

THE HEIGHTS, South Dennington

DEVELOPMENT PLAN

Planning Report



WARRNAMBOOL
CITY COUNCIL

WARRNAMBOOL PLANNING SCHEME
Approved Development Plan
DP2022-0002
Russell Street
Date: 06.03.2023
Delegate: R. Wandell



MILWARD
Engineering Management



the heights
by Oakwood

Document Controls

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1.0	17 March 2022	Final report to be submitted for assessment and approval	Justin Hinch, Senior Project Manager Milward Engineering Management
0.1	07 March 2022	Draft report prepared	Justin Hinch, Senior Project Manager Milward Engineering Management

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Introduction

This report has been prepared by Milward Engineering Management Pty Ltd (the Applicant) on behalf of The Heights by Oakwood Pty Ltd (the Client/Developer/Landowner) as the Development Plan for area referred to as The Heights, South Dennington (the Subject Site).



Figure 1 - Subject Site Locality Plan (Department of Environment, Land, Water and Planning, 2021)

The Development Plan relates to the future development and use of residential land and contains information regarding the precinct context, site assessment, general layout and staging of the Subject Site including environmental impacts, cultural heritage, movement network and stormwater treatments.

Subject to the approval of this Development Plan by the Responsible Authority, it is anticipated that a subsequent planning permit application for subdivision of the Subject Site will be lodged concurrently. The

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planning permit application will detail the intended use, form, and development of the Subject Site generally in accordance with this Development Plan.

Development Plan Overview

The Subject Site is zoned General Residential Zone (GRZ1) within the Warrnambool Planning Scheme (the Planning Scheme) and is subject to the Development Plan Overlay (DPO1) which specifies a Development Plan is required to be submitted and approved by the Responsible Authority prior to subdivision of the land into more than two (2) lots.

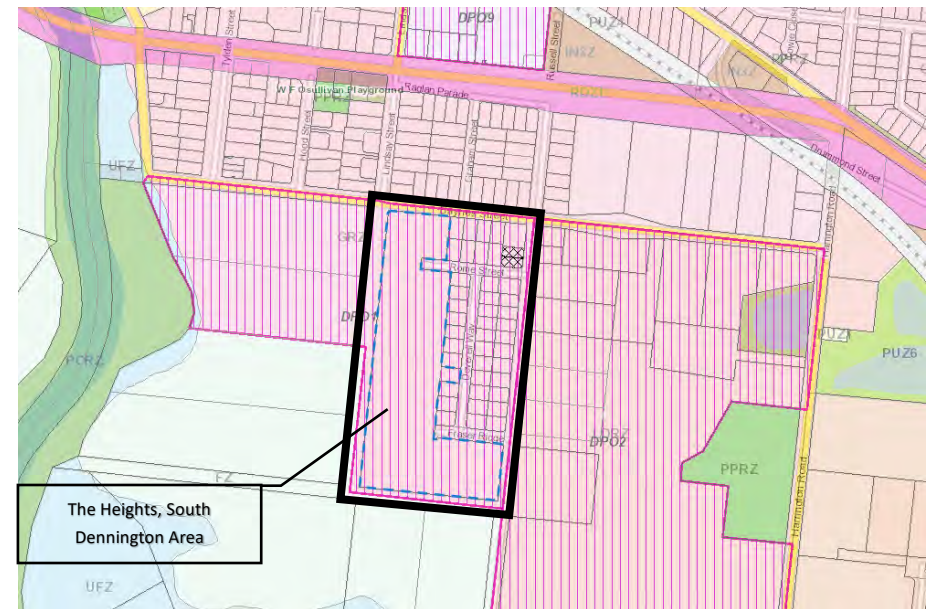


Figure 2 – The Heights, South Dennington Development Plan Area (Department of Environment, Land, Water and Planning, 2021)



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Purpose of the Development Plan

The Heights, South Dennington Development Plan will become the key strategic planning documents that will provide the short- and long-term vision for the future planning and development of this residential area.

Structure of the Development Plan

The structure and content of this Development Plan has been prepared based on the general requirements of Clause 43.04-4, the purpose of a Development Plan is:

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

The outcomes of the Development Plan align with the State Planning Policy Framework, Local Planning Policy Framework, Warrnambool Planning Scheme including the Municipal Strategic Statement and local planning policies to ensure that any future development is undertaken 'generally in accordance' with the approved Development Plan.

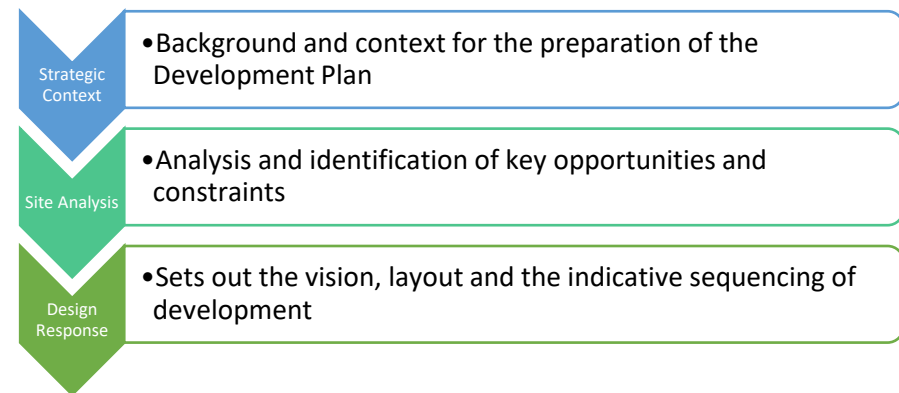


Figure 3 - Development Plan Document Structure

Several supporting documents have also been prepared and supplied separately which influence the approach to the design and layout of development. These documents include:

- A. Property Reports
- B. Vegetation Assessment
- C. Cultural Heritage Management Plan
- D. Stormwater Management Plan
- E. Traffic Assessment Report
- F. Infrastructure Services Report
- G. Landscaping Plan
- H. Development Plan Layout
- I. Site Feature Survey Plan





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Strategic Context

Planning Scheme Provisions

The Development Plan needs to ensure that it is consistent with established State and Local policies and guidelines.

Planning Policy Framework

All planning schemes in Victoria include the Planning Policy Framework (PPF) which has been developed by the State Government. Councils must take these policies into account and give effect to them when making planning decisions. State planning policies aim to provide for the fair, orderly, economic, and sustainable use, and development of land.

The following clauses have been considered in preparing this Development Plan.

- Clause 11 Settlement
- Clause 12 Environmental and Landscape Values
- Clause 15 Built Environment and Heritage
- Clause 16 Housing
- Clause 17 Economic Development
- Clause 18 Transport
- Clause 19 Infrastructure

Local Planning Policy Framework

Clause 21 of the Warrnambool Planning Scheme contains the Municipal Strategic Statement and outlines the key strategic planning, land use and development objectives for the City of Warrnambool municipality, and the strategies and actions for achieving the objectives. It includes statements about a wide range of areas and issues and outlines key issues and trends and includes the following policies of relevance to development.

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The following key local policies of the Warrnambool Planning Scheme which are considered relevant to this Development Plan.

- Clause 22.01 Housing
- Clause 22.02 Environment
- Clause 22.04 Infrastructure

Local Strategy

Land Use

The Warrnambool Land Use Strategy (Parson Brinckerhoff Australia Pty Ltd, September 2004) recognises the Dennington area contained by the Merri River as having potential for future urban development, but it is considered limited and recommends short to medium term strategic planning for North Dennington as a priority.

Housing

The Warrnambool City-Wide Housing Strategy 2013 (Warrnambool City Council, December 2013) makes key reference or has related content to the Subject Site with:

- Acknowledgement that the South Dennington Growth Area as a medium-term objective and would ultimately be subject to a Precinct Structure Plan to guide development – which has not yet been prepared; and
- Acknowledgement that the Dennington Neighbourhood Activity Centre Structure Plan 2009 will service surrounding development (both to the north and south).

Open Space

The Warrnambool Open Space Strategy 2014 (Warrnambool City Council, August 2014) does not identify a specific open space requirements for the Subject Site which is situated in the South Warrnambool / Merrivale precinct.

The future Precinct Structure Plan for the South Dennington Growth Area will focus on opportunities to link the rail trail to open space likely to be floodplain and biodiversity corridors along the Merri River.

Activity Centre

The Dennington Neighbourhood Activity Centre Structure Plan (Hansen Partnership Pty Ltd, November 2009) makes limited references to the future development of the South Dennington Growth Area, but does acknowledge the Subject Site:

- Has opportunity for key views from the elevated land;
- Sits within the 400m walkable catchment of the activity centre;
- Has potential to support townhouses and dual occupancy housing on standard lots; and
- Will utilise the arterial network (Princes Highway) with major traffic control / signalised intersection as a key transport junction.



Figure 4 - Dennington Neighbourhood Activity Precinct Structure Plan (Hansen Partnership Pty Ltd, November 2009)

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Zones

The entire Subject Site is General Residential Zone (GRZ) which applies Schedule 1. The GRZ1 seeks to encourage development that respects the existing neighbourhood character, and a diversity of housing types and housing growth. Development must occur in accordance with the requirements of Clause 56 Residential Subdivision of the Victoria Planning Provisions, which has been considered throughout the preparation of the Development Plan.

There is a mix of zones surrounding the Subject Site to be considered including:

- General Residential Zone to the west and north along Baynes Street;
- Farming Zone to the west and south along unmade roads; and
- Low Density Residential Zone to the east along Russell Street.

Overlays

Overlays are used as an additional level of control to zones, where local and site-specific requirements can be made, as necessary. The Development Plan Overlay Schedule 1 (DPO1) applies to the site triggering the requirement to prepare a Development Plan to facilitate coordinated development. This generally occurs prior to any application for planning permits for subdivision.

Development Plan Overlay

Schedule 1 to the Development Plan Overlay has several requirements before a permit can be granted. This Development Plan will:

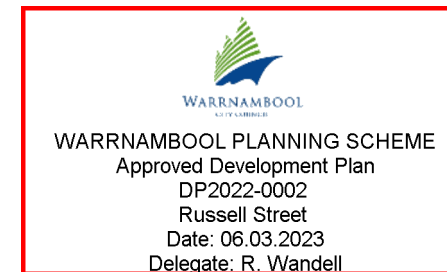
- Include a Site Analysis which shows the topography of the land, and the location of any existing vegetation, drainage lines, existing buildings, sites of conservation, heritage or archaeological significance and other features.

- Show the proposed subdivision layout including lots, roads, public open space and other features of the subdivision in a manner which is responsive to the features identified in the Site Analysis.
- Identify the means by which sites of conservation, heritage or archaeological significance will be managed during the construction phase of the subdivision.
- Identify Appropriate Building Areas on the site and within individual lots that are suitable for the construction of dwellings or other buildings, which are not affected by constraints such as slope, potential for inundation, or presence of remnant vegetation to the satisfaction of the responsible authority. If there are no constraints affecting the site, all lots should be notated as Appropriate Building Areas.
- Include a Landscaping Plan showing the location of existing vegetation to be retained and proposed vegetation.
- Show suitable road and pedestrian linkages between the site and adjacent areas.
- Outline arrangements for the provision and funding of physical infrastructure.
- Identify the staging of the subdivision.

Regional Context

Dennington South is located approximately 260 kilometres south-west of Melbourne situated on the edge of the Princes Highway and located five kilometres west of the Warrnambool CBD via the Princess Highway.

The population of Dennington is approximately 1,900 persons (Australian Bureau of Statistics, 2021) with 700 dwellings accommodating 500 families. Dennington is located within the City of Warrnambool municipal district that covering 120 square kilometres in south-west Victoria which has a population of 35,000 (Warrnambool City Council, 2021).





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Site Analysis

Site Overview

The land to which this Development Plan applies primarily covers the Subject Site, 4.8 hectares of undeveloped land and partially developed previous stages of residential land to the east. The undeveloped parcel details are as follows and as further detailed in Appendix A.

- A. Lot 34, PS636695; and
- B. Lot 97, PS636695.

For the sake of completeness, this Development Plan considers the previous stages of the “Dennington South Estate” now excised and developed to be included in this Development Plan area.

Topography & Landform

The Subject Site is located on a dune that is rising to the north east away from the floodplain of Kelly Swamp/Merri River.

The general lay of the land at the Subject Site slopes in two (2) directions, 1) towards Baynes Street at a moderate 5 to 10% grade average referred to as the northern catchment; and 2) towards the floodplain at a steeper average grade of 20 to 25% referred to as the southern catchment.

Views from the ridgeline at approximately 32m AHD showcase the floodplain, dunes, and Dennington skyline.

A site plan with feature survey information is provided in Appendix I.

The northern portion of the Subject Site contains a substantial amount of deposited fill to create a raised surface above the natural dune landscape. The raised surface has areas of levelling and grading to create surfaces for residential dwellings. These works were undertaken as part of a previous planning permit, but not formalised / completed.



Figure 5 - Photo from Subject Site 'high-point' north towards Baynes Street

The soil profile (Painter, November 2021) is generally a silty loam with a gradual transition to sandier loam as elevation increases. There are some larger pockets of sand underlying calcareous accumulations within the dune landform, not found within the swampy floodplain landform which contains fill deposition and considerable ground disturbance.



Figure 6 - Photo from Subject Site 'high-point' south-east towards Russell Street and Merri River floodplain



Figure 7 - Photo from Russell Street and Merri River floodplain toward southern boundary and ridgeline of Subject Site

Waterways & Drainage

While not directly adjoining the Merri River, the Subject Site has overland flow connection to river which is an integral part of the drainage corridor servicing a large area of Warrnambool and beyond.

The Merri River is also an area of high amenity with views from the Subject Site, and of high value to flora and fauna within the riparian corridor.

A flood study undertaken by the Glenelg Hopkins Catchment Management Authority (Water Technology Pty Ltd, January 2007) has identified a 1 in 100 year flood line, but it is acknowledged this does not affect the Subject Site.

The stormwater flows from previous stages of development located in the northern catchment and external upstream catchments are directed to a drainage basin on the Subject Site cut into the dune substrate.



Figure 8 - Photo from Subject Site 'high-point' south-west towards Merri River floodplain



Figure 9 - Photo of Subject Site existing drainage basin

Cultural Heritage

The Subject Site is within an area of cultural heritage sensitivity as described in the Aboriginal Heritage Regulations 2018. A Cultural Heritage Management Plan (CHMP) is required to be prepared and approved by

the relevant Registered Aboriginal Party (RAP) prior to land being subdivided or developed.

An approved CHMP #18097 (Painter, November 2021) provided in Appendix C has been prepared for this Development Plan area.

There are no recorded Aboriginal places within the activity area (including the Subject Site and surrounding road reserves). After field investigations, no Aboriginal cultural material was located within the activity area and no areas of potential sensitivity were identified. As a result, the proposed activity is unlikely to impact on Aboriginal cultural material within the activity area; therefore, there is no known cumulative impact upon cultural heritage in the region because of these works.

Vegetation & Habitat

A Vegetation Quality Assessment (Richdale, March 2021) including a general fauna survey has been undertaken (Appendix B) to determine whether the proposed subdivision would impact upon any existing native vegetation and fauna species.

Prior to 2002 the Subject Site was utilised for farming which most likely led to broadscale clearing of the land and the introduction of agricultural species and other weeds.

It is acknowledged that the Subject Site is highly modified and degraded, with extensive earthworks shifting soil, rocks, and gravel resulting in the land being devoid of canopy genera trees and a shrub layer, with the ground cover being almost exclusively covered in a variety of weed species, some of which are regionally restricted or controlled.

Due to the lack of native vegetation, specifically the lack of patches of native vegetation and scattered canopy trees, there was insufficient data to generate a Native Vegetation Removal (NVR) report and an offset

would not be required should the proposed subdivision be approved. The proposed subdivision should not significantly impact upon the areas, biodiversity value, or environs.

As no canopy native vegetation or patches of native vegetation are present, there is no requirement for a native vegetation planning permit or an offset requirement under Planning Scheme Clause 52.17.

Bushfire

The land is within a designated Bushfire Prone Area (refer to Appendix A) but is not included within a Bushfire Management Overlay. Bushfire Prone Areas are areas that are subject to or likely to be subject to bushfires. Minimum construction standards apply to all new buildings in a bushfire prone area.

In consideration of the provisions at Clause 13.02-1S, the following bushfire protection measures to minimise bushfire risk are inherent in the site plus further measures will be incorporated into the development:

- The site already has a low fuel load as there is no significant vegetation present on site. The predominant bushfire risk would be grass fire.
- The design response has been laid out on a grid formation with good road and pedestrian accessibility, high visibility, and means of escape with compliant access requirements for heavy vehicles and emergency vehicles in the event of a fire.
- The development will be equipped with CFA compliant firefighting infrastructure such as fire plugs, hydrants with reticulated water supply.
- Dwellings will be required to have rainwater tanks installed to meet the environmental requirements which may be an additional source of water in emergency circumstances.

Traffic & Movement

The Subject Site is bordered by a grid-style road network with Baynes Street to the north, the unmade extension of Lindsay Street to the west, unmade / unnamed road to the south and Russell Street to the east.

Moderate levels of traffic primarily related to property access for the local community connect to and from the Subject Site via Baynes Street, with three (3) key routes to the east, north and west connections, being:

- East from Russell Street towards Harrington Road (South Warrnambool);
- North between Lindsay Street and Russell Street, shortest connection to the arterial network (towards Warrnambool and/or Port Fairy); and
- West from Lindsay Street towards The Esplanade, left out only on to the arterial network (towards Port Fairy).

The front of the Subject Site is within a desirable 400 metres walkable distance to the Dennington Neighbourhood Activity Centre. The extent of the footpath network serving pedestrian accessibility to the Subject Site is limited, with the main connection to the arterial network on Raglan Parade and the Dennington Activity Centre following the Russell Street, Baynes Street and Graham Street route which do have nominated road crossing points. There are footpaths for the full length of Lindsay Street, but no formal connection from the Subject Site.

No dedicated provision for cyclist accessibility is currently available that connects to the Subject Site. There are dedicated bicycle lanes on Raglan Parade.



Figure 10 - Subject Site Existing Features



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Design Response

Vision

The Heights by Oakwood Development Plan sets out a framework to create a new residential area, consistent with previously developed residential area and applying contemporary in urban design principles, infrastructure standards and service provisions.

The development of this area will also create a community that will be integrated with the existing Dennington township and meet the needs of all the current and future residents.

Outcomes

The Heights by Oakwood Development Plan will inform the detailed design of the site, driven by the natural landform and adding value to the landscape character and the environmental features of the area to create a place with high quality aesthetic values by:

- Housing supply with minimum of 12 dwellings per hectare
- Creating a medium density housing opportunity
- Walkability to the neighbourhood activity centre
- Connection to the arterial road network and public transport
- Supports active transport options
- Local road and bicycle network safety improvements
- Expansion of the footpath network
- Applies a grid road network for traffic permeability
- Integration ready for future development to the west
- Maximises the amenity of the stormwater drainage features
- Creates a medium density opportunity with excellent accessibility
- Connection to local recreational open space



Figure 11 - Proposed land use plan

Open Space

The WF O'Sullivan Reserve located along Raglan Parade with access also from Lindsay Street and Hood Street is a local recreation reserve (Warrnambool City Council, August 2014) which caters for the Development Plan area.

As a local recreation reserve, it offers a limited number of recreational opportunities, such as a small playground and a grassed area for informal uses. These types of parks are intended for frequent, short duration visits within a short walking distance of users.

Ideally local parks should be located within 400 metres safe walking distance of at least 95% of all dwellings. Based on utilising the existing open space the Development Plan proposes that:

- 50 new and existing lots (45%) of lots located are within 400m
- 110 new and existing lots (100%) of lots are located within 600m

Further passive open space is also anticipated to be accessible within 500 metres of all new and existing lots of the Merri River floodplain when residential zone land to the west is developed.

While the drainage reserve proposed within the Subject Site is not formally recognised as open space, it will be designed to provide high amenity value, providing a 'green' break in the built form with safe accessible slopes from the adjoining road reserves providing limited opportunity to provide seating within 400m of all new and existing lots.

Complimenting the access to existing open space is the requirement for an open space contribution proposed to be a percentage of the site value not exceeding 5 per cent.



Figure 12 - Open space locations and service areas

Streetscape Landscaping

An enhanced landscape treatment is proposed along Lindsay Street as the primary access to be shared between the proposed development of the Subject Site and future development to the west. Further information can be found on the Landscaping Plan (Appendix G) relating to street tree locations, types, and installation.

Movement Network

The Development Plan proposes use of conventional design and interconnection of new roads and paths with the existing networks that will allow people to safely move within and beyond the Subject Site to the surrounding neighbourhood activity centre, local recreational open space, with connections via the arterial road network towards Warrnambool and Port Fairy.

The primary vehicle and pedestrian access will be from either Lindsay Street or Russell Street in the north-south orientation feeding off Baynes Street. Permeability through the site is achieved via Rome Street and Fraser Ridge connecting roads in the east-west orientation. Other roads such as Dowell Way, Deverell Way and Keys Street provide local access functions.

A major feature of the movement network are road safety improvements on Baynes Street at the Lindsay Street and Russell Street intersections. A new roundabout will be implemented at Lindsay Street to accommodate the road extension improving safety by simplifying conflicts, reducing speeds, and providing clear indication of priority. Similarly, changes at the Russell Street intersection uses visual cues, lane narrowing and left-in / left-out treatments for local access and provisions for an on-road bicycle lane to encourage slower vehicle approach speeds that improve the safety of movement.

Safe pedestrian linkages crossing Baynes Street will be established, likely be implemented as part of the intersections works.

Further information can be found in the Traffic Assessment Report (Appendix E) relating to road cross sections, intersection treatments, and traffic calming.



LEGEND

- | | |
|---|---------------------------------------|
| Proposed 'Access' Road Type 1 (6.0m Interim, 7.3m Ultimate) | Existing 'Access' Road (7.3m) |
| Proposed 'Access' Road Type 2 (7.3m) | Existing 'Access' Road (6.0m) |
| Proposed 'Access' Road Type 3 (6.0m) | Existing 'Category 3' Footpath (1.5m) |
| Proposed Intersection & Safety Treatments | Existing Pedestrian Connection |
| Proposed 'Category 3' Footpath (1.5m) | |
| Proposed Pedestrian Connection | |

Figure 13 - Development Plan Proposed Road, Pedestrian and Cycling Networks

Staged Construction

While the Traffic Assessment Report (Appendix E) acknowledged a roundabout is ideally constructed at the Baynes Street / Lindsay Street intersection the delivery of the roundabout without adjoining land being developed presents some challenges. The report recommends that a financial contribution (such as a Development Contribution) towards the roundabout is provided. This contribution, plus the allocation of land on the Subject Site allows for the roundabout to be constructed later when the traffic treatments are warranted and can be integrated with the development to the west.

The Traffic Assessment Report also proposes Lindsay Street is an 'Access Street' and is expected to ultimately be constructed with a 7.3m carriageway when development to the west is completed. As an interim treatment (serving one side of the road only), a 6.0m carriageway width (as per an 'Access Place') has been adopted that can be widened in the future. Both widths are consistent with the Infrastructure Design Manual.

Servicing & Infrastructure

The Development Plan area is capable of being serviced by all major urban services. Service statements are provided below with further information contained in the Infrastructure Servicing Report (Appendix F).

Roads & Footpaths

The proposed residential development within the entire Development Plan area (including previously constructed stages) is estimated to generate 1,100 vehicles per day, with estimated additional morning and afternoon peak traffic of 94 vehicles per hour and assessed that the development would not adversely affect traffic conditions, the safety or operation of surrounding road and footpath networks as outlined in the Traffic Assessment Report (Appendix E).

Stormwater Drainage

The Development Plan proposes stormwater drainage systems that effectively manage how the quantity and quality of stormwater arising from and/or passing through the proposed residential development to avoid adverse impacts on people, property, and the natural environment.

The Stormwater Management Report (Appendix D) proposes to:

- collect and control all stormwater generated within the development and entering the development from external upstream catchments;
- provide an effective outlet for all collected stormwater to a natural watercourse or acceptable outfall; and
- achieve these objectives without detriment to the environment generally, surface and subsurface water quality, groundwater infiltration characteristics, adjoining landowners and landowners, and watercourses either upstream or downstream of the subdivision.

Northern Catchment

A drainage basin has been proposed as an interim solution to manage stormwater, noting the main catchment does not have an outfall to the Merri River and currently relies on informal infiltration into the underlying sand soil profile. A piped system connection can be implemented from the drainage basin to the Merri River to coincide with future development to the west of the Subject Site.

It is proposed to formalise the drainage basin for the northern catchment utilising infiltration and detention storage to detain and treat incoming catchment flows from existing residential development to the north, the proposed subdivision, and undeveloped flows from the west.

As the current basin has sufficient capacity, it is not critical to complete the entire construction of the basin immediately and is reasonable to defer to a later stage.

To support deferral of complete construction, it is proposed to provide pre-treatment capacity as detailed in the Infrastructure Servicing Report (Appendix F) to maintain the capacity of the infiltration media. This may include provision of a sedimentation basin, or alternatively by a sacrificial filter layer within the main basin.

Southern Catchment

Development in the southern catchment will utilise underground storage to manage outflow to pre-development levels and a linear bioswale and infiltration system to convey stormwater to the floodplain.

As is detailed in the Infrastructure Servicing Report (Appendix F) the drainage structure can be located entirely within the large existing road reserve, allowing unimpeded maintenance access, and avoiding undue impact on other properties. Alternatively, the structure could be located entirely within the road pavement, with a piped discharge to the constructed swale. The selected location directs all stormwater flows to an existing depression, maintaining predevelopment conditions.

The proposed drainage structure is proposed to function as a permanent solution. However, it is recognised that the broader precinct does not have a formal stormwater management strategy. By adopting a design that can utilise the existing road reserve, this provides drainage infrastructure at the lowest point of the land impacted but also creates opportunity for the drainage network to be augmented in the future to either maintain, upsize, or remove the structure.

Water Supply

Due to topography and elevation the Development Plan area will have two (2) different water pressure zones (low-level and high-level). The divide elevation between the two zones is typically 20m AHD. Servicing of lots from the high-level system requires the installation of a pressure regulating valve to ensure the lots below 20m AHD are not subject to higher than typical pressures. These lots would then be transferred over to the low-level system in the future when the surrounding growth area is developed.

Sewerage

The previously completed stages within the Development Plan area are serviced by an existing sewerage network, gravity fed from the high point along Fraser Ridge down to Baynes Street. This network can be expended to service the remaining development areas north of Fraser Ridge.

Lots proposed to be created south of Fraser Ridge will not be able to connect to the existing network via gravity. A temporary pump station is required to connect this area. This pump station could be located on the south-west corner of the Development Plan area, ideally located on the existing government road reserve.

The proposed pump station is a temporary system and hence will be likely be removed in the future, because of this it is not necessary to locate the system in a dedicated permanent services reserve. Within the existing road reserve there is more than ample room to house the system and when the land to the west is developed the pump station may be decommissioned or relocated to the next low point with no residual land left behind.

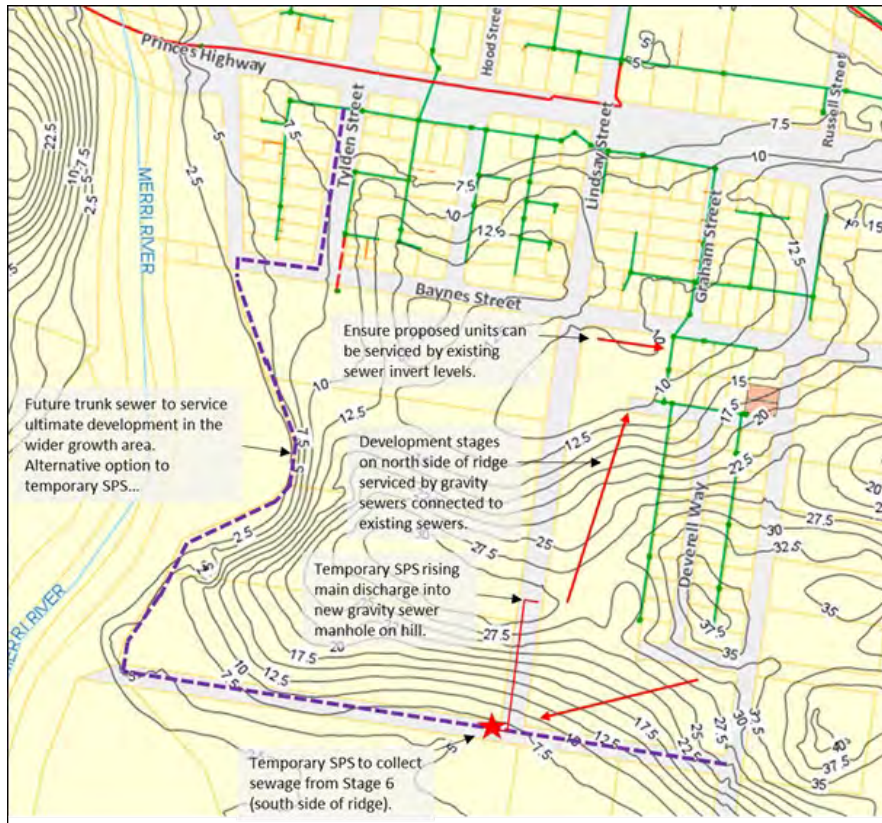


Figure 14 - Sewerage Infrastructure Concept Plan

Electricity Supply & Public Lighting

An existing 500kVA distribution substation in Fraser Ridge is well within the capacity of the supply available without the need for an additional substation.

Public lighting will be provided in accordance with the design requirements and relevant Australian Standards. All public lighting is to use of energy efficient luminaires.

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Gas Supply

The previously completed stages within the Development Plan area are serviced by plastic polyethylene distribution mains with planned gas assets extending along Russell Street (south of Fraser Ridge), then west along the unmade / unnamed government road to Lindsay Street.

Telecommunications

Assets are already provided to lots within the previously completed stages within the Development Plan area. It is expected that network services as delivered by NBN Co Limited and/or Telstra will continue to service the entire development subject to the relevant service agreements being in place.



Staging & Infrastructure Delivery

The sequencing of development across The Heights by Oakwood Development Plan area will generally continue from previously completed stages from Russell Street to Lindsay Street.

The numeric sequence of these stages is generally Stage 4 through to Stage 7, although Stage 5 and Stage 6 could be switched depending on service delivery preferences.

Stage 4

The extension of Rome Street and Fraser Ridge will be with a new north-south access road. Stormwater will continue to use the existing informal drainage basin at Baynes Street. Road safety improvements at the Baynes Street and Russell Street intersection to be implemented as per the Traffic Assessment Report.

Stage 5

A local access only road created to 'loop' around Stage 5 from Fraser Ridge, using Lindsay Street, Russell Street, and the unnamed road reserve. A new stormwater will be created to drain towards the Merri River, and new pump station for sewerage connection.

Stage 6

A new road will be created along the unmade section of Lindsay Street between Fraser Ridge and Rome Street and will eventually be connected to Baynes Street in Stage 7. Stormwater will continue to use the existing informal drainage basin at Baynes Street.

Stage 7

The drainage basin at Baynes Street is to be upgraded as per the Stormwater Management Report (Appendix D).

The roundabout at the Baynes Street and Lindsay Street intersection as detailed in the Traffic Assessment Report (Appendix E) will be implemented to complete the road connection with Stage 6 and provide the additional pedestrian crossing on Baynes Street.

Implementation of the roundabout will require land provisions outside the Development Plan area and ultimately service the broader growth area.

The Development Plan proposes a financial contribution (Development Contribution) towards the roundabout under the Planning & Environment Act 1987 facilitated with a Section 173 Agreement.

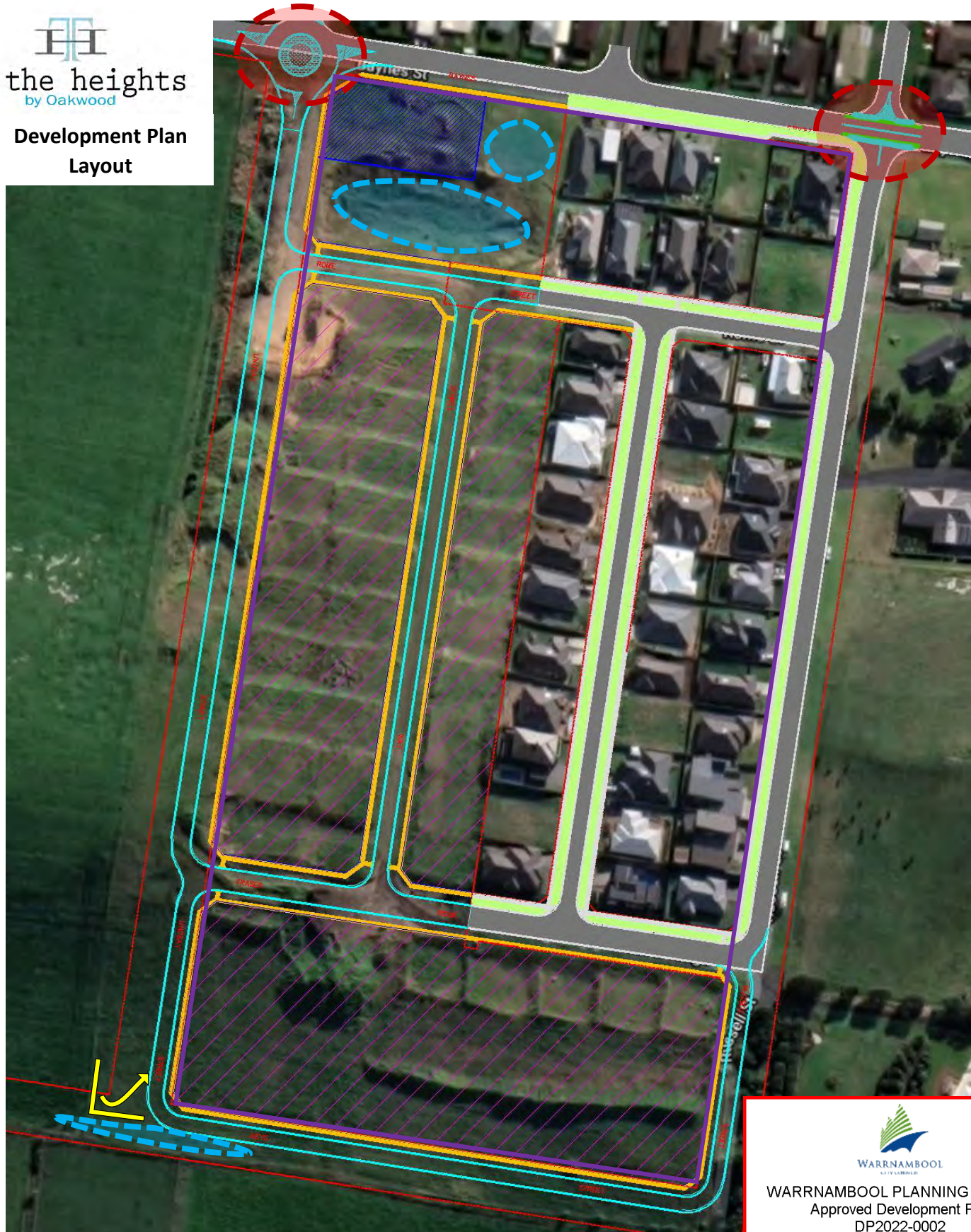
This contribution, plus the allocation of land on the Subject Site proposed in Stage 7 allows for the roundabout to be constructed by others when these traffic treatments are warranted and can be integrated with the future development to the west.













Figure 15 - Indicative Stage Areas





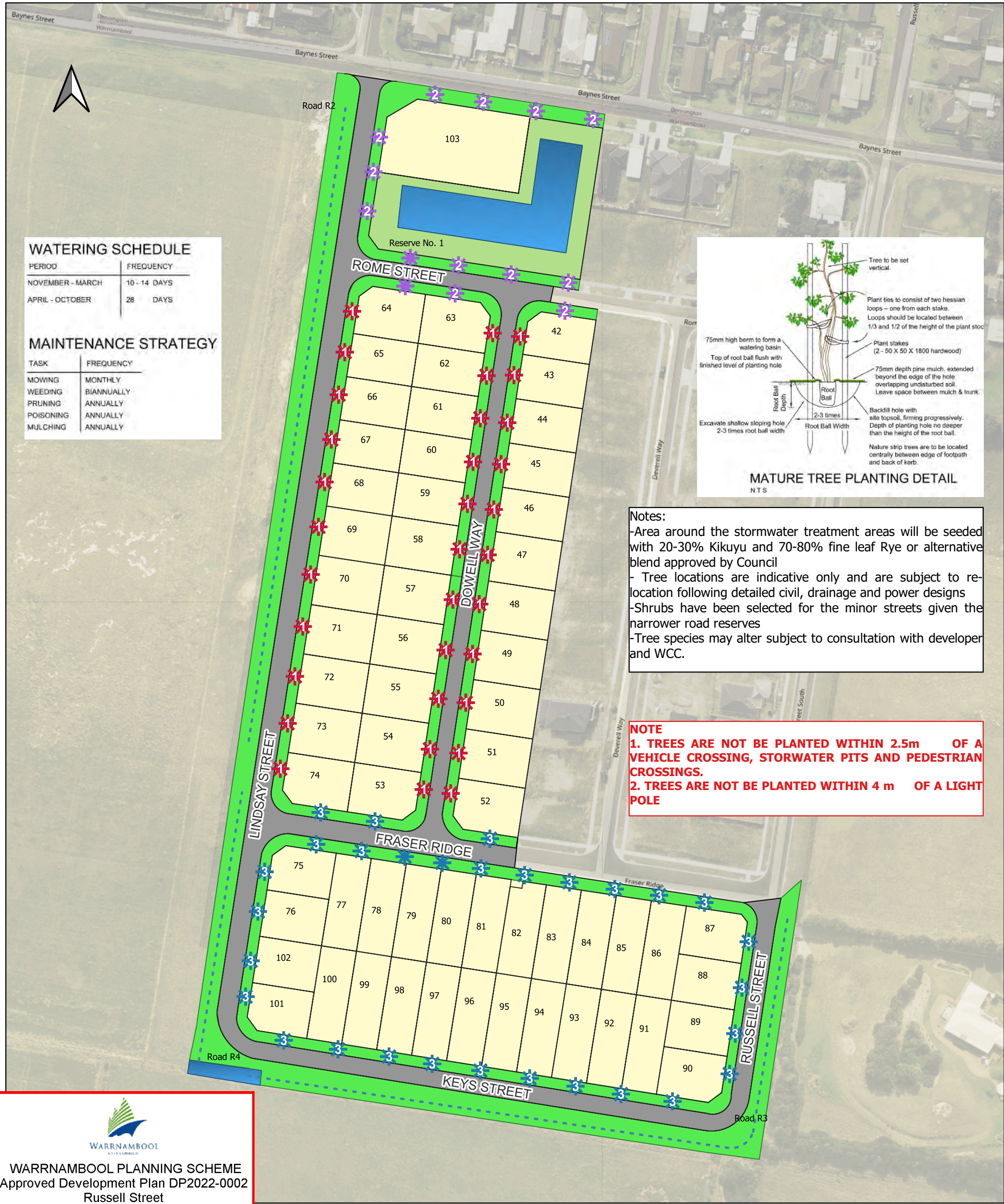
LEGEND

-  FOOTPATH INFRASTRUCTURE
-  ROAD CARRIAGEWAY INFRASTRUCTURE
-  KEY SEWERAGE INFRASTRUCTURE
-  DEVELOPMENT PLAN AREA

-  KEY DRAINAGE INFRASTRUCTURE
-  RESIDENTIAL LOTS (>500m²)
-  RESIDENTIAL LOTS (MEDIUM DENSITY)
-  INTERSECTION TREATMENT



WARRNAMBOOL PLANNING SCHEME
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 Russell Street
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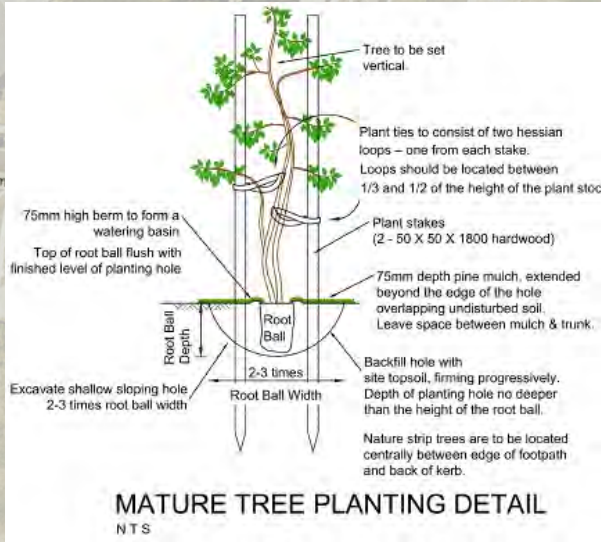


WATERING SCHEDULE

PERIOD	FREQUENCY
NOVEMBER - MARCH	10 - 14 DAYS
APRIL - OCTOBER	28 DAYS


MAINTENANCE STRATEGY

TASK	FREQUENCY
MOWING	MONTHLY
WEEDING	BIANNUALLY
PRUNING	ANNUALLY
POISONING	ANNUALLY
MULCHING	ANNUALLY



- Notes:
- Area around the stormwater treatment areas will be seeded with 20-30% Kikuyu and 70-80% fine leaf Rye or alternative blend approved by Council
 - Tree locations are indicative only and are subject to re-location following detailed civil, drainage and power designs
 - Shrubs have been selected for the minor streets given the narrower road reserves
 - Tree species may alter subject to consultation with developer and WCC.

- NOTE
1. TREES ARE NOT BE PLANTED WITHIN 2.5m OF A VEHICLE CROSSING, STORWATER PITS AND PEDESTRIAN CROSSINGS.
 2. TREES ARE NOT BE PLANTED WITHIN 4 m OF A LIGHT POLE



WARRNAMBOOL
CITY COUNCIL

WARRNAMBOOL PLANNING SCHEME
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the heights
by Oakwood

LANDSCAPING PLAN
All Stages

Created: 19 September 2022
Version: 2

LEGEND

- Street Trees

1-Banksia "Sentinel" 

2-Silver Banksia 

3-Pin Cushion Hakea 

Indicative Drainage 
- Development Area

Residential Lots 

Naturestrip 

Road 

Drainage Reserve 

Stormwater Treatment Area 

Planting & Maintenance Schedule

Species	Pot size	Growing Height
Banksia 'Sentinel'	50 cm	2.5 x 1 m
Silver Banksia	50 cm	5 x 4 m
Pin-cushion Hakea	50 cm	2-3 m

