

# **Design Guidelines for Industrial & Commercial Development**

For the Macedon Ranges Shire

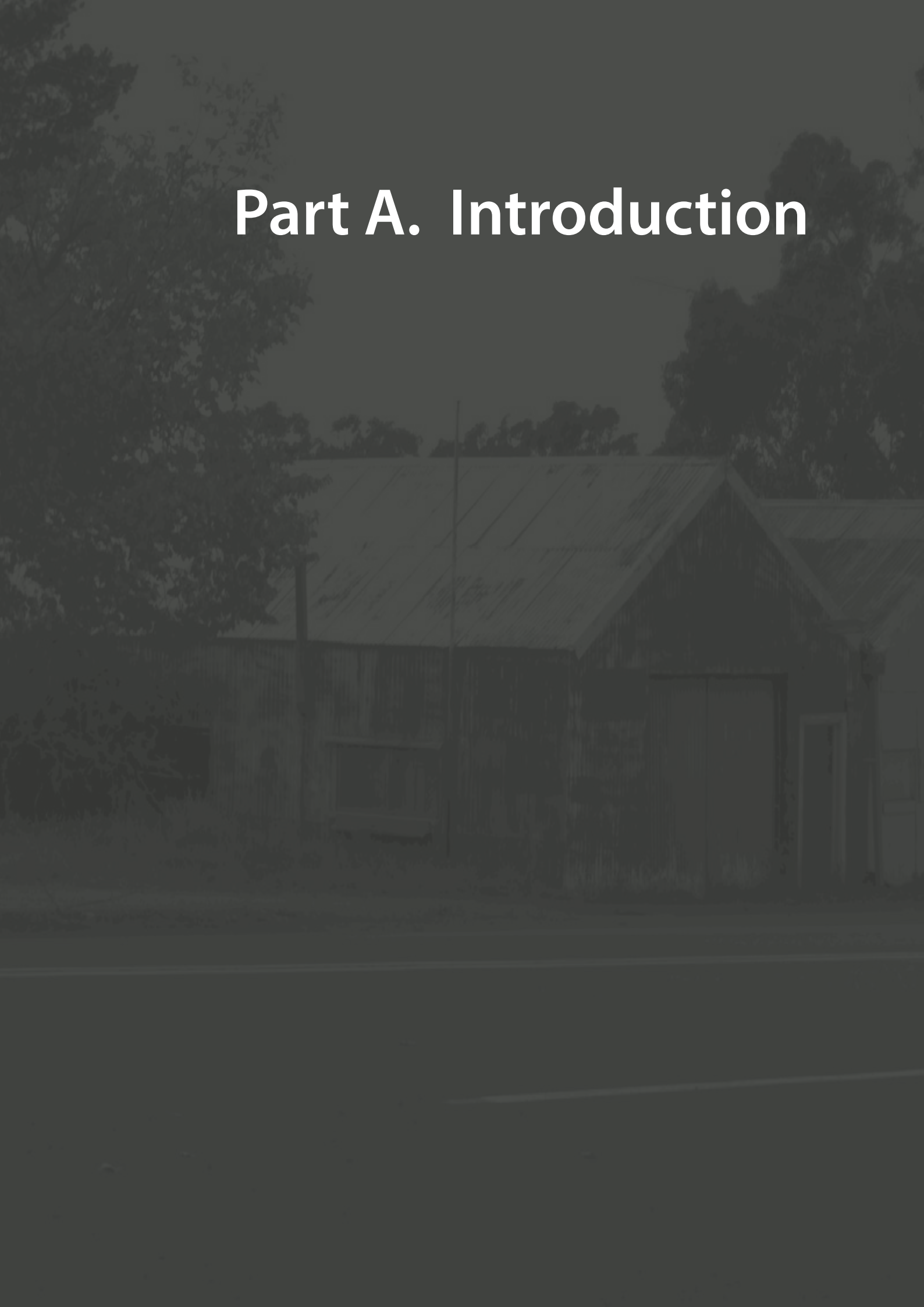
June 2012



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# Part A. Introduction





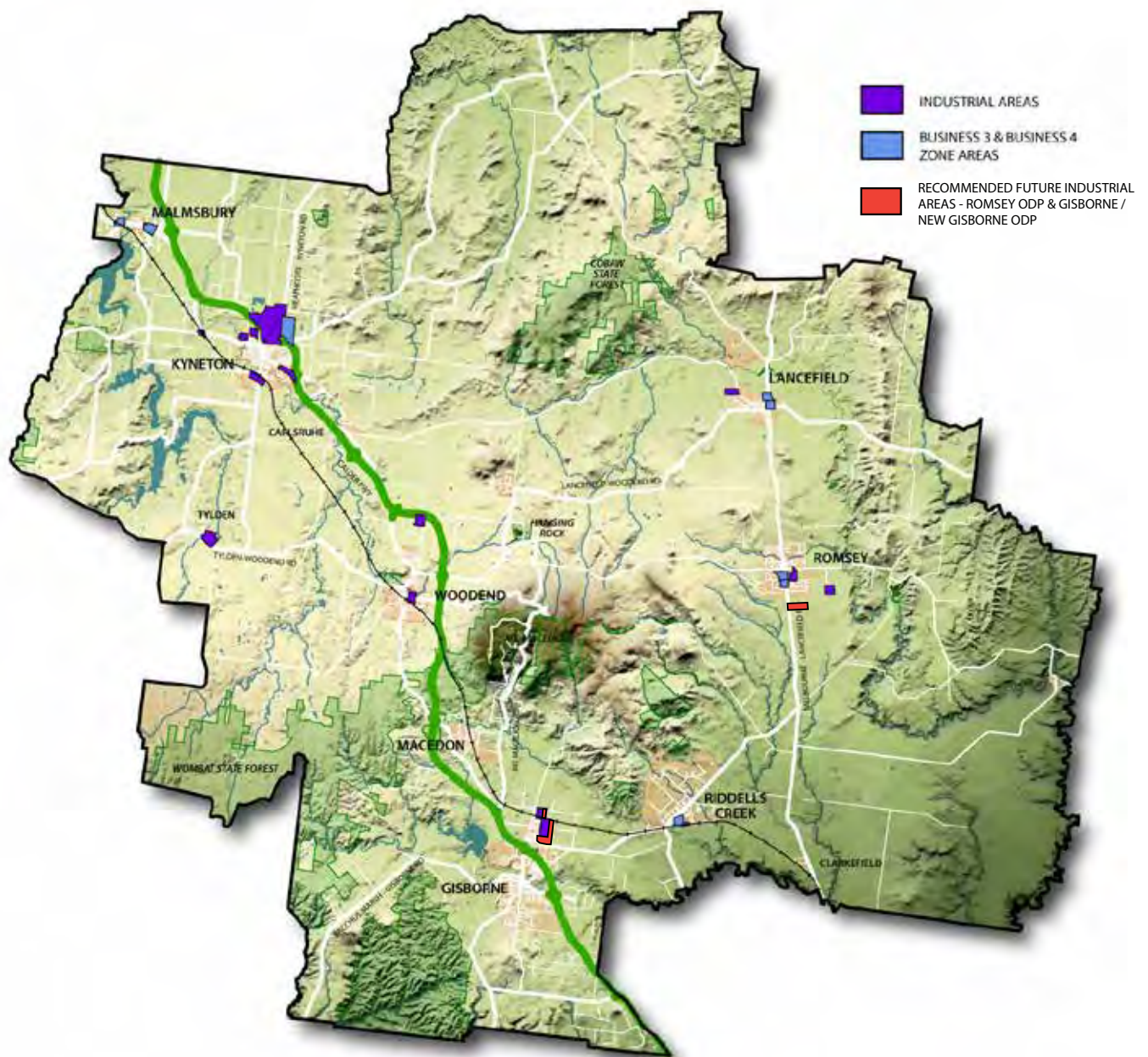


Figure 1 - Industrial and Business areas within the Macedon Ranges Shire

## 1. About the Guidelines

### 1.1 Purpose

The purpose of the guidelines is to provide guidance for development and subdivision in the Shire's Industrial Zones and Business 3 and 4 Zones. The guidelines will be used to guide the design of developments and subdivisions, be utilised in the preparation of planning permit applications and be utilised by Council for the assessment of permit applications.

The guidelines aim to ensure that industrial and commercial areas within the Shire are functional and attractive environments for business operators, workers, visitors, and residents of the Shire. They cover how existing and future industrial and commercial areas should look and function, and how they should respond to the local environment and surrounding context.

### 1.2 Why the guidelines are needed

A substantial proportion of industrial land in the Macedon Ranges is currently undeveloped, comprising 36% of currently zoned industrial land. New industrial areas are proposed at New Gisborne and Romsey, which will further increase the amount of undeveloped industrial land in the Shire. The guidelines are needed to provide clear long term guidance on the standard of industrial development in these areas and also on existing, developed sites that may be redeveloped in the future.

There are key environmental and landscape values that need to be protected in future industrial development. The Macedon Ranges is recognised as an environmentally sensitive area as outlined in Clause 12.04-1 of the State Planning Policy Framework. This is reinforced within the Local Planning Policy Framework which also recognises the significance of the environment and landscape throughout the shire. These elements are important to the strong tourism and recreational appeal of the shire.

The Macedon Ranges Shire is valued by many for its rural character. This was identified as a common theme in the consultation undertaken for this project and also the New Ratepayers Survey of 2009, which identifies the 'rural lifestyle' and 'beauty of the area' as the major reason for moving to the Macedon Ranges. With a number of industrial areas located along main roads, at township entries and key gateways, the design of future development is critical in reinforcing the valued character of the shire and each individual township.

In addition to the elements above, there is also a need to provide high quality industrial areas that strengthen the economic role of industrial land uses within the shire. Industrial and commercial development needs to reflect best practice standards in functionality, design, safety, environmental footprint and amenity, in order to attract future investment to the shire and also provide great places to work.

### 1.3 Guideline Objectives

The objectives of the Guidelines are:

- To facilitate the development of functional, well serviced, amenable, and attractive industrial and commercial areas that have regard to their local context.
- To recognise and build on the Shire's existing industrial and commercial areas and provide a variety of industrial precincts that meet the diverse needs of industry and associated commerce.
- To establish design and development guidelines which support future industrial and commercial market demands, facilitate business and employment opportunities and achieve State and Local planning objectives.
- To establish a standard of development which assists the facilitation of economic development and increase in the number of business and industrial enterprises located in the Shire.
- To ensure industrial and commercial development makes a positive impact on the amenity and environment in the Shire.
- To ensure industrial and commercial development reinforces the valued rural character of the Macedon Ranges Shire.

#### Defining 'rural character'

The 'rural character' of the Macedon Ranges is referred to throughout the guidelines. It is important to reinforce this character particularly in areas that are visible from main roads, the Calder Freeway, rail corridors, key public viewing areas, and from adjoining rural and residential uses.

In the context of these guidelines, the 'rural character' is defined by the following elements:

- A strong connection to the surrounding landscape which is reinforced by views to surrounding landforms such as the Macedon Ranges and Hanging Rock, waterways and views to areas of vegetation.
- A sense of spaciousness within streetscapes defined by wide roads and buildings set in grounds and a flow of landscape between the private and public realms.
- Low-key development that integrates with the surrounding environment through the use of compatible landscaping, materials, colours and building forms.

## 2. How to use the guidelines

### 2.1 Where they apply

The Guidelines apply to all land within the following land use zones:

- Industrial 1
- Industrial 2
- Industrial 3
- Business 3
- Business 4

Figure 1 on the previous page broadly outlines these areas.

### 2.2 How they apply

The guidelines must be considered for development where a permit application is required for:

- Subdivision, buildings and works in the zones listed above
- Advertising signs in the zones listed above throughout the Shire.

The guidelines also apply where car parking spaces need to be provided in accordance with Clause 52.06 Car parking.

The guidelines will only apply to existing, developed properties when a planning permit is required for alterations or additions, or to redevelop the site.

Permit applications for development associated with the continued use of a dwelling in the applicable zone are generally not subject to the requirements of the guidelines. However the guidelines do apply for permit applications for development or use of former dwellings now used for commercial purposes.

### 2.3 How they are Structured

The guidelines are structured in four parts as described below

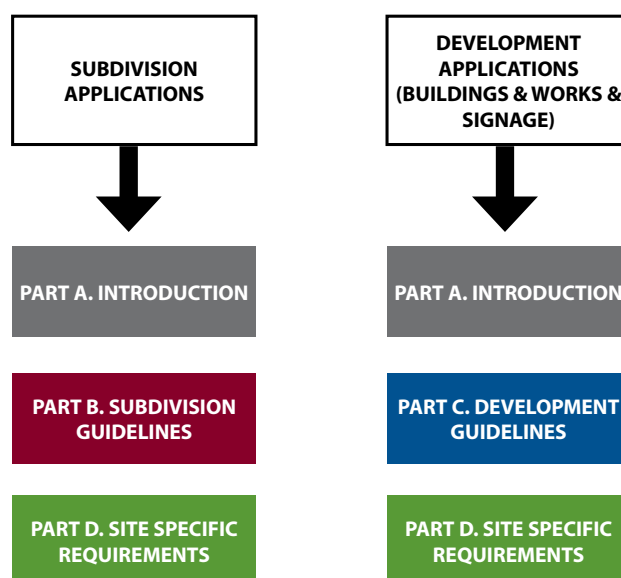
**Part A** - Provides the overall objectives for the guidelines and instructions on how they apply and should be used.

**Part B** - Provides guidelines for subdivision permit applications within the zones listed in Section 2.1.

**Part C** - Provides guidelines for buildings and works and signage permit applications within the zones listed in Section 2.1.

**Part D** - Provides guidelines for specific locations within the zones listed in Section 2.1.

The diagram below outlines the sections of the guidelines that need to be considered for each type of permit application.





## 3. The Approvals Process

### 3.1 Approvals Process

Applications for subdivision and development within the relevant zones will follow the existing approvals process that is in place for these types of permits.

Applicants will be required to accord with the design guidelines in preparing planning permit applications for subdivision, buildings and works or signage. The responsible authority will need to consider how the applicant has responded to the guidelines in assessing permit applications.

Before applying for a planning permit, applicants are encouraged to meet with Council officers to discuss what information is required for the application, and discuss which guidelines are relevant to their particular application.

### 3.2 Assessing permit applications

Council will consider each development proposal on its merits and take into account the particular characteristics of the development and its context. Greater flexibility may be provided for sites in existing industrial areas where the existing conditions and constraints of the site do not allow for the applicable guidelines to be met.

Council may refuse a permit application for a development that does not comply with the guidelines, and may seek to impose permit conditions that will enable the development proposal to meet the guidelines.

In order to seek an exemption from compliance with a guideline, the applicant must clearly demonstrate:

- That the guideline is inappropriate in relation to their particular proposal.
- That the objective of the guideline can still be satisfied even if the guideline provisions cannot be met.

### 3.3 Requirements for permit applications

For subdivision and development applications the following drawings and reports are to be prepared and submitted as part of the permit application.

#### Subdivision Applications

- **Site Context Plan** - Identifies surrounding land uses, interface issues, landscape elements, open space networks and transport networks.
- **Site Analysis Plan** - Provides detailed analysis of the characteristics of the site including landform (contour plans), drainage networks, vegetation, existing buildings and climate.
- **Design Response Plan** - Provides an overview of how the proposed subdivision responds to the analysis and context of the site.
- **Subdivision Plan** - the boundaries and dimensions of the site, adjoining roads, relevant ground levels, the subdivision layout including lot sizes and dimensions, proposed roads, open space areas if applicable and stormwater treatment areas if applicable.
- **Road and site cross sections**
- **Guidelines Response Submission** - Details how the development responds to the objectives and guidelines and where and why it doesn't comply.

Other plans and reports that may be requested by the responsible authority or referral authorities include:

- **Traffic Report and Management Plan**
- **Stormwater Management Plan**
- **Site Management Plan**
- **Vegetation Removal Plan**
- **Soil Management Plan (for contaminated sites)**
- **Infrastructure Plan**
- **Land Capability Assessment**
- **Aboriginal Cultural Heritage Management Plan** - Proponents may be required to address Aboriginal Cultural Heritage requirements under the Aboriginal Heritage Act 2006 prior to lodging a planning permit application.

#### Development Applications

- **Site Context Plan** - Identifies surrounding land uses, built form siting, landscape elements and transport networks.
- **Site Analysis Plan** - Provides detailed analysis of the characteristics of the site including landform (contour plans), drainage networks, vegetation, existing buildings and climate.
- **Design Response Plan** - Provides an overview of how the proposed development responds to the analysis and context of the site.

- **Site Layout plan** - Details the boundaries and dimensions of the site, adjoining roads, relevant ground levels, the layout of existing and proposed buildings and works, driveways and vehicle parking and loading areas, proposed landscape areas, and external storage and waste treatment areas.
- **Landscape plan** - includes a description of vegetation to be planted, the surfaces to be constructed, a site works specification and the method of preparing, draining, watering and maintaining the landscape area.
- **Floor Plans** - Building layout plans.
- **Construction details** - of all drainage works, driveways and vehicle parking and loading areas.
- **Elevations and Cross Sections** - Required as necessary to show the dimensions, colours and materials of all buildings and works.
- **Signage Plan** - Provides details of the proposed signage for the development including siting and design.
- **Guidelines Response Submission** - Details how the development responds to the objectives and guidelines and where and why it doesn't comply.

Other plans and reports that may be requested by the responsible authority or referral authorities include:

- **Traffic Report and Management Plan**
- **Stormwater Management Plan**
- **Site Management Plan**
- **Aboriginal Cultural Heritage Management Plan**
- **Vegetation Removal Plan**
- **Soil Management Plan (for contaminated sites)**
- **Acoustic Assessments**
- **Land Capability Assessment**



# Part B. Subdivision Design Guidelines

# 1. Site Responsive Design

## 1.1 Site and Context Assessment

### Objectives

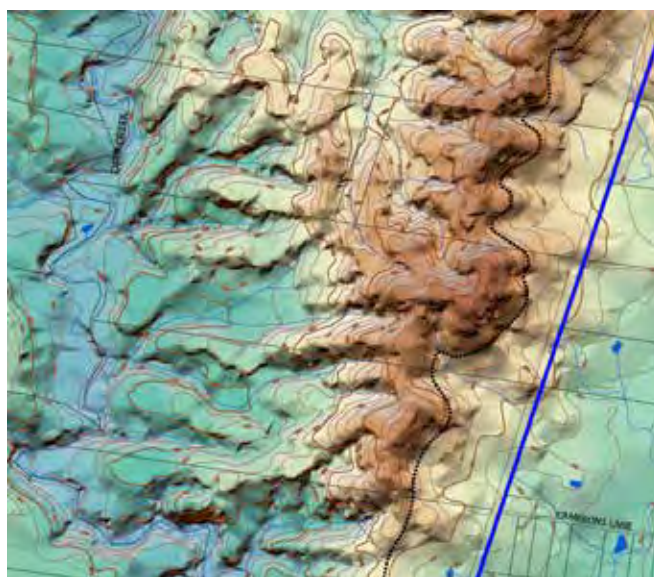
- To ensure new subdivisions are designed to respond to the local characteristics of the site and its context.
- To reinforce the rural character of the Macedon Ranges Shire.

### Guidelines

- 1.1.1** Before any subdivision design is undertaken, a thorough investigation of the site and its context should be undertaken, so that the new subdivision will respond in the most appropriate way. This will include an analysis of:
- Surrounding existing and future land uses - sensitive interfaces, key land uses etc.
  - Surrounding existing and future transport networks - road, pedestrian and cycle paths, and public transport.
  - Areas of vegetation.
  - Natural and man-made features within the site - landform, exposed geological features, wind row planting etc.
  - Predominant landscape and cultural heritage character of the area.
  - Assessment of drainage systems both within and beyond the site.
  - Views from within the site to significant land forms or water bodies and views to the site from key public locations.
  - Climatic conditions including solar access and prevailing winds.
- It will need to be demonstrated that the subdivision design responds to each of these elements.



**Figure 2 - Understanding key views is important when designing subdivisions**



**Figure 3 - Topography is a key driver for road and drainage networks**

## 2. Access & Circulation

### 2.1 Street Network

#### Objectives

- To provide for interconnected street networks that integrate appropriately with surrounding urban and rural areas and allow for efficient transport movement.
- To provide site responsive street networks that integrate with the environmental and landscape features of the site.
- To provide sufficient capacity within the road network to cater to the needs of industrial and business uses, and emergency vehicles
- To limit the impacts of heavy vehicles on adjoining residential and rural living areas.
- To demonstrate the consideration of passive solar design in the layout of street network.

#### Guidelines

- 2.1.1 New subdivisions should provide connected road networks to enable greater pedestrian, cycle and vehicle permeability and avoid the use of cul-de-sacs. Streets should connect to existing established road networks and enable future connections to adjoining areas, where required (refer to Figure 4 and 5).
- 2.1.2 Design street networks to integrate with natural drainage systems and accentuate the topographic features of the site.
- 2.1.3 Orientate streets to take advantage of viewlines to surrounding landscape elements such as mountain ranges or valleys. The street should be orientated so that the key view is available from within the street (refer to Figure 6).
- 2.1.4 Roads should be designed to enable buildings to front onto creek reserves and open space (refer to Figure 4).
- 2.1.5 Maximise passive solar access opportunities for allotments by orientating roads on a north-south and east-west axis.
- 2.1.6 A logical road hierarchy should be provided where necessary that can be easily understood by all users. Refer to Figure 7- Suggested Cross Sections for potential road types.
- 2.1.7 B-double truck access should be limited to locations where a B-double route is approved. A Traffic Engineer's report should be provided to demonstrate that the B-double vehicles can enter, exit and manoeuvre within the subdivision safely and efficiently, with minimal impact on the streetscape and surrounding uses.
- 2.1.8 Roads should be designed in accordance with Council's Engineering Requirements for Infrastructure Construction Policy and the relevant Australian Standards.

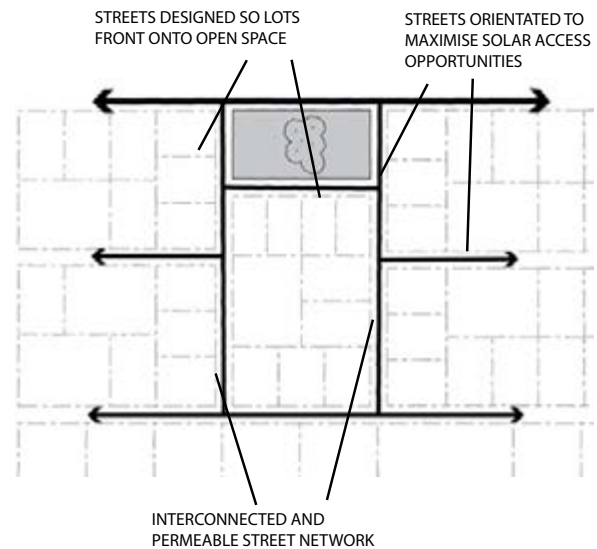


Figure 4 - Indicative Subdivision Layout

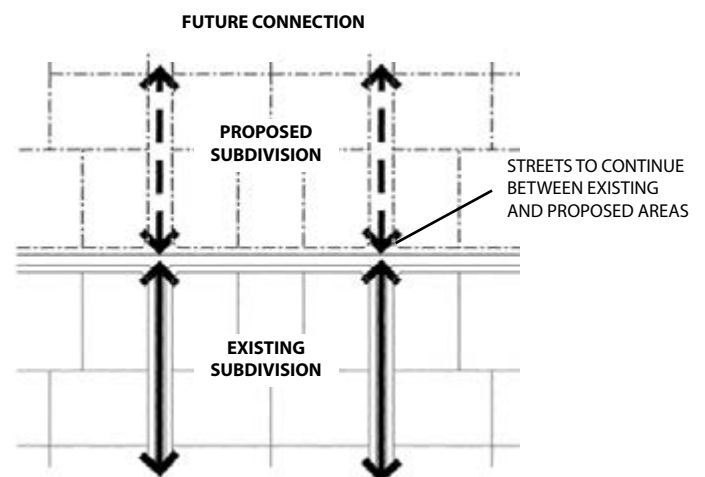


Figure 5 - Connection to adjoining subdivisions

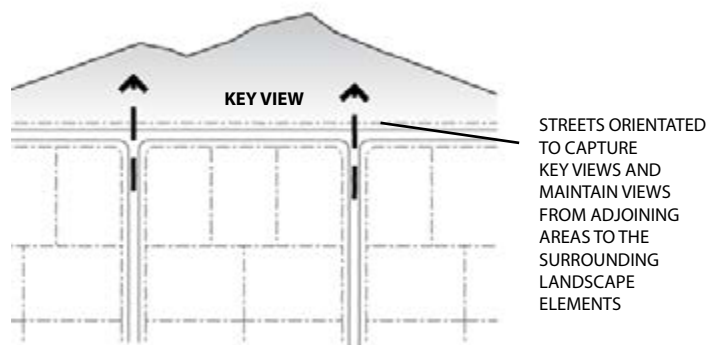
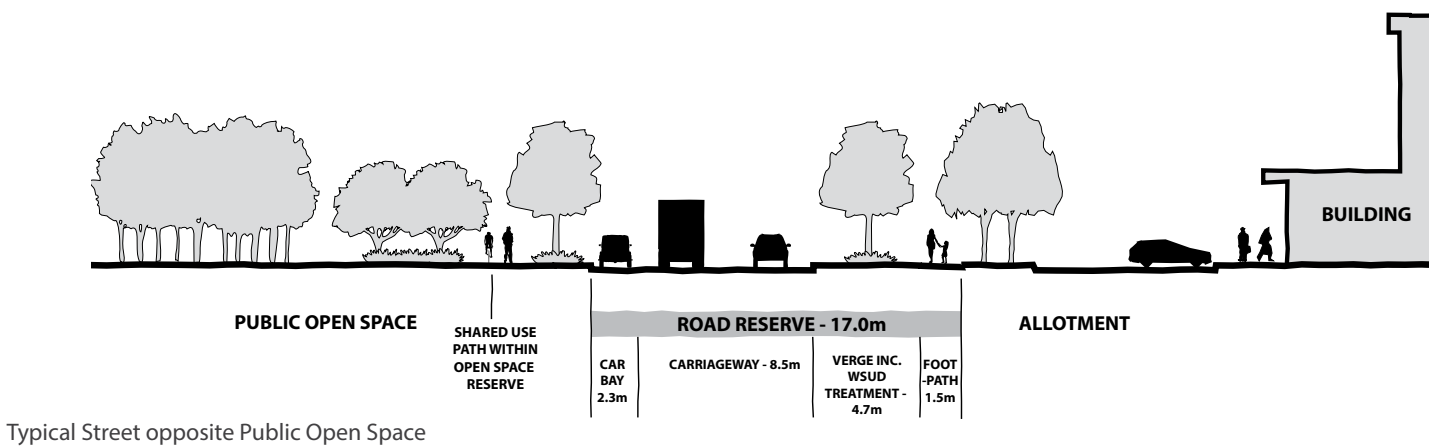
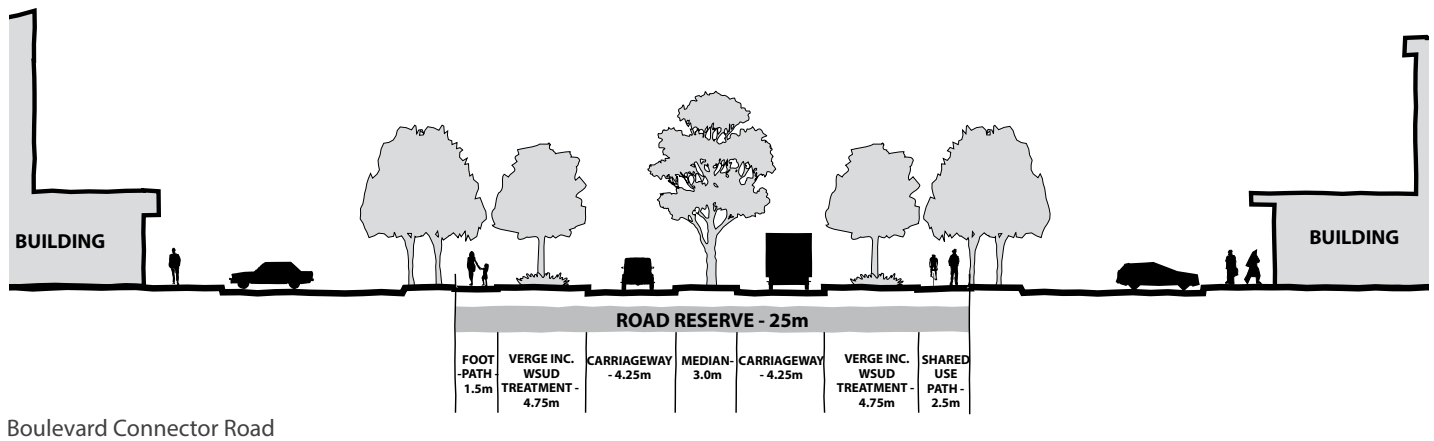
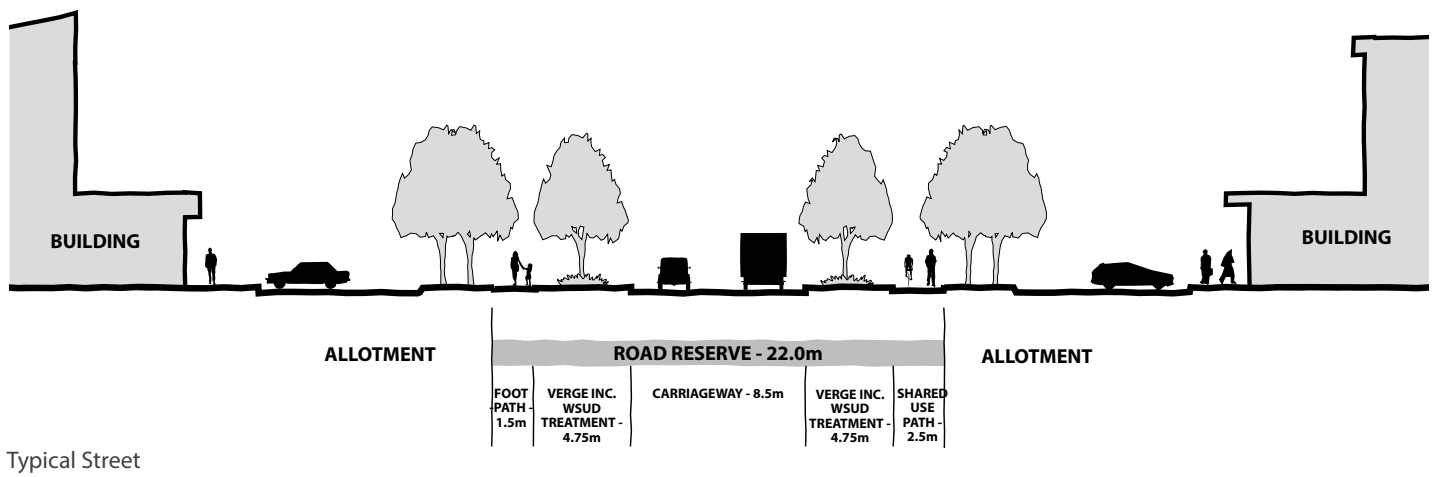


Figure 6 - Orientation of streets to key views





**Figure 7 - Suggested Street Cross sections**

**N.B.** Where applicable other road treatment cross sections may be required by the responsible authority and/or a referral authority.

## 2.2 Pedestrian & Cyclist Access

### Objectives

- To ensure pedestrians and bicycle access is integrated into the design of future subdivisions.
- To promote walking and cycling as suitable transport alternatives.
- To provide for safe and convenient access for pedestrians and cyclists.
- To provide for adequate separation of pedestrian, cyclists movements from heavy vehicles.

### Guidelines

- 2.2.1** Develop a pedestrian and cycle network as part of the subdivision application that provides for continual and safe access between the future allotments and the surrounding services, facilities and public transport within the area. The network should connect into existing trails where possible and provide signage to direct people to these connections (refer to Figure 7).
- 2.2.2** Where required for open space and linear networks, shared bicycle / pedestrian paths should be provided to one side of the open space, waterway or road, having a minimum width of 2.5m and be constructed with a sealed surface (refer to Figure 7).
- 2.2.3** For major roads, where required, pedestrian paths with a minimum width of 1.5m are to be provided on both sides of the road (except where a shared 2.5m, wide path is instead required) and constructed with a sealed surface.
- 2.2.4** To reduce the potential for conflict there should be an appropriate level of separation and/or wayfinding for cyclists where needed on shared pedestrian links.

**N.B.** In some instances an on road cycle path may be required for main roads or where separation from pedestrian movement or wayfinding for cyclists is required.

## 2.3 Public Transport

### Objectives

- To provide adequate access to public transport within new industrial areas.

### Guidelines

- 2.3.1** Where required, relevant anticipated streets should be designed with sufficient width so they are capable of carrying bus services if required in the future. Refer to Figure 7 for typical carriageway widths.

**N.B.** Where relevant, the cross section requirements of the Department of Transport 'Public Transport Guidelines for Land Use Planning 2008' may be required for relevant bus route roads.



**Figure 8 - Example of a footpath with regularly spaced street trees**

## 3. Lot Layout

### 3.1 Lot Size & Shape

#### Objectives

- To create suitably sized allotments that are functional, accessible and contribute positively to future streetscapes and enhance the local character of the Shire.
- To provide for a diversity of lot sizes and enable flexibility within allotments to cater for a range of industrial and business uses.
- To ensure lots are of an adequate size to protect environmental and landscape features and respond to the site's constraints and features.
- To maximise passive solar design through the orientation of allotments.

#### Guidelines

##### Lot Size

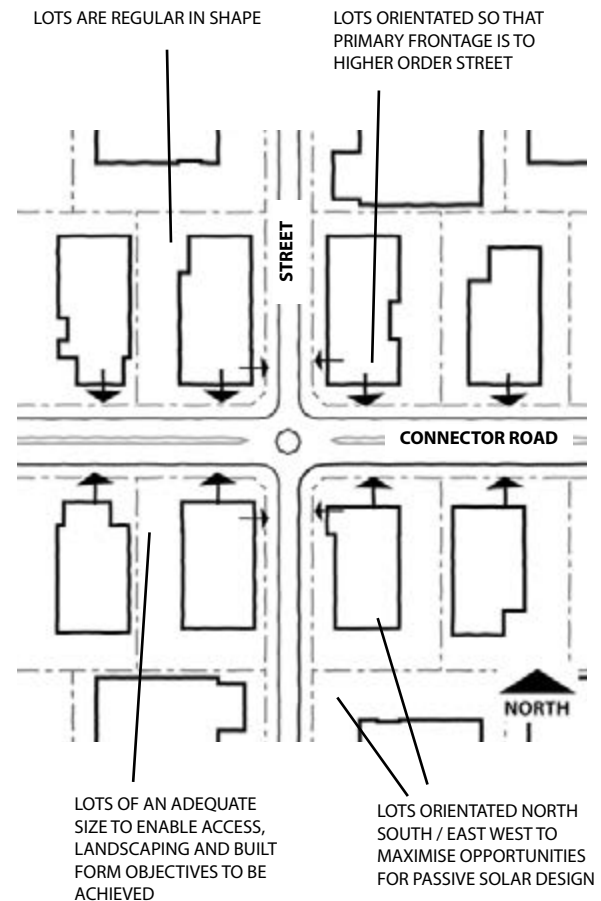
- 3.1.1** Lot sizes are to be of an adequate size and dimension, to enable objectives and guidelines contained in Part C - Development Guidelines to be satisfied for future Development.
- 3.1.2** Applicants will be required to demonstrate that a suitable building envelope can be achieved whilst satisfying the Setback, Landscaping, Access and Built Form objectives and guidelines in Part C. This does not apply where the proposed lots have an area of at least 2,000 sqm and have a frontage width of at least 30m.

##### Lot Shape

- 3.1.3** Lots should be regular in shape to provide for efficient use of land and enable a range of industrial and business uses to be accommodated on the lot.

##### Lot Orientation

- 3.1.4** Orientate lots so that buildings can be sited to maximise passive solar design. This would require a north-south or east-west orientated lot (refer to Figure 9).
- 3.1.5** For corner allotments with two street frontages, the lot should be orientated so that the building will front onto the higher order road within the road hierarchy (refer to Figure 9).
- 3.1.6** Orientate allotments so that buildings can capture views to surrounding landscape.



**Figure 9 - Indicative lot layout**

## 4. Landscape & Open Space

### 4.1 Streetscapes

#### Objectives

- To provide streetscapes that are compatible with the 'rural' character of the Macedon Ranges Shire and respond to the particular characteristics of the site and area.
- To ensure streetscapes are durable and require minimal maintenance.

#### Guidelines

**4.1.1** Develop a landscape masterplan for new streetscapes in subdivisions. Refer to Council's Street Tree Policy for additional guidance. The landscape masterplan will:

- Incorporate elements of the rural character in new streetscapes. This includes providing verges, incorporating existing significant vegetation within the streetscape and utilising swale drains where practical (refer to Figure 10).
- Utilise street tree spacing and siting to reinforce the desired character for an area. i.e. formalised avenue planting could be used for areas such as estate entries and clump planting could be utilised to reinforce the informal character of a street (refer to Figure 11).
- Provide for trees or groups of trees spaced at a maximum of 12m apart and as near as possible to the centre of each allotment.
- Generally utilise native or indigenous canopy trees that require minimal irrigation and reflect the local character of the area. Utilise exotic species for feature planting or if appropriate to the character of the area provided the trees can be irrigated without utilising the potable water supply.
- Utilise low level shrubs and grasses in conjunction with canopy trees (refer to Figure 12).
- Utilise low maintenance passive irrigation techniques so that street trees can be irrigated with stormwater captured on the site (refer to Figure 12).
- Where appropriate, incorporate low key entry features that utilise landscaping rather than large built elements to define the entry to the estate.

**4.1.2** Provide street furniture including seating and bins around key open space nodes and convenience stores within new subdivisions. Furniture is to reflect the rural character of the area.

**4.1.3** Incorporate street lighting that is sited and designed to provide for a safe journey along pedestrian paths in accordance with the Australian Standards.



**Figure 10 - Swale drains and remnant roadside vegetation are important elements of the 'rural character'**



**Figure 11 - Example of a central median with planting to create entry feature**



**Figure 12 - Example of a swale utilised to irrigate plants and infiltrate water**



## 4.2 Open Space Provision and Design

### Objectives

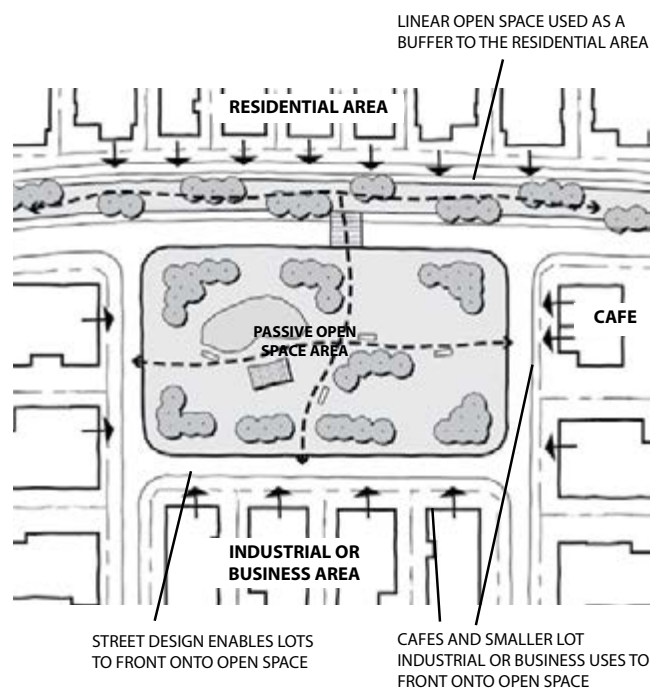
- To provide good provision of open space for industrial and business areas
- To ensure new developments provide suitable activation and passive surveillance of existing and new open space areas.
- To incorporate natural and valued landscape elements into new open space areas that reflect the rural character of the Macedon Ranges Shire.

### Guidelines

- 4.2.1** Public open space should be provided at the rate of 5% of all land that is to be subdivided for industrial or business uses.
- 4.2.2** Where agreed by Council, a contribution may be paid to the Council to the equivalent value of 5% of all land that is to be subdivided for industrial or business uses.
- 4.2.3** Where encumbered land is to be retained as open space, this will not be included within the 5% contribution.
- 4.2.4** Distribute open space throughout the subdivision so that it is accessible to workers of the business or industrial area, and other surrounding land uses.
- 4.2.5** Incorporate natural elements into the open space network such as creeks or water bodies and areas of established vegetation (Refer to Figure 13). Provide linear open space links along creeks with appropriate pedestrian and bicycle access.
- 4.2.6** Site open space to optimise views and vistas to key landmarks and topographic features such as the Macedon Ranges.
- 4.2.7** Design street networks so that buildings will front onto the open space on each side and provide smaller lots at the open space frontage in order to achieve greater activation (refer to Figure 14).
- 4.2.8** Locate uses such as cafes and convenience shops adjacent to the open space to take advantage of the outlook and provide a location for staff and visitors to enjoy outdoor dining (refer to Figure 14).



**Figure 13 - Example of an open space area incorporating remnant vegetation**



**Figure 14 - Plan showing frontage to open space**



## 5. Interface Treatments

### Objectives

- To carefully manage the interface between industrial and business uses and adjoining sensitive land uses, rural areas, and sensitive environmental areas.
- To ensure adequate visual and sound buffers are provided to adjoining residential areas.

### Guidelines

- 5.1.1** Where appropriate, create a separation between proposed industrial and business areas, and residential, low density residential and sensitive uses, by providing a road with at least a 10m wide landscape buffer or a substantial open space area with a minimum width of 20m (refer to Figure 14). The landscape buffer or open space should incorporate landscape screening and noise attenuation techniques such as planting and mounding.
- 5.1.2** Where the above treatments are not practical as considered by the responsible authority, provide larger lots at the interface to residential, low density residential, or rural areas so that a substantial landscaping screen or buffer can be accommodated within the proposed industrial allotment (Refer to Figure 15 and Part C, Guideline 5.1.16 for further detail).
- 5.1.3** For main road and township entry areas, design the road network so that development will front onto the major road by providing direct access to the road where considered appropriate, or by utilising service roads. Uses that provide for higher quality built form outcomes should be located along the major road.
- 5.1.4** For rural and Calder Freeway interfaces, provide a road between the rural property or Freeway and the proposed industrial area, so that development can front the rural area or freeway.
- 5.1.5** For open space, creek or water body interfaces, provide a road between the open space, creek or water body and the proposed subdivision, so that development can front onto the interface to provide passive surveillance and capture an attractive outlook. Alternatively a pedestrian path / driveway can be provided if a road is not required or feasible.

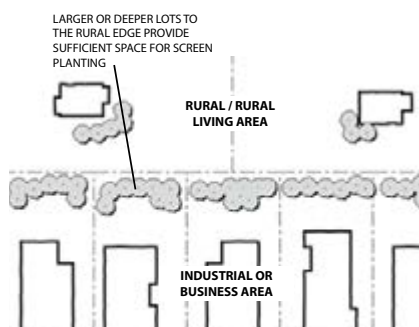


Figure 15 - Large lots to rural or residential interface

## 6. Stormwater Management

### Objectives

- To ensure streets and drainage perform adequately during storm events.
- To minimise any increase in stormwater run-off and protect receiving waters from environmental degradation.
- To capture, retain, treat and re-use stormwater before it is discharged into natural systems.

### Guidelines

- 6.1.1** Stormwater and drainage infrastructure should be provided in accordance with Council's Engineering Requirements for Infrastructure Construction Policy.
- 6.1.2** In addition to the engineering standards, design for stormwater and drainage should:
- Take into account the natural drainage characteristics of the site and surrounds and design the system to integrate with these features.
  - Retain and enhance the function of natural drainage features in the area including drainage corridors and waterways. Development should be set back from the drainage corridors and waterways in accordance with any referral authority requirements and State Planning Policies.
  - Aim to minimise stormwater run-off by limiting the amount of impervious surfaces and utilising pervious surfaces to maximise infiltration.
  - Retard and treat stormwater on-site or within a consolidated area before it is discharged into the drainage system or waterways to the satisfaction of Macedon Ranges Shire Council and the relevant referral authority.
  - Be designed to be economically maintained and create attractive features within sites or streetscapes.
  - Incorporate Water Sensitive Urban Design features to manage run-off in streets and public open space. These features should be designed to the approval of the Macedon Ranges Shire Council and relevant referral authority requirements.
  - Optimise capture, retention, treatment and re-use of water on site by addressing an integrated 'whole of water cycle' approach to water management, involving permeable surfaces, storage, wetlands and roof collection as appropriate.

- All new development must meet relevant flood protection criteria. If development occurs in the vicinity of an open waterway or floodway, appropriate freeboard requirements for the development should be adopted as determined by the responsible authority or referral authority and to the satisfaction of the responsible authority.
- Any vehicle and/or pedestrian access must be designed and constructed to comply with the following safety criteria associated with the applicable floodlevel: (A) Depth of flow does not exceed 0.35m; (b) Velocity of flow does not exceed 1.5m/s; (C) the Depth and Velocity product does not exceed 0.35m<sup>2</sup>/s.



# Part C. Development Design Guidelines

# 1. Site Responsive Design

## Objectives

- To ensure new development is designed to respond to the local characteristics of the site and its context.
- To reinforce the rural character of the Macedon Ranges Shire.

## Guidelines

- 1.1.1** Before any development design is undertaken, a thorough investigation of the site and its context should be undertaken, so that the design of new development can respond in the most appropriate way. This will include an analysis of:
- Surrounding existing and future land uses - sensitive interfaces, key land uses etc
  - Surrounding existing and future transport networks - road, pedestrian and cycle paths, and public transport.
  - Surrounding built form character and heights.
  - Areas of vegetation.
  - Natural and man-made features within the site - landform, exposed geological features, wind row planting etc.
  - Predominant landscape and cultural heritage character of the area
  - Understanding of drainage systems both within and beyond the site.
  - Views both from within and to the site.
  - Climatic conditions including solar access and prevailing winds.
- It will need to be demonstrated that the development design responds to each of these elements.



**Figure 16 - Gain an understanding of the role of the site in the context of the township**



**Figure 17 - Understanding site interfaces is important so that development can integrate with its immediate context.**

## 2. Access and Circulation

### 2.1 Pedestrian and Cyclist Access

#### Objectives

- To provide safe and convenient access for pedestrians and cyclists within industrial and business sites.
- To provide adequate walking and cycling facilities within industrial and business sites.
- To provide walking and cycling as suitable transport alternatives in order to minimise the numbers of vehicle trips.

#### Guidelines

- 2.1.1** Provide clearly defined pedestrian / cyclist entry points from the footpath / shared path into the industrial or business site. The pedestrian / cyclist entry should be separated (eg. by landscaping) from all vehicle movements.
- 2.1.2** Separate pedestrian and bicycle circulation from vehicle movements, particularly loading and servicing vehicles (refer to Figure 18).
- 2.1.3** Ensure clear sight lines to vehicle crossovers are provided for pedestrians and cyclists.
- 2.1.4** Design driveway access to minimise vehicle and pedestrian / cyclist conflicts by maintaining clear viewlines between the exiting or entering vehicle and pedestrians. Landscaping, fencing and building design are key considerations.
- 2.1.5** Provide secure bicycle storage, lockers and showers for staff and employees in accordance with Clause 52.34 of the Macedon Ranges Planning Scheme.
- 2.1.6** Pedestrian access within the site should be designed to achieve Disability Discrimination Act (DDA) compliance.

### 2.2 Vehicle Access

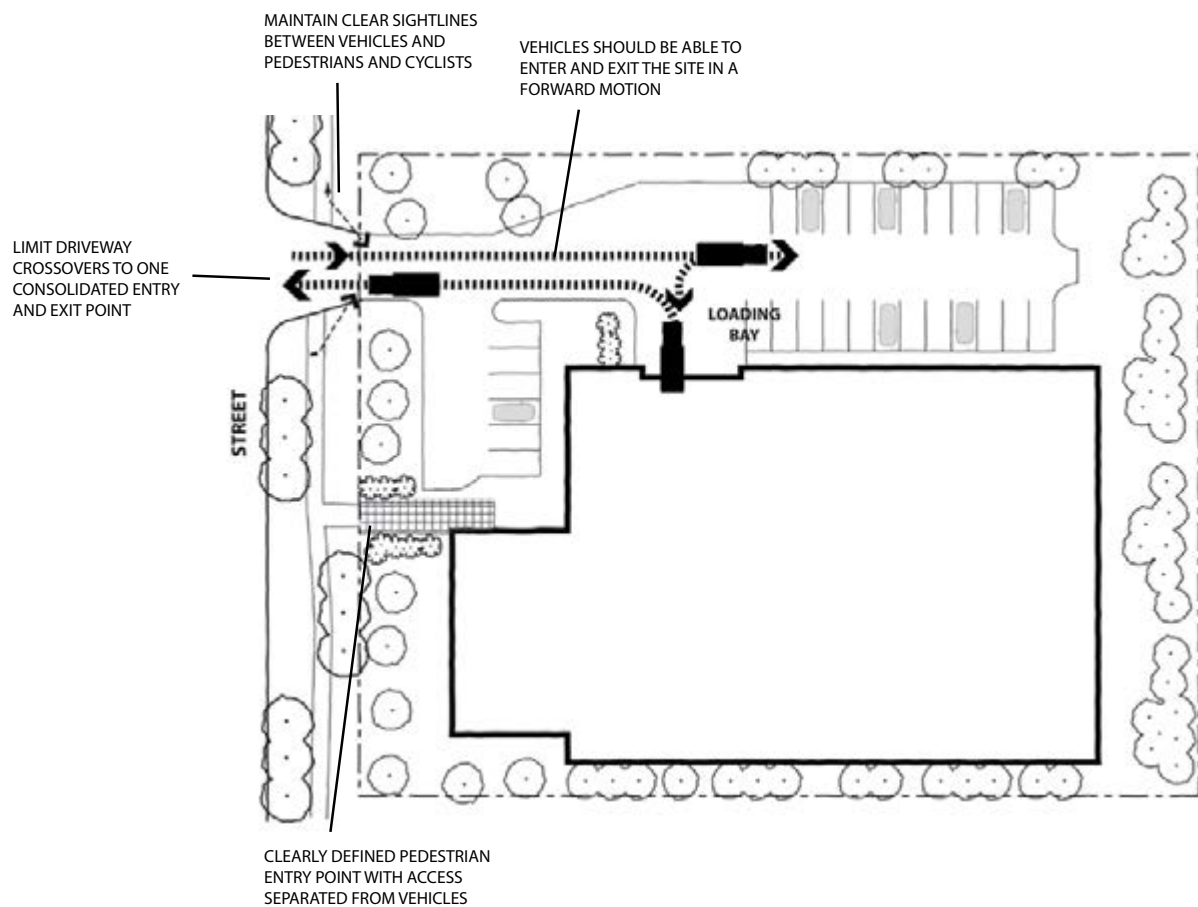
#### Objectives

- To provide safe, convenient and efficient access for all vehicles to and from industrial and business sites.
- To minimise the impacts of traffic on surrounding sensitive land uses.
- To provide access and car parking arrangements that are logical and legible to visitors and employees.
- To minimise the impacts of driveway crossovers on pedestrian / cyclist access and streetscapes.

#### Guidelines

- 2.2.1** Developments should be designed to allow all vehicles to enter and exit a site in a forward motion. This applies to all sites regardless of lot size.
- 2.2.2** Locate vehicle access points to the industrial or business site in a location that enables clear sight lines along the road enabling vehicles to enter and exit safely and efficiently.
- 2.2.3** For sites where B-double access is required, a Traffic Engineer's report should be provided to demonstrate that the vehicle can enter and exit and manoeuvre within the site safely and efficiently, and with minimal impact on the streetscape and surrounding uses.
- 2.2.4** New developments should minimise the impact of traffic on surrounding sensitive land uses including residential areas, schools and shopping areas. A traffic engineer's report may be required for some developments where considered necessary by the Responsible Authority.
- 2.2.5** Limit driveway crossovers to one consolidated entry and exit point for each site in order to minimise disruption to footpaths. Additional crossovers may be permitted for larger sites where a loop circulation network is required within the site.





**Figure 18 - Vehicle and pedestrian movement plan**



**Figure 19 - Example of a clearly defined pedestrian entry to a building**



**Figure 20 - An example of safe pedestrian access being provided in a car park**

## 2.3 Loading and Servicing

### Objectives

- To provide safe and efficient loading and servicing of industrial and business sites.
- To minimise the visual impact of loading bays and service areas when viewed from the surrounding streets and other key viewing areas.

### Guidelines

- 2.3.1** Loading areas should be located to the rear or side of the property away from the primary street frontage (refer to Figure 21).
- 2.3.2** Where practical, integrate loading areas into the design of the building so that loading occurs internally. Where external loading areas are visible from adjoining land uses, they should be screened with landscaping or articulated built form.
- 2.3.3** Loading and servicing should occur with the vehicle completely contained within the site. No part of the vehicle should extend into the public road reserve.
- 2.3.4** Loading and servicing should be designed to service a range of vehicle types in order to provide for flexibility pursuant to Clause 52.07 of the Macedon Ranges Planning Scheme.
- 2.3.5** Access to loading areas should be clearly separated from pedestrian and bicycle access routes, and where practical, separated from vehicle access routes.
- 2.3.6** Ensure storage and loading areas are of sufficient size and dimensions to avoid the use of car parks for temporary storage of goods. Refer to Clause 52.07 of the Macedon Ranges Planning Scheme for size and dimension requirements.
- 2.3.7** Loading areas should be clearly defined with line marking, designed to allow unobstructed vehicle access and provide appropriate turning areas in accordance with Australian Standards AS 2890.2 - Parking facilities Part 2: Off-street commercial vehicle facilities.
- 2.3.8** Allow for sufficient and safe collection of waste materials.

## 2.4 Car Parking Provision

### Objectives

- To provide sufficient car parking for the needs of the business or industry within the site without adverse impacts on streetscapes.

### Guidelines

- 2.4.1** When the end use of the site is known, car park spaces will be provided for visitors and occupants in accordance with the provisions specified in Clause 52.06 of the Macedon Ranges Planning Scheme.
- 2.4.2** Where the end use of the site is not known, the 'Industry' car parking rate in Clause 52.06 of the Macedon Ranges Planning Scheme should be applied to the development.
- 2.4.3** A reduction in car park provision may be considered where a development is being purpose built for a known end user and it can be demonstrated that lower car park numbers are required on the basis of employee numbers, alternative transport options and likely client / visitor numbers. An area on the site will need to be set aside so that the full car parking requirements can be met to Council's satisfaction in the future if necessary. This area will need to be landscaped and maintained in the interim.
- 2.4.4** Car parking bays for people with disabilities should be provided in accordance with the standards outlined in Disability Discrimination Act (DDA).

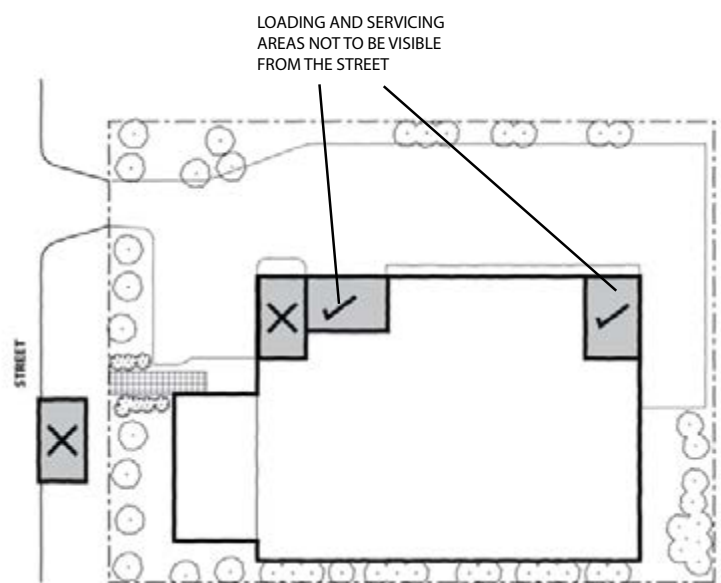


Figure 21 - Location of loading and servicing areas

## 2.5 Car Parking Layout and Design

### Objectives

- To provide attractive industrial and office areas where parking is not a dominant element of the streetscape.
- To provide landscaped car parks that integrate with the design of the site and adjoining streetscape.
- To provide safe and efficient access within car parks for all users.

### Guidelines

#### Siting

- 2.5.1** Car parking within the front setback of the site should be generally restricted to visitor parking. Visitor spaces should be clearly distinguished with suitable signage or pavement markings and should be made permanently available for visitor use. Staff parking may be provided in the front setback if it can be demonstrated that sufficient car parks have been provided for visitors (refer to Figure 22).
- 2.5.2** Large expanses of car park of greater than 20 spaces should be located to the side or rear of the building, unless a justified exemption is sought to the satisfaction of the responsible authority (refer to Figure 22).
- 2.5.3** Car parking should be avoided within 3m of the front property boundary to allow sufficient space for landscaping. Refer to the landscape guidelines in Section 5.
- 2.5.4** Land uses which require the parking and regular movement of trucks should provide designated truck parking areas. This does not include truck movements within loading areas.

#### Access

- 2.5.5** Clearly define pedestrian / cyclist access between the car park and the entrance to the building.
- 2.5.6** Car parking spaces, loading docks and vehicle route directions should be permanently marked out on the pavement surface in accordance with the approved parking and access layout.

#### Design

- 2.5.7** Car parking spaces and access ways should be designed in accordance with the dimensions specified in Clause 52.06 of the Macedon Ranges Planning Scheme and the Australian Standards.
- 2.5.8** Buildings should be designed to address car parking areas with windows and active uses such as entrances to provide passive surveillance.
- 2.5.9** Undercroft car parking may be provided if it does not form a dominant element of the building frontage and enables larger areas of landscaping within the front setback.

**2.5.10** Car parks should be landscaped in accordance with Section 5 of guidelines.

**2.5.11** Car parks and vehicle turning areas should be constructed and sealed with an all weather pavement surface and adequately drained. Unsealed surfaces may be permitted for low trafficked areas to the satisfaction of the Responsible Authority.

**2.5.12** Utilise Water Sensitive Urban Design techniques between rows of car parking to treat stormwater before it is discharged from the site and passively irrigate vegetation.

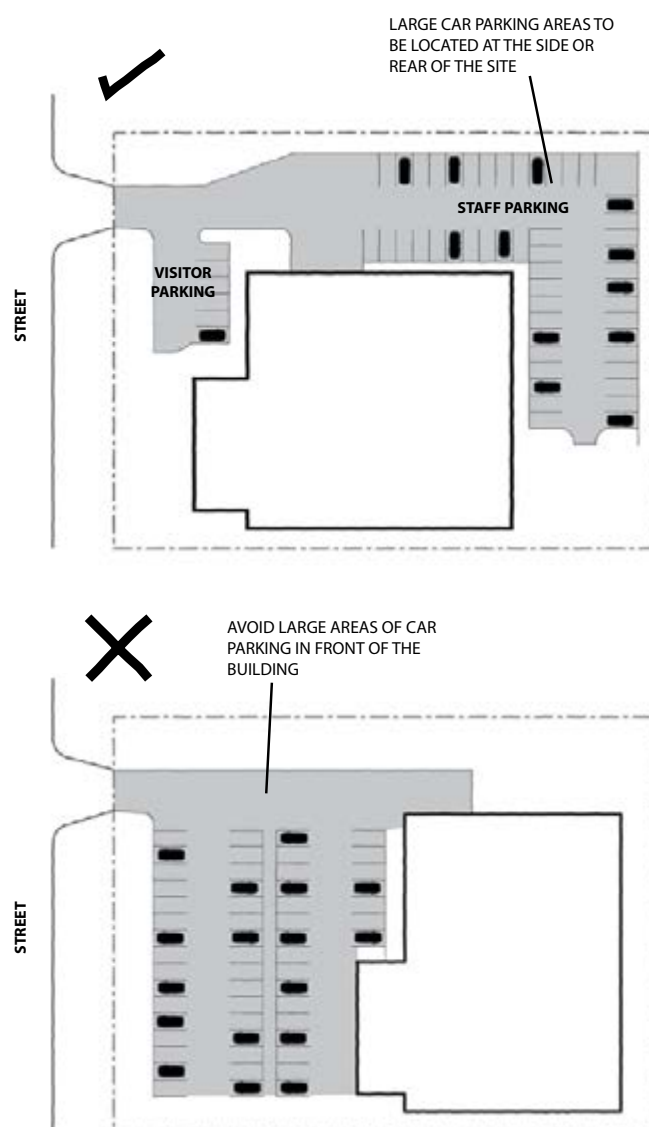


Figure 22 - Car parking layouts





**Figure 23 - An example where the front car park is not a dominant element and its impact is softened by landscaping in the front setback. Windows allow for passive surveillance of the car park**



**Figure 24 - Landscaping with grasses and trees minimise the visual impact of the car park and provides shade to cars**

## 3. Building Siting and Orientation

### 3.1 Setbacks

#### Objectives

- To ensure the siting of buildings reinforces the rural character of the Shire and/or the preferred character of the local area.
- To create cohesive streetscapes that are characterised by consistent building setbacks.
- To provide active and pedestrian friendly streets.
- To ensure the siting of buildings provides adequate space for landscaping and planting and strengthens the landscape character of the area.
- To minimise impacts of overshadowing within the site and on adjoining uses.

#### Guidelines

##### Setbacks

- 3.1.1** For infill development, front building setbacks are to be consistent with the predominant front setbacks in the street if the surrounding lot sizes and uses are consistent with the subject site (refer to Figure 25).
- 3.1.2** Where there is no predominant front setback in the street, front setbacks should be no less than 5 metres from the front property boundary to enable sufficient space for landscaping and building access. The 5m minimum setback is only permitted if car parking (including visitor parking) is provided to the side or rear of the building.
- 3.1.3** Front setbacks should be landscaped in accordance with Section 5 of these Guidelines and should not be used to store goods, materials or waste.
- 3.1.4** Buildings with a width of greater than 30 metres should be set back from both side boundaries in order to minimise the impact of a continuous built wall to the street.
- 3.1.5** Adequate side setbacks should be provided to retain and /or improve the character of a particular industrial and commercial area (i.e a predominance of stand-alone buildings, spaciousness, canopy trees).
- 3.1.6** Development should avoid construction over existing or required easements.

##### Corner Sites

- 3.1.7** For corner sites, the setback from the secondary street frontage should be a minimum of 3 metres to enable sufficient space for landscaping and building access. This setback may be reduced if the facade to the secondary street frontage is articulated through the use of techniques such as recessing and projecting elements of the building, utilising changes in materials, utilising textured concrete and providing windows. A reduction will not be considered where the side boundary is opposite a residential zone.

- 3.1.8** Setbacks on corner sites should enable adequate sight lines for vehicular traffic in accordance with the relevant Australian Standard.

### 3.2 Building Orientation

#### Objectives

- To provide development which addresses the street and enhances street activity in the area.
- To minimise the impact of car parking and loading areas on the streetscape through the orientation of buildings.
- To maximise opportunities for passive solar design through the orientation of buildings.

#### Guidelines

- 3.2.1** Buildings should be orientated so that the building frontage (i.e. entrance, reception, customer service area) is parallel with the primary street frontage.
- 3.2.2** Orientate buildings so that they take advantage of the north / north east aspect to maximise opportunities for passive solar heating and cooling.
- 3.2.3** Buildings should be orientated so that loading and servicing, and large areas of car park (greater than 20 spaces) will occur to the rear or the side of the site.

## 4. Built Form

### 4.1 Building Address

#### Objectives

- To create active and pedestrian friendly industrial and business areas through the design and layout of buildings.
- To ensure development provides adequate activation and passive surveillance of adjoining open space areas.
- To provide businesses and industry that is easy to find for visitor and workers.

#### Guidelines

- 4.1.1** Pedestrian generating uses including customer service, retail and office components, should be located at the street frontage to provide visual interest to the street, create a more pedestrianised scale and assist in passive surveillance of the public realm.
- 4.1.2** Customer service, retail and office components should be articulated by varying building setbacks, utilising glazing, and varying building materials, finishes and colours.



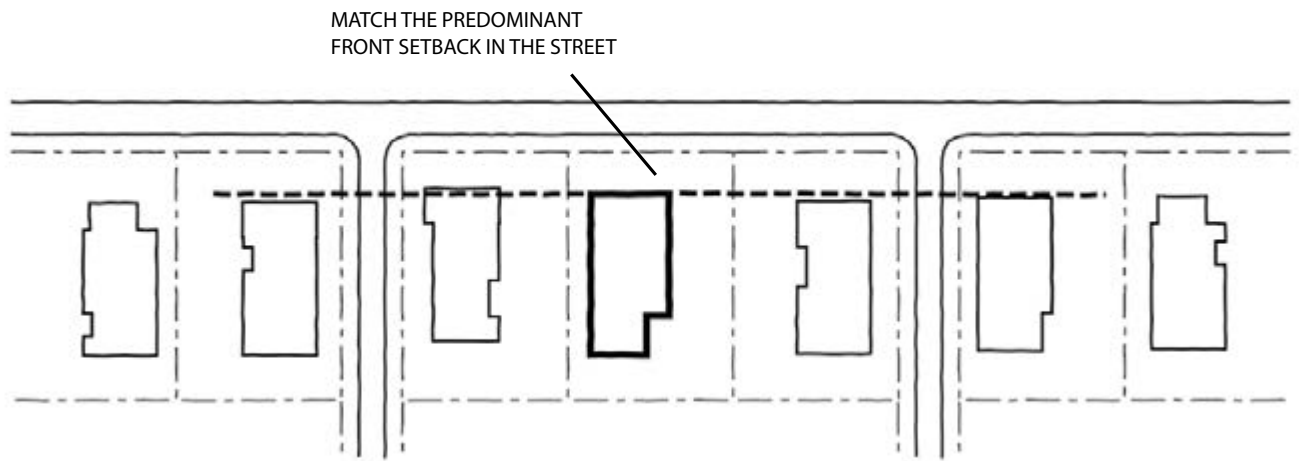


Figure 25 - Front setback delineation



Figure 26 - An example of a building addressing both street frontages on a corner lot



Figure 27 - An example of where a landscaped front setback provides an attractive address for the building

- 4.1.3** Building entries are to be located and orientated to the street frontage, and located at the same level as the street or car park in order to provide logical and convenient access for visitors.
- 4.1.4** Buildings on corner allotments should address both street frontages with articulated facades. Provide taller built form or roof elements to emphasise prominent locations (refer to Figure 29).
- 4.1.5** Buildings should generally front onto public open space. Where this is impractical, the building should address the open space with articulated built form and habitable rooms or spaces. This will improve passive surveillance of the open space and provide visual interest when the development is viewed from the open space (refer to Figure 28).
- 4.1.6** Avoid blank, unarticulated walls to public viewing areas.

## 4.2 Building Design and Detail

### Objectives

- To reinforce the rural character of the Shire and/or the preferred character of a local area through the design of new buildings.
- To provide buildings that are simple in detail, and representative of the particular industrial or business built form.
- To provide practical building forms that meet the purpose of the industry or business.

### Guidelines

- 4.2.1** Buildings are to be of a responsive architectural style and reflect an industrial or commercial form of development appropriate to the rural character of the area. Avoid excessive detailing in facades.
- 4.2.2** Office components are to utilise greater articulation within facades and a greater proportion of glass.
- 4.2.3** All building walls that are visible from the street, public open space or key public viewing areas should be articulated to provide visual interest. Avoid excessive blank walls.

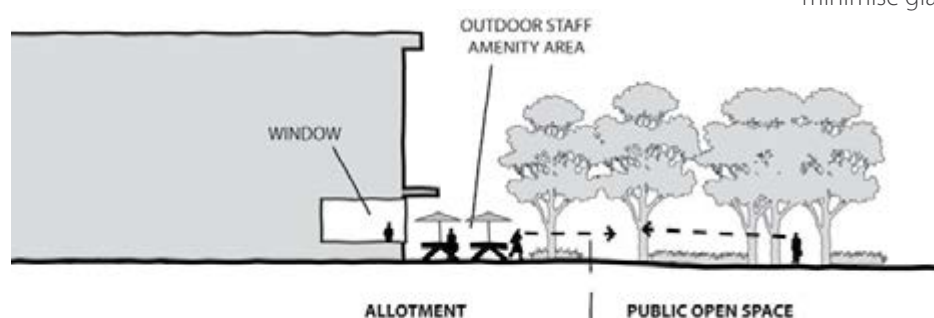


Figure 28 - Open space address

- 4.2.4** Articulation can be achieved by varying building setbacks or projecting building elements, varying roof forms, utilising glazing, and varying building materials, finishes and colours.
- 4.2.5** Buildings should provide a minimum of 30% glazing in the facade that fronts the street. Where this is not practical, it will need to be demonstrated that the front facade contributes positively to the streetscape and provides passive surveillance of the street.
- 4.2.6** Design outbuildings to be consistent with the overall design theme of the site.

## 4.3 Colours, Materials and Finishes

### Objectives

- To ensure colours, materials and finishes are compatible with the rural character of the Macedon Ranges Shire.
- To provide a co-ordinated palette of colours, materials and finishes within industrial and business areas.
- To provide materials that are durable and robust.

### Guidelines

- 4.3.1** Utilise materials that reinforce the rural built form and landscape such as corrugated iron, timber and textured concrete. Avoid the excessive use of heavy looking materials and unfinished pre-cast concrete walls.
- 4.3.2** Utilise a mix of materials and colours particularly within the visible facades, to provide articulation to the buildings and visual interest to the street.
- 4.3.3** Materials should utilise muted, earthy tones or other colours approved by the responsible authority. Avoid the use of bright, bold colours that are not compatible with the muted tones of the natural landscape.
- 4.3.4** Where the rear or side of a building is visible from a publicly accessible area, provide articulation or utilise a textured surface treatment in order to provide visual interest.
- 4.3.5** External finishes should be of low reflectivity to minimise glare and reflection to surrounding areas.

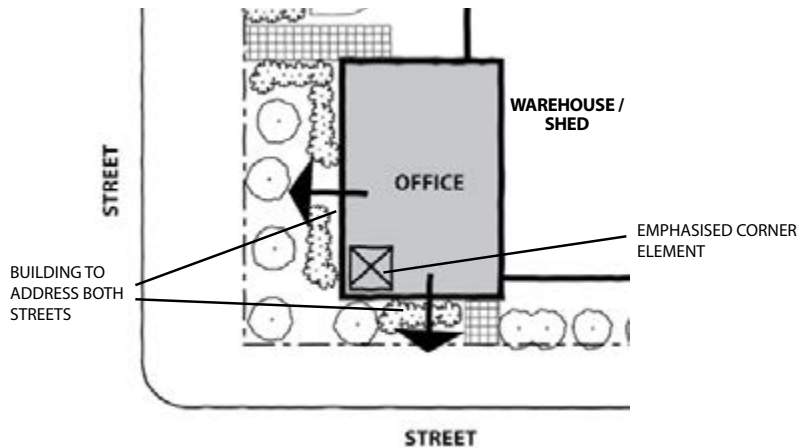


Figure 29 - Corner treatment



Figure 30 - This example uses building forms that are representative of industrial building style, it incorporates mixed materials to articulate the facades, and it provides for a defined entry to the building



Figure 31 - An example of where the office element integrates with the 'shed' by adopting a similar building form



Figure 32 - Simple screening provides facade articulation and shade to windows





**Figure 33 - Textured concrete combined with windows and openings is utilised in this example to provide for articulation of the facade**



**Figure 35 - Providing textured panelling and changing the orientation of the panelling can provide for effective articulation**



**Figure 34 - Use of 'earthy' tones and timber provides design response which integrates with the landscape setting**



**Figure 36 - This facade utilises a variety of colours, textures and projected elements to provide effective articulation**

## 4.4 Building Heights

### Objectives

- To ensure building heights respond to the predominant scale of built form in the area.
- To ensure building are appropriately scaled to maintain key views from surrounding areas
- To ensure industrial and offices buildings have minimal impact on the amenity of the adjoining public realm and residential areas.

### Guidelines

- 4.4.1** Building heights should respond to the scale of existing development in the street, and incorporate lower elements towards the street to relate to the pedestrian scale (refer to Figure 37).
- 4.4.2** Where an industrial development is located opposite a residential area, building heights at the street frontage should relate to the scale of residential buildings (refer to Figure 37).
- 4.4.3** Building Heights should generally not exceed 9m unless a taller built form is required for the purpose of the industry or business. In this case, it will need to be demonstrated that the taller element will have minimal visual impact on views from surrounding residential and rural living areas, views from key public viewing areas, views from the adjoining street and views to and from significant landscapes.
- 4.4.4** Taller elements of the building over 9m in height should be recessed from the street in accordance with Figure 38.
- 4.4.5** Buildings should not generally overshadow public footpaths or public open space between the hours of 11:00AM and 2:00PM at the Winter Solstice, June 21.

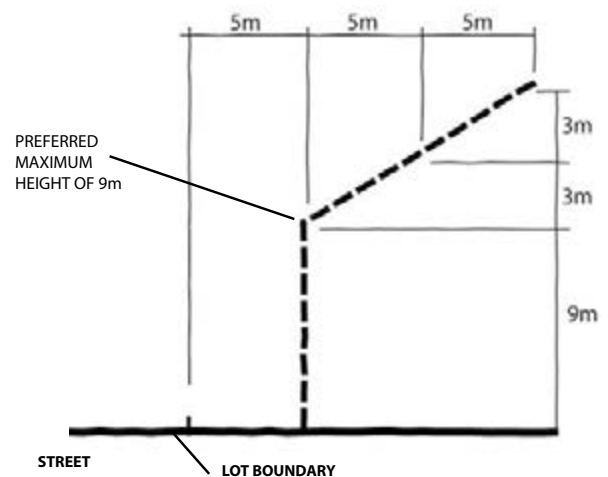


Figure 38 - Front building height setbacks

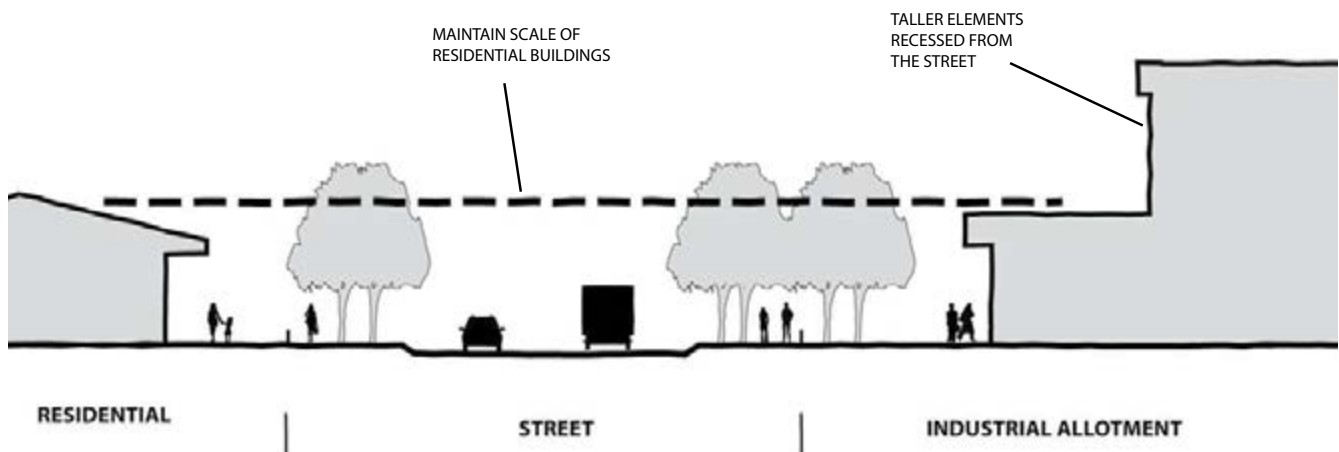


Figure 37 - Building heights responding to existing scale



## 4.5 Roof Forms

### Objectives

- To provide articulated roof forms that create visual interest and variation in the street.
- To integrate the roof form into the overall design of the building.
- To ensure roof forms reflect the prevailing streetscape character and the industrial / business function of the building.
- To minimise the impact of roofing and building infrastructure on adjoining areas.

### Guidelines

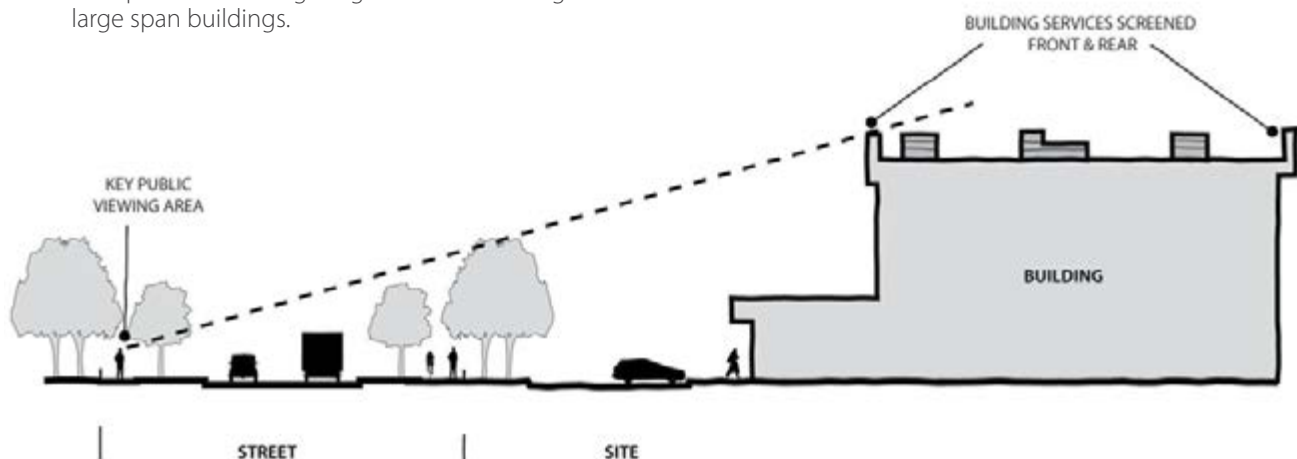
- 4.5.1 Utilise varied roof forms to provide visual interest to the street whilst providing forms that are compatible with the character and function of industrial and office buildings. Avoid bulky or highly detailed roof forms.
- 4.5.2 Roof forms should be designed to integrate with the prevailing roof forms in the industrial or business area.
- 4.5.3 Roof forms should generally be of a low pitch unless necessitated by the particular industry function. Steeper pitched roof elements may also be utilised to reduce the apparent bulkiness of a large roof areas and to respond to the prevailing streetscape character.
- 4.5.4 Utilise roof forms to differentiate between the various elements of the building. This could include the transition between the office / sales area through to the larger shed behind.
- 4.5.5 Building infrastructure which is located on the roof including air conditioning units, plant room, lift motor rooms, exhaust systems, rooftop car parking etc. is to be screened from adjoining streets and areas utilising roof forms or parapets that integrate with the overall design of the building (refer to Figure 41).
- 4.5.6 Incorporate natural lighting into the roof design for large span buildings.



**Figure 39 - An example of simple, non-bulky roof form that represents the industrial building character**



**Figure 40 - Low pitched gabled roof forms are an important element of the industrial character in the Shire**



**Figure 41 - Utilising roof forms to screen building infrastructure**

## 4.6 Signage and Advertising

### Objectives

- To ensure signage and advertising is designed and located to be compatible with the rural character of the Shire.
- To provide for the identification of businesses in a way that maintains the character and amenity of the street and is designed to be compatible with visually sensitive areas.
- To ensure signage is informative and co-ordinated in a way that enables customers to easily locate the industry or business and determine its services.

### Guidelines

- 4.6.1** Signage should be integrated into the design of buildings by forming a logical element of the front facade and be in keeping with the scale of the facade (refer to Figure 42).
- 4.6.2** Signage should be limited in numbers to avoid visual clutter and unnecessary repetition.
- 4.6.3** Where there are multiple business occupancies within the one site, one shared sign should be provided that details the location of the businesses. A small identification sign may be provided for each business that it is co-ordinated with the shared sign in terms of style and materials.
- 4.6.4** Freestanding signage should be avoided and will only be permitted if it can be demonstrated that signage on the building facade will not provide effective business identification. If freestanding signage is permitted, it should integrate with the overall design of the site in terms of scale, form, landscaping and materials, and should not detract from the streetscape character and key views to the area (refer to Figure 43).
- 4.6.5** Signage attached to front fences and temporary A-Frame signage on footpaths should be avoided.
- 4.6.6** In visually sensitive areas, signage should be designed so that it does not detrimentally affect the character of the area and does not unduly diminish key views within the area.
- 4.6.7** Directional signage should be provided within sites to delineate entries and exits, staff and visitor parking, office /reception areas, and loading areas. Directional signage within the site should be consistent in style and form.

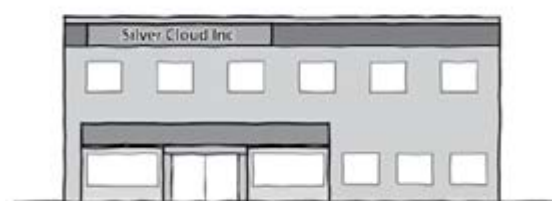
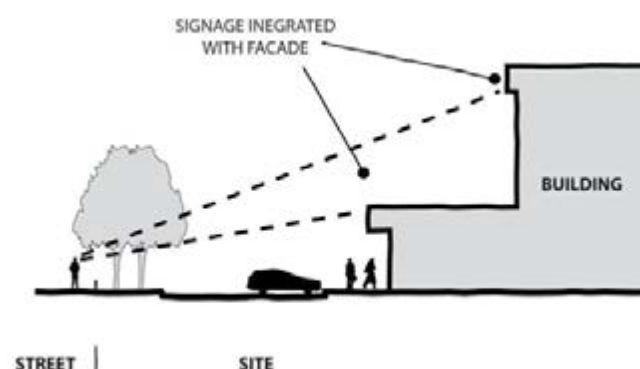


Figure 42 - Siting and design of facade signage

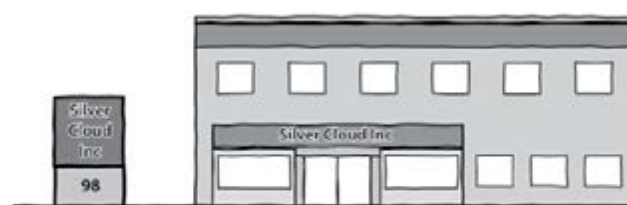
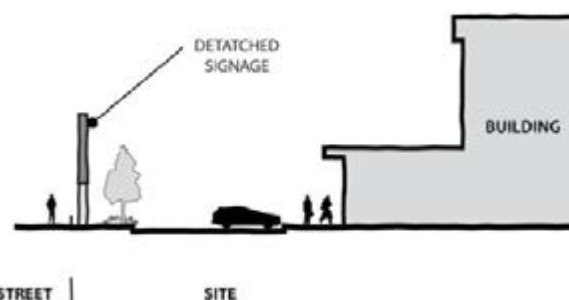


Figure 43 - Siting of design of detached signage



Figure 44 - An example where the signage integrates with the design of the facade through its relative scale and colour



Figure 45 - An example of multiple tenancy signage



Figure 46 - An example of directional signage that is provided at eye height and integrated with the colour and style of other signage



## 5. Landscaping

### 5.1 Landscape Design

#### Objectives

- **To build on the rural character of the Shire through compatible and ample landscaping within industrial and business areas.**
- **To provide landscape design that responds to the characteristics and qualities of the particular site and area.**
- **To provide high quality landscaping within the front setback that enhances the setting of buildings in the street.**
- **To provide low maintenance and drought tolerant landscaping.**
- **To ensure the ongoing maintenance of landscaped areas.**

#### Guidelines

##### Siting and Areas requirements

- 5.1.1** Where canopy trees are to be provided, landscaped areas should be a minimum of 3 metres in width to enable sufficient space for root zones. Landscaped areas of shrub, grasses, sedges and groundcovers should be a minimum of 2 metres to provide for the effective impact of planting.
- 5.1.2** Utilise planter boxes in locations where there is insufficient space to establish a landscaped area. Boxes should be integrated into the overall design of the building and landscape, and be of an adequate size to maintain plants.
- 5.1.3** Buildings should be setback from existing trees by the width of the canopy of the mature tree in order to protect tree root zones.
- 5.1.4** Consolidate landscape areas to maximise the effect of the landscape and allow sufficient space for tree growth.

##### Landscaped Setbacks

- 5.1.5** Front setbacks should be designed with at least a 3 metre wide landscape strip that incorporates clean trunk canopy trees that will reach over 8m in height, and enable clear views between the street and the front of the building. Low shrubs, grasses, sedges and ground covers can be utilised in combination with the canopy trees provided uninterrupted views at ground level are maintained. Semi-mature trees should be utilised when appropriate.
- 5.1.6** Trees species should be carefully selected and sited so that the root systems and canopy do not impact negatively on assets within the road reserve or users of the road reserve.
- 5.1.7** Provide elements within the front setback that will encourage the use of the space by staff and visitors.

This could include landscaped areas incorporating seating and grassed areas (refer to Figure 47).

- 5.1.8** Corner sites should provide landscaped setbacks to both street frontages to the satisfaction of the responsible authority.
- 5.1.9** Landscaping in rear setbacks should be provided if the rear of the site adjoins a public street, is visible from key public viewing areas eg railway line, freeway, or a rural or residential area.

##### Car park landscaping

- 5.1.10** For visitor car parking within the front setback, provide one canopy tree for every 6 car parking spaces. The species should be selected to provide shade for vehicles and pedestrians, and allow clear views between pedestrians and the vehicles.
- 5.1.11** A landscape strip of at least 1 metre should be provided to separate car parks from side and rear boundaries.
- 5.1.12** For large car parks with greater than 20 spaces, provide canopy tree planting for every 8 car parking spaces. The species should be selected to provide shade for vehicles and pedestrians, and allow clear views between pedestrians and the vehicles.
- 5.1.13** Landscaped areas should be separated from vehicle access through the use of kerbs or raised edging to ensure the maintenance of vegetation.
- 5.1.14** Utilise water sensitive urban design techniques to treat stormwater run-off from car parks and passively irrigate vegetation.

##### Staff Amenity Areas

- 5.1.15** Where provided for or where the features of a site or proposal make it feasible or necessary, functional outdoor staff areas should be located to take advantage of northern aspect, connection to internal staff meals areas, and be landscaped with shade trees and seating.

##### Visual and Acoustic Screening

- 5.1.16** Where a landscape screen / buffer is required, it should have a minimum width of 5 metres and consist of a variety of trees, shrubs, grasses, sedges and groundcovers.
- 5.1.17** Screen planting should be provided where an undesired element of the site will be visible from the Calder Freeway, main roads or township entries, or adjoining rural or residential properties. Elements to be screened include, loading areas, goods storage areas, waste and recycling areas, electrical substations and heavy machinery.
- 5.1.18** Utilise landscaped mounding in combination with planting of shrubs and canopy trees for effective screening (refer to Figure 48).
- 5.1.19** For screening that is required for acoustic purposes, provide dense tree and tall shrub planting with a combination of mounds / walls as required.

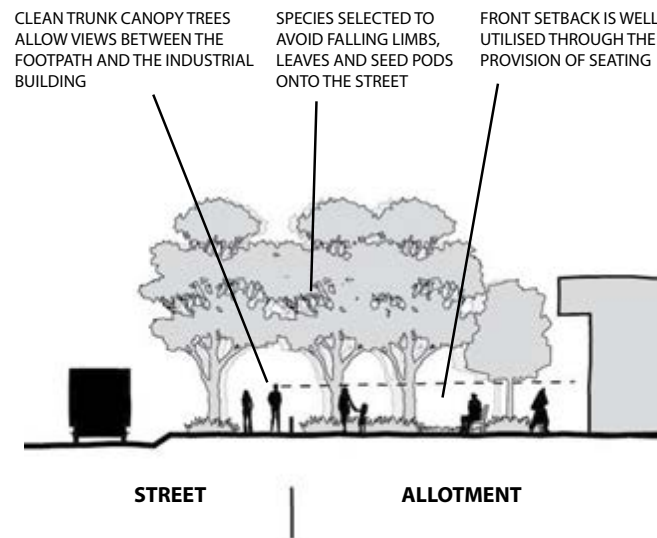


Figure 47 - Front setback design

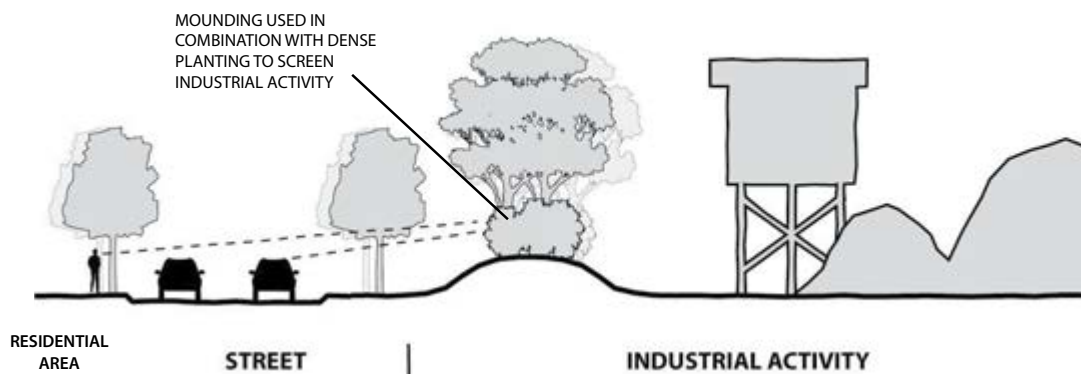


Figure 48 - Visual and acoustic screening

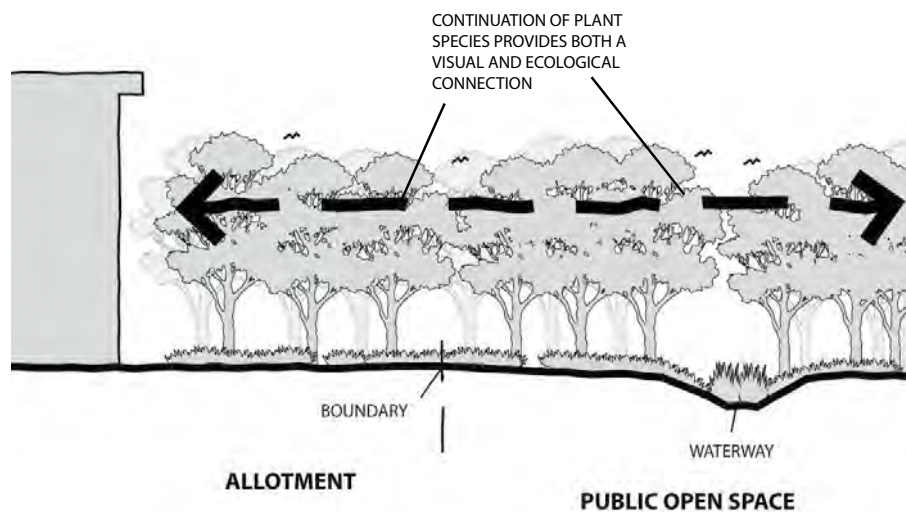


Figure 49 - Rear interface with natural open space feature





**Figure 50 - This example of a landscaped area is wide enough to provide for a mix of grasses, shrubs and trees and have a strong effect on the streetscape**



**Figure 51 - This landscaping example is effective in screening and also providing an attractive element to the streetscape**



**Figure 52 - An example where the building has been sited and designed to retain a remnant tree**

## Landscaping Adjoining Open Space

**5.1.20** For sites adjoining creek corridors or areas of indigenous or native vegetation, utilise plant species that reflect the species within the particular area to provide a visual and ecological connection (refer to Figure 49).

## 5.2 Species selection

**5.2.1** Species should be selected to integrate with the surrounding landscape character and connect and integrate with the landscape of adjoining sites where appropriate.

**5.2.2** Landscape areas should be planted with species that are low maintenance and hardy, and do not require irrigation from the potable water supply. Species selection should generally provide an emphasis on native and indigenous plants that are appropriate to the site and landscape character of the area.

**5.2.3** Exotic species may be utilised in areas where they are considered to be an important element of the landscape character or for emphasis planting provided the plants do not require potable water supply for irrigation.

## Vegetation Retention

**5.2.4** Buildings and landscaping should be sited and designed to retain existing vegetation on site to the satisfaction of the responsible authority. Trees and other vegetation can be retained within building setbacks, building recesses, or within future open space areas (refer to Figure 52).

## Establishment and Maintenance

**5.2.5** Landscaping should be completed within 3 months of building construction completion and be carried out in accordance with the approved landscape plan.

**5.2.6** Provide for the ongoing maintenance of landscaped areas and generally utilise low maintenance and durable landscaping techniques.

## 5.3 Fencing

### Objectives

- **To ensure the front boundary treatment contributes positively to the appearance of the streetscape and clearly delineates the public and private realms.**
- **To ensure fencing provides for adequate site security.**
- **To ensure fencing is co-ordinated with the design of the building and landscaping.**

### Guidelines

**5.3.1** Fencing along the front boundary should generally be avoided unless accepted by the responsible authority. Utilise landscaping to delineate the front property boundary.

**5.3.2** Where front fencing is permitted and is not required for security purposes, the fence should be:

- Unobtrusive and not exceed 1.5m in height.
- Allow clear views between the street and the business.
- Utilise materials and colours appropriate to the location, and building and landscape design.
- Avoid the use of high and/or solid structures / materials.

**5.3.3** If security fencing is required, it should have a high degree of transparency and be constructed with black plastic coated chain link wire or black steel post style. Provide landscaping around the fencing to soften the visual impact and avoid the use of razor or barbed wire fencing.

**5.3.4** If security fencing is required along the front boundary, it should be provided at or behind the building line to enable stronger visual and physical connection between the street and building entries.

**5.3.5** Where screen fencing is required, it should be designed to integrate with the materials and colours utilised throughout the site.

## 5.4 Paving

### Objectives

- **To minimise excessive runoff from sites and maximise infiltration of water.**
- **To provide paved areas that are robust and require minimal maintenance in an industrial or office environment.**

### Guidelines

**5.4.1** Impervious paving materials including concrete, stone and brick should be minimised in landscaped areas to allow for natural infiltration of water and passive irrigation of plants.

**5.4.2** Utilise appropriately treated, robust materials in areas that are highly trafficked by pedestrians or utilised for vehicle manoeuvring and parking.

**5.4.3** Provide shade to large paved areas to minimise the 'heat island effect.'

**5.4.4** Minimise run-off from paved areas.

## 6. Site Amenity

Refer to Clause 52.10 of the Macedon Ranges Planning Scheme for setback requirements for industrial and warehouse uses with adverse amenity potential.

### 6.1 Waste Storage

#### Objectives

- To ensure adequate access to waste and recycling facilities is provided for each business or industry.
- To ensure waste storage and treatment areas do not detrimentally impact on the amenity of streetscapes and the quality of stormwater.

#### Guidelines

- 6.1.1** All sites are to provide dedicated waste and recycling storage areas.
- 6.1.2** Waste storage and recycling areas should be located away from the street frontage, staff amenity areas and stormwater drains. They should not be located in front of the building, within landscaped areas, driveways, car and truck parking spaces and vehicle turning areas.
- 6.1.3** Waste and recycling storage areas should be adequately screened from the public realm, staff amenity areas and adjoining rural or residential properties utilising landscaping as outlined in Part C, Section 5.1 or structural screening (refer to Figure 54).
- 6.1.4** New developments are to demonstrate methods to minimise the production of waste as well as recycling and the re-use of waste materials.

### 6.2 Goods Storage

#### Objectives

- To ensure goods storage areas are appropriately sited and designed to minimise impacts on streetscapes.
- To ensure the storage of goods does not adversely impact on the quality of stormwater.

#### Guidelines

- 6.2.1** Goods storage areas should be located behind the building line and located away from stormwater drains. Goods storage areas should not be located within landscaped areas, driveways, car and truck parking spaces and vehicle turning areas.
- 6.2.2** Goods storage areas should be appropriately screened from key public viewing locations. Refer to Guideline 5.1.17 for visual screening guidelines and figure 53.
- 6.2.3** If goods storage areas are to be accessed by customers on a regular basis, safe pedestrian access should be provided.

### 6.3 Lighting

#### Objectives

- To ensure lighting is adequate for the purposes of navigation for pedestrians and security.
- To minimise the spill of light onto adjoining and nearby residential and rural properties.

#### Guidelines

- 6.3.1** Lighting should be provided on site for the purposes of security and safe pedestrian access to buildings and car parks. It should be designed so that it does not adversely impact on the safety of road users
- 6.3.2** Lighting is to be directed, baffled and of a height that prevents light spillage onto adjoining, and nearby residential, low density residential and rural properties.
- 6.3.3** Utilise sensor lighting where appropriate to reduce energy consumption and impacts on surrounding areas.

### 6.4 Acoustic Treatments

#### Objectives

- To ensure acoustic treatments are designed to achieve their purpose and integrate with the surrounding context.
- To ensure acoustic treatments match in with the site design.

#### Guidelines

- 6.4.1** Where practical, utilise acoustic treatments internal to the building through the design of the building layout, and the use of acoustic insulation or suitable building materials.
- 6.4.2** Where external acoustic treatments are required, utilise tree and shrub planting, mounding, acoustic walls or a combination of each as required. The acoustic treatment areas should be accessible and maintained.
- 6.4.3** Design the acoustic treatment so that it contributes positively to the public realm and adjoining properties, and integrates with the design of the building and landscaping.



Figure 53 - Timber utilised to screen storage areas



## 7. Interface Treatments

Refer to Part D of the Guidelines document to determine which interface treatments are applicable. Where visual or acoustic screening is required, refer to Part C, Sections for 5.1 and 6.4 for further guidance.

Refer to Clause 52.10 of the Macedon Ranges Planning Scheme for setback requirements for industrial and warehouse uses with adverse amenity potential.

### 7.1 Interface Types

#### Objectives

- **To protect the amenity of residential, low density residential, rural living, rural areas and other sensitive land uses.**
- **To ensure the rural character of the Macedon Ranges Shire is maintained when industrial and business sites are viewed from key public areas.**
- **To ensure industrial and business sites contribute positively to their particular context.**

#### Guidelines

Residential / Low Density Residential / Rural Living Interface / Schools

- 7.1.1** Where an industrial or business site abuts or is located opposite a residential property within a Residential Zone, provide a transition in height so that the building relates to the scale of residential buildings at the interface edge (refer to Figure 38).
- 7.1.2** For industrial or business sites that share a side or rear boundary with a residential, low density residential, or rural living property, provide a side or rear setback of 5 metres to the adjoining boundary. Provide appropriate vegetated screening / mounding or a combination of both to the property in order to soften the visual impact of the industrial or business building.
- 7.1.3** Uses that are likely to have a visual or acoustic impact on the amenity of residential, low density residential, rural living or school properties, should be sited as far as possible from the sensitive interface and provide sufficient visual and/or acoustic screening within the industrial or business property.

Rural Interface

- 7.1.4** Where an industrial or business site abuts a rural property, provide appropriate vegetated screening / mounding within a minimum width of 5 metres or a combination of both to the rural property in order to maintain the undeveloped outlook from within the rural property.
- 7.1.5** Uses that are likely to have a visual or acoustic impact on the amenity of the rural property should be sited as far as possible from the rural interface and provide

sufficient visual and/or acoustic screening within the industrial or business property.

Calder Freeway Interface

- 7.1.6** For industrial and business sites that back or side onto the Calder Freeway and are visible from vehicles, utilise landscaping with a minimum width of 5 metres to screen loading, storage, waste storage and recycling areas, and blank walls from the freeway. This could be achieved through a combination of mounding and appropriate vegetation planting.
- 7.1.7** Articulate the building facades and roof forms that face onto the freeway in order to provide an attractive visual interface to motorists.

Railway Interface

- 7.1.8** For industrial and business sites that back or side onto the railway line and are visible from the train or railway stations, utilise landscaping with a minimum width of 3 metres to screen views to the rear or side of the sites. This could be achieved through a combination of mounding and dense vegetation planting.
- 7.1.9** Articulate the building facades and roof forms that face onto the railway line in order to provide an attractive visual interface to passengers.

Township Entries / Main Roads

- 7.1.10** Sites considered to have importance in the entry to townships and sites located on main roads require careful design guidance to ensure that the proposed development does not diminish the sense of arrival into the town, and detrimentally alter the character of place. The elements that will need to be carefully considered include:
- Limiting the prominence of signage and advertising so that it is a recessive element in the streetscape and visual clutter is minimised.
  - Retaining vegetation that is considered by the responsible authority to be an important element of the entry experience or main road character.
  - Providing appropriate setbacks and landscaping that integrates with the adjoining public realm.
  - Providing high quality built form, materials, colours and finishes that are compatible with the scale and character of built form in the industrial area and the township.

Open Space Interface

- 7.1.11** For sites located opposite open space, development should be designed to address the open space with windows on the ground floor and uses that provide passive surveillance of the open space and street.

**7.1.12** Where a building backs onto public open space, the building should address the open space with articulated built form and habitable rooms or spaces, and provide uses such as staff amenity areas at the interface. This will improve passive surveillance of the open space and provide visual interest when the development is viewed from the open space (refer to Figure 29).

**7.1.13** Avoid the use of high solid fencing along the open space boundary that prevents views between the open space and the industrial or business development.

#### Waterway / Water body Interface

**7.1.14** Creeks, waterways or water bodies within sites should be emphasised as key features through the layout and design of buildings and landscaping. Development should address the water feature with articulated built form and habitable rooms or spaces, and provide uses such as staff amenity areas at the interface.

**7.1.15** Planting within the site should integrate with the natural vegetation of the water feature.

**7.1.16** Development should be set back from the drainage corridors and waterways in accordance with any referral authority requirements and State Planning Policies.

## 8. Specific requirements

### 8.1 Factoryettes

Factoryette developments are typically small industry or warehouse units with shared access and car parking areas. Buildings are generally attached at the side wall.

#### Objectives

- To ensure factoryette lot sizes are adequate to enable flexibility for a variety of land uses.
- To provide safe and convenient pedestrian, cycle and vehicle access, and adequate car parking.
- To ensure factoryette developments contribute positively to the streetscape.

#### Guidelines

**8.1.1** Where the end use of each factoryette is not known, car parking should be provided at the rate for Industrial land uses under Clause 52.06 of the Macedon Ranges Shire Planning Scheme.

**8.1.2** A reduction in car park provision may be considered where a development is being purpose built for a known end user and it can be demonstrated that

lower car park numbers are required on the basis of employee numbers and likely client / visitor numbers.

**8.1.3** Development should provide built form that addresses the primary street frontage as well as the internal access lanes. Car parking in front street setback areas should be minimised.

**8.1.4** Where practical, provide a rear lane for service and loading traffic so that it is separated from visitor access and parking.

**8.1.5** Clearly separate pedestrian building entries into developments from vehicle and servicing entries by providing a pedestrian door to an office area and a separate roller or tilt door for vehicle access.

**8.1.6** Provide a central waste area that is screened from public view and easily accessible by tenants and waste collection vehicles.

**8.1.7** Storage areas are to be completely contained within the buildings or at the rear of the building and appropriately screened from view.

### 8.2 3.8.1 Motor Vehicle Repairs

#### Objectives

- To ensure motor vehicle repairs premises contribute positively to the streetscape
- To ensure adequate space is provided for the operational and storage needs of premises.

#### Guidelines

**8.2.1** Sites should be of a sufficient size to enable all vehicle storage and other storage, visitor and staff parking, to be completely contained within the site.

**8.2.2** Visitor car parking spaces should be permanently reserved for visitor access and not utilised for storage of cars to be repaired.



## 9. Environmentally Sustainable Design

### 9.1 Integrated water management

#### Objectives

- To minimise any increase in stormwater run-off and protect receiving waters from environmental degradation.
- To reduce potable water consumption.

#### Guidelines

##### Stormwater minimisation

- 9.1.1** Incorporate rainwater tanks on each building of at least 5,000 litres to collect runoff from roof areas. The water should be used for landscape irrigation, cleaning and toilet flushing.
- 9.1.2** Utilise pervious and porous surfaces and minimise impervious sealed services in order to maximise on-site stormwater infiltration.
- 9.1.3** Utilise grass swales for channelling stormwater and perforated stormwater drainage pipes in order to increase infiltration.

##### Stormwater Treatment

- 9.1.4** Incorporate water sensitive urban design techniques to treat stormwater before it is discharged from the site. Techniques include:
- Use of a sediment basin, wetland and pond to treat water and release into receiving waters at pre-development flows.
  - Use of bioretention swales, basins or rain gardens to improve stormwater quality and provide attractive landscape features.

##### Water Recycling and Re-use

- 9.1.5** Where practical, incorporate grey water treatment and re-use systems (in accordance with EPA requirements) to provide additional water sources for irrigation of landscapes, cleaning and toilet flushing.

##### Potable water conservation

- 9.1.6** Provide water efficient taps and fittings and utilise recycled or tank water to minimise consumption of potable water.

### 9.2 Energy Efficient Building & Site Design

#### Objectives

- To minimise greenhouse gas emissions from industrial and business sites.
- To provide economically viable solutions to energy efficient design.

#### Guidelines

##### Site Layout and Building Orientation

- 9.2.1** Strategically locate deciduous trees to provide shade to windows and outdoor spaces in summer, and allowing sun entry in winter.
- 9.2.2** Orientate buildings and position windows, awnings and shutters to capture solar access in winter and provide appropriate shading in summer.

##### Heating and Cooling

- 9.2.3** Utilise natural systems to provide cross flow ventilation of buildings while ensuring openings are sealed in winter to minimise draft.
- 9.2.4** Utilise insulation in combination with other materials that maximise thermal performance.
- 9.2.5** Heating and Cooling systems should be zoned to meet the operating times and uses of the business.

##### Energy Conservation / Renewable Energy Production

- 9.2.6** Maximise natural lighting through skylights, light wells and positioning windows to capture northern light. Utilise light coloured internal finishes to reflect light.
- 9.2.7** Utilise energy efficient lighting and appliances.
- 9.2.8** Consider on-site production of renewable energy through photovoltaic cells and solar hot water systems. Maximise north facing roof spaces to facilitate energy production.
- 9.2.9** Consider wind generation as a form of renewable energy if it can be demonstrated that the turbines have minimal impact on the streetscape and adjoining properties.

##### Building Materials

- 9.2.10** Where practical, source local building materials to reduce transportation. Selection should also take into account the embodied energy required in the production of the material.
- 9.2.11** Utilise recycled building materials where possible.

### 9.3 Flood Protection Criteria

#### Objectives

- **To ensure new development in flood prone or flood risk areas is sited, setback, and designed with appropriate freeboard levels to avoid the risk of flood inundation.**
- **To ensure vehicle and pedestrian access siting and design meets applicable flood safety criteria.**

#### Guidelines

##### Freeboard Requirements

- 9.3.1** All new development must meet relevant flood protection criteria. If development occurs in the vicinity of an open waterway or floodway, appropriate freeboard requirements for the development should be adopted as determined by the responsible authority or referral authority and to the satisfaction of the responsible authority.

##### Access Flood Safety Criteria

- 9.3.2** Any vehicle and/or pedestrian access must be designed and constructed to comply with the following safety criteria associated with the applicable floodlevel: (A) Depth of flow does not exceed 0.35m; (b) Velocity of flow does not exceed 1.5m/s; (C) the Depth and Velocity product does not exceed 0.35m<sup>2</sup>/s.



# Part D. Site Specific Guidelines





# 1. Overview

## 1.1 Introduction

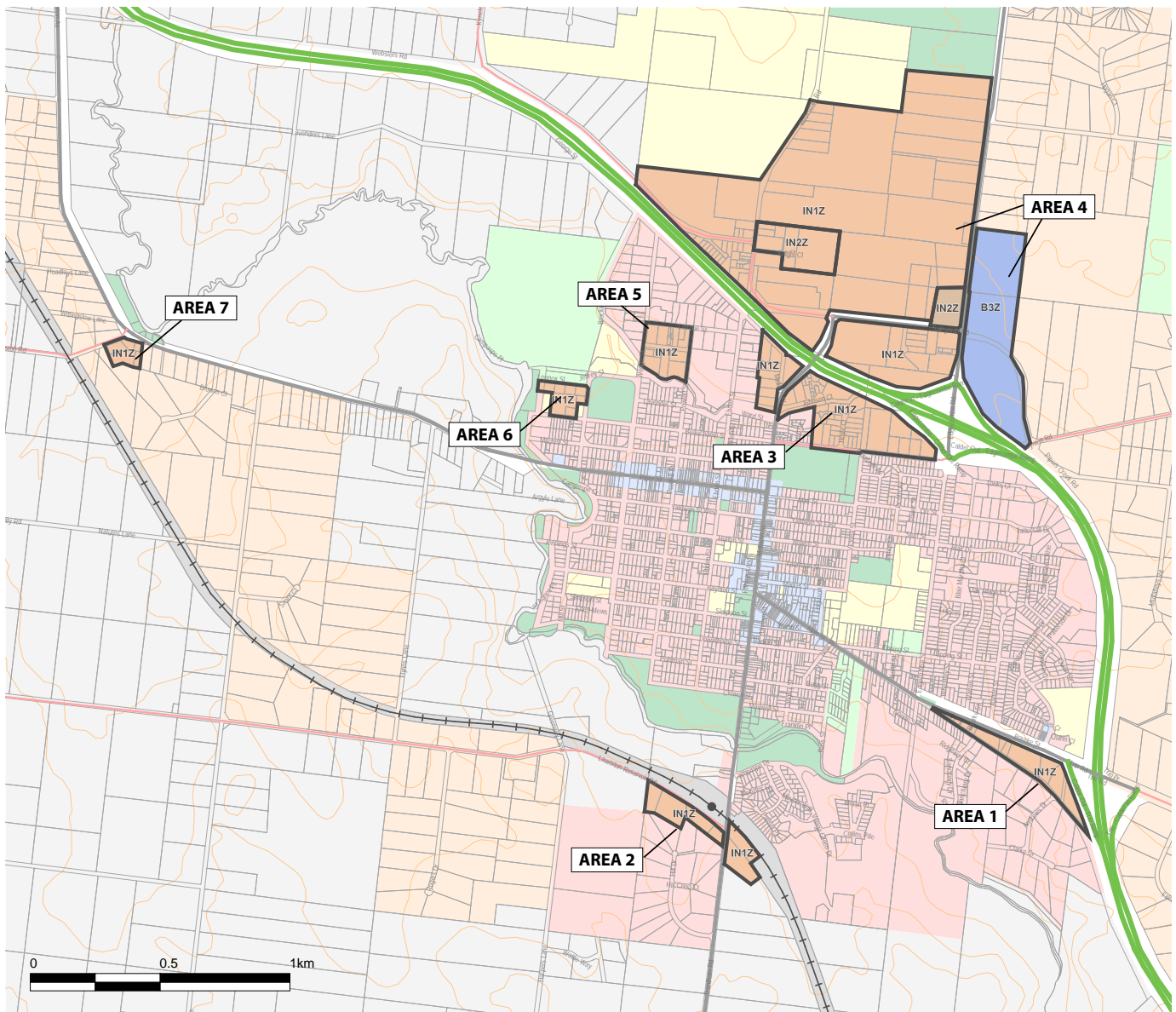
This part of the guidelines document provides guidance for specific site design issues.

It identifies the various interface types for which guidelines are provided in Part C, Section 7 of this document. In addition, this section provides site specific guidelines where a particular outcome for an area is desired.

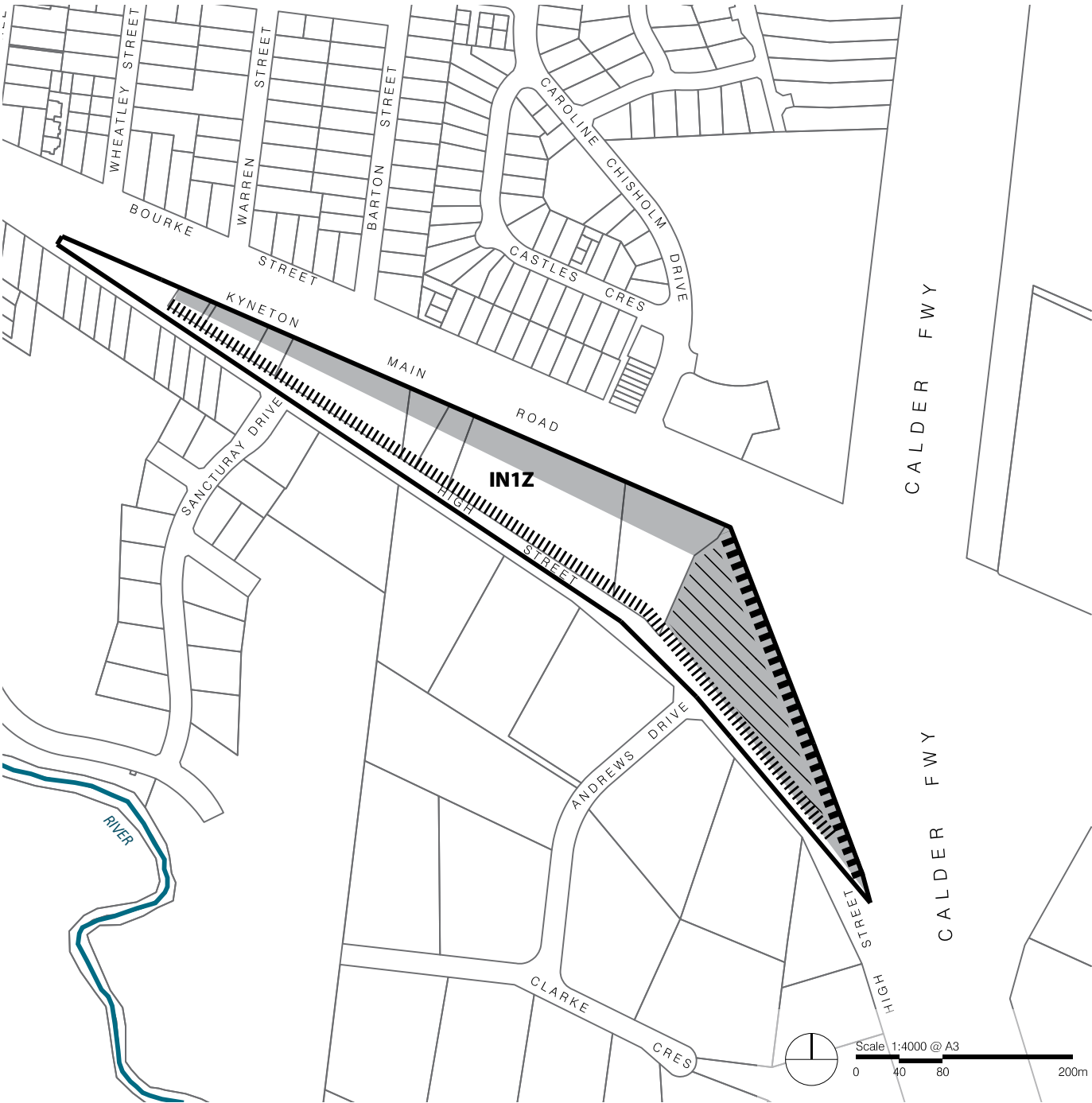
This section will assist the permit applicant, the responsible authority and the community when assessing developments against the decision guidelines of the relevant land use zone.

## 2. Kyneton

### Key Map







## 2.1 Kyneton Area 1

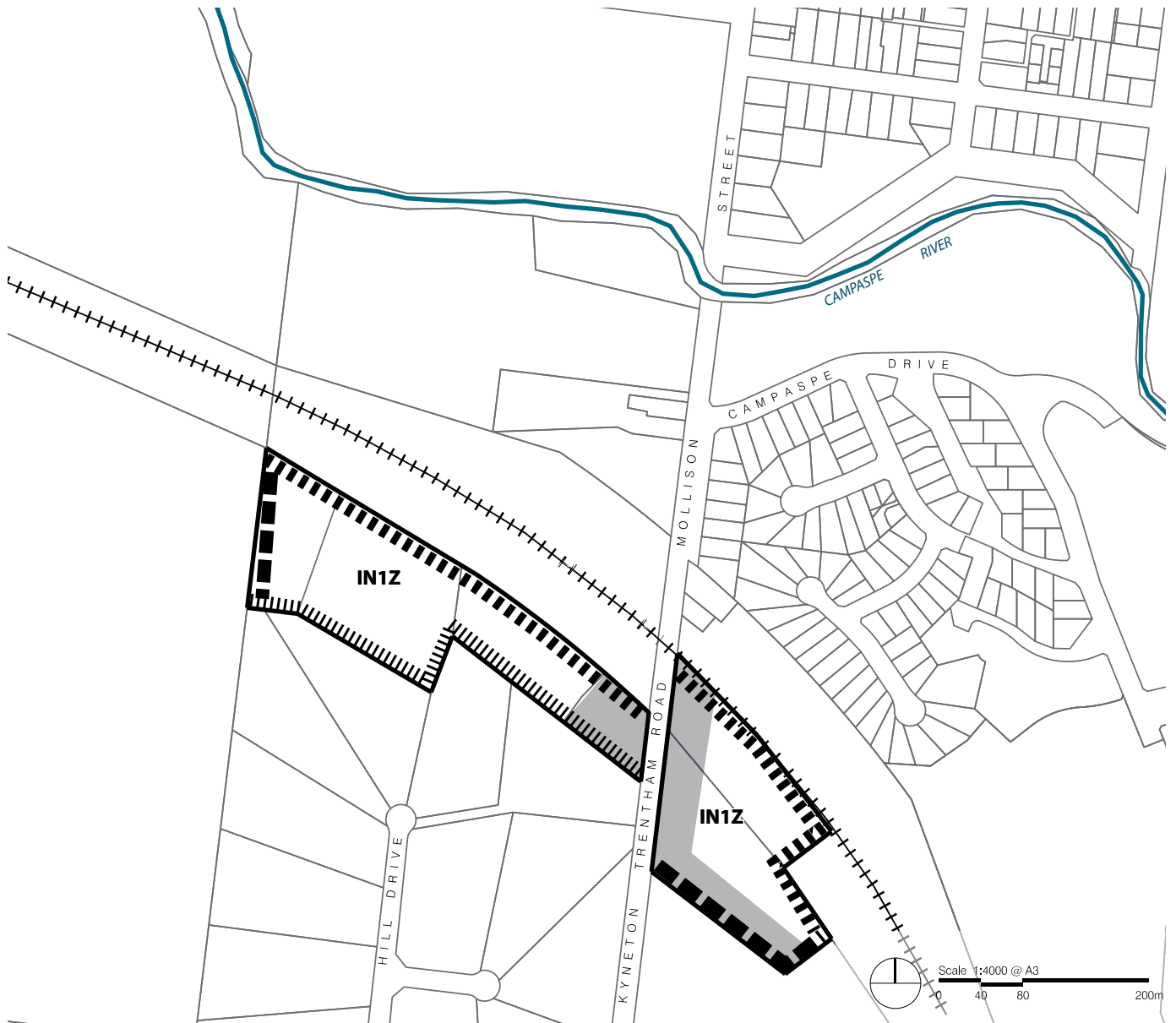


### Guidelines

- 2.1.1** Ensure development addresses both Kyneton-Main Road and High Street, and responds appropriately to the residential and low density residential interface.
- 2.1.2** Enhance the rural appearance from the freeway and freeway off-ramp by maintaining the dominance of vegetation and minimising the visual impact of built form and signage.

-  Calder Freeway interface (refer to Part C, Section 7)
-  Residential / Low Density Residential Interface - Guideline 2.1.1 applies
-  Township entry area (refer to Part C, Section 7)
-  Guideline 2.1.2 applies

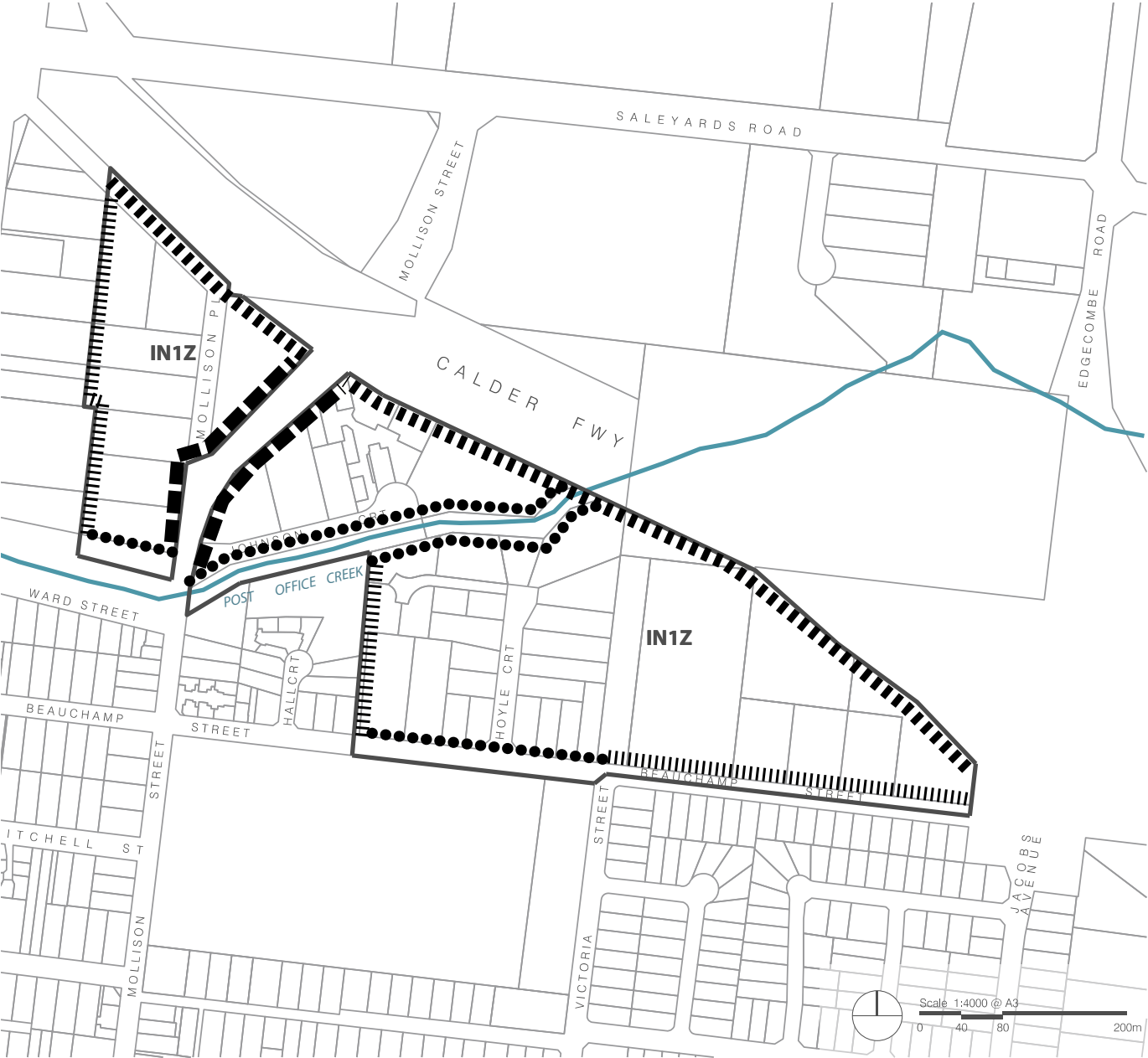
## 2.2 Kyneton Area 2



- ||||||| Low Density Residential Interface (refer to Part C, Section 7)
- ■ Rural interface (refer to Part C, Section 7)
- ||||| Railway line / station interface (refer to Part C, Section 7)
- Township entry area (refer to Part C, Section 7)

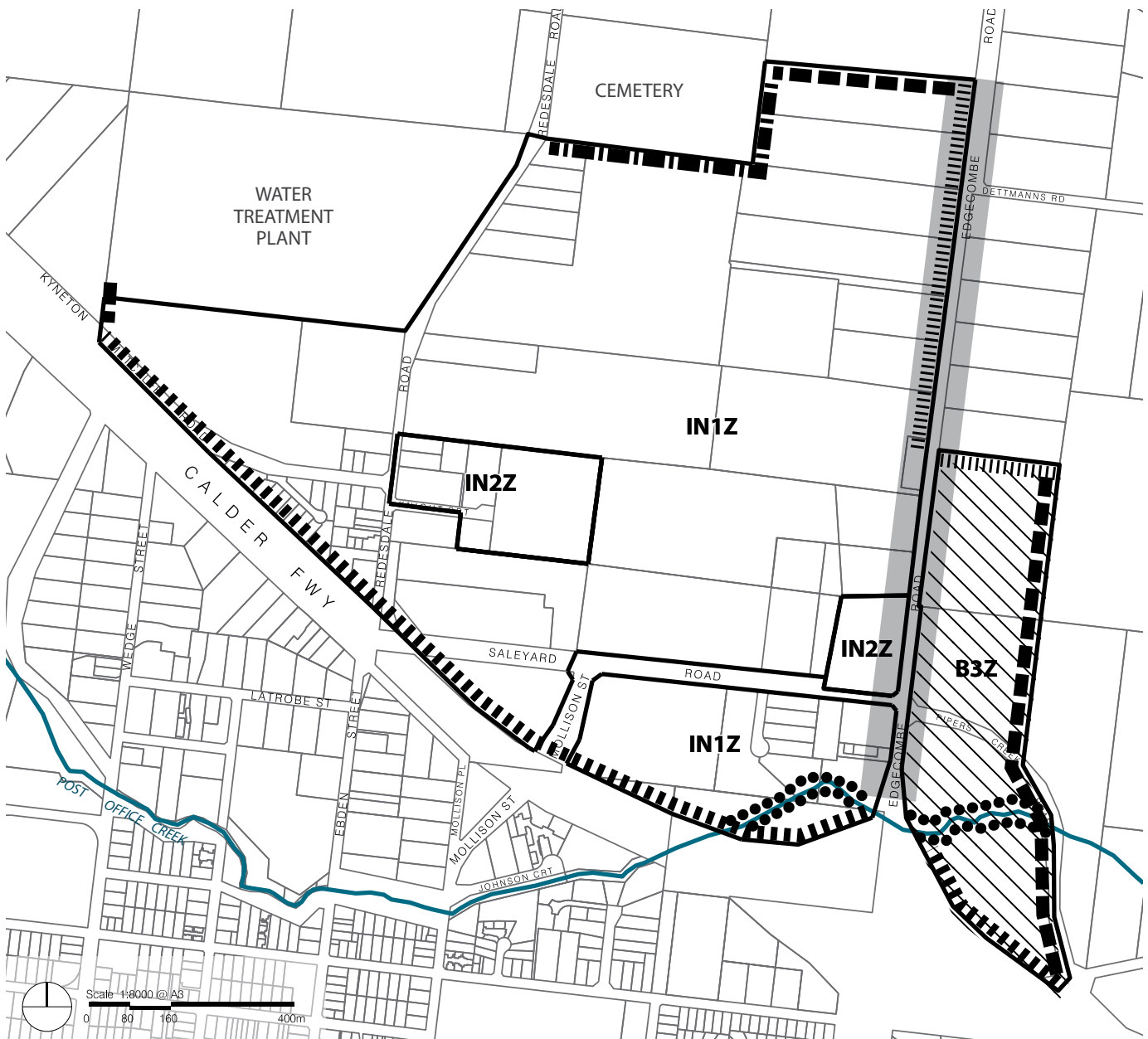


2.3 Kyneton Area 3



- ||||||| Residential Interface (refer to Part C, Section 7)
- ..... Waterway / open space interface (refer to Part C, Section 7)
- Calder Freeway Interface (refer to Part C, Section 7)
- Township Entry Interface (refer to Part C, Section 7)

## 2.4 Kyneton Area 4










### Guidelines

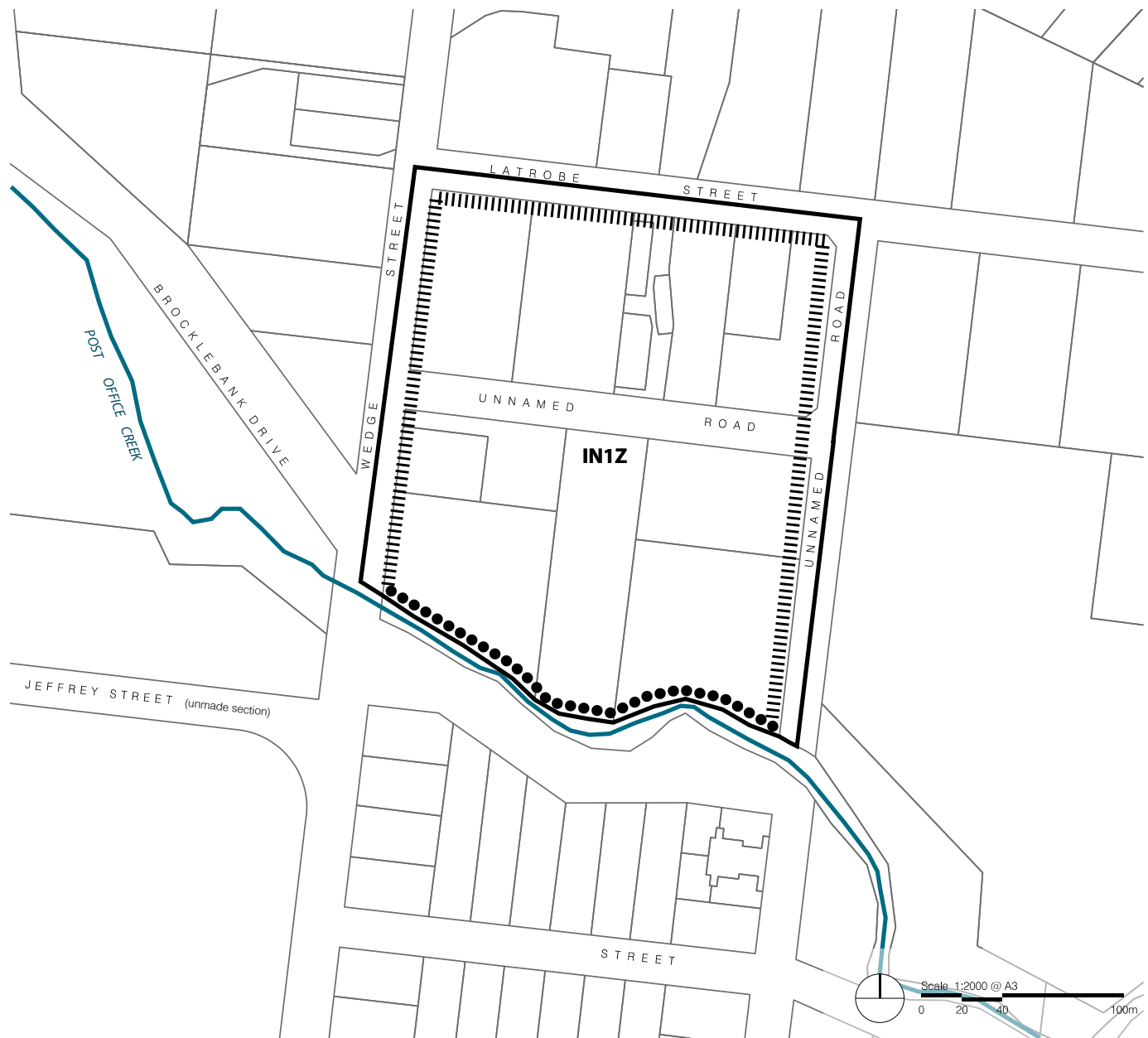
**2.4.1** Maintain the rural appearance of Edgcombe Road in future development. Buildings should be set back from the Edgcombe Road, road pavement by at least 20 metres with landscaped frontages. Incorporate rural elements into the streetscaping such as swale drains, large verges and informal planting of native vegetation.

**2.4.2** Ensure new development maintains the predominantly rural outlook when this area is viewed from the Calder Freeway by screening buildings with vegetation and providing appropriate setbacks. All built form that is visible from the Freeway should be articulated.

**2.4.3** Screen development when viewed from the cemetery and set buildings back by at least 5 metres.

-  Rural living interface (refer to Part C, Section 7)
-  Rural interface (refer to Part C, Section 7)
-  Calder Freeway interface (refer to Part C, Section 7)
-  Creek interface (refer to Part C, Section 7)
-  Guideline 2.4.1 applies
-  Guideline 2.4.2 applies
-  Guideline 2.4.3 applies

## 2.5 Kyneton Area 5



||||| Residential Interface (refer to Part C, Section 7)

●●● Creek / open space interface (refer to Part C, Section 7)

## 2.6 Kyneton Area 6



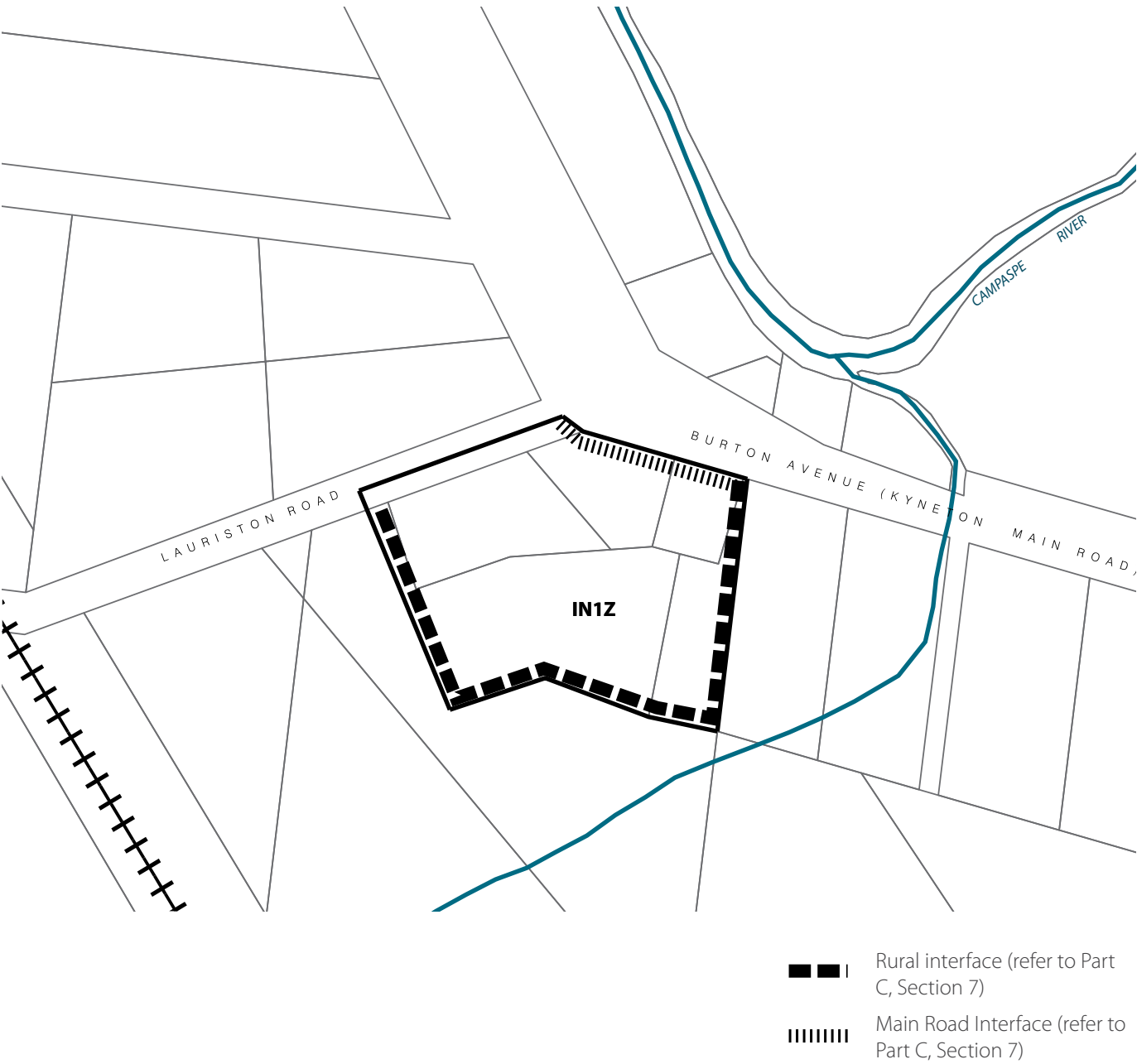
### Guidelines

- 2.6.1** Ensure development is compatible with the heritage character of the racecourse precinct and is designed to address surrounding open space and the Campaspe River.
- 2.6.2** Development in this area is to have regard to the amenity of residential uses in the abutting area.
- 2.6.3** Development and/or uses in this area should have regard to the amenity requirements of sensitive horse training uses both within the area and in the abutting area. Suitable noise attenuation measures should also be provided for as part of future developments and/or potential noise generating land use proposals (Refer to Part C, Section 6.4 Acoustic Treatments).

- ||||||| Residential Interface - (refer to Part C, Section 7)
- Open space interface - Guideline 2.6.1 applies.

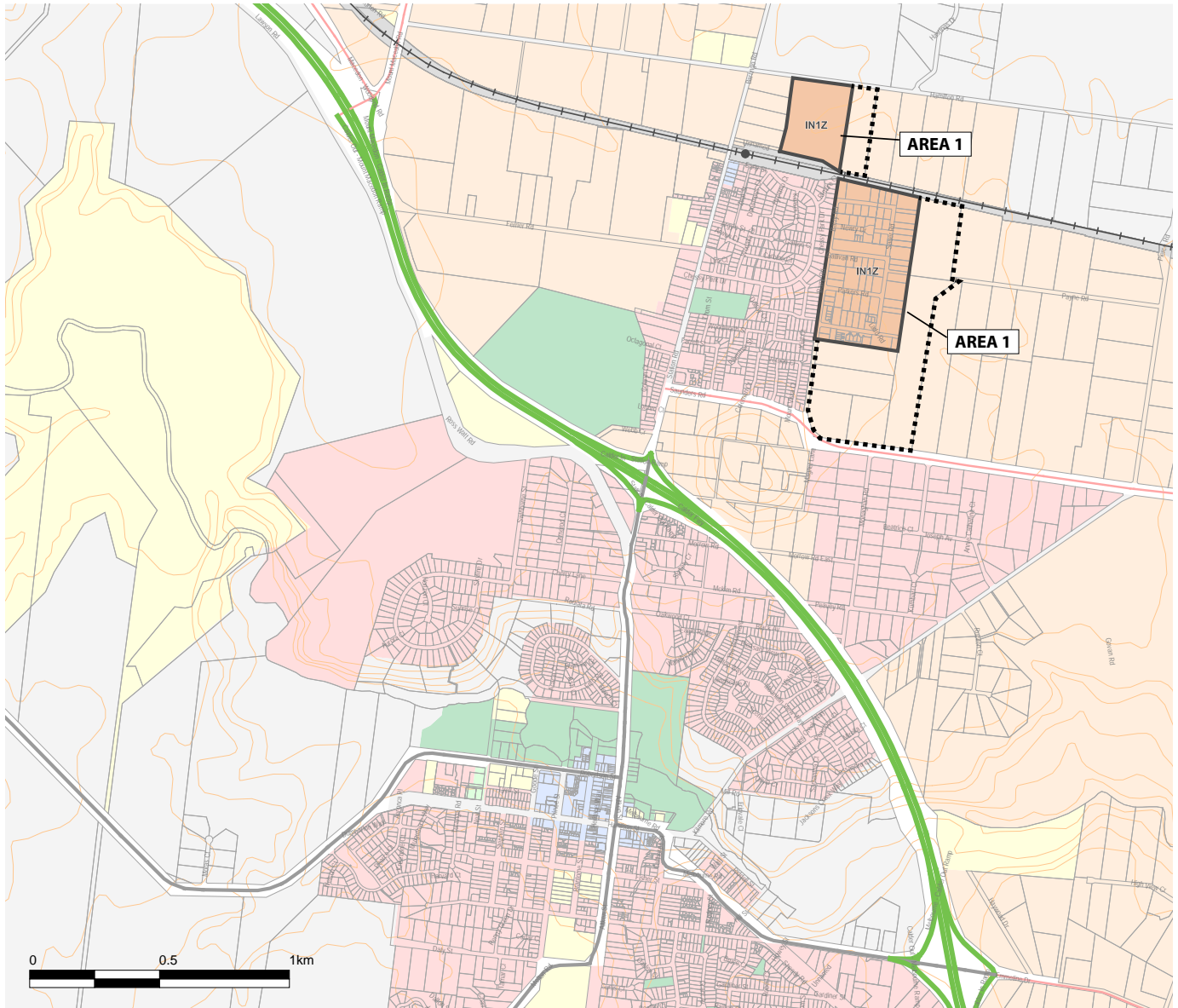


2.7 Kyneton Area 7

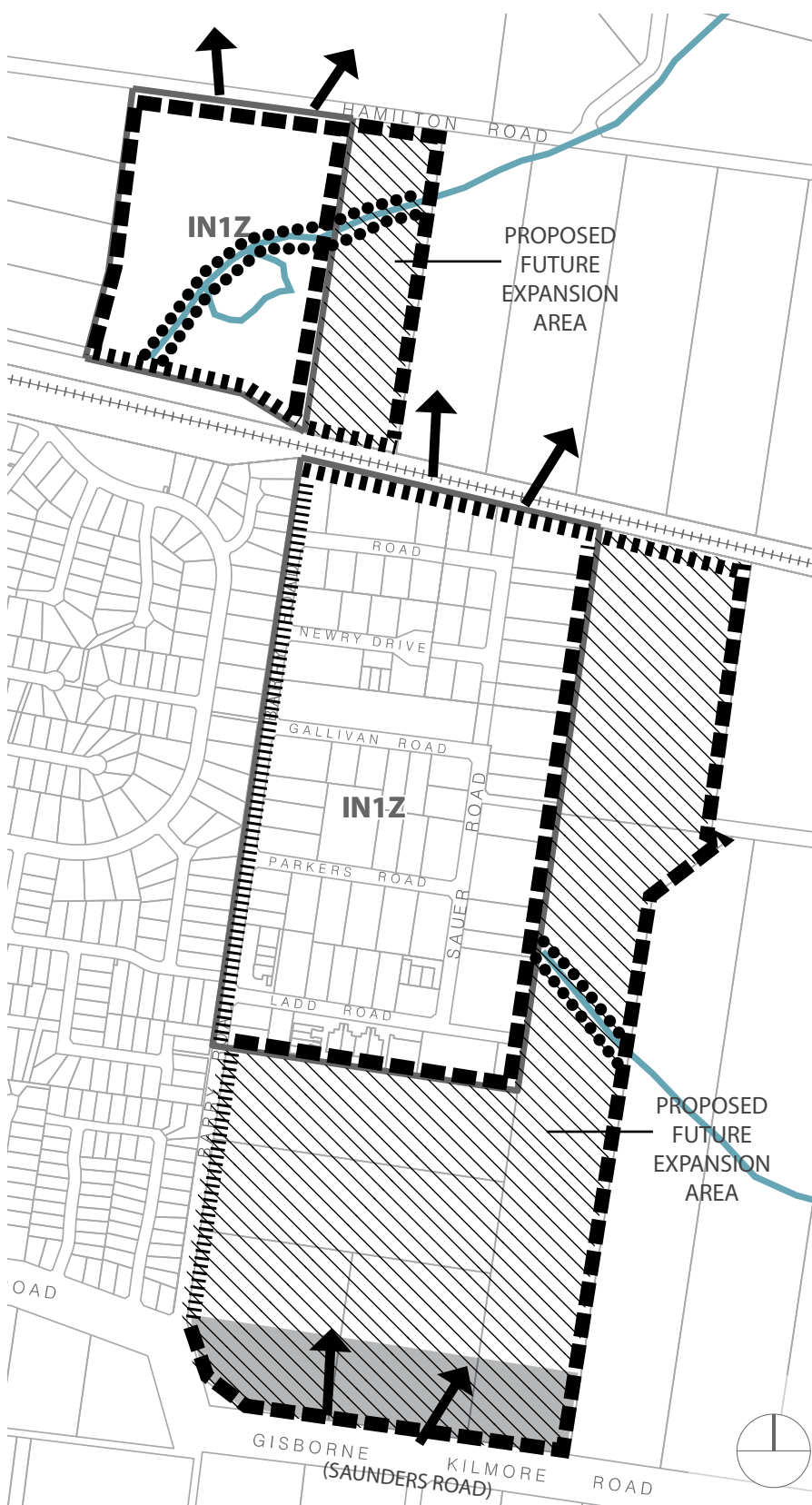


### 3. New Gisborne

#### Key Map



### 3.1 New Gisborne Industrial Area (includes existing and approved future expansion areas)



#### Guidelines

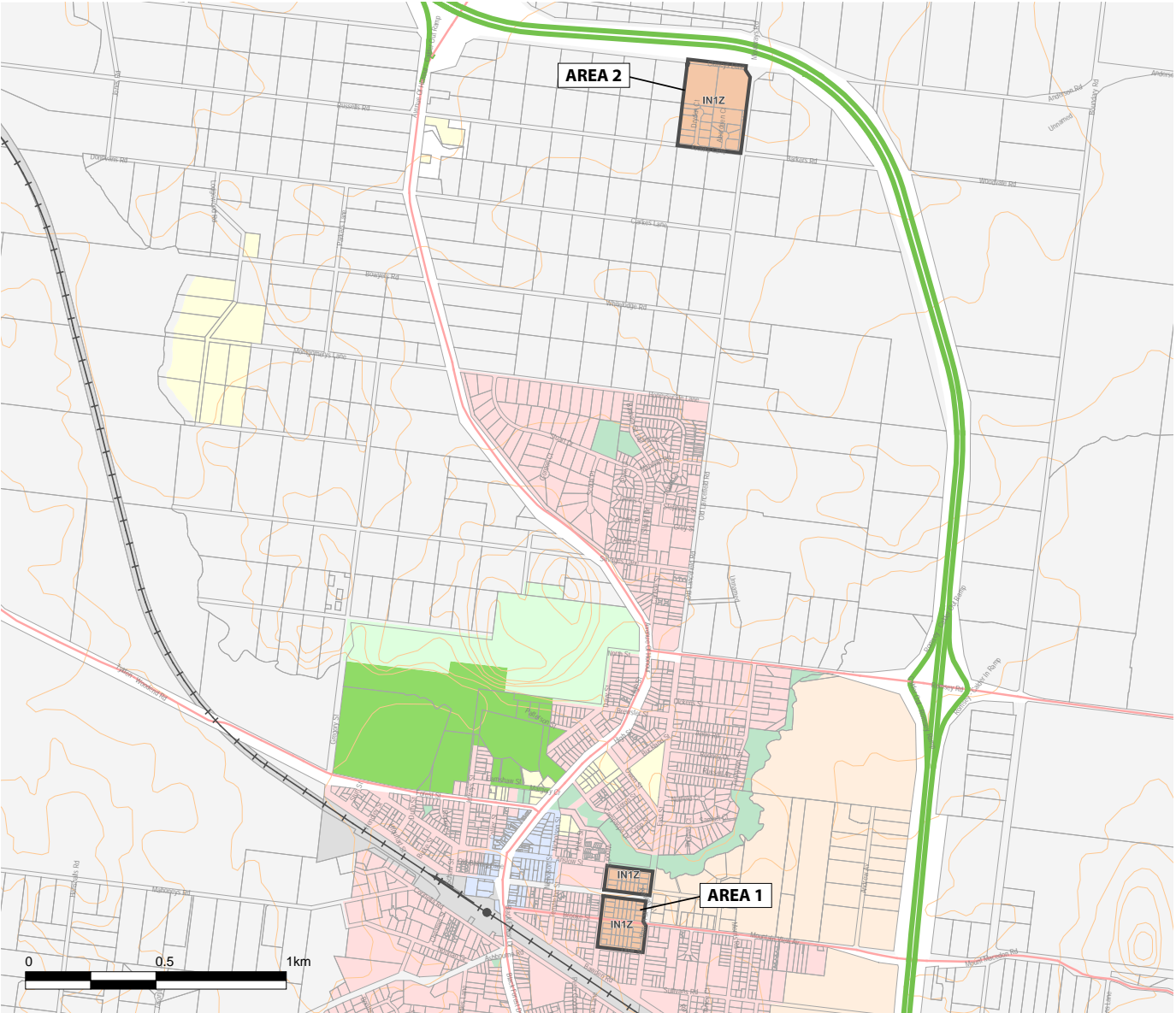
**3.1.1** The following is to be considered if this area is rezoned for industrial or business uses in the future. New subdivision and development should:

- Integrate with the adjoining industrial road networks to the west.
- Consider the entire precinct when designing the road, drainage and open space networks.
- Be designed to capture views to the Macedon Ranges in the north.
- Provide land uses to Saunders and Barry Road that are compatible with the residential area opposite and provide an attractive built form along the entry road into New Gisborne.
- Provide generous setbacks to Saunders Road that are compatible with low density residential areas to the south. These setbacks will need to be resolved through future detailed planning as part of any rezoning.
- Provide substantial landscape buffers to adjoining rural living properties and residential areas.

- ||||| Residential Interface (refer to Part C, Section 7)
- Rural living / Low density residential interface (refer to Part C, Section 7)
- ||| Rail line / Station Interface (refer to Part C, Section 7)
- ... Waterway Interface (refer to Part C, Section 7)
- ▨ Guideline 3.1.1 applies
- Township entry area (refer to Part C, Section 7)
- ➔ Key views to Macedon Ranges

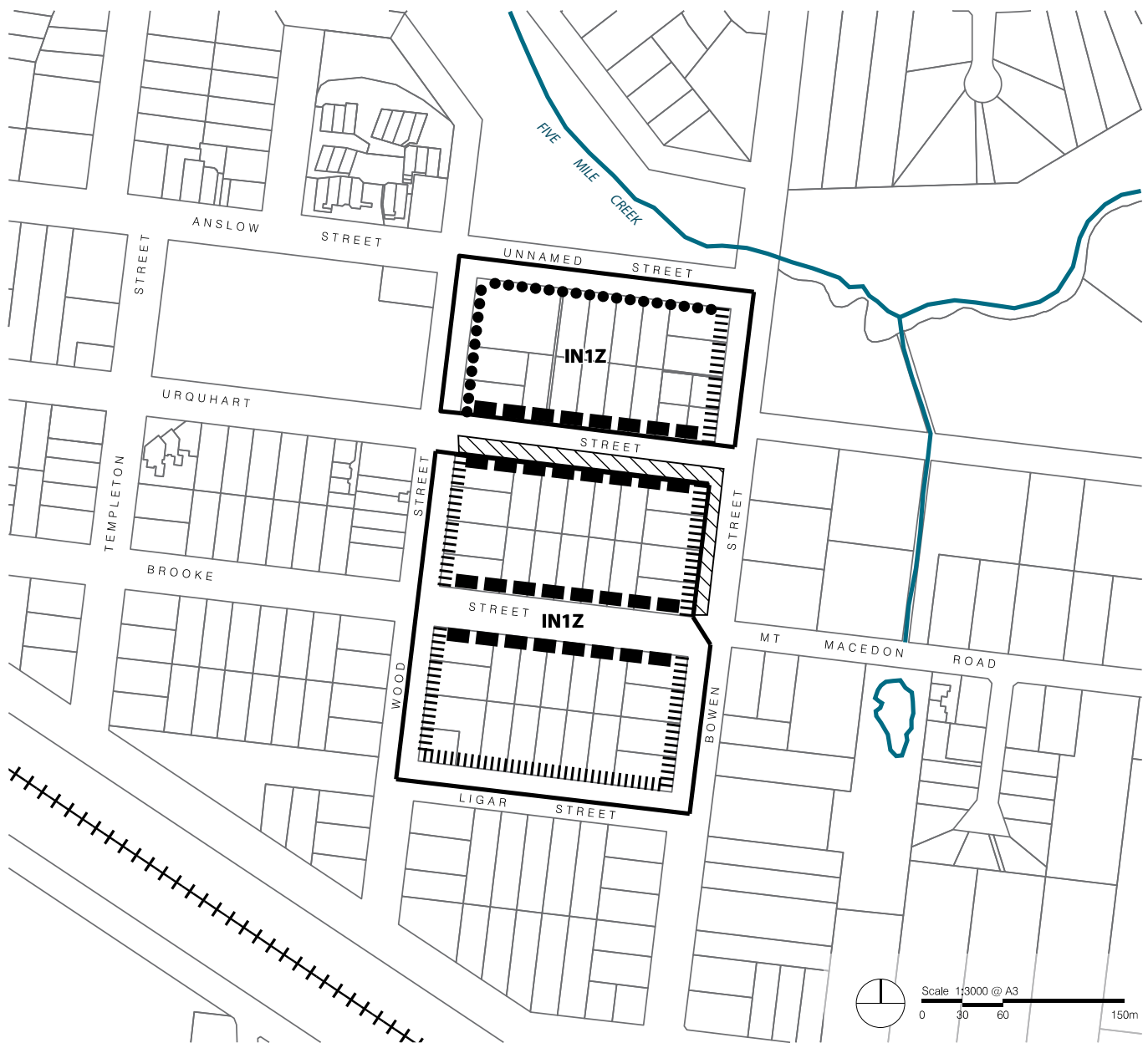
4. Woodend

Key Map









## 4.1 Woodend Area 1

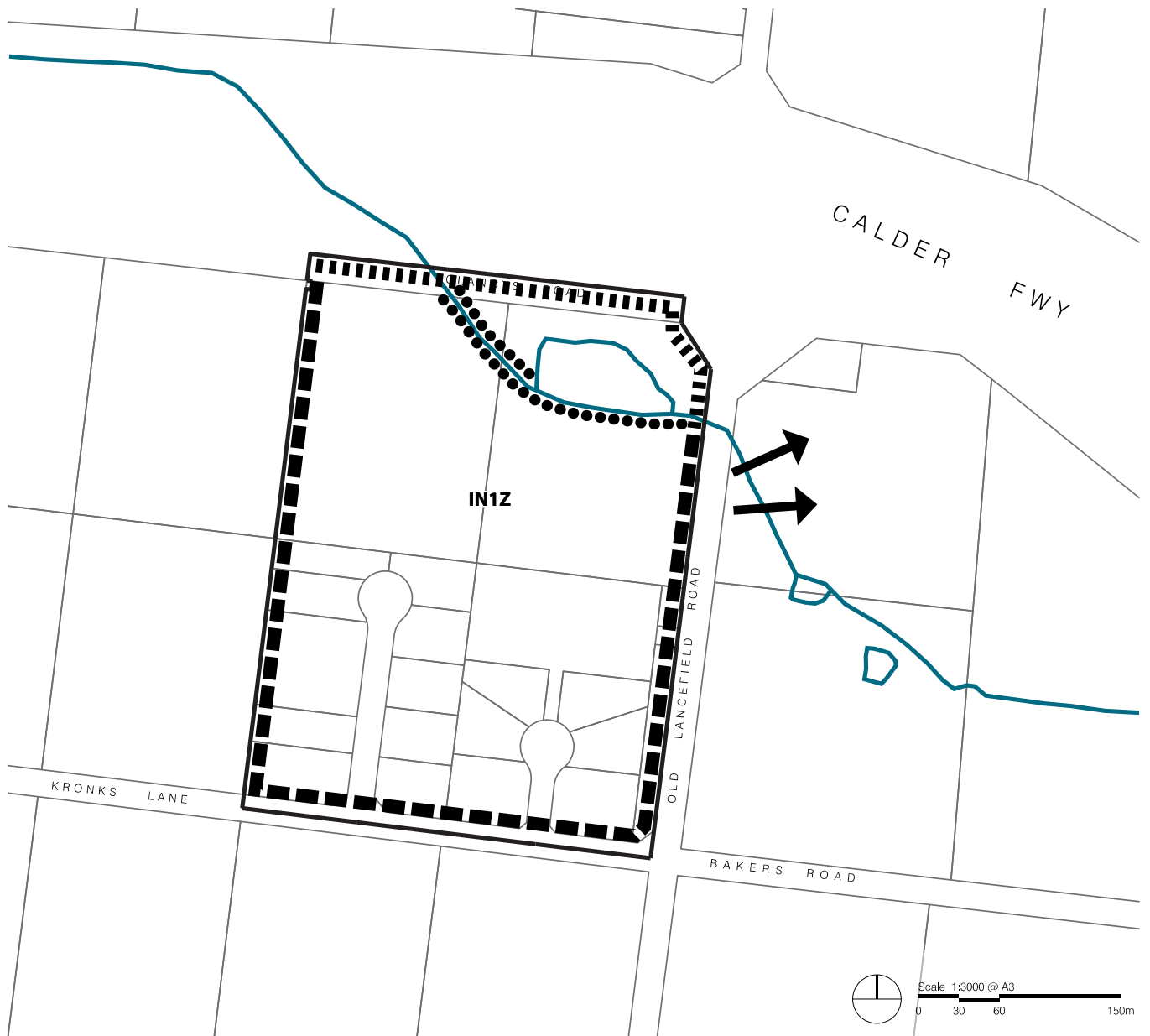






### Guidelines

- 4.1.1** Ensure new development does not detrimentally impact on existing street trees.

-  Residential Interface (refer to Part C, Section 7)
-  Open space / creek corridor interface (refer to Part C, Section 7)
-  Township Entry / Main Road Interface (refer to Part C, Section 7)
-  Guideline 4.1.1 applies

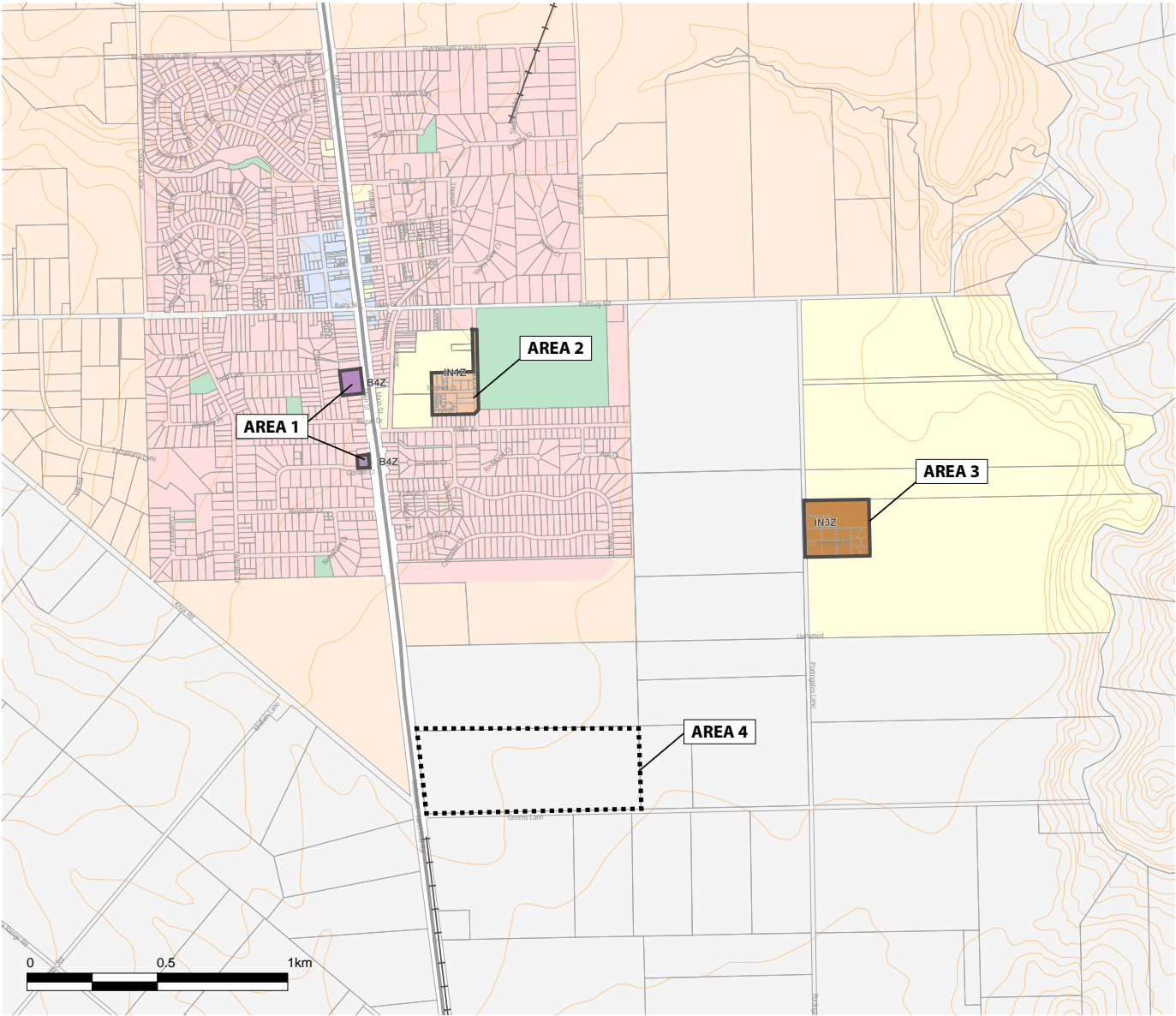
## 4.2 Woodend Area 2



-  Rural interface (refer to Part C, Section 7)
-  Calder Freeway interface (refer to Part C, Section 7)
-  Waterway interface (refer to Part C, Section 7)
-  Views to Hanging Rock

5. Romsey

Key Map



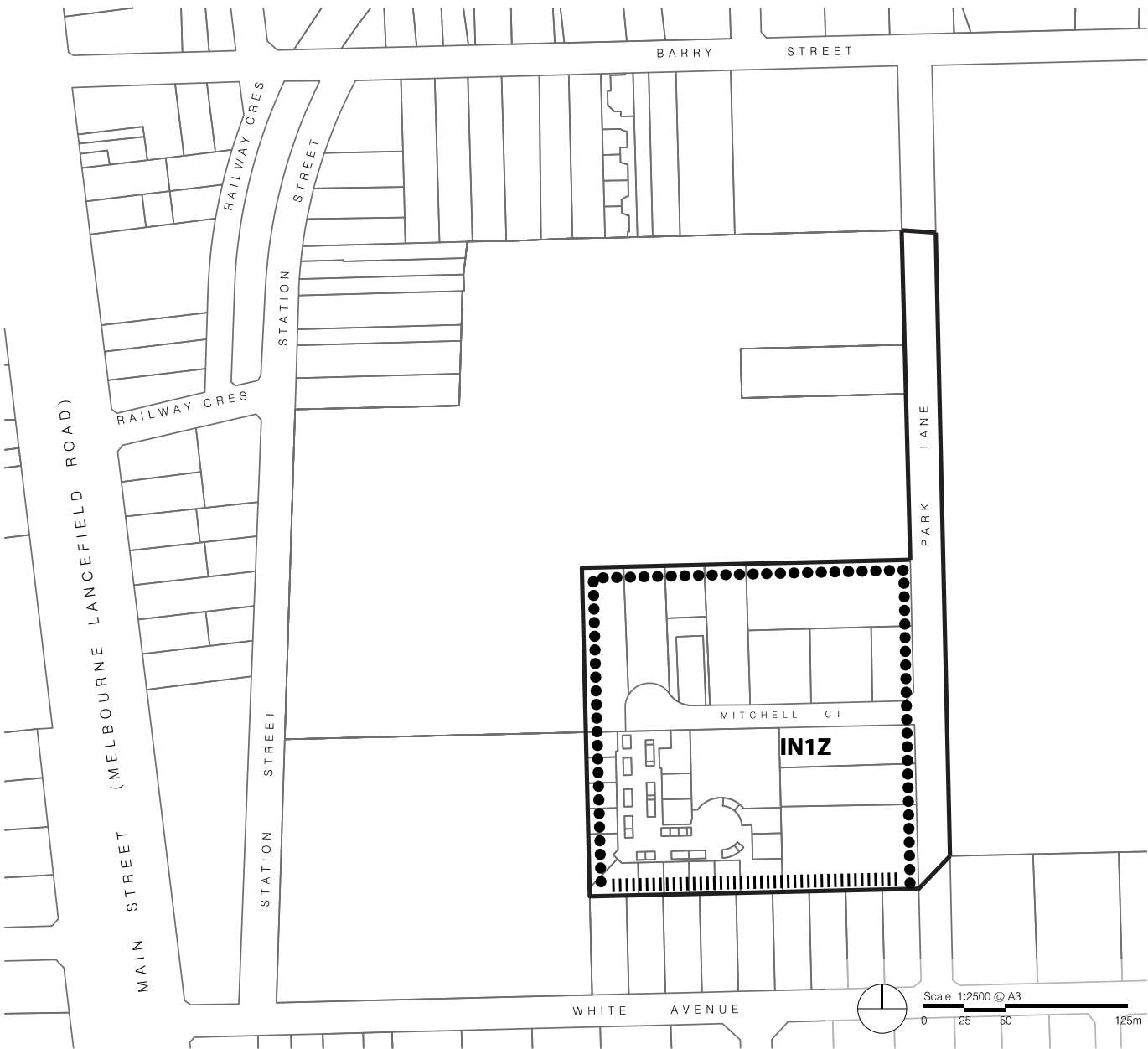
5.1 Romsey Area 1



- ||||| Residential Interface (refer to Part C, Section 7)
- ■ Main Road Frontage (refer to Part C, Section 7)

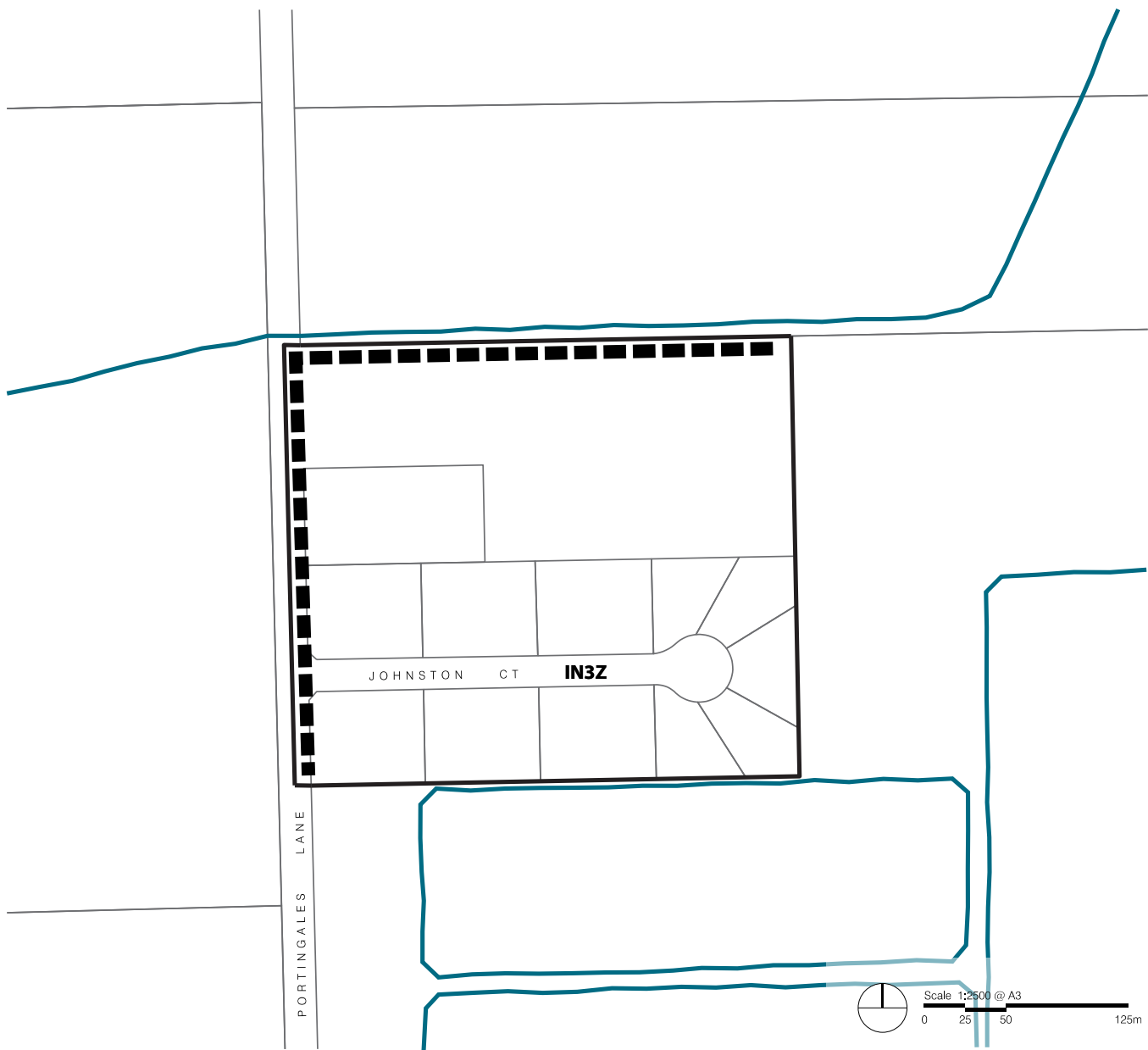


5.2 Romsey Area 2



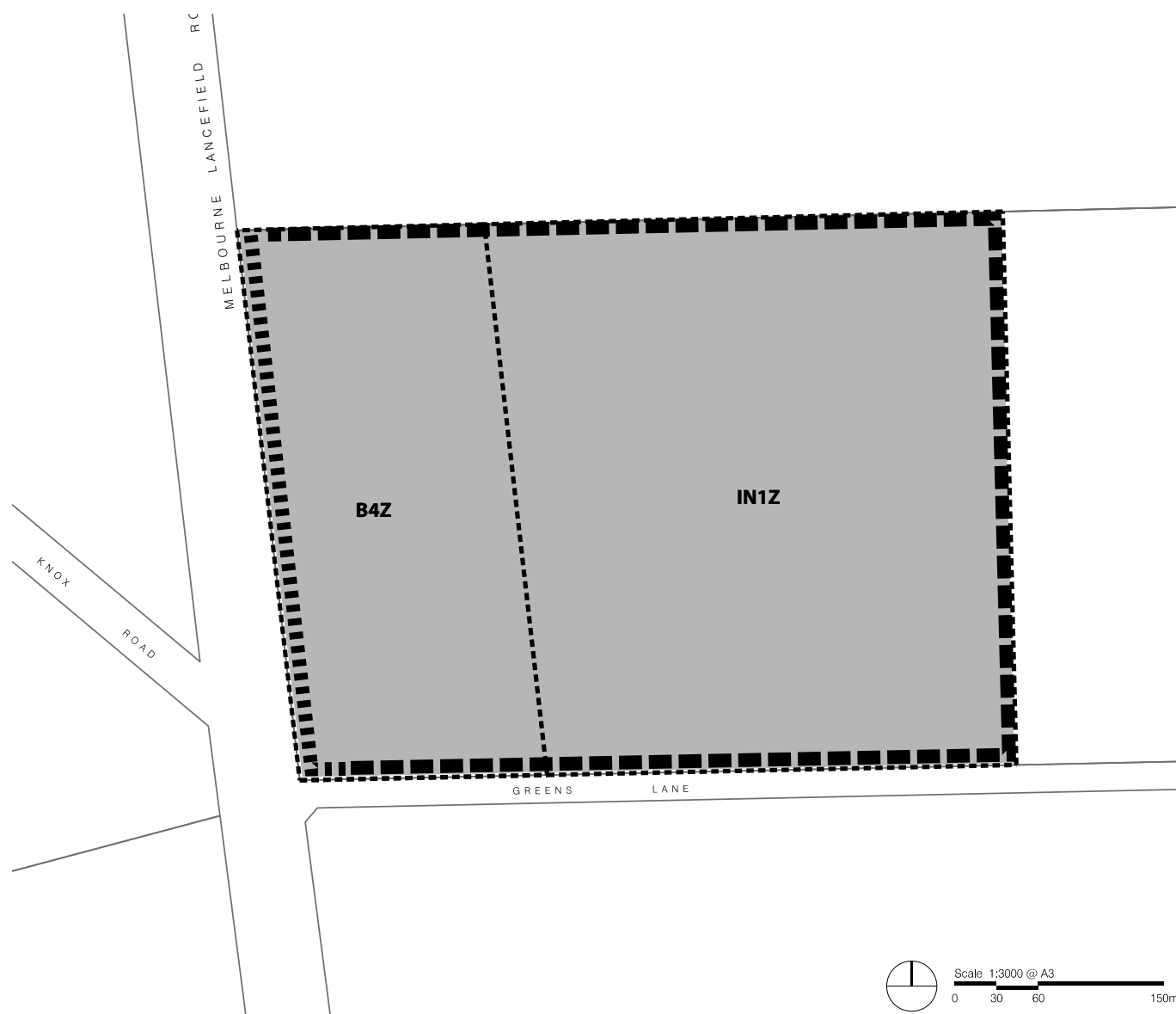
- ||||| Residential Interface (refer to Part C, Section 7)
- Open space / school interface (refer to Part C, Section 7)

5.3 Romsey Area 3



■ ■ | Rural interface (refer to Part C, Section 7)

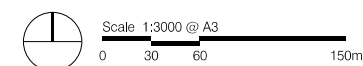
## 5.4 Romsey Area 4 (Proposed future expansion area)






### Guidelines

**5.4.1** The following is to be considered if this area is rezoned for industrial or business use in the future. New subdivision and development should:

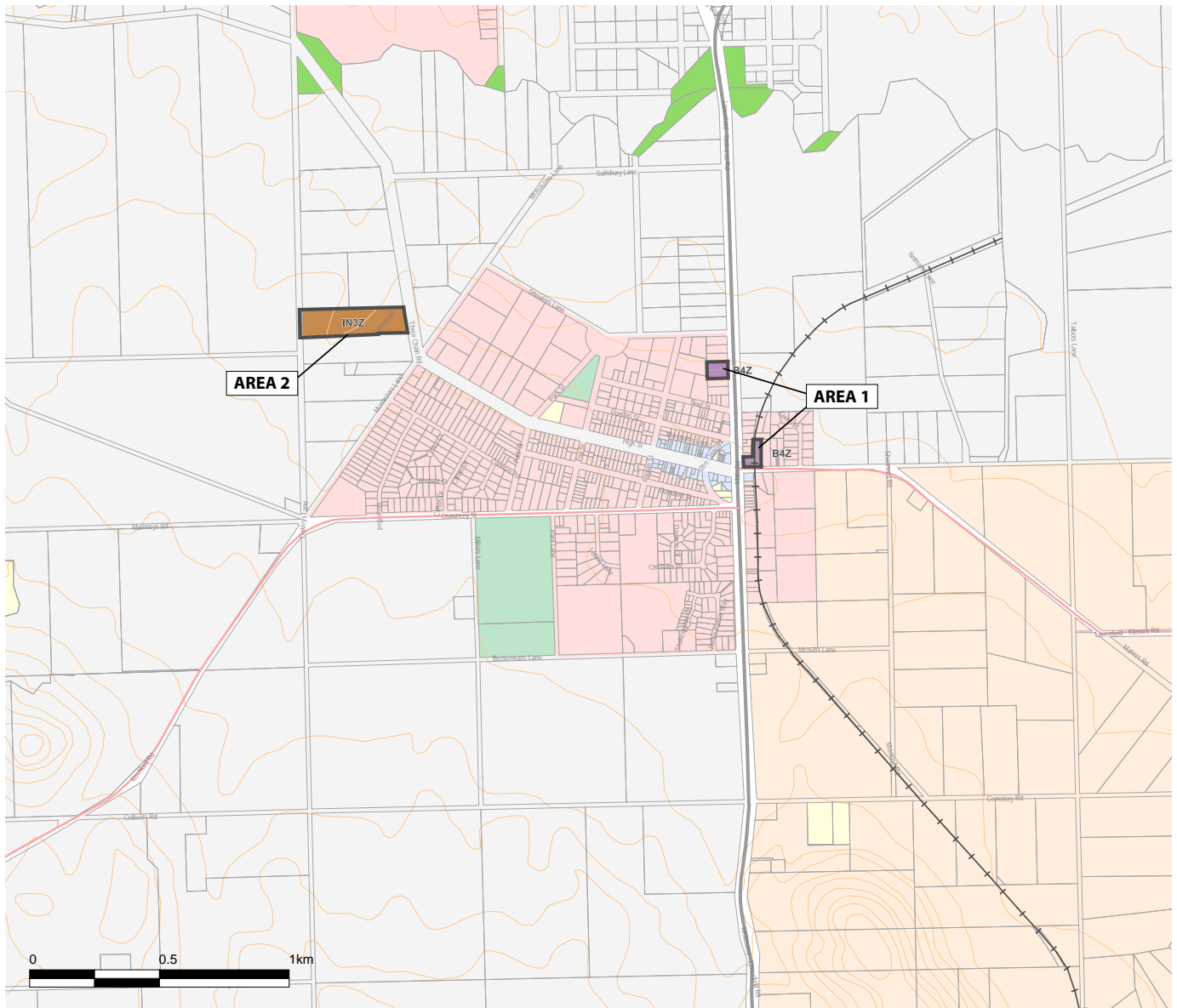
- Consider the entire precinct in the design of the road, drainage and open space networks.
- Provide land uses to Melbourne-Lancefield Road that are compatible with the surrounding rural uses and result in attractive built form and landscaping, which enhances southern entrance into Romsey
- Unless shown otherwise in an approved Development Plan, buildings should be set back at least 30m from the eastern edge of the Melbourne-Lancefield Rd, road pavement.
- Minimise the traffic impacts onto existing roads.
- Be designed to capture views to surrounding hills in the east
- Provide landscape buffers to adjoining rural land.



-  Guideline 5.4.1 applies
-  Main road frontage (refer to Part C, Section 7)
-  Rural Interface (refer to Part C, Section 7)

## 6. Lancefield

### Key Map





## 6.1 Lancefield Area 1

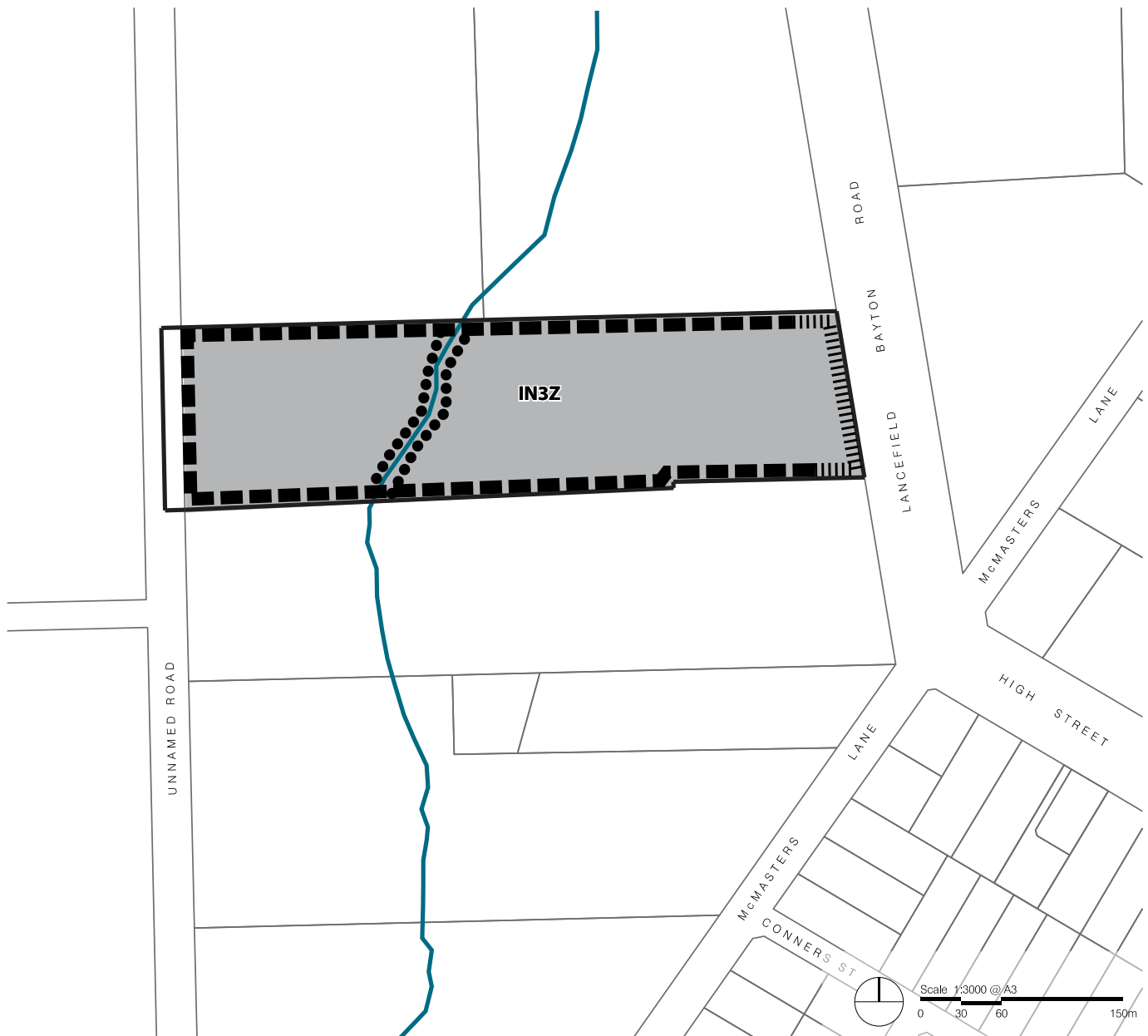


### Guidelines

- 6.1.1** New development should take into consideration the view along High Street towards the site and aim to enhance the view through the siting and design of development. Development should also be compatible with the surrounding heritage buildings and heritage trees along High Street.

- ||||| Residential / low density residential Interface (refer to Part C, Section 7)
- Main road frontage (refer to Part C, Section 7)
- ➔ Key view to distant hills
- Guideline 6.1.1 applies

## 6.2 Lancefield Area 2



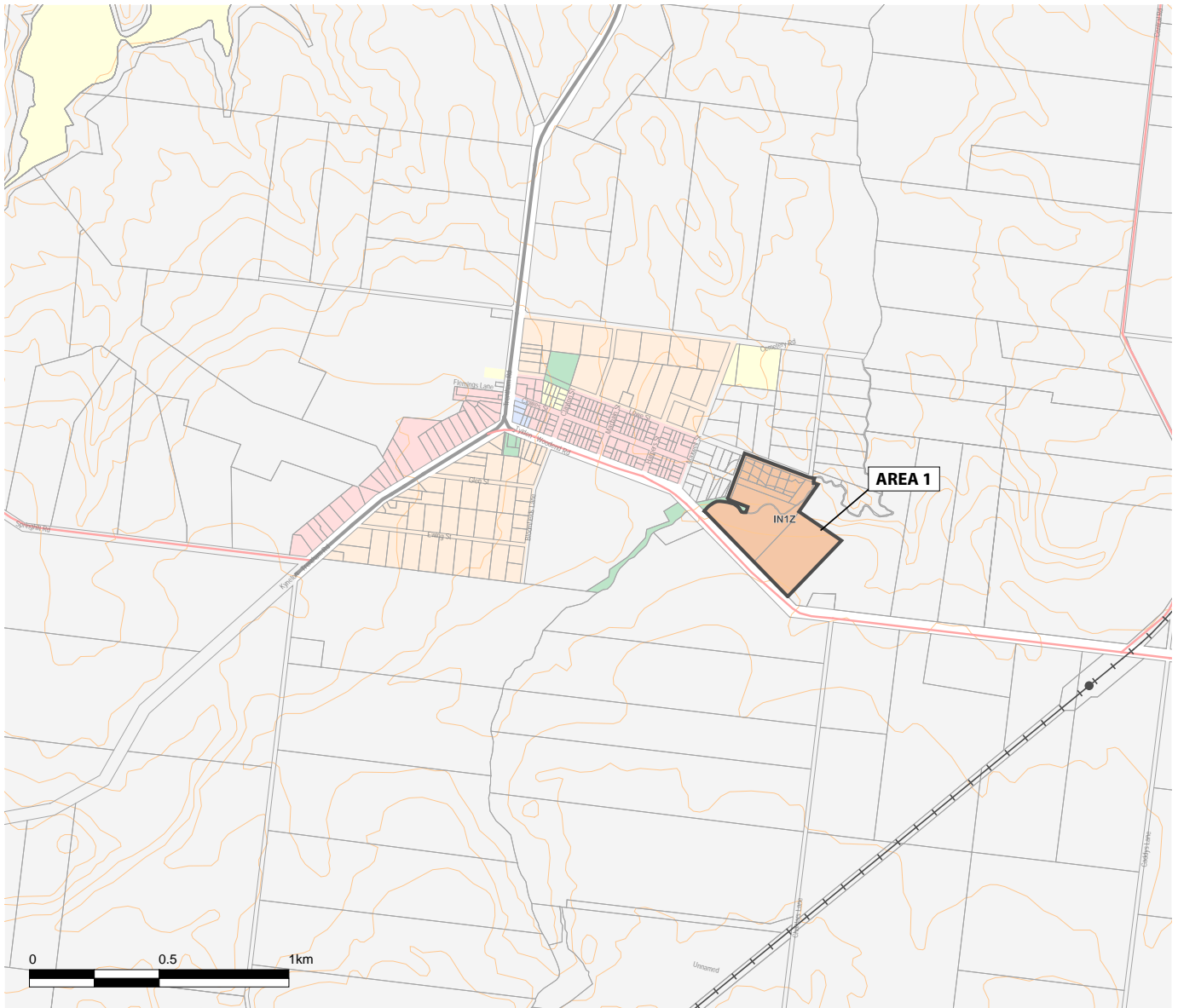
### Guidelines

- 6.2.1** New buildings should be set back by at least 40m to Lancefield Bayton Rd, road pavement in order to maintain the rural entrance into the Lancefield township. The significance of vegetation along the waterway will need to be considered in any future development on the site.

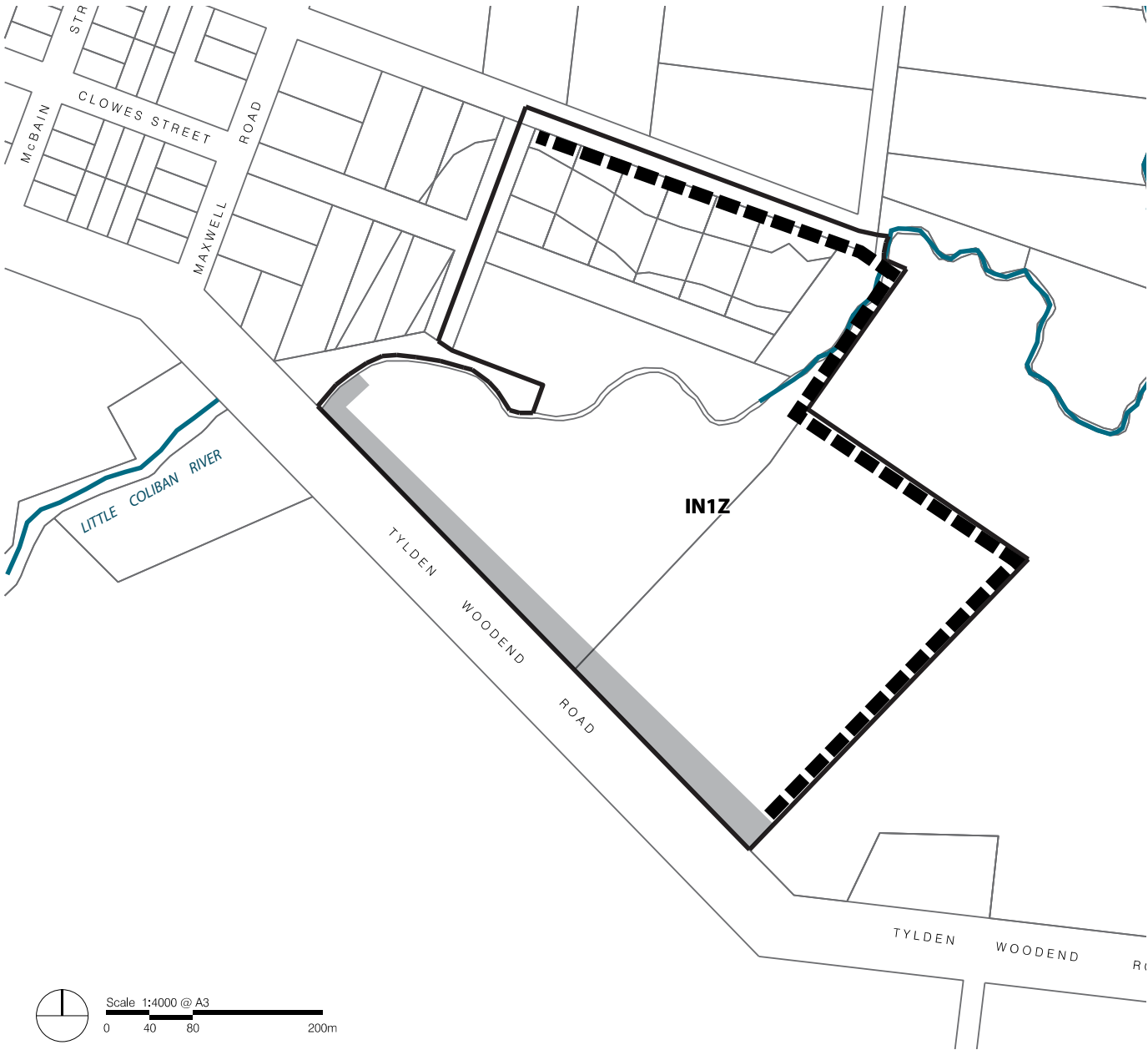
- ■ Rural Interface (refer to Part C, Section 7)
- |||| Main road frontage (refer to Part C, Section 7)
- ● Waterway interface
- Guideline 6.2.1 applies

## 7. Tylden

### Key Map



7.1 Tylden Quarry



Guidelines

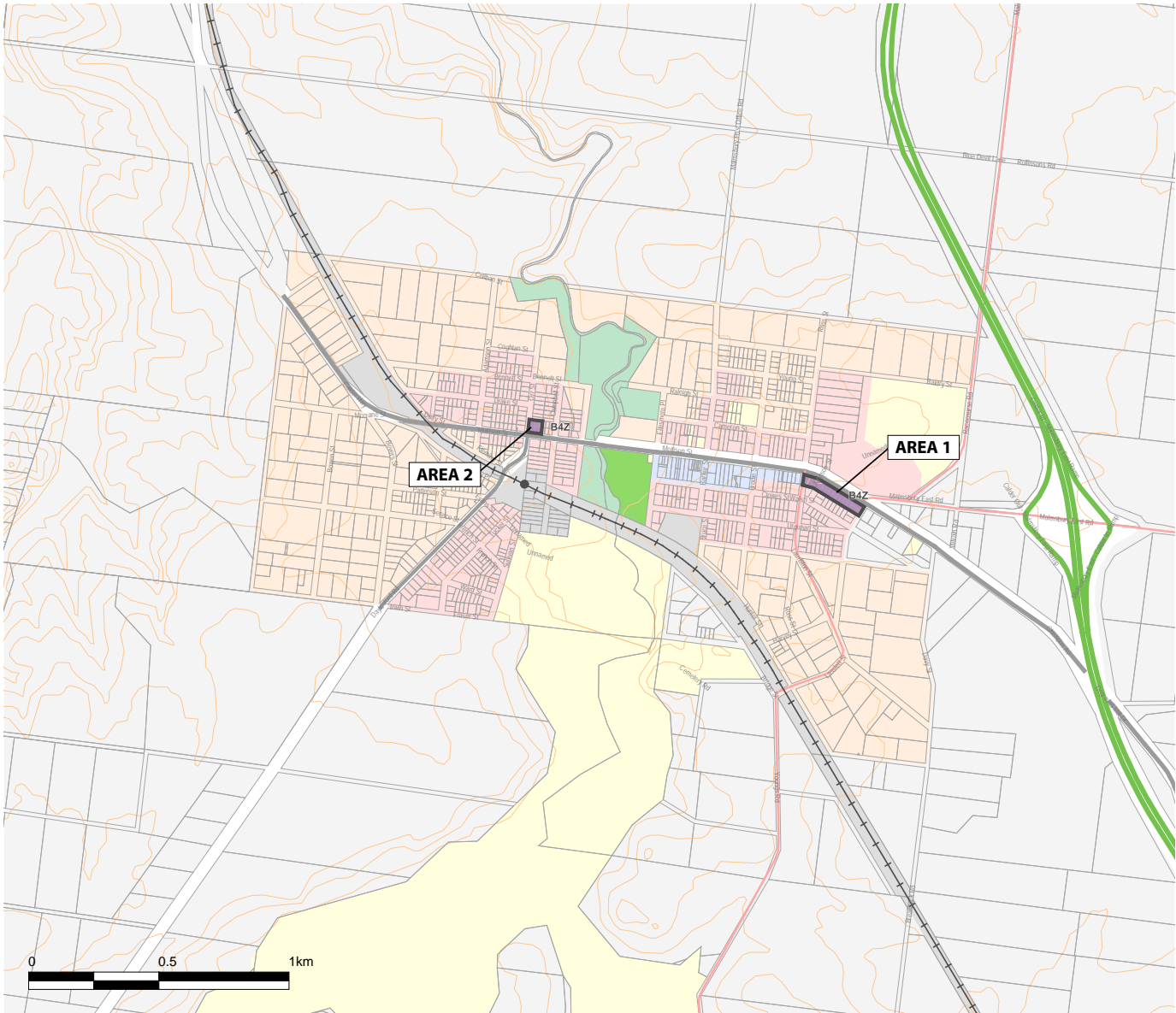
7.1.1 Maintain and reinforce screening of the quarry along the Tylden-Woodend Road to retain the rural character of the entry into Tylden from the east.

- ■ ■ Rural interface (refer to Part C, Section 7)
- Guideline 7.1.1 applies

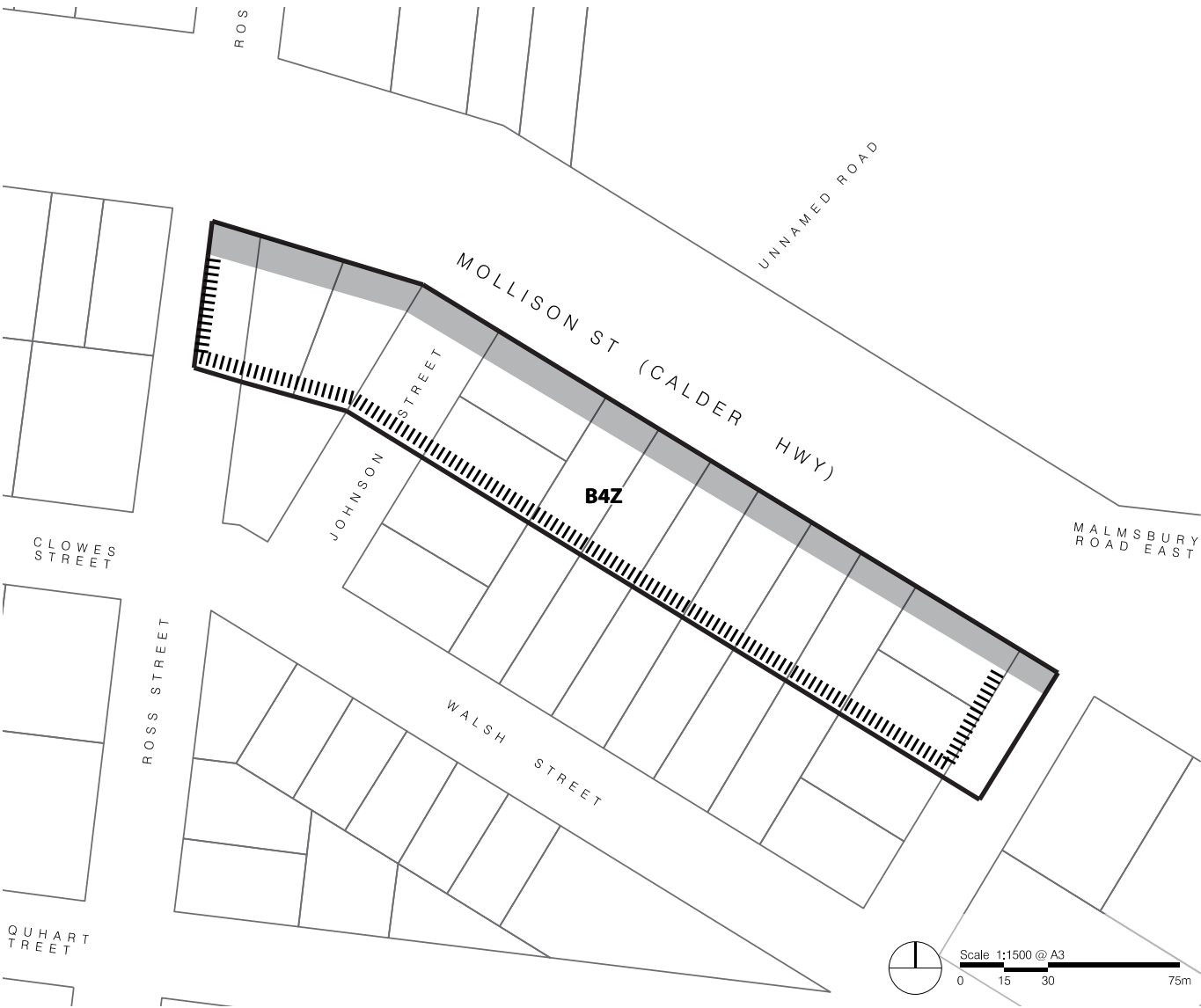


8. Malmsbury

Key Map



8.1 Malmsbury Area 1



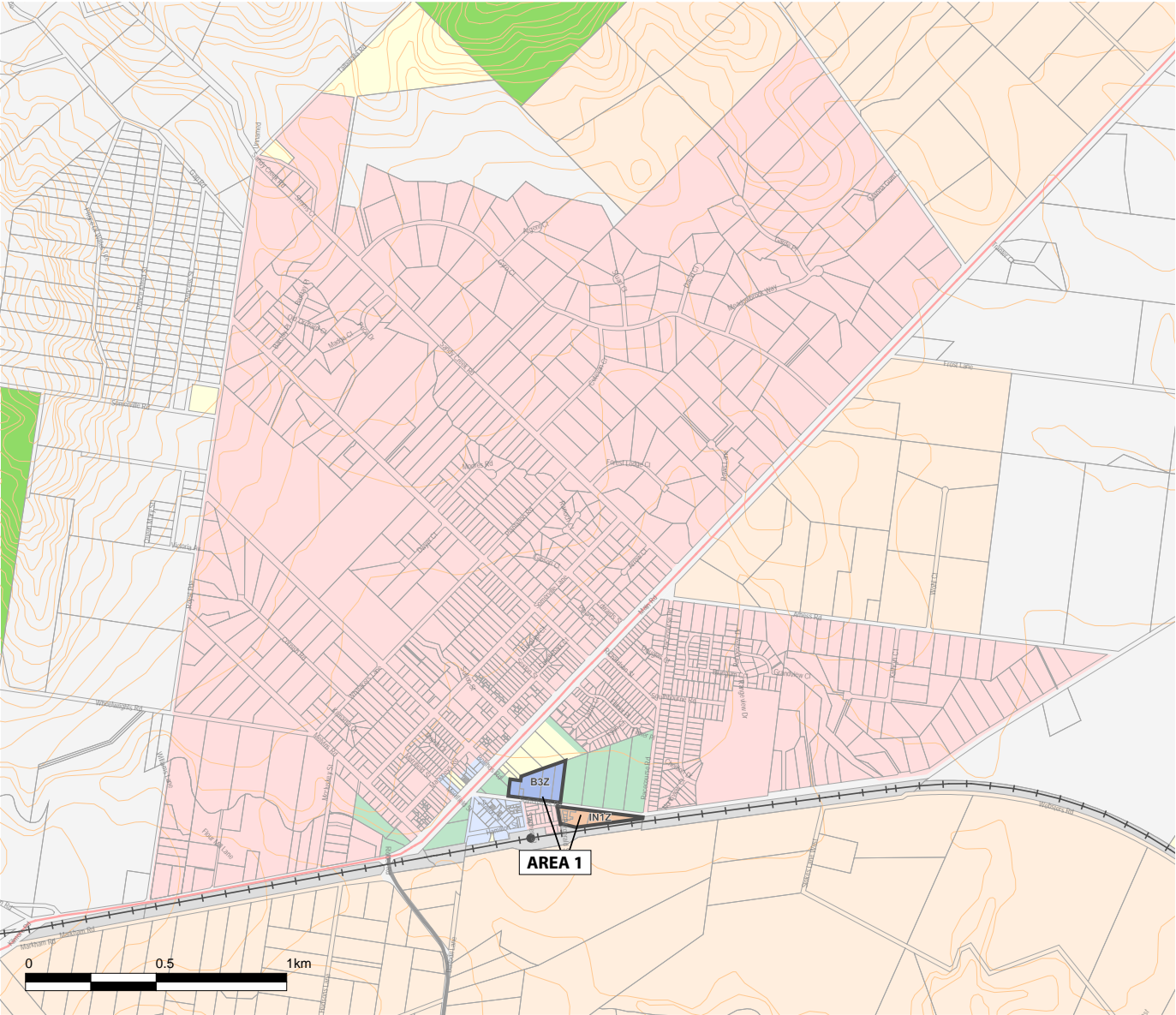
- Residential interface (refer to Part C, Section 7)
- Township entry area (refer to Part C, Section 7)

8.2 Malsbury Area 2



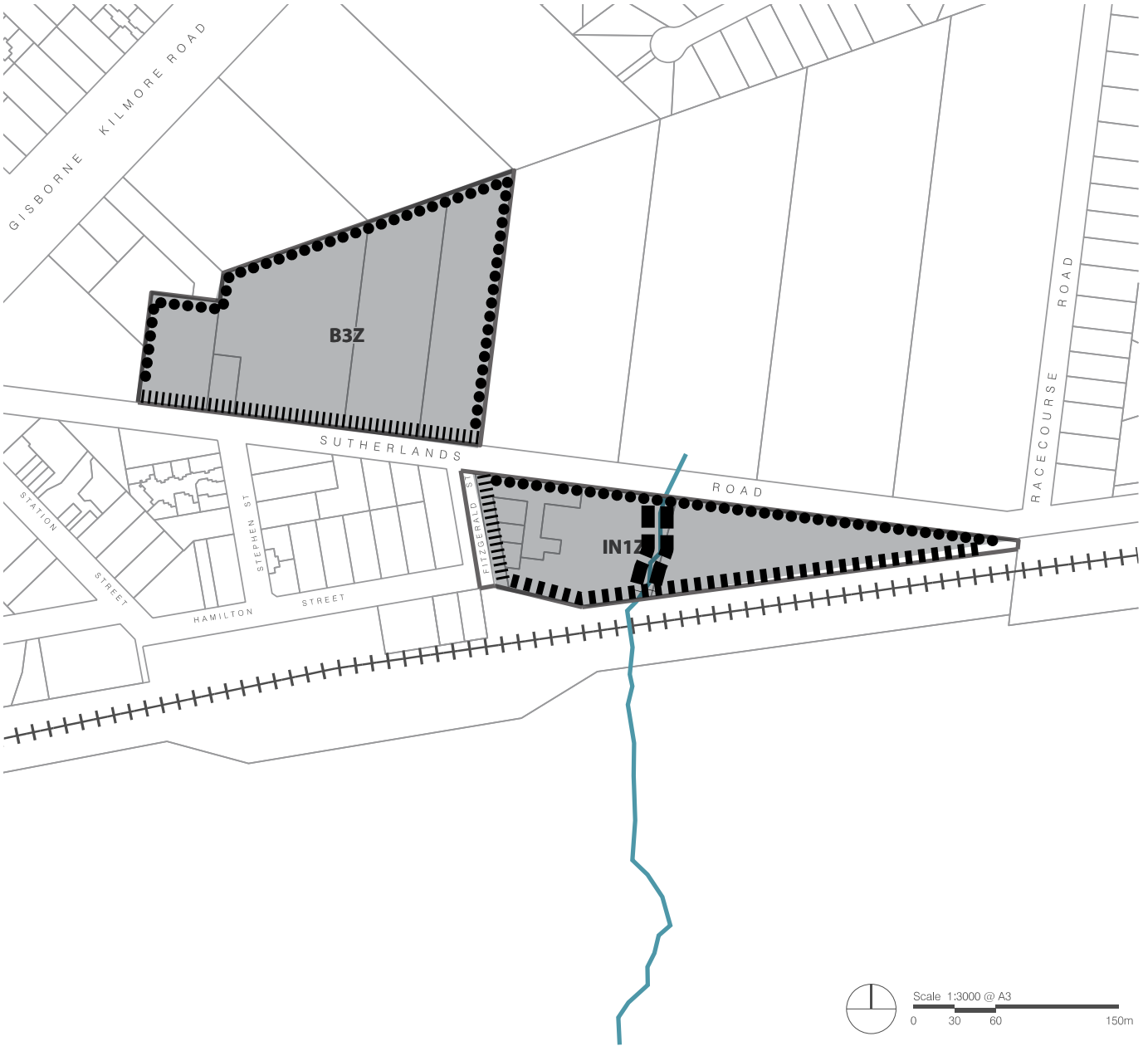
# 9. Riddells Creek

## Key Map





9.1 Riddells Creek Industrial and Business 3 Area



Guidelines

9.1.1 Ensure development is designed to address surrounding open space and community facilities.

- Residential interface (refer to Part C, Section 7)
- Open space interface (refer to Part C, Section 7)
- Railway precinct interface (refer to Part C, Section 7)
- Waterway interface (refer to Part C, Section 7)
- Guideline 9.1.1 applies