

176-194 Thornhill Road, Highton

33 Lot Subdivision and Native Vegetation Removal

January 2017



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1 INTRODUCTION

SMEC acts on behalf of Barwon Region Water Authority (Barwon Water) in relation to this planning permit application. The site is comprised of two water storage basins and ancillary infrastructure and outbuildings. The capacity of the storage basins are currently underutilised, and Barwon Water seek to develop the land for residential subdivision in responding to this issue. A Planning Scheme Amendment application (C338) has been lodged concurrently to facilitate this proposed subdivision and future residential development.

The proposal is to subdivide the land into 33 residential lots - 30 conventional lots, 2 superlots and 1 balance lot of approximately 3.83ha to the north - and the removal of native vegetation. The site is located on the south-west edge of the Geelong Township, approximately 8.1km street distance from the Geelong CBD, abutting the Geelong Ring Road to the west and south.

Use and development of the site is governed by the Greater Geelong Planning Scheme. The site is currently within a Public Use Zone (PUZ1) and is proposed to be rezoned in part to the General Residential Zone (GRZ1) by Amendment C338 requested under Section 96A of the *Planning and Environment Act 1987*.

A planning permit is required to subdivide land under clause 32.08-2 of the GRZ1. This planning permit application seeks approval for subdivision and native vegetation removal (a permit is required for native vegetation removal under Clause 52.17 (Native Vegetation)).

Pre-application discussions were initially undertaken on 19 August 2015 with Peter Smith, Council's Coordinator of Strategic Implementation. Several subsequent discussions have been held with Council. General support was indicated for the application. This report provides an assessment of the proposal against the provisions of the Greater Geelong Planning Scheme.

1.1 Project Synopsis

Parcel Details	Lot 1 TP606996E, Lot 1 TP413249U, Lot 1 TP246558K, and Lot 1 PS620847F		
Planning Controls	CURRENT ZONE:	Public Use Zone (PUZ1)	
	PROPOSED ZONE:	General Residential Zone (GRZ1)	
	OVERLAYS:	Design and Development Overlay (DDO14)	
Subdivision Proposal	TOTAL SITE AREA:	3.42ha (excluding balance lot)	
	PROPOSED LOTS:	Total	33
		Residential < 300m ²	0
		Residential > 300m ²	30
		MD Superlots	2
		Balance Lot	1 (3.83ha)
	FEATURES:	Proposed 15m drainage reserve within and abutting eastern boundary, retarding basin proposed within south-east corner of the site, medium density sites fronting Thornhill Road, shared path infrastructure provided in reserve to the west.	
Planning Permit Trigger	Clause 32.08-2 – Subdivide land		
	Clause 52.17-2 – Removal of native vegetation		
Is The Application Exempt From Advertising	No – an application to subdivide land is exempt from advertising under Clause 32.07-10 (GRZ) of the Greater Geelong Planning Scheme		
	An application to remove native vegetation is not exempt from advertising under Clause 52.17 (Native Vegetation)		

2 APPLICATION UPDATES AND RESOLUTIONS

Through the planning assessment process a number of matters have been discussed and resolved. This section provides an overview:

Drainage Engineering

- Council's engineering team initially sought review regarding water sensitive urban design initiatives proposed within the subdivision and particularly the main boulevard swale. Additional details were requested on 8 April 2016 in terms of the viability of the system and broader drainage of the site.
- Ongoing discussions with Council to resolve these matters resulted in a meeting held between parties on 10 August 2016. Changes to the subdivision have included the removal of the internal boulevard swale and dimensioning of the retarding basin.
- A formal response to Council's request was submitted 30 August 2016, which led to agreement that the engineering matters could be addressed through detailed engineering design under conditions of an approved Planning Permit. A draft Planning Permit was prepared in order for Council and the proponent to reach general agreement in terms of the form of these conditions.

Noise Measurements

- On 8 December 2016 VicRoads requested noise measurements and modelling to be undertaken to assess predicted increased noise levels generated by traffic on the adjacent Geelong Bypass over the next ten years. Noise attenuation measures were to be implemented if predicted noise levels reached above 63dBA (L10_{18hr}).
- After numerous revisions were made at VicRoads' request, acknowledgment was provided on 7 December 2016 that noise levels would be below 63dBA (L10_{18hr}). On this basis the principal finding of the proponent's noise report (prepared by Watson Moss Growcott, November 2016) was supported, this being that no amelioration would be required. VicRoads referral response was submitted to Council detailing no objection to the proposal.
- Refer to the Noise Assessment Report provided at **Appendix L**.

Shared Path/Public Open Space Requirements

- As part of the proposed subdivision development, Barwon Water have agreed to construct a shared path between the subject site in the south (Thornhill Road) and Roslyn Road in the north, located entirely within the major north-south linear utility and services reserve directly west of the subject site. The proposed works and landscaping will be provide as a contribution to the public open space requirements of the proposed subdivision, as a value add to the community.
- The linear shared path will provide community benefits in the form of greater connection and amenity to the locality, including connection to a variety of abutting local parks and reserves, including Tim Hill Recreation Reserve in the west and an unnamed drainage reserve to the east, as well as a number of pocket parks.
- Refer to the Proposed Shared Path Alignment Plan provided at **Appendix H**.

3 SITE AND CONTEXT DESCRIPTION

3.1 Parcel Details

The site is located at 176-194 Thornhill Road, Highton, and is referred to as Lot 1 on Title Plan 606996 (main land holding), Lot 1 on Title Plan 413249 (eastern drainage reserve), and Lot 1 on Title Plan 246558K and Lot 1 on Plan of Subdivision 620847F (western drainage reserve). Full title details are provided in **Appendix A**.

3.2 Site Conditions

The subject site is located north and west of Thornhill Road, Highton, approximately 1.3km south of the intersection with Roslyn Road. The site is primarily comprised of two water storage basins and ancillary buildings and infrastructure, with access provided formally and informally from Thornhill Road in the south-west and north-east respectively.

Vegetation on the site is predominantly located in the south-west, proximate to informal vehicle access routes and buildings on site, and has (assumed to be) planted as part of the basin works. The subject site is located on a high point within the locality, providing impressive views to the north and east across the Geelong Township. The topography of the site has been highly modified due to the construction of the basins.

A Site Analysis Plan is provided at **Appendix B**.



Figure 1: Aerial view - Site

■ SITE

■ PROPERTY

3.3 Surrounding Area

The subject site is bordered by the Geelong Ring Road to the south and west and residential areas to the north and south. The suburbs of Highton and Belmont are located in the east, with Waurin Ponds to the south. Land uses within the vicinity are primarily of a residential nature, with pockets of passive open space and small commercial areas interspersed. Land further west is primarily comprised of agricultural purposes.

Directly opposite the site, on the eastern side of Thornhill Road, is the Christian College Middle School, with the senior campus located directly south-west of the site, opposite the Geelong Ring Road. Further south is Deakin University’s Geelong (Waurin Ponds) Campus. The Waurin Ponds Sub-Regional Activity Centre is located approximately 2.2km south-east of the subject site.

The site itself is adjacent to a number of pipeline reserves. The reserve abutting and within the eastern boundary of the site is a 15m pipeline reserve which travels along the entire eastern boundary of the Barwon Water owned land. A second pipeline reserve abuts the western boundary of the subject site, travelling approximately 1.3km north of the subject site to Roslyn Road, and further north on Scenic Road to the Montpelier Basins. This reserve intersects a number of open space areas, including Tim Hill Reserve and further encumbered passive open space proximate to the subject site.

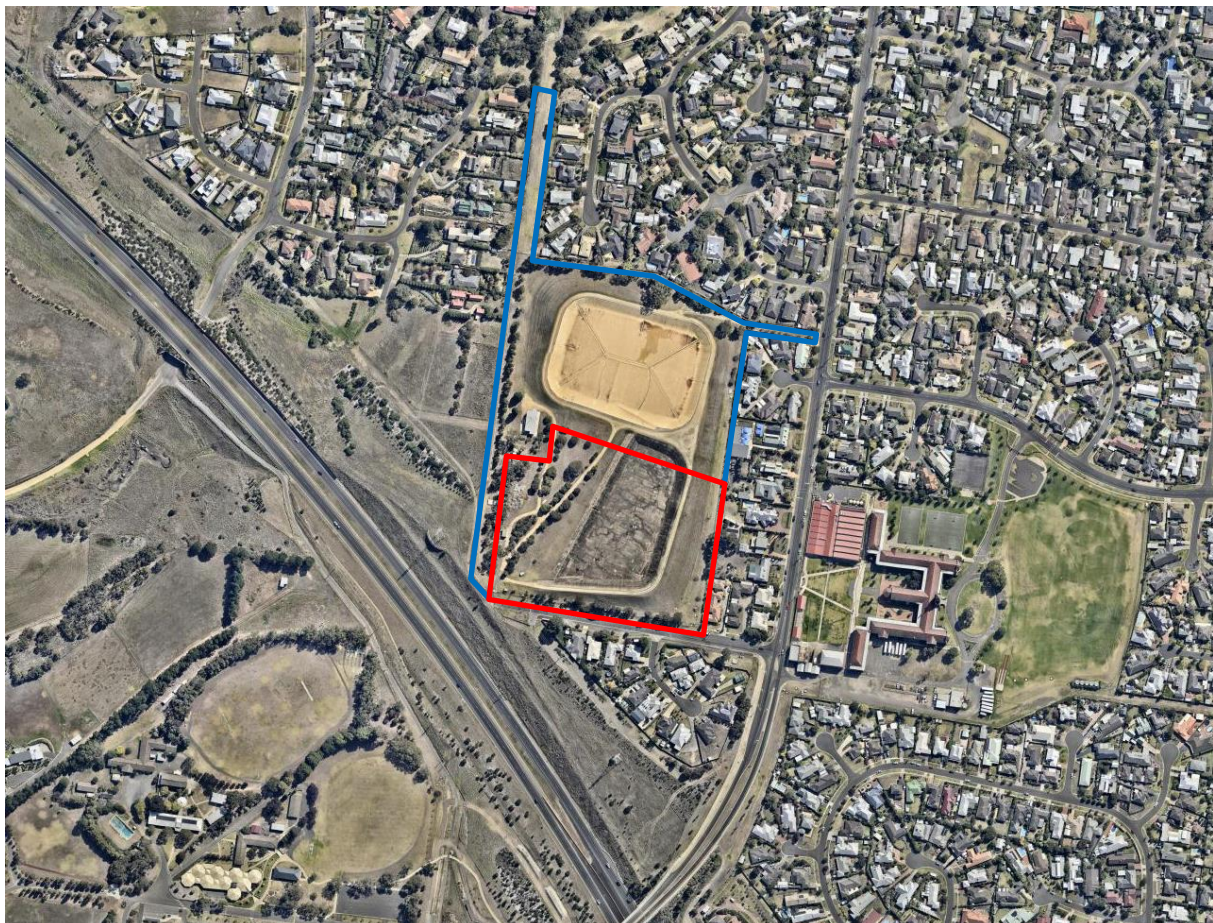


Figure 2: Aerial view – Surrounds

SITE PROPERTY

4 PROPOSAL

The proposal is to subdivide the land for residential development and remove native vegetation. The land currently comprises two water storage basins which have recently become underutilised and Barwon Water are seeking to rezone and develop the surplus land. This will require significant works to the site in making it appropriate to accommodate development in the future. This section provides an overview of the proposed subdivision, including the various investigations undertaken to assess the proposal.

The proposed Subdivision Concept Plan showing the proposal is provided at **Appendix C** and **Figure 3** below.

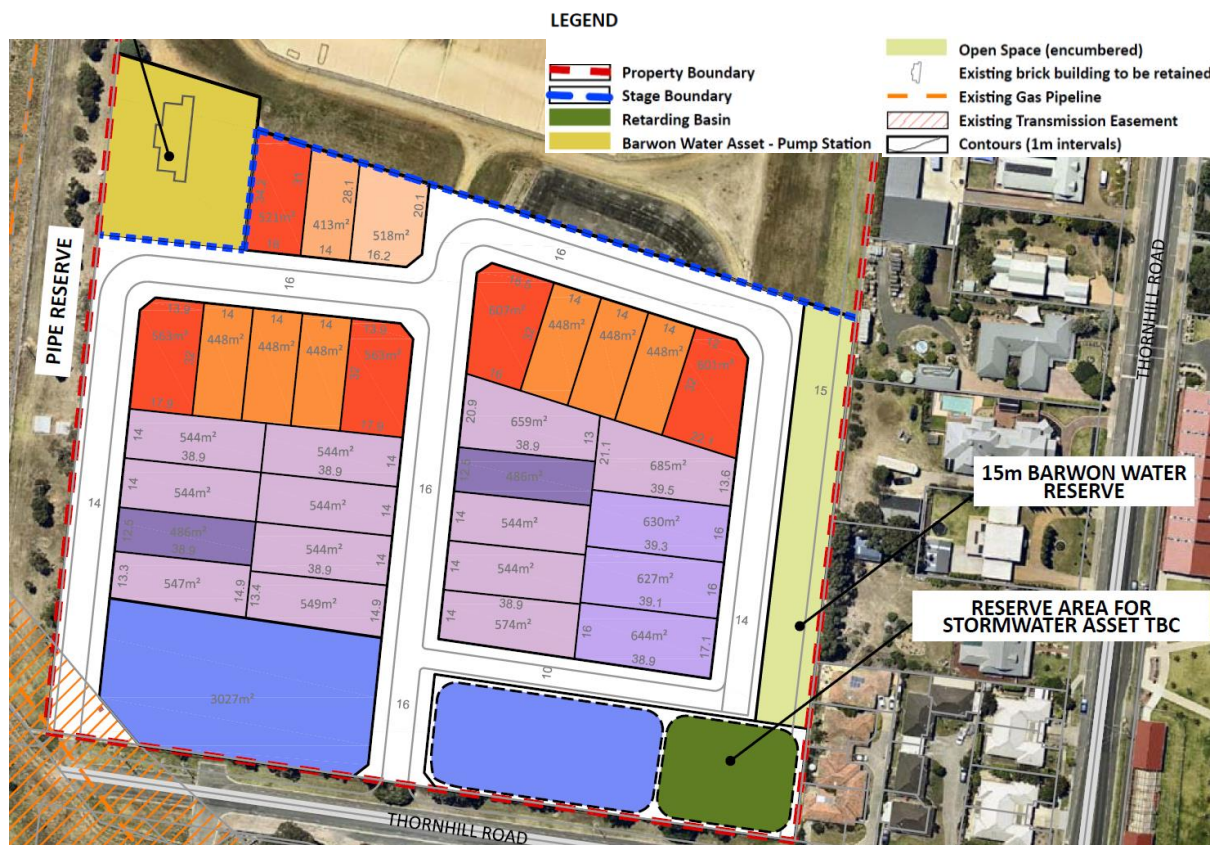


Figure 3: Subdivision Concept Plan

4.1 Amendments

This subdivision proposal is to be assessed concurrently with a Planning Scheme Amendment request (C338) which proposes to rezone part of the land from the Public Use Zone (PUZ1) to the General Residential Zone (GRZ1) and apply the Design and Development Overlay (DDO14) to the rezoned land, in accordance with the underlying controls applicable to the local area.

The assessment of the proposed subdivision against the policy requirements of the Greater Geelong Planning Scheme acknowledges both the PUZ1 and the GRZ1 and DDO14, in relation to the proposed rezoning, for completeness.

4.2 Subdivision

The proposed residential subdivision of the land would create 33 lots – 30 of which are of a conventional density, with two (2) superlots, and a balance lot to the north containing the storage basin to remain. The proposed residential lots are broken down into the following sizes:

Size	Lots	% of Lots	% of NDHa	Size	Lots	% of Lots	% of NDHA
400-449m ²	7	22%	10%	600-649m ²	5	16%	10%
450-499m ²	2	6%	3%	650-699m ²	2	6%	4%
500-549m ²	11	34%	19%	700m ² +	2	6%	*
550-599m ²	3	9%	5%	Balance lot	1	n/a	n/s

Note: superlots included exclusively within 700m² lots, indicative status does not allow % of NDHA.

The subdivision proposes the majority of lots at a conventional density, ranging from 413-685m², while the two (2) superlots fronting Thornhill Road will provide opportunity for medium density (<300m²) residential development*. This provision and diversity of lot product is an appropriate outcome in the context of the site and will respond to the dwelling needs for a variety of future residents.

Council have previously expressed their desire for lots fronting Thornhill Road in the south to be accessed via rear laneways, minimising vehicle crossovers within the subdivision frontage. A rear laneway is provided to the eastern superlot, while the western superlot will provide integrated vehicular access as part of the overall design of a future residential outcome.

*Lots less than 300m² will require a future planning permit for the construction of a dwelling. This would be sought by others at the time of development.

4.3 Landscaping

A Landscape Master Plan (LMP) for the proposed subdivision area has been developed by SMEC. The LMP is comprised of four (4) different tree types located throughout the subdivision area:

- Laneway trees – located within the rear laneways of lots fronting Thornhill Road, providing vegetative articulation to diversify the built up nature of these areas.
- Columnar trees – located along the Thornhill Road frontage, providing a high quality entrance to the subdivision development, whilst respecting the existing character of the local streetscape.
- Street trees – located throughout the subdivision streetscape settings, providing a leafy, vegetative street network and create an attractive public realm throughout the neighbourhood.
- Entry Boulevard trees – located within the main entry boulevard. These tree types have been chosen to create a feature entrance to the proposed subdivision, creating attention and interest which will contribute to the overarching neighbourhood character.

The LMP also provides bio retention system (BRS) planting located within the stormwater retention basin area, comprising grasses and shrubs which are suitable for the landscape, as well as a 2.5m wide shared path and specified amenities within the western pipe reserve.

The proposed Landscape Master Plan for the proposed subdivision is provided at **Appendix D** and **Figure 4** below.



Figure 4: Landscape Master Plan

4.4 Assessments

4.4.1 Traffic

A Preliminary Transport Assessment (PTA) was undertaken by SMEC to assess the impact of the proposed development on the local transport network, and the risks associated with the development in regards to the upgrading of this network to accommodate the proposal. The findings of the PTA are as follows:

- The proposed development is expected to generate approximately 594 daily vehicle trips, with 59 vehicle trips occurring in the peak hour (8-9am, 3.30-4.30pm);
- The traffic generated by the proposed development will not impact on the operation of the existing unsignalised intersection of Thornhill Road and Augustines Road as the additional traffic is negligible compared to the capacity of the intersection;

- *A turn warrant assessment shows that a basic left turn and basic right turn treatments are required on Augustines Road;*
- *Provisions for road network upgrades to Thornhill Road and Augustines Road are not required;*
- *Provision of proposed pedestrian footpath is required on the north side of Augustines Road.*

The proposed development will be appropriately accommodated by the existing local transport network. The Preliminary Transport Assessment is provided in **Appendix E**.

4.4.2 Ecology & Cultural Heritage

An Ecological & Cultural Heritage Assessment (ECHA) was undertaken by *Ecology & Heritage Partners* to assess the ecological and Aboriginal cultural heritage significance of the land, and the impact of the proposed development on these values. From an ecological aspect, the findings of the ECHA are summarised as follows:

- *The site is representative of areas within the local region, being significantly modified vegetation which is generally limited to modified woodland habitats and planted trees;*
- *Remnant vegetation within the site was limited to small fragmented patches of the Grassy Woodland Ecological Vegetation Class (EVC);*
- *Despite this EVC having the ability to support a level of diversity for flora and common urban-based fauna species, the general scarcity of structural diversity and density of this EVC limited opportunity to support these species, and it is considered unlikely that these species are present on site;*
- *The removal of vegetation identified within the Grassy Woodlands EVC will require permit approval and offsets will be required.*

The total amount of native vegetation which requires removal to facilitate the proposed development is 0.224 hectares. The offset requirements for removal of 0.224ha of native vegetation is 0.011 General Biodiversity Equivalence Units (BEU) with a minimum Strategic Biodiversity Score of 0.102.

From a cultural heritage aspect, the findings of the ECHA are as follows:

- *The site has undergone significant land modification through the construction of the existing water storage basins and their ancillary infrastructure;*
- *Due to this, any Aboriginal archaeological deposits that were previously present on the site are likely to have been destroyed;*
- *There are no identified areas of Aboriginal archaeological significance within the subject site;*
- *No Cultural Heritage Management Plan (CHMP) is required.*

The proposed development would not adversely impact ecological or Aboriginal cultural heritage areas of significance within the subject site. No areas of Aboriginal cultural significance were identified on the land, while a planning permit is required to remove native vegetation on the land (Grassy Woodlands, EVC 175 - shown in Figure 5) which will also require a biodiversity offset contribution.

The Ecological & Cultural Heritage Assessment is provided in **Appendix F**, whilst a Tree Retention/Removal Plan is provided in **Appendix G**.



Figure 5: Areas of Vegetation ▭ SITE ▭ NATIVE VEG ▨ OTHER VEG

4.4.3 Geotechnical

A Geotechnical Investigation was undertaken by *Ground Science* to assess the geotechnical qualities of the land and the impact of the proposed development on the ground and surface conditions. The findings of the investigation are as follows:

- *The soil profile of the site is comprised of clayey sands, sandy clays, clays and weathered rock (clayey gravels/gravels). Uncontrolled fill (clayey/silty sands and clays/gravelly clays) was found in a majority of test pits, ranging from 0.2m to 0.9m in depth; and*
- *The depth of the concrete basin floor ranged from 0.075m to 0.105m thick, with underlying soils generally comprised of clays, clayey sands and sandy clays which were non-acid sulphate forming.*

Further recommendations are provided in relation to the civil work, earthwork and soil conditioning required to accommodate the proposed development within the subject site.

The Geotechnical Investigation Report is provided in **Appendix I**.

4.4.4 Land Contamination

A Land Contamination Investigation was undertaken by *Environmental Site Assessments (ESA)* to ascertain whether the site is potentially contaminated, as defined in *Ministerial Direction 1 – Potentially Contaminated Land*. The findings of the investigation are as follows:

- *Site inspection was undertaken on 21 September 2015, with twelve soil samples being collected and tested for contamination.*
- *Through laboratory testing, it was determined that there is no indication that the site is potentially contaminated, therefore the site should be suitable for residential development and other sensitive uses.*

The Land Contamination Investigation Report is provided in **Appendix J**.

4.4.5 Stormwater

A Stormwater Management Plan (SWMP) has been developed by *SMEC*, in consultation with Council, to retain and treat stormwater on site. The findings of the stormwater investigation are as follows:

- *Based on a “Net No Change” analysis for the catchment, the discharge from the site is to be restricted to 0.137m³/s.*
- *The analysis has confirmed the 5 year ARI developed flows are to be retarded on site prior to connecting to the existing 300mm diameter pipeline in Augustine’s Drive.*
- *A retarding basin must be sized to store a volume of 265m³.*
- *The external roads have enough capacity to safely convey the 100 year developed flows.*
- *A MUSIC (Model for Urban Water Stormwater Improvement Conceptualisation) model has been completed and best practice pollutant removal targets are achieved by incorporating two swales (along the main road entrance and Barwon Water’s easement on the eastern boundary) and a bio-retention system within the retarding basin. Further details are to be provided to Council at detailed design stage, regarding the constructability of the bio-retention system and suitable filter media to be adopted.*
- *A reserve area of 1,298m² is to be located in the south-east corner for retardation and treatment purposes. This area is based on a depth of 1.25 metres and has taken into account batters, offsets to existing assets and freeboard of 600mm.*
- *Council advised they will maintain the treatment and storage assets in the future.*

The Stormwater Management Plan is provided in **Appendix K**.

4.4.6 Noise Assessment

A Noise Assessment was provided by Watson Moss Growcott (Ref. 11837-7jg, dated November 2016) at the request of VicRoads, who is a referral authority. The purpose of the report is to assess the impacts of noise generated through increased traffic on the Geelong Ring Road. If noise modelling found levels above 63dB(A) L10_{18hr} on site, noise attenuation measures would be required to protect residents.

The following parameters were used for the assessment:

- Based on information provided by VicRoads, WMG adopted a linear traffic growth rate of 3% per year and provided a road surface of 14/7 stone seal, amongst other criteria;
- Noise logging locations measured noise levels ranging from 58.5-59.5 dB(A) L10_{18hr} at Location 1 (closest to GRR) and 50.5-54.5 dB(A) L10_{18hr} at Location 2;
- Handheld noise measurements and unattended noise logging was undertaken on 1-7 March 2016;

The findings of this report were as follows:

- Noise prediction modelling using the predetermined criteria provided by VicRoads resulted in an estimated noise level of 60.6 dB(A) L10_{18hr} at the most noise sensitive location with existing road surface type (14/7 Stone Seal).
- Based on the findings, it was advised that no noise amelioration would be required at the site.

The finding have been acknowledged by VicRoads who raised no objection to the proposal.

Refer to the Noise Assessment Report provided at **Appendix L** and VicRoad’s referral response.

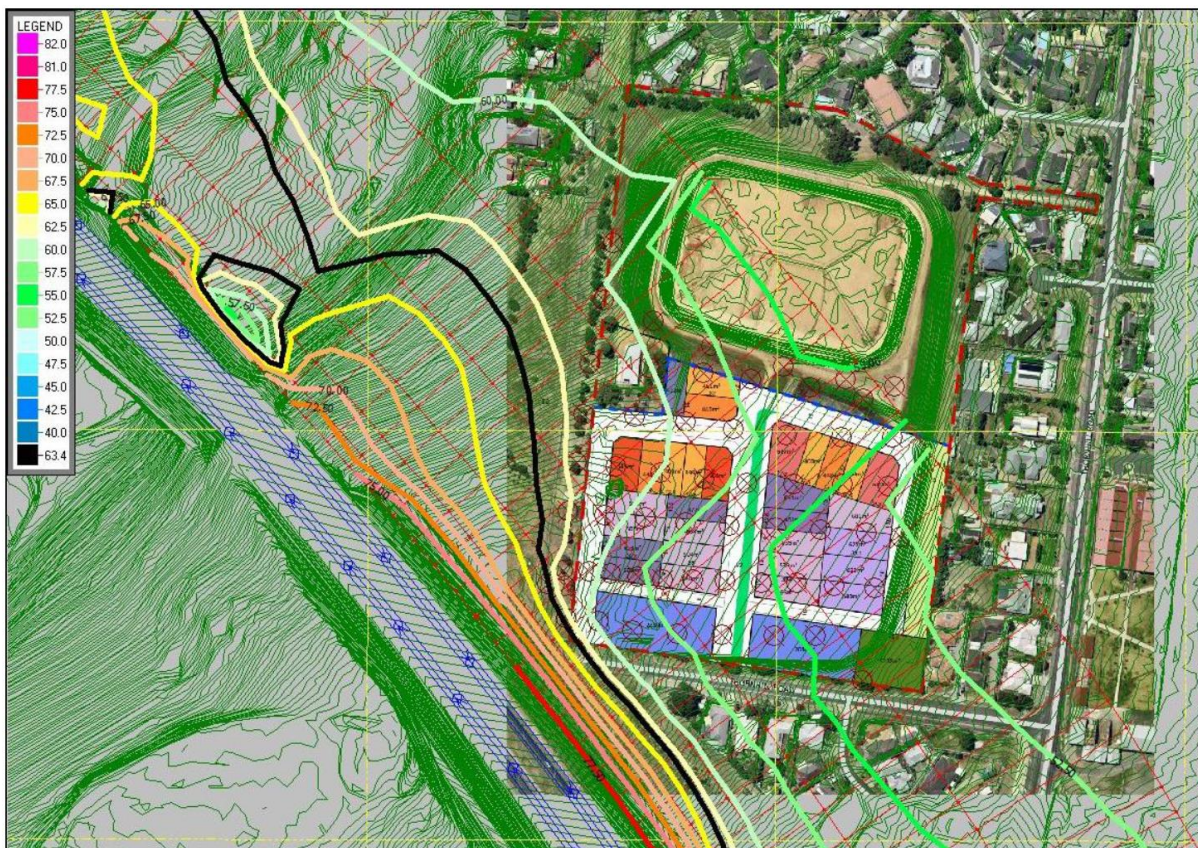


Figure 6: 2027 Predicted Noise Level Contours (WMG, Nov 2016)

4.5 Design Response

The proposed residential subdivision is an appropriate development proposal within the subject site and in the context of the local area. The wider urban area is predominantly for residential purposes of which the proposal is sympathetic. Overall there would be no appreciable adverse amenity impacts to neighbouring properties.

The proposed lot sizes are of conventional densities and medium density residential outcomes are facilitated through the two proposed superlots to accommodate the diverse housing requirements and needs of the wider local population. The subdivision provides predominantly larger lot sizes which are representative of lot patterns in the locality. This outcome provides a holistic subdivision design which seamlessly integrates within the existing urban pattern, ultimately providing housing stock which will contribute to the overarching neighbourhood character of the residential area.

In addition to the residential arrangement of the land, the proposal also incorporates key infrastructure and amenity to the local area in the form of encumbered passive open space and communal shared paths. The reserves on the eastern and western boundaries of the property

provide key pedestrian linkages to the wider residential area, providing access and amenity opportunities to residents and encouraging a more integrated and active community.

Key drainage infrastructure, in the form of a retarding basin in the south-east, will provide a sustainable stormwater management solution to the urban development of the land. The result is a more considered approach to water management, which fits into the proposed residential area and provide a high-quality aesthetic to the local neighbourhood.

5 PLANNING ASSESSMENT FRAMEWORK

This section outlines the planning policies and controls of the Greater Geelong Planning Scheme that are relevant to this proposal.

5.1 Assessment Summary

The assessment of the proposed subdivision against the policy requirements of the Greater Geelong Planning Scheme are to be read in conjunction with the zoning amendments proposed by Planning Scheme Amendment (C338) under Section 96A of the *Planning and Environment Act 1987*.

Accordingly, the following assessment relates to the planning framework that will be applied by C338 including the General Residential Zone (GRZ1).

5.2 State Planning Policy Framework (SPPF)

The following clauses of the SPPF are considered relevant to the proposed subdivision of the subject site:

Clause 11.02-1 ‘Supply of urban land’ seeks to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.

Clause 11.03-1 ‘Open space planning’ seeks to assist creation of a diverse and integrated network of public open space commensurate with the needs of the community.

Clause 11.03-2 ‘Open space management’ seeks to provide for the long term management of public open space.

Clause 11.04-2 ‘Housing choice and affordability’ seeks to provide a diversity of housing in defined locations that cater for different households and are close to jobs and services.

Clause 11.04-4 ‘Liveable communities and neighbourhoods’ seeks to create healthy and active neighbourhoods and maintain Melbourne’s identity as one of the world’s most liveable cities.

Clause 11.04-5 ‘Environment and water’ seeks to protect natural assets and better plan our water, energy and waste management systems to create a sustainable city.

Clause 11.05-1 ‘Regional settlement networks’ seeks to promote the sustainable growth and development of regional Victoria through a network of settlements identified in the Regional Victoria Settlement Framework plan.

Clause 11.05-4 ‘Regional planning strategies and principles’ seeks to develop regions and settlements which have a strong identity, are prosperous and are environmentally sustainable.

Clauses 11.07 ‘Geelong (G21) regional growth’ seeks to optimise infrastructure and consolidate growth; create unique and connected communities; protect, restore and enhance the region’s unique environment; and allow communities to live, work and participate locally.

Clause 12.01-2 ‘Native vegetation management’ seeks to ensure that permitted clearing of native vegetation results in no net loss in the contribution made by native vegetation to Victoria’s biodiversity by applying the risk-based approach to managing native vegetation as set out in ‘Permitted clearing of native vegetation – Biodiversity assessment guidelines’ (Department of Environment and Primary Industries, September 2013).

Clause 13.03-1 ‘Use of contaminated and potentially contaminated land’ seeks to ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely by requiring applicants to provide adequate information on the potential for contamination to have adverse effects on the future land use, where the subject land is known to have been used for industry, mining or the storage of chemicals, gas, wastes or liquid fuel.

Clause 14.02-2 ‘Water quality’ seeks to protect water quality.

Clause 14.02-3 ‘Water conservation’ seeks to ensure that water resources are managed in a sustainable way.

Clause 15.01-1 ‘Urban design’ seeks to create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.

Clause 15.01-3 ‘Neighbourhood and subdivision design’ seeks to ensure the design of subdivisions achieves attractive, liveable, walkable, cyclable, diverse and sustainable neighbourhoods.

Clause 15.01-4 ‘Design for safety’ seeks to improve community safety and encourage neighbourhood design that makes people feel safe.

Clause 15.01-5 ‘Cultural identity and neighbourhood character’ seeks to recognise and protect cultural identity, neighbourhood character and sense of place.

Clause 15.02-1 ‘Energy and resource efficiency’ seeks to encourage land use and development that is consistent with the efficient use of energy and the minimisation of greenhouse gas emissions.

Clause 16.01-1 ‘Integrated housing’ seeks to promote a housing market that meets community needs.

Clause 16.01-2 ‘Location of residential development’ seeks to locate new housing in or close to activity centres and employment corridors and at other strategic redevelopment sites that offer good access to services and transport.

Clause 19.03-2 ‘Water supply, sewerage and drainage’ seeks to plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment.

Clause 19.03-3 ‘Stormwater’ seeks to reduce the impact of stormwater on bays and catchments.

ASSESSMENT:

The proposal will result in an appropriate subdivision development within the local urban area. The redevelopment of surplus Barwon Water land provides an opportunity to consolidate residential development within the local area, minimising urban sprawl and locating dwellings in proximity to existing infrastructure and established amenity.

The proposed subdivision design is generally consistent with the urban pattern of the local area and provides a mixture of lot sizes to facilitate a range of dwelling densities to accommodate the varying needs of future residents.

The proposed subdivision will not jeopardise the ecological or Aboriginal cultural heritage significance of the subject site, with biodiversity offsets required to facilitate the removal of native vegetation on the land. The historical use of the land has not resulted in the contamination of soil, and the land has been assessed to be appropriate for residential development.

An integrated drainage and stormwater system has been designed for the subdivision, providing a considered approach to water management. Existing drainage reserves within the subject site have been utilised for the provision of linear open space linkages connecting with the established local neighbourhood and existing pedestrian movement networks.

5.3 LPPF Incorporating the Municipal Strategic Statement (MSS)

The following clauses of the MSS are considered relevant to the proposed subdivision of the subject site:

Clause 21.05 ‘Natural Environment’ provides an overview of the key issues impacting the municipality’s natural environment, directing key objectives and strategies to resolve these issues. Objectives which are relevant to the proposed subdivision include:

- *To reduce the amount of runoff from urban development and improve the quality of stormwater runoff entering waterways, estuarine and marine waters.*
- *To protect, maintain and enhance the biodiversity of the municipality.*

Clause 21.06 ‘Settlement and Housing’ provides an overview of the key issues impacting urban growth and housing stock within the municipality, directing key objectives and strategies to resolve these issues. Objectives which are relevant to the proposed subdivision include:

- *To improve housing affordability through the maintenance of appropriate urban land supplies, the promotion of competition in the housing market and the development of a diverse range of well located housing stock.*
- *To provide for the consolidation of existing urban areas in a managed way.*
- *To encourage an appropriate range of development densities.*
- *To improve accessibility to urban services.*
- *To manage the impact of urban change on existing neighbourhoods.*
- *To ensure that new development responds to the existing neighbourhood character.*
- *To protect areas with a significant garden character.*
- *To protect areas with views to significant landscape features.*
- *To ensure that urban development enhances Geelong’s sense of place and identity.*

Clause 21.08 ‘Development and Community Infrastructure’ provides an overview of the key issues impacting key infrastructure and services within the municipality, directing objectives and strategies to resolve these issues. Objectives which are relevant to the proposed subdivision include:

- *To develop a safe, accessible, equitable and efficient traffic, transport and freight network.*
- *To provide services that respond to the changing needs of the City’s population.*
- *To develop a comprehensive, safe and accessible open space network.*
- *To ensure safe access to community and development infrastructure for all members of the community.*

ASSESSMENT:

The proposed subdivision responds to the objectives of the MSS through consolidating residential development within established residential areas. The subdivision will provide a range of dwelling densities to respond to the diverse local community, while providing lots and subdivision layouts which are in keeping with neighbourhood character.

The proposed subdivision provides an integrated approach to stormwater drainage, providing a number of water sensitive urban design initiatives and the provision of necessary drainage infrastructure. Likewise, the subdivision area will be well serviced by a safe and accessible movement network, providing passive open space amenity and connection to services and utilities.

5.4 Local Planning Policies

There are no Local Planning Policies within the LPPF that are considered relevant to the proposed subdivision of the subject site.

5.5 Zoning

The current zoning of the subject site is the Public Use Zone (PUZ1), which is consistent with Barwon Water’s historical use of the land for water storage. The proposed zoning of the land (currently being amended through Amendment C338) is the General Residential Zone (GRZ1), to facilitate the residential development of the land. The following section addresses both zoning provisions.

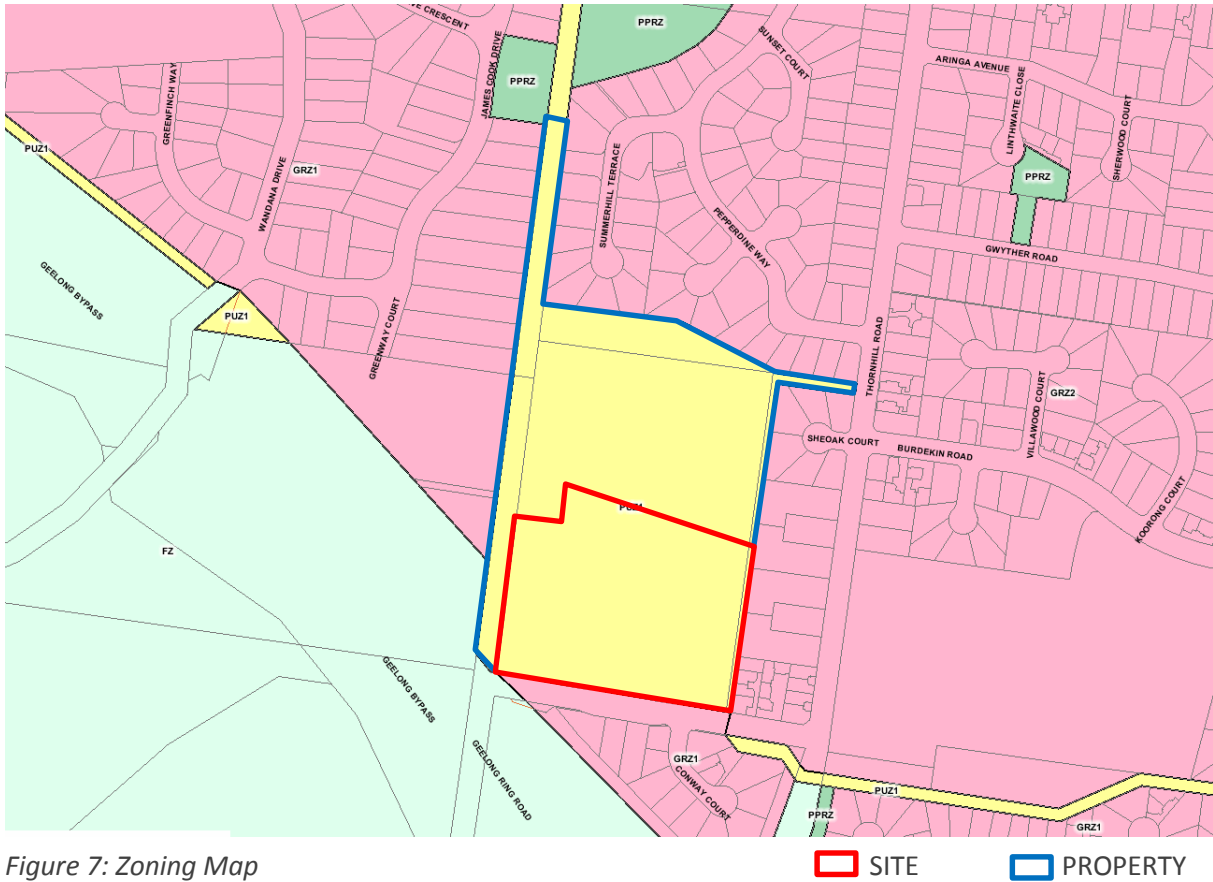


Figure 7: Zoning Map

5.5.1 Public Use Zone (PUZ1)

The subject site is located in the **Public Use Zone (PUZ1)**. The purposes of the PUZ are:

- To recognise public land use for public utility and community services and facilities.
- To provide for associated uses that are consistent with the intent of the public land reservation or purpose.

PUZ1 relates specifically to ‘Services and Utilities’. Pursuant to PUZ, an application to use land must be for the purposes of ‘Service and Utilities’ and be carried out by or on behalf of the public land manager. The zone is obviously inappropriate for the intended use of the land, hence the rezoning request.

To facilitate the proposed subdivision and residential development of the land, the subject site is proposed to be rezoned to the General Residential Zone (GRZ1), a more appropriate zoning control to facilitate the proposed residential use and development of the land.

5.5.2 General Residential 1 Zone (GRZ1)

The subject site is proposed to be located in the **General Residential 1 Zone (GRZ1)**. The purposes of the GRZ are:

- To encourage development that respects the neighbourhood character of the area.
- To implement neighbourhood character policy and adopted neighbourhood character guidelines.
- To provide a diversity of housing types and moderate housing growth in locations offering good access to services and transport.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

Pursuant to GRZ1 a planning permit is required to subdivide land.

An application to subdivide land, other than an application to subdivide land into lots each containing an existing dwelling or car parking space, must meet the requirements and objectives of Clause 56 and should meet the standards of Clause 56.

An application to subdivide land pursuant to the GRZ1 is exempt from advertising, and no variations are specified within the Schedule to the GRZ1 which are applicable to the proposed subdivision.

In determining the application the Council will need to consider the following Decision Guidelines:

- *The purpose of this zone.*
- *The pattern of subdivision and its effect on the spacing of buildings.*
- *The objectives and standards of Clause 56.*

ASSESSMENT:

The proposed subdivision provides the necessary lot sizes, dimensions and orientation to effectively accommodate a range of dwelling typologies and densities that will comply with ResCode and Building Code requirements. The proposed subdivision responds to the purpose of this zone by encouraging residential development at a variety of densities, which will respect neighbourhood character and implement ideals of housing diversity.

An assessment of the proposed subdivision against the objectives and standards of Clause 56 is provided in **Appendix M**.

5.6 Overlays

There are no overlays currently applicable to the subject site. An intention of proposed Planning Scheme Amendment (C338) is to introduce the Design and Development Overlay (DDO14) to the subject site, consistent with other residential zoned land in the local area.

5.6.1 Design and Development Overlay (DDO14)

The subject site is proposed to be included in the **Design and Development Overlay (DDO14)**. The purpose of the DDO is:

- *To identify areas which are affected by specific requirements relating to the design and built form of new development.*

DDO14 applies to **'Dwellings over 7.5m in areas with access to views'**. The Design objective of DDO14 is:

- *To ensure that the siting, height and visual bulk of dwellings achieves a reasonable sharing of views between properties to significant landscape features such as the coast (ocean and foreshore), Corio Bay, Barwon River, Central Geelong, Barabool Hills and the You Yangs.*

Pursuant to the DDO14, a permit is not required to subdivide land.

ASSESSMENT:

A permit is not required to subdivide land, and no buildings and works relating to dwelling development is proposed as part of this application, therefore no permit considerations are required under this control.

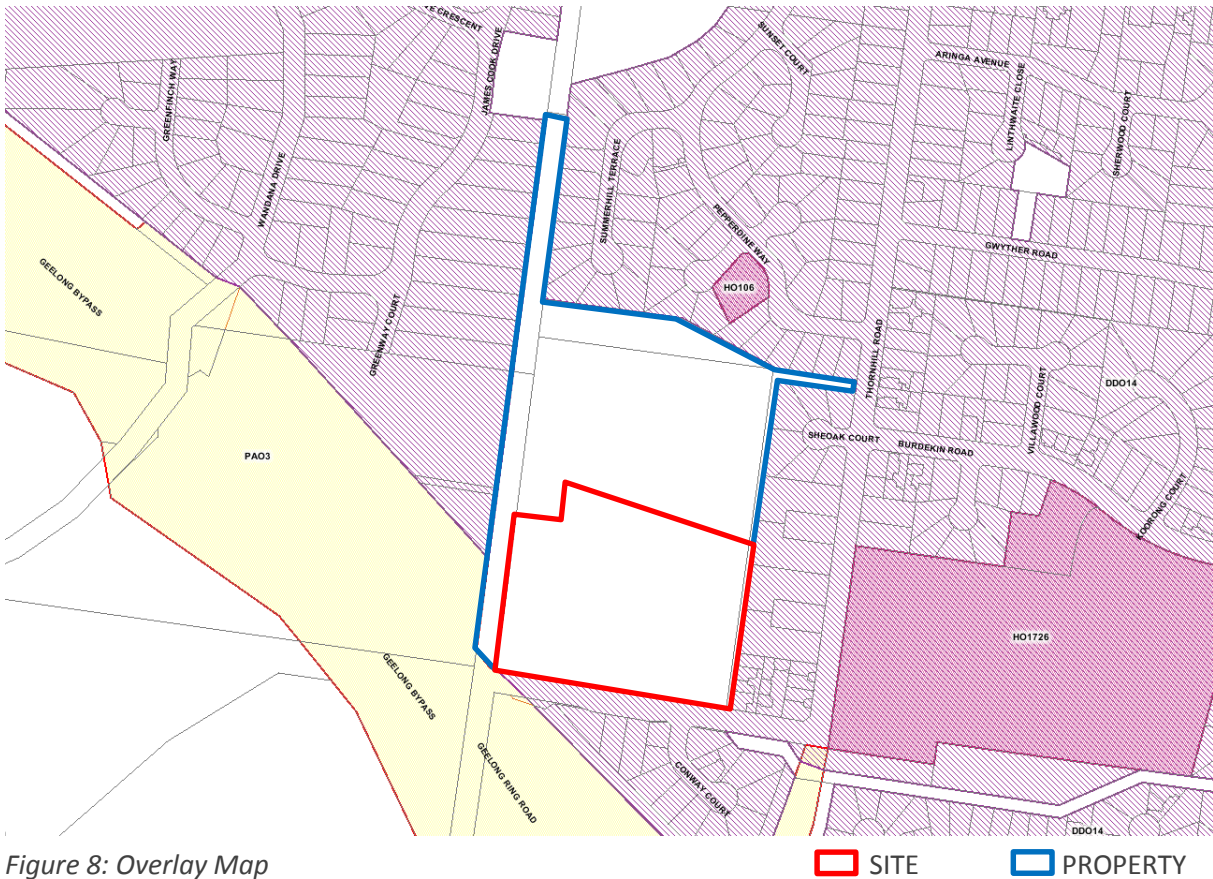


Figure 8: Overlay Map

5.7 Particular Provisions

The following Particular Provisions are considered relevant to the proposed subdivision of the subject site.

5.7.1 Clause 52.01 ‘Public Open Space Contribution and Subdivision’

Clause 52.01 requires, ‘a person who proposes to subdivide land must make a contribution to the council for public open space in an amount specified in the schedule to this Clause. If no amount is specified, a contribution for public open space may still be required under Section 18 of the Subdivision Act 1988’.

ASSESSMENT:

The Clause 52.01 schedule requires a 10% public open space contribution for the subdivision of ten or more lots on land that is zoned for residential purposes after 31 August 2007.

In lieu of a monetary public open space contribution to Council, Barwon Water propose to undertake improvements to the adjoining Pipe Track, between Thornhill Road and Roslyn Road as follows:

- Construction of a shared path (2.5 metres wide);
- Provision of three (3) bench seats (as shown on the Landscape Master Plan);
- One (1) drinking fountain (as shown indicatively on the Landscape Master Plan).

This assumes that Council will have full management responsibility (including all maintenance) of the pipe track reserve within this defined section. Council have indicated in-principal support for this approach.

5.7.2 Clause 52.17 ‘Native Vegetation’

Clause 52.17 has the following purposes:

- *To ensure permitted clearing of native vegetation results in no net loss in the contribution made by native vegetation to Victoria’s biodiversity. This is achieved through the following approach:

 - *Avoid the removal of native vegetation that makes a significant contribution to Victoria’s biodiversity.*
 - *Minimise impacts on Victoria’s biodiversity from the removal of native vegetation.*
 - *Where native vegetation is permitted to be removed, ensure that an offset is provided in a manner that makes a contribution to Victoria’s biodiversity that is equivalent to the contribution made by the native vegetation to be removed.**
- *To manage native vegetation to minimise land and water degradation.*
- *To manage native vegetation near buildings to reduce the threat to life and property from bushfire.*

Pursuant to this clause a permit is required to remove, destroy or lop native vegetation, including dead native vegetation.

An application to remove, destroy or lop native vegetation must be accompanied by the following information, as appropriate:

- *The location of the native vegetation to be removed.*
- *A description of the native vegetation to be removed, including the area of the patch of native vegetation and/or the number of any scattered trees to be removed.*
- *Maps or plans containing information set out in the Permitted clearing of native vegetation – Biodiversity assessment guidelines, (Department of Environment and Primary Industries, September 2013).*
- *Recent dated photographs of the native vegetation to be removed.*
- *Topographic information, highlighting ridges, crests and hilltops, streams and waterways, slopes of more than 20 percent, drainage lines, low lying areas, saline discharge areas, and areas of existing erosion.*
- *A copy of any property vegetation plan that applies to the site.*
- *Where the removal, destruction or lopping of vegetation is to create defensible space, a statement explaining why removal, destruction or lopping of native vegetation is required having regard to other available bushfire risk mitigation measures. This does not apply to the creation of defensible space in conjunction with an application under the Bushfire Management Overlay.*
- *Details of any other native vegetation that was permitted to be removed on the same property with the same ownership in the five year period before the application for a permit to remove native vegetation is lodged.*
- *The strategic biodiversity score of the native vegetation to be removed.*
- *The offset requirement if the native vegetation is permitted to be removed.*

ASSESSMENT:

The proposed subdivision requires the removal of 0.224 hectares of native vegetation. The offset requirements for removal of 0.224ha of native vegetation is 0.011 General Biodiversity Equivalence Units (BEU) with a minimum Strategic Biodiversity Score of 0.102. Refer to the Ecological and Cultural Heritage Assessment (ECHA) provided at **Appendix F**.

The ECHA provides an assessment of the offset requirements to be provided for the removal of vegetation, and a response to the application requirements of Clause 52.17 (Table S3). In summary, the proposed native vegetation removal will require permit approval, and the necessary offset

contributions will be provided as a permit condition, pending approval of this planning permit application.

5.7.3 Clause 56 'Residential Subdivision'

Clause 56 has the following purposes:

- *To create liveable and sustainable neighbourhoods and urban places with character and identity.*
- *To achieve residential subdivision outcomes that appropriately respond to the site and its context for:*
 - *Metropolitan Melbourne growth areas.*
 - *Infill sites within established residential areas.*
 - *Regional cities and towns.*
- *To ensure residential subdivision design appropriately provides for:*
 - *Policy implementation.*
 - *Liveable and sustainable communities.*
 - *Residential lot design.*
 - *Urban landscape.*
 - *Access and mobility management.*
 - *Integrated water management.*
 - *Site management.*
 - *Utilities*

The provisions of this clause apply to Clause 32.08-2 of the General Residential Zone.

An application to subdivide land:

- *Must be accompanied by a site and context description and a design response.*
- *Must meet all of the objectives included in the clauses specified in the zone.*
- *Should meet all of the standards included in the clauses specified in the zone.*

ASSESSMENT:

The proposed subdivision is generally in accordance with the standards, and complies with all of the objectives, specified within Clause 56. Refer to the Clause 56 Assessment provided in **Appendix M** for the comprehensive assessment against the clause.

5.8 General Provisions

The following General Provisions are considered relevant to the proposed subdivision of the subject site.

5.8.1 Clause 65 Decision Guidelines

Approval of an application or plan, states that before deciding on an application to subdivide land, the responsible authority must also consider, as appropriate:

- *The suitability of the land for subdivision.*
- *The existing use and possible future development of the land and nearby land.*
- *The availability of subdivided land in the locality, and the need for the creation of further lots.*
- *The effect of development on the use or development of other land which has a common means of drainage.*
- *The subdivision pattern having regard to the physical characteristics of the land including existing vegetation.*

- *The density of the proposed development.*
- *The area and dimensions of each lot in the subdivision.*
- *The layout of roads having regard to their function and relationship to existing roads.*
- *The movement of pedestrians and vehicles throughout the subdivision and the ease of access to all lots.*
- *The provision and location of reserves for public open space and other community facilities.*
- *The staging of the subdivision.*
- *The design and siting of buildings having regard to safety and the risk of spread of fire.*
- *The provision of off-street parking.*
- *The provision and location of common property.*
- *The functions of any Body Corporate.*
- *The availability and provision of utility services, including water, sewerage, drainage, electricity and gas.*
- *If the land is not sewered and no provision has been made for the land to be sewered, the capacity of the land to treat and retain all sewage and sullage within the boundaries of each lot.*
- *Whether, in relation to subdivision plans, native vegetation can be protected through subdivision and siting of open space areas.*

ASSESSMENT:

The provisions of this Clause do not introduce any additional issues or decision making criteria that has not already been considered and addressed by other provisions of the Planning Scheme.

Clause 66 ‘Referral and Notice Provisions’ sets out referral and notice requirements. The application must be referred to the following authorities pursuant to Clause 66.01 and Clause 66.03 including the relevant water, drainage, sewerage, electricity supply and gas supply authorities. All referral authorities have 28 days to respond to a referred application.

6 CONCLUSION

Barwon Water's proposed residential subdivision of surplus water storage land at 176-194 Thornhill Road, Highton is an appropriate response to the current opportunities presented by the site.

The proposed subdivision provides an integrated residential outcome including a diverse range of lot sizes to accommodate and respond to the changing needs of residents, while incorporating key drainage infrastructure for the urban area. Key public open space connections are also made available within the general vicinity and would provide key pedestrian movement networks which would encourage a healthy and active community lifestyle.

The proposed subdivision development can be comfortably accommodated within the site and with consistency and sympathy to the existing and preferred neighbourhood character.

The site's biodiversity values will not be adversely affected by the proposed development, with vegetation offsets required within the new development. No adverse impacts will occur to adjoining land uses, with the residential outcome being generally in accordance with the overarching land use in the area.

As demonstrated in this report the proposal is appropriate and warrants Council approval.

APPENDIX A CERTIFICATE OF TITLE

APPENDIX B SITE ANALYSIS PLAN

APPENDIX C SUBDIVISION CONCEPT PLAN

APPENDIX D LANDSCAPE MASTER PLAN

APPENDIX E PRELIMINARY TRANSPORT ASSESSMENT

APPENDIX F ECOLOGY & CULTURAL HERITAGE ASSESSMENT

APPENDIX G TREE RETENTION/REMOVAL PLAN

**APPENDIX H PROPOSED SHARED PATH ALIGNMENT
PLAN**

APPENDIX I GEOTECHNICAL INVESTIGATION REPORT

APPENDIX J LAND CONTAMINATION REPORT

APPENDIX K STORMWATER MANAGEMENT PLAN

APPENDIX L NOISE ASSESSMENT REPORT

APPENDIX M CLAUSE 56 ASSESSMENT

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