



GOLDEN PLAINS SHIRE

ATTACHMENTS

**Under Separate Cover
Ordinary Council Meeting**

6.00pm Tuesday 28 April 2020

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PLANNING APPLICATION P20-007 FOR THE DEVELOPMENT OF LAND FOR TWO LOT SUBDIVISION

File Number: P20-007
Author: Sandra Tomic, Town Planner
Authoriser: Phil Josipovic
Director Infrastructure and Development
Applicant: [REDACTED]
Owner: [REDACTED]
Proposal: The Development of land for two lot subdivision.
Location: 27 Steddy Road, Lethbridge
Attachments:

1. Draft Conditions
2. Objection
3. Full Officer Report
4. Planning Application

RECOMMENDATION

That Council resolves to issue a Notice of Decision to Grant a Planning Permit for the development of the land for two lot subdivision at 27 Steddy Road, Lethbridge subject to the conditions attached to this report.

EXECUTIVE SUMMARY

This report relates to a planning permit application for the development of land for two lot subdivision at 27 Steddy Road, Lethbridge. This report provides a background to the application and a summary of the relevant planning considerations.

PURPOSE

The application has been referred to the Council Meeting for determination because there is an objection to the application.

CONFLICT OF INTEREST

In accordance with Section 80B of the Local Government Act 1989, the officers preparing this report declare no conflict of interest in regards to this matter.

COUNCIL PLAN

Managing natural and built environments.

Agenda

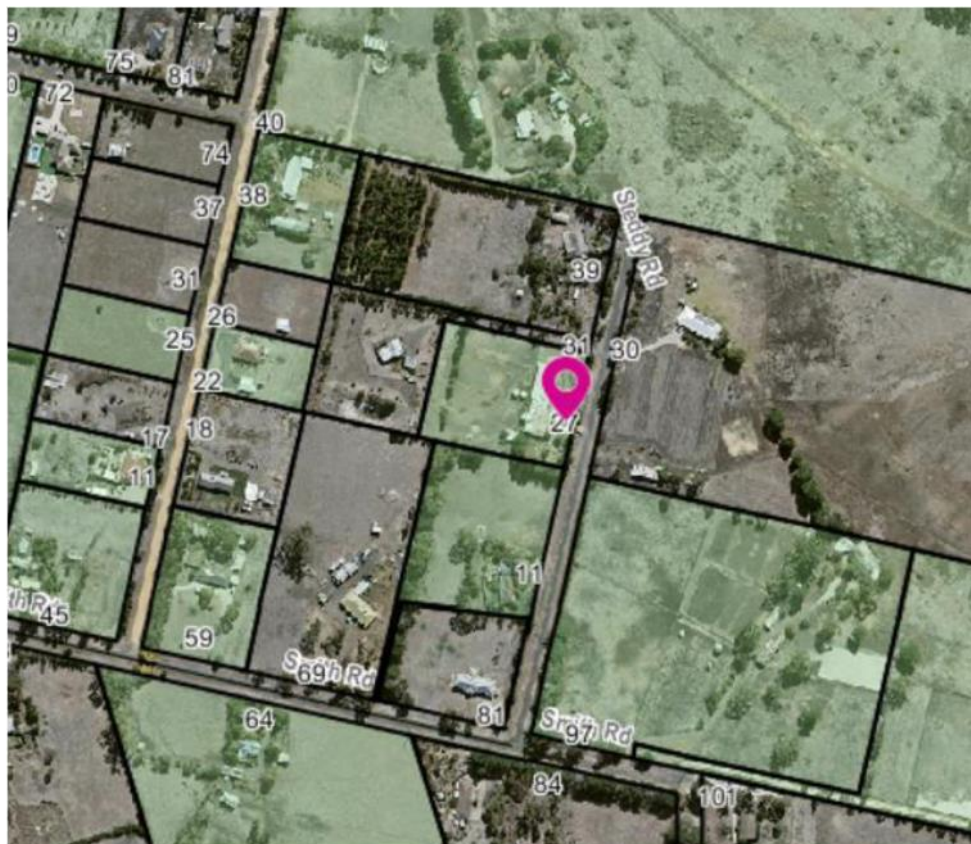
BACKGROUND INFORMATION

Site description

The subject site is located on the west side of Steddy Road, Lethbridge. The site currently contains a dwelling and outbuildings. There is one available access point to the site, via Steddy Road which is sealed council road and provides connection to the township of Lethbridge, via Smith Street and the Midland Highway.

The subjects site is zoned Low Density Residential Zone (LDRZ) and is covered by the Environmental Significant Schedule 2 (ESO2) and Design and Development Overlay schedule (DDO5). The site is 1.02ha in area and is not subject to any restrictive covenants.

Site map



The proposal

The application proposes the development of the land for a two (2) lot subdivision. A copy of the application and plans available and attached at attachment 4. The subdivision proposes the following features:-

Lot 1 – 6099sqm, retain the existing dwelling and outbuildings. Existing access from Steddy Road to be retained.

Agenda

Lot 2 – 4067sqm, vacant with vehicle access from Steddy Road. This lot proposes a 30m frontage to Steddy Road and has shown indicative building and effluent envelopes

An indicative plan has been submitted showing the anticipated layout of a future subdivision.



CONSULTATION

Notice of the application was given in accordance with Section 52 (1) (a) of the *Planning and Environment Act 1987*. Notice was provided by mail to 6 adjoining owners and occupiers. Notice was also carried out by placing a sign on the site.

As a result of the public notice, 1 objection was received. A copy of the objection are attached. (Attachment 2)

The main concerns raised by the objection relate to, privacy, concerns regarding future two storey dwelling and design layout.

No consultation meeting was held due to the current hold on public gatherings as a result of COVID-19. This includes no unnecessary meetings held by Council.

ASSESSMENT

Processing of the application

The application was submitted to Council on 14 January 2020 and a preliminary assessment was undertaken. The application was internally referred to Council’s Works and Environmental Health Department. These parties had no objection to the issue of a permit subject to conditions being placed on the permit.

Golden Plains Planning Scheme

Planning Policy Framework (PPF)

 Agenda

Clause 11.02 Managing Growth

The objective of the policy for the supply of urban land (Clause 11.02-1S) is to ensure a sufficient supply of land is available for residential and other uses. Planning for urban growth should consider:

- Opportunities for the consolidation, redevelopment and intensification of existing urban areas.
- Neighbourhood character and landscape considerations.
- The limits of land capability and natural hazards and environmental quality.
- Service limitations and the costs of providing infrastructure.

Clause 15.01 – Urban Environment

The objective of the policy for subdivision design (Clause 15.01-3S) is to ensure the design of subdivision achieves, safe, accessible, diverse and sustainable neighbourhoods. In the development of new residential areas and the redevelopment of existing areas, subdivisions should be designed to create liveable and sustainable communities by, among other things, providing a range of lot sizes to suit a variety of dwelling and household types to meet the need and aspiration of the different groups of people.

Clause 16.01 – Residential Development

The objectives of the policy for the location of residential development (Clause 16.01-2S) is to locate new housing in designated locations that offer good access to jobs, services and transport. The policy seeks to increase the proportion of new housing in designated locations with established urban areas, ensure an adequate supply of redevelopment opportunities within the established urban area to reduce the pressure for fringe development and to identify opportunities for increased residential densities to help consolidate urban areas.

Local Planning Policy Framework**Clause 21.02 Settlement**

The local policy for settlement patterns (Clause 21.02-1) includes objectives to make efficient use of and encourage the consolidation of existing township areas. The policy seeks to direct residential development to township areas that have reticulated water, sewerage and stormwater drainage and community services and facilities. In fill development in towns lacking sewerage treatment will be required to provide onsite effluent treatment.

The largest town Bannockburn with approximately 19% of the population, followed by Teesdale with approximately 8% of the population. All other townships have a population of less than 1000 people. This highlights the dispersed nature of the population in Golden Plains Shire.

Clause 21.07 – Local areas – Small Towns

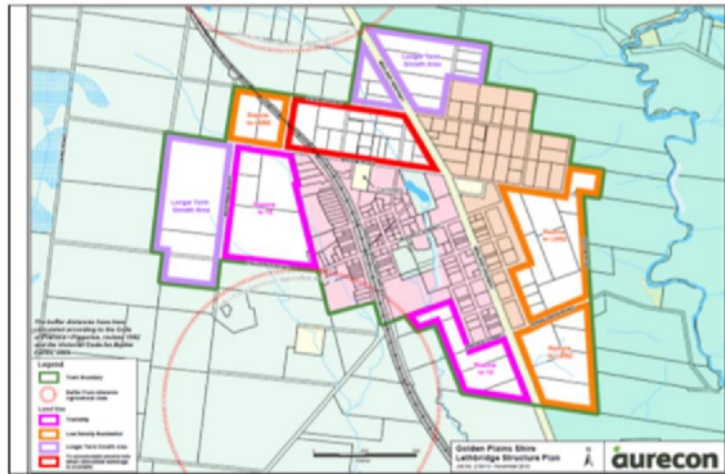
Town structure plans have been prepared for most settlements and establish a basis for future strategic planning decisions in each town. The areas for which the town structure plans apply are identified in the Golden Plains Strategic Framework Plan

(Clause 21.01-1) and address:

- The preferred layout of residential, commercial, community and other land uses based on a ten-year outlook.
- Infrastructure servicing
- Desired future character

Agenda

- Environmental sustainability.



Clause 22.09 – Low Density Subdivision Policy (LDRZ)

The policy applies to subdivision in the Low Density Residential (LDRZ).

Relative to the application proposal key objectives of the LDRZ policy include but not limited to:-

- To ensure new lots created in the Low Density Residential Zone are sufficient size to treat and retain wastewater within their property boundaries; and
- To maintain an open and spacious character for low density residential areas across the Shire through:
 - Design that provides for open space and landscaping;
 - Retention of existing vegetation;
 - Avoiding creation of lots with battle-axe access in greenfield development;
 - The provision of wide driveways/accessways with sufficient areas available for landscaping; and
 - Lot sizes with sufficient area to accommodate setbacks required by the Design and Development Overlay schedule 5

Zone and overlay provisions

Low Density Residential Zone (LDRZ)

The site is located in a Low Density Residential Zone (LDRZ). The purpose of the LDRZ is to provide for low density residential development on lots which in the absence of reticulated sewerage, can treat and retain all wastewater. A permit is required to subdivide land under the provisions of the LDRZ. The LDRZ sets a minimum lot size of 0.4ha. The decision guidelines of The LDRZ require Council to be considered, as appropriate.

Subdivision

- The protection and enhancement of the natural environment and character of the area including the retention of vegetation and faunal habitat and the need to plant vegetation along waterways, gullies, ridgelines and property boundaries
- The availability and provisions of utility services, including sewerage, water, drainage, electricity, gas and telecommunications.

Agenda

General provisions

Before deciding on an application to subdivide land, the decision guideline contained in Clause 65.02 must be considered, 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.

Discussion

Planning Scheme

The proposed subdivision is considered to satisfy the relevant provisions of the planning scheme including State and Local Planning Policy for Low Density Residential Development (Clause 22.09).

Low Density Residential Development (Clause 22.09) seeks to ensure new lots are sufficient size for on-site effluent disposal and maintain the character of the low density residential areas. A land capability assessment (LCA) submitted with the application demonstrates that the proposed lots area capable of accommodating on-site effluent disposal. The LCA was referred to Councils Environmental Health Department; a condition will be included requiring any dwelling on lot 2 does not exceed 4 habitable bedrooms. Habitable bedrooms include any room that may be closed off with a door, such as a study, library or sunroom that could be used for the purposes of a bedroom. In addition, the proposed subdivision has access to adequate infrastructure including a road network, drainage (upgrades as required) and utilities.

The proposed subdivision design contributes to the character of the area by creating lots of sufficient size to provide setbacks in accordance with the DDO5, allowing for street frontage to both lots and providing space for landscaping.

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Objectors concerns

The objector raised concerns regarding future built form and requested that a restriction be placed on the title restricting any future dwelling to a single storey dwelling. The objector also raised questions in relation to upgrades of Steddy road and Smith Road, water pressure, stormwater and septic run-off and the nominated dwelling location.

On inspection of the site and surrounding area it is acknowledged that dwellings are predominantly single storey which could also be attributed, to the fact that lots are big enough to accommodate large footprints, without the need to go double storey, however a two storey form is an acceptable built form within a residential area. The permit applicant has provided comment within their written submission that they would accept a restriction to be placed on any future title to restrict any future dwelling on Lot 2 to a single storey dwelling. This has been addressed via a recommended condition.

The application was referred to Council Works Department, conditions will be included regarding upgrading the existing vehicle crossing to lot 1 and providing a new vehicle crossover to Lot 2. There is no requirement for the Road (Steddy Road or connecting roads) to be upgraded for a two lot subdivision.

The purpose of the LDRZ is to provide for low density residential development on lots which can treat and retain all wastewater. The minimum lot size in the LDRZ is 0.4ha. The application is considered to satisfy the provisions of the LDRZ as the proposed lots meet the minimum lot size and are considered to be of sufficient size to treat and retain all wastewater. The mandatory conditions as required by the planning scheme have been included (attachment 1) and this will include meeting the requirements of utilities including Barwon Water

Development Contribution

A development Contribution requirement prior to Statement of Compliance has been made as a condition of permit, it has been required at a rate of \$1500 per lot for each new lot. This application proposes one new lot therefore a total contribution of \$1500 is required

CULTURAL HERITAGE IMPLICATIONS

This proposal does not require the preparation of a Cultural Heritage Management Plan under the Aboriginal Heritage Regulations 2007.

CONCLUSION

The application satisfies the provisions of the Planning Scheme, including State and Local Planning Policies, including the Local Policy for Low Density Residential Development (Clause 22.09), the provisions of the Low Density Residential Zone, and the decision guidelines of the Planning Scheme (Clause 65). The proposed subdivision has been designed to maintain the character of the area and are capable of on-site effluent disposal.

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SUBMISSION / OBJECTION TO GRANTING A PLANNING PERMIT

Planning and Environment Act 1987

Before completing this form, it is recommended you inspect the planning permit application online or at a Customer Service Centre.



DETAILS OF THE PERMIT APPLICATION YOU ARE RESPONDING TO:	
Application Number:	P20-007
Address of Subject Land:	27 Steddy Road, Lethbridge VIC 3332
Description of Proposal:	Two Lot Subdivision
Name of Applicant:	[REDACTED]

<p>DETAILS OF SUBMISSION / OBJECTION:</p> <p><i>(State reasons for objection and how you would be affected by the granting of a planning permit)</i></p> <p>Our primary concern would be any 2 storey house that might be built on this block. This would drastically interfere with our privacy having a [REDACTED] property being able to look out over [REDACTED] [REDACTED] We would expect Council to place a ban on any multi storey dwelling and restrict any building to single storey only.</p> <p>Also see attached.</p> <p style="text-align: right;">Continued – see over</p>
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obj ①

PLANNING 13/03/2020

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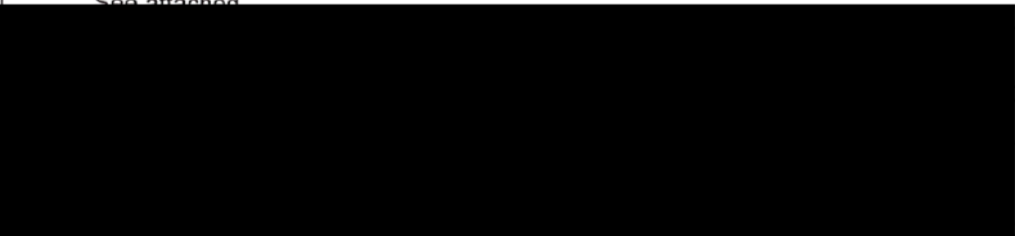
DETAILS OF SUBMISSION / OBJECTION: Continued

Attach additional pages if required

Are there any changes that could be made to the proposal to address your concerns? Yes No

If yes, what changes would you suggest that would meet your concerns:

See attached



IMPORTANT NOTES ABOUT SUBMISSIONS / OBJECTIONS TO PERMIT APPLICATIONS

1. This form is to help you make an objection to an application in a way which complies with the *Planning and Environment Act 1987*, and which can be readily understood by the responsible authority. There is no requirement under the Act that you use any particular form.
2. Make sure you clearly understand what is proposed before you make an objection. You should inspect the application at the responsible authority's office.
3. To make an objection you should clearly complete the details on this form and lodge it with the responsible authority as shown on the Public Notice - Application for Planning Permit.
4. An objection must state the reasons for your objection; and state how you would be affected if a permit is granted.
5. The responsible authority may reject an application which it considers has been made primarily to secure or maintain a direct or indirect commercial advantage for the objector. In this case, the Act applies as if the objection had not been made.
6. Please be aware that copies of objections/submissions received may be made available to any person for the purpose of consideration as part of the planning process in accordance with the *Planning & Environment Act 1987*.
7. To ensure the responsible authority considers your objection, make sure that the authority receives it by the date shown in the notice you were sent or which you saw in a newspaper or on the website.
8. If you object before the responsible authority makes a decision, the authority will tell you its decision.
9. If despite your objection the responsible authority decides to grant the permit, you can appeal against the decision. Details of the appeal procedures are set out on the back of the Notice of Decision which you will receive. An appeal must be made on a prescribed form (obtainable from the Victorian Civil and Administrative Tribunal) and accompanied by the prescribed fee. A copy must be given to the responsible authority. The closing date for appeals is 21 days of the responsible authority giving notice of its decision.
10. If the responsible authority refuses the application, the applicant can also appeal. The provisions are set out on the Refusal of Planning Application which will be issued at that time.

Golden Plains Shire Privacy Statement

The Golden Plains Shire considers that the responsible handling of personal information is a key aspect of democratic governance, and is strongly committed to protecting an individual's right to privacy. Council will comply with the information Privacy Principles as set out in the Privacy and Data Protection Act 2014. Council has in place a standard operating procedure that sets out the requirements for the management and handling of personal information.

If you have any queries regarding this Privacy Statement, please contact the Privacy Officer on 03 5220 7111.

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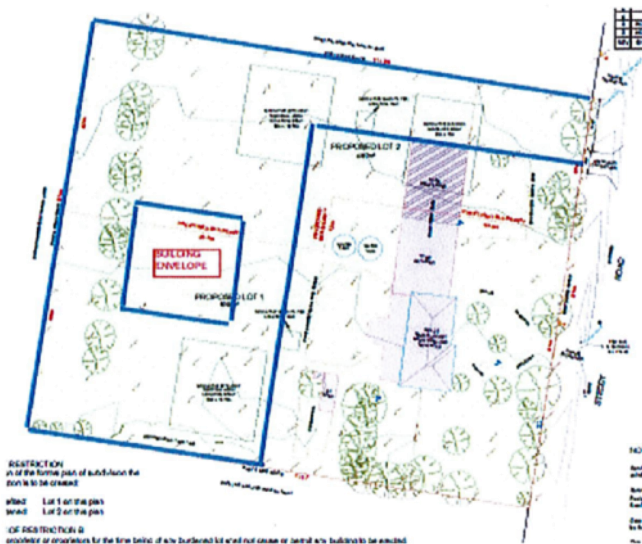
P20-007 Submission Attachment – [REDACTED]

Country living – we purchased our [REDACTED] and moved out to Lethbridge over [REDACTED] years ago looking for a relaxed, quiet life style far enough away from neighbours to retain our privacy. In more recent years, we have already had a number of sub-divisions taking place within the area to 2 to 2-1/2 acre blocks. These smaller blocks of land definitely do not fit into our rural area and would totally change our environment forever. It would take away the country feel which is the very reason why all the current people residing in this area purchased acreage and built their homes.

Roads – with an increase in vehicle & pedestrian traffic. Will Smith Rd & Steddy Rd receive any upgrades or improved surfaces?

Water – pressure has always been poor. With the additional 6 new blocks already proceeding and now another block to service, will Barwon Water improve the water pressure and/or extend the water main along Steddy Rd, potentially increasing our costs to replace our private line.

Regarding the nominated dwelling location in the submission, has any consideration been given to the sub-division option shown below? This would be in line with the previous sub-division of the original 5 acre block and have the 3 houses in a linear layout instead of cramming a second house along the Steddy Road frontage.



PLANNING 13/03/2020

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Has the additional stormwater, septic run-off and any grey water systems been factored into this planning permit to ensure that nothing flows across into neighbouring properties?

We hope that you will take our concerns into consideration when deciding on this sub-division so the people who are already living in this area can continue the lifestyle that we have chosen and enjoyed for ever.



PLANNING 13/03/2020



Clause 56 Assessment – Residential Subdivision

The purpose of Clause 56 is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- 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 infill sites within established residential areas.
- 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, and utilities.

Clause 56 Assessment

The following is an assessment of the proposal against the relevant Standards and Objectives of Clause 56. Pursuant to Clause 32.03-6, only the relevant standards of Clauses 56.07-1 to 56.07-4 must be met.

Clause	Comment
<p>56.01 SUBDIVISION SITE AND CONTEXT DESCRIPTION AND DESIGN RESPONSE</p>	<p>✓ Complies – The proposed subdivision derives from an assessment of the subdivision site. The site is suited towards subdivision at the density proposed given the available land area and its Low Density Residential Zoning.</p> <p>More specifically, the subdivision design derives from and responds to the site and its context through the following:</p> <ul style="list-style-type: none"> • The lot's side-by-side configuration and rectangular shape makes best use of the site's dimensions and generally flat character. • The configuration and shape also maintain the streetscape character following the design of several existing subdivisions in the area. • Proposed lot sizes at 4067m² and 6099m² in area are deemed to be reasonable for the desired residential uses. • The lots can each be developed with a dwelling and can maintain consistent front and side setbacks from boundaries in keeping with the desired character of the area. • The lots have been designed to integrate with Steddy Road. • The addition of a singular lot will ensure that change in the locality is incremental. <p>For further description of the subdivision site under Clause 56.01-1, please refer to attached Town Planning Report.</p>

27 Steddy Road, Lethbridge J6538 1



<p>56.07-1 DRINKING WATER SUPPLY OBJECTIVES</p> <p>To reduce the use of drinking water.</p> <p>To provide an adequate, cost-effective supply of drinking water.</p>	<p>✓ Complies – Water supply will be provided to the new lot prior to Statement of Compliance. Reticulated drinking water will be connected to both lots to the satisfaction of Barwon Water Corporation.</p>
<p>56.07-2 REUSED AND RECYCLED WATER OBJECTIVE</p> <p>To provide for the substitution of drinking water for non- drinking purposes with reused and recycled water.</p>	<p>N/A – The use of recycled water is not proposed as part of this subdivision.</p>
<p>56.07-3 WASTE WATER MANAGEMENT OBJECTIVE</p> <p>To provide a waste water system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner.</p>	<p>✓ Complies – Wastewater effluent will be discharged and treated on site in accordance with the attached Land Capability Assessment and Council's requirements.</p>
<p>56.07-4 URBAN RUN-OFF MANAGEMENT OBJECTIVES</p> <p>To minimise damage to properties and inconvenience to residents from urban run-off.</p> <p>To ensure that the street operates adequately during major storm events and provides for public safety.</p> <p>To minimise increases in stormwater run-off and protect the environmental values and physical characteristics of receiving waters from degradation by urban run-off.</p>	<p>✓ Complies – An appropriate stormwater management system will be provided in accordance with the requirements of Council's Infrastructure Department.</p> <p>As the attached Land Capability Assessment suggests, there is a low likelihood of stormwater run-on, but upslope diversion berms or drains may be constructed if deemed to be necessary. Stormwater from roofs and other impervious surfaces must not be disposed of into the wastewater treatment system or effluent management system.</p> <p>Detailed engineer work will be undertaken at a later stage to determine the best method of retention.</p> <p>Lots will be connected to the legal point of discharge.</p>

**LAND
CAPABILITY
ASSESSMENT**

Ballarat Soil Testing

*Specialising in building site soil classification
& land capability assessments*

ABN 24 586 140 741

SUMMARY:

JOB:	
Reference No	SJ031219
Date	December 4, 2019

SITE:	
Proposed development	2 x lot subdivision
Property address	27 Steddy Road, Lethbridge
Shire council	Golden Plains Shire Council
Soil category (AS/NZ 1547:2012)	6 - moderately structured silty clay (medium to heavy clay)
Design loading rate (DIR)	2mm/day

PROPOSED LOT 1 – EXISTING 3-BEDROOM DWELLING:	
Loading rate	600L/day
Primary treatment device	Existing septic tank
Secondary treatment device	Sand filter of 15m ² added to existing septic tank <u>or</u> Aerated Water Treatment System (AWTS) instead of septic tank and sand filter
Land application system	Subsurface irrigation system of 375m ² <ul style="list-style-type: none"> The drip irrigation system needs to be installed at a depth of 150-250mm <i>in situ</i> or in imported good quality topsoil with a 1m spacing between lines

PROPOSED LOT 2 – NEW 4-BEDROOM DWELLING:	
Loading rate	750L/day
Secondary treatment device	3000 - 3500L septic tank and 15m ² sand filter <u>or</u> an Aerated Water Treatment System (AWTS)
Land application system	Subsurface irrigation system of 375m ² <ul style="list-style-type: none"> The drip irrigation system needs to be installed at a depth of 150-250mm <i>in situ</i> or in imported good quality topsoil with a 1m spacing between lines

PREPARED FOR:	
Client name	[REDACTED]
Address	27 Steddy Road, Lethbridge VIC 3332

PREPARED BY:	
Geologist	[REDACTED]
Address	[REDACTED]
Telephone	[REDACTED]
Email	[REDACTED]

REVIEW:	DATE:	DETAILS:
A	December 4, 2019	Initial draft for submission
B		
C		
D		
E		
F		

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1 Commission

When a property developer, potential buyer or land holder considers subdividing land or building one or more premises, they must first determine whether wastewater can be sustainably managed and absorbed by the land within the property boundaries without negatively impacting the beneficial uses of surface waters and groundwater.

It is the responsibility of the property owner to prove to Council that the proposed onsite wastewater treatment and recycling system will operate sustainably on the property without adverse impacts on public health or the environment.

The objective of this investigation is to conduct a Land Capability Assessment (LCA) and propose a suitable type of onsite wastewater management system for the proposed residential development at the above address.

This document provides a detailed LCA for the allotment, information about the site and soil conditions along with monitoring and management recommendations.

This report has been written to comply with all relevant and current Victorian legislation, guidelines, codes and standards, including:

- AS/NZS 1547:2012, Onsite domestic wastewater management;
- AS/NZS 1547:1994, Onsite domestic wastewater management;
- Code of Practice Onsite Wastewater Management, Publication No. 891.4, July 2016, Environmental Protection Authority;
- Land Capability Assessment for Onsite Domestic Wastewater Management, Publication 746.1, March 2003, EPA Victoria;
- Victorian Land Capability Assessment Framework, January 2014, Municipal Association of Victoria.

2 Locality and site description

2.1 The site

Site shape, dimensions, size, gradient and drainage	
The site has an estimated area of:	6099m ² in the proposed Lot 1 subdivision. 4067m ² in the proposed Lot 2 area.
The ground surface is:	Relatively flat
The gradient of the site is:	Slight slope falling to west
The drainage on site is:	Fair

Existing use and development on the site	
The current use of the site is:	Domestic yard with some stock.
The buildings or works located on the site are:	Brick veneer dwelling and attached shedding in proposed Lot 1.

Existing access arrangements	
The main vehicle access to the site is provided from:	Gravel driveway from Steddy Road.
The space available for vehicle maneuverability can be considered:	Fair due to fences, gates and electric fences currently in place
The site is located:	Please refer to Attachment 1.

Existing vegetation	
Describe the vegetation on the site, including the type, location, extent and any other relevant information:	Sparse grasses across site proposed effluent field areas.

2.2 The locality and surrounding land

Existing use and development on adjacent sites	
Describe the land and existing land uses around the subject land:	Residential area (Low density residential zone (LDRZ)).

3 Existing development

3.1 Construction

	Building
The existing building on site is:	Brick veneer dwelling (and detached shedding).
The number of bedrooms/study is:	Three (3) bedrooms.
The maximum occupancy is :	Four (4) persons.

3.2 Wastewater

	Target effluent quality
Wastewater system:	Aims to achieve the target effluent quality of BOD <20 mg/L and SS <30mg/L.
Existing wastewater load:	<p>Daily household wastewater generation is estimated by multiplying the potential occupancy, which is based on the number of bedrooms (plus one person), by the Minimum Wastewater Flow Rates.</p> <p>Assessments should include any additional room(s) shown on the house plan such as a study, library or sunroom that could be closed off with a door, as a bedroom for the purposes of the following calculations.</p> <p>The following have been considered:</p> <ul style="list-style-type: none"> • Three-bedroom dwelling on this site • Water-saving fixtures installed • Four (4) people maximum occupancy • Wastewater generation of 150L/day/person. <p>Therefore: Total Design Load = 600L/day</p>

3.3 Intended water supply and sewer source

	Services
Domestic water supply	Reticulated water supply is provided.
Availability of sewer	No town sewerage system is likely to be connected in the short to medium future.

4 Proposed development

4.1 Construction

	Building
The proposed building on site is:	New dwelling with onsite wastewater treatment system.
The number of bedrooms/study is proposed to be:	Four (4) bedrooms.
The maximum occupancy is proposed to be:	Five (5) persons.

4.2 Wastewater

	Target effluent quality
Wastewater system:	Aims to achieve the target effluent quality of BOD <20 mg/L and SS <30mg/L.
Anticipated wastewater load:	<p>Daily household wastewater generation is estimated by multiplying the potential occupancy, which is based on the number of bedrooms (plus one person), by the Minimum Wastewater Flow Rates.</p> <p>Assessments should include any additional room(s) shown on the house plan such as a study, library or sunroom that could be closed off with a door, as a bedroom for the purposes of the following calculations.</p> <p>Assuming construction of a new four-bedroom dwelling, water-saving fixtures, five (5) people maximum occupancy and wastewater generation of 150L/day/person.</p> <p>Therefore: Total Design Load = 750L/day</p>

4.3 Intended water supply and sewer source

	Services
Domestic water supply	Reticulated water supply is likely to be provided.
Availability of sewer	No town sewerage system is likely to be connected in the short to medium future.

5 Site and soil assessment

5.1 Work undertaken

Assessment	
Assessor:	[REDACTED]
Date:	December 3, 2019

5.2 Site assessment

Feature	Description	Level of constraint	Mitigation measures
Aspect (affects solar radiation received)	North	Nil	NN
Climate (difference between annual rainfall and pan evaporation)	Excess of rainfall over evaporation in the wettest months	Major	Rainfall is relatively low, averaging just over 500 mm per annum as per 2.3 Bannockburn – 2.3.1 Land Capability Assessment - Domestic Wastewater Management Plan Volume 2 - Technical Reports
Erosion (or potential for erosion)	Nil	Nil	NN
Exposure to sun and wind	Full sun	Nil	NN
Fill (imported)	No fill	Nil	NN
Flood frequency (ARI)	Less than 1 in 100 years	Nil	NN
Groundwater bores	No bores onsite or on neighbouring properties	Nil	NN
Land area available for LAA	Meets LAA and duplicate LAA and buffer distance requirements	Moderate	No reserve area required as per Table 2-2: Land Application Area - Bannockburn - Domestic Wastewater Management Plan Volume 2 - Technical Reports
Landslip (or landslip potential)	Nil	Nil	NN
Rock outcrops (% of surface)	<10%	Nil	NN
Slope Form (affects water shedding ability)	Straight side-slopes	Minor	NN

Slope gradient (%)			
for subsurface irrigation	<10%	Nil	NN
Soil Drainage (qualitative)	Some signs or likelihood of dampness	Moderate	Comprises low permeability soils, as described in Table 2-1, that are generally dispersive as per 2.3 Bannockburn – 2.3.1 Land Capability Assessment - Domestic Wastewater Management Plan Volume 2 - Technical Reports
Stormwater run-on	Low likelihood of stormwater run-on	Nil	NN
Surface waters - setback distance (m)	Setback distance complies with requirements in EPA Code of Practice 891.4 (as amended)	Nil	Dam to the west is at least 60 metres from the proposed effluent field area in Lot 1.
Vegetation coverage over the site	Limited variety of vegetation	Moderate	Lawn grasses to be planted in both proposed effluent fields.
Soil Drainage (Field Handbook definitions)	Moderately well drained. Water removed somewhat slowly in relation to supply, some horizons may remain wet for a week or more after addition	Moderate	The Design Irrigation Rate for drip irrigation is 2 mm/day. Comprises low permeability soils, as described in Table 2-1, that are generally dispersive as per 2.3 Bannockburn – 2.3.1 Land Capability Assessment - Domestic Wastewater Management Plan Volume 2 - Technical Reports

*NN: not needed

5.3 Soil key features

The site's soils have been assessed for their suitability for onsite wastewater management by a combination of soil survey and desktop review of published soil survey information as outlined below.

5.4 Geology

Geological mapping	
Geological Survey Code:	Qno1
Description:	Basalt, minor scoria and ash; tholeiitic to alkaline.
Reference:	VANDENBERG, A.H.M., 1997. MELBOURNE SJ 55-5 Edition 2, 1:250 000 Geological Map Series 1:250,000 geological map. Geological Survey of Victoria.

5.5 Local Mine Hazards

	DPI Search for Mine Hazard results
Department of Primary Industries records:	"do not indicate the presence of any mining activity on this site, and the site appears to be outside any known mined area."

5.6 Soil

	Soil conditions
The predominant soil profile on site is:	Shallow stiff basaltic silty clay.

5.7 Soil profile determination

	Assessment
Field work	Two (2) boreholes were established and excavated in the area of the proposed wastewater management systems.
Method of drilling or excavation	Hand-held soil sampling machine.
Method of classification	The soil was classified according to AS/NZS 1547-1994/2012 while considering Lethbridge's temperate climate.
Site and test plan	Please refer to Attachment 2.
Reporting	Please refer to Attachment 4.

5.8 Soil assessment

Feature	Assessment	Level of Constraint	Mitigation Measures
Soil category (AS/NZ 1547:2012)	6 - moderately structured silty clay (medium to heavy clay).		
Soil depth	Soil: >100mm	Minor	NN
Soil Permeability & Design Loading Rates	Soil: 6 - moderately structured silty clay (medium to heavy clay): <0.06 - 0.12 m/day saturated conductivity (K_{sat}) (AS/NZS1547:2012); 2 mm/day Design Loading Rate (DIR) for irrigation system (Code of Practice, 2016).	Major	Use conservative DIR = 2mm/day in calculations
Mottling	Very well to well-drained soils generally have uniform brownish or reddish colour	Nil	NN

pH	5.5 - 8 is the optimum range for a wide range of plants	Nil	NN
Rock Fragments	0 - 10%	Nil	NN
Soil Depth to Rock or other impermeable layer	>1.5 m	Nil	NN
Soil Structure (pedality)	Moderately-structured	Nil	NN
Soil Texture, Indicative Permeability	6	Major	Use conservative DIR = 2mm/day in calculations
Watertable Depth (m) below the base of the LAA	>2m	Nil	NN

5.9 Golden Plains Shire Domestic Wastewater Management Plan Assessment

	Assessment
Rainfall Risk Rating:	Low Risk
Soil Risk Rating:	Moderate Risk
Slope Risk Rating:	Low Risk (<20%)
Groundwater Risk Rating:	Low Risk Area
Catchment Area:	Outside Designated Water Supply Catchment Area

5.10 Groundwater Assessment

	DEPI Groundwater Data Search
Department of Environment and Primary Industries records:	Groundwater depth: >50m Groundwater salinity: 1000 - 3500mg/l

5.11 Victorian Planning Provision – Overlays

Overlay	Assessment
Planning Zone:	LDRZ - Low Density Residential Zone

<p>Planning Overlay:</p>	<p>ESO3 - Environmental Significance Overlay - Schedule 3</p> <p>DDO5 - Design And Development Overlay</p> <ul style="list-style-type: none"> • Schedule 5 - Low density residential zone setbacks
<p>Bushfire Prone Area:</p>	<p>Yes</p>

5.12 Overall assessment results and land capability rating

Based on the most constraining site features (rainfall and evaporation) and soil assessment (soil type and shallow rock), the overall land capability of the proposed effluent management area is constrained. However, the effluent management system for each dwelling will be designed, installed and maintained in ways which will mitigate these factors.

The proposed effluent management area is located above the 1:100 flood level and by using secondary treatment and pressure-compensating sub-surface irrigation, there will be ample protection of surface waters and groundwater.

6 Wastewater management system – Lot 1 – Existing dwelling

6.1 Overview

This report provides recommendations for treatment and land application systems that are appropriate to the land capability. The following sections provide an overview of a suitable system, with sizing and design considerations and justification for its selection. Detailed design for the system is beyond the scope of this study, but should be undertaken at the time of building application and submitted to Council.

6.2 Existing treatment system servicing current dwelling

Conventional septic tank with surface irrigation

The existing dwelling has a conventional concrete septic tank installed which will need to be supplemented with a sand filter to provide secondary treatment of effluent. This has proven to be a cost effective strategy in other similar sites.

Alternatively, the existing septic tank may be replaced by a new Aerated Water Treatment System (AWTS).

6.3 Type of land application system servicing dwelling

Absorption trenches and beds or subsurface irrigation field

No effluent field was identified on this site. A new subsurface irrigation field will be required to service the existing dwelling.

7 Wastewater management systems – Lot 1 & 2 – Existing and new dwelling

7.1 Overview

This report provides recommendations for treatment and land application systems that are appropriate to the land capability. The following sections provide an overview of a suitable system, with sizing and design considerations and justification for its selection. Detailed design for the system is beyond the scope of this study, but should be undertaken at the time of building application and submitted to Council.

7.2 Type of treatment system required

Sand Filter or Aerated Water Treatment System (AWTS)
<p>To treat domestic wastewater and allow irrigation with the treated effluent, we recommend installing a system that provides secondary treatment to meet Environmental Protection Authority requirements for irrigation. Indicative target effluent quality is:</p> <ul style="list-style-type: none"> • BOD <20 mg/L; • SS <30mg/L. <p>Several suitable options are available, including an aerated water treatment system (AWTS) or sand filter. Any of these options are capable of achieving the desired level of performance and final selection is the responsibility of the property owner, who will forward details to Council for approval.</p> <p>It is recommended that the existing septic tank servicing the dwelling on Lot 1 be retained and supplemented with a sand filter to provide secondary treatment of effluent. This has proven to be a cost effective strategy in other similar sites.</p> <p>The new dwelling may be serviced by either a 3000 - 3500L septic tank and 15m² sand filter <u>or</u> an Aerated Water Treatment System (AWTS).</p>

7.3 Sizing the sand filter system

To determine the necessary size of the design area, the sizing relationship from AS/NZS 1547:1994 has been used:

$$\text{Area of Sand Filter} = \frac{Q}{50L/d}$$

where

Q = Quantity of wastewater (L/d)

50L/d = Sand filter acceptance rate

Number of bedrooms	Number of occupants	Total daily household wastewater	Area of sand filter
3	4	600	12m ²
4	5	750	15m ²
5	6	900	18m ²

7.4 Alternative treatment system for new dwelling

Aerated Water Treatment System (AWTS)

To treat domestic wastewater and allow irrigation with the treated effluent, we recommend installing a system that provides secondary treatment to meet Environmental Protection Authority requirements for irrigation. The water quality of secondary standard effluent in Victoria is <20 mg/L BODs, <30 mg/L TSS and, where disinfected, *E. coli* <10 cfu/100 mL.

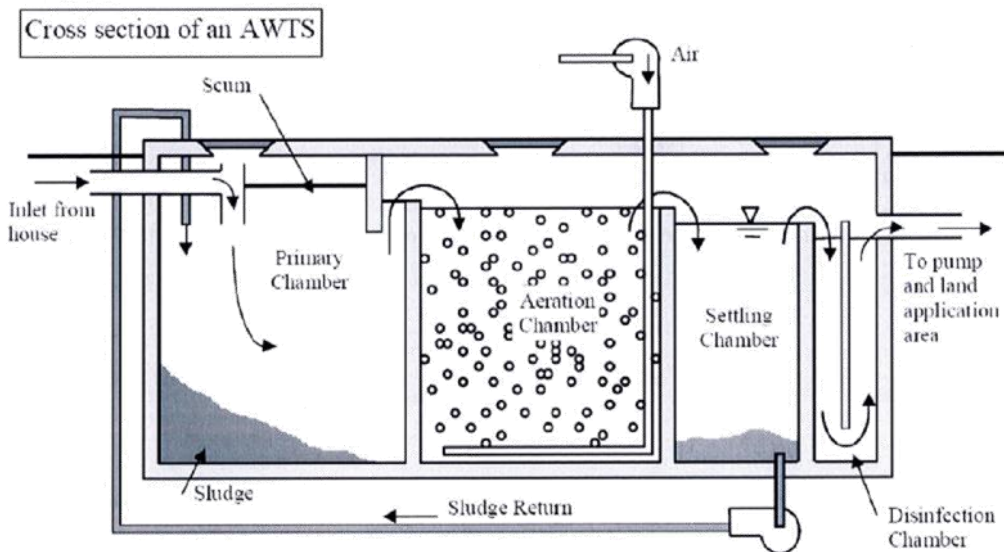
An **Aerated Water Treatment System (AWTS)** is the preferred option and is designed to treat small (<2000L/day) wastewater flows. This system consists of a series of treatment chambers combined where air is bubbled through wastewater in a tank provides oxygen to micro-organisms to facilitate aerobic biological digestion of the organic matter in the wastewater.

Wastewater from a household is treated in stages in several separate chambers. The first chamber is similar to a conventional septic tank. The wastewater enters the chamber where the solids settle to the bottom and are retained in the tank forming a sludge layer.

Scum collects at the top, and the partially clarified wastewater flows into a second chamber. Here the wastewater is mixed with air to assist bacteria to further treat it.

A third chamber allows additional clarification through the settling of solids, which are returned for further treatment to either the septic chamber or to the aeration chamber. The clarified effluent may be disinfected in another chamber (usually by chlorination) before irrigation can take place.

Bacteria in the first chamber break down the solid matter in the sludge and scum layers. Material that cannot be fully broken down gradually builds up in the chamber and must be pumped out periodically.



7.5 Type of land application system

Pressure compensating subsurface irrigation system
<p>The default land application system for sustainably recycling secondary treated sewage or greywater effluent to land is pressure-compensating sub-surface irrigation (with disc or mesh filters and scour and vacuum valves) which evenly distributes effluent throughout the irrigation area.</p> <p>The distribution pipes (drip-lines) fill up with effluent until a certain pressure is reached which opens the emitter valves. More controlled pressure can be applied when the field is divided into two or more zones and these smaller areas are intermittently dosed using a sequencing valve.</p> <p>Water is not wasted by evaporation or runoff, flexible garden designs are possible, water is delivered to the plants' roots in the topsoil layer and it provides the highest protection for environmental and public health.</p> <p>In combination with the selected secondary treatment system, these systems will provide even and widespread dispersal of highly treated effluent loads within the root-zone of plants.</p> <p>Secondary quality effluent is a valuable water and nutrient resource and should be used beneficially to support vegetation growth, not be discharged deep in the soil profile where it provides very little beneficial use to the land or to the residents.</p> <p>A gravity-flow effluent irrigation system is not allowed, due to the lack of even distribution. Irrigation distribution pipes must not have dripper-holes drilled or cut into them after purchase because the effluent will flow out of the holes in the first few metres of pipe at a far higher rate than the system is designed for and higher than the soil is capable of sustainably absorbing.</p>

7.6 Sizing the irrigation system

As per the Golden Plains Shire Council Domestic Wastewater Management Plan 2016, water balance modelling has not been undertaken using the method and water balance tool developed for the Victorian Land Capability Assessment Framework (2014) in order to determine the necessary size of the sub-surface irrigation system.

Size
<p>As per Table 2-2: Land Application Area – Bannockburn (Land Capability Assessment - Domestic Wastewater Management Plan Volume 2 - Technical Reports), a subsurface irrigation field of at least 375m² is required for a dwelling with four bedrooms on each of the proposed sites.</p> <p>This land application area size adheres to the GPSC DWMP (2016) which recommends minimum lot sizes to be <15% of the area of each lot to be set aside for wastewater irrigation/disposal.</p> <p>This allows space for house, sheds, driveways, play areas and so on. This limit has been set based on RMCG experience elsewhere in Victoria and consideration of what is working for existing developments in Bannockburn and Meredith.</p>

7.7 Siting and configuration of the irrigation system

Description
<p>It is preferable to keep the irrigation area as high on the property as possible and a maximum distance from the boundaries and the dam in the adjacent property to the west as setbacks allow.</p> <p>The preferred area is to the west of the existing and proposed dwellings.</p> <p>Attachment 3 shows an envelope of land that is suitable for effluent management, although this envelope is much larger than the minimum required. Final placement and configuration of the irrigation system will be determined by the client and/or system installer, provided it remains within this envelope.</p> <p>Whilst there is ample area for application of the effluent, it is important that appropriate buffer distances to the waterways be maintained. It is important to note that buffers are measured as the overland flow path for run-off water from the effluent irrigation area.</p> <p>It is recommended that the owner consult an irrigation expert familiar with effluent irrigation equipment to design the system, and an appropriately registered plumbing/drainage practitioner to install the system. The irrigation plan must ensure even application of effluent throughout the entire irrigation area.</p>

7.8 Buffer distances

Description
<p>Setback buffer distances from effluent land application areas and treatment systems are required to help prevent human contact, maintain public amenity and protect sensitive environments. The relevant buffer distances for this site, taken from Table 5 of the Code (2016) are:</p> <ul style="list-style-type: none"> • 150 metres from a dam, lake or reservoir (potable water supply); • 100 metres from waterways (potable water supply); • 30 metres from waterways, wetlands (continuous or ephemeral, non-potable); estuaries, ocean beach at high-tide mark; dams, lakes or reservoirs (stock and domestic, non-potable); • 20 metres from groundwater bores in Category 2b to 6 soils; and • 3 metres if area up-gradient and 1.5 metres if area down-gradient of property boundaries, swimming pools and buildings (conservative values for primary effluent). <p>The setback distance in a Special Water Supply Catchment area may be reduced by up to a maximum of 50% conditional on the following requirements (otherwise the setback distances for primary treatment systems apply):</p> <ul style="list-style-type: none"> • effluent is secondary treated to 20/30 standard as a minimum • a maintenance and service contract, with a service technician accredited by the manufacturer, is in place to ensure the system is regularly serviced in accordance with Council Septic Tank Permit conditions and • Council is satisfied the reduction in set-back distance is necessary to permit the appropriate development of the site and that risks to public health and the environment are minimised. <p>Where an intermittent stream on a topographic or orthographic map is found through ground-truthing to be a drainage line (drainage depression) with no defined banks and the bed is not incised, the setback distance is 40 m (SCA 2010). The topography of the drainage line must be visually inspected and photographed during the LCA site inspection and reported upon in writing and photographs in the LCA report.</p> <p>All buffer distances are achievable.</p> <p>The site plan in Attachment 3 shows the location of the proposed wastewater management system components and other relevant features.</p>

8 Installation, monitoring, operation and maintenance

8.1 Installation of the irrigation system

Description
<p>Installation of the irrigation system must be carried out by a suitably qualified, licensed plumber or drainer experienced with effluent irrigation systems.</p> <p>To ensure even distribution of effluent, it is essential that the pump capacity is adequate for the size and configuration of the irrigation system, taking into account head and friction losses due to changes in elevation, pipes, valves, fittings etc. An additional, optional measure to achieve even coverage is to divide the irrigation area into two or more separate sub-zones; dosed alternately using an automatic indexing or sequencing valve.</p> <p>The irrigation area and surrounding area must be vegetated or revegetated immediately following installation of the system, preferably with turf. The area should be fenced or otherwise isolated (such as by landscaping), to prevent vehicle and stock access; and signs should be erected to inform householders and visitors of the extent of the effluent irrigation area and to limit their access and impact on the area.</p> <p>Stormwater run-on is not expected to be a concern for the proposed irrigation area, due to the landform of the site and its relatively gentle slopes. However, upslope diversion berms or drains may be constructed if this is deemed to be necessary during installation of the system, or in the future. Stormwater from roofs and other impervious surfaces must not be disposed of into the wastewater treatment system or onto the effluent management system.</p>

8.2 Monitoring, operation and maintenance

Description
<p>Maintenance is to be carried out in accordance with Australian Standards 1546.1 to 1546.4 pursuant to the selected secondary treatment system and Council's permit conditions. The treatment system will only function adequately if appropriately and regularly maintained.</p> <p><u>To ensure the treatment system functions adequately, residents must:</u></p> <ul style="list-style-type: none"> • Have a suitably qualified maintenance contractor service the treatment system at the frequency required by Council under the permit to use; • Use household cleaning products that are suitable for septic tanks; • Keep as much fat and oil out of the system as possible; and • Conserve water (AAA rated fixtures and appliances are recommended). <p><u>To ensure the land application system functions adequately, residents must:</u></p> <ul style="list-style-type: none"> • Regularly harvest (mow) vegetation within the LAA and remove this to maximise uptake of water and nutrients; • Monitor and maintain the irrigation system following the manufacturer's recommendations, including flushing the irrigation lines; • Regularly clean in-line filters; • Not erect any structures and paths over the LAA; • Avoid vehicle and livestock access to the LAA, to prevent compaction and damage; and • Ensure that the LAA is kept level by filling any depressions with good quality topsoil (not clay).

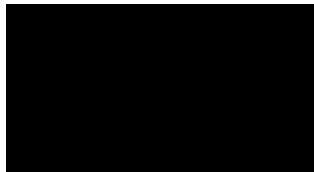
9 Conclusions

As a result of our investigations we recommend that sustainable onsite wastewater management systems can be built to meet the needs of a two lot subdivision at 27 Steddy Road, Lethbridge.

Specifically, we recommend the following:

- Existing dwelling – proposed Lot 1
 - Primary treatment of wastewater using the existing septic tank.
 - Secondary treatment of wastewater in a 15m² sand filter added to existing septic tank.
 - Alternatively, the new dwelling may be serviced by a new Aerated Water Treatment System (AWTS).
 - Land application of wastewater in a new 375m² pressure compensating subsurface irrigation area.
 - Location of Land Application Area to the west of the existing dwelling.
- New dwelling – proposed Lot 2
 - Four bedroom dwelling constructed in northeast of proposed allotment.
 - Secondary treatment of wastewater in a 15m² sand filter or an Aerated Water Treatment System.
 - Land application of wastewater in a 375m² pressure compensating subsurface irrigation area.
 - Location of Land Application Area to the west of the proposed dwelling location.
- Moderately structured silty clay (medium to heavy clay) should be considered to have a DIR of 2mm/d.
- Installation of water saving devices in the new residence to reduce the effluent load for onsite disposal.
- Use of low phosphorus and low sodium (liquid) detergents to improve effluent quality and maintain soil properties.
- Operation and management of the treatment and disposal system in accordance with manufacturer's recommendations, Australian Standards 1546.1 to 1546.4 pursuant to the selected secondary treatment system, the EPA Code of Practice (2016) and the recommendations made in this report.

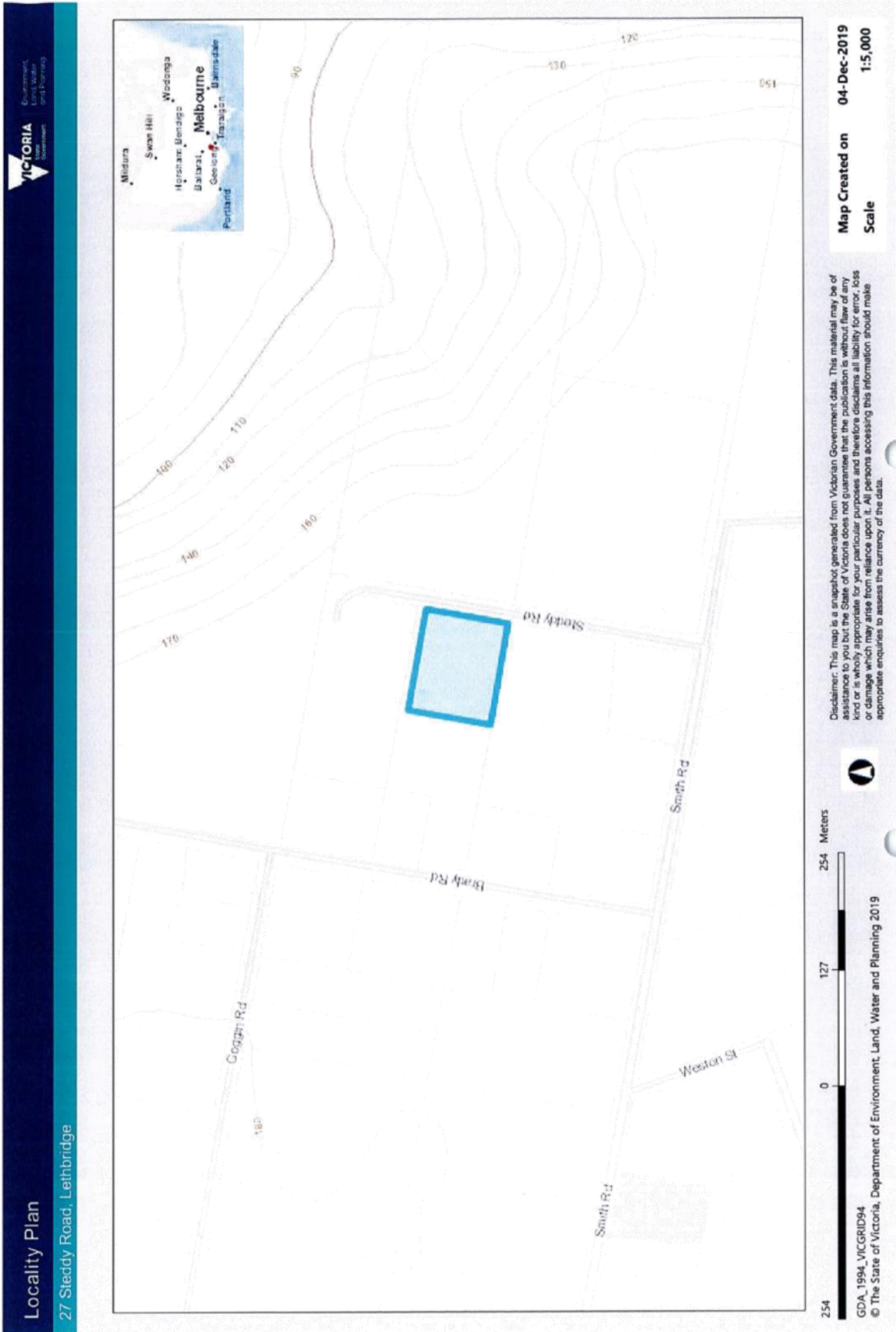
If there are any queries regarding the content of this report please contact this office.



Geologist

Attachment 1 – Locality plan

Plan included on next page.



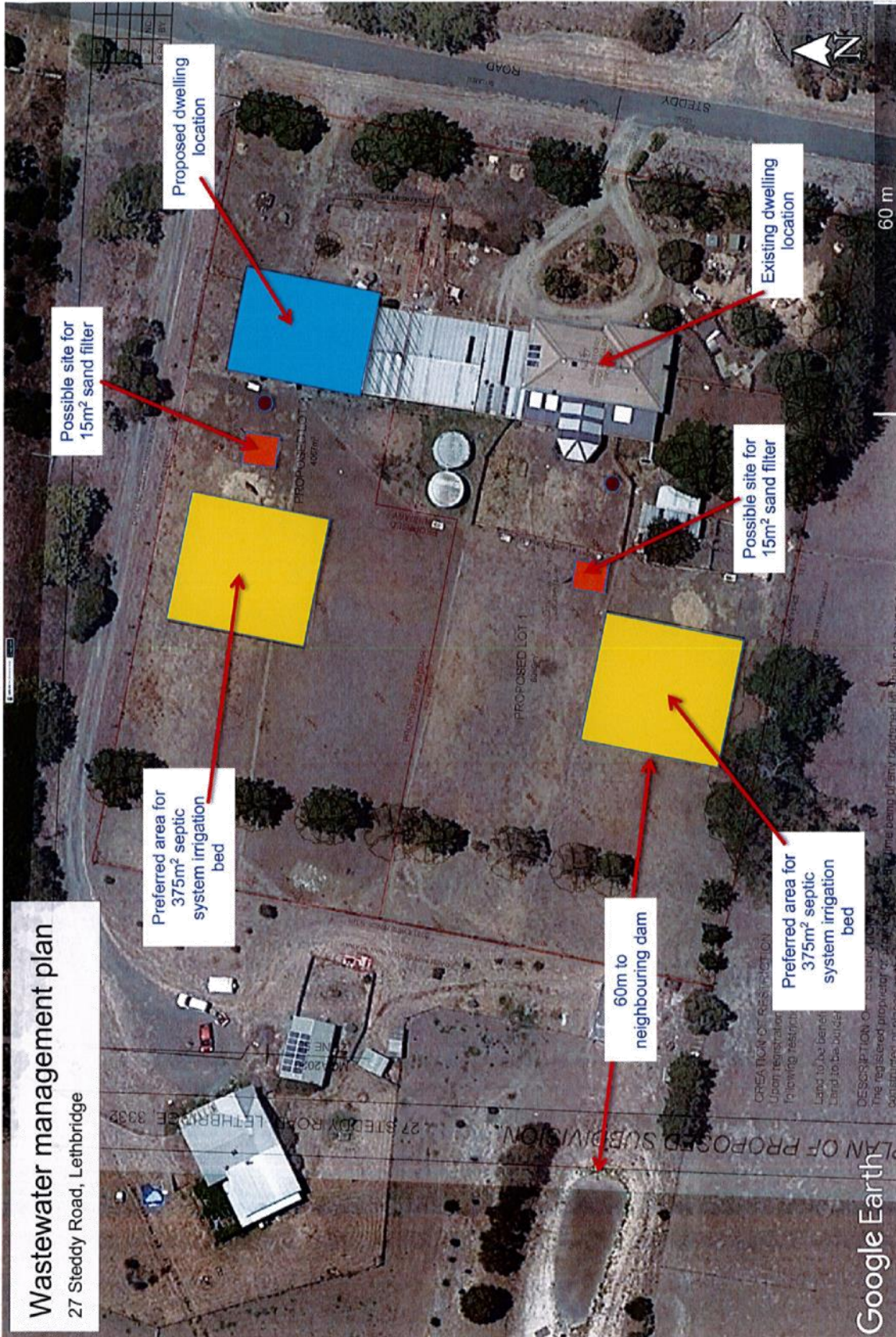
Attachment 2 – Soil testing program plan

Plan included on next page.



Attachment 3 – Proposed wastewater treatment plan

Plan included on next page.



Attachment 4 – Sample hole results

Sample Hole BH01

Depth (mm)	Description	Fill	Moisture	Consistency	Allowable Bearing Pressure (kPa)	Reactivity
100	Silty CLAY; dark grey	-	Slightly moist	Stiff	130	High
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500	END OF HOLE					

Sample Hole BH02

Depth (mm)	Description	Fill	Moisture	Consistency	Allowable Bearing Pressure (kPa)	Reactivity
100	Silty CLAY; dark grey	-	Slightly moist	Stiff	130	High
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500	END OF HOLE					

Attachment 5 – VicPlan Planning Property Report

Report included on next page.

PLANNING PROPERTY REPORT



From www.planning.vic.gov.au on 04 December 2019 05:17 PM

PROPERTY DETAILS

Address: **27 STEDDY ROAD LETHBRIDGE 3332**
 Lot and Plan Number: **Lot 1 PS540103**
 Standard Parcel Identifier (SPI): **1\PS540103**
 Local Government Area (Council): **GOLDEN PLAINS** www.goldenplains.vic.gov.au
 Council Property Number: **45170010**
 Planning Scheme: **Golden Plains** planning-schemes.delwp.vic.gov.au/schemes/goldenplains
 Directory Reference: **VicRoads 522 E8**

UTILITIES

Rural Water Corporation: **Southern Rural Water**
 Urban Water Corporation: **Barwon Water**
 Melbourne Water: **outside drainage boundary**
 Power Distributor: **POWERCOR**

STATE ELECTORATES

Legislative Council: **WESTERN VICTORIA**
 Legislative Assembly: **BUNINYONG**

Planning Zones

[LOW DENSITY RESIDENTIAL ZONE \(LDRZ\)](#)
[SCHEDULE TO THE LOW DENSITY RESIDENTIAL ZONE \(LDRZ\)](#)



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LDRZ - Low Density Residential **RAZ - Rural Activity**
 Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

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PLANNING PROPERTY REPORT: 27 STEDDY ROAD LETHBRIDGE 3332

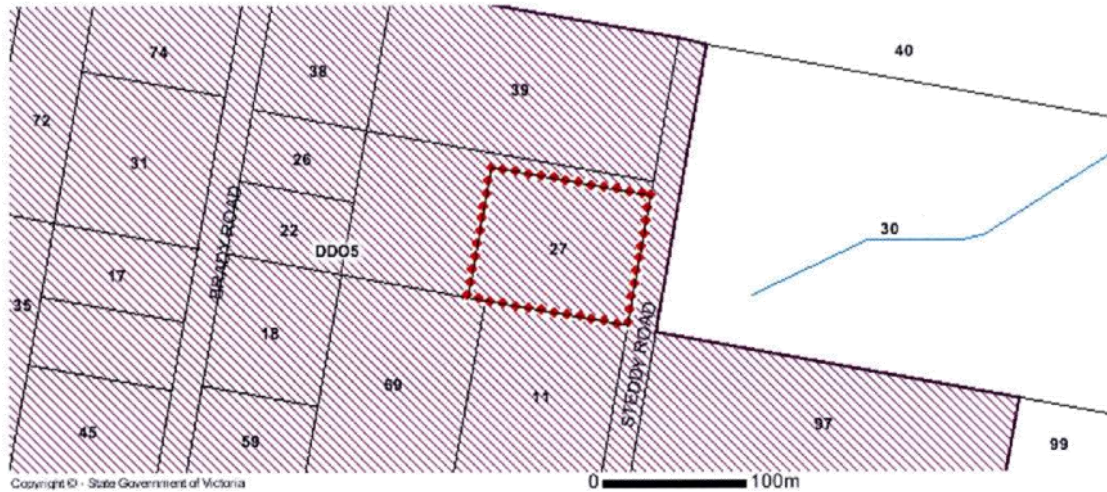
Page 1 of 4

PLANNING PROPERTY REPORT



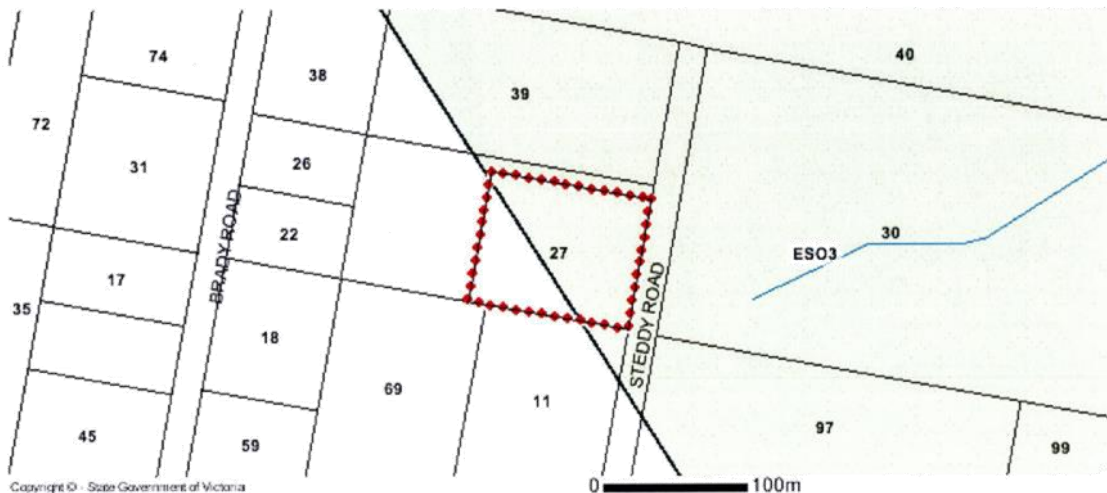
Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO)
 DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 5 (DDO5)



DDO - Design and Development
 Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)
 ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 3 (ESO3)



ESO - Environmental Significance
 Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

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PLANNING PROPERTY REPORT



Further Planning Information

Planning scheme data last updated on 28 November 2019.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.

This report provides information about the zone and overlay provisions that apply to the selected land.

Information about the State and local policy, particular, general and operational provisions of the local planning scheme

that may affect the use of this land can be obtained by contacting the local council

or by visiting <https://www.planning.vic.gov.au>

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the *Planning and Environment Act 1987*.

It does not include information about exhibited planning scheme amendments, or zonings that may affect the land.

To obtain a Planning Certificate go to Titles and Property Certificates at Landata - <https://www.landata.vic.gov.au>

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit <http://mapshare.maps.vic.gov.au/vicplan>

For other information about planning in Victoria visit <https://www.planning.vic.gov.au>

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PLANNING PROPERTY REPORT: 27 STEDDY ROAD LETHBRIDGE 3332

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PLANNING PROPERTY REPORT



Designated Bushfire Prone Area

This property is in a designated bushfire prone area. Special bushfire construction requirements apply. Planning provisions may apply.



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Designated Bushfire Prone Area

Designated bushfire prone areas as determined by the Minister for Planning are in effect from 8 September 2011 and amended from time to time.

The Building Regulations 2018 through application of the Building Code of Australia, apply bushfire protection standards for building works in designated bushfire prone areas.

Designated bushfire prone areas maps can be viewed on VicPlan at <http://mapshare.maps.vic.gov.au/vicplan> or at the relevant local council.

Note: prior to 8 September 2011, the whole of Victoria was designated as bushfire prone area for the purposes of the building control system.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website www.vba.vic.gov.au

Copies of the Building Act and Building Regulations are available from www.legislation.vic.gov.au

For Planning Scheme Provisions in bushfire areas visit <https://www.planning.vic.gov.au>

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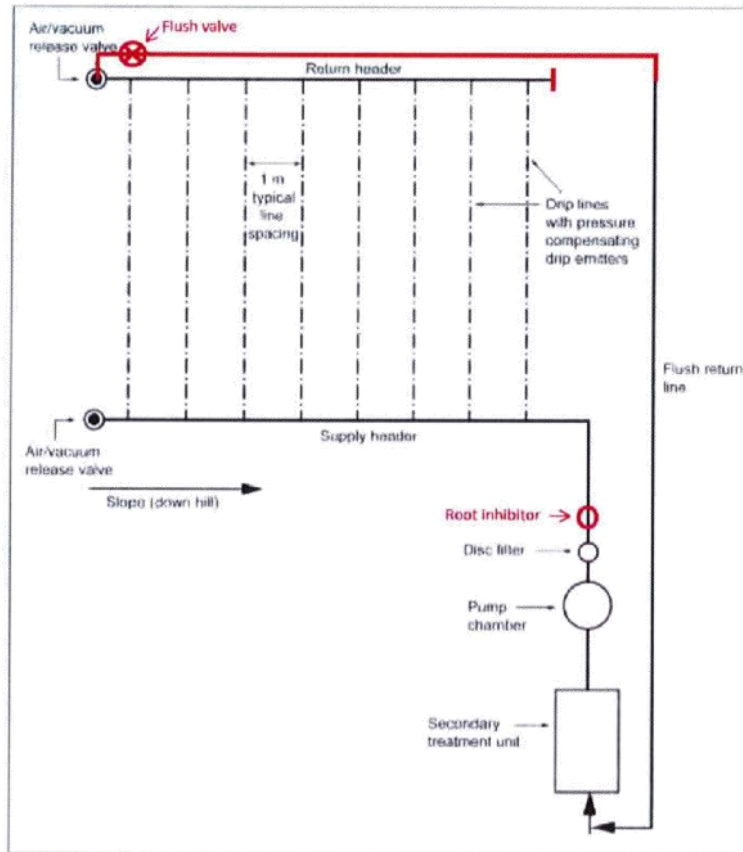
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Notwithstanding this disclaimer, a vendor may rely on the information in this report for the purpose of a statement that land is in a bushfire prone area as required by section 32C (b) of the Sale of Land 1962 (Vic).

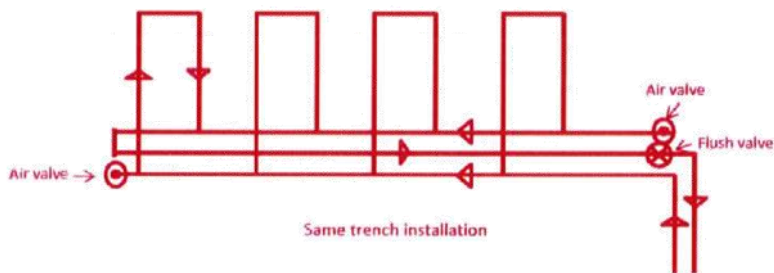
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Attachment 6 – Subsurface irrigation system example



Revised Figure M1 Page 167 AS/NZS1547:2012 to ensure effective distribution and flushing



**Attachment 7 – Code of Practice Onsite Wastewater Management –
Appendix D: Septic Tanks**

Table included on next page.

Code of Practice Onsite Wastewater Management

Appendix D: Septic Tanks

Commissioning

After installation or desludging, and before use, a septic tank must be two-thirds filled with clean water to:

- provide ballast in the tank to prevent groundwater lifting the tank out of the ground
- reduce odours
- enable any subsequent secondary treatment plant to be switched on, commissioned and used immediately.

When domestic wastewater from the dwelling flows into the septic tank it contains sufficient microbiological organisms to start and continue the treatment process. There is no need to 'feed' or dose a new or desludged septic tank with starter material or micro-organisms. If odour occurs after the commissioning of a system, a cup of garden lime can be flushed down the toilet each day until the odour disappears. If the odour persists, the property should seek professional advice from a plumber.

Sludge and scum

As organic matter from the wastewater and inert material, such as sand, settle to the bottom of the tank a layer of sludge forms. This layer contains an active ecosystem of mainly anaerobic micro-organisms which digest the organic matter and reduce the volume of sludge. Scum forms as a mixture of fats, oils, grease and other light material floats on top of the clarified liquid that has separated from the solids. When the clarified liquid flows out of the septic tank it is called 'primary treated effluent'.

It is not necessary or recommended that householders pour commercial products that are reputed to dissolve sludge build-up, down the toilet or sink. A teaspoon of granulated yeast flushed down the toilet once a fortnight may assist with microbial activity, though such a procedure is not an alternative to regular sludge and scum pump-out (Lord 1989).

Desludging septic tanks

Over time, the sludge and scum layers build up and need to be removed for the tank to function properly. The level of solids accumulation in the tank cannot be accurately predicted, and will depend on the waste load to the tank. Therefore, the sludge and scum depth should be checked annually by a contractor. If a septic tank is under a maintenance contract, regular assessment (every 1 to 3 years) of the sludge and scum layers must be part of the maintenance agreement.

The sludge and scum need to be pumped-out with a vacuum suction system when their combined thickness equals 50% of the operational depth of the tank. The frequency of pump-out depends on:

- whether the tank is an adequate size for the daily wastewater flow
- the composition of the household and personal care products
- the amount of organic matter, fat, oil and grease washed down the sinks
- the use of harsh chemicals such as degreasers
- overuse of disinfectants and bleaches
- the use of antibiotics and other drugs, especially dialysis and chemotherapy drugs
- whether any plastic or other non-organic items are flushed into the tank.

A well-functioning septic tank – one that is not overloaded with liquid, organic matter or synthetic material – typically only needs to be desludged once every 3 to 8 years (depending on the size of the tank). A septic tank connected to a home with a frequently used dishwasher will need to be pumped out more frequently (typically every 3 to 4 years) than a home with no dishwasher connected (typically every 5 to 6 years). A holiday home will need to be pumped out less frequently. Large (6,000 L) domestic septic tanks which are common in New Zealand and the USA and have started to be installed in Victoria, have been proven to require desludging only once every 10 to 15 years (Bounds, 1994).

After pump-out, tanks must not be washed out or disinfected. They should be refilled with water to reduce odours and ensure stability of plumbing fixtures. A small residue of sludge will always remain and will assist in the immediate re-establishment of bacterial action in the tank.

Householders should keep a record of their septic tank pump-outs and notify the local Council that a pump-out was undertaken in accordance with the Council Permit.

Septic tank failure

It is critical that a septic tank is not used as a rubbish receptacle. Septic tanks are designed solely for the treatment of water and organic materials. Items such as sanitary napkins, tampons, disposable nappies, cotton buds, condoms, plastic bags, stockings, clothing and plastic bottles will cause the septic tank to fail and require costly removal of these items. If a tank is contaminated or poisoned by household materials it should be pumped out immediately to enable the microbiological ecosystem to re-start.

Code of Practice Onsite Wastewater Management

Without the removal of the scum and sludge, sewage biosolids will increasingly be discharged into the soil absorption trenches and will eventually cause them to fail. This can force untreated sewage onto the ground surface and cause:

- noxious odours
- a boggy backyard
- a health hazard to the family, pets, visitors and neighbours from the pathogens in the sewage
- environmental degradation of the property, surrounding area and waterways from the nutrients, organic matter and other pollutants in the discoloured water
- and
- a public health risk to drinking water supplies in potable water supply catchments.

Positive actions a property owner can take to help a septic tank function well:

- Use soapy water (made from natural unscented soap), vinegar and water or bi-carbonate of soda and water to clean toilets and other water fixtures and fittings.
- Read labels to learn which bathroom and laundry products are suitable for septic tanks. Generally plain, non-coloured, unscented and unbleached products will contribute to a well-functioning septic tank.
- Use detergents with low levels of salts (e.g. liquid detergents), sodium absorption ratio, phosphorus and chlorine (see www.lanfaxlabs.com.au).
- Wipe oils and fats off plates and saucepans with a paper towel and dispose of in the kitchen compost bin.
- Use a sink strainer to restrict food scraps entering the septic system.
- Ensure no structures such as pavements, driveways, patios, sheds or playgrounds are constructed over the tank or absorption trench area.
- Ensure the absorption trench area is not disturbed by vehicles or machinery.
- Engage a service technician to check the sludge and scum levels, pumps and alarms annually.
- Keep a record of the location of the tank and the trenches and all maintenance reports (including the dates of tank pump-outs, tank inspections and access openings) and ensure the service technician sends a copy of the maintenance report to the local Council
- Have the tank desludged when the combined depth of the scum and sludge is equal to the depth of the middle clarified layer.

Indications of failing septic tanks and soil absorption trenches

- Seepage along effluent absorption trench lines in the soil
- Lush green growth down-slope of the soil absorption trench lines
- Lush green growth down-slope of the septic tank
- Inspection pits and/or the soil absorption trenches consistently exhibiting high water levels
- Soil absorption trench lines become waterlogged after storms
- General waterlogging around the land disposal area
- Presence of dead and dying vegetation (often native vegetation) around and down-slope of the land disposal areas
- A noxious odour near the tank and the land disposal area
- Blocked water fixtures inside the house, with sewage overflowing from the relief point
- High sludge levels within the primary tank (within about 150 mm of inlet pipe)
- Flow obstructed and not able to pass the baffle in the tank
- The scum layer blocking the effluent outflow.

Decommissioning treatment systems

Septic tanks

When a septic tank is no longer required it may be removed, rendered unusable or reused to store stormwater. The contents of the tank must first be pumped out by a sewage sludge contractor. The contractor must also hose down all inside surfaces of the tank and extract the resultant wastewater. Where the tank will no longer be used but will remain in the ground, the contractor must first disinfect the tank by spreading (broadcasting) hydrated lime over all internal surfaces in accordance with the WorkSafe safety precautions associated with using lime (i.e. wearing gloves, safety goggles and not using lime on a windy day).

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Under no circumstances should anyone enter the tank to spread the lime or for any other reason, as vapours in confined spaces can be toxic.

A licensed plumbing practitioner must disconnect the tank from the premises and from the absorption trench system. The inlet and outlet pipes on the tank must be permanently sealed or plugged. To demolish a tank, the bottom of the tank is broken and then the lid and those parts of the walls that are above ground are collapsed into the tank. The tank is then filled with clean earth or sand.

Before a tank may be used to store stormwater a licensed plumbing practitioner must disconnect it from the premises and the trench system and connect an overflow pipe from the tank to the stormwater legal point of discharge. Before disinfecting the tank, it must be pumped out, the inside walls hosed down and then pumped out again. The tank is to be filled with fresh water and disinfected, generally with 100 mg/L of pool chlorine (calcium hypochlorite or sodium hypochlorite) to provide a resultant minimum 5 mg/L of free residual chlorine after a contact time of 30 minutes. However, advice should be obtained from a chemical supplier about safety precautions, dosage and concentrations to provide adequate disinfection for any tank. The chlorine is not to be neutralised, but be allowed to dissipate naturally for at least 1 week, during which time the water must not be used. Pumps may be installed to connect the tank to the irrigation system. The contents of the tank must not be used for any internal household purposes or to top-up a swimming pool. The water may only be used for garden irrigation. The tank and associated irrigation system must be labelled to indicate the water is unfit for human consumption in accordance with AS/NZS 3500: Plumbing and Drainage (Blue Mountains City Council 2008).

Secondary treatment systems

Secondary treatment systems must be decommissioned by a licensed plumbing practitioner.

Attachment 8 – Reducing Wastewater

In accordance with the principles of the waste hierarchy, the following steps are recommended to limit the amount of wastewater generated and beneficially use the resultant water resource onsite:

	Suggestions
1. Avoid generating excess wastewater by:	<ul style="list-style-type: none"> a) constructing a house with fewer bedrooms b) installing a dry composting toilet c) not installing a spa d) not installing a bath (low flow rate shower only) e) not installing a kitchen food waste grinder.
2. Reduce the volume of wastewater generated by installing:	<p>High 'Water Efficiency Labelling Scheme' (WELS)-rated water-efficient fittings (minimum '3 Stars' for appliances and minimum '4 Stars' for all fittings and fixtures):</p> <ul style="list-style-type: none"> a) water-efficient clothes washing machines (front or top loading) b) dual-flush (6.5/3.5L or less) toilets c) water-efficient shower roses d) water-efficient dishwashers e) aerated taps f) hot and cold water mixer taps (especially for the shower) g) flow restrictors h) hot water system fitted with a 'cold water diverter' which recirculates the initial flow of cold water until it is hot enough for a shower.
3. Reuse (another use without any treatment) wastewater by:	<ul style="list-style-type: none"> a) washing fruit and vegetables in tap water in a container and reusing the water for another purpose in the house such as watering pot plants b) collecting the initial cold water from showers in buckets and using it for another purpose such as soaking feet, hand washing clothes or washing the car on the lawn.
4. Recycle wastewater after treatment by using it to:	<ul style="list-style-type: none"> a) water gardens and lawn areas b) flush toilets with effluent from an EPA-approved 10/10/10 greywater system c) supply effluent to the cold water tap of the washing machine from an EPA-approved 10/10/10 greywater treatment system