



Issues, Opportunities & Constraints Paper

[FINAL DRAFT] 23 APRIL 2012

ACKNOWLEDGEMENT

The Latrobe City Council acknowledges the traditional custodians of this land, Elders, past and present, their spirits and ancestors.

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PROJECT CONTROL

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Appendix 2: Traralgon North DP & DCP Flora and Fauna Assessment and Net Gain Analysis (Ecology & Heritage Partners, March 2012)

Appendix 3: Traralgon North DP & DCP Desktop Aboriginal and Historical Heritage Assessment (Ecology & Heritage Partners, March 2012)

Appendix 4: Traralgon North DP & DCP Preliminary Servicing Report (TGM Group Pty Ltd, Feb 2012)

Appendix 5: Traralgon North DP & DCP Transport Issues, Opportunities & Constraints Report (GTA Consultants, Feb 2012)

1 INTRODUCTION

Latrobe City Council has appointed a consultant team led by Planisphere to prepare a Development Plan (DP) and Development Contribution Plan (DCP) for a 118 hectare area of land bounded by Traralgon-Maffra Road to the east, Marshalls Road to the south, the Traralgon Creek floodplain to the west, and a high pressure oil and gas pipeline easement to the north – refer to Figure 1.

This *Issues, Opportunities and Constraints Paper* is intended to summarise the initial investigations, consultation and a literature review undertaken by the consultant team, and identify key issues for the Development Plan for Traralgon North.

The study team will address the diverse requirements of the project brief, combining specialists across a range of fields. The team and their various roles are:

Planisphere	Project Management, Planning & Urban Design
Gerard Coutts & Associates	Landowner Engagement, Land Broker
Ecology & Heritage Partners	Flora and Fauna, Cultural Heritage
TGM Group	Drainage and Stormwater Management, Infrastructure Services
GTA Consultants	Traffic and Transport Engineering

1.1 Policy Context

Traralgon is the largest urban area in the Gippsland region and is experiencing strong population growth, which is predicted to continue in the long term. As population increases so will the demand on local housing, public infrastructure and urban amenity.

Since 2007, Latrobe City Council has undertaken a series of strategic projects focusing on ensuring there is adequate supply of land for residential development in the municipality. In 2009, the *Latrobe City Residential and*

Rural Residential Land Assessment confirmed a shortage of Residential 1 zoned lots for development in Traralgon.

Prior to this, the *Traralgon Structure Plan (2007)* identified an area to the north of Traralgon for future residential growth, comprising the area bounded by Traralgon-Maffra Road to the east, Marshalls Road to the south, the Traralgon Creek floodplain to the west, and a high pressure oil and gas pipeline easement to the north – refer to Figure 1. This area forms the Study Area for this project.

Following a series of strategic planning projects, Amendments C47, C56 and C58 to the *Latrobe Planning Scheme* rezoned the Study Area from Farming Zone (FZ) to Residential 1 Zone (R1Z) and applied a Development Plan Overlay (DPO5) to the land.

Latrobe City is currently undertaking a *Traralgon Growth Areas Review* to identify all future urban development growth options in and around Traralgon. Further, to identify future community infrastructure requirements needed to support population growth. The project is being prepared concurrently to the Traralgon North project and will inform this project as required.

1.2 Why a Development Plan?

The Subject Land is included in the Development Plan Overlay (DPO5) in the *Latrobe Planning Scheme*. A **Development Plan Overlay (DPO)** is a town planning tool used to guide the future development of land. A DPO is used in areas where land is controlled by multiple owners, and an integrated development outcome is required.

The DPO prevents the granting of permits under the zone before a Development Plan (DP) has been approved. The purpose of this provision is to restrain use and development of the land until a plan has been prepared and ensure that future use and development of the land is carried out in accordance with that plan (DPCD, Applying the Incorporated Plan Overlay and Development Plan Overlays, Practice Note, January 2003).

The DPO requires a **Development Plan (DP)** to be prepared and approved for the Traralgon North Precinct. The Plan will be prepared in accordance with the requirements of the current DPO, providing additional guidance on where key

elements such as roads, parks and physical infrastructure should be located. It is important the Plan is responsive to existing conditions such as topography, drainage, vegetation and surrounding land uses; and is underpinned by best practice design principles.

A **Development Contributions Plan (DCP)** identifies what new infrastructure will be needed by the local community and what infrastructure is required to be funded for the development of the precinct. It may include items like drainage, roads, open space, community facilities, playgrounds etc. A DCP is a means of sharing the cost of providing the community with infrastructure that satisfies its future economic and social needs. The process of preparing the DCP seeks to ensure that contributions are reasonable, fair and appropriately timed.

1.3 Approach

The project is being undertaken in the following six stages:

STAGE 1:	Inception & Background Review
STAGE 2:	Engagement Phase 1
STAGE 3:	Background Analysis & Report [CURRENT] <i><u>Issues, Opportunities & Constraints Paper</u></i>
STAGE 4:	Draft Development & Contributions Plans
STAGE 5:	Engagement Phase 2
STAGE 6:	Final Plans and Implementation Plan

It is expected that the project will be completed in 2013.

1.4 Stakeholder Consultation

Community and stakeholder engagement is critical in developing the Traralgon North DP and DCP. There will be substantial opportunities for the Traralgon community, land owners and other relevant stakeholders, such as service authorities, to input into and have their say in the preparation of the Plan. For

more refer to the *Community & Stakeholder Engagement Strategy* included as [Appendix 1](#).

As part of Stages 1 and 2, the following consultation has been undertaken and is summarised below:

Project Bulletin – A Project Bulletin was mailed to owners and occupiers to provide general information about the project.

One-on-one Meetings - with owners of land within the Study Area. Gerard Coutts has established contact and undertaken discussions with all 13 land owners to inform them about the project and ascertain their intentions for development of their land.

A summary of feedback includes:

- The landowners are keen to be involved in an integrated process to prepare a DP.
- There are varying intentions regarding timing of development of land.
- Owners of the eastern most part of the Subject Land (abutting Traralgon-Maffra Road) have submitted a Development Plan to Council which applies to the whole site.
- Not all landowners support the submitted DP and would prefer to prepare a DP as part of Council process.

One on one consultation with landowners will continue throughout the life of the project.

Agencies and Authorities Workshop – A workshop was held on 7 February, 2012 to identify the existing issues, constraints and opportunities for service providers and authorities with regard to the Study Area.

In attendance were: representatives from State Government Departments (DSE, DHS); Authorities (EPA, WGCMA, VicRoads, CFA, Ambulance Victoria); Agencies (Gippsland Water, Telstra, SP Ausnet); and Latrobe City Officers.

A summary of feedback includes:

- Utility Services have capacity to support development of the Subject Land.

- Gippsland Water informed of potential relocation of the pump station to the north of the site (near DDO1). This could possibly cause odour buffer issues to the north of the site depending on location.
- Existing buffers include an odour buffer area around the Traralgon emergency storage (south west corner of site). This is a minimum of 300m from the edge of the pond, and no 'sensitive use' is permitted within this area i.e. no housing. Also no residential dwellings can be built within 300 metres of existing industrial sites.
- VicRoads stated that access roads to Traralgon-Maffra Road should be limited to two, and include intersection improvements.
- Emergency Services require sufficient area on roads and roadsides for vehicle access and parking. Preference for a main access in to the site via Park Lane, and the main access heading out to Traralgon-Maffra Road.
- The WGMCA is currently undertaking a Latrobe River Flood Study, expected to be completed in 18 months. The existing flood area at the south west corner of site is almost the same area as the emergency storage buffer.
- Consideration should be given to water sensitive urban principles design as well as reuse.

Councillor Workshop – A workshop held on 7 February, 2012, with Councillors to identify issues, constraints and opportunities regarding the Study Area. Further, to understand the Councillor aspirations for the Study Area. A summary of feedback includes:

- Support an integrated approach to planning of new growth areas in Traralgon.
- Issues with speed on the Traralgon-Maffra Road and how to rectify the traffic flow to and from the development area – prevent the 'rat run'.
- Grey Street is already overloaded due to a number of schools on that road or access is via that road. Suggest consideration of services in Traralgon North to reduce traffic coming to centre.
- Positive views on Ellavale development based on the use of open space, and the friendly neighboured feel within the area.

- A range of views on housing density.
- Would prefer wider street widths rather than the standard requirements

Latrobe City Council Officers - Council Officers have provided information on the issues, constraints and opportunities for the site, and also to identify service gaps and projects being undertaken which may impact the future uses and infrastructure in the Study Area.

1.5 Development Plan Objectives

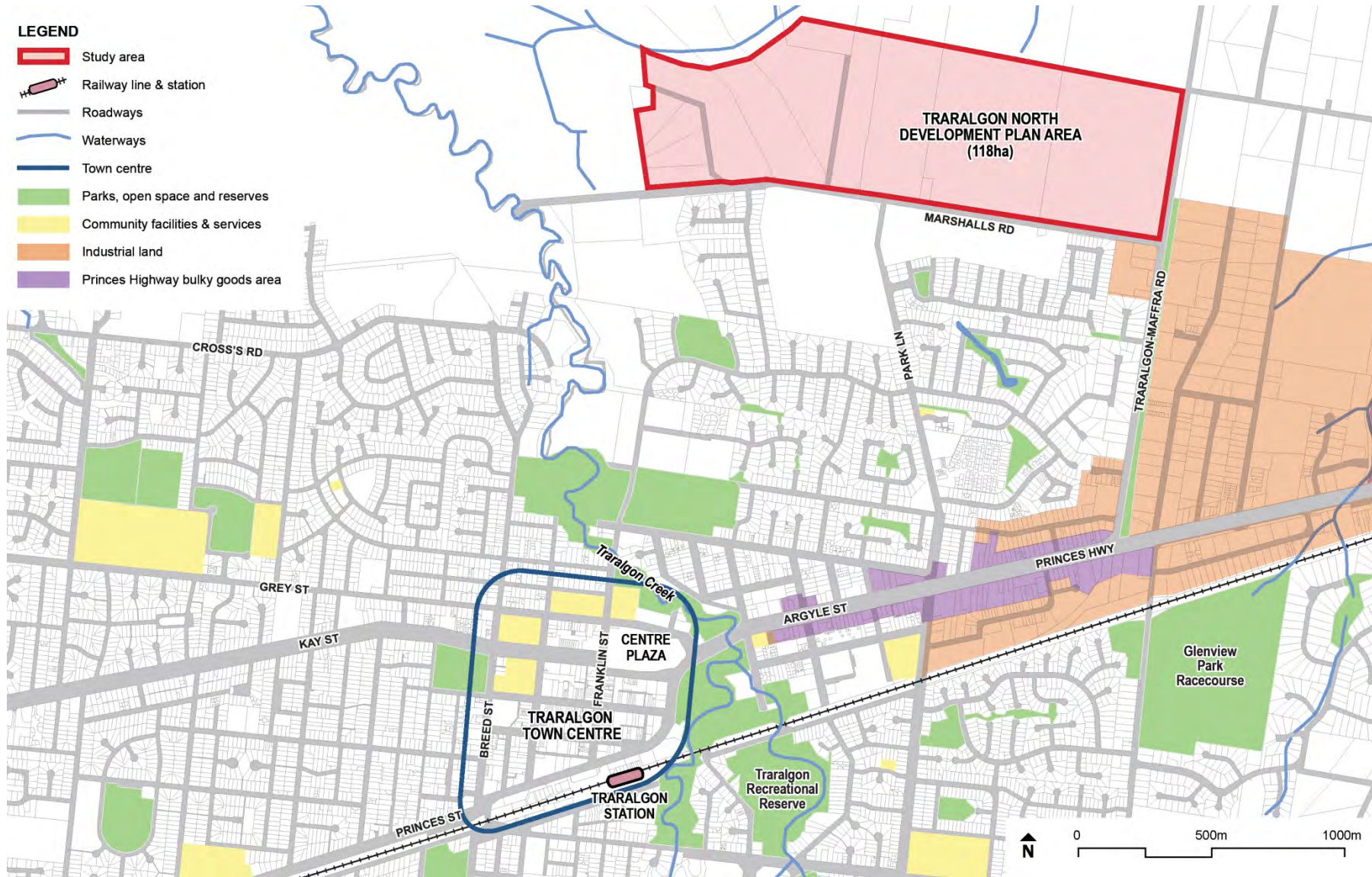
Development Plan objectives have been prepared in accordance with best practice approaches to growth area planning established by the State Government's Growth Area Authority (GAA), Clause 56 of the *Victoria Planning Provisions* and the provisions of the Latrobe Planning Scheme.

The GAA's *Growth Area Precinct Structure Planning Guidelines* provide clear objectives and direction for delivering sustainable neighbourhood design of growth areas in metropolitan areas. These guidelines have equal relevance to Traralgon North and have been applied where relevant.

Objectives for the Development Plan are listed at the start of each section of the Report, and include the following:

- Housing
- Open Space
- Community Infrastructure
- Environment
- Access and Movement
- Civil Infrastructure

FIGURE 1: STUDY AREA CONTEXT MAP



2 EXISTING CONDITIONS

This section describes the existing conditions of the site and assessment of the issues, opportunities and constraints for the DP. It is informed by research, site survey and analysis undertaken by Planisphere and Ecology and Heritage Partners. The site analysis is represented in Figure 2: Existing Conditions Map. Refer to Figure 3: Environment and Cultural Heritage Map.

2.1 Development Objectives

The development objectives for environment and cultural heritage are:

- Respond to climate change and increase environmental sustainability.
- Protect the environmental values and significant landscape features of the area.
- Utilise natural features in the design and development of the site.
- Provide opportunities for long-range views to surrounding mountain ranges.
- Manage off site amenity impacts through the provision of appropriate buffers.
- Include water sensitive urban design (WSUD) features to manage run-off in streets and public open space.

2.2 Land Use

The study area includes 118 hectares to the north east of the Traralgon town centre, and is bounded by Traralgon-Maffra Road to the east, Marshalls Road to the south, the Traralgon Creek floodplain to the west, and a high pressure oil and gas pipeline easement to the north (refer to Figure 1).

The majority of the study area has been subject to modification through long term agricultural use. The area was recently rezoned to Residential 1 Zone (R1Z) as part of Amendment C56 to the *Latrobe Planning Scheme*, and

currently comprises a mixture of farm uses, rural residential living and vacant lots.

The land in its entirety is included in the Development Plan Overlay Schedule 5 (DPO) in the *Latrobe Planning Scheme*.

As part of a recent review undertaken by the West Gippsland Catchment Management Authority (WGCMA), part of the western end of the subject land was included in the Land Subject to Inundation Overlay (LSIO) and Flood Overlay (FO). The overlay controls are shown in Figures 2 and 3.

Land use to the south of Marshalls Road forms part of 'The Strand' residential development. The development is generally constructed, however the section directly abutting Marshalls Road is still to be completed.

Traralgon North has historically been the commercial / industrial area within Traralgon. The east side of Traralgon-Maffra Road, and west side of Traralgon-Maffra Road south of Marshalls Road, comprise existing industrial uses. Land to the west and north of the subject land comprise open pastoral land in the Farming Zone (FZ).

ISSUES, OPPORTUNITIES & CONSTRAINTS – LAND USE

- The Residential 1 Zone supports residential development of the land.
- The land subject to the LSIO may be considered for non residential use, such as open space.
- A non-residential buffer may be considered for the areas on Traralgon-Maffra Road and Marshalls Road that abut industrial areas to the east and south, this may include retail or commercial opportunities.

2.3 Land Ownership

The study area comprises 13 privately owned freehold properties and road reserves. Contact has been made with all 13 landowners through one on one meetings. Several of the properties extend beyond the study area to the north of the gas and oil pipeline easement.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- The Development Plan seeks to ensure an integrated and certain development outcome for the land in the future. However, the aspirations of landowners will significantly drive the overall success of the Development Plan.
- Factors that will influence or need to be addressed during the design process include:
 - The fragmentation of landholdings;
 - Land development costs;
 - The timing of development fronts across the subject area and the impact of this on the co-ordination of services;
 - The timing and equitable distribution of costs for construction of essential infrastructure and services;
 - The intention of some land owners to continue existing uses on their land for the short-to-medium term;
- The preference of some landowners to adopt a position of minimum subdivision or low density outcomes, potentially restricting the overall development potential and yield.

2.4 Topography & Views

The majority of the study area is relatively flat with a gradual slope descending towards the Latrobe River and Traralgon Creek to the north and west of the study area.

The land immediately to the west of Traralgon-Maffra Road falls to the west at reasonably grade.

The north-western boundary of the study area is defined by the edge of an escarpment which slopes steeply down to a flood plain. The escarpment and flood plain also extend into the western edge of the study area.

Long-range views are available across the site, capturing the distant foothills of the Great Dividing Range and Baw Baw National Park to the north-west, and the Strzelecki Ranges to the south.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Future development of the site should take advantage of long-range views towards the Great Dividing Range, Baw Baw National Park and the Strzelecki Ranges.

2.5 Waterways

There are no designated waterways within the study area.

Nearby waterways include the Latrobe River, Traralgon Creek and Loy Yang Creek. All three waterways are highly valued by the local community for their environmental, aesthetic and cultural values.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Under the State Planning Policy Framework and Water Act, 1989, a 30 metre buffer zone is required on each side of a designated waterway.
- Drainage infrastructure will need to be designed to manage stormwater flow and quality. Stormwater re-use should also be considered.

2.6 Remnant Native Vegetation

Remnant native vegetation and scattered indigenous trees within the study area were recorded in small patches within the road reserves and on three of the thirteen private properties.

The study area also supports several scattered Gippsland Red Gums, which provide habitat for a suite of native fauna species.

Remnant vegetation within the study area is considered to be of at least high local ecological significance. This is due to the presence of:

- Plains Grassy Wetland (125) and Plains Grassy Woodland (55) EVCs, which are both listed as Endangered in the Gippsland Plain bioregion; and,
- The presence of scattered indigenous trees associated with the Plains Grassy Woodland EVC.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Remnant vegetation will need to be considered during the initial planning and design phase of the Development Plan, with the first two steps of 'Victoria's Native Vegetation Framework' followed.



Photo: Remnant Vegetation on the Subject Site

2.7 Flora & Fauna

The subject land is highly modified, with a long term agricultural history. It supports a few small isolated patches of native vegetation.

Flora

Eighty-six flora species (23 indigenous and 63 exotic) were recorded in the study area during the assessment.

No nationally significant flora species were recorded within the study area. Five nationally listed flora species have previously been recorded within the local area (within 10 kilometres of the study area). An additional five species, not previously documented within the local area, also have habitat potentially occurring within the vicinity of the study area.

No State listed flora species were recorded within the study area during the assessment.

Fauna

Twenty-nine fauna species were recorded during the field survey, comprising three mammals (one native and two introduced), 25 birds (20 native and five introduced) and one native frog.

No national, State or regionally significant fauna species were recorded within the study area during the assessment.

Vegetation Communities

No national or state significant ecological communities were recorded within the study area.

Net Gain Analysis

The study area consists of 0.44 habitat hectares within remnant patches, comprising:

- 0.43 habitat hectares of Very High conservation significance Plains Grassy Wetland.

- 0.01 habitat hectares of High conservation significance Plains Grassy Woodland.
- 20 scattered indigenous trees comprising 5 Very Large Old Trees, 10 Large Old Trees, 2 Medium Old Trees, and 3 Small Trees

ISSUES, OPPORTUNITIES & CONSTRAINTS

- There is no habitat present within the study area for threatened flora or fauna species, therefore no targeted surveys are recommended for the study area. Accordingly, an EPBC Act referral to the Commonwealth Minister is not required. This includes no requirement for further assessment of frog and fish communities.
- A planning permit from Latrobe City Council will be required for the removal of any native vegetation associated with the development of the study area and this will likely take into consideration wildlife regulations.

2.8 Aboriginal Cultural Heritage

The study area has a rich geological and ecological history that would have provided a diverse range of resources for Aboriginal peoples during the past 50,000 years.

Several previous archaeological studies in the vicinity of the activity area demonstrate that archaeological potential is present in areas of raised land that may exist throughout the broader north Traralgon area.

Background research indicated that there have been 41 Aboriginal archaeological sites previously recorded within a 5 km radius of the study area, and one historical archaeological site previously recorded within a 2 km radius of the study area.

No Aboriginal sites or historical sites are known to be located in the study area, although the study area has not been previously assessed for archaeological sites.

The background research concluded artefact scatters and scarred trees were the types of Aboriginal sites most likely to occur within the study area. There is some likelihood that historical archaeological sites occur in the study area. Survey by an archaeologist can confirm this.

No Aboriginal heritage places listed on the Heritage Overlay are present within the study area.

There are no Aboriginal or Historic sites listed with the Register of the National Estate for the Traralgon area.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- There are no known Aboriginal cultural heritage issues in regard to the proposed development, and therefore no legislative trigger to prepare a CHMP exists under the Aboriginal Heritage Act 2006.

FIGURE 2: EXISTING CONDITIONS MAP

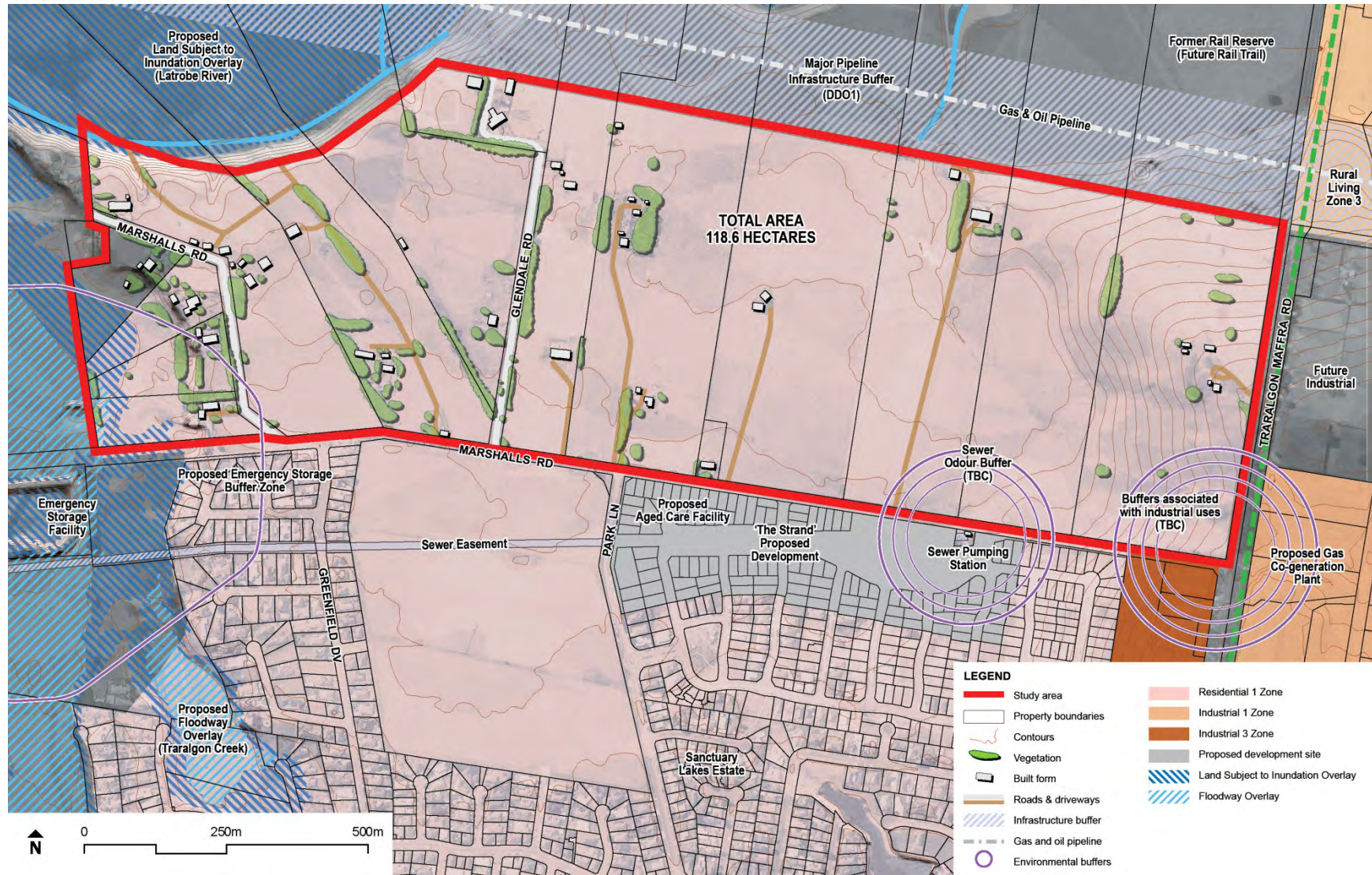
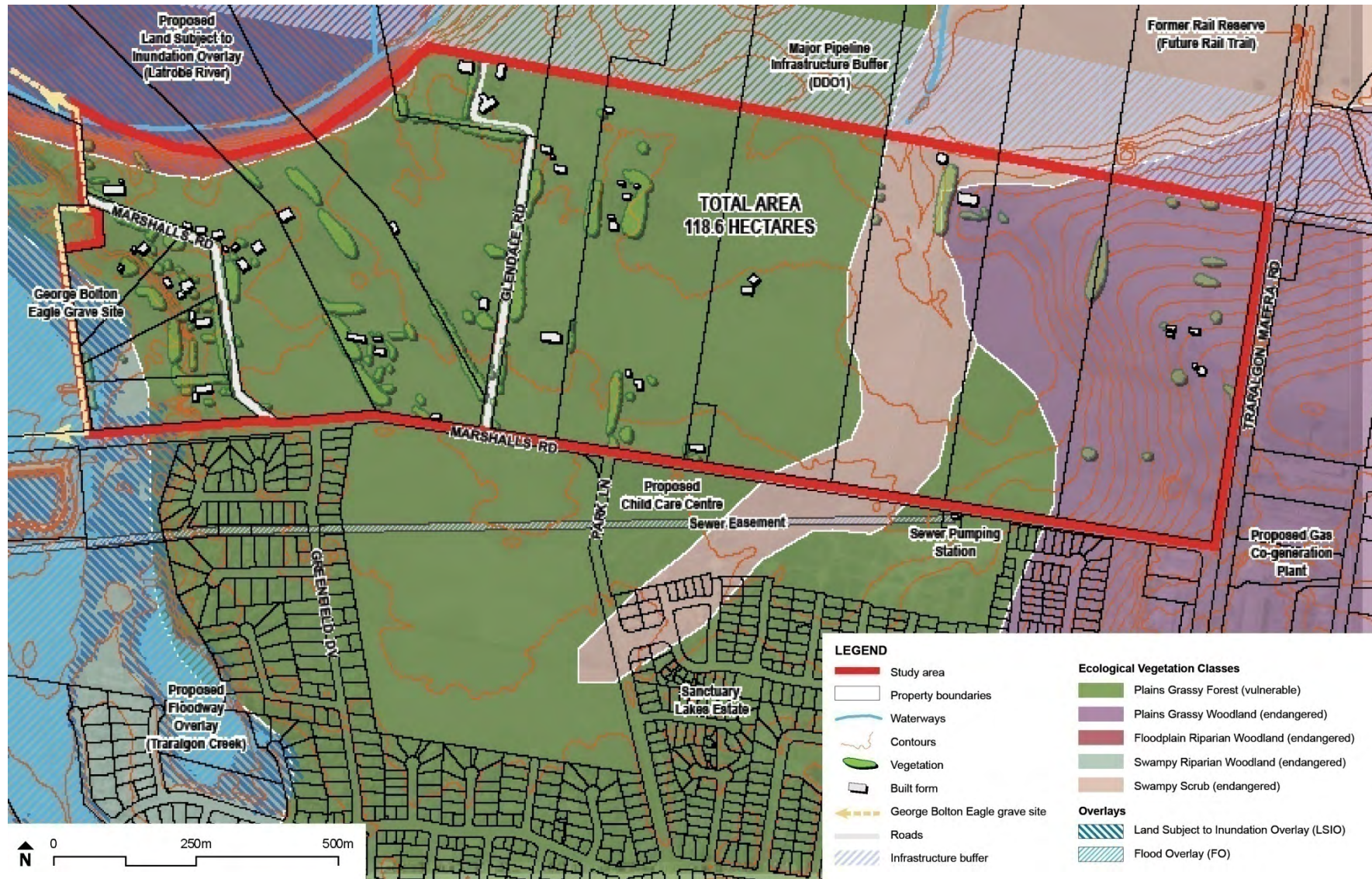


FIGURE 3: SUBJECT SITE ENVIRONMENT AND CULTURAL HERITAGE MAP



3 CIVIL INFRASTRUCTURE

This Civil Infrastructure section provides an analysis of the existing conditions, supply and capacity and assessment of the issues, opportunities and constraints for the Development Plan. It is informed by research, site survey and analysis undertaken by TGM Group.

It is important to establish the civil infrastructure requirements of the Development Plan to inform preparation of a Development Contributions Plan (DCP) for the site. The DCP will leverage developer contributions toward the provision of infrastructure including such things as:

- The design and construction of stormwater drainage infrastructure including main drainage, wetlands, and retarding basins.
- The acquisition of land for stormwater drainage purposes.

3.1 Civil Infrastructure Objectives

The Development Objectives relevant to Civil Infrastructure are:

- Provide adequate public utility infrastructure to support the future growth of Traralgon North.
- Ensure the physical and functional integration of new utility infrastructure with the surrounding area.
- Provide public utilities in a timely, coordinated and efficient manner.
- Develop a fair and equitable funding mechanism that is well supported by Council and landowners, and minimizes risk for all parties.

3.2 Stormwater

West Gippsland Catchment Management Authority (WGCMA) is the authority responsible for regional waterways whilst the Latrobe City Council is responsible for local drainage works.

The Latrobe River, Traralgon Creek and Loy Yang Creek are the receiving water bodies for the entire development. The land to the west of the Subject Land is included in a Land Subject to Inundation Overlay (LSIO) and Floodway Overlay (FO). This land generally has little slope but falls towards the north. The land immediately to the west of Traralgon-Maffra Road falls to the west.

There are several stormwater overland flows paths that are not clearly defined. An existing Council stormwater drain of 1500mm diameter (from the Sanctuary Lakes development located to the south of Marshalls Road) discharges into an existing water body to the north of the Traralgon North development area.

It is unclear if the pipe linking the Council stormwater drain to the water body north of the Study Area has capacity to convey the 1 in 100 year Average Recurrence Interval (ARI) event. Provision of an overland flow path such as road reserve is necessary to accommodate not only internal overland flow but also external overland flow. Further investigation is necessary to determine what external flow may be possible.

WGCMA advises that the stormwater drainage from the proposed development area will be controlled by local Council. However, the WGCMA will still act as referral authority for any town planning applications and will mandate Water Sensitive Design protocols to comply with Victorian Stormwater Committee Best Practice Guidelines. They will also mandate the on-site detention of stormwater run-off, to ensure discharges to WGCMA designated receiving waters are of the highest water quality and maintained at pre-development levels.

The WGCMA has indicated that the current flood overlays will still remain but they are not based on any specific flood study. At present the LSIO affects the south west corner of the site which is also impacted by the potential odour buffer from GW's emergency storage facility. A detailed flood study is being undertaken but shall not be completed for another 18 months.

The *Latrobe City Design Guidelines (2003)* guide and assist Council in the preparation of best practice designs for civil engineering infrastructure to be constructed in the City. The *Design Guidelines* provide a set of Standards to be

used by developers, consultants and designers in the planning of new infrastructure and for the rehabilitation of existing infrastructure.

Latrobe City will mandate requirements for both Water Sensitive Design protocols to comply with Victorian Stormwater Committee Best Practice Guidelines, and the on-site detention of stormwater run-off. Latrobe City has indicated that the existing drainage infrastructure is limited and that all runoff from the development are to be maintained at the current pre-developed flow.

At the south eastern area of the study area located in Marshalls Road is a 1500mm diameter stormwater drain that discharges to Traralgon Creek, just north of the Gippsland Water emergency treatment plant.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- TGM has prepared a Preliminary Stormwater Strategy Plan – refer to Figure 4. This is based on the information available at the time of writing. The plan details the following:
 - proposed areas for detention of stormwater runoff
 - key drainage catchments and initiatives that can be adopted for water quality improvements.
- All overland flows will be conveyed via the proposed road network and where this is not possible open space reserves will be nominated to convey such flows.
- All existing watercourses are assumed to continue along their existing alignment. TGM has also assumed that to ensure development can maintain appropriate overland flow paths, earthworks including regarding of the land will be necessary to provide appropriate longitudinal grades.

3.3 Potable & Recycled Water Supply

Gippsland Water (GW) is the authority responsible for the provision of water supply facilities.

Limited water supply infrastructure exists within and surrounding the vicinity of the Traralgon North area. GW has informed that in general terms GW has no issues with servicing this development. There is no mandate by GW to provide recycled water reticulation.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- TGM has prepared a Preliminary Water Strategy Plan – refer to Figure 5.
- All developments will require construction of new mains to service new properties. Typically, water mains will be laid in the road reserve with individual water connections to each new property.
- All new water mains and associated infrastructure will be constructed at the developer's cost and transferred to GW ownership.
- A 300mm diameter water main will need to be extended in Marshalls Road east and west from Park Lane. The length west is approximately 500m interconnecting with the existing 150mm main in Greenfield Drive. The length east is approximately 600m but this may extend further depending on the proposed road layout of the Traralgon North development plan. Allocation of space within the road reserve will be necessary to position the proposed water main.
- The developers of the Traralgon North area will be required to construct the proposed 300mm diameter water main.
- Recycled Water will be made possible if GW were to develop a recycling plant, or alternatively that any other authority was to consider the possibility of a stormwater harvesting plant. In this instance pipelines can be provided similar to potable supply in order to reticulate the proposed development area.

3.4 Sewerage

Gippsland Water (GW) is the authority responsible for the provision of sewerage facilities to this development.

Significant sewerage infrastructure exists within and surrounding the vicinity of the Traralgon North area which is shown on the sewer strategy plan (Figure 6).

In summary the following infrastructure is present:

- The Glengarry-Traralgon rising main is located in the land to the north of Marshalls Road where it runs west from the Maffra-Traralgon Road before it changes direction and heads south to the Marshalls Road East Sewer Pump Station.
- The Marshalls Road East Sewer Pump Station and the Regional Outfall Sewer Booster Pump Station are located to the eastern end of Marshalls Road. The Marshalls Road West Sewer Pump Station and the Traralgon Emergency Storage Facility which receives all sewage flows from the Traralgon area, where it is then pumped to the Gippsland Water Storage Facility, is located to the western end of Marshalls Road.
- From the Marshalls Road Sewer Booster Pump Station the Regional Outfall Sewer connects to the Traralgon Emergency Storage Plant via land to the south of Marshalls Road.
- Risings mains are located on both the north and south side of the Marshall Road reserve.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- TGM has prepared a Preliminary Water Sewerage Plan – refer to Figure 6.
- Gippsland Water recently engaged Engineers GHD to undertake modelling of the current sewer system within the development area. The results concluded that the sewer system including the Marshalls Road Pump Station are at capacity and need to be replaced with a single pump station. Both of the pump stations in Marshalls Road should be

decommissioned. The preferred location of the pump station is north of the development area and the Esso gas pipelines and above any flood plain area. The preference of GW is to provide an odour buffer zone of minimum 300m in which no residential development is permitted. A rising main of approximately 300mm is required to discharge from this new pump station to the emergency storage facility via Marshalls Road. The proposed location of the pump station and associated pipe work is shown in the sewer strategy plan (Figure 6). All major Gippsland Water assets should ideally be located within the proposed road reserve and clear of any road pavement. Any other alternative locations would need to be confirmed with Gippsland Water.

- Based on current EPA guidelines the Traralgon Emergency Storage facility should have an odour buffer zone which is a minimum 300m offset from the edge of the plant. This is already compromised. Any future residential development should be clear of the odour buffer zone, unless consent from GW is permitted to develop in closer proximity.
- GW has advised that future potential development to the land north of the Esso gas lines as indicated by Latrobe City Council will require the conceptual sizing to be reviewed. GW expects this to be undertaken in the next 2-3 months.
- The Regional Outfall Sewer that connects to the Traralgon Emergency Storage Plant via land to the south of Marshalls Road will require protection and therefore Gippsland Water require appropriate reserve rights. It is understood that the reserve width is a minimum of 20m wide. The pipeline is shallow and fragile, and any infrastructure crossing the reserve will require careful planning and assessment.

3.5 Electricity

SP Ausnet is the franchised authority responsible for the electrical supply to this development.

Existing 66kV and 22 kV high voltage and low voltage overhead power lines exist surrounding the development area including Marshalls Road, Park Lane and Traralgon-Maffra Road. Overhead power lines are also present within the Traralgon North development area which currently service existing properties.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- The current network planning conducted for the development indicates that existing infrastructure will be suitable to service the Traralgon North Area.
- SP-Ausnet requires all new electrical infrastructures to be constructed underground and handed over as an SP-Ausnet asset. Low voltage rebates and reimbursements for high voltage works will apply.
- Electrical substations will be required within the development area strategically located as SP-Ausnet assets. These are best located within open space reserves and require a reserve or a designated easement in favour of SP-Ausnet.
- All existing overhead powerlines within the Traralgon North Development Area are to be retired at the expense of the developer.

3.6 Gas

A major gas (and oil) pipeline exists within an easement to the north of the development plan area.

A 100m Overlay applies to the gas and oil pipeline which may limit development within this area. Previous discussions with Latrobe City Council and Department of Primary Industries have indicated that development within the buffer may be appropriate.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- APA Group may be able to supply this estate with natural gas. Initial feasibility enquiries are being conducted by the APA Group to determine availability of supply. This information will inform the DP. These works could be subject to contributions from the developer. Detailed costs can be provided only at the time of formal application.
- Although outside of the study area, the buffer zone area may be able to accommodate non-urban development such as infrastructure and recreational uses.

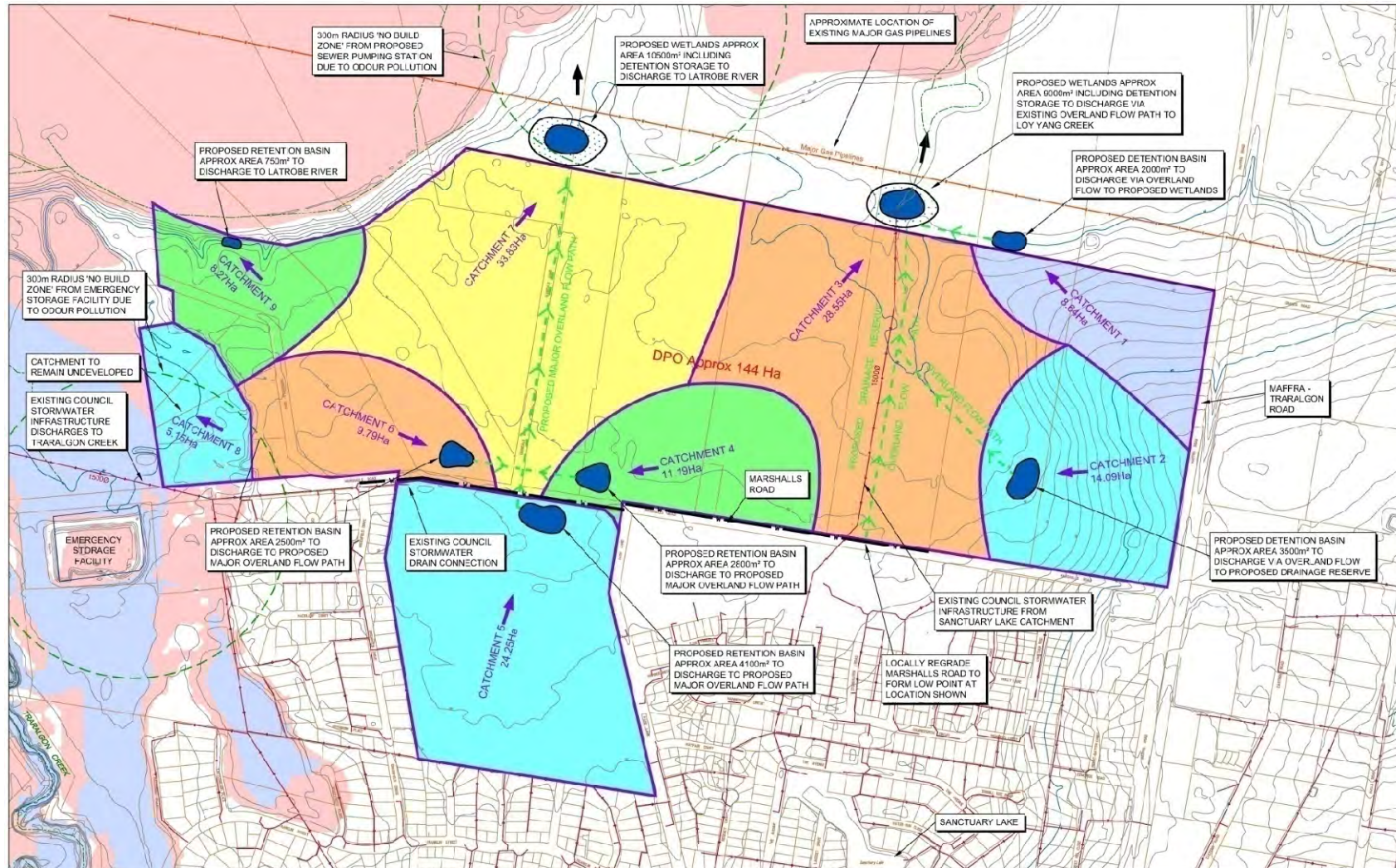
3.7 Telecommunications

Telecommunications services based on standard copper assets can be provided to the site by way of extension of the existing assets located within and to the south of Marshalls Road.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Telstra's emphasis is to upgrade their wireless network due to a 300% increase in mobile internet use in the area. Capacity upgrades are expected to cover the Traralgon North area although this is subject to further system planning.
- Mobile upgrade works will include works on existing towers and the construction of a new tower.
- Recent changes to the telecommunications industry have seen the rollout of high speed broadband. NBN Co is the responsible authority for the rollout of the broadband, and has indicated that given that the Traralgon North development area is greater than 100 lots, then it will fall within NBN's rollout criteria for new developments.

FIGURE 4: PRELIMINARY STORMWATER MANAGEMENT PLAN



■ Latrobe Flood Overlay
■ Latrobe Land Subject to Inundation Overlay

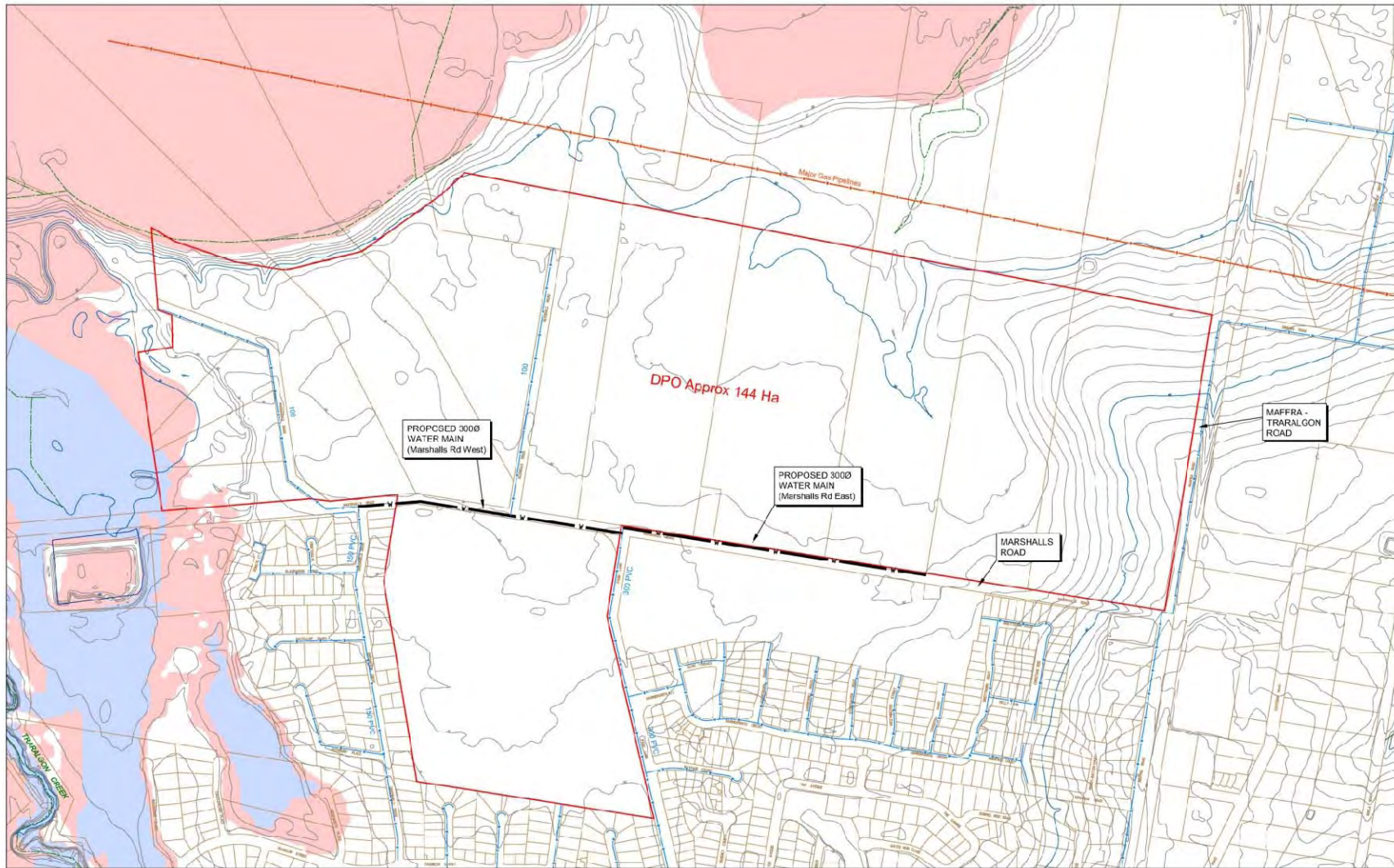


MARSHALLS ROAD, TRARALGON
PRELIMINARY STORMWATER STRATEGY PLAN
 SCALE 1: 3500 @ A1

TGM Group Pty Ltd
 Baring 03 5331 8888
 Geelong 03 5202 4100
 Melbourne 03 8862 9333
 Web: www.tgmgroup.com



FIGURE 5: PRELIMINARY WATER STRATEGY PLAN



■ Latrobe Flood Overlay
■ Latrobe Land Subject to Inundation Overlay

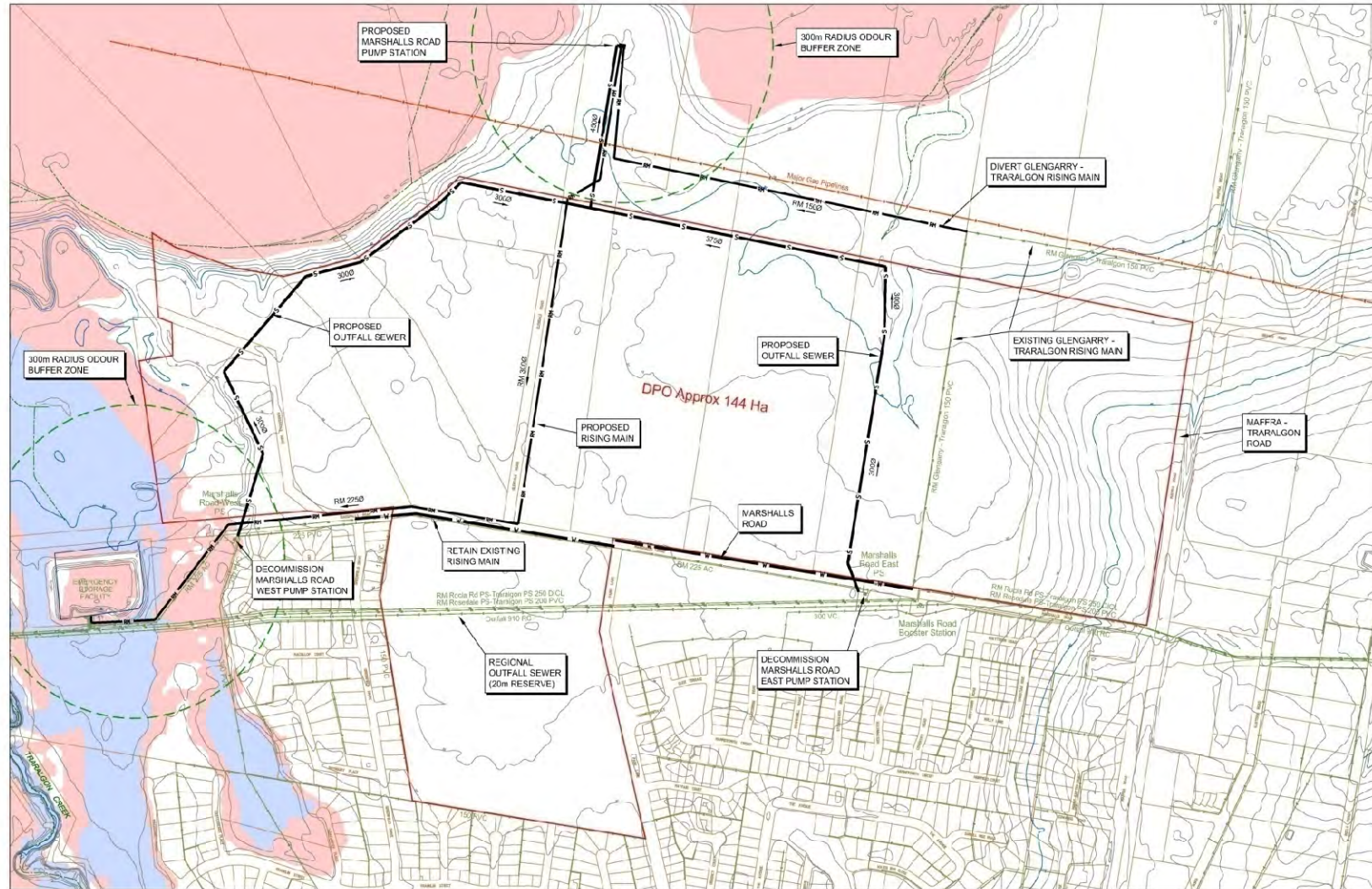


MARSHALLS ROAD, TRARALGON
PRELIMINARY WATER STRATEGY PLAN
SCALE 1 : 3500 @ A1

TGM Group Pty Ltd
Ballarat 03 5330 8888
Geelong 03 5202 4600
Melbourne 03 8862 9333
Web: www.tgmgroup.com



FIGURE 6: PRELIMINARY SEWERAGE STRATEGY PLAN



Lairose Flood Overlay
 Lairose Land Subject to Inundator Overlay



MARSHALLS ROAD, TRARALGON
PRELIMINARY SEWER STRATEGY PLAN
 SCALE 1: 3500 @ A1

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4 MOVEMENT & ACCESS

This Movement and Access section explores the access needs for new residential development and how to maximise connectivity, walkability and liveability for all users, including issues of traffic, pedestrians, cycling and public transport.

It is important to establish the infrastructure requirements of the Development Plan to inform preparation of a Development Contributions Plan (DCP) for the site. The DCP will leverage developer contributions toward the provision of infrastructure including such things as:

- Acquisition of land required for a road reserve.
- The construction of any road
- Infrastructure associated with a proposed bus route.
- Traffic calming treatments.
- The walking and cycling network including safe crossing points on the abutting arterial roads (excluding footpaths along roads).

Refer to Figure 7 for a Movement and Access Map.

4.1 Movement & Access Objectives

The Access and Movement development objectives are:

- Provide better transport choices.
- Create walkable neighbourhoods including safe, attractive and continuous network of pedestrian and cycle routes to all key local destinations.
- Provide legible street networks that are clear and easy to navigate.
- Create well connected streets that integrate with the wider area.
- Provide links to existing pedestrian and cycling networks.

- Distribute traffic evenly throughout the local street network.
- Ensure the area can be adequately and efficiently serviced by buses.
- Provide bus stops in close proximity to neighbourhood centres.

4.2 Road Network

The site is bounded by the Traralgon-Maffra Road to the east and Marshalls Road along its southern boundary. Traralgon-Maffra Road functions as a secondary state arterial road (controlled by VicRoads) which is aligned in north-south direction. Marshalls Road functions as a collector road (controlled by Council) and aligned in an east-west direction.

Marshalls Road east of Park Lane and west of Traralgon-Maffra Road will be undergoing upgrade as part of The Strand development to the south.



Traralgon – Maffra Road Looking North



Marshalls Road looking west

The surrounding road network includes the following roads and their functions:

- **Park Lane** (Collector Road) - The road reserve north of Hammersmith Circuit is currently 20 metres wide, but will be widened to 25 metres as part of the development of the adjacent land.

- **Franklin Street** (Collector Road) - Franklin Street is aligned in a north-south direction and provides a direct connection to the Traralgon CBD via a bridge over Traralgon Creek. As one of only two links across the river between Traralgon North and the Traralgon CBD, the road network between Franklin Street and Traralgon-Maffra Road experiences through traffic.
- **Morgan Drive** (Major Access Street).
- **Greenfield Drive** (Major Access Street).

The *Growth Area Authority Guidelines* provide a set of benchmarks and standards for new residential development. With regard to a proposed road network, the Guidelines require arterial roads to be spaced at approximately 1.6km intervals and connector streets spaced at approximately 800m intervals (*GAA Guidelines*).

The configuration of road intersections surrounding the Subject Land include:

- Traralgon-Maffra Road / Marshalls Road (unsignalised T-intersection)
- Marshalls Road / Park Lane (unsignalised T-intersection – proposed future roundabout)
- Park Lane / Hammersmith Circuit (roundabout)
- Park Lane / Morgan Drive / Franklin Drive (roundabout)
- Marshalls Road / Glendale Road (unsignalised T-intersection)
- Marshalls Road / Greenfield Drive (unsignalised T-intersection)

The Traralgon-Maffra Road and Park Lane intersection with the Princes Highway to the south of the site are signalised intersections.

The VicRoads 'CrashStats' database details reported casualty accident history for the roads and intersections in the vicinity of the study area. The database lists one recorded accident within the vicinity of the site during the last five year period. This accident involved a vehicle hitting a pedestrian.

ISSUES, OPPORTUNITIES & CONSTRAINTS

VICROADS ROADS:

- VicRoads has indicated that it currently has no proposals to upgrade Traralgon-Maffra Road, or undertake additional upgrades to the intersections of Princes Highway with Traralgon-Maffra Road and Park Lane.
- As Traralgon-Maffra Road is a declared main road, new connections from the study area to this road should be limited, in accordance with VicRoads policies. Specifically, VicRoads has indicated that there should be a maximum of two intersections between the subject land and Traralgon-Maffra Road.
- Details of the configuration of the intersection of Traralgon-Maffra Road and Marshalls Road will require further analysis of expected future traffic volumes.
- However, as a minimum, all intersections between the study area and Traralgon-Maffra Road will require auxiliary left turn and right turn lanes, including the intersection with Marshalls Road, in order to meet with VicRoads design standards.

COUNCIL ROADS:

- In accordance with the *Growth Area Authority Guidelines* the arterial roads should be spaced at approximately 1.6km intervals and connector streets spaced at approximately 800m intervals.
- Whilst further analysis is required of expected future traffic volumes, it is expected that in order to accommodate future traffic volumes Marshalls Road will need to be upgraded to the standard of a connector street, in accordance with the requirements of Clause 56 of the *Latrobe Planning Scheme* and the *Department of Transport Public Transport Guidelines*.

ISSUES, OPPORTUNITIES & CONSTRAINTS CONTINUED

- The new roads within the study area should also be designed as a minimum in accordance with the requirements of Clause 56 of the *Latrobe Planning Scheme* and Council's Design Guidelines
- In particular, as requested by the emergency services, road widths should be sufficient for other vehicles to park a stationary emergency service vehicle in accordance with the requirements of Ambulance Victoria and the CFA.
- The study area should be designed to provide future road connections to the north, to accommodate the potential future development of the land to the north of the study area.
- To maximise safety it is preferable to avoid internal cross intersections within the study area, unless they are controlled by a roundabout.
- In accordance with Council standards, the new roads within the study area will need to be constructed with kerb and channel, and underground drainage. All services within the study area will also be required to be underground.
- Whilst further analysis is required of expected future traffic volumes, the development of the study area will result in significant additional traffic on Park Lane, Greenfield Drive and Franklin Street. Notwithstanding, the volume of traffic on these roads is unlikely to exceed the typical upper limit for a collector road. All of these roads already function as collector roads and have been constructed to a collector road standard. Further, there is limited opportunity to undertake any works on these roads to mitigate the impacts of the expected additional traffic. Therefore, minimal works are likely to be required on these roads.

4.3 Pedestrian & Cycle Network

Pedestrian paths are generally located along the residential frontages of the roads in the vicinity of the study area. There are currently no paths on the Marshalls Road or Traralgon-Maffra Road site frontages.

An existing off road cycle route is located on the eastern side of Traralgon-Maffra Road. A rail trail has been developed on the eastern side of the Traralgon-Maffra Road, and Council aims to link this path back into the main bicycle network.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- In accordance with Clause 21.08-3 - Healthy Urban Design Overview – of the *Latrobe Planning Scheme*, the DP should be design to:
 - Promote active lifestyles and avoid social isolation by designing new dwellings to be close to user-friendly pedestrian and cycle paths that incorporate shade, toilet facilities, seating and directional signage where possible.
 - Promote walkability within new developments, community centres or buildings (appropriate to the scale of development) of approximately 400-800 metres from all dwellings.

ISSUES, OPPORTUNITIES & CONSTRAINTS CONTINUED

- In accordance with Government policy to encourage the use of walking and cycling, and reduce reliance on private motor vehicles:
 - All roads within the study area should have footpaths on both sides.
 - Footpaths within the study area should connect to existing footpaths to the south to provide connections to the residential and commercial areas to the south of the study area.
 - The road network within the study area should allow direct pedestrian and cycle path links through the area and to the external network without the need for overly circuitous routes, through the provision of cul-de-sac links or similar if necessary.
- The *Latrobe City Bicycle Plan* nominates a future local bicycle route along Marshalls Road east of Greenfield Drive. This is nominated to be provided in the form of on-road cycle lanes. However, there is potential for an off-road shared path within the road reserve as an alternative.
- The *Latrobe City Bicycle Plan* nominates a future shared path along the west side of Park Lane. It may be reasonable for the developers of the study area to contribute to the cost of these works in the DCP, given that such a facility would assist cyclists from the study area. Notwithstanding, it is understood that off-road shared paths cannot be located abutting property boundaries and therefore there may be difficulties with providing such a shared path.
- Consideration should be given to providing on-road cycle lanes and/or an off-road shared path within the road reserve along connector streets within the study area.
- The cycle facilities within the study area should link to the proposed rail trail along the eastern side of Traralgon-Maffra Road. This could include a median island or other appropriate pedestrian/cyclist facility to maximise the safety of pedestrians and cyclists crossing Traralgon-Maffra Road.

4.4 Public Transport

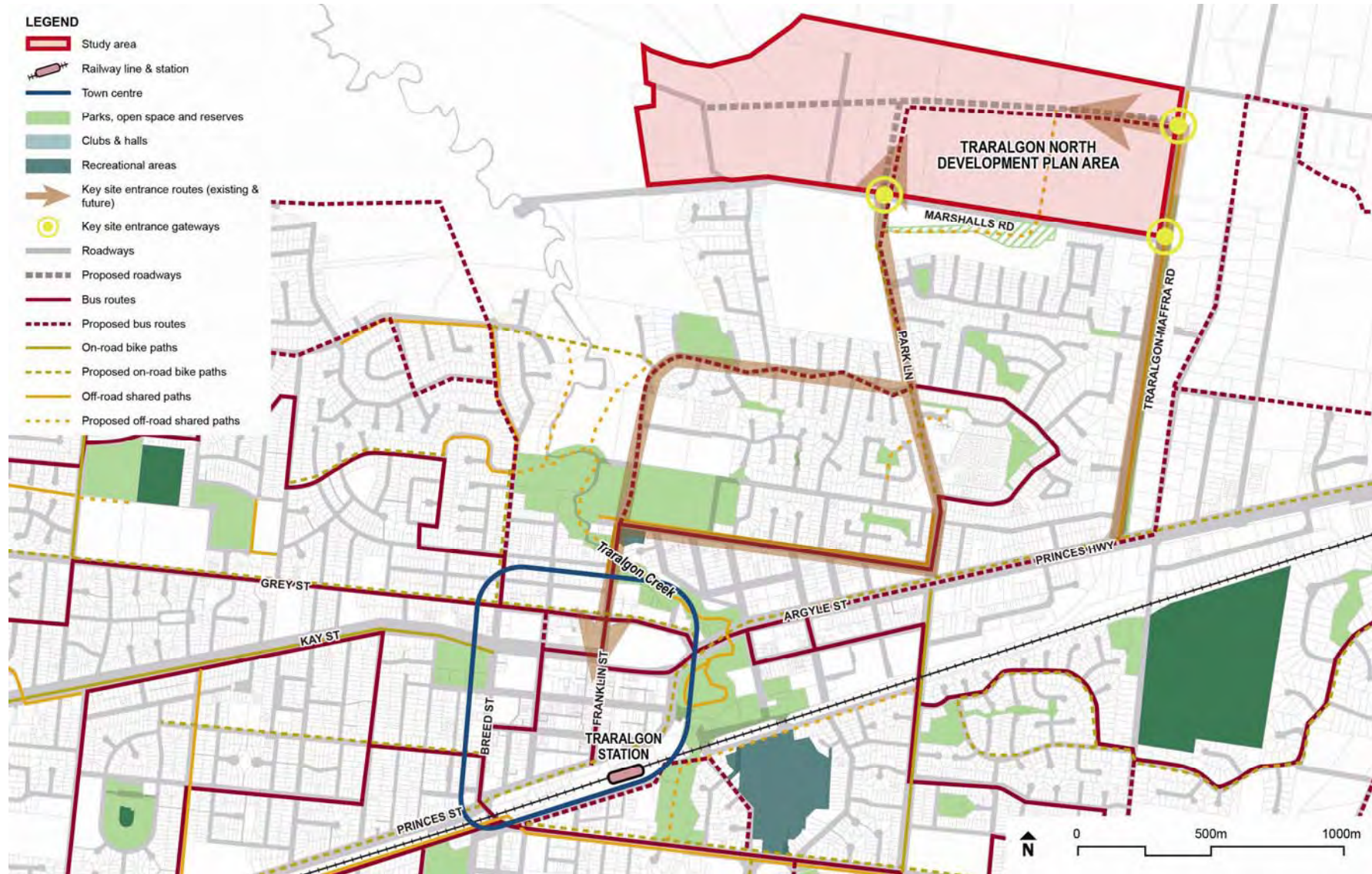
A new bus route (#45) operates along Marshalls Road adjacent to the study area, as shown in the Figure 7. There are no other public transport services within close proximity of the study area.

The Growth Area Authorities provide a set of benchmarks and standards for new residential development, including that 95% of dwellings are located not more than 400m street walking distance from the nearest or proposed bus stop.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Council and State Government policies, and the provisions of DPO5, support the provision of public transport for new residential developments.
- When Marshalls Road is upgraded it should be designed to meet the requirements for a bus route in accordance with the Public Transport Guidelines, including appropriate provision for bus stops.
- Any other connector streets within the development area should also be designed to accommodate potential future bus services, including potential bus stop locations.
- The Plan should provide for a road network that results in all properties being within 300 metres of any future internal bus link.
- Potential exists for achieving this goal through modification to the existing route (#45) or through a potential future additional route.
- Notwithstanding the above, there do not appear to be any transport issues which would impede the preparation of a Development Plan to guide the development of the study area with a suitable residential development.

FIGURE 7: ACCESS AND MOVEMENT MAP



5 HOUSING

Through recent policy work, Latrobe City Council has established that Traralgon has a shortage of residential land supply for the next 10 to 15 years, and as such has rezoned 800 hectares of land throughout the City, including approximately 118 hectares at the subject land, to a Residential 1 Zone.

5.1 Housing Objectives

The Development Objectives relevant to housing are:

- Create greater housing choice, diversity and affordable places to live.
- Provide a range of densities that enable a mix of housing types and sizes.
- Provide housing to meet the needs of different life-cycle stages, including ageing in place.
- Locate higher density housing around the neighbourhood activity centre and close to public transport.

5.2 Density

The *Latrobe City Residential and Rural Residential Land Assessment (2009)* identifies that surrounding Traralgon are three main constraints that limit options for future urban growth: coal to the south; major pipeline infrastructure to the north; and floodplains to the north. The *Assessment* identifies that at present the average lot size within greenfield developments in Traralgon is 940 square metres.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- The *Latrobe Planning Scheme* aims to achieve an average density of at least 15 dwellings per hectare (net developable area).

- Given the land use constraints around Traralgon there is a need to reduce average residential property sizes to consume remaining land at a more sustainable rate. Lot sizes will need to be an average of 800 square metres, with higher densities around the neighbourhood activity clusters.

5.3 Household Type

The Australian Bureau of Statistics 2006 Census identifies that Traralgon has a declining average household size, with dwellings housing fewer people than in the past. This is in part due to an ageing population, more single parent households, and a higher proportion of single person households. Traralgon provides good opportunities for employment, education, community services and housing choice. For this reason, Traralgon has traditionally attracted a high proportion of young families. Clause 21.04 of the *Latrobe Planning Scheme* seeks to encourage a wider variety of housing types, especially smaller and more compact housing, to meet the changing housing needs of the community.

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Demand for housing will be driven by population growth.
- 'Lone person' households are predicted to be the predominant household type in Traralgon in 2031, followed by 'couples without dependents' and 'couple families with dependents'. Young families will continue to be a dominant household type.
- The Development Plan should include a mix of housing types and sizes to reflect declining household size, and provide for different life-cycle requirements
- The provision of a range of lot sizes will encourage a variety of housing options.
- Higher densities should be considered around public transport, community services and commercial/retail uses.

6 COMMUNITY INFRASTRUCTURE

Community infrastructure encompasses the facilities and spaces which support identified social goals and objectives. In the context of a social model of healthy community infrastructure includes not only the direct provision of services such as Maternal & Child Health, but the infrastructure which supports individuals to lead a healthy lifestyle such as walking and cycling paths, space for social interaction and opportunities for lifelong learning. Therefore community infrastructure plays an important role in greenfield residential subdivisions and developments by supporting the creation of local identity and promoting health, well-being and social inclusion among new residents.

Latrobe City is an essential service provider to the local community. In situations where development of greenfield sites for new residential development is being planned, the development industry can also play a role in the construction and funding of community infrastructure. A key objective of the Development Plan is to identify these opportunities for developer contribution to community infrastructure.

As part of a regional, Traralgon services both local community needs as well as having a regional function. Existing community infrastructure is generally located within the town centre and to the north-west and south-east of the Traralgon CBD. Figure 7 illustrates the lack of community infrastructure within the Traralgon North growth area environment.

A key challenge for the Latrobe City is ensuring the timely delivery of community facilities and services to Traralgon's steadily growing population.

6.1 Community Infrastructure Objectives

The Development Objectives relevant to Community Infrastructure are:

- Enhance the quality of residents' lives by encouraging positive interrelated elements including safety, health, education, quality of life, mobility and accessibility, and sense of place.

- Deliver accessible, integrated and adaptable community infrastructure.
- Provide community facilities and services which meet the needs of local residents within the subject site and surrounding area.
- Support the co-location of community facilities and services.
- Encourage healthy and active lifestyles.
- Provide a focus for community gathering and activity.
- Provide physical and functional linkages between the subject site and existing community infrastructure.
- Locate a local centre (including convenience store) on a connector street that carries an existing or proposed public transport route.

6.2 Healthy by Design

Clause 21.08-3 - Healthy Urban Design Overview – of the *Latrobe Planning Scheme*, implements the *Healthy Urban Design Good Practice Guideline – Meeting Healthy by Design Objectives*. Inclusion of the Guideline within the *Latrobe Planning Scheme* is an indication as to the value Council places on designing and developing healthy lifestyles for the community through accommodating community, pedestrians and cyclists as a first priority in street, building and open space design.

The Healthy by Design Guidelines aim to avoid creating new residential developments on the fringe of Traralgon that are disconnected from community services and facilities. Strategies include creating walkable neighbourhoods that ensure proximity to mixed use community centres among retail, housing, open space and public transport.

The Healthy by Design Guidelines provide a valuable set of objectives and strategies for creating liveable and healthy residential developments.

ISSUES, OPPORTUNITIES & CONSTRAINTS

The objectives of the *Healthy Urban Design Good Practice Guideline – Meeting Healthy by Design Objectives* specifically relevant to community infrastructure include:

- Community spaces or buildings that incorporate a variety of uses, and co-locate with complementary uses, such schools, public transport, civic areas and parks which will also assist in ensuring a viable community heart.
- Ensure all subdivision housing developments include community spaces or buildings that are provided within a walkable distance (approximately 400-800 metres) where appropriate.

6.3 Demographic & Population Analysis

This section provides an overview of the current and predicted population and demographic profile of Latrobe City as well as Traralgon. It is highlighted that this assessment is based on forecasts prepared by consultants, Forecast i.d., in 2009. Forecasts should be considered as a conservative estimate of future population growth and change in the area.

Latrobe City

The estimated population of Latrobe City in 2011 is 76,640 (Source: Australian Bureau of Statistics). The municipality as a whole is expected to grow by 18,706 residents by 2031 to comprise 90,710 persons.

The average household size is predicted to decrease slightly during this period from 2.46 (2006) to 2.34 (2031) persons.

In order to accommodate falling household size and population growth it is expected that a further 9,730 dwellings will need to be constructed.

Traralgon

Traralgon is the largest urban area within the municipality and is anticipated to accommodate the majority of population growth, followed by Moe/Newborough and Morwell.

In 2006 Traralgon had an estimated population of 24,143 residents. By 2031 the town is expected to grow by 11,282 residents to accommodate 35,452 people, requiring an additional 5,381 dwellings.

The average household size is predicted to decrease slightly from 2.49 (2006) to 2.37 (2031) persons.

Key demographic statistics and trends are as follows:

- Traralgon has a declining average household size, meaning that dwellings are housing fewer people than they did in the past.
- Demand for land and housing will therefore be driven by both population growth and declining household sizes.
- Traralgon has traditionally attracted a high proportion of young families. This trend is forecast to continue into the future.
- The number of people under 15 is forecast to increase by 1,959 people between 2006 and 2031 to represent approximately 20.4% of the local population
- The number of people aged over 65 years is expected to increase by 2934 residents between 2006 and 2031, and will represent approximately 16.7% of the local population.
- The 70-74 year old age group is expected to experience the most significant proportional increase, relative to its population size. By 2031 this age group is forecast to increase by 847 persons.
- 'Lone person' households are predicted to be the predominant household type in Traralgon in 2031, followed by 'couples without dependents' and 'couple families with dependents'.

- The population of the City of Latrobe is characterised by relatively high levels of socio-economic disadvantage.
- The most popular mode of transport to work in Traralgon is by private vehicle.

6.4 Existing Services & Facilities

Latrobe City Council currently has no proposals for expanded or new community services in Traralgon North. For this reason, defining the role of community infrastructure on the Subject Land is a complex undertaking, which involves considering its relationship to surrounding residential development, to the Traralgon Township and indeed Latrobe City.

The *Gippsland Regional Plan (2010)* identifies the Latrobe Valley, which is predominantly located within Latrobe City, as the provincial centre of Gippsland. Traralgon is one of the main towns within the Latrobe Valley alongside Morwell, Moe-Newborough and Churchill. As such, Traralgon should provide a broad range of health, education, community, recreation, retail and business activities servicing the resident population and their surrounding rural hinterlands.

This Preliminary Assessment has identified a range of community facilities and services which are likely to be required to respond to growth. There are some facilities which will be triggered in the longer term based on the projected development surrounding the subject site. Therefore a crucial issue for the Development Plan is to respond to is what facilities are to be provided on the subject land, which may service a wider population.

HEALTH

There are several significant regional health facilities located in Traralgon including the Latrobe Regional Hospital and Latrobe Community Health Service. The regional health services in Traralgon are located at the western gateway to the township, and are not easily accessed by residents in Traralgon North.

EDUCATION

The GippsTAFE Academy is a regional education facility, and there are several government and non-government schools and colleges, however all educational institutions and regional facilities are located outside of Traralgon North, either in the town centre or in the established residential areas to the south of Princes Highway. Monash University has a campus in Churchill, a town south of Traralgon.

Anecdotal evidence suggests that students in Traralgon North are reasonably dependent on private vehicle access to primary, secondary and tertiary education campuses given the distance and physical barriers to existing facilities.

Traralgon is expected to continue to attract a high proportion of young families. Providing a primary school in Traralgon North would have benefits of providing education locally, increase liveability and within a walkable catchment.

EARLY YEARS & CHILDREN

A preliminary audit indicates a broad range of early years facilities and services are provided in Traralgon, and are generally co-located with complementary uses and spaces (e.g. primary schools, recreation reserves). However most services are located within central Traralgon or to the south of Princes Highway.

The following observations are made with regard to social and community infrastructure provision near the Subject Land:

- A small neighbourhood centre is located to the south of the development site on Park Lane and includes:
 - Goodstart Early Learning Traralgon North (private facility)
 - Park Lane Preschool
 - The centre has a vacant former Maternal Child Health Service.

- Goodstart Early Learning Traralgon is located further south on the corner of Park Lane and Conway Court, Traralgon.

Council's Family Services Department advises that all services in Traralgon are operating at capacity. Latrobe City Council currently has no plans to develop further early child facilities in Traralgon North or generally within in Traralgon.

The two private Goodstart child care facilities in Traralgon North offer kindergarten, long day care, and before and after school care places. Both have places available in all age groups. Management has indicated that the availability of places is a year to year prospect.

There are no Primary, Secondary or Tertiary education facilities in Traralgon North.

AGED SERVICES

A preliminary audit of aged services community infrastructure located in Traralgon has been undertaken.

In terms of services in Traralgon North, an Aged Care (Planned Activity Group) facility is located in Park Lane, in addition to Mayfair Gardens Retirement Village. A new retirement living development is proposed for the land south of the subject site on the opposite side of Marshalls Road.

In general, most aged care services and facilities are located within central Traralgon or to the south of Princes Highway, including hospitals and health services.

Council has no current plans to provide additional aged care facilities in the near future.

COMMUNITY CENTRE / RETAIL

There is no community centre/focus in Traralgon North. A 'Friendly Grocer' convenience shop is located on Park Lane, and larger format bulky goods retailing and fast food outlets are located along Princes Highway.

Given recent and proposed population growth, there is scope to strengthen Traralgon North's sense of identity and community. The main opportunity is

to provide a neighbourhood activity centre, preferably linked in to other community facilities, where residents can shop, meet and build community life within walking and cycling distance of their home.

6.5 Standards & Benchmarks

Table 1 provides an outline of some likely facility triggers and land requirements for a range of community facilities as used for growth area planning in Victoria.

Table 1: Level 1 Community Infrastructure Hub (up to 10,000 people)

Facility	Land Reqs	Population Trigger	Source
Government Primary School	4.5ha	1 per 3000 households, 1 per 9000 residents	DEECD
Catholic Primary School	TBC	1 per 6000 households, 1 per 18000 residents	ASR Report
Early Years Facility (Level 1) Long Day Child Care Centre (Level 1)	2,500m ²	1 per 3,000 households 1 per 9,000 residents	<i>Planning for Community Infrastructure in Growth Areas (2008)</i>
Neighbourhood House/ Community Centre	0.8 ha	1 per 6,667 households 1 per 20,000 residents	<i>Planning for Community Infrastructure in Growth Areas (2008)</i>
Early Years Facility Long Day Child Care Centre	2,500 sq m	1 per 3000 households, 1 per 9000 residents	ASR Report <i>Planning for Community Infrastructure in Growth Areas (2008)</i>

References: GAA Guidelines for Social Infrastructure Standards; Australian Social & Recreation (ASR) Research Pty Ltd. "Planning for Community Infrastructure in Growth Areas." Melbourne, 2008; Department of Education and Early Childhood Development (DEECD). *Catchment criteria for establishing new schools*. www.education.vic.gov.au, 2010

The Table 2 outlines the population scenario used for the purpose of extrapolating community infrastructure standards and benchmarks for Traralgon North.

Table 2: Population Assumption / Scenario

Assumption	Scenario
Dwellings per hectare (SPPF/LPPF requirement)	15
Land Area	118 hectares
Average Household Size (based on 2006 Australian Bureau of Statistics)	2.49 persons
Total No. of Households	1770 households
Total Population of Subject Land (approx)	4407 persons

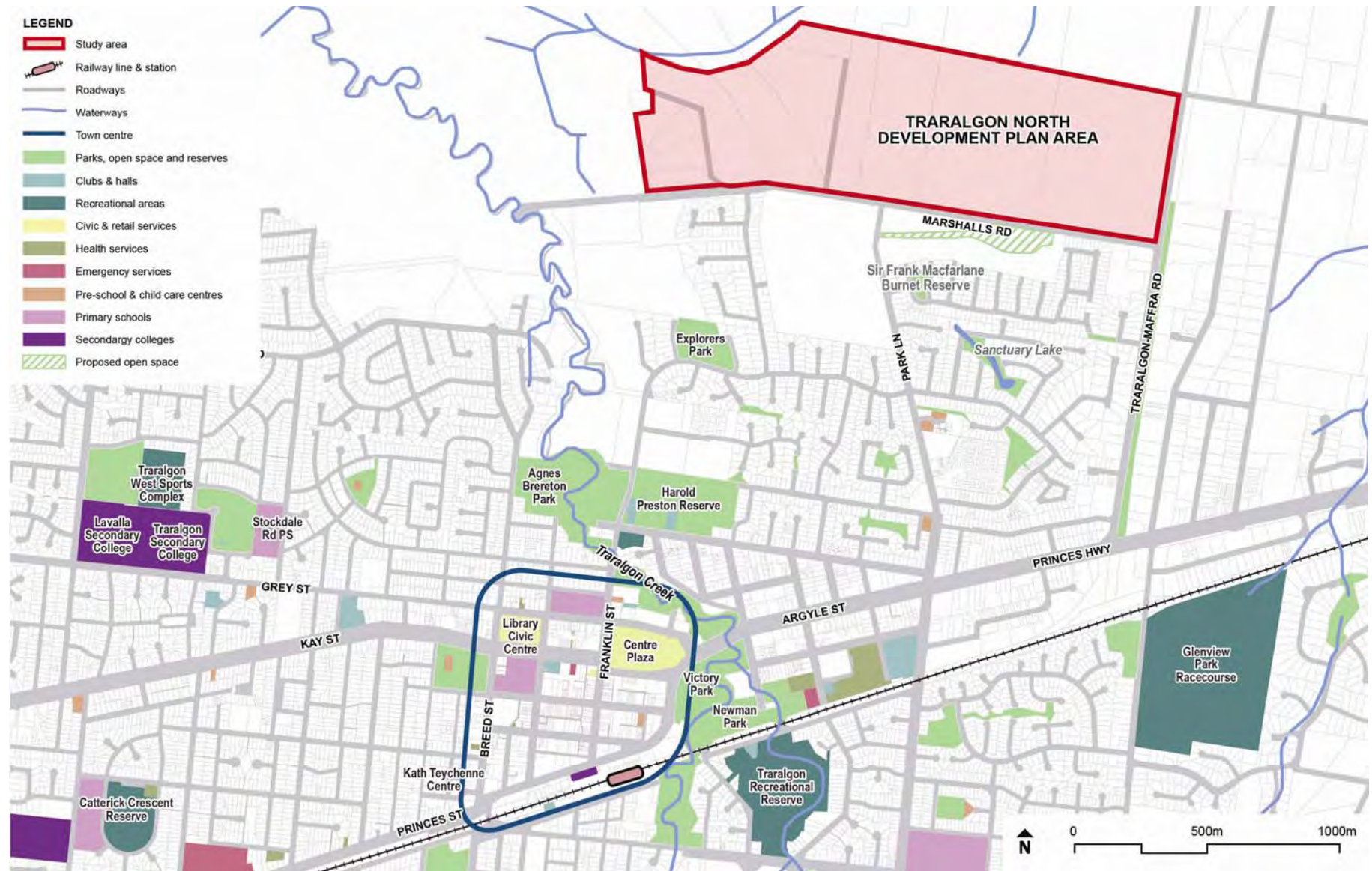
On its own, the Subject Land will not trigger any of the facilities listed in Table 3. However the subject land will build on an existing and established population within Traralgon North. It is likely under the all of Traralgon North population scenario, the following facilities may be triggered:

- Government Primary School
- Early Years Facility / Long Day Care
- Neighbourhood House / Community Centre

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Traralgon is identified as a key growth area within Latrobe City and the Gippsland region and is projected to continue growing.
- Existing community facilities and social services in proximity of the development site are limited, with the majority located to the west of the Latrobe River or south of Princes Highway.
- It is important that the Development Plan allows for the provision of physical and functional linkages between the development site and existing community infrastructure on Park Lane, and in central Traralgon.
- All current Council Early Child and Aged Care facilities and services are operating at capacity. As it stands, Latrobe City has no current plans to develop further early child facilities or aged care services in proximity to the site. Latrobe City would support provision of these services within the Development Plan.
- Private Early Child facilities in Traralgon North are not yet operating at capacity.
- The Growth Area Authority standard for provision of social infrastructure should be applied to determine infrastructure requirements. This should take into account the greater residential population of Traralgon North, including existing residential development to the south of the subject land.
- The Development Plan should also consider the *Global Age-friendly Cities: A Guideline* in application of standards for design and service provision for aged persons.
- The objectives and strategies of Clause 21.08 of the *Latrobe Planning Scheme* (Healthy by Design Guide) should underpin and be applied to design and layout of the Development Plan.

FIGURE 7: EXISTING COMMUNITY SERVICES & OPEN SPACE MAP



7 OPEN SPACE

Latrobe City Council currently owns and manages a diverse range of public parks and reserves in locations across the municipality. These include parks, gardens, playgrounds, walking tracks, rail trails and bike paths.

A well planned and connected network of open space contributes to the liveability of a municipality and provides the opportunity for passive recreation such as walking, jogging and cycling and is important for the promotion of healthy communities.

The role of this Development Plan is to ensure that open spaces are properly considered and able to meet the aspirations of a growing community, and link into the wider municipal Open Space strategy. To achieve the vision for a connected and inclusive built environment, it is important that the accessibility of community open space facilities is preserved and enhanced as the community grows.

A network of well designed open spaces add to the character and appeal of places, facilitating healthy lifestyles and social wellbeing. Open spaces also provide the vital green infrastructure that enables us to deal with floods or mitigate and adapt to climate change while providing wildlife habitats, sporting facilities and parks.

Latrobe City is an essential service provider to the local community. In situations where development of greenfield sites for new residential development is being planned, the development industry can also play a role in the funding of open space infrastructure. A key objective of the Development Plan is to identify these opportunities for developer contributions. Developers are currently required to contribute either 5% of development area or a cash contribution equal to 5% of the land value for the provision of public open space (POS). This contribution then becomes the responsibility of Council for the ongoing provision and maintenance of the public open space.

UPDATE OF PUBLIC OPEN SPACE STRATEGY 2007

Council is currently reviewing its 2007 *Open Space Strategy* so the strategic vision for the future planning and improvement of public open spaces across Latrobe City can be achieved. This includes in new residential growth areas.

The following adopted Latrobe City Council Plans are required to be reviewed as part of the Public Open Space Strategy Review:

- *Tennis Plan (2008)*
- *Soccer Plan (2008)*
- *Skate/BMX Plan (2009)*
- *The Public Toilet Plan (2010 – 2014)*
- *Playground Strategy (2006 – 2021)*
- *Latrobe City Bicycle Plan (2007- 2010)*

The outputs and recommendations of this Study, will inform the Open Space objectives for this Development Plan.

7.1 Open Space Objectives

The Development Objectives relevant to Open Space are:

- Establish a sense of place and community.
- Provide adequate opportunities for passive and active recreation.
- Create vegetated linear parks and trails.
- Use unencumbered land for active open space areas.
- Create clear links to other areas of open space within the catchment.

7.2 Open Space Supply

Existing community and open space facilities and services are shown in Figure 7. Existing active public open spaces and club facilities are generally located

to the north-west and south-east of the Traralgon Central Business District (CBD).

ACTIVE OPEN SPACE

Within Traralgon North are the following active open spaces:

- **Harold Preston Reserve** is a regional facility located approximately 3km south-east of the development site. This reserve comprises 5 soccer fields, a grass athletics track, clubrooms and various small buildings for storage, etc and an indoor table tennis facility. The *Traralgon Recreation Plan* notes that a number of facilities provided at this location are in poor condition.
- The **Traralgon Tennis Centre** is located opposite the Harold Preston Reserve, and supports 20 courts and a clubroom.
- The **Sir Frank MacFarlane Burnet Reserve** is located in Hammersmith Street, and was developed as part of 'The Strand' residential development (photo below). It includes a playground and BBQ facilities.



- A **Rail Trail Shared Pathway** is located on the opposite eastern side of Traralgon-Maffra Road. Latrobe City Council would support a link with the rail trail with central Traralgon.
- A second playground is being developed as part of a new parkland, also including wetlands and a shared pathway connection between Marshalls Road and Park Lane (within 'The Strand' site). The site is shown on Figure 8.

PASSIVE OPEN SPACE

Within Traralgon North there are limited local and passive open space areas in proximity of the study area. Linear reserves have been developed along encumbered land in new residential development south of the site. These spaces, particularly in The Strand development, are not connected through to Marshalls Road and the Subject Land. However, a shared pathway connection is proposed between Park Lane and Marshalls Road, and a bike trail along Marshalls Road.

Small pocket parks are scattered across Traralgon North.

POLICY DIRECTIONS

Traralgon Outdoor Recreational Plan (2006) identifies the following participation trends and public open space requirements in Traralgon:

- Participation in netball, hockey and little athletics is stable.
- Football and cricket are very popular.
- Demand for touch football and soccer is growing.
- Traralgon Baseball Club has the highest membership numbers of any baseball club in Latrobe City. A regional facility for the municipality is needed.

The Latrobe City, as part of its *Playground Strategy (2006 to 2012)* provides three categories of playgrounds:

- **Local Playgrounds:** located close to residential areas to provide basic play opportunities for the surrounding neighbourhood.

- **District Playgrounds:** provide a wider variety of play experiences for a broader range of ages and are located to service a number of neighbourhood areas.
- **Regional Playgrounds:** provide a variety of play experiences for a number of age and ability levels. Regional playgrounds are supported by a number of associated facilities that allow for multiple hours visits and are well located to service a number of districts. Regional Playgrounds to also function as a district facility for the surrounding 2km catchment zone.

The *Playground Strategy* provides the following requirements for each level of playground type and is used to determine if a playground is required in a new residential development.

- **Regional Facility:**
 - Major playground sites located in towns with a population of over 10,000.
 - Variety of play equipment for all ages and abilities.
 - Located in close proximity to large open space areas.
 - Provides greater play opportunities intended for multiple hour visits.
 - Associated facilities including toilets, paths, BBQs and shade structures.
 - Total replacement cost of these playgrounds estimated \$100,000+ (2006).
 - The CPTED (Crime Prevention through Environmental Design) principles will be considered in the design of regional playground sites.
 - Highly accessible sites.
 - Catchment area of entire town and surrounding smaller townships

- **District Facility:**
 - Large playground sites.
 - Variety of play equipment suitable for a number of age and ability levels.
 - Where possible located in close proximity to large open space areas.
 - Located to provide for a number of local neighbourhood areas.
 - Replacement cost is estimated at \$25,000 (2006).
 - Catchment area of 2km radius. The Playground & Recreation Association of Victoria (PRAV) in the document “Play Area Development Policy for Local Government in Victoria July 2004” outlines people will travel further to use district parks than for local parks.
 - District playgrounds to also function as a local facility for the surrounding 500 metre catchment zone.
 - The CPTED (Crime Prevention through Environmental Design) principles will be considered in the selection and design of district playground sites.
- **Local Facility:**
 - Small playground sites
 - Basic provision of equipment
 - Replacement cost estimated at \$10,000 (2006)
 - Catchment area of 500 metre radius giving consideration to major barriers such as freeways and train lines.
 - The CPTED (Crime Prevention through Environmental Design) principles will be considered in the selection and design of local playground sites.

HEALTHY BY DESIGN

Clause 21.08-3, Healthy Urban Design Overview – of the *Latrobe Planning Scheme*, implements the *Healthy Urban Design Good Practice Guideline – Meeting Healthy by Design Objectives*. The Design Guideline aims to design and develop healthy lifestyles for the community through accommodating community, pedestrians and cyclists as a first priority in open space design.

The Design Guidelines provide a valuable set of objectives and strategies for creating liveable and healthy open space areas. In particular walking and cycling paths, and linkages within a development and from the development to open spaces are fundamental.

ISSUES, OPPORTUNITIES & CONSTRAINTS

General principles for open space and path networks:

- A well designed open space and path network needs to include regular intervals of well arranged seating that promotes opportunities for social interaction, provides public amenities and shelter.
- All users of a path or park should be able to see and be seen in their surroundings at all times.
- Shade is an important aspect for paths and parks, however it should not obstruct maintaining clear sightlines.
- Existing linear open spaces and public parks can be improved by applying *Healthy by Design*® principles through minor adjustments including planting new shade trees, maintaining clear sightlines and bridging missing linkages to create a network of well-lit, walking and bicycle paths.
- The use of lighting has the potential to encourage or discourage use and therefore should be carefully designed in all parks and linear open spaces, especially along walking and cycling paths.
- There are linear open space opportunities associated with the Latrobe River to the north of the site.
- Physical and functional open space linkages should be provided between the development site and existing reserves and facilities on Franklin Street.

7.3 Public Open Space Standards

The current *Latrobe City Public Open Space Strategy (2007)* specifies the following hierarchy and requirements for open space provision in residential areas throughout the municipality:

- **Local:** The majority of houses in residential areas should have access to a minimum of 0.5 hectares of public open space within a 500 metre radius.
- **District:** The majority of houses in residential areas should have access to district level public open space within a 3 km radius.
- **Regional:** Each town with a population of over 5,000 should have regional level public open space within the township boundaries.

The 2007 Strategy is currently being reviewed by Council.

The *Latrobe City Playground Strategy (2006 to 2021)* requires the following playground type in residential areas:

- **District Facility:**
 - Catchment area of 2km radius. The Playground & Recreation Association of Victoria (PRAV) in the document “Play Area Development Policy for Local Government in Victoria July 2004” outlines people will travel further to use district parks than for local parks.
 - District playgrounds to also function as a local facility for the surrounding 500 metre catchment zone.
- **Local Facility:**
 - Catchment area of 500 metre radius giving consideration to major barriers such as freeways and train lines.

In terms of population triggers and land requirements, Table 4 shows the *GAA Guidelines for Social Infrastructure Standards*:

Table 4: GAA Guidelines for Social Infrastructure Standards

FACILITY	LAND REQ	POPULATION TRIGGER	SOURCE
Active Recreation Reserve (Level 1)	10 ha	1 per 3,000 households 1 per 9,000 residents	ASR Report <i>Planning for Community Infrastructure in Growth Areas (2008)</i>
Neighbourhood Park (Level 1- Passive Park)	1 ha	1 per 1,000 households 1 per 333 residents	<i>Planning for Community Infrastructure in Growth Areas (2008)</i>

As outlined in Table 2 of this report, the population assumption / scenario for Traralgon North if 1770 households and 4407 persons.

On its own, the population scenario for the Subject Land for public open space standards would trigger a Neighbourhood Park. It would also require provision of a Local Playground Facility.

However the subject land will build on an existing and established population within Traralgon North. It is likely under the all of Traralgon North population scenario, the following additional facilities may be triggered:

- Active Recreation Reserve
- District Playground Facility

ISSUES, OPPORTUNITIES & CONSTRAINTS

- Provision of open space should be provided in accordance with Clause 56 of the *Latrobe Planning Scheme*.
- The location of future open space should be provided in accordance with GAA standards until the time the Latrobe City Council Open Space Strategy 2007 Review is complete:
 - Provide local parks (1 hectare) within 400m safe walking distance of at least 95% of all dwellings (Clause 56, GAA Guidelines).
 - Provide active open space (8 hectares) within 1km of at least 95% of all dwellings (Clause 56, GAA Guidelines).
 - Provide linear parks and trails within 1km of at least 95% of all dwellings (Clause 56, GAA Guidelines).
 - Provide playgrounds in accordance with the *Latrobe City Playground Strategy (2006 to 2012)*.
- Provide approximately 10% of the net developable area as total public open space, of which 6% is active open space (Clause 56, GAA Guidelines).

APPENDICES

Appendix 1:

Traralgon North DP & DCP Community & Stakeholder Engagement Strategy (Planisphere, Dec 2011)

Appendix 2:

Traralgon North DP & DCP Flora and Fauna Assessment and Net Gain Analysis (Ecology & Heritage Partners, Feb 2012)

Appendix 3:

Traralgon North DP & DCP Desktop Aboriginal and Historical Heritage Assessment (Ecology & Heritage Partners, Feb 2012)

Appendix 4:

Traralgon North DP & DCP Preliminary Servicing Report (TGM Group Pty Ltd, Feb 2012)

Appendix 5:

Traralgon North DP & DCP Transport Issues, Opportunities & Constraints Report (GTA Consultants, Feb 2012)

