

Franklin Place Development Plan



Lot 1 TP552002 Park Lane, Traralgon 3844

Applicant: 6 Star Developments Pty Ltd March 2019



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1 Introduction

The Franklin Place Development Plan (FPDP) comprises this document and the accompanying plans. It has been prepared for land at Park Lane, Traralgon and sets out the form and conditions for future urban use and development.

The Development Plan has been prepared in accordance with the requirements of the <u>Development Plan Overlay (DPO)</u> provisions at <u>Clause 43.04</u> of the Latrobe Planning Scheme and more particularly <u>Schedule 5</u> of the <u>Development Plan Overlay – Residential Growth</u> <u>Areas</u>.

A planning permit for the subdivision, use and development of land must be generally in accordance with the Development Plan. It is noted that detailed plans (in particular the Master Plan and plans that follow from this) have been prepared in order to guide the preparation of accompanying background reports, authority consultation and ultimately the Development Plan itself, these plans should be read as being indicative only.

1.1 Supporting Documentation

Accompanying this submission is the following supporting documentation:

Appendix 1	Certificate of Title Volume 9352 Folio 257
Appendix 2	Development Plan NBA Group in consultation with Millar Merrigan Reference: 16547 DP1 Version 7
Appendix 3	Master Plan NBA Group in consultation with Millar Merrigan Reference: 16547 MP1 Version 6
Appendix 4	Staging Plan NBA Group in consultation with Millar Merrigan Reference: 16547 P3 Version 3
Appendix 5	Landscape Concept Plan NBA Group in consultation with Millar Merrigan Reference: 16547 L01 Version 3 – 2 sheets
Appendix 6	Infrastructure Services Report As prepared by Millar Merrigan March 2013
Appendix 7	Flora & Fauna Assessment As prepared by Biosis Pty Ltd 21 November 2012



Appendix 8	Transport Impact Assessment As prepared by GTA Consultants Pty Ltd Issue 1 20 November 2012 & Addendum letter 15 March 2013
Appendix 9	Aboriginal Heritage Due Diligence Study As prepared by Andrew Long and Associates Pty Ltd 28 September 2012
Appendix 10	Preliminary Surface Water Management Report As prepared by Water Technology March 2013
Appendix 11	Context Plan NBA Group in consultation with Millar Merrigan Reference: 16547 DP2 Version 1
Appendix 12	Mobility Plan NBA Group in consultation with Millar Merrigan Reference: 16547 DP3 Version 2
Appendix 13	Cross Section NBA Group in consultation with Millar Merrigan Reference: 16547 MP4 Version 2



2 Development Plan Area

The Franklin Place Development Plan (FPDP) applies to Lot 1 TP552002D which comprises a total area of 24.25 hectares.

This section of the report provides a description of the site's surrounding context and physical features.

2.1 Site Context

The subject area is located on the northern periphery of the Traralgon Township some 160km south-east of Melbourne.

The land is a greenfield site bound by Marshalls Road to the north, Park Lane to the east and existing residential development to the south and west. Refer to Figure 1 – Regional Context Plan, Figure 2 – Local Context Plan and Figure 3 – Aerial Photograph. A Context Plan has also been prepared to demonstrate the relationship between the site and the draft Traralgon North Development Plan, see Appendix 11.

Land on the northern side of Marshalls Road is residential, however is yet to be developed. The Traralgon North Development Plan (TNDP) is currently on exhibition and the features offered in this layout have been considered in the design of the FPDP where appropriate.



Figure 1: Regional Context Plan



2.2 Site Analysis

The subject land is irregular in shape and is contained within a single land holding of 24.25ha. The site comprises of cleared farming land, with no buildings or improvements present. A copy of the relevant Certificate of Title is available at Appendix 1.

Substantial road frontages are available to Park Lane to the east (approximately 530m) and Marshalls Road to the north (approximately 400m). A link is also available to the site from Mitchell Drive to the south and Cambridge Way to the west. GTA Traffic Consultants have prepared a Transport Impact Assessment for the proposed Development Plan (Appendix 2) and provide the following commentary on the existing road network (see Appendix 8 for Transport Report):

Marshalls Road

Marshalls Road functions as an access street. It is a two way road aligned in an east-west direction and configured with a two lane, 6.2 metre wide carriageway set within a 20 metre wide road reserve (approximately) Marshalls Road carries approximately 900 vehicles per day near Traralgon Maffra Road.

Park Lane

Park Lane functions as a collector street. It is a two way road aligned in a north-south direction and generally configured with a two lane, 12.0 metre wide carriageway set within a 25 metre wide road reserve (approximately) south of Hammersmith Circuit and a 20 metre wide road reserve (approximately) north of Hammersmith Circuit. Park Lane carries approximately 2,500 vehicles per day north of Franklin Street.

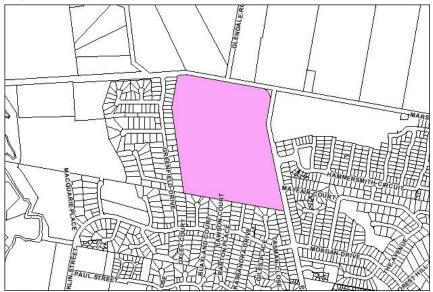


Figure 2: Local Context Plan



Topographically speaking the land is generally flat, falling slightly to the north towards Marshalls Road. There are two small dams within the site, one situated just north of the middle of the site, and the other adjacent to Marshalls Road.

The land comprises of pasture grass with no canopy trees present. The vegetation on site has been highly modified by past land practices and is of low ecological value. A Flora & Fauna Assessment has been prepared for the proposed development by Biosis Research (Appendix 7) and notes the following:

<u>Flora</u>

The study area is dominated by introduced grass species including Yorkshire Fog Holcus lanatus, Sweet Vernal-grass Anthoxanthum odoratum, Prairie Grass Bromus catharticus and Marsh Fox-tail Alopecurus geniculatus with introduced forbs throughout the area including Onion Grass Romulea rosea, Capeweed Arctotheca calendula and Ribwort Plantago lanceolata. Few native species are present scattered throughout the area such as Yellow Wood-sorrel Oxalis corniculata, Common Spike-sedge Eleocharis acuta and Small Loosestrife Lythrum hyssopifolia (Appendix 1).

Two artificial wetlands (farm dams) are present within the study area (Figure 2) however these waterbodies support little to no vegetation.

Two isolated trees Blackwood Acacia melanoxylon and Black Wattle Acacia mearnsii are present within the Marshalls Road road reserve (Figure 2); however, following review of the preliminary development plan (NBA Group & Millar Merrigan) it appears they will not be impacted by the proposed development.

The study area does not support the presence of any patches of native vegetation (Ecological Vegetation Class).

No flora species of national or state significance were recorded during the site inspection and none are likely to occur due to a lack of suitable habitat.

<u>Fauna</u>

Fauna habitats identified within the study area include exotic pasture, artificial wetlands and two isolated trees within the roadside reserve of Marshalls Road. Fauna habitats within the study area are highly modified and therefore provide limited resources for terrestrial threatened fauna species that have been previously recorded within the surrounding area (Biosis Research 2011).

The majority of the study area supports exotic pasture habitat. These areas are dominated by introduced grasses and are of little value for most native fauna species. Common species adapted to pastoral landscapes are likely to occur within this habitat, including Australian Magpie Gymnorhina tibicen, Willie Wagtail Rhipidura leucophrys and Little Raven Corvus mellori. Raptor species such as Nankeen Kestrel Falco cenchroides and Brown Falcon Falco berigora will also forage over these areas.



The artificial wetlands within the study area consist of two farm dams and several small ephemeral wet depressions. These areas are degraded by stock and lack deep pools, native aquatic vegetation and surface rock. The low quality reduces their suitability as habitat for many species. Common frog species such as Common Froglet Crinia signifera are likely to inhabit these areas and were recorded during the current assessment. These dams and depressions also provide habitat for common waterfowl such as Pacific Black Duck Anas superciliosa and Chestnut Teal Anas castanea but do not support critical habitat for threatened terrestrial species.

The two wattles present within the Marshalls Road roadside reserve may be utilised by highly mobile fauna. When in flower, these trees provide foraging resources for honeyeaters including Red Wattlebird Anthochaera carunculata. Species such as Eastern Rosella Platycercus eximius will also forage and roost within these trees.

No terrestrial fauna species of national or state significance were recorded during the site inspection and none are likely to occur due to a lack of suitable habitat.

The land is traversed by a 20m wide easement which travels in an east-west direction. As discussed in the Infrastructure Services Report (Appendix 6) the easement contains the Regional Outfall Sewer Main (ROS), which has been a significant consideration in the preparation of the FPDP. The location of the ROS has been determined by survey and has informed the design.



Figure 3: Aerial Photograph



2.3 Site Photographs

Photograph 1 – Looking north-west towards the site from Park Lane



Photograph 2 – Looking south-west towards the site from Marshalls Road



Photograph 3 – Looking north across the site from Mitchell Drive



Photograph 4 & 5 – Links from the southern end of the site to Flinders Place & Lawson Court







Photograph 6 – Looking north-west from the site to Cambridge Way



Photograph 7 – Looking west from the site up the ROS easement



Photograph 8 – Looking south down Mitchell Drive





3 Development Plan Overlay Requirements

Schedule 5 of the Development Plan Overlay requires the following:

A development plan must be prepared to the satisfaction of the Responsible Authority.

The plan must show the following:

3.1 Land Use and Subdivision

• The proposed boundaries of the development area, and provide the strategic justification for those boundaries.

The Development Plan (see Appendix 2) identifies the boundary of the proposed development area. The site of the proposed FPDP is the only land holding on the southern side of Marshalls Road in the area that is affected by the DPO. It is a single land holding and was excluded from the area covered by the Traralgon North Development Plan (TNDP), which is currently on exhibition.

It is noted that a parcel to the north east of the site is not included within the DP area. This allotment (lot 1 on LP74280) is in the ownership of Council and we understand that it is required for the upgrade of the intersection at Marshalls Road and Park Lane.

• The overall subdivision of the area, including where possible, the proposed size and density of allotments which provide opportunities for a diverse range of housing types.

The Master Plan (see Appendix 3) indicates an indicative overall subdivision for the development area. A lengthy design process has been undertaken and has been informed by various background reports. The design has been split into two parts with residential subdivision north of the ROS easement and residential development to the south.

The residential development to the south can be described as a curvilinear layout that offers flowing circulation and excellent integration with the adjoining land uses and street network. The Master Plan provides for approximately 108 standard residential lots with an average size of 630m², 37 low density lots within an average of 1036m² and 3 medium density sites.

The residential development to the north can also be described as a curvilinear layout that offers excellent integration with Marshalls Road. It provides for approximately 73 standard residential lots with an average size of 655m².



The plan provides for an appropriate mix of allotments to cater for the diverse needs of the population. The lots provided may appeal to both the aging population, and growing families, with low maintenance and lifestyle opportunities available.

The medium density lots have been strategically located adjacent to the ROS easement and proposed open space reserve to ensure that an active frontage to the open space area is achieved.

Prior to the issue of Statement of Compliance for Stage 1 of the subdivision, urban design guidelines must be prepared for any lots abutting a reserve and medium density sites to the satisfaction of the Responsible Authority. The urban design guidelines must address(but not limited to) the following matters:

- Active frontages to public open space
- Road cross sections
- Design and layout of the buildings and lots to ensure overshadowing, overlooking and amenity are appropriately addressed.

The low density allotments would be suitable for re-development in the future, however a sunset clause is proposed prohibiting development of these lots for a period of 20 years. Such a clause could be included as a covenant on title, details of which would be determined at the subdivision stage.

The FPDP graphically identifies the varying intended land uses as discussed above. It clearly provides scope for a diverse range of housing types, suited to the needs of the changing population. Percentages of the development area are as follows:

Standard lots (average 630sqm)	11.01ha	47.25%
Low density lots (average 1036qm)	3.85ha	16.52%
Medium Density Housing Sites (average 2333sqm)	0.70ha	3 %
Roads	3.96ha	23.78%
NET DEVELOPABLE AREA	21.10ha	
Reserves	1.32ha	5.7%
Encumbered land (ROS)	0.88ha	
TOTAL SITE AREA	23.3ha	

While the Latrobe Planning Scheme aims to achieve an average density of at least 15 dwellings per hectare (net developable area), Latrobe City Council have adopted a desired density of 11 dwellings per hectare. The *GAA Precinct Structure Planning Guidelines* define 'net housing density' as:

The number of houses divided by the net developable area.

The net developable area is defined as:

Land within the precinct available for development. This excludes encumbered land, arterial roads, railway corridor, government schools and community facilities and public open space. It includes lots, local roads and connector streets.



Whilst a small percentage of the proposed land use is allocated to lower density development, this is offset by a large number of standard residential lots as well as development occurring at the medium density areas.

The below table indicates the following approximate number of lots/dwellings:

Lot type	Amount
Standard lots (average 630sqm)	181
Low density lots (average 1036sqm)	37
Medium density (average at 2333sqm)	23 (based on 300sqm)
Total	241

The net developable land area is 21.10 hectares and as such the overall number of dwellings per hectare based on the above assumptions is 11. The figures have assumed densities for the medium density lots however it is possible that a higher density on these sites may be achieved. It must be noted that the TNDP offers an overall density of approximately 11 dwellings per hectare (net developable area) which is appropriate and in line with Council's adopted desired density.

The low density lots provide for diversity and will be targeted at the premium end of the market. The FPDP offers balance between preferred land development densities and market demand.

• The overall pattern of development of the area, including any proposed re-zoning of land and proposed land uses.

The FPDP responds to the overall development pattern of the area, including the layout indicated within the TNDP. The indicated land uses are consistent with and will not conflict with adjacent land uses.

The entire land is zoned <u>*Residential*</u> and as such there are no rezoning's required. The land is to be developed for residential purposes.

The TNDP proposes a town centre on the north side of Marshalls Road opposite the subject site. It is not considered necessary to provide any additional commercial uses on the site.

Street networks that support building frontages with two way surveillance.

The Development Plan (see Appendix 2) offers a street network that encourages future buildings to overlook public spaces. Roads are proposed along public open spaces, including the ROS easement, to enable high levels of surveillance whilst creating an attractive outlook.



The indicative lot layout has been designed to support high levels of surveillance with each lot fronting an existing or proposed road. Lots backing onto roads and public spaces have been avoided to ensure positive design outcomes.

The proposed residential development has been designed to integrate well with the ROS easement. Roads are proposed along either side of the easement and dwellings/lots front the roads where they will overlook the easement. This was considered appropriate by Gippsland Water. Medium density sites are strategically located adjacent to the ROS easement and open space reserve whereby future development can be site specifically designed to ensure active frontages.

Roads are proposed along each side of the proposed public park, with the lifestyle lots designed to overlook the open space area.

Prior to the issue of Statement of Compliance for Stage 1 of the subdivision, urban design guidelines must be prepared for site abutting reserves and medium density sites to the satisfaction of the Responsible Authority. The urban design guidelines must address(but not limited to) the following matters:

- Active frontages to public open space
- Road cross sections
- Design and layout of the buildings and lots to ensure overshadowing, overlooking and amenity are appropriately addressed.
- An accessible and integrated network of walking and cycling routes for safe and convenient travel to adjoining communities (including existing and future areas included in the DPO), local destinations or points of local interest, activity centres, community hubs, open spaces and public transport.

The layout caters for an integrated pedestrian and cyclist network that offers external connections where considered appropriate as shown on the Mobility Plan at Appendix 12.

The internal street network offers a mix of road hierarchies, which are intended to cater for pedestrians and vehicles. Road reserves are narrowed adjacent to open spaces where the intention is that the path network be contained within the reserve, creating a pleasant and safe environment for users.

The path network offers pedestrian links to Flinders Place, Lawson Court and Mitchell Drive to the south, and Cambridge Way and Park Lane to the east and west.

The path network also provides a linear path to the ROS easement and a link between the north and south residential developments which connects to the Strand, TNDP and the Traralgon-Maffra Rail Trail.

• The provision of any commercial facilities and the extent to which these can be collocated with community and public transport facilities to provide centres with a mix



of land uses and develop vibrant, active, clustered and more walkable neighbourhood destinations.

No major commercial facilities are proposed as part of the FPDP as these are to be located to the north within the land covered by the TNDP. The shared pedestrian/cycling path network will ensure convenient access to these facilities.

A new bus route (#45) runs along Marshalls Road and the TNDP proposes an extended route with bus stop just north of the Marshalls Road/Park Lane intersection. This is located adjacent to the ROS easement where it links to pedestrian/bicycle networks to aid in the creation of walkable neighbourhoods. See the Mobility Plan at Appendix 12.

3.2 Waterways

A buffer zone of 30 metres each side of waterways designated under the Water Act 1989 or a buffer based on a flood study which identifies the 100 year flood extent must be set aside for ecological purposes.

A Preliminary Surface Water Management Report has been prepared for the site by Water Technology (Appendix 10) and confirms there are no declared waterways traversing or in close proximity to the site, as such no buffers are required.

3.3 Infrastructure Services

An integrated stormwater management plan that incorporates water sensitive urban design techniques which provides for the protection of natural systems, integration of stormwater treatment into the landscape, improved water quality, and reduction and mitigation of run-off and peak flows, including consideration of downstream impacts.

Water Technology has been engaged by the NBA Group to provide a preliminary Surface Water Management Report (SWMR) (Appendix 10).

The site drains from south to north under existing conditions and flow from the proposed development will pass through the future residential land to the north of Marshalls Road and into the Latrobe River (see Figure 4).

In relation to site storage, the SWMR notes the following:

Analysis of existing and developed flows for the proposed development show that site flows increase by approximately 150% under developed conditions. This result is consistent with Water Technology's experience with developments of this nature. It also found that approximately 300m3 – 500m3 of storage per developed hectare was required to attenuate developed flows back to existing conditions. It should be noted that this calculation does not take into account the existing flows from upstream catchments that may be directed towards the site. If these flows are directed into the storages then the size of the storages may



increase. Alternatively these flows may be directed around the storages, or given consideration of catchment timing may not influence the total volume. To accurately determine this affect a catchment level hydrological model (such as RORB) should be built at the subdivisional stage.

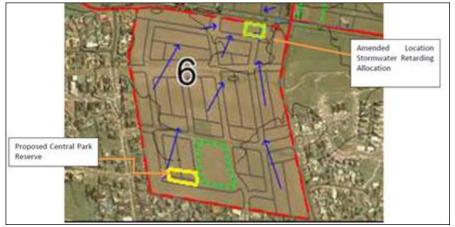


Figure 4: Existing undeveloped drainage conditions

The SWMR comments on the retardation requirements as follows:

Note the location of the basins has been revised from the previous greater area study. The total area available for retention is about 6.6 ha, which can be considered adequate in the preliminary assessment stage.

The SWMR comments on overland flows as follows:

A detailed assessment of the flow paths will be required at the subdivisional stage, however for the purposes of this review and based on a preliminary look at contours in the area, it is assumed that flow paths 1 and 2 are under $1m^3/s$. For flows of this size the road reserves as depicted above are more than adequate to provide overland flow in a safe manner. Given the catchment upstream of flow path 3 it is possible that this flow is greater than $1m^3/s$ and as such a detailed assessment of the flow and possible hazards associated with this flow should be undertaken.





Figure 5: Overland Flow Paths

The SWMR comments on water quality as follows:

... Latrobe River and Traralgon Creek are the respective receiving water bodies for all sub catchments within the development. Both waterways are considered to have high environmental, amenity, cultural, stormwater and economic values to the local community. Data available for the respective waterways indicates nutrients and sediments are current water quality issues.

The Franklin Place development will need to be designed to protect the values of waterways it discharges into. The achievement of Best Practice Stormwater management will enable the development to achieve these objectives.

The SWMR suggests 3 treatment options, and the proposed Master Plan has been designed to enable implementation of Option 2, which is as follows:

A less land hungry option is to implement a distributed system within the greater development. This would involve selection of bioretention systems, or raingardens, within key locations around the site. If raingardens are selected in appropriate areas the land take on this option would be up to half that of the wetland option. It is suggested however for practical and reduced maintenance requirements that



raingarden locations consider the impacts of sediment loads on the long term viability and maintenance requirements of the system. This option would require detailed discussions with Council.

The SWMR has reviewed the implication of the proposed Master Plan and states that: Importantly the review has not found that any significant restriction to the development of the Franklin Place site with respect to surface water management. A number of points of investigation, and a full SWMS should be undertaken at the subdivisional stage.

The report offers the following conclusions and recommendations:

- The stormwater management plan for the approved overall development plan in accordance with 56.07-4 of the Latrobe City town planning scheme will be required at the subdivisional stage. As noted in the preliminary Council comments, this SWMS will need to take into account flow discharges from the site for the 1% ARI event and its impact upon the larger Traralgon North Development Plan.
- Appropriate water quantity storages in the order of 6000-7000 m³ will be required for the development to meet development guidelines within the site. Significant area has been reserved for the purpose.
- A detailed study of upstream flows entering the site to ensure appropriate overland flow paths are accounted for. The development plan as it stands seems to allow adequate area for this, but the actual flows should be quantified
- Opportunities for integrated water management should be investigated

In summary this review has found that appropriate provision for surface water management is provided for in the Development Plan. As such this plan should proceed to subdivisional stage and commission the appropriate detailed investigations at this point.

A meeting was held with Gippsland Water on 20 November 2012, where the potential of the ROS easement was discussed as well as crossing the easement for services, in particular drainage. Gippsland water advised that permanent structures such as rain gardens etc would not be permissible within the easement. It was noted that drainage will need to cross the easement to provide outfall to the north and a number of options for doing this were discussed at the meeting.

Following survey of the ROS and parallel rising mains crossing the site it was possible to determine how the drainage outfall could cross the easement. Gippsland Water commented that:

- 1. The ROS easement will converted to reserve as part of the subdivision process.
- 2. The sheet flow of 1 in 100 year storm across the ROS reserve seems to be practical. This is no different to the current situation, if it is at predeveloped levels.



The minor rainfall events (1 in 5 year storm) still need to cross the easement under the ROS and rising mains and will be subject to detailed design at the subdivision stage.

Existing dams on site have been incorporated into the drainage strategy where possible to reduce earthworks requirements. Both dams are intended to be co-located with proposed retarding basins and water treatment areas and are intended to be augmented in line with detailed design.

- The pattern and location of the major arterial road network of the area including the location and details of any required:
 - road widening
 - intersections
 - access points
 - pedestrian crossings or safe refuges
 - cycle lanes
 - bus lanes and stops

The Development Plan (Appendix 2) indicates a proposed road network for the subject land. It offers a logical and safe circulation network for both vehicles and pedestrians/cyclists. The primary access point for the subdivision area is proposed as a boulevard with central median. The road, verge and median widths together with how it connects with the roundabout will be detailed at subdivision stage and designed to meet the requirements of the Responsible Authority.

GTA Consultants have prepared a Transport Impact Assessment which provides a detailed traffic engineering assessment of the proposed layout, including the internal access arrangements as well as the likely impacts on the surrounding road network of the proposed development. Cross Sections for proposed road types have been prepared and are attached at Appendix 13.

The traffic assessment concluded in part that:

- The development of the site in accordance with the proposed Development Plan could generate up to 1,900 vehicles movements per day and 190 vehicle movements per hour in the peak periods.
- There is sufficient capacity within the existing road network to accommodate the additional traffic movements.
- The indicative street network has been designed in accordance with Clause 56 of the Latrobe Planning Scheme.

The connections from the residential development are to the north, east, west and south, and include:

- Access points to the north onto Marshalls Road.
- Access point to the east which forms the western approach to the existing roundabout on Park Lane.



- Access point to the east to Park Lane, south of Mayfair Court
- Continuation of existing Cambridge Way to the west.
- Continuation of existing Mitchell Drive to the south.

These require no significant infrastructure upgrades and the existing designs are considered to have sufficient capacity to cater for the proposed development.

A draft development plan (TNDP) has been prepared for the area of land immediately to the north of Marshalls Road covered by the DPO5. GTA Consultants have provided advice to Council in the form of a transport report which included flagging the need for Marshalls Road to be upgraded to a connector street in accordance with future traffic volumes.

Marshalls Road will need to be re-constructed in accordance with the requirements of a 'Connector Street – Level 2' in Clause 56.06-8 of the Latrobe Planning Scheme to accommodate the expected future traffic volumes.

It is however noted that the northern side of Marshalls Road will accommodate the road widening, and the road upgrade will have no detrimental impact on the layout for the FPDP.

The preliminary analysis of the area north of Marshalls Road indicated that the road network could support the future traffic volumes subject to the upgrading of Marshalls Road as part of the development of this area.

Pedestrian/cyclist networks and public transport are discussed below and shown on the Mobility Plan at Appendix 12.

 The pattern and location of any internal road system based on a safe and practical hierarchy of roads including safe pedestrian and bicycle connections and crossing points in accordance with Latrobe City Bicycle Plan 2007-2010, (as amended).

The proposed road layout is indicated on the Development Plan (Appendix 2) and has been designed in a practical fashion to ensure traffic and pedestrian/cyclist safety. The road network in the residential area utilises a combination of Access Streets and Access Places as indicated in figure 6 and shown in the Cross Section at Appendix 13.

An Access Street is defined under Clause 56.06-8 as being 'a street providing local residential access where traffic is subservient, speed and volume are low and pedestrian and bicycle movements are facilitated'.

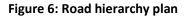
An Access Place is defined under Clause 56.06-8 as being 'a minor street providing local residential access with shared traffic, pedestrian and recreation use, but with pedestrian priority'.

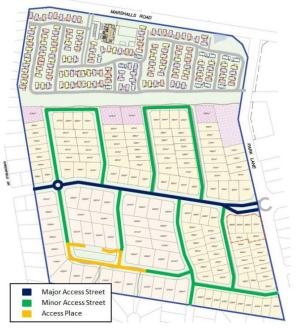
The transport assessment notes that:



The nominated road hierarchy, has been designed to be consistent with the road hierarchy outlined within the Planning Scheme.

Based on the hierarchy the proposed road network will be capable of accommodating the traffic volumes expected to be generated by the subject site.





The layout sees provision of widened road reserves (18m) in the lower density area to create more open streetscapes that will offer a unique parkland feel to this part of the development. Sections of narrowed pavement will also be utilised, particularly adjacent to the open space area whereby they will aid in creating the parkland feel and act as traffic calming devices.

Both street types utilised throughout the development facilitate shared pedestrian and bicycle movements and each will be designed in accordance with the applicable standards at subdivision stage. In addition, designated shared pathways are proposed to link the residential areas on site to surrounding developments.

The FPDP provides excellent shared pedestrian/bicycle links to the surrounding road and open space network. Links are proposed to Park Lane, Cambridge Way, Mitchell Drive, Lawson Court and Flinders Place to allow for connection to future on and off road bicycle routes planned under the Latrobe Bicycle Plan, see Figure 7 below. Furthermore a link is proposed along the ROS easement to aid in creation of a linear trail throughout the wider area.



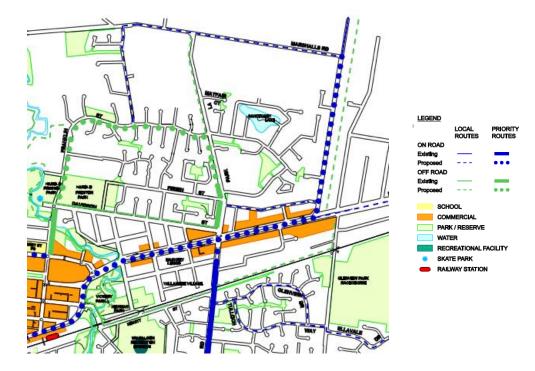


Figure 7: Latrobe Bicycle Plan – Traralgon Bicycle Network (plan cropped)

In consultation with relevant agencies and authorities, provision of public transport stops where appropriate within easy walking distance to residential dwellings and key destinations. Stops should also be located near active areas where possible.

Figure 8 indicates the current bus network, which runs at 60 minute intervals and offer access to major features such as Traralgon Plaza, education facilities and recreation facilities. The closest stop is on Greenfield Drive approximately 160m from the northwest corner of the subject land. The TNDP proposes an extended route through the development linking back to Traralgon Maffra Road, with a new bus stop just north of the Marshalls Road/Park Lane intersection. All lots within the subject development area are within suitable walking distance to an existing or proposed bus route as shown on the Mobility Plan at Appendix 12.

The GTA Report comments on public transport infrastructure:

Bus route 45 is currently the only public transport service which operates adjacent to the site. This service operates along Marshalls Road and Park Lane. No Bus services are proposed to operate within the internal road network and therefore streets within the site are not required to be designed to accommodate potential future bus services.





Figure 8: Existing public transport network

3.4 Open Space

The location and size of the proposed open spaces that cater for a range of user groups and provide a variety of functions that perform both an active and passive role for recreation, as appropriate.

The Development Plan (Appendix 2) shows the location and size of proposed open space areas. Five types of reserves are offered in response to site constraints and opportunities.

A reserve is located in the south-western corner within the lower density residential area to aid in creation of a parkland feel to this premium aspect of the development. The land is unencumbered with no constraints and can be developed with landscape features as required to meet the future open space needs of residents. This park will be treated in an appropriate landscape fashion to ensure it becomes a highly desired aspect of the premium residential area and makes a positive contribution to amenity levels.

Photograph 9: Example of a small park making a positive contribution to a residential area





Two reserves are proposed at the southern end of the development to allow pedestrian/cyclist links with Flinders Place and Lawson Court as space has been left to continue these connections and integrate the existing developed residential areas with the FPDP area.

A large central reserve of 1.11ha is located adjacent to the ROS to cater for both useable open space and stormwater retention/treatment. This area is capable of accommodating landscape features and canopy trees and provides an extension to the ROS easement. Medium density allotments are designed to overlook this reserve, which is central to the standard allotments throughout the overall development.

The ROS easement is also proposed as open space due to the constraints posed. Whilst generally considered as undevelopable, the FPDP is strongly lobbying for landscape works to be permitted in this area to create a pleasant outlook for residents and enable good pedestrian/bicycle networks. It is intended that the ROS easement be enhanced with low impact landscape features (as appropriate and to the satisfaction of Gippsland Water) to enhance the space and enable it to form a meaningful contribution to the open space areas. In a meeting of 20 November 2012 between Millar Merrigan and Gippsland Water (attended by Anthony Faltum, Paul Young, Lindsay Nation, Michael Johnston and Geoff Harris of GW) it was agreed that low impact landscaping works including ground covers and gravel paths may be permissible within the ROS easement, however no canopy trees or WSUD works are to be contained within the easement. Gippsland Water indicated that lots/dwellings overlooking the ROS as proposed in the Master Plan were appropriate, however crossings should be minimised. The Master Plan shows one pedestrian crossing that links the north and south residential areas, and this would be subject to detailed design and can be constructed to Gippsland Water's requirements. As discussed in the meeting the easement is to be created as a Gippsland Water Reserve with 24 hour access required, however an agreement can be put in place for Council to maintain the area, as is the case with neighbouring developments that abut the ROS easement.

In total the open space areas offer approximately 2.67 hectares or 11.01% of the total site area. It is noted that some areas of open space are encumbered through proposed stormwater treatment works, however these areas are subject to detailed engineering design. Open space can be provided as either land, a cash contribution, or a combination of both. The DP provides for 5.09% unencumbered open space.



- Public open spaces designed to provide:
 - Public spaces of a minimum of 0.5 hectares within a 500 metre walking distance of all residents in accordance with Latrobe City Public Open Space Plan 2007, (as amended).
 - The inclusion of pedestrian and cycle paths and play equipment, that encourage active recreational opportunities.

All lots within the FPDP are located within 500m of usable public open space. The main reserve is located centrally and is more than twice the required area of 0.5 hectares.

There are also major open space areas proposed as part of the abutting TNDP and there are many existing open space areas within close proximity that encourage a range of active recreational opportunities.

All lots are within walking distance to public open spaces and a shared path network will provide maximum levels of accessibility.

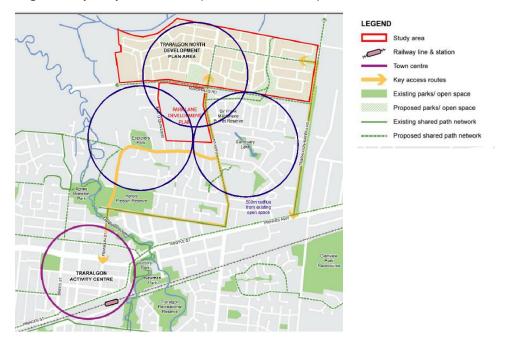


Figure 9: Open Space Network (sourced from TNDP)

 Opportunities for visual surveillance to promote safety of users, through encouraging active frontages, using buildings to frame public spaces and locating open spaces within or adjacent to activity centres where possible.



Good urban design principles have been employed to create a development with excellent levels of visual surveillance. As discussed above, the layout offers excellent reserve interface with roads provided along open space perimeters. It is intended that all future dwellings be orientated to overlook open spaces to maximise surveillance and create a sense of safety throughout the development.

A landscape concept plan for all open space areas, indicating the location of plantings, pathways, shade, shelter and seating at activity areas as well as at intervals along pathways.

The Landscape Concept Plan (Appendix 5) shows an indicative treatment and plant schedule for public open space areas. Pedestrian links, seating and shading features are indicated however landscape details will be developed at the subdivision stage.

Key features of the design intent include provision of large canopy trees along the main road to create a boulevard entrance and striking avenue. Varying other tree types are indicated throughout the development to reinforce street hierarchies and create differing feels between each of the residential densities.

The large central reserve offers ample space for recreation together with stormwater retardation/quality features. Large canopy trees will be clumped together to create a leafy and attractive park with seating spots and the potential for a gazebo/shade structure.

The park central to the lower density area will be a unique feature overlooked by adjacent dwellings. Open space will be maximised and pedestrian/bicycle movements prioritised through use of narrowed pavements to reduce traffic speed and create a spacious and high amenity like feel to this area of the development. There is also scope for seating a gazebo/shade structure in this reserve.

The shared path along the ROS easement is intended to meander amongst vegetation. As discussed with Gippsland Water, low impact landscaping could be incorporated into the ROS easement in accordance with their requirements. Such detail can be provided at the subdivision stage.

3.5 Community Hubs and Meeting Places

In consultation with relevant agencies and authorities, the provision of appropriate community facilities, including schools, pre-schools, maternal child health centres, senior citizen centres and general community centres within a walkable range of 400-800 metres across large subdivisions.

The subject Development Plan offers potential for approximately 168 residential lots as shown on the Master Plan which does not warrant provision of additional major education or community facilities given the location of the site on the edge of the



Traralgon township. In the local area there are a range of existing facilities including a number of primary schools, child care centres and a range of other community facilities.

A community hub is also proposed within the TNDP north of Marshalls Road. The TNDP notes that the future facilities and services to be provided at the community hub should be determined through a master planning process, and be based on an assessment of the demographic profile, population projections and supply, distribution and capacity of community infrastructure.

Based on existing facilities and those which can be accommodated within the TNDP there is no additional need to provide community facilities on the subject site.

- Provision for access and social interaction, particularly where this encourages physical activity. For example:
 - Consider the need for public amenities, including toilets and bicycle parking at key destinations in accordance with the Latrobe City Public Toilet Strategy 2006 (as amended) and Latrobe City Bicycle Plan 2007-2010 (as amended).
 - The pattern and location of pedestrian and bicycle paths should provide safe and practical access to and from community hubs and meeting places.
 - Spaces should be designed to accommodate community events and cultural programs including local arts activities and other festivals.

The proposed shared path network encourages social interaction and physical activity and is consistent with the Latrobe City Bicycle Plan. It offers links to the proposed open space facilities in the TNDP area to the north and to the existing open space areas to the north-east of the Traralgon Township.

As noted within Latrobe City Council's *Public Toilet Plan* 2010-2014, there would be no need to provide public toilets within the development site. The facilities proposed within the open space are not significant enough (by definition within the Plan) to require public toilets.

3.6 Flora and Fauna

In consultation with the Department of Sustainability and Environment, a flora and fauna survey, prepared by a suitably qualified expert, which includes but is not limited to species surveys for Growling Grass Frog (Litoria raniformis) and Dwarf Galaxias (Galaxiella pusilla), and measures required to protect the identified species.

Biosis Research have prepared a Flora and Fauna Assessment for the subject site. The assessment states:

- No terrestrial fauna species of national or state significance were recorded during the site inspection and none are likely to occur due to lack of suitable habitat.
- No flora species of national or state significance were recorded during the site inspection and none are likely occur due to lack of suitable habitat.



The recommendations of the report are:

This addendum report addresses the recommendations of the initial due diligence assessment (Biosis Research 2011) for the revised (reduced)study area only.

A planning permit is required to remove scattered native vegetation within the study area under Clause 52.17 of the Latrobe Planning Scheme. Overall, the revised study area is of low ecological value, surrounded by residential housing and agricultural land and <u>no further survey is recommended</u>.

 An assessment of any native vegetation to be removed having regard to Victoria's Native Vegetation Management: A Framework for Action, including how it is proposed to protect and manage any appropriate native vegetation.

No native vegetation is proposed to be removed to provide for the development of the land.

As discussed in the Flora & Fauna Assessment:

Two isolated trees, Blackwood Acacia melanoxylon and Black Wattle Acacia mearnsii are present within the Marshalls Road road reserve, however following review of the preliminary development plan, it appears they will not be impacted by the proposed development.

• Regard must be had to the West Gippsland Native Vegetation Plan 2003.

As discussed in the Flora and Fauna Assessment:

The proposed development does not entail the removal of patches of native vegetation as determined by the Framework and as such an assessment against Victoria's net Gain policy is not required and there are no additional permit requirements for the project under the relevant West Gippsland Native Vegetation Plan (2003).

 Any management plan should take into account that the Strzelecki Bioregion is one of Victoria's most fragmented Bioregions and address this as a consideration.

The <u>Development Plan Overlay – Schedule 5</u> covers a range of areas within the municipality of Latrobe City. It is noted that the subject land is not contained within the Strzelecki Bioregion, rather it is within the Gippsland Plain Bioregion.

3.7 Cultural Heritage

• A cultural heritage assessment including how cultural heritage values will be managed.



As outlined in the attached Aboriginal Heritage Due Dilligence Study (Appendix 9), the site is not in an area of cultural heritage sensitivity:

The activity area is not an area of cultural heritage sensitivity in accordance with either the Regulations or the AAV 1:100,000 Map - Areas of Cultural Heritage Sensitivity in Victoria 8221 – Traralgon.

The due diligence study confirms that Cultural Heritage Management Plan is not required for the subject site:

It is my expert opinion that a CHMP, as defined in the Aboriginal Heritage Act 2006, need not be lodged as part of an application for planning approval for the proposed residential development of the activity area. Furthermore, it is also my professional view the progress of such an application cannot be suspended in accordance with Section 52 of the Act.

This opinion is based on the understanding that the activity area is not an area of cultural heritage sensitivity.

3.8 Staging and Implementation

• The development plan should be prepared with an appropriate level of community participation as determined by the Responsible Authority.

There has been a substantial amount of consultation, particularly with Gippsland Water surrounding the ROS easement, and the final Development Plan (Appendix 2) has considered all aspects of applicable policy and responded to site conditions appropriately.

An implementation plan must be submitted as part of the development plan, indicating the proposed staging of the development.

An indicative staging plan has been prepared and is attached at Appendix 4. The first stage will see the land separated into two parcels to enable the north and the south residential subdivisions to proceed individually. The remaining stages relate to the residential subdivision and are arranged in a logical fashion, both in response to market demand and ease of infrastructure provision.

Proposed public open space areas are also included within the stages to enable their timely creation and development.

Staging has primarily been informed by the layout of required sewerage infrastructure to ensure that servicing can be undertaken viably. It also responds to existing surrounding road networks.



• The approved Development Plan may be amended to the satisfaction of the responsible authority

The proposed development plan provides an intended development layout whilst maintaining some flexibility to avoid the requirement for the Development Plan to be amended for minor variations.

NBA Group Pty Ltd