



**Brighton
Council**

ATTACHMENTS

ORDINARY COUNCIL MEETING

18 MARCH 2025





Brighton Council

MINUTES OF THE ORDINARY COUNCIL MEETING
OF THE BRIGHTON COUNCIL, HELD IN THE COUNCIL CHAMBERS,
COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH
AT 5.30P.M. ON TUESDAY, 18 FEBRUARY 2025

PRESENT: Cr Gray; Cr Curran; Cr De La Torre; Cr Irons; Cr McMaster; Cr Murtagh; Cr Owen and Cr Whelan

IN ATTENDANCE: Mr J Dryburgh (Chief Executive Officer) Mr C Pearce-Rasmussen (Director Asset Services); Ms J Banks (Director Governance & Regulatory Services); Mr A Woodward (Director Development Services); and Ms G Browne (Director Corporate Services)

1. Acknowledgement of Country

2. Apologies / Applications for leave of absence

Cr De La Torre moved, Cr Murtagh seconded that Cr Geard be granted leave of absence.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

3. Confirmation of Minutes

3.1 Ordinary Council Meeting

The Minutes of the previous Ordinary Council Meeting held on the 21st January 2025 are submitted for confirmation.

RECOMMENDATION:

That the Minutes of the previous Ordinary Council Meeting held on 21st January 2025, be confirmed.

DECISION:

Cr Whelan moved, Cr McMaster seconded that the Minutes of the previous Ordinary Council Meeting held on 21st January 2025, be confirmed.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

3.2 Planning Authority Meeting

The Minutes of the Planning Authority Meeting held on the 4th February 2025 are submitted for confirmation.

RECOMMENDATION:

That the Minutes of the Planning Authority Meeting held on 4th February 2025, be confirmed.

DECISION:

Cr Owen moved, Cr Irons seconded that the Minutes of the Planning Authority Meeting held on 4th February 2025, be confirmed.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

3.3 Parks & Recreation Committee

The Minutes of the Parks & Recreation Committee Meeting held on the 4th February 2025 are submitted for confirmation.

RECOMMENDATION:

That the Minutes of the Parks & Recreation Committee Meeting held on 4th February 2025, be confirmed.

DECISION:

Cr De La Torre moved, Cr Curran seconded that the Minutes of the Parks & Recreation Committee Meeting held on 4th February 2025, be confirmed.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

4. Declaration of Interest

In accordance with the requirements of Part 2 Regulation 8 of the *Local Government (Meeting Procedures) Regulations 2015*, the chairperson of a meeting is to request Councillors to indicate whether they have, or are likely to have, a pecuniary interest or conflict of interest in any item on the Agenda.

In accordance with Section 48(4) of the *Local Government Act 1993*, it is the responsibility of councillors to then notify the Chief Executive Officer, in writing, the details of any interest(s) that the councillor has declared within 7 days of the declaration.

There were no declarations of interest.

5. Public Question Time and Deputations

In accordance with the requirements of Part 2 Regulation 8 of the *Local Government (Meeting Procedures) Regulations 2015*, the agenda is to make provision for public question time.

There was no requirement for Public Question Time.

6. Reports from Council**6.1 Mayor's Communications**

The Mayor's communications were as follows:

- 22/1 TasWater Project Briefing
- 29/1 Online Consultation Session re Local Government Meeting and General Regulations
- 4/2 Council Workshop

- 4/2 Planning Authority Meeting
- 4/2 Parks & Recreation Committee Meeting
- 5/2 Meeting with Director, Development Services
- 12/2 TasWater Half Yearly Briefing to shareholders
- 18/2 Citizenship Ceremony
- 18/2 Council Meeting

RECOMMENDATION:

That the Mayor’s communications be received.

DECISION:

Cr Owen moved, Cr Whelan seconded that the Mayor’s communications be received.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

6.2 Reports from Council Representatives

- Cr Irons & Cr Owen attended the Jordan River community work shed meeting.

RECOMMENDATION:

That the verbal reports from Council representatives be received.

DECISION:

Cr De La Torre moved, Cr Whelan seconded that the verbal reports from Council representatives be received.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

7. Miscellaneous Correspondence

- Feedback to the Office of Local Government from Brighton Council dated 6th February 2025 in regard to Local Government Priority Reform Program.

8. Notification of Council Workshops

In accordance with the requirements of Section 8(2)(c) of the Local Government (Meeting Procedures) Regulations 2015.

One (1) Council workshop has been held since the previous Ordinary Council meeting.

A workshop was held on the 4th February 2025 at 4.45pm to receive updates on the following issues:- Community Development update; BGH Breakers Netball; Local Government Reforms and Brighton Local Area Plan.

Attendance: Cr Gray; Cr Curran; Cr De La Torre, Cr Geard, Cr Irons; Cr McMaster, Cr Murtagh, Cr Owen & Cr Whelan

Apologies: Cr Geard (*LG Reform & Brighton Local Area Plan*).

9. Notices of Motion

There were no Notices of Motion.

10. Consideration of Supplementary Items to the Agenda

In accordance with the requirements of Part 2 Regulation 8(6) of the *Local Government (Meeting Procedures) Regulations 2015*, the Council, by absolute majority may approve the consideration of a matter not appearing on the agenda, where the Chief Executive Officer has reported:

- the reason it was not possible to include the matter on the agenda, and
- that the matter is urgent, and
- that advice has been provided under Section 65 of the *Local Government Act 1993*.

The Chief Executive Officer reported that there were no supplementary agenda items.

11. Reports from Committees

11.1 Parks & Recreation Committee - 4 February 2025

The recommendations of the Parks & Recreation Committee held on 4th February 2025 are submitted to Council for adoption.

RECOMMENDATION:

That the recommendations of the Parks & Recreation Committee meeting held 4th February 2025 be adopted.

DECISION:

Cr Irons moved, Cr McMaster seconded that the recommendations of the Parks & Recreation Committee meeting held 4th February 2025 be adopted.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

12. Council Acting as a Planning Authority

Under the provisions of the *Land Use Planning and Approvals Act 1993* and in accordance with Regulation 25 of the *Local Government (Meeting Procedures) Regulations 2015*, the Council will act as a planning authority in respect to those matters appearing under Item 12 on this agenda, inclusive of any supplementary items.

There were no Planning Authority items.

13. Petitions**13.1 Petition - Stanfield Drive Old Beach Dual Access**

A paper petition was received by Council by Mr Adrian Tanner on the 3rd February 2025 with 52 signatories.

Petition Subject:

We the electors of the Brighton Council petition the Councillors in accordance with the Local Government Act 1993; to act in their capacity as a road authority and refuse approval for a second access to St Ann's Retirement Village located at 1 Radius Drive.

Petition statement and action requested:

A recent Traffic Impact Assessment for a development at 1 Radius Drive identified that the service level of the Stanfield/East Derwent Highway intersection will deteriorate to level F. This will result in delays for residents, and we expect there to be an increase in accidents as drivers leaving the area try to merge with traffic on East Derwent Highway. Given the 80 km/hr speed limit on East Derwent Highway it is not unreasonable to expect some accidents to result in fatalities.

A possible solution, that has been discussed in the past, is to construct a roundabout at the junction of Stanfield/Riviera/East Derwent Highway.

Allowing a second access onto Stanfield Drive from 1 Radius Drive will complicate or make impossible the construction of a roundabout.

The Department of State Growth are undertaking a traffic study for East Derwent Highway and we should await the outcome of this work before ruling out the option of constructing the roundabout.

Chief Executive Officer’s response:

This petition complies with Section 57 of the *Local Government Act 1993* and has accordingly been tabled. In accordance with Section 58 of the Act the General Manager is to table the petition at the next ordinary meeting of the Council, enabling Council to receive it.

The key matters raised in the Petition pertain to a Development Application that was determined at Council’s February Planning Authority Meeting held on the 4th February 2025.

Through that legislated and thorough assessment process council officers have considered all matters to which they are able to, provided an assessment and recommendations and the Planning Authority has made its determination – to conditionally approve the Development Application.

Council’s role from here would be potential representation of its assessment and decision in any appeal processes and ultimately compliance with the planning permit. Other matters raised by residents are matter between themselves and the owner, rather than with Council.

RECOMMENDATION:

That the Petition be received.

DECISION:

Cr Owen moved, Cr McMaster seconded that the Petition be received.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

14. Officers Reports

14.1 Restoration of the 'Jerry' sculpture

Author: Manager Community Development & Engagement (A Turvey)

Authorised: Chief Executive Officer (J Dryburgh)

Background

The purpose of this report is to seek Council's endorsement to use the full unspent \$20,000 allocated for the Public Art Strategy in the 2024/25 budget for the restoration of the sculpture 'Jerry' (2007) by Tony Woodward. This sculpture is to be reinstalled as part of the new Bridgewater Bridge precinct.

The remaining funds (\$2,106.00) for this project would be allocated from the Promotion of the Municipality budget item.

Designer Margaret Woodward has provided a comprehensive quote for the restoration of the sculpture outlining materials, hours and work required for the restoration (refer attachment).

Consultation

Senior Management Team; Margaret Woodward Design

Risk Implications

None.

Financial Implications

\$20,000 re-allocated from the Public Art Strategy budget item & \$2106.00 from the Promotion of Municipality budget item.

Strategic Plan

1.3 ensure attractive local areas that provide social, recreational and economic opportunities

1.4 encourage a sense of pride, local identity and engaging activities

Social Implications

Enhancing community infrastructure

Environmental or Climate Change Implications

Nil.

Other Issues

Nil.

Assessment

Designer Margaret Woodward has been approached and provided a comprehensive quote for the restoration of the sculpture *Jerry* (2007) by Tony Woodward outlining materials, hours and work required for the restoration.

Options

1. As per the recommendation.
 2. Other.
-

RECOMMENDATION:

That Council endorse reallocating the unspent \$20,000 from the Public Art Strategy budget item in the 2024/25 budget to restore the ‘Jerry’ sculpture in the new Bridgewater Bridge precinct; with the remaining funds from the Promotion of Municipality budget.

DECISION:

Cr Owen moved, Cr Murtagh seconded that Council endorse reallocating the unspent \$20,000 from the Public Art Strategy budget item in the 2024/25 budget to restore the ‘Jerry’ sculpture with the remaining funds from the Promotion of Municipality budget. Council to determine the exact location for ‘Jerry’ to be relocated.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

14.2 Review - Customer Service Charter

Author: Director, Governance & Regulatory Services (J Banks)

Background

Section 339F of the *Local Government Act 1993* (The Act) requires council to review its Customer Service Charter within 12 months after each ordinary election and at least every two years.

Council's Customer Service Charter was endorsed in April 2023 following the last council election and is to be reviewed at least once every 2 years

339F. Customer service charter

- (1) *A council must adopt a customer service charter on or before 1 January 2006.*
- (2) *The customer service charter is to –*
 - (a) *specify the principles relating to services provided by the council; and*
 - (b) *specify a procedure for dealing with complaints relating to services provided by the council; and*
 - (c) *include any prescribed matter.*
- (3) *The general manager is to make the customer service charter available –*
 - (a) *for public inspection at the public office during ordinary office hours; and*
 - (b) *on the council's internet site free of charge; and*
 - (c) *for purchase at a reasonable charge.*
- (4) *A council is to review its customer service charter at least once every 2 years.*
- (5) *The general manager is to provide the council with a report at least once a year of the number and nature of complaints received.*

The Charter outlines what our customers can expect from our staff and how members of the public can help us to deliver professional, reliable and consistent customer service.

Consultation

Senior Management Team; Executive Officer, Governance

Risk Implications

Nil.

Financial Implications

Nil

Strategic Plan

S4.2 – Be well-governed, providing quality service and accountability to our community.

Social Implications

Not Applicable.

Environmental or Climate Change Implications

Not Applicable.

Economic Implications

Not Applicable.

Other Issues

Nil.

Assessment

The Senior Management Team were provided with the opportunity to review the Charter prior to submission to Council. Minor amendments have been made to the Charter with a version attached with proposed changes.

Options

1. As per the recommendation.
2. That Council make further amendments to the Customer Service Charter.
3. Other.

RECOMMENDATION:

That Council adopt the Customer Service Charter in accordance with Section 339F of the *Local Government Act 1993* and make it publicly available on Council's website.

DECISION:

Cr De La Torre moved, Cr Curran seconded that Council adopt the Customer Service Charter in accordance with Section 339F of the Local Government Act 1993 and make it publicly available on Council's website.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

14.3 Council Policy Reviews

Author: Director, Governance & Regulatory Services (J Banks)

Background

A comprehensive review of all Council endorsed policies is in progress.

Below is a summary of the policies that are submitted to Council for either adoption or rescindment.

No:	Policy Name:	Comments:
1.1	Rates – Multi-Service	<ul style="list-style-type: none"> • Rescind Policy. • Consolidated into Policy 1.6 Rates & Charges. • Attached for reference.
1.3	Financial Hardship Assistance	<ul style="list-style-type: none"> • Policy reviewed. • Included in attachment with tracked changes.
1.4	Rates – Churches	<ul style="list-style-type: none"> • Rescind Policy. • Consolidated into Policy 1.6 Rates & Charges. • Attached for reference.
1.5	Pensioner Rates Remissions Application of Penalty and/or Interest	<ul style="list-style-type: none"> • Rescind Policy. • Consolidated into Policy 1.6 Rates & Charges. • Attached for reference.
1.6	Rates and Charges	<ul style="list-style-type: none"> • Policy reviewed. • Consolidates rescinded Policy 1.1, 1.4, 1.5 & 1.10 • Included in attachment with tracked changes.
1.10	Debt Collection – Rates	<ul style="list-style-type: none"> • Rescind Policy. • Consolidated into Policy 1.6 Rates & Charges. • Attached for reference.
1.11	Debt Collection - Water	<ul style="list-style-type: none"> • Rescind Policy. • Attached for reference.
2.6	Related Party Disclosures	<ul style="list-style-type: none"> • Policy reviewed. • Included in attachment with tracked changes.
6.3	Bond Policy <i>(previously named Subdivision Building Defect Liability Guarantee Policy)</i>	<ul style="list-style-type: none"> • Policy reviewed & renamed. • Consolidates Policy 6.3 and 6.4.
6.4	Subdivision Building Estate Bonds and Guarantees	<ul style="list-style-type: none"> • Rescind Policy. • Consolidated into 6.3 Bond Policy
7.5	Planning Appeals	<ul style="list-style-type: none"> • Policy reviewed.

No:	Policy Name:	Comments:
		<ul style="list-style-type: none"> Included in attachment with tracked changes.

Policies that have been recommended to be rescinded are either outdated and no longer relevant or have been incorporated into existing policies that have been reviewed.

There will also be a range of administrative measures taken in addition to the adoption of these policies, including all policies being made publicly available on council’s website (or removed if a rescinded policy).

Consultation

SMT; Executive Officer - Governance; Executive Officer – Accounting, Senior Officer – Development Engineering.

Risk Implications

Regular review and monitoring of council policies will be undertaken to ensure compliance with relevant legislation.

Financial Implications

Not applicable.

Strategic Plan

S4.2: Be well-governed, providing quality service and accountability to our community.

Social Implications

Not applicable.

Environmental or Climate Change Implications

Not applicable.

Economic Implications

Not applicable.

Options

- As per the recommendation.
- Other.

RECOMMENDATION:

That Council

- adopt** the following policies:
 - 1.3 Financial Hardship Assistance
 - 1.6 Rates and Charges

2.6 Related Party Disclosures

6.3 Bond Policy

7.5 Planning Appeals

2. **rescind** the following policies:

1.1 Rates Multi-Service

1.4 Rates - Churches

1.5 Pensioner Rates Remissions Application of Penalty and/or Interest

1.10 Debt Collection - Rates

1.11 Debt Collection – Water

6.4 Subdivision Building Estate Bonds and Guarantees

DECISION:

Cr De La Torre moved, Cr McMaster seconded that Council

1. *adopt the following policies:-*

1.3 Financial Hardship Assistance

1.6 Rates and Charges

2.6 Related Party Disclosures

6.3 Bond Policy

7.5 Planning Appeals

2. *rescind the following policies:*

1.1 Rates Multi-Service

1.4 Rates – Churches

1.5 Pensioner Rates Remissions Application of Penalty and/or Interest

1.10 Debt Collection – Rates

1.11 Debt Collection - Water

6.4 Subdivision Building Estate Bonds and Guarantees

CARRIED

VOTING RECORD

In favour	Against
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Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	

Cr Owen
Cr Whelan

14.4 Master Plan Project - Pontville Park Precinct

Author: Chief Executive Officer (J Dryburgh)

Background

The purpose of this report is to seek Council's endorsement for the commencement of a Master Planning project for the Pontville Park Precinct this financial year.

The project would aim to engage experienced consultants to provide expert guidance and support during the master planning process as well as undertaking thorough consultation with stakeholders, including local residents and facility user groups, to gather input and feedback through the various project stages.

A Master Plan for this site would establish a clear vision that is created and approved through a collaborative and consultative process.

Consultation

Senior Management Team

Risk Implications

None.

Financial Implications

This project is currently not budgeted for and can only proceed if the budget position allows for the allocation of required funds.

Strategic Plan

1.1 engage with and enable our community

1.3 ensure attractive local areas that provide social, recreational and economic opportunities

3.2 infrastructure development and service delivery are guided by strategic planning to cater for the needs of a growing and changing population

3.3 community facilities are safe, accessible and meet contemporary needs

4.1 be big picture, long-term and evidence-based in our thinking

Social Implications

Enhancing community facilities; improving social infrastructure and increasing community engagement.

Environmental or Climate Change Implications

Nil.

Economic Implications

Other Issues

Nil.

Assessment

Ensuring suitably qualified consultants are selected along with the availability of staff to manage and oversee the project will also need to be assessed to ensure the project is implemented successfully.

Options

1. As per the recommendation.
2. Council not approve the project until it is an approved project in a future budget.
3. Other.

RECOMMENDATION:

That Council endorse the commencement of a Master Planning Project for the Pontville Park Precinct subject to:-

- a) Council’s budget position;
- b) staff capacity to manage the project; and
- c) securing suitably qualified consultants.

DECISION:

Cr Irons moved, Cr Curran seconded that Council endorse the commencement of a Master Planning Project for the Pontville Park Precinct subject to:-

- a) *Council's budget position;*
- b) *staff capacity to manage the project; and*
- c) *securing suitably qualified consultants.*

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

14.5 Urban Precincts & Partnerships Grant Scheme - Committee for Greater Hobart

Author: Chief Executive Officer (J Dryburgh)

Background

The Committee for Greater Hobart have approached Council seeking to partner on a grant application under the Federal Government's Urban Precincts and Partnerships grant scheme. The Committee for Greater Hobart are seeking to assist with transformational planning and investment across Greater Hobart and want to demonstrate real-life scenarios in which this can occur. They have reviewed potential opportunities for this across the metropolitan area of Hobart (the six urban council areas) and have determined that their preferred project is centred around the Bridgewater Bridge Precinct and the waterfront and growth area around it.

As Councillors are aware, there is a need to bring together separate pieces of strategic work in the area and to further consider what planning scheme provisions are appropriate and what the key pieces of enabling infrastructure might be.

Under the proposal, the Committee for Greater Hobart would be the applicant, but Brighton Council and the State Government would be partners (the Committee for Greater Hobart intend to seek formal support from the State Government). Indeed, under the grant terms, the State Government has to be the recipient and administrator of funds.

Council staff have explained that we have severe resource constraints at present due to high growth and strategic activity, and due to recent successes with other grants for a range of strategic projects. Under the proposal, GHD (as a member of the Committee for Greater Hobart) would undertake to prepare the grant application pro-bono, with some support from Council and the grant proposal is to include funding for adequate additional resources for council to participate fully in the project.

Council officers see this proposal as a novel approach and a unique opportunity, one that is worth pursuing. As previously discussed with Councillors, there is a need to ensure a collaborative approach with the State Government to ensure the precinct around the new bridge is well master planned so that Brighton and Tasmania can fully realise the community and economic benefits of the structural changes in the area. This type of partnered approach could be a vehicle to help achieve this.

The grant focuses on master planning, being under Stream 1:

- ***Stream One: Precinct development and planning***
 - *Project funding of between \$500,000 to \$5 million is available to activate partnerships and deliver an investment-ready precinct plan.*

However, it is considered that the successful completion of a Stream 1 project would ensure that the precinct is very well placed for Stream 2 funding, in which major funding (up to \$50 million) is available for developing the precinct. This would clearly be an incredible opportunity for both Council and the State Government.

- **Stream Two: Precinct delivery**
 - *Project funding of \$5 million to \$50 million is available to help deliver one or more elements of a precinct. This could include enabling public infrastructure (roads, pathways, underground infrastructure), open spaces between elements, or a particular building/s that is the catalyst for, or complements, other investment within a precinct.*

Consultation

SMT, Committee for Greater Hobart, Strategic Planner

Risk Implications

The only risks are considered minor. These relate to the normal risk around a partnership being more complex to manage than a project run independently. However, with this particular project it is essential that the State Government are a partner given they are the major land and asset owner in the precinct.

The other risk is managing expectations, given recommendations through a master planning process may not be able to be funded in the short term. However, this issue should not inhibit long-term strategic planning.

Financial Implications

No direct financial contribution is to be made by Council, but there will be some staff time applied to the grant application process. Co-funding is not a requirement of the grant.

Strategic Plan

3.2 infrastructure development and service delivery are guided by strategic planning to cater for the needs of a growing and changing population

4.1 be big picture, long-term and evidence-based in our thinking

Social Implications

This precinct is extremely important for the entire Brighton community and for the image of our region beyond our boundaries. It is critical we do what we can to ensure its future is well thought out and mechanisms put in place to steer its development accordingly.

Environmental or Climate Change Implications

Sound master planning enables better local environmental outcomes and should lead to more efficient communities that produce lower emissions.

Economic Implications

The precinct around the new bridge is considered to be a significant economic opportunity for Brighton and the wider region. This opportunity will only be optimised with the development of a clear vision that can then be implemented.

Other Issues

Nil.

Assessment

Council officers believe the opportunity to partner with the Committee and State Government on this grant should be pursued.

Options

1. As per the recommendation.
2. Other.

RECOMMENDATION:

That Council endorse officers to assist the Committee for Greater Hobart to prepare a grant application for master planning around the Bridgewater Bridge Precinct under the Federal Government’s Urban Precincts and Partnerships grant scheme and for Council to be a partner in the application.

DECISION:

Cr McMaster moved, Cr Curran seconded that Council endorse officers to assist the Committee for Greater Hobart to prepare a grant application for master planning around the Bridgewater Bridge Precinct under the Federal Government’s Urban Precincts and Partnerships grant scheme and for Council to be a partner in the application.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

14.6 Annual Plan 2024/25 - Progress Update

Author: Chief Executive Officer (J Dryburgh)

Background

Each year, the Council formulates an Annual Plan as mandated by the *Local Government Act 1993*. This plan must be closely aligned with the budget.

The purpose of this report is to provide an update on Council's progress against the actions within the Annual Plan for 2024/25.

Consultation

Senior Management Team and relevant staff.

Risk Implications

None.

Financial Implications

This report is not a budget review. It is a summary of progress against the Annual Plan but it does also give an indication of how council is tracking against many key items in the budget.

Strategic Plan

The Annual Plan was prepared consistent with Council's Strategic Plan.

Providing a mid-year update on the progress of the Annual Plan furthers Goal 4 of the Strategic Plan to 'ensure a stable organisation' especially with regard to:

S4.1: Be big picture, long-term and evidence based in our thinking

S4.2: Be well-governed, providing quality service and accountability to our community

S4.4: Ensure Financial & Risk Sustainability

Social Implications

The Annual Plan includes a range of actions focussing on social outcomes.

Environmental or Climate Change Implications

The Annual Plan includes a range of actions focussing on environmental issues and opportunities.

Economic Implications

A range of actions in the Annual Plan have economic implications.

Other Issues

Nil.

Assessment

The Key Focus Areas and Summary of Strategies and Initiatives for 2024/25 are provided in the attachment with a status and comments section provided beside each action.

RECOMMENDATION:

That the 2024/25 Annual Plan Progress update be received.

DECISION:

Cr De La Torre moved, Cr McMaster seconded that the 2024/25 Annual Plan progress update be received.

CARRIED

VOTING RECORD

In favour	Against
Cr Curran	
Cr De La Torre	
Cr Gray	
Cr Irons	
Cr McMaster	
Cr Murtagh	
Cr Owen	
Cr Whelan	

15. Questions on Notice

There were no Questions on Notice for the February meeting.

Meeting closed: 6.20pm

Confirmed: _____
(Mayor)

Date: _____
18 March 2025



6 March 2025

ATTACHMENT

AGENDA ITEM 7

State Planning Office
Department of State Growth
GPO Box 536
HOBART TAS 7001

Dear Sir/Madam

**SOUTHERN TASMANIA REGIONAL LAND USE STRATEGY - URBAN GROWTH
BOUNDARY PROPOSED UPDATE**

I refer to your letter dated 3 February 2025 regarding the above-mentioned matter. Firstly, thank you for the opportunity to provide comment.

Council has reviewed the proposed update for the locations within our municipality and are largely satisfied that this is consistent with the work conducted to date with the STRLUS project. All four locations are supported by Council and work has been done to ensure these locations have been considered appropriately.

More broadly across the Southern region, Council supports those areas that have been previously identified as part of the STRLUS review. However, we note that there have been additional areas nominated. It is not clear on the methodology used to select these sites and it does not necessarily appear to meet good planning principles.

Furthermore, Council feels that the approximated maximum lot yields identified across all sites is excessive and should be reassessed for a more probable figure.

Council's position is that we are committed to delivering a robust and transparent long term regional land use strategy as quickly as possible. We encourage the state to actively assist with the progression of the STRLUS project and not to proceed with the fast-track Urban Growth Boundary update. This approach would give the STRLUS project the best chance of being successfully completed.

Yours sincerely

James Dryburgh
CHIEF EXECUTIVE OFFICER

Leigh Gray
MAYOR

6 March 2025

General Managers and CEOs of Southern Councils

Dear General Managers and CEOs,

NEW BOARD MEMBER

As you are aware, at its meeting on 19 February 2025, member representatives of the Local Government Forum considered the appointment of a new Chief Member Representative following the departure of David Reeve, Director of Engineering Services at Kingborough Council.

Brighton Mayor, Cr Leigh Gray, was appointed as Chief Member Representative. This position is appointed to the TasWaste South Board.

We welcome Leigh's appointment and look forward to continuing to work with your respective councils.

Yours sincerely,

Dr Katrena Stephenson



Chair
TasWaste South

Contact Us:

326 Macquarie Street
South Hobart,
Tasmania 7004

GPO Box 1521
Hobart,
Tasmania 7001

Tel: 0409 963 061
taswastesouth.tas.gov.au
ABN 71 966 321 558



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Brian White

From: TasWater Development Mailbox <Development@taswater.com.au>
Sent: Tuesday, 4 February 2025 9:45 AM
To: Development
Subject: TasWater Response to Planning Authority Referral of Planning Scheme Amendment, Council reference RZ 2024-04
Attachments: TWDA 2025-00074-BTN.pdf

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Dear Planning Authority,

TasWater does not object to the proposed amendment to the Brighton LPS as mentioned above and has no formal comments for the Tasmanian Planning Commission in relation to this matter and does not require to be notified of nor attend any subsequent hearings as stated in the attached SPAN.

If you have any queries, please contact me.

Thank you.

Phil Papps
Senior Development Assessment Officer



M 0474 931 272
E phil.papps@taswater.com.au
A GPO Box 1393, Hobart, TAS 7001

www.taswater.com.au

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Brian White

From: Darshil Patel <darshil.patel@tasgas.com.au>
Sent: Tuesday, 4 February 2025 4:25 PM
To: Brian White
Cc: Engineering
Subject: FW: Notification - Draft Amendment RZ 2024-04 - Brighton Local Provision Schedule.
Attachments: Attachment B - Landowners' Consent.pdf; Attachment C - Truck Stop Upgrades Concept Plan.pdf; Attachment D - Stakeholder feedback.pdf; Attachment E - Mobile Food Vendor Policy.pdf; OCM Minutes (EXTRACT) 21.1.25 - Brighton LPS Food Services Use.pdf; Title Documents.pdf; Attachment A - Instrument of Certification.docx.pdf
Follow Up Flag: Follow up
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Good Afternoon Brian,

Tas Gas Network (TGN) holds **no objections** to application **CT 164049/1** at **1 Strong Street, Brighton**.

However, please note that a TasGas network valve is in close proximity to the property boundary and requires unrestricted access at all times. We request that any food trucks be kept at least 5 meters away from the valve to ensure safe and clear access.

Let me know if you need any further clarification.

Kind regards,

Darshil Patel
Graduate Engineer
Tas Gas Networks

0419 356 101
03 6208 6412

29 Derwent Park Road, Derwent Park,
7009

tasgasnetworks.com.au



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Sent: Friday, 31 January 2025 11:41 AM
To: Darshil Patel <darshil.patel@tasgas.com.au>
Cc: Litzen Jacob <litzen.jacob@tasgas.com.au>
Subject: FW: Notification - Draft Amendment RZ 2024-04 - Brighton Local Provision Schedule.

Hi Darshil

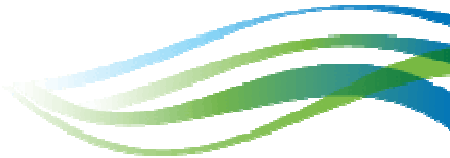
Please view and respond if we need to.

Tristan Thomson
Engineering Manager
Tas Gas Networks

0438 097 563
03 6336 9382

5 Kiln Court, St Leonards, 7250

tasgasnetworks.com.au



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From: Brian White <brian.white@brighton.tas.gov.au>
Sent: Friday, 31 January 2025 10:58 AM
To: Jason Harriss <Jason.Harriss@tasgas.com.au>; Tristan Thomson <Tristan.Thomson@tasgas.com.au>; Solstice Customer Service <info@solsticeenergy.com.au>
Subject: FW: Notification - Draft Amendment RZ 2024-04 - Brighton Local Provision Schedule.

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Good Morning,

In accordance with Section 40FA of the Land Use Planning and Approval Act 1993, I am writing to inform you that the Brighton Council Permit Authority initiated draft amendment RZ 2024-04 to the Brighton Local Provision Schedule at its meeting on 21st January 2025.

The draft amendment seeks to:

- Insert Site Specific Qualification to allow Food Services Use (if for Mobile Food Vendor) as Permitted Use within the Utilities Zone on Land at CT 164049/1 (2 Strong Street, Bridgewater).

Please find attached the draft amendment and relevant supporting documents.

The draft amendment will be on public exhibition from 1st February to 3rd March.

Should you require any further clarification or information, please do not hesitate to contact me.

Kind Regards,

BRIAN WHITE
STRATEGIC PLANNER



Brighton
going places



Click here to view the
2050
VISION

1 Tivoli Road, Old Beach TAS 7017

Tel: (03) 6268 7070

www.brighton.tas.gov.au

We acknowledge the traditional owners who once walked this country, the Mumirimina people, the original custodians of the skies, land and water of kutalayna (Jordan River). We forward our respect to the palawa/pakana (Tasmanian Aboriginal) community as the traditional and original owners of lutruwita (Tasmania).

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PROPOSED SUBDIVISION

ALL MEASUREMENTS ARE IN METRES

LEVEL DATUM: Listmap

CONTOUR INTERVAL: 10 Metres

REFERENCE: 210768V6

OWNER:

SOUTHERN WASTE MANAGEMENT PTY LTD

LOCATION:

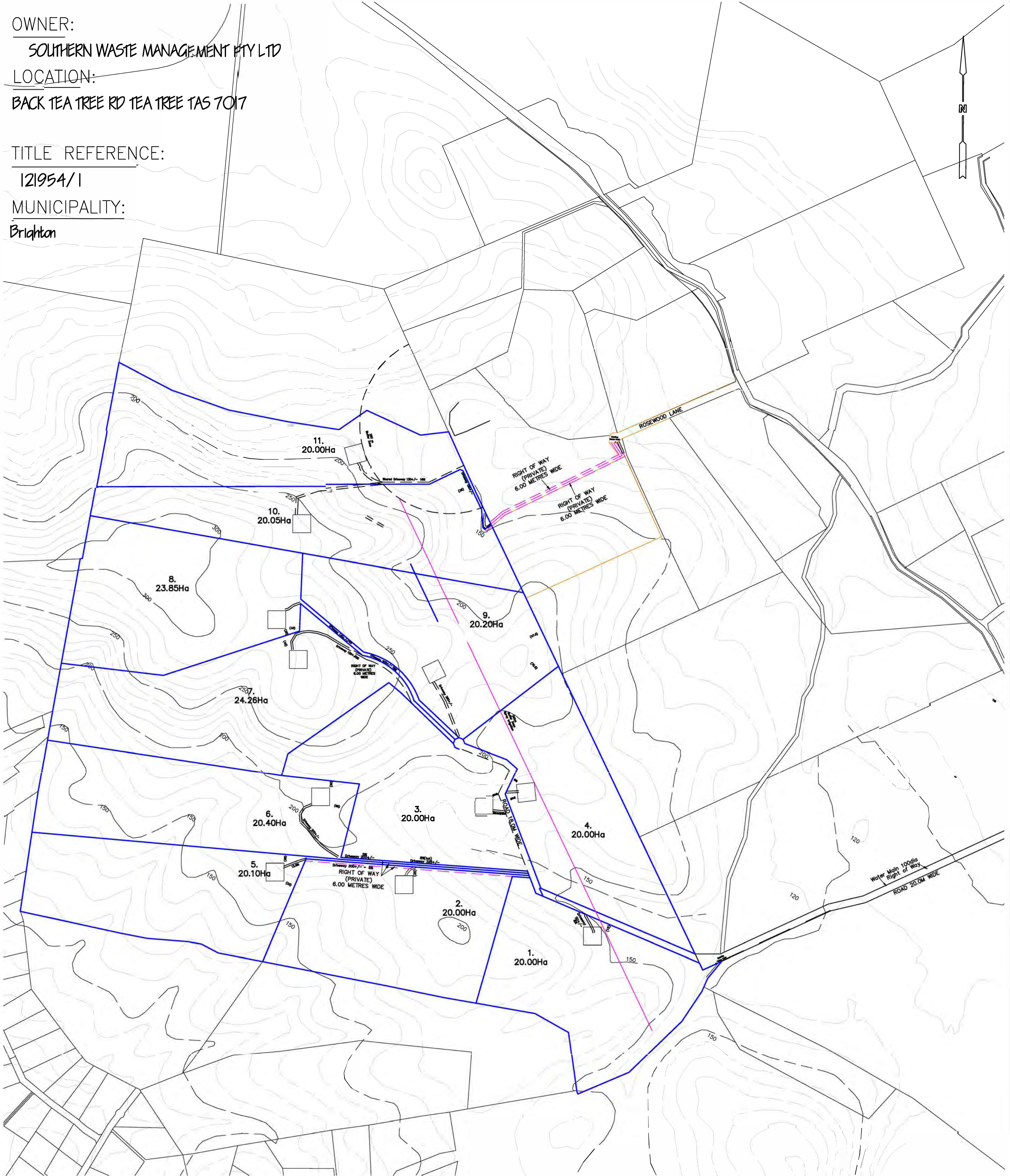
BACK TEA TREE RD TEA TREE TAS 7017

TITLE REFERENCE:

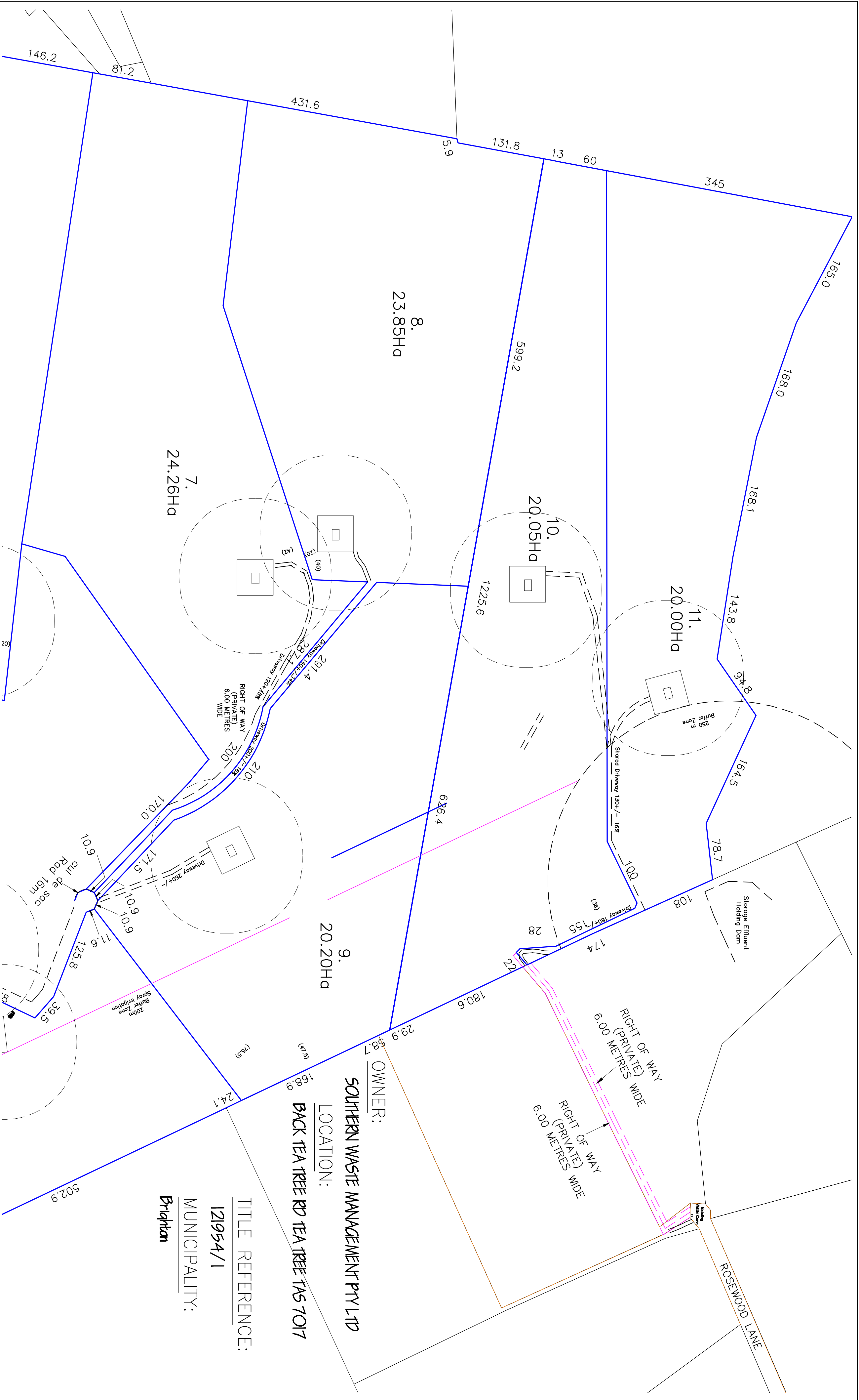
121954/1

MUNICIPALITY:

Brighton



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OWNER:
SOUTHERN WASTE MANAGEMENT PTY LTD

LOCATION:
BACK TEA TREE RD TEA TREE TAS 7017

TITLE REFERENCE:
121954/1

MUNICIPALITY:
Brighton

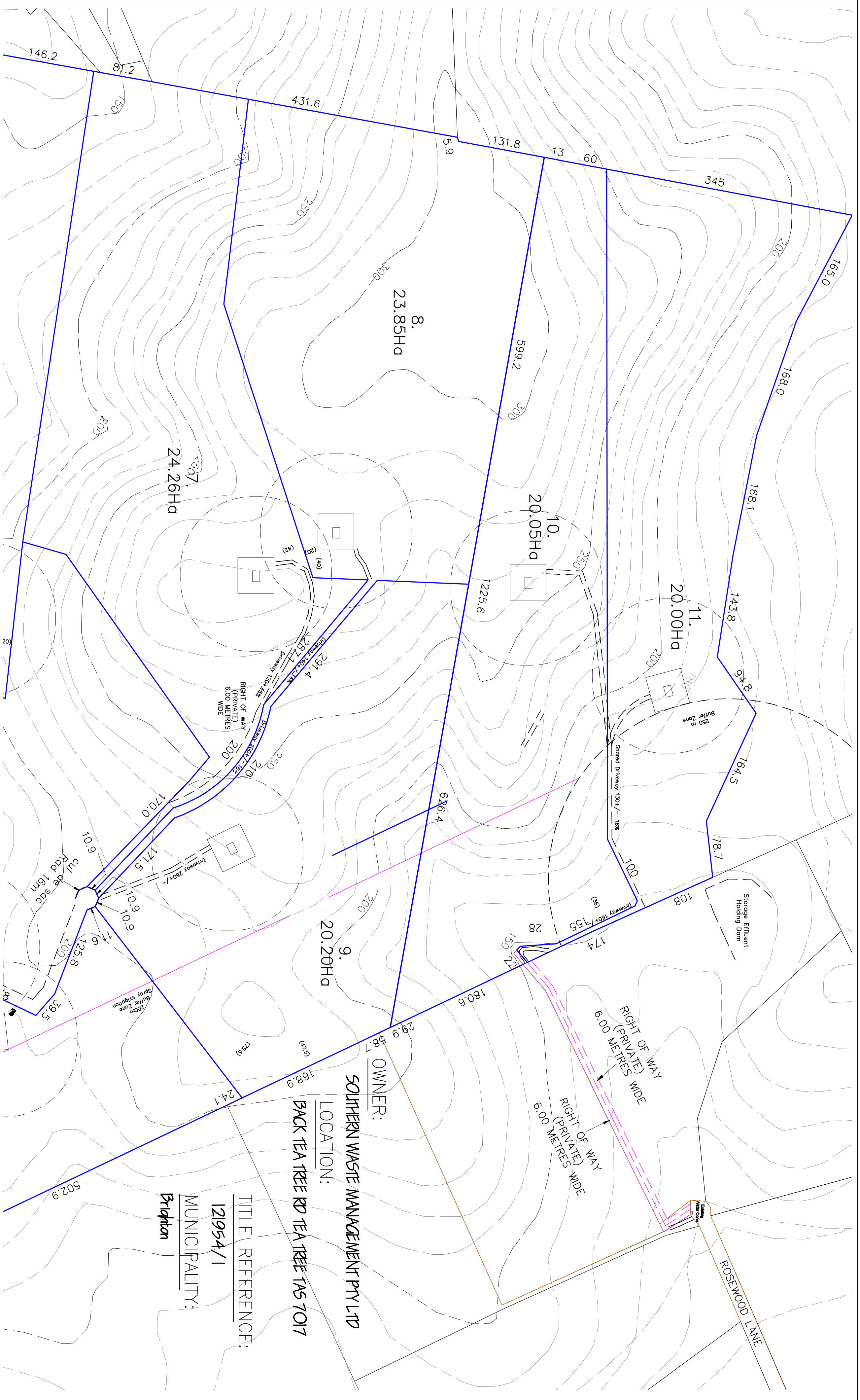
9 Warwick St, Hobart, Tasmania 7000
 Phone: 03-62 343082 Fax: 03-62 343360
 Email: djpotter@iinet.net

D.J. POTTER
 Land Consultants

SCALE: 1:5000
DATE: 17/01/25
DRAWN: TP/JP

PROPOSED SUBDIVISION

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OWNER:
SOUTHERN WASTE MANAGEMENT PTY LTD

LOCATION:
BACK TEA TREE RD TEA TREE TAS 7017

TITLE REFERENCE:
121954/1

MUNICIPALITY:
Brighton

D.J. POTTER
Land Consultants

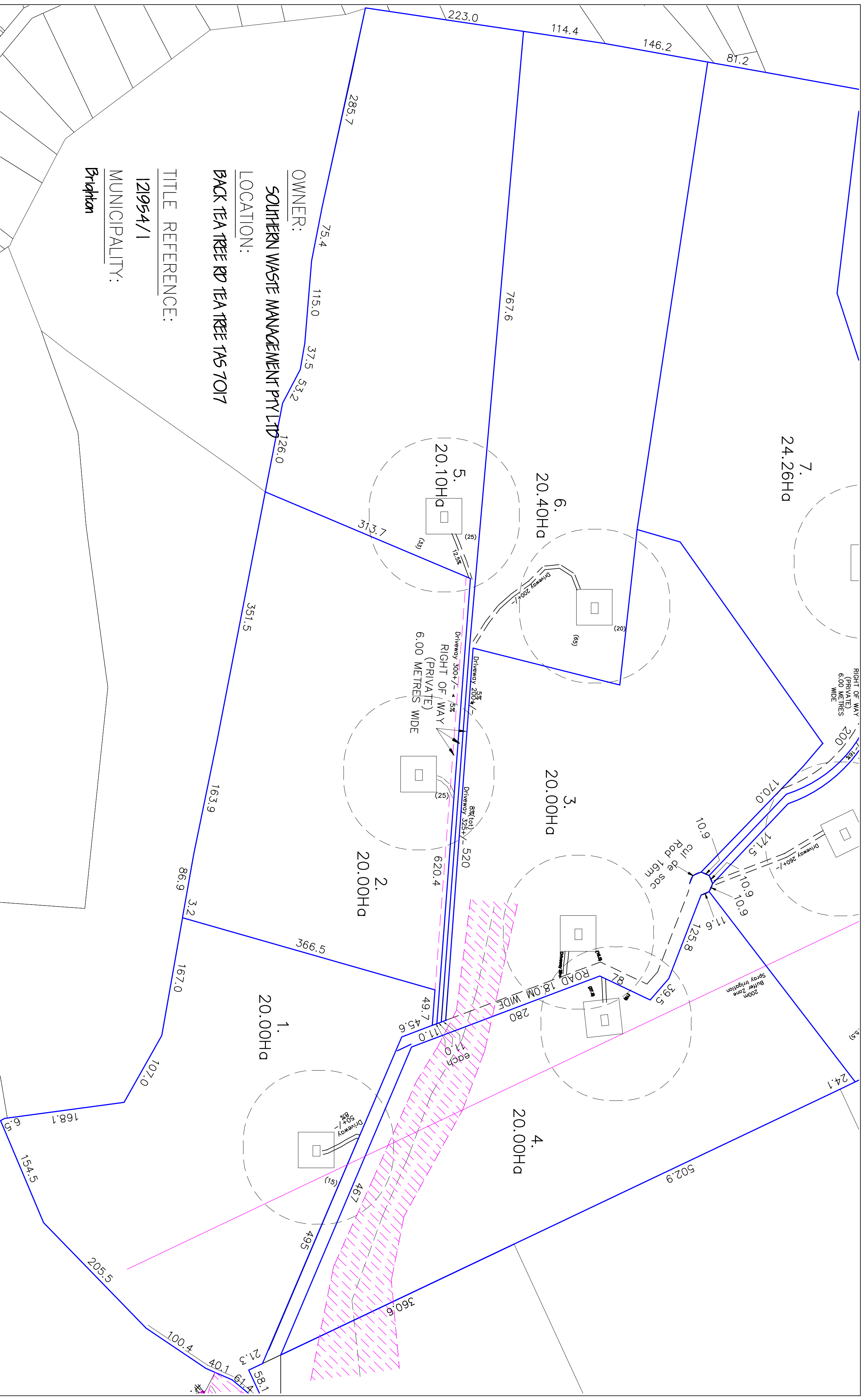
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 Email: djpotter@iinet.net

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PROPOSED SUBDIVISION

ALL MEASUREMENTS ARE IN METRES LEVEL DATUM: assumed datum 100 at Survey Station CONTOUR INTERVAL: 10meters REFERENCE: 210768V6

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OWNER:
SOUTHERN WASTE MANAGEMENT PTY LTD

LOCATION:
BACK TEA TREE RD TEA TREE TAS 7017

TITLE REFERENCE:
121954/1

MUNICIPALITY:
Brighton

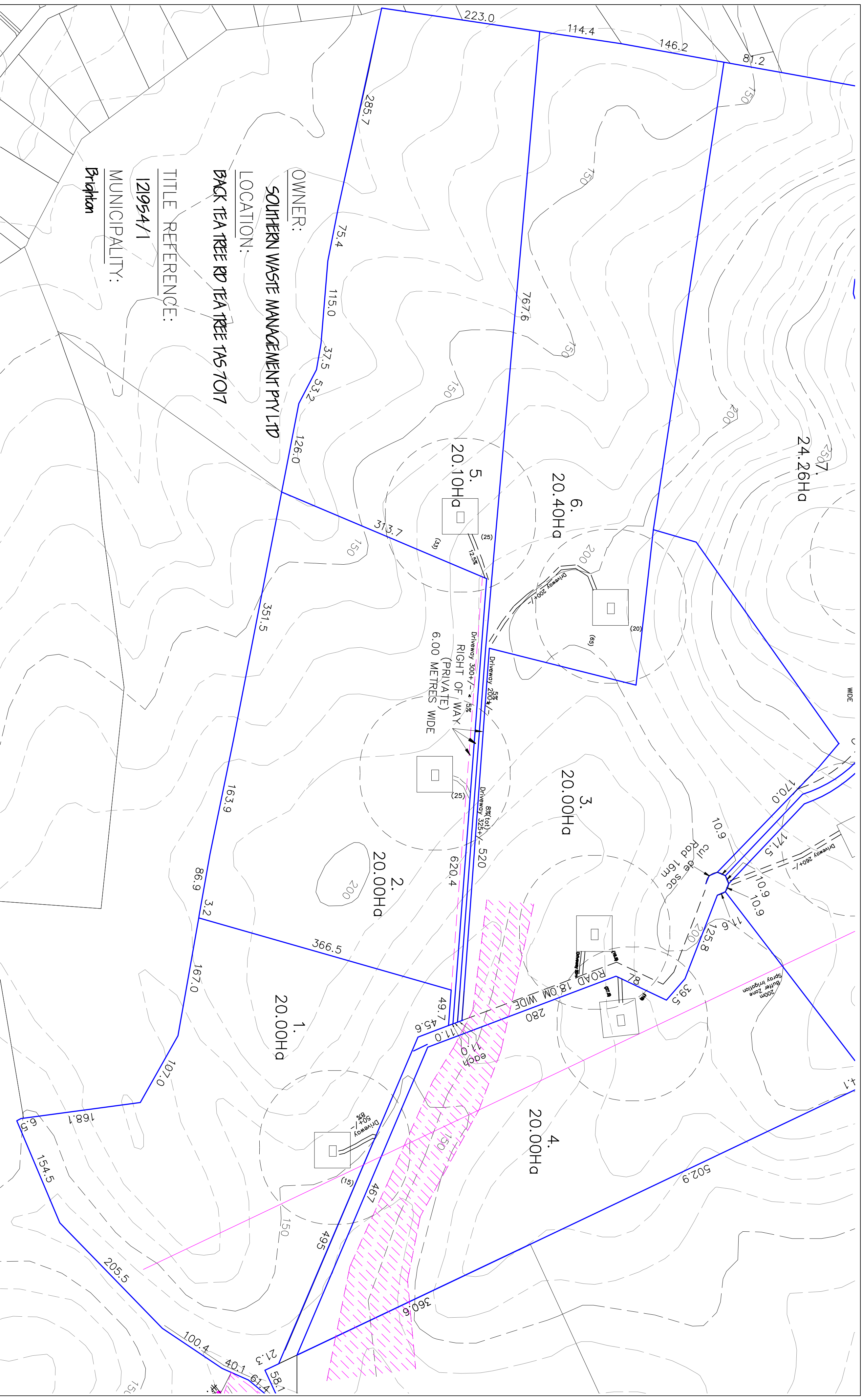
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LOCATION:
BACK TEA TREE RD TEA TREE TAS 7017

TITLE REFERENCE:
121954/1

MUNICIPALITY:
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Back Tea Tree Road, Tea Tree - Proposed Subdivision Bushfire Report and Hazard Management Plan

01/02/2024

For Southern Waste Management (SWS002)



313 Macquarie Street, Hobart Tasmania, 7000

03 62319788

admin@northbarker.com.au

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CONTENTS

	1
1. INTRODUCTION	1
2. SITE DESCRIPTION	1
3. PROPOSED USE	1
4. BUSHFIRE SITE ASSESSMENT	3
4.1 VEGETATION	3
4.2 SLOPE AND FIRE PATHS	3
4.3 DISTANCE	3
5. BUSHFIRE PRONE AREAS MANAGEMENT OBJECTIVES	10
6. MANAGEMENT OF THE HMA AND LANDSCAPING	11
REFERENCES	11
APPENDIX 1. BUSHFIRE HAZARD MANAGEMENT PLAN	12
Bushfire Attack Level (BAL) Assessment Report	12
Property Details	12
APPENDIX 2. SPECIFICATIONS FOR ACCESS, WATER SUPPLY AND HAZARD MANAGEMENT AREAS.	17
APPENDIX 3. PLANNING CERTIFICATE	22

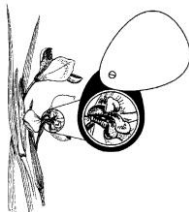
ACKNOWLEDGMENTS

Client: Southern Waste Solutions

Survey and bushfire report: Cameron Geeves and Philip Barker

HMP: Philip Barker

Mapping: Linda Drummond and Craig Stobbs



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1. INTRODUCTION

The following proposal is for the development of an 11 Lot subdivision at Back Tea Tree Road, Tea Tree. The development site is on a title of approx. 230 ha (Title Ref: 121954/1).

Brighton Council requires a Bush Fire Hazard Management Plan (HMP) demonstrating the required BAL for the proposal and the proposed mitigation in compliance with the AS3959 (2018).

The BHMP is required to be developed for the purposes of Tasmanian Planning Scheme (TPS) – Bushfire-Prone Areas Code C13.0. This bushfire hazard management plan addresses the requirements for all lots in the subdivision.

This HMP is relevant to this subdivision application and specific location of building areas illustrated below. Any application to build a dwelling in an alternative location will require a new HMP specific to the new location.

2. SITE DESCRIPTION

The land is within the municipality of Brighton Council and the relevant parcels are within the bushfire overlay of the *Tasmanian Planning Scheme – Brighton*.

The site is spread over Jews Hills, which is part of the northern end of the Meehan Range. The site consists of gentle to moderately sloped farmland, native grassland, and woodland. Lots one to nine are accessed from Back Tea Tree Road while lots 10 and 11 are accessed from Rosewood Lane off Back Tea Tree Road.

The site is a mosaic of pasture, native grassland, and woodlands occurring across a predominantly eastern aspect. To the north and east of the property is agricultural land. To the south and west is woodland.

See Figures 1 and 2 for the context and locality of the proposal.

Limitations:

This HMP is relevant to this subdivision application and specific location of building areas illustrated below and referred to as “notional”. Any application to build a dwelling in an alternative location will require a new HMP specific to the new location.

This report is based on site measurements at the time of inspection and from information provided by the proponent. The report is limited in scope to bushfire hazard assessment only. The assessment is based on this building proposal and its findings are for this site only. Future changes to the building proposal or changes in the vegetation that affect bushfire hazard have not been considered.

3. PROPOSED USE

The proposal is for a low-density residential subdivision to create eleven low density residential lots.

All lots will rely on static water for firefighting purposes. All lots will have a dedicated static water supply and have independent access.

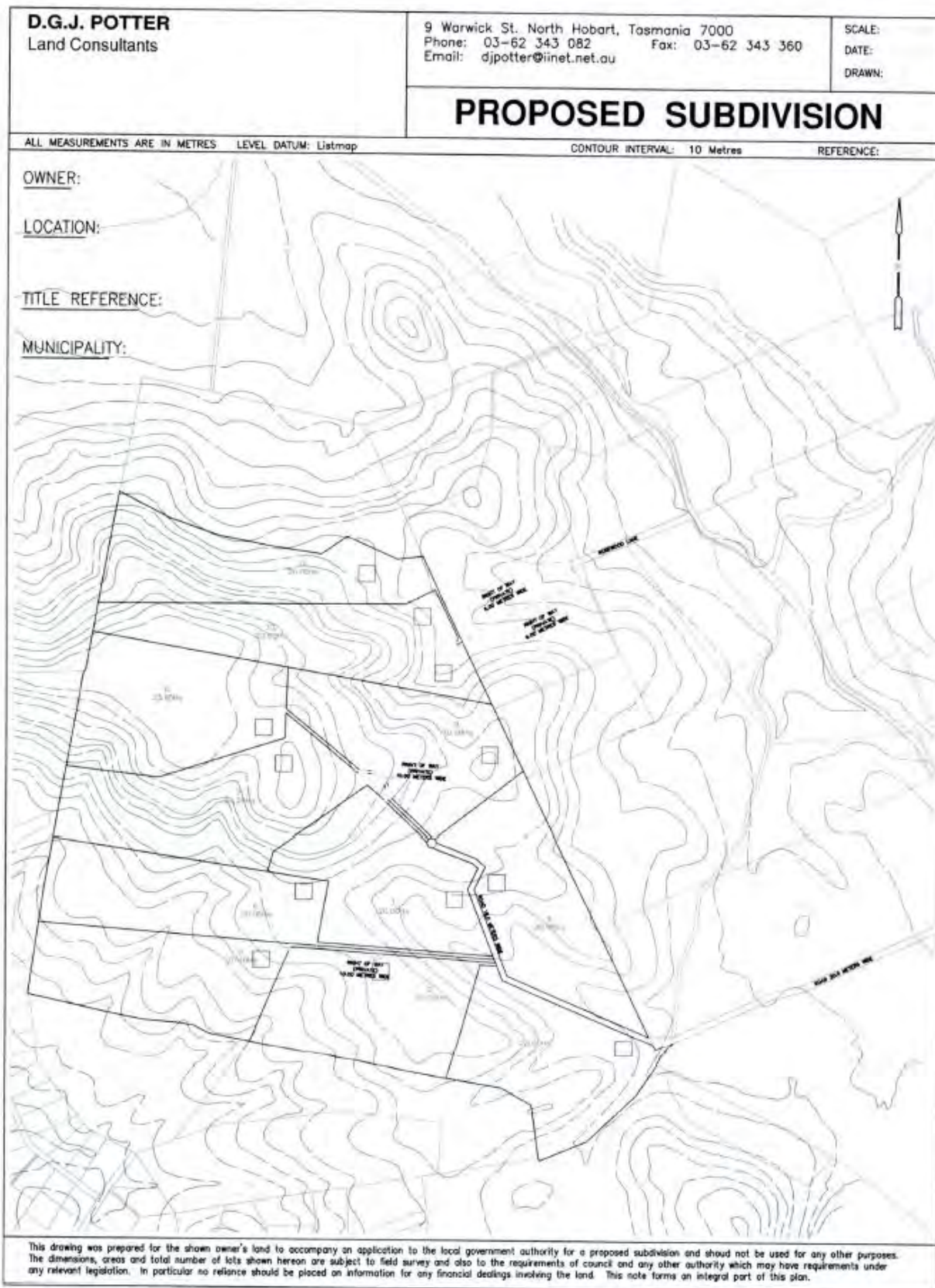


Figure 1: Plan of subdivision (1 of 2)

4. BUSHFIRE SITE ASSESSMENT

4.1 VEGETATION

Low lying areas and north facing aspects consist of grassland or sparse woodland (generally lots on the eastern side of the property) while south or west facing aspects (generally lots to the west and south) consist of woodland. Detail on the vegetation on and within 100 m of the building area on each lot is as follows:

Lot 1: Woodland to the south and southwest, Grassland to the north and northeast.

Lot 2: Predominantly grassland. Woodland, downslope to the southwest.

Lot 3: Entirely grassland.

Lot 4: Predominantly grassland. Woodland to the north.

Lot 5: Entirely woodland.

Lot 6: Grassland to the north and east, woodland to the south and west.

Lot 7: Grassland.

Lot 8: Predominantly grassland with woodland to the west.

Lot 9: Entirely grassland.

Lot 10: Entirely grassland.

Lot 11: Predominantly grassland with a small patch of woodland to the north.

The existing vegetation is depicted in Figure 2 and tabulated in Table 1.

4.2 SLOPE AND FIRE PATHS

On all lots the slopes are low to moderate (Table 1). Given the slope and predominant fire weather the most likely fire path is from the north. Only the slopes that affect the BAL rating at the proposed house sites are reported in Table 1, although there are changes in slope within the 100m zone but beyond the distance that affects the BAL rating on the building areas.

4.3 DISTANCE

Table 1 and Figure 2 indicate the site characteristics for a 100 m radius that have been assessed to determine the bushfire attack level for each building area and provide the dimensions for the BHMA for a BAL 19 solution as per Section 2 of AS 3959. All aspects have been resolved to BAL 19 by the bushfire hazard management plan (Appendix 1).

NOTE: All distances are based on the existing and notional building areas illustrated in Figure 2.

Each notional building area shown in figure 2 is 25*25 m² totalling a 500 m² area. Table 1 below shows the size and distance to title boundaries of each notional building area within the proposed subdivision. All distances are measured from the north-eastern corner of each notional building area.

Table 1: Notional building area size and location for each lot. All distances are measured from the north-eastern corner of each notional building area.

Notional Building Area (BA)	BA (m ²)	Distance to Northern title boundary (m)	Distance to Eastern title boundary (m)
Lot 1	500 m ²	17 m	40 m
Lot 2	500 m ²	31 m	300 m
Lot 3	500 m ²	110 m	25 m
Lot 4	500 m ²	225 m	185 m
Lot 5	500 m ²	38 m	35 m
Lot 6	500 m ²	25 m	60 m
Lot 7	500 m ²	115 m	130 m
Lot 8	500 m ²	160 m	30 m
Lot 9	500 m ²	155 m	110 m
Lot 10	500 m ²	37 m	45 m
Lot 11	500 m ²	43 m	151 m

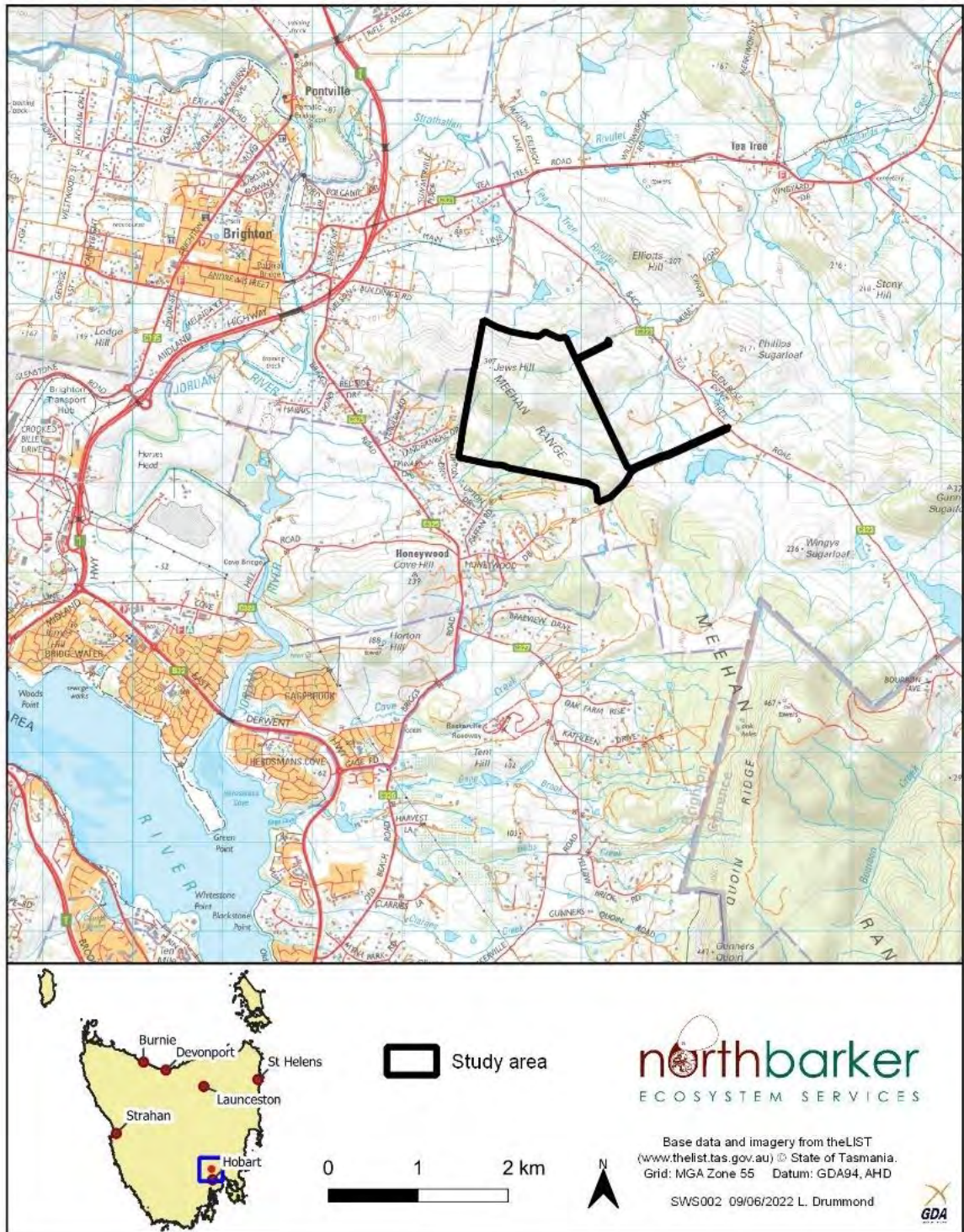


Figure 2: Locality



Plate 1: Typical grassland vegetation found across the site.



Plate 2: Looking towards Jew Hill from the southeast near lot 4.



Plate 3: Grassy woodland near the summit of Jew Hill.



Plate 4: Looking to the north from lot 1.



Plate 5: Typical woodland vegetation on lot 5.

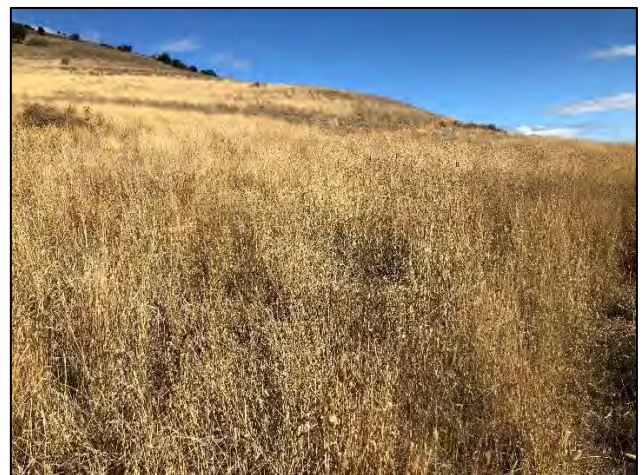


Plate 6: Grassland surrounding lot 11.

Table 2: Vegetation Slope characteristics and AS3959 BAL 19 min HMA.

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
Lot 1					
North	Grassland	0 – 5 °	0 – 100 m	10 m	n/a
East	Woodland	0 - 5 °	0 – 100 m	18 m	n/a
South	Woodland	flat / upslope	0 – 100 m	15 m	n/a
West	Woodland	0 - 5 °	0 – 100 m	18 m	n/a
Lot 2					
North	Woodland	0 – 5 °	0 – 100 m	18 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Woodland	flat / upslope	0 – 100 m	15 m	n/a
West	Grassland	5 – 10 °	0 – 25 m	13 m	n/a
West	Woodland	5 – 10 °	25 – 100 m	23 m	n/a
Lot 3					
North	Grassland	flat / upslope	0 – 100 m	10 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
West	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
Lot 4					
North	Grassland	flat / upslope	0 – 100 m	10 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 5					
North	Woodland	flat / upslope	0 – 100 m	15 m	n/a
East	Woodland	flat / upslope	0 – 100 m	15 m	n/a
South	Woodland	10 – 15 °	0 – 100 m	28 m	n/a
West	Woodland	10 – 15 °	0 – 100 m	28 m	n/a
Lot 6					
North	Grassland	flat / upslope	0 – 32 m	10 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	5 – 10 °	0 – 42 m	13 m	n/a
West	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
Lot 7					

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Grassland	flat / upslope	0 – 60 m	10 m	n/a
East	Grassland	10 – 15 °	0 – 100 m	15 m	n/a
South	Grassland	15 – 20 °	0 – 100 m	17 m	n/a
West	Grassland	10 – 15 °	0 – 90 m	15 m	n/a
Lot 8					
North	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 32 m	10 m	n/a
West	Woodland	flat / upslope	32 – 100 m	15 m	n/a
Lot 9					
North	Grassland	10 – 15 °	0 – 100 m	15 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
Southeast	Shrubland	0 – 5 °	0 – 100 m	15 m	n/a
Southwest	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 10					
North	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 11					
North	Grassland	0 – 5 °	0 – 60 m	11 m	n/a
North	Woodland	0 – 5 °	60 – 100 m	15 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a

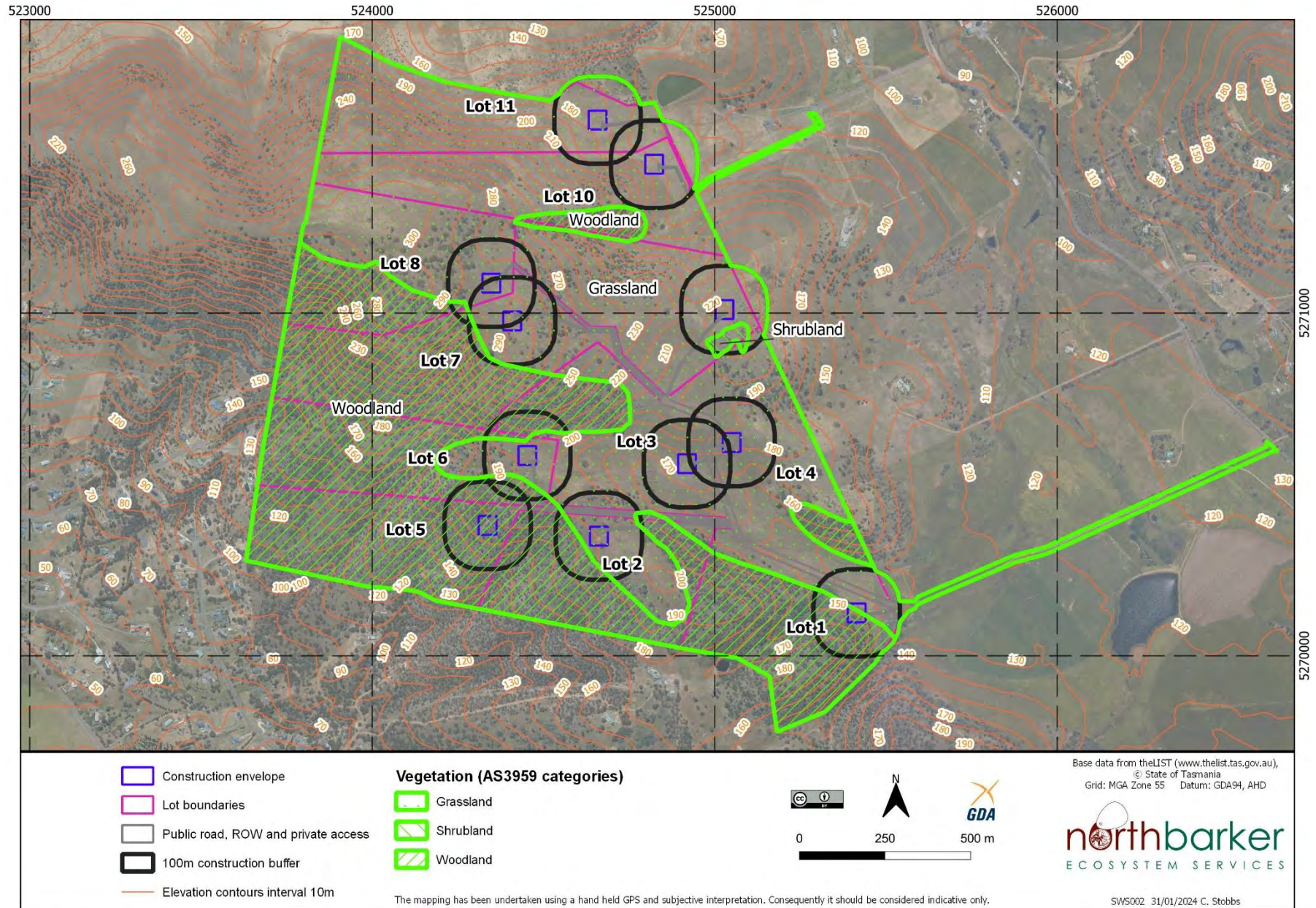


Figure 2: Vegetation and contours in relation to the site.

5. BUSHFIRE PRONE AREAS MANAGEMENT OBJECTIVES

The Bushfire-Prone Areas Code of the Tasmanian Planning Scheme C13.0 applies to the subdivision of land that is located within, or partially within, a bushfire prone area. This code has been developed to ensure that use and development is designed, located, serviced and constructed to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

Appendix 2 of this report tabulates the specifications for standards set out in C13.6 for subdivisions. This proposal must comply with this directive as set out in Table 2 below.

Public access to lot 1 – 9 is from Back Tea Tree Road. Public access to lots 10 and 11 is from Rosewood Lane, which is accessed from Back Tea Tree Road. Rosewood Lane is a dead-end road greater than 200 m long and 8 m wide. Back Tea Tree Road is 7 m wide.

Table 3. Compliance of the subdivision proposal with the TPS 13.0 Bushfire Prone Areas Code.

	Deemed to satisfy requirements (Elements)	Requirement (Appendix 2)	Compliance
C13.0	Construction requirements	AS 3959 - 2018	Yes All construction specifications will be compliant and verified by a building surveyor.
C13.6.1	Hazard management area	C 13.6.1 (A1)	Yes, all lots will have a compliant hazard management area. A hazard management area must have ground cover vegetation managed to less than 100 mm height, lower tree limbs pruned to above 2 m height and if necessary, remove sufficient trees to achieve a 3 m canopy separation within the HMA. The hazard management areas on lots should be implemented and verified by a building surveyor before occupancy.
C13.6.2	Firefighting access	C13.1 Public A Private C13.2(a, b and c)	Yes, as per table C13.1 (A) Standards for roads. Yes, as per table C13.2 Standards for property access. Property access to lots 1, 3 and 4 will be 30 - 200 m in length and therefore must comply with table C13.2 (b). Property access to lots 2 and lots 5 – 11 will have access greater than 200 m in length. Access must comply with Table C13.2 (b) as well as the following: Minimum carriageway width must be 6 m or greater or if less than 6 m must include passing

			<p>bays of 2 m additional carriageway width and 20 m length provided every 200 m.</p> <p>Access to building areas on all lots must be implemented before occupancy and verified by a building surveyor.</p>
C13.6.3	Provision of water supply for firefighting purposes	C13.5 (a-e)	<p>Yes. All parts of the building areas will be within 90 m of a static water point as measured by hose lay.</p> <p>All lots will be compliant subject to a dedicated water supply and remote water offtake as per the requirements of table C13.5 (a-e). The water supply should be implemented on all lots prior to occupancy of each lot and should be verified by a building surveyor.</p>

6. MANAGEMENT OF THE HMA AND LANDSCAPING

The bushfire hazard management plan (Appendix 1) has resolved all aspects to BAL 19 as per Table 1. All vegetation within the HMA of the site will be managed in a low fuel state and the following recommendations are made:

- Required - Maintain HMA in a low fuel state. Ground cover vegetation less than 100 mm tall, trees pruned of low hanging foliage to > 2m.
- Recommended - Gardens exclude shrubs from within 5 m of the building.
- Recommended - All aspects to be mineral surface to a minimum of 0.5 m from the building.
- Recommended - No trees or shrubs within 10 m to exceed the height of the gutters unless leaf shedding gauze is fitted.

REFERENCES

Australian Standard AS 3959 (2018) Construction of Buildings in Bushfire Prone Areas.

Tasmanian Planning Scheme – Bushfire-Prone Areas Code (C13).

APPENDIX 1. BUSHFIRE HAZARD MANAGEMENT PLAN

Assessment date: 24th of June 2022

Assessor: Philip Barker BFP- 147 1,2,3A,3B,3C

Bushfire Attack Level (BAL) Assessment Report

Bushfire Attack Level (BAL) assessment conducted in accordance with Clause 2.2 Simplified Procedure (Method 1) of AS 3959 – 2018.

This BAL Assessment Report has been provided to determine the BAL (in accordance with AS3959-2018) for the site and where necessary provide recommendations for BAL reduction methods to comply with the Tasmanian planning Schemes Bushfire-Prone Areas Code C13.0. Requirements for water supply for fire fighting and vehicle access and egress for fire fighting have been included; and should part of the Building Surveyors Certificate of Likely Compliance assessment.

Limitations

This HMP is relevant to this subdivision application and specific location of building areas illustrated below and referred to as "notional". Any application to build a dwelling in an alternative location will require a new HMP specific to the new location.

All measurements have been made using standard practices and may contain small errors of precision.

Compliance with the AS3959 building standards referred to in this assessment does not mean that there is no risk to life or property as a result of bushfire.

A primary limitation is that the BAL value is determined under an FDI of 50. The FDI can be higher under certain weather and fuel conditions and consequently the BAL may also be higher than determined here.

Property Details

Applicants Name: Southern Waste Solutions

Municipality: Brighton

PID: 1698711

Certificate of title / number: CT 121954/1

Address: Back Tea Tree Road, Tea Tree

Proposal: 11 lot subdivision

Bush Fire Attack Level (BAL) 19

Relevant fire danger index: (see clause 2.2.2) FDI 50

Determination of Bushfire Attack Level (BAL 19)

Summary of Compliance Requirements and Recommendations (see Figure 1):

- Building materials and design must comply with BCA for BAL 19.
- Public access is compliant at the private access point. Access from Back Tea Tree Road for lots 1 – 9 is greater than 200 m long. Access from Rosewood Lane to lots 10 and 11 is greater

than 200 m long. Access to building areas on all lots must be implemented before occupancy and verified by a building surveyor.

- The hazard management areas must be implemented and maintained by the respective owner/s before occupancy.
- All lots must install a dedicated water supply and remote water offtake as per the requirements of table C13.5. The water supply should be implemented on each lot prior to occupancy of each lot and should be verified by a building surveyor.

Table 4: Determination of vegetation and slope within 100m in all directions.

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
Lot 1					
North	Grassland	0 – 5 °	0 – 100 m	10 m	n/a
East	Woodland	0 - 5 °	0 – 100 m	18 m	n/a
South	Woodland	flat / upslope	0 – 100 m	15 m	n/a
West	Woodland	0 - 5 °	0 – 100 m	18 m	n/a
Lot 2					
North	Woodland	0 – 5 °	0 – 100 m	18 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Woodland	flat / upslope	0 – 100 m	15 m	n/a
West	Grassland	5 – 10 °	0 – 25 m	13 m	n/a
West	Woodland	5 – 10 °	25 – 100 m	23 m	n/a
Lot 3					
North	Grassland	flat / upslope	0 – 100 m	10 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
West	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
Lot 4					
North	Grassland	flat / upslope	0 – 100 m	10 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 5					
North	Woodland	flat / upslope	0 – 100 m	15 m	n/a
East	Woodland	flat / upslope	0 – 100 m	15 m	n/a
South	Woodland	10 – 15 °	0 – 100 m	28 m	n/a
West	Woodland	10 – 15 °	0 – 100 m	28 m	n/a

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
Lot 6					
North	Grassland	flat / upslope	0 – 32 m	10 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	5 – 10 °	0 – 42 m	13 m	n/a
West	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
Lot 7					
North	Grassland	flat / upslope	0 – 60 m	10 m	n/a
East	Grassland	10 – 15 °	0 – 100 m	15 m	n/a
South	Grassland	15 – 20 °	0 – 100 m	17 m	n/a
West	Grassland	10 – 15 °	0 – 90 m	15 m	n/a
Lot 8					
North	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 32 m	10 m	n/a
West	Woodland	flat / upslope	32 – 100 m	15 m	n/a
Lot 9					
North	Grassland	10 – 15 °	0 – 100 m	15 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
Southeast	Shrubland	0 – 5 °	0 – 100 m	15 m	n/a
Southwest	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 10					
North	Grassland	5 – 10 °	0 – 100 m	13 m	n/a
East	Grassland	flat / upslope	0 – 100 m	10 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a
Lot 11					
North	Grassland	0 – 5 °	0 – 60 m	11 m	n/a
North	Woodland	0 – 5 °	60 – 100 m	15 m	n/a
East	Grassland	0 – 5 °	0 – 100 m	11 m	n/a
South	Grassland	flat / upslope	0 – 100 m	10 m	n/a
West	Grassland	flat / upslope	0 – 100 m	10 m	n/a

Table 5: Notional building area size and location for each lot. All distances are measured from the northeastern corner of each notional building area.

Notional Building Area (BA)	BA (m ²)	Distance to Northern title boundary (m)	Distance to Eastern title boundary (m)
Lot 1	500 m ²	17 m	40 m
Lot 2	500 m ²	31 m	300 m
Lot 3	500 m ²	110 m	25 m
Lot 4	500 m ²	225 m	185 m
Lot 5	500 m ²	38 m	35 m
Lot 6	500 m ²	25 m	60 m
Lot 7	500 m ²	115 m	130 m
Lot 8	500 m ²	160 m	30 m
Lot 9	500 m ²	155 m	110 m
Lot 10	500 m ²	37 m	45 m
Lot 11	500 m ²	43 m	151 m

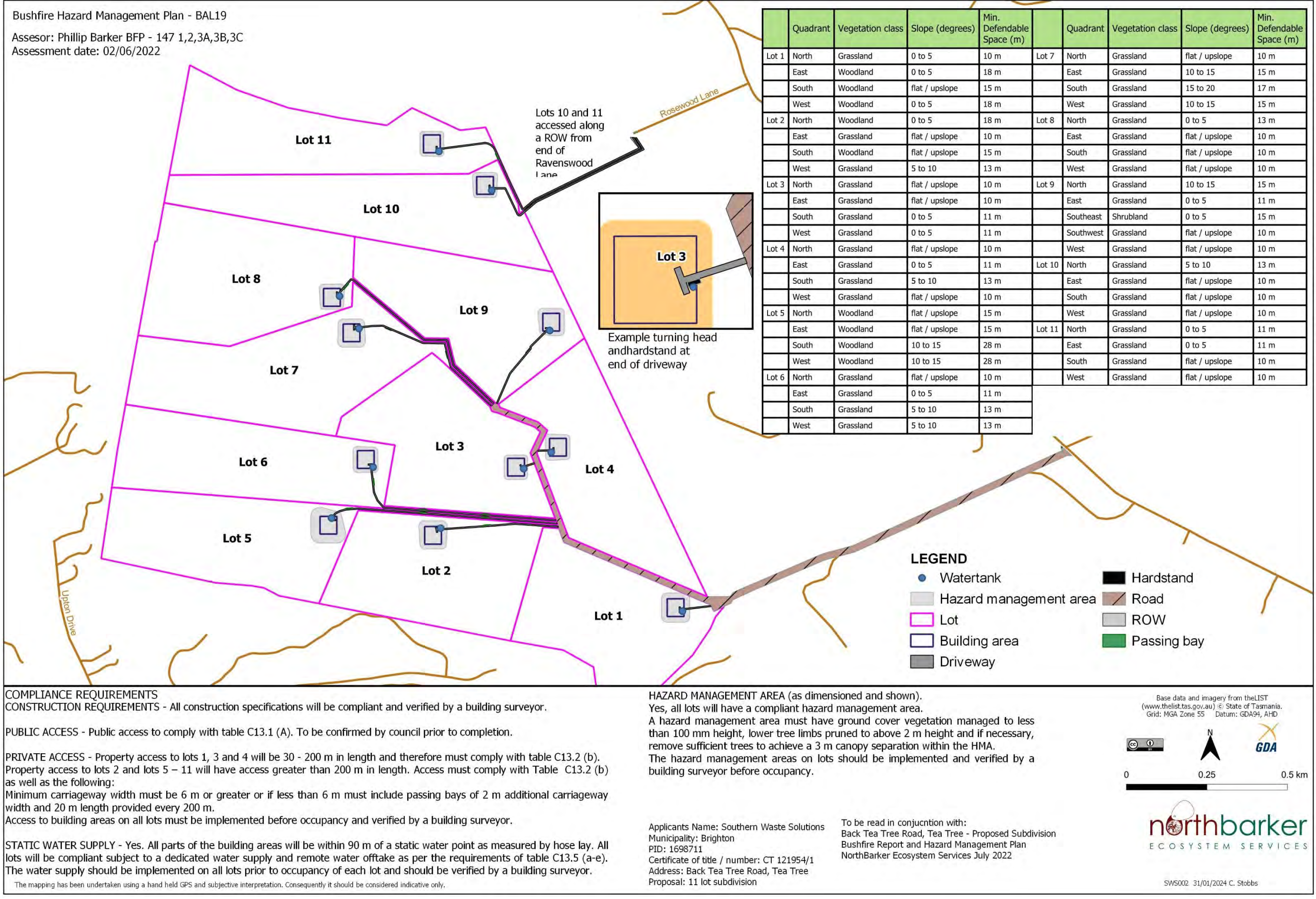


FIGURE 1. BUSHFIRE HAZARD MANAGEMENT PLAN

APPENDIX 2. SPECIFICATIONS FOR ACCESS, WATER SUPPLY AND HAZARD MANAGEMENT AREAS.

C13.6.1 Subdivision: Provision of Hazard management areas

<p>Objective: Subdivision provides for hazard management areas that:</p> <p>(a) facilitate an integrated approach between subdivision and subsequent building on a lot;</p> <p>(b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and</p> <p>(c) provide protection for lots at any stage of a staged subdivision.</p>	
Acceptable Solution	Performance Criteria
<p>A1</p> <p>(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or</p> <p>(b) The proposed plan of subdivision:</p> <p>(i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision;</p> <p>(ii) shows the building area for each lot;</p> <p>(iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of <i>Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas</i>; and</p> <p>(iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of <i>Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas</i>; and</p> <p>(c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.</p>	<p>P1</p> <p>A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:</p> <p>(a) the dimensions of hazard management areas;</p> <p>(b) a bushfire risk assessment of each lot at any stage of staged subdivision;</p> <p>(c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability;</p> <p>(d) the topography, including site slope;</p> <p>(e) any other potential forms of fuel and ignition sources;</p> <p>(f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development;</p> <p>(g) an instrument that will facilitate management of fuels located on land external to the subdivision; and</p> <p>(h) any advice from the TFS.</p>

Table C13.1: Standards for Roads

Element		Requirement
A	Roads	<p>Unless the development standards in the zone require a higher standard, the following apply:</p> <p>(a) two-wheel drive, all-weather construction;</p> <p>(b) load capacity of at least 20t, including for bridges and culverts;</p> <p>(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;</p> <p>(d) minimum vertical clearance of 4m;</p> <p>(e) minimum horizontal clearance of 2m from the edge of the carriageway;</p> <p>(f) cross falls of less than 3 degrees (1:20 or 5%);</p> <p>(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;</p> <p>(h) curves have a minimum inner radius of 10m;</p> <p>(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7 metres in width;</p> <p>(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and</p> <p>(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743-2001 Road Signs-Specifications.</p>

Table C13.2 Standards for property access

Element		Requirement
A	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	<p>The following design and construction requirements apply to property access:</p> <p>(a) all-weather construction;</p> <p>(b) load capacity of at least 20t, including for bridges and culverts;</p> <p>(c) minimum carriageway width of 4m;</p> <p>(d) minimum vertical clearance of 4m;</p> <p>(e) minimum horizontal clearance of 0.5m from the edge of the carriageway;</p>

		<p>(f) cross falls of less than 3 degrees (1:20 or 5%);</p> <p>(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;</p> <p>(h) curves with a minimum inner radius of 10m;</p> <p>(i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and</p> <p>(j) terminate with a turning area for fire appliances provided by one of the following:</p> <p>(i) a turning circle with a minimum outer radius of 10m; or</p> <p>(ii) a property access encircling the building; or</p> <p>(iii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.</p>
C	Property access length is 200m or greater.	<p>The following design and construction requirements apply to property access:</p> <p>(a) the requirements for B above; and</p> <p>(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.</p>
D	Property access length is greater than 30m, and access is provided to 3 or more properties.	<p>The following design and construction requirements apply to property access:</p> <p>(a) complies with requirements for B above; and</p> <p>(b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.</p>

Table C13.4 Standards for fire trails

Element		Requirement
A.	All fire trails	<p>The following design and construction requirements apply:</p> <p>(a) all-weather, 4-wheel drive construction;</p> <p>(b) load capacity of at least 20t, including for bridges and culverts;</p> <p>(c) minimum carriageway width of 4m;</p> <p>(d) minimum vertical clearance of 4m;</p> <p>(e) minimum horizontal clearance of 2m from the edge of the carriageway;</p> <p>(f) cross falls of less than 3 degrees (1:20 or 5%);</p> <p>(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;</p> <p>(h) curves with a minimum inner radius of 10m;</p> <p>(i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for unsealed fire trails;</p>

		<p>(j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and</p> <p>(k) terminate with a turning area for fire appliances provided by one of the following:</p> <p>(i) a turning circle with a minimum outer radius of 10m; or</p> <p>(ii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.</p>
B	Fire trail length is 200m or greater.	<p>The following design and construction requirements apply:</p> <p>(a) the requirements for A above; and</p> <p>(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.</p>

Table C13.5 Static water supply for firefighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	<p>The following requirements apply:</p> <p>the building area to be protected must be located within 90 m of fire fighting water point of a static water supply; and</p> <p>the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.</p>
B.	Static Water Supplies	<p>A static water supply:</p> <p>(a) may have a remotely located offtake connected to the static water supply;</p> <p>(b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;</p> <p>(c) must be a minimum of 10,000l per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;</p> <p>(d) must be metal, concrete or lagged by non-combustible materials if above ground; and</p> <p>(e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of <i>Australian Standard AS 3959-2009</i></p> <p><i>Construction of buildings in bushfire-prone areas</i>, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by:</p> <p>(i) metal;</p> <p>(ii) non-combustible material; or</p> <p>(iii) fibre cement a minimum of 6mm thickness.</p>

C.	Fittings, pipework and accessories (including stands and tank supports)	<p>Fittings and pipework associated with a fire fighting water point for a static water supply must:</p> <ul style="list-style-type: none"> (a) have a minimum nominal internal diameter of 50mm; (b) be fitted with a valve with a minimum nominal internal diameter of 50mm; (c) be metal or lagged by non-combustible materials if above ground; (d) if buried, have a minimum depth of 300mm²; (e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to firefighting equipment; (f) ensure the coupling is accessible and available for connection at all times; (g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length); (h) ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this Table; and (i) if a remote offtake is installed, ensure the offtake is in a position that is: <ul style="list-style-type: none"> (i) visible; (ii) accessible to allow connection by firefighting equipment; (iii) at a working height of 450 – 600mm above ground level; and (iv) protected from possible damage, including damage by vehicles.
D.	Signage for static water connections	<p>The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must:</p> <ul style="list-style-type: none"> (a) comply with water tank signage requirements within <i>Australian Standard AS 2304-2011 Water storage tanks for fire protection systems</i>; or (b) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.
E.	Hardstand	<p>A hardstand area for fire appliances must be:</p> <ul style="list-style-type: none"> no more than 3m from the hydrant, measured as a hose lay; no closer than 6m from the building area to be protected; a minimum width of 3m constructed to the same standard as the carriageway; and connected to the property access by a carriageway equivalent to the standard of the property access.

APPENDIX 3. PLANNING CERTIFICATE

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

Back Tea Tree Road, Tea Tree

Certificate of Title / PID:

PID: 1698711

Certificate of title / number: CT 121954/1

2. Proposed Use or Development

**Description of proposed Use
and Development:**

11 lot subdivision

Applicable Planning Scheme:

Tasmanian Planning Scheme - Brighton

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Plan of subdivision - 210768	DG Potter	16/9/21	1

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

<input type="checkbox"/>	E1.4 / C13.4 – Use or development exempt from this Code	
	Compliance test	Compliance Requirement
<input type="checkbox"/>	E1.4(a) / C13.4.1(a)	Insufficient increase in risk

<input type="checkbox"/>	E1.5.1 / C13.5.1 – Vulnerable Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.1 P1 / C13.5.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
<input type="checkbox"/>	E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan

<input type="checkbox"/>	E1.5.2 / C13.5.2 – Hazardous Uses	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.5.2 P1 / C13.5.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
<input type="checkbox"/>	E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

<input type="checkbox"/>	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>

<input type="checkbox"/>	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
<input type="checkbox"/>	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input type="checkbox"/>	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bushfire Hazard Practitioner

Name: Philip Barker

Phone No: 0438250713

Postal Address: 163 Campbell Street Hobart 7000

Email Address: pbarker@northbarker.com.au

Accreditation No: BFP – 147

Scope: 1,2,3A,3B,3C


6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

- Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or
- The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:

certifier



Name:

Philip Barker

Date:

01/02/2024

Certificate Number:

SWS002

(for Practitioner Use only)



Unit 2, 1 Liverpool St
Hobart, Tas. 7000

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BUSHFIRE HAZARD REPORT & BUSHFIRE HAZARD MANAGEMENT PLAN



AMENDMENT TO THREE LOTS (PART OF 11 LOT SUBDIVISION)

**LOT 1 BACK TEA TREE ROAD
TEA TREE 7017**

SOUTHERN WASTE MANAGEMENT PTY LTD

31 JANUARY 2025 – VERSION 1.0

EXECUTIVE SUMMARY

The subject land is located at lot 1 Back Tea Tree Road (CT. 121954/1), Tea Tree. The development proposal includes an amendment to three lots contained within a proposed 11 lot subdivision. This report and Bushfire Hazard Management Plan (BHMP) assess lots 9, 10 and 11 only. This report and BHMP should be read in conjunction with the Bushfire Report and BHMP prepared by North Barker Ecosystem Services¹, 1/2/2024. The proposed amendment to lots 9, 10 and 11 are assessed and deemed to comply with the requirements of C13.0 Bushfire-Prone Areas Code of the Tasmania Planning Scheme.

LIMITATIONS

This report is based on findings concluded from a desktop and field investigation of the subject property. Classification of vegetation has been based on the site inspection does not account for any further modification to the existing vegetation (planting, clearing etc.)

The assessment is based on information provided at the time of the report and location shown on the Bushfire Hazard Management Plan (BHMP). If the location of the proposed development (indicative building area) differs from the location shown on the BHMP a new assessment will be required.

The BAL assessment is based on the Fire Danger Index (FDI) of 50. The FDI will exceed 50 when the Australian Fire Danger Ratings System (AFDRS) level is Extreme or Catastrophic.

The forward of AS3959 – 2018, *Construction of buildings in bushfire prone areas* states that “It should be borne in mind that the measures contained in this standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions.”

Due to the unpredictable nature and behaviour of fire, compliance with AS359-2018 does not guarantee a dwelling will survive a bushfire event.

¹ Back Tea Tree Road, Tea Tree – Proposed Subdivision, Bushfire Report and Hazard Management Plan, North Barker Ecosystem Services, 01/02/2024.

CONTENTS	PAGE
EXECUTIVE SUMMARY	1
LIMITATIONS	1
CONTENTS	2
1.0 INTRODUCTION	
1.1 SCOPE	3
1.2 PROPOSAL	3
1.3 GENERAL INFORMATION	3
2.0 SITE DESCRIPTION	
2.1 LOCALITY	4
2.2 TOPOGRAPHY & VEGETATION	6
3.0 BUSHFIRE SITE ASSESSMENT	
3.1 EXISTING BUSHFIRE HAZARD ASSESSMENT	10
3.2 BUSHFIRE ATTACK LEVEL ASSESSMENT	11
4.0 PLANNING SCHEME COMPLIANCE	
E1.6.1 SUBDIVISION: PROVISION OF HAZARD MANAGEMENT AREAS	12
E1.6.2 SUBDIVISION: PUBLIC FIRE FIGHTING ACCESS	14
E1.6.3 SUBDIVISION: PROVISION OF WATER SUPPLY FOR FIRE FIGHTING PURPOSES	17
5.0 CONCLUSION	22
6.0 REFERENCES	22
7.0 APPENDIX	
7.1 FIELD PHOTOS	23
7.2 BUSHFIRE HAZARD MANAGEMENT PLAN	29
7.3 PROPOSED PROPERTY SUBDIVISION PLAN	30
7.4 BUSHFIRE-PRONE AREAS CODE – PLANNING CERTIFICATE	

1.0 INTRODUCTION

1.1 SCOPE

To assess the proposed boundary adjustment against the requirements of C13.0 Bushfire-Prone Areas Code of the Tasmanian Planning Scheme.

1.2 PROPOSAL

Amendment to the building envelopes of lot 9, lot 10 and lot 11 (part of 11 lot subdivision).

1.3 GENERAL INFORMATION

SITE ADDRESS

Lot 1 Back Tea Tree Road, Tea Tree

OWNER

Southern Waste Management Pty Ltd

TITLE REFERENCE

C.T. 121954/1

PROPERTY ID NUMBER

1698711

CURRENT USE:

Rural

MUNICIPALITY

Brighton Council

2.0 SITE DESCRIPTION

2.1 LOCALITY

The subject land is located at lot 1 Back Tea Tree Road, Tea Tree. The site is situated on the slopes of Jews Hill and consists of grassland with some remanent bushland. A 11-lot subdivision is proposed. Lots 9, 10 & 11 require amendment to the proposed building areas. Lots 10 and 11 will be accessed from a Right of Way extending from the end of Rosewood Lane and lot 9 will be accessed from a new road extending from Back Tea Tree Road. The proposed plan of subdivision is provided in the appendix of this report.

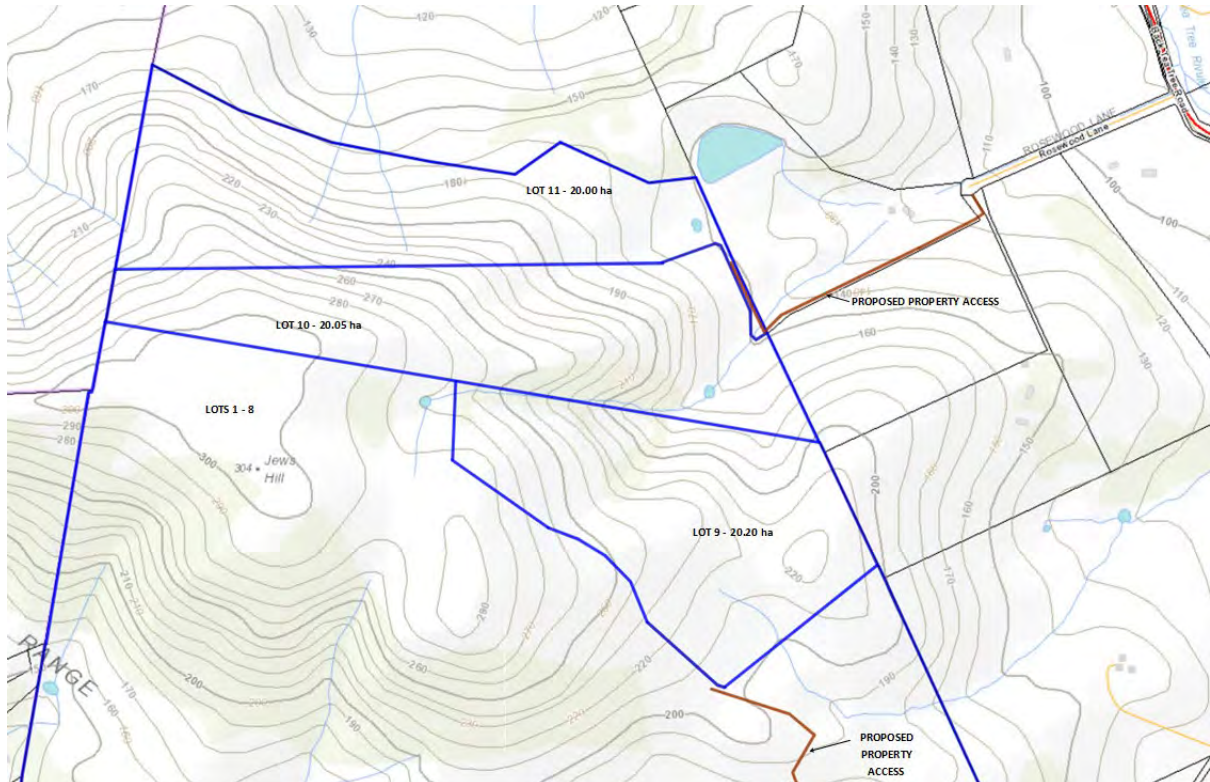


Figure 1: Locality map of the area with subject lot shown Source: Land Information System Tasmania, <http://www.thelist.tas.gov.au>

2.1.2 FIRE HISTORY

Recent bushfire and / or planned burns were identified within 1km of the property boundaries. Data collected from LIST Map 'Fire History Layer'².

Ignition date	Fire / Planned burn name	Type	Size
7/2/1967	1967 Fire	Bushfire	198781 ha

² LIST Map Data is incomplete and majority of fire history is not shown on the LIST.

2.1.2 PLANNING – ZONING & TENURE

The existing lot is zoned as Landscape Conservation and is privately owned. Zoning and tenure of surrounding lots 9, 10 and 11 is shown below (within 200m from the existing property boundaries).

Direction	Zoning	Tenure
North	Agriculture	Private Freehold
East	Agriculture	Private Freehold
South	Landscape Conservation	Private Freehold
West	Landscape Conservation	Private Freehold

2.1.3 PLANNING – OVERLAYS

Overlay	Development Response
Bushfire-prone areas	The Bushfire Hazard Report and BHMP satisfy the requirements of this code.
Waterway and coastal protection area	The provisions of the BHMP do not require removal of significant vegetation and do not conflict with the requirements of this overlay.
Low / Medium landslip hazard	The provisions of the BHMP do not require removal of significant vegetation and do not conflict with the requirements of this overlay.
Priority vegetation area	The provisions of the BHMP may conflict with the requirements of this overlay. A Natural Values Assessment may be required if significant vegetation is required to satisfy the Hazard Management Area requirements of the BHMP.

2.1.4 PLANNING – THREATENED FLORA AND FAUNA

A threatened flora and fauna search³ revealed no threatened flora and fauna identified on the site.

³ Threatened species search using Land Information Systems Tasmania. This is not a complete search and other information may be available from other agencies.

2.2 TOPOGRAPHY

Indicative building areas (50m x 50m red square) shown and bushfire – prone vegetation type.

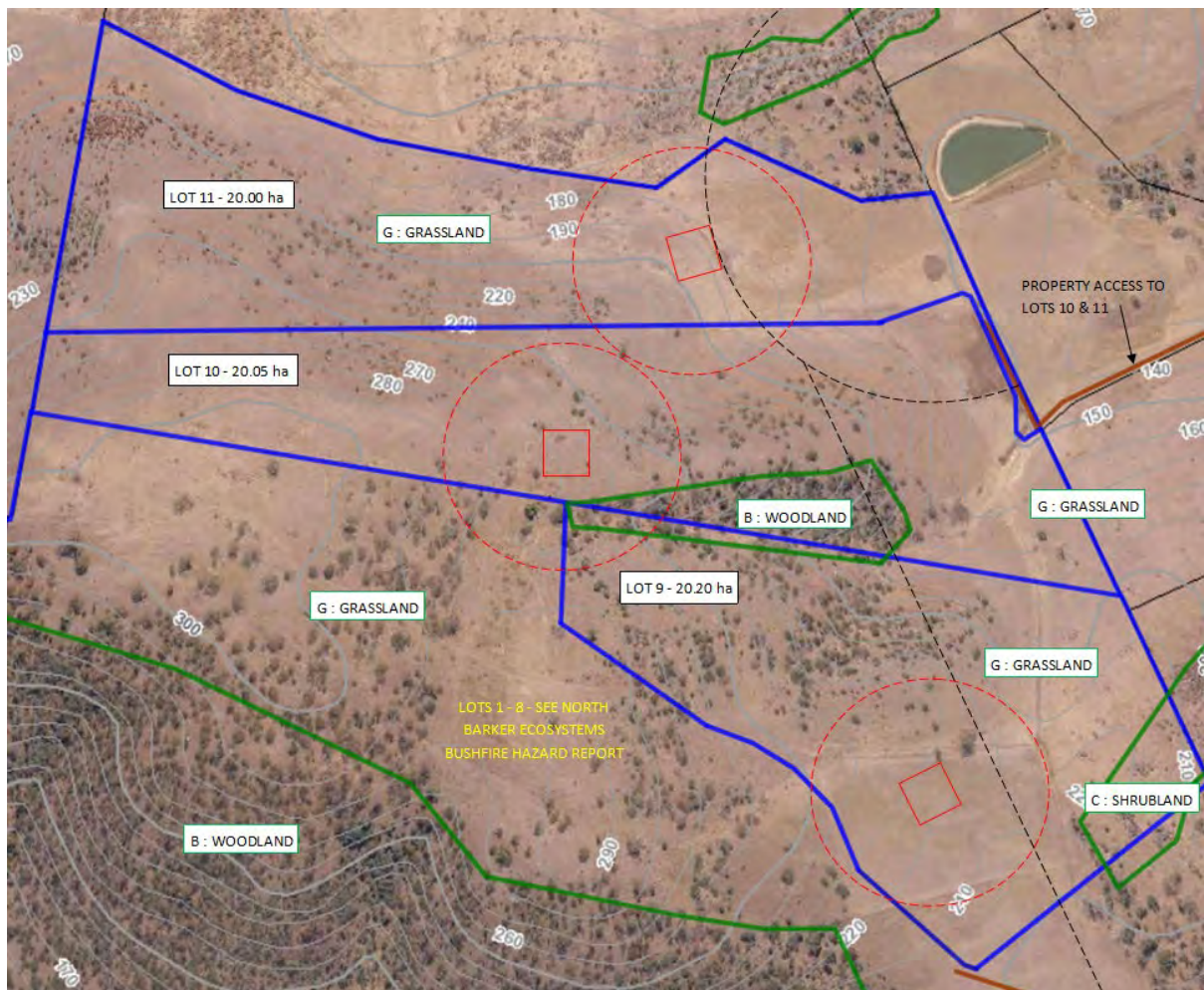


Figure 2: Aerial photo of the lots 9, 10 and 11. Green line shows borders between classified vegetation. Source: Land Information System Tasmania, <http://www.thelist.tas.gov.au>.

TASVEG Live FAG – Agricultural land, GCL – Lowland grassland complex and DVG – Eucalyptus viminalis grassy forest and woodland has been mapped across Lots 9, 10 and 11.

Lot 9 indicative building area:

Direction	Existing Vegetation Description	Effective slope
North - east	0m: Isolated eucalyptus trees (height <10m) and shrubs including wattles. Over storey foliage cover estimated to <10%. Dominant grassy under storey. Classified vegetation: G: Grassland	Down slope >5-10°
South - east	0m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Down slope >5-10°
South - west	0m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Upslope / 0°
North - west	0m: Over storey of eucalyptus trees (height <10m) and shrubs including wattles. Over storey foliage cover estimated to <10%. Dominant grassy under storey. Classified vegetation: G: Grassland	Down slope >0-5°

Lot 10 indicative building area:

Direction	Existing Vegetation Description	Effective slope
North	<p>0m: Isolated eucalyptus trees (height <10m) and shrubs including wattles. Over storey foliage cover estimated to <10%. Dominant grassy under storey.</p> <p>Classified vegetation: G: Grassland</p>	Down slope >15-20°
East	<p>0m: Grassland with isolated shrubs.</p> <p>Classified vegetation: G: Grassland</p> <p>40m: Over storey of eucalyptus trees (height <15m) and shrubs including wattles. Over storey foliage cover estimated to be between 10-30%. Dominant grassy under storey.</p> <p>Classified vegetation: B: Woodland</p>	<p>Down slope >15-20°</p> <p>Down slope >10-15°</p>
South	<p>0m: Grassland with isolated shrubs.</p> <p>Classified vegetation: G: Grassland</p> <p>23m: Over storey of eucalyptus trees (height <15m) and shrubs including wattles. Over storey foliage cover estimated to be between 10-30%. Dominant grassy under storey.</p> <p>Classified vegetation: B: Woodland</p>	<p>Down slope >5°-10°</p> <p>Down slope >5°-10°</p>
West	<p>0-100m: Over storey of eucalyptus trees (height <10m) and shrubs including wattles. Over storey foliage cover estimated to <10%. Dominant grassy under storey.</p> <p>Classified vegetation: G: Grassland</p>	Upslope / 0°

Lot 11 indicative building area:

Direction	Existing Vegetation Description	Effective slope
North	0-100m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Down slope >5-10°
East	0-100m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Down slope >5-10°
South	0-100m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Upslope / 0°
West	0-100m: Grassland with isolated shrubs. Classified vegetation: G: Grassland	Upslope / 0°

3.0 BUSHFIRE SITE ASSESSMENT

3.1 EXISTING BUSHFIRE HAZARD ASSESSMENT

3.2.1 CONSTRUCTION

No buildings exist on any lot.

3.2.2 PROPERTY ACCESS

Lot 10 and 11 to be access from a Right-Of-Way extending from the end of Rosewood Lane. The access has been partially constructed.

Lot 9 currently has no formal property access.

3.2.3 WATER SUPPLY

Lots 9, 10 and 11 are not supplied by a reticulated water supply and will rely on tank water supply for firefighting purposes.

3.2.4 HAZARD MANAGEMENT AREA

No HMA exists on any lot.

3.2.5 EMERGENCY PLAN

No emergency plan exists for any lot.

3.2 BUSHFIRE ATTACK LEVEL ASSESSMENT

Lot 9 (from indicative building area):

	North - east	South - east	South - west	North - west
Vegetation classification as per AS3959:2018	Grassland	Grassland	Grassland	Grassland
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from proposed / existing edge of building.	0	0	0	0
Classified vegetation	Grassland	Grassland	Grassland	Grassland
Effective slope under the classified vegetation	Down slope >15° to 20°	Down slope >5° to 10°	Upslope / 0°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	17m	13m	10m	10m

Lot 10 (from indicative building area):

	North	East	South	West
Vegetation classification as per AS3959:2018	Grassland	Grassland & Woodland	Grassland & Woodland	Grassland
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from proposed / existing edge of building.	0	Grassland – 0 Woodland - 40	Grassland – 0 Woodland - 23	0
Classified vegetation	Grassland	Woodland	Woodland	Grassland
Effective slope under the classified vegetation	Down slope >15° to 20°	Down slope >10° to 15°	Down slope >5° to 10°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	17m	28m	23m	10m

Lot 11 (from indicative building area):

	North	East	South	West
Vegetation classification as per AS3959:2018	Grassland	Grassland	Grassland	Grassland
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from proposed / existing edge of building.	0	0	0	0
Classified vegetation	Grassland	Grassland	Grassland	Grassland
Effective slope under the classified vegetation	Down slope >5° to 10°	Down slope >5° to 10°	Upslope / 0°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	13m	13m	10m	10m

If the minimum setback distance between the indicative building area on lot 9, 10 and 11 and the classified vegetation are maintained the bushfire attack level for the is assessed as BAL – 19. The assessment is based on a FDI of 50. The FDI will exceed 50 when the AFDRS is Extreme or Catastrophic

4.0 PLANNING SCHEME COMPLIANCE

The following bushfire hazard management requirements required to comply with C13.0 Bushfire-Prone Areas Code.

C13.6 Development Standards for Subdivision

C13.6.1 Subdivision: Provision of hazard management areas

Objective:
That subdivision provides for hazard management areas that: (a) facilitate an integrated approach between subdivision and subsequent buildings on a lot; (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce radiant heat levels, direct flame attack and ember attack at the building area; and (c) provide protection for lots at any stage of a staged subdivision.
Acceptable Solutions A1 (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or (b) The proposed plan of subdivision: (i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a stage subdivision. (ii) shows the building area for each lot; (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of <i>Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas</i> ; and (iv) is accompanied by a bushfire hazard management plan that address all the individual lots that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of <i>Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas</i> ; and (c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.
Performance Criteria A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to: (a) the dimensions of hazard management areas; (b) a bushfire risk assessment of each lot at any stage of staged subdivision; (c) the nature of the bushfire-prone vegetation including type, fuel load, structure and flammability; (d) the topography, including site slope; (e) any other potential forms of fuel and ignition source;

- (f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development;
- (g) an instrument that will facilitate management of fuels located on land external to the subdivision;
- (h) any advice from the TFS.

Development response

The Bushfire Hazard Report and BHMP satisfies the requirements of A1(b) for lots 9, 10 and 11.

E1.6.2 Subdivision: Public and fire fighting access

Objective:
That access roads to, and the layout of roads, tracks and trails, in a subdivision: <ul style="list-style-type: none">(a) allow safe access and egress for residents, fire fighters and emergency service personnel;(b) provide access to the bushfire-prone vegetation that enables both property to defend when under bushfire attack and for hazard management works to be undertaken;(c) are designed and constructed to allow for fire appliances to be manoeuvred;(d) provide access to water supplies for fire appliances; and(e) are designed to allow connectivity, and where needed, offering multiple evacuation points.
Acceptable Solutions
A1 <ul style="list-style-type: none">(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of fire fighting; or(b) A proposed plan of subdivision showing the layout of roads, fire trails and the location of property access to building areas is included in a bushfire hazard management plan that:<ul style="list-style-type: none">(i) demonstrates proposed roads will comply with Table C13.1, proposed property accesses will comply with Table C13.2 and proposed fire trails will comply with Table C13.3; and(ii) is certified by the TFS or an accredited person.
Performance Criteria
P1 <p>A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:</p> <ul style="list-style-type: none">(a) appropriate design measures, including<ul style="list-style-type: none">(i) two – way traffic;(ii) all weather construction;(iii) height and width of any vegetation clearances;(iv) load capacity(v) provision of passing bays;(vi) traffic and control devices;(vii) geometry, alignment and slope of roads, tracks and trails;(viii) use of through roads to provide for connectivity;(ix) limits on the length of cul-de-sacs and dead-end roads;(x) provision of turning areas;(xi) provision of parking areas;(xii) perimeter access; and(xiii) fire trails;(b) the provision of access to:<ul style="list-style-type: none">(i) bushfire-prone vegetation to permit the undertaking of hazard management works; and(ii) fire fighting water supplies; and(c) any advice from the TFS.

Development response

The Bushfire Hazard Report and BHMP satisfies the requirements of A1(b) for proposed lot 9, 10 and 11.

Public road to be designed and constructed to Table C13.1. Property access to be designed and constructed to Table C13.2.

Table C13.3 is not applicable as no fire trails are proposed for the subdivision.

Table C13.1 Standards for Roads

Element		Requirement
A.	Roads.	<p>Unless the development standards in the zone require a higher standard, the following apply:</p> <ul style="list-style-type: none"> (a) two-wheel drive, all-weather construction; (b) load capacity of at least 20 tonnes, including for bridges and culverts; (c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 2m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; (h) curves have a minimum inner radius of 10m; (i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width; (j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and (k) carriageway less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with <i>Australian Standard AS1743:2018 Road signs-Specifications</i>.
Development response		Road shall be designed and constructed to comply with Table C13.1.

Table C13.2 Standards for Property Access

Element		Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a firefighting water point	There are no specified design and construction requirements.
B.	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> (a) all – weather construction (b) load capacity of at least 20t, including bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (13.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and (j) terminate with a turning area for fire appliances provided by one of the following: <ul style="list-style-type: none"> (j) a turning circle with a minimum outer radius of 10m; or (ii) a property access encircling the building; or (iii) a hammerhead ‘T’ or ‘Y’ turning head 4m wide and 8m long.
C.	Property access length is 200m or greater.	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> (a) the requirements for B above; and (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.
D.	Property access length is greater than 30m, and access is provided to 3 or more properties	<p>The following design and construction requirements apply to property access:</p> <ul style="list-style-type: none"> (a) the requirements for B above; and

		(b) passing bays of 2m additional carriageway width and 20m length provided every 100m.
Development response		
Property access to be designed and constructed to comply with Table C13.2. Minimum 4m wide crossover to be installed prior to sealing of final plan.		

E1.6.3 Subdivision: Provision of water supply for fire fighting purposes

<p>Objective:</p> <p>That an adequate, accessible and reliable water supply for the purposes of fire fighting can be demonstrated at the subdivision stage and allow for protection of life and property associated with the subsequent use and development of bushfire-prone areas.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A1</p> <p>In areas serviced with reticulated water by the water corporation:</p> <ul style="list-style-type: none"> (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for fire fighting purposes; (b) A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by TFS or accredited person as being compliant with Table E4; or (c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire 	<p>P1</p> <p>No Performance Criterion.</p>
<p>A2</p> <p>In areas that are not serviced by reticulated water by the water corporation:</p> <ul style="list-style-type: none"> (a) The TFS or an accredited person certifies that there is insufficient increase in risk from bushfire to warrant provision of a water supply for fire fighting purposes; (b) The TFS or an accredited person certifies that a proposed plan of subdivision demonstrates that a static water supply, dedicated to fire fighting, will be provided and located compliant with Table E5; or (c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire. 	<p>P2</p> <p>No Performance Criterion.</p>
<p>Development response</p> <p>A static water supply shall be installed for lots 9, 10 and 11 and comply with A2 (b).</p>	

Table C13.5 Static water supply for fire fighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	<p>The following requirements apply:</p> <ul style="list-style-type: none"> (a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Static Water Supplies	<p>A static water supply:</p> <ul style="list-style-type: none"> (a) may have a remotely located offtake connected to the static water supply; (b) may be supplied for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times; (c) must be a minimum 10,000L per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems; (d) must be metal, concrete or lagged by non-combustible material if above ground; and (e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: <ul style="list-style-type: none"> (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6mm thickness.
C.	Fittings, pipework and accessories (including stands and tank supports)	<p>Fittings and pipework associated with a fire fighting water point for a static water supply must:</p> <ul style="list-style-type: none"> (a) have a minimum nominal internal diameter of 50mm; (b) be fitted with a valve with a minimum nominal internal diameter of 50mm; (c) be metal or lagged by non-combustible materials if above ground

		<p>(d) if buried, have a minimum depth of 300mm;</p> <p>(e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;</p> <p>(f) ensure the coupling is accessible and available for connection at all times;</p> <p>(g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);</p> <p>(h) ensure underground tanks have either an opening at the top of no less than 250mm diameter or a coupling compliant with this Table; and</p> <p>(i) if a remote offtake is installed, ensure the offtake is in a position that is:</p> <p>(i) visible;</p> <p>(ii) accessible to allow connection by fire fighting equipment;</p> <p>(iii) at a working height of 450 – 600mm above ground level; and</p> <p>(iv) protected from possible damage, including damage by vehicles</p>
D.	Signage for static water connections.	<p>The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must:</p> <p>(a) comply with water tank signage requirements with Australian Standard AS 2304-2019 Water Storage tanks for fire protection systems; or</p> <p>(b) comply with the Tasmanian Fire Service Water Supply Guideline published by the Tasmania Fire Service.</p>
E.	Hardstand	<p>A hardstand area for a fire appliance must be:</p> <p>(a) no more than 3m from the fire fighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);</p> <p>(b) no closer than 6m from the building area to be protected;</p> <p>(c) a minimum width of 3m constructed to the same standard as the carriageway; and</p> <p>(d) connected to the property access by a carriageway equivalent to the standard of the property access.</p>

Development response

Lots 9, 10 and 11 requires a static water supply for firefighting purposes. Static water supply for firefighting purposes to comply with Table C13.5.

5.0 CONCLUSION

A Bushfire Hazard Report has been completed for lots 9, 10 and 11

Lots 9, 10 and 11 are within the Bushfire-prone areas overlay. The Bushfire Hazard Report and certified BHMP shows compliance to C13.0 Bushfire-Prone Areas Code Tasmanian Planning Scheme.

This Bushfire Hazard Report and Bushfire Hazard Management Plan (BHMP) does not endorse the removal of any vegetation without the approval from the local government authority.

It is the owners' responsibility to ensure that the requirements of the Bushfire Hazard Report and BHMP are implemented and maintained for the life of the development.

This Bushfire Hazard Report and BHMP are valid for any building wholly constructed within the 'indicative building area' as shown on the BHMP. Any buildings or part of a building located outside this area will require a Bushfire Hazard Report and BHMP to comply with the Director's Determination – Bushfire Hazard Areas, V1.2 or any subsequent Determination valid at the time of building.

The BHMP is valid for a period of six years.

6.0 REFERENCES

AS3959 – 2018 - Construction of Buildings in Bushfire Prone Areas

Bushfire Information Publications - Tasmania Fire Service.

The LIST - Department of Primary Industries Parks Water & Environment

Tasmanian Planning Scheme 2015

7.0 APPENDIX

7.1 PHOTOS



Photo 1: Field photo showing example of Classified vegetation: G: Grassland on Lot 11.



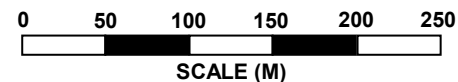
Photo 2: Field photo showing example of Classified vegetation: G: Grassland (foreground) and B: Woodland (background on lot 10.



Photo 3: Field photo taken showing existing property access at the entrance with Rosewood Lane.



Photo 4: Field photo showing existing property access. Part of proposed property access for Lots 10 and 11.

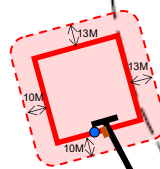


IMPORTANT INFORMATION:

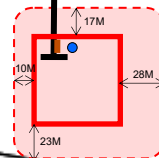
- THIS BHMP ASSESSES LOT 9, 10 AND 11 ONLY. REFER TO NORTH BARKER ECOSYSTEMS BUSHFIRE HAZARD REPORT AND BHMP FOR LOTS 1-8.
- THIS BHMP SHOULD BE READ IN CONJUNCTION WITH THE BUSHFIRE HAZARD REPORT, HED CONSULTING DATED 31/1/2025 & NORTH BARKER ECOSYSTEMS BUSHFIRE HAZARD REPORT
- THIS BHMP IS VALID FOR BUILDINGS WHOLLY CONSTRUCTED WITHIN THE 'INDICATIVE BUILDING AREA' AS SHOWN. ANY BUILDING OR PART OF BUILDING OUTSIDE THIS AREA WILL REQUIRE A BUSHFIRE HAZARD REPORT AND BHMP TO COMPLY WITH DIRECTORS DETERMINATION - BUSHFIRE HAZARD AREAS, V1.2 OR ANY SUBSEQUENT DETERMINATION VALID AT THE TIME OF BUILDING.

LOT 11 - 20.00 ha

LOT 10 - 20.05 ha



PROPERTY ACCESS FOR LOT 11 (NOMINAL LAYOUT) TO COMPLY WITH TABLE C13.2 OF TAS PLANNING SCHEME



PROPERTY ACCESS FOR LOT 10 (NOMINAL LAYOUT) TO COMPLY WITH TABLE C13.2 OF TAS PLANNING SCHEME

PROPERTY ACCESS FOR LOT 10 & 11 (ROW FROM END OF ROSEWOOD LANE) ACCESS TO COMPLY WITH TABLE C13.2 OF TAS PLANNING SCHEME.

ROSEWOOD LANE

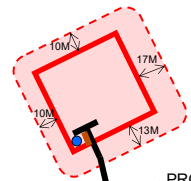
LOT 11 - 20.20 ha

BUSHFIRE HAZARD MANAGEMENT REQUIREMENTS

1. Lot 9, 10 & 11: To comply with C13.6.1: A1 (b) of the Tasmanian Planning Scheme.
2. Lot 9, 10 & 11: To comply with C13.6.2: A1 (b) of the Tasmanian Planning Scheme. Public road to comply with Table C13.1 and property access to comply with Table C13.2.
3. Lot 9, 10 & 11: To comply with C13.6.3: A2 (b) and Table C13.5 of Tasmanian Planning Scheme. Static water supply to comply with Table C13.5.
4. Hazard Management Area: This area to be maintained and managed as defensible space from a bushfire flame and ember attack. The HMA can be landscaped with the following measures:
 - Establish non-flammable areas around the building area. This includes paths, driveways, and maintained lawns (less than 100mm height).
 - Non-combustible ground cover should be used in garden beds (small rock and pebbles instead of pine bark)
 - Remove any ground fuels (eg. leaf litter, bark and branches).
 - Flammable materials such as woodpiles, fuels and rubbish shall be stored away from the dwelling.
 - Non-flammable separated shrubs, hedges and small trees shall be used for landscaping around the dwelling.
 - Tree canopies must not distribute leaf litter into gutters.
 - There must be a horizontal separation between the tree crowns and vertical separation between the ground fuels and trees branches.
 - No mass plantings of trees greater than 2m.

KEY:

- INDICATIVE BUILDING AREA (50M X 50M)
- HAZARD MANAGEMENT AREA WITH MINIMUM SEPARATION DISTANCES SHOWN (BETWEEN EDGE OF BUILDING AND BUSHFIRE PRONE VEGETATION)
- PROPERTY ACCESS (NOMINAL LAYOUT)
- HARDSTAND (NOMINAL LAYOUT)
- STATIC WATER SUPPLY (NOMINAL LAYOUT)



PROPERTY ACCESS FOR LOT 9 (NOMINAL). ACCESS TO COMPLY WITH TABLE C13.2 OF TAS PLANNING SCHEME.

PUBLIC ROAD TO COMPLY WITH TABLE C13.1 OF TAS PLANNING SCHEME.

BUSHFIRE HAZARD MANAGEMENT PLAN

CLIENT: SOUTHERN WASTE MANAGEMENT PTY LTD
 ADDRESS: LOT 1 BACK TEA TREE ROAD TEA TREE 7017
 PROPERTY ID: 1698711 TITLE REF: 121954/1
 DATE: 31/1/2025
 VERSION: 1.0
 CERTIFIED BY: JOE HEPPEL (SCOPE 1,2,3A,3B)
 SIGNED:

HED CONSULTING

UNIT 2, 1 LIVERPOOL STREET HOBART TAS 7000
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BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

Back Tea Tree Road, Tea Tree 7017

Certificate of Title / PID:

CT 121954/1 / PID 1698711

2. Proposed Use or Development

Description of proposed Use and Development:

Amendment to three lots (part of 11 lot subdivision)

Applicable Planning Scheme:

Tasmanian Planning Scheme

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Report	HED Consulting	31/1/2025	1.0
Bushfire Hazard Management Plan	HED Consulting	31/1/2025	1.0
Proposed Subdivision - 210768	D.J. Potter Land Consultants	17/10/2024	
Bushfire Report and Hazard Management Plan	North Barker Ecosystem Services	1/2/2024	

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

<input type="checkbox"/> E1.4 / C13.4 – Use or development exempt from this Code	
Compliance test	Compliance Requirement
<input type="checkbox"/> E1.4(a) / C13.4.1(a)	Insufficient increase in risk

<input type="checkbox"/> E1.5.1 / C13.5.1 – Vulnerable Uses	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.5.1 P1 / C13.5.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/> E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
<input type="checkbox"/> E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan

<input type="checkbox"/> E1.5.2 / C13.5.2 – Hazardous Uses	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.5.2 P1 / C13.5.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/> E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
<input type="checkbox"/> E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

<input type="checkbox"/> E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas	
Acceptable Solution	Compliance Requirement
<input type="checkbox"/> E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/> E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
<input checked="" type="checkbox"/> E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
<input type="checkbox"/> E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input type="checkbox"/>	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bushfire Hazard Practitioner

Name:

Joe Hepper

Phone No:

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Accreditation No:

BFP – 148

Scope:

1,2,3A,3B

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

- Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or
- The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:
certifier



Name:

JOE HEPPER

Date:

31/1/2025

Certificate Number:

H2957

(for Practitioner Use only)



11 lot Low-Density Residential Subdivision Back Tea Tree Road, Tea Tree

Natural Values Assessment

February 2024

For Southern Waste Solutions (SWS002)



313 Macquarie Street, Hobart Tasmania, 7000

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Summary

Tasmanian Planning Scheme 2021 - Brighton	
Zones	Landscape Conservation (22)
Overlays	<p>Natural assets code (C7)</p> <ul style="list-style-type: none"> • Waterway and Coastal Protection Area (C7.7.1) • Priority Vegetation Area (C7.7.2) <p>Bushfire Prone Areas (C13) – addressed in a separate report</p>
Threatened flora	<p><i>Asperula scoparia</i> (TSPA rare)</p> <p><i>Vittadinia gracilis</i> (TSPA rare)</p> <p><i>Vittadinia muelleri</i> (TSPA rare)</p> <p><i>Scleranthus diander</i> (TSPA rare)</p> <p><i>Scleranthus fasciculatus</i> (TSPA rare)</p>
Impacts	No direct impact
Threatened fauna and habitat	<p>Tasmanian wedge-tailed eagle (TSPA endangered, EPBCA Endangered); eastern barred bandicoot (EPBCA Vulnerable); spotted-tail quoll (TSPA rare, EPBCA Vulnerable); eastern quoll (EPBCA Endangered); Tasmanian devil (TSPA endangered, EPBCA Endangered); and grey goshawk (TSPA endangered)</p> <p>- limited to potential foraging habitat in primarily modified land for these wide-ranging species</p>
Impacts	Impact to the foraging habitat primarily in modified land for the wide-ranging species not significant.
Threatened vegetation	<p>DAS (NCA listed) – small impact</p> <p>GTL (EPBC listed) – no direct impact</p>
Impacts	1.8 ha of DAS
EPBC Act	No significant impact to MNES
TSP Act	A permit to take may be required for <i>Scleranthus fasciculatus</i>
NCA Act	Nil
Weed Management Act	Five declared weeds present, all classified as Zone B - requires containment

Contents

SUMMARY	I
1 PROJECT DETAILS	1
2 SITE VALUES	1
2.1 Site Characteristics and Study Area	1
3 RESULTS AND DISCUSSION	4
3.1.1 <i>Eucalyptus amygdalina</i> forest and woodland on sandstone (DAS, Plate 2)	4
3.1.2 <i>Bursaria-Acacia</i> woodland (NBA, Plate 3)	5
3.1.3 Lowland Grassland Complex (GCL, Plate 4)	5
3.2 Plant Species of Conservation Significance	9
3.3 Threatened Fauna Habitat	9
3.4 Weeds	10
4 IMPACT ASSESSMENT AND SCOPE FOR MITIGATION	13
4.1 Vegetation Communities	13
4.2 Threatened Flora Species	13
4.3 Threatened Fauna Habitat and Trees	14
4.4 Weeds	14
5 LEGISLATIVE IMPLICATIONS	19
5.1 Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>	19
5.2 Tasmanian <i>Threatened Species Protection Act 1995</i>	19
5.3 Tasmanian <i>Nature Conservation Act 2002</i>	19
5.4 Tasmanian <i>Biosecurity Act 2019</i>	19
5.5 Tasmanian <i>Planning Scheme 2021 -Brighton</i>	19
5.5.1 Zones	19
5.5.2 Codes	20
6 CONCLUSION AND RECOMMENDATIONS	24
6.1 Vegetation Communities	24
6.2 Flora of Conservation Significance	24
6.3 Introduced Flora	24
6.4 Threatened Fauna	24
REFERENCES	26
APPENDIX A: VASCULAR PLANT SPECIES LIST	27
APPENDIX B: THREATENED FLORA WITHIN 500 M AND 5 KM	32
APPENDIX C: THREATENED FAUNA WITHIN 500 M AND 5000 M	41

1 Project Details

Background

The proponent is seeking approval for a subdivision at Back Tea Tree Road (PID 1698711, title reference 121954/1) (Figure 1), including accessways from Back Tea Tree Road and Rosewood Lane to 11 residential blocks (Figure 2) – the study area. To support a development application to the Brighton Council, the proponent has engaged North Barker Ecosystem Services (NBES) to undertake a natural values assessment consistent with NRE's *Guidelines for Natural Values Surveys – Terrestrial Development Proposals*.

Date of Field Survey: 7th & 8th April 2022

Field Survey, Report and Photos: Cameron Geeves

Methods

Plant species composition of the study area was surveyed using an area search based on the Timed Meander Search Procedure¹, stratified within representative areas of each vegetation type present in accordance with TASVEG 4.0 units; vegetation boundaries were assessed in the field and on desktop with the aid of GPS points and aerial imagery. Fauna habitat was assessed concurrently with the vegetation assessment according to industry guidelines on search requirements and habitat quality.

The Tasmanian Natural Values Atlas database was searched for records of threatened species and vegetation types within a 5 km radius². The possibility of threatened values known from within this radius occurring within the impact area has been considered in the interpretation of results.

Limitations

The field survey was undertaken in autumn. Values that are seasonal may have been overlooked or absent; the potential for this is considered where relevant in the discussion. The quality of fauna habitat, including the presence of tree hollows, was assessed from ground level.

2 Site Values

2.1 Site Characteristics and Study Area

The study area covers ~232 ha of the property (Figure 2). The entire study area is within the Landscape Conservation zone under the *Tasmanian Planning Scheme - Brighton* (the Scheme). Parts of the study area are subject to the Natural Assets Code overlay, including areas subject to Waterway and Coastal Protection area code and Priority Vegetation area code under the Scheme (Figure 2). The study is for 11 lots, and the lot layout, building envelopes and bushfire hazard management areas (BHMA) in this report are as per the Bushfire Hazard Management Plan included in the application (Figure 2).

The study area is located in a rural landscape comprised of a mosaic of low-density residential use, quality agricultural land, grazed rough pasture, and remnant native vegetation. The study area is

¹ Goff *et al.* 1982

² Natural Values Atlas Report, (report nvr_3_06-Apr-2022)

comprised mostly of cleared land with a history of grazing but does also includes remnant native vegetation in the southern portion of the site.

The site is spread over Jews Hills, which is part of the northern end of the Meehan Range. The site consists of gentle to moderately sloped land between 110 m asl and 300 m asl at Jews Hill. Average annual rainfall for the area is under 500 mm. The site substrate is derived primarily from Jurassic dolerite in the north and east, but also includes a deposition of Permian-Triassic sandstone in the south.

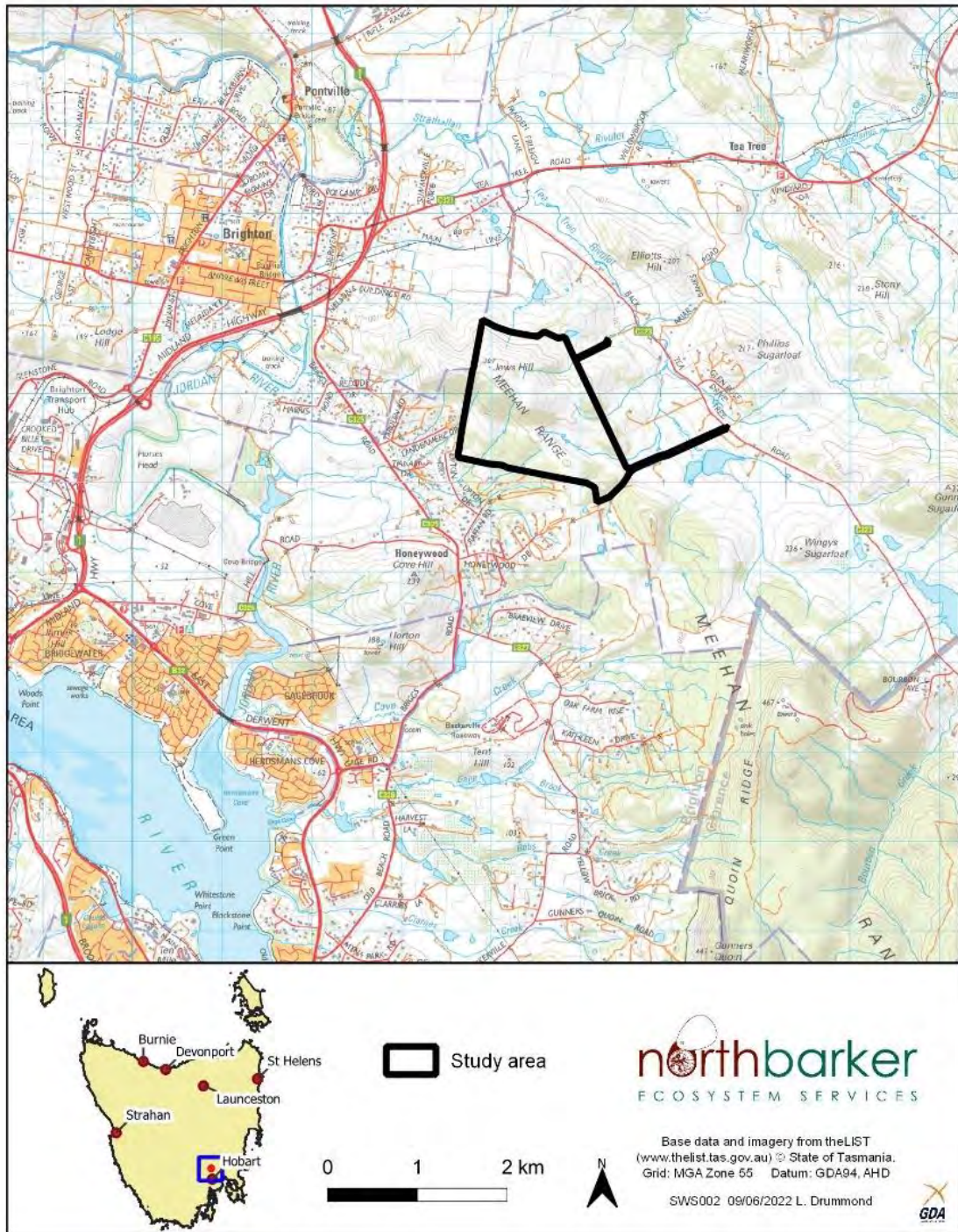


Figure 1: Location of the subdivision.

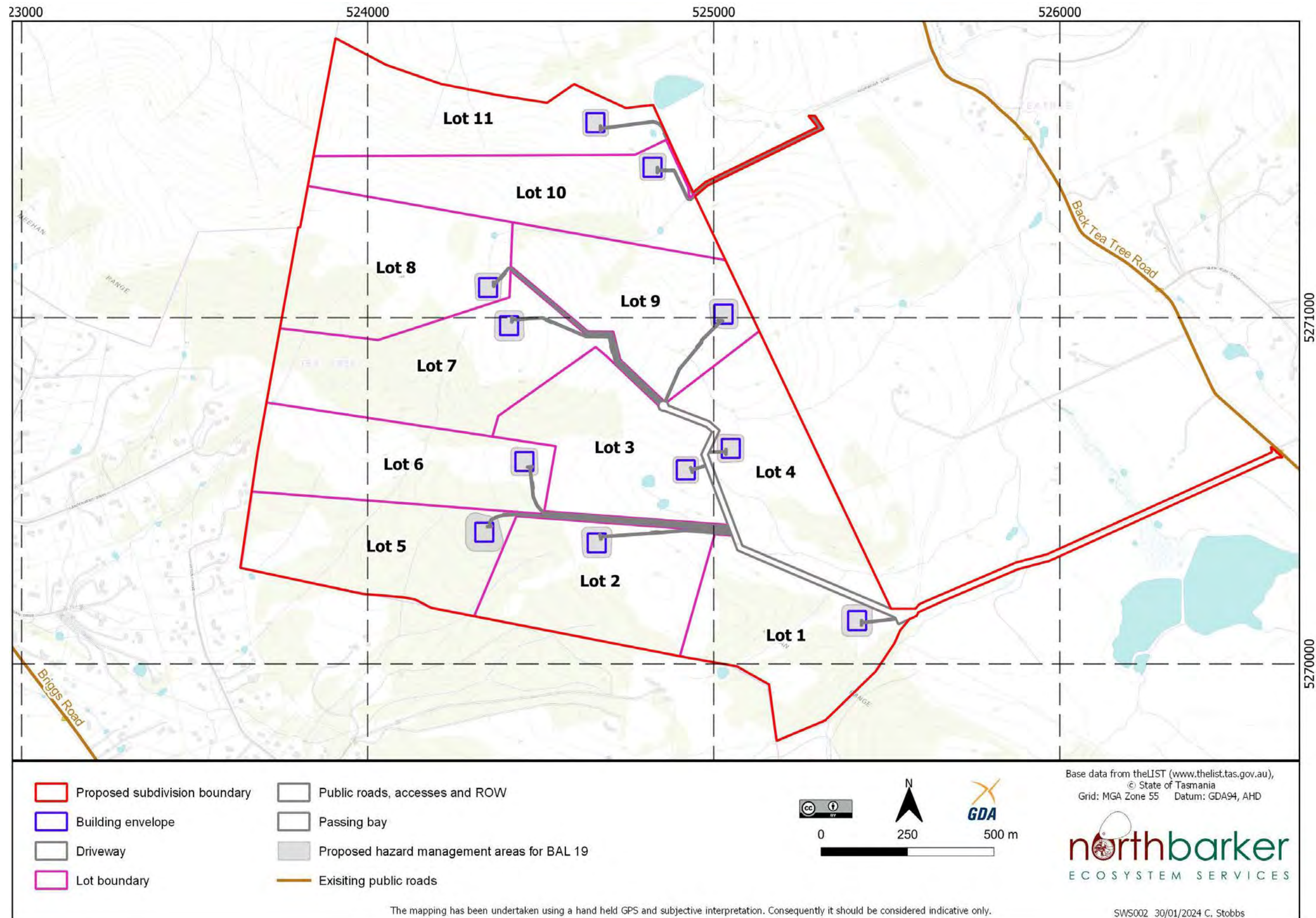


Figure 2: Lots, notional building areas, HMAs and access.

3 Results and Discussion

Vegetation

The majority of the lots are situated on modified land; as per TASVEG 4.0 this is classed as FAG (Agricultural land). Five native vegetation communities are present within the study area (Figure 3, Plates 1-4). The two forest communities are in relatively poor to moderate condition, compromised by location (edge effects), exotic species, and in some areas tree dieback. A high level of native grazing is evident in the south-western area of extensive bushland (DAS), which is limiting the regeneration of native woody understorey species.

A patch of native grassland TASVEG 4.0 mapped as Lowland Themeda Grassland occurs in the far southwestern corner of the study area. This was not verified during the survey given the current subdivision plan will not impact the area.

- *Eucalyptus viminalis* grassy forest and woodland (DVG) – 48.53 ha in study area.
- *Eucalyptus amygdalina* forest and woodland on sandstone (DAS) – 44.82 ha in study area.
- *Bursaria-Acacia* woodland (NBA)– 9 ha in study area.
- Lowland Grassland Complex (GCL) – 1.90 ha in the study area
- Lowland *Themeda* Grassland (GTL) – approx. 7 ha

DAS is listed as a threatened community under the Tasmanian *Nature Conservation Act 2002* (NCA).

Although not listed as threatened under the NCA, if certain condition thresholds are met, Both GCL and GTL can qualify for listing as the critically endangered *Lowland Native Grasslands of Tasmania* community, in this case perennial non-native species make up more than 20 % total ground cover in GCL and thus the community does not qualify³.

GTL is a critically endangered ecological community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The GTL patch was not verified during the survey due to seasonal constraints.

Eucalyptus viminalis grassy forest and woodland (DVG, Plate 1)

Occurs on lots 4, 7, 8 and 10. The canopy is dominated by *Eucalyptus viminalis*. *Bursaria spinosa* is the dominant understorey species with *Acacia dealbata* and *A. mearnsii* also present. The shrub layer is sparse and is comprised of widespread dry woodland species such as *Lissanthe strigosa* and *Pimelea humilis*. The ground cover is grass dominated, with a number of native herbs present; species include: *Poa labillardierei*, *P. rodwayi*, *Lagenophora stipitata* and *Scleranthus spp.*

This community is in a poor condition: old growth characteristics are absent and crown dieback is common. Much of the area surveyed is subject to edge effects that include a diversity of introduced weed species from the surrounding pasture.

This community is not listed under the NCA.

3.1.1 *Eucalyptus amygdalina* forest and woodland on sandstone (DAS, Plate 2)

Occurs on lots 1, 2, 5 and 6 in southern parts of the survey area. This community is dominated by *Eucalyptus amygdalina*, with *E. viminalis* as a subdominant and *Bursaria spinosa* dominant in places.

³ Lowland native grasslands of Tasmania EPBCA policy statement (2010)

Old-growth characteristics are absent, potentially a result of historic firewood collection. *Acacia mearnsii*, *Allocasurina littoralis* and *Dodonaea viscosa* occur in the understorey. The shrub and ground cover layers include widespread species such as *Astroloma humifusum*, *Lissanthe strigosa*, *Leucopogon virgatus* subsp. *virgatus*, *Boronia anemonifolia*, *Acaena novae-zelandiae*, *Lomandra longifolia* and *Microlaena stipoides*. Similarly, edge effects were evident in this community, with weedy grasses from nearby pasture also being common throughout the understorey.

Eucalyptus amygdalina forest and woodland on sandstone is listed as threatened under the Tasmanian NCA.

3.1.2 Bursaria-Acacia woodland (NBA, Plate 3)

This disturbance-induced community occupies large areas on the fringes between native vegetation and pasture in the study area. The community dominated by *Bursaria spinosa* and *Acacia mearnsii*. The shrub and ground cover layers are relatively species poor and comprised of a few common and widespread species such as *Lissanthe strigosa*, *Dichondra repens*, *Lomandra longifolia*, *Themeda triandra* and *Poa rodwayi*. Weedy pasture species such as *Phalaris sp.*, *Cynosurus echinatus* and *Dactylis glomerata* are also common throughout this community.

Bursaria – Acacia woodland (NBA) is not listed under the Tasmanian NCA.

3.1.3 Lowland Grassland Complex (GCL, Plate 4)

This community is typically derived from the degradation of grassy native vegetation, which is most likely the case within the study area. Here it occurs in patches on lots 2, 3 and 7. These areas are subject to grazing and whilst native grasses such as *Rytidosperma spp.* and *Austrostipa spp.* form between 25% - 50% of the species composition, perennial non-native grasses from adjacent pasture such as *Dactylis glomerata*, *Cynosurus echinatus* and *Phalaris spp.* are very common throughout these areas, which has degraded the quality of this grassland. Given the time of survey (Autumn), herb species were sparse in the understorey, although the herbaceous weed *Acetosella vulgaris*, and native herbs *Dichondra repens* and *Plantago varia* were common.

This community is not listed under the NCA.



Plate 1: DVG on lot 8. Grassy understory with a high component of non-native species.



Plate 2: DAS in the study area.



Plate 3: NBA in the study area.



Plate 4: GCL in the study area.

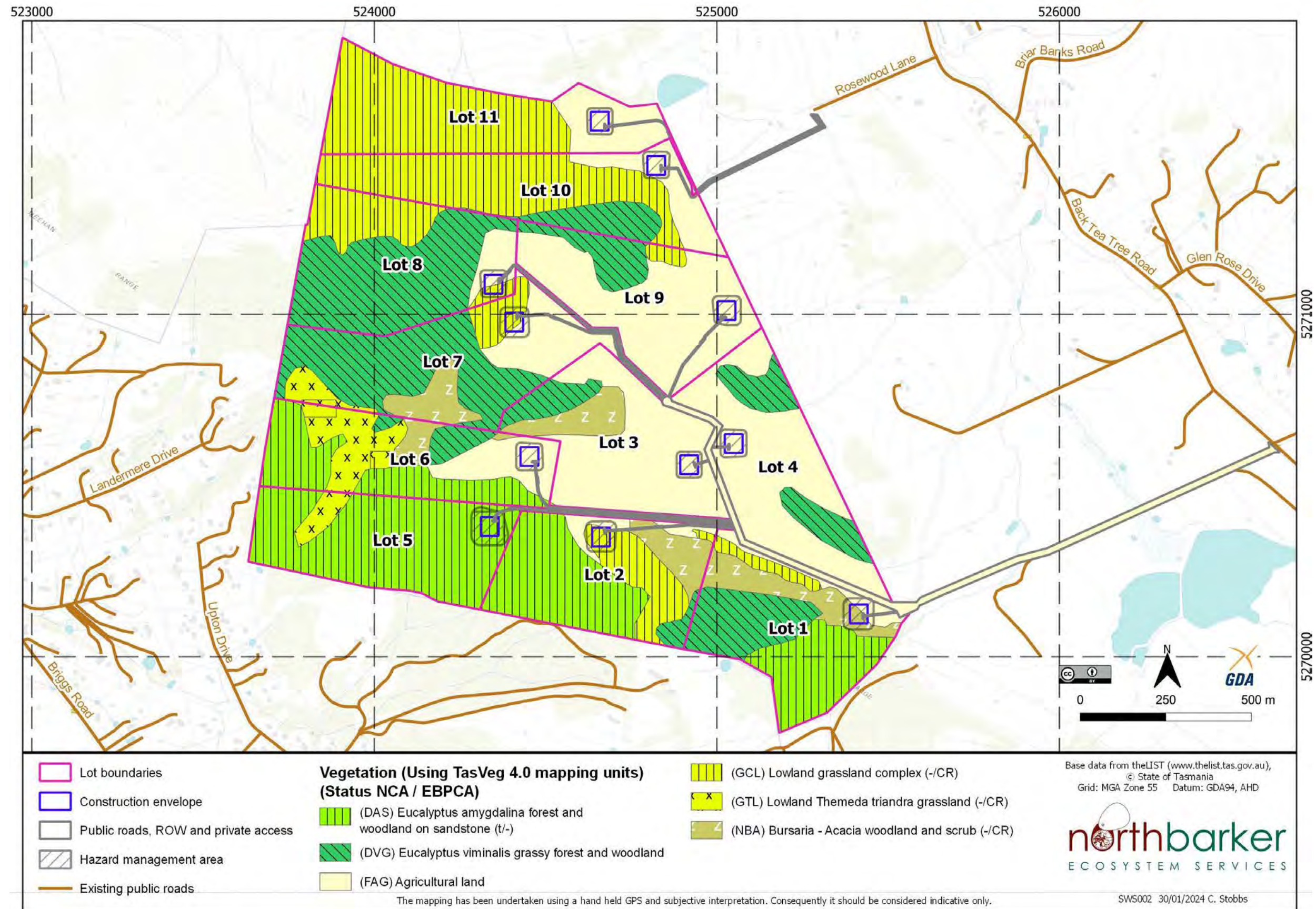


Figure 3: Vegetation in the study area.

3.2 Plant Species of Conservation Significance

Ninety-two vascular plant taxa were recorded in the study area (Appendix A); of these, twenty-nine are introduced species. Five species listed as threatened under the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were recorded during the survey (Figure 4):

- *Asperula scoparia* subsp. *scoparia* (TSPA rare) – found in one location on lot 8.
- *Vittadinia gracilis* (TSPA rare) – a small population of plants occur in the FAG in the north of the study area.
- *Vittadinia cuneata* var *cuneata* (TSPA rare) – incidentally recorded in FAG between lot 10 and lot 11.
- *Scleranthus diander* (TSPA vulnerable) – incidentally recorded in FAG on lot 7
- *Scleranthus fasciculatus* (TSPA vulnerable) – incidentally recorded in FAG on lot 4

The Tasmanian *Natural Values Atlas* lists two species of threatened flora within 500 m of the study area:

- *Asperula scoparia* subsp. *scoparia* - This is a small herb species, which was found to also be present on lot 8;
- *Isoetopsis graminifolia* – This cryptic annual herb grows in native grasslands. Seed is known to persist in the soil for many decades, allowing the species to emerge in response to seasonally favourable conditions. Peak flowering is September to November. Chances of detecting the species outside of its flowering time are very low, and thus the species may very well be present within the study area.

A number of additional threatened plant taxa have been recorded within 5 km⁴ of the area. The habitat in most of the study area is heavily grazed pasture largely comprised primarily of competitive introduced grass species. These areas are unsuitable for most of the threatened flora recorded within 5 km.

Similarly, the chances of threatened flora species occurring in the native communities and having been overlooked during the survey are low to very low. These areas are in moderate to poor condition, and are prone to edge effects, especially the presence of introduced species.

Those species that have some chance of occurring, albeit low, are discussed in Appendix B.

3.3 Threatened Fauna Habitat

No sign or presence of threatened fauna were recorded during the survey.

Further, our fauna habitat assessment established that the proposed clearance footprint does not contain any observable habitat elements that could be considered critical to the persistence of threatened fauna species at a local level or higher.

The Tasmanian *Natural Values Atlas* lists one threatened fauna species within 500 m of the study area: the eastern barred bandicoot. A range of additional threatened fauna species have been recorded within 5 km of the site and the likelihood of their occurrence is discussed in Appendix C. Most of these species are not likely to occur because the habitat is entirely unsuitable (e.g., swift

⁴ Natural Values Atlas Report, (report nvr_3_06-Apr-2022)

parrot). Some species have a low chance of occurring occasionally at the site or traversing the site (e.g., wedge-tailed eagle) but no impact is expected to those species.

3.4 Weeds

Five species of declared weeds under the Tasmanian *Weed Management Act 1999* and a single environmental weed occur in the study area (Figure 4). Two environmental weeds are also widespread throughout the study area. Note that our records are not intended to represent the distribution of weeds on the entire area.

Declared weed species

- California thistle (*Cirsium arvense*, Plate 6): is widespread throughout the modified land on the site.
- African boxthorn (*Lycium ferocissimum*, Plate 7): scattered throughout the study area; mostly single plants but two patches of 10 and 17 plants occur.
- Fennel (*Foeniculum vulgare*): one patch concentrated around the entrance to the study area near Rosewood Lane.
- Gorse (*Ulex europaeus*, Plate 9): one isolated patch on lot 2 in the southern part of the study area.
- White horehound (*Marrubium vulgare*, Plate 10): large patch on lot 9 and one individual on lot 8. This species is likely to be more widespread within the study area and vicinity.

Environmental weed species

- Sweet briar (*Rosa rubiginosa*): this is an environmental weed that is scattered throughout modified land predominantly in the northern parts of the study area.
- Spear thistle (*Cirsium vulgare*): widespread throughout disturbed areas.



Plate 5: Californian thistle in the study area.



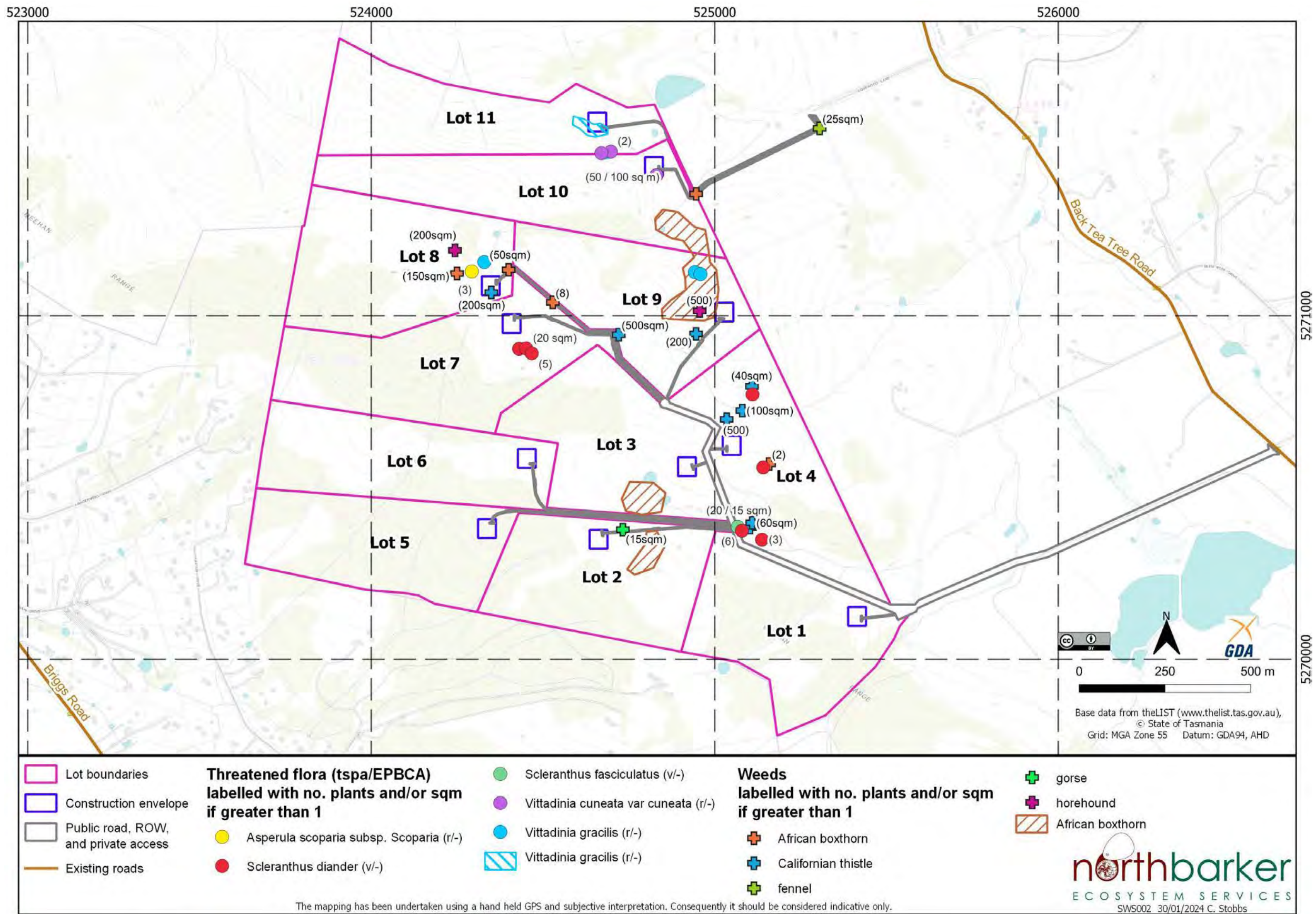
Plate 6: African boxthorn in the study area.



Plate 7: Gorse occurs within the study area on lot 2.



Plate 8: White horehound from lot 9.



The mapping has been undertaken using a hand held GPS and subjective interpretation. Consequently it should be considered indicative only.

Figure 4: Natural values in the study area.

4 Impact Assessment and Scope for Mitigation

4.1 Vegetation Communities

The two access roads included in this application will impact a total of 4.4 ha. All of which is agricultural land (FAG).

The notional layout of the building areas, and bushfire hazard management areas is also situated largely in FAG, and impact to native communities is largely avoided with this design.

Due to the minor impact to native vegetation communities, no mitigation measures are warranted. However, indirect impacts to vegetation outside the construction area should be avoided by clearly defining the extent of clearance and excluding the parking and use of vehicles and the storing of materials from native habitats.

An area of grassland TASVEG mapped as GTL occurs in the far southwestern part of the study area on lots 5, 6, and 7. No impacts under the subdivision plan are anticipated and the mapped area is remote from notional building areas. A spring survey would be required to verify the patch as the EPBC listed ecological community. If the community is present then it should be protected from development by a legal instrument such as a Conservation Covenant under the NCA 2002.

4.2 Threatened Flora Species

Five threatened flora species have been recorded within the project area:

- *Asperula scoparia* subsp. *scoparia* (TSPA rare) – found in one location within lot 8.
- *Vittadinia gracilis* (TSPA rare) – a small population of ~ 50 plants occur in the FAG in the north of the study area and a single plant was recorded close to the current notional building area on lot 8.
- *Vittadinia cuneata* var *cuneata* (TSPA rare) – incidentally recorded in FAG between lot 10 and lot 11.
- *Scleranthus diander* (TSPA vulnerable) – found on lot 7 and incidentally recorded in the understory of DVG and within FAG on lot 4.
- *Scleranthus fasciculatus* (TSPA vulnerable) – 20 plants recorded on the boundary of the access road and lot 4 in FAG vegetation.

The following spring flowering species have a low to moderate chance of occurring, especially within the more native grassland and grassy woodland vegetation in the project area:

- *Isoetopsis graminifolia* (grass cushion) TSP vulnerable – This cryptic annual herb grows in native grasslands. Seed is known to persist in the soil for many decades, allowing the species to emerge in response to seasonally favourable conditions. Peak flowering is September to November. Chances of detecting the species outside of its flowering time are very low, and thus the species may very well be present within the study area.
- *Pterostylis wapstrarum* (fleshy greenhood) TSP endangered, EPBC critically endangered – spring flowering orchid, the chances of detecting the species outside of its flowering time is very low.
- *Pterostylis squamata* (ruddy greenhood) TSP vulnerable – spring/summer flowering orchid, the chances of detecting the species outside of its flowering time is very low.

It is recommended that targeted Spring survey be undertaken to rule out the presence of these species within the areas proposed to be impacted.

No other threatened flora are expected to occur in the study area, and no mitigation measures are required at this stage in the proposal.

4.3 Threatened Fauna Habitat and Trees

The proposal may impact foraging habitat for threatened fauna that may occur in modified land and the surrounding native vegetation: Tasmanian wedge-tailed eagle, masked owl, eastern barred bandicoot, quolls, Tasmanian devil, and grey goshawk. These are wide-ranging fauna and the development of the proposal is expected to have a low impact on these species. The study area is unlikely to support a population or be important to the survival of a local population for any of these species. Accordingly, no mitigation measures are recommended for these species.

4.4 Weeds

Without mitigation, the proposal runs the risk of spreading and/or worsening the declared weeds on site. It is recommended that all occurrences of declared weeds are treated prior to works. Best practice construction hygiene⁵ should be practiced to prevent the spread of weed propagules in contaminated soil. This should involve cleaning all machinery before leaving the works area, as well as not bringing dirty machinery into the site. Follow-up weed control will be required 6-12 and 24 months after works to treat any individuals that have colonised the disturbance area.

⁵ DPIPWE 2015

Table 1: Summary of impacts to natural values.

Natural value	Potential impacts	Context and comments on mitigation ⁶
EPBCA Ecological Communities		
None present	No indirect impacts anticipated	
Native vegetation communities (TASVEG units)		
(DAS) <i>Eucalyptus amygdalina</i> forest and woodland on sandstone – Threatened - Nature Conservation Act 2002.	Lot 5 Bushfire Hazard Management Areas: 0.60 ha Lot 5 and 6 Access: 0.11 Lot 5 Building area 0.29 ha	Total extent in Tasmania: 40,400 ha Total extent in Tasmanian reserve estate: 13,600 ha Total extent in Brighton Council: 600 ha Total extent in reserves in Brighton Council: 30 ha
(DVG) <i>Eucalyptus viminalis</i> grassy forest and woodland	Bushfire Hazard Management Areas: 0 ha Access: 0 ha	Total extent in Tasmania: 103,900 ha Total extent in Tasmanian reserve estate: 17,500 ha Total extent in Brighton Council: 1,400 ha Total extent in reserves in Brighton Council: 50 ha
(NBA) <i>Bursaria – Acacia</i> woodland	Bushfire Hazard Management Areas: 0.42 ha Access: 0.07 ha	Total extent in Tasmania: 18,600 ha Total extent in Tasmanian reserve estate: 2,600 ha Total extent in Brighton Council: 500 ha

⁶ Includes statements from DPIPW Threatened Species Link summaries and note sheets

Natural value	Potential impacts	Context and comments on mitigation ⁶
		Total extent in reserves in Brighton Council: 40 ha
(GCL) Lowland grassland complex	Nil	Total extent in Tasmania: 69,100 ha Total extent in Tasmanian reserve estate: 3,300 ha Total extent in Brighton Council: 12,000 ha Total extent in reserves in Brighton Council: 100 ha
(GTL) Lowland <i>Themeda triandra</i> grassland – Critically endangered – EPBC Act 1999.	Nil	Total extent in Tasmania: 7,600 ha Total extent in Tasmanian reserve estate: 2,300 ha Total extent in Brighton Council: 200 ha Total extent in reserves in Brighton Council: 60 ha
Other Vegetation Communities (TASVEG units)		
FAG – Agricultural land	Survey Area: 10.5 ha	
EPBCA listed flora		
None present		
TSPA listed flora		
<i>Asperula scoparia</i> subsp. <i>scoparia</i> (TSPA rare)	3 plants	Three individual plants found near the building area on lot 8.

Natural value	Potential impacts	Context and comments on mitigation ⁶
<i>Vittadinia gracilis</i> (TSPA rare)	90 plants	Majority of plants found to occur in FAG vegetation in lot 11 outside the impact area.
<i>Vittadinia cuneata</i> var <i>cuneata</i> (TSPA rare)	53 plants	Majority of plants found to occur in FAG vegetation on lot 11 , outside of proposed area to be impacted.
<i>Scleranthus diander</i> (TSPA vulnerable)	67 plants	Approximately 50 plants found within lot 7. Small patches of plants opportunistically recorded between impact areas.
<i>Scleranthus fasciculatus</i> (TSPA vulnerable)	20 plants	Approximately 20 plants recorded on the boundary with lot 4 and the southern access road.
Threatened Fauna and Fauna Habitat		
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i> Spotted-tailed quoll EPBCA Vulnerable, TSPA Rare	Removal of a small area of potential habitat within DVG and DAS forest	Negligible impacts anticipated.
<i>Dasyurus viverrinus</i> Eastern quoll EPBCA Endangered, TSPA Not listed		
<i>Sarcophilus harrisii</i> Tasmanian devil EPBCA Endangered, TSPA Endangered		
<i>Aquila audax</i> subsp. <i>fleayi</i> Tasmanian wedge-tailed eagle EPBCA Endangered, TSPA Endangered	No direct impacts to nesting habitat.	Negligible impacts anticipated.

Natural value	Potential impacts	Context and comments on mitigation ⁶
<p><i>Tyto novaehollandiae</i> subsp. <i>castanops</i> Tasmanian masked owl</p> <p>EPBCA Vulnerable, TSPA Vulnerable</p>	<p>No direct impacts to nesting habitat.</p>	<p>Negligible impacts anticipated.</p>
Weeds		
<p>Zone B Species</p> <p><i>Foeniculum vulgare</i> fennel</p> <p><i>Cirsium vulgare</i> Californian thistle</p> <p><i>Lycium ferocissimum</i> African boxthorn</p> <p><i>Marrubium vulgare</i> white horehound</p> <p><i>Ulex europaeus</i> gorse</p>		<p>The management objective is to contain the spread of these species. The containment principles of the WMA should be sufficiently met with best practice construction hygiene that prevents the transport of contaminated material off site, and the completion of a post-works audit.</p>

5 Legislative Implications

5.1 Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

No impacts proposed in this application. However, GTL is a Matter of National Environmental Significance and could be inadvertently impacted by land use change engendered by residential subdivision. The area of GTL should be verified and if confirmed should be protected by a conservation covenant.

5.2 Tasmanian *Threatened Species Protection Act 1995*

Any impact on threatened plant species listed under the TSPA will require a 'permit to take' from the Policy and Conservation Branch (PCAB) at the Department of Natural Resources and Environment. Potential impacts on the following State-listed flora species within the project area may trigger a permit to take requirement:

- *Asperula scoparia* subsp. *scoparia* (TSPA rare)
- *Vittadinia gracilis* (TSPA rare)
- *Vittadinia cuneata* var. *cuneata* (TSPA rare)
- *Scleranthus diander* (TSPA vulnerable)
- *Scleranthus fasciculatus* (TSPA vulnerable)

5.3 Tasmanian *Nature Conservation Act 2002*

One vegetation community (*Eucalyptus amygdalina* forest and woodland on sandstone – DAS), listed as threatened under schedule 3A of the NCA occurs within the project area.

The NCA does not regulate impacts to this community but informs relevant criteria within the Tasmanian Planning Scheme

5.4 Tasmanian *Biosecurity Act 2019*

California thistle, African boxthorn, Fennel, White horehound and Gorse are all zone B species in the Brighton Council, the proponent must prevent spread of these weeds resulting from works. Eradication of the reported plants will be most effective means of achieving this requirement.

5.5 Tasmanian *Planning Scheme 2021 -Brighton*

5.5.1 Zones

The study area is zoned as Landscape Conservation (22).

The purpose of the Landscape Conservation Zone is:

To provide for the protection, conservation, and management of landscape values.

To provide for compatible use or development that does not adversely impact on the protection, conservation, and management of the landscape values.

5.5.2 Codes

Natural Assets Code (C7)

Parts of the study area fall within a Waterway and Coastal Protection Area and Priority Vegetation Area (WWCPA & PVA, Figure 2 above) and any clearing in these areas is subject to the Natural Assets Code. Subdivision proposals are considered under **C7.7.1** and **C7.7.2** of the Code respectively.

5.5.2.1 Subdivision within a Waterway and Coastal Protection Area or a Future Coastal Refugia Area (C7.6.1)

Under C7.6.1 the objective of the Code is stated as follows:

- (a) works associated with subdivision within a waterway and coastal protection area or future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets; and*
- (b) future developments likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on natural assets*

Acceptable Solutions A1

Each lot, or a lot proposed in a plan of subdivision, within a waterway and coastal protection area or a future coastal refugia area must:

- a) be for the creation of separate lots for existing buildings;*
- b) be required for public use by the Crown, a council, or a State authority;*
- c) be required for the provisions of Utilities;*
- d) be for the consolidation of a lot; or*
- e) not include any works (excluding boundary fencing), building area, services, bushfire hazard management area or building access within a waterway and coastal protection area or future coastal refugia area.*

The proposal cannot meet acceptable solutions A1 and therefore must meet performance criteria P1.1 as follows:

Each lot, or a lot proposed in a plan of subdivision, within a waterway and coastal protection area or a future coastal refugia area, must minimise adverse impacts on natural assets, having regard to:

- a) the need to locate building areas and any associated bushfire hazard management area to be outside a waterway and coastal protection area or future coastal refugia area;*

The hazard management areas and/or building areas are located outside of the Waterway and Coastal Protection Area (WWCPA) overlay.

The proposal can therefore meet this criterion.

- b) Future development likely to be facilitated by the subdivision.*

The future development of access to the subdivision will overlap with three watercourses subject to the WWCPA. The watercourses associated with this overlay are all highly modified (comprised primarily of introduced species in FAG) this renders these watercourse of limited ecological value in terms of native natural values. As such there will be no impact on natural values in the WWCPA.

The proposal can therefore meet this criterion.

5.5.2.2 Subdivision within a Priority Vegetation Area (C7.6.2)

Under C7.6.1 the objective of the Code is stated as follows:

- (a) works associated with subdivision will not have an unnecessary or unacceptable impact on priority vegetation; and*
- (b) future developments likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on priority vegetation.*

Acceptable Solutions A1

Each lot, or a lot proposed in a plan of subdivision, within a priority vegetation area must:

- a) be for the creation of separate lots for existing buildings;*
- b) be required for public use by the Crown, a council, or a State authority;*
- c) be required for the provisions of Utilities;*
- d) be for the consolidation of a lot; or*
- e) not include any works (excluding boundary fencing), building area, bushfire hazard management area, services or vehicular access within a priority vegetation area.*

The proposal cannot meet acceptable solutions A1 and therefore must meet performance criteria P1.1 and P1.2 as follows:

P1.1

Each lot, or a lot proposed in a plan of subdivision, within a priority vegetation area must be for:

- a) subdivision for an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmanian Fire Service or an accredited person;*

N/A subdivision is not for an existing use

- b) subdivision for the construction of a single dwelling or an associated outbuilding;*

N/A – subdivision is for multiple lots, each with a single dwelling.

- c) subdivision in the General Residential zone or Low Density Residential Zone;*

N/A – subdivision is zoned Landscape conservation

d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design;

The proposed design lot layout, and associated building areas has been located as best as possible with regard to priority vegetation, boundary and hazard management setbacks. While alternative building areas do exist, there is no feasible benefit to an alternative location or design.

e) subdivision involving clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or

Currently, the land proposed for subdivision, including the areas subject to the natural assets code for priority vegetation is used for agricultural purposes in the form of sheep grazing. This has resulted in the degradation of the native vegetation to the point where bare ground and declared weeds and the introduction of non-native pasture species have become dominant features in parts of the study area. The current land use does not ensure the long term persistence of the little priority vegetation remaining within the study area.

The subdivision of this land is for the purpose of developing 11 low density residential lots and hence the change in land use may in fact provide the opportunity for the current vegetation communities to recover to a more natural state.

f) subdivision involving clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site

On lots 5 and 6 ~1.0 ha of priority vegetation (DAS) will be impacted through the creation of a building area, driveway(s) and associated hazard management area.

This equates to ~2 % of the extent of priority vegetation mapped across the study area.

The proposal meets performance criteria P1 (e) and (f).

P1.2

Works associated with subdivision within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:

(a) the design and location of any works, future development likely to be facilitated by the subdivision, and any constraints such as topography or land hazards

Impacts to priority vegetation have been minimised by siting building areas and their associated hazard management areas to the extent possible given the constraints of topography.

(b) any particular requirements for the works and future development likely to be facilitated by the subdivision

So long as impacts to priority vegetation is minimised through siting this criteria can be met.

(c) the need to minimise impacts resulting from bushfire hazard management measures through siting and fire-resistant design of any habitable buildings;

Impacts to priority vegetation have been minimised by siting building areas and their associated hazard management areas outside of the priority vegetation overlay area to the extent possible given the constraints of topography.

The proposal can therefore meet this criterion.

(d) any mitigation implemented to minimise the residual impacts on priority vegetation;

Residual impacts to priority vegetation are not anticipated and, in fact, the change in land use may indeed provide scope for recovery of the vegetation on the site.

The proposal can therefore meet this criterion.

(e) any on-site biodiversity offsets; and

Within lots 5 and 6 - 1.0 ha of DAS will be impacted as part of the establishment of the building area and its associated HMA. This equates to 2 % of the extent of priority vegetation mapped across the study area.

Given the relatively small area of impact, no on-site biodiversity offsets are warranted.

The proposal can therefore meet this criterion.

(f) any existing cleared areas on the site.

Much of the site has historically been cleared and converted to pasture or is rough pasture. Building areas have been sited on all lots to make use of cleared areas where possible.

The design of the building footprints and the associated HMA's are such that impact to priority vegetation has been largely avoided with only 1.8 ha impacted by the building area and BMA on lots 5 & 6 (this is less than 4 % of the 45 ha of priority vegetation in the project area).

The proposal can therefore meet this criterion.

(g) Additional mitigation measures are proposed to ensure that the subdivision will satisfactorily reduce all remaining impacts on priority vegetation; and

It is recommended that indirect impacts to vegetation outside the construction area should be avoided by clearly defining the extent of clearance and excluding the parking and use of vehicles and the storing of materials from native habitats.

The proposal can therefore meet this criterion.

6 Conclusion and recommendations

A natural values assessment has been undertaken for a proposal on Tea Tree Road in southern Tasmania. Key findings and recommendations in relation to the identified values within the proposed subdivision are as follows:

6.1 Vegetation Communities

The majority of the project area supports agricultural modified land currently utilised for grazing

The project area also contains one threatened vegetation community (DAS). The current subdivision layout, building areas, and the associated HMA on lot 5 and access on lots 5 and 6 will impact on 1.0 ha of DAS.

An unverified area of native grassland (GTL) on lots 5-7 is outside of the impact footprint. However, this critically endangered vegetation type should be verified and protected if present. This could be done as a condition of approval through either a Part 5 agreement or a covenant under the NCA 2002.

6.2 Flora of Conservation Significance

Five species of threatened flora have been recorded during the natural values assessment in the study area including the TSPA listed species *Asperula scoparia* subsp. *scoparia*, *Vittadinia gracilis*, *Vittadinia cuneata* var *cuneata*, *Scleranthus diander* and *Scleranthus fasciculatus*.

The locations of these threatened species should be noted and taken into consideration with the aim of avoiding impacts to these species wherever possible. Where impacts are unavoidable, a 'permit to take' will need to be obtained from DNRE.

An area of rocky grassland on lot 2 has a single NVA record for *Isoetopsis graminifolia* (TSPA vulnerable). This cryptic annual herb can only be identified during its flowering time between September and November. Based on habitat and distribution, this area has a moderate likelihood of supporting this species and thus before any works within grassland on this lot is to be conducted, further investigations would be required to determine its presence/absence.

6.3 Introduced Flora

Five species listed as declared under the weed management act were found throughout the project area. All these species are identified as Zone B species within the Brighton municipality.

6.4 Threatened Fauna

No threatened fauna species were located during the survey, and threatened fauna habitat is largely confined to minor amounts of potential foraging habitat for a few widely-occurring threatened species. No significant impacts to any threatened fauna are expected with this development.

The proposal has been shown to be able to meet the requirements of the Natural Assets and the Waterway and Coastal Protection Codes under the Tasmanian Planning Scheme 2021.

Recommendations are as follows:

- Indirect impacts to vegetation outside the construction area should be avoided by clearly defining the extent of clearance and excluding the parking and use of vehicles and the storing of materials from native habitats.
- Native grassland on lots 5-7 should be verified and if present protected using a conservation instrument such as a covenant. A spring survey is necessary to verify the grassland.
- An exclusion zone is erected around any threatened flora where there is no permit to take to ensure impacts are avoided during construction.
- All occurrences of declared weeds are treated prior to works and that best practice construction hygiene should be practiced to prevent the spread of weed propagules in contaminated soil.

References

- Commonwealth of Australia (2011). Survey guidelines for Australia's threatened mammals: Guidelines for detecting mammals listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999. <http://www.environment.gov.au/epbc/publications/pubs/survey-guidelines-mammals.pdf>
- Commonwealth of Australia (1999). Environment Protection and Biodiversity Conservation Act 1999. No. 91, 1999.
- de Salas, M.F. and Baker, M.L. (2021) A Census of the Vascular Plants of Tasmania, Including Macquarie Island. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery. Hobart) www.tmag.tas.gov.au (PDF).
- Department of the Environment, Water, Heritage and the Arts (2010). Lowland Native Grasslands of Tasmania — a nationally threatened ecological community. Environment Protection and Biodiversity Conservation Act 1999 Policy Statement 3.18. Australian Government, Canberra.
- DNRE (2022). Natural Values Report April 2022 (report nvr_3_06-Apr-2022), Natural Values Atlas, Threatened Species Section, Department of Natural Resources and Environment, Tasmania.
- DPIPWE (2015). Guidelines for Natural Values Survey – Terrestrial Development Proposals. Version 1.0. 16th April 2015. Policy and Conservation Advice Branch. Department of Primary Industries, Parks, Water and Environment.
- DPIPWE (2015). Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania. (Eds.) Karen Stewart and Michael Askey-Doran. Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania.
- Goff, F.G, Dawson, G.A. and Rochow, J.J. (1982). Site examination for threatened and endangered plant species. *Environmental Management* 6 (4) pp 307-316.
- Kitchener, A. and Harris, S. (2013). From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Edition 2. Department of Primary Industries, Parks, Water and Environment, Tasmania.
- Tasmanian State Government (1995). Threatened Species Protection Act 1995. No.83 of 1995. Government Printer, Hobart, Tasmania
- Tasmanian State Government (1999). Weed Management Act 1999. No.105 of 1999. Government Printer, Hobart, Tasmania.

Appendix A: Vascular Plant Species list

Status codes:

ORIGIN	NATIONAL SCHEDULE	STATE SCHEDULE
i - introduced	EPBC Act 1999	TSP Act 1995
d - declared weed WM Act	CR - critically endangered	e - endangered
en - endemic to Tasmania	EN - endangered	v - vulnerable
t - within Australia, occurs only in Tas.	VU - vulnerable	r - rare

Sites:

1	FAG - E524670, N5271475	7/04/2022	Cameron Geeves
2	DVG - E525120, N5270756	7/04/2022	Cameron Geeves
3	DAS - E525295, N5270009	7/04/2022	Cameron Geeves
4	GCL - E524762, N5270341	8/04/2022	Cameron Geeves
5	NBA - E524802, N5270361	8/04/2022	Cameron Geeves

Site	Name	Common name	Status
	DICOTYLEDONAE		
	APIACEAE		
1	<i>Foeniculum vulgare</i>	fennel	d
	ASTERACEAE		
1 2 5	<i>Cirsium arvense var. arvense</i>	Californian thistle	d
1 2 5	<i>Cirsium vulgare</i>	spear thistle	i
3	<i>Dimorphotheca fruticosa</i>	trailing daisy	i
4	<i>Euchiton japonicus</i>	common cottonleaf	
1	<i>Helminthotheca echioides</i>	bristly oxtongue	i
1	<i>Lactuca serriola f. serriola</i>	prickly lettuce	i
2 3	<i>Lagenophora stipitata</i>	blue bottledaisy	
4	<i>Leontodon saxatilis</i>	hairy hawkbit	i
2	<i>Olearia ramulosa</i>	twiggy daisybush	
3	<i>Ozothamnus obcordatus</i>	yellow everlastingbush	
1 2	<i>Senecio quadridentatus</i>	cotton fireweed	

1	<i>Silybum marianum</i>	variegated thistle	i
1	<i>Sonchus asper</i>	prickly sowthistle	i
1	<i>Taraxacum officinale</i>	common dandelion	i
1	<i>Vittadinia cuneata var. cuneata</i>	fuzzy new holland daisy	r
1 4	<i>Vittadinia gracilis</i>	woolly new-holland-daisy	r
BRASSICACEAE			
1	<i>Lepidium campestre</i>	field peppergrass	i
2	<i>Lepidium didymum</i>	lesser swinegrass	i
1	<i>Sisymbrium officinale</i>	hedge-mustard	i
CAMPANULACEAE			
3	<i>Wahlenbergia gracilis</i>	spreading bluebell	
2 4	<i>Wahlenbergia sp.</i>	bluebell	
CARYOPHYLLACEAE			
3	<i>Scleranthus biflorus</i>	twinflower knawel	
2 3	<i>Scleranthus diander</i>	tufted knawel	v
2	<i>Scleranthus fasciculatus</i>	spreading knawel	v
CASUARINACEAE			
2 3 4 5	<i>Allocasuarina littoralis</i>	black sheoak	
5	<i>Allocasuarina monilifera</i>	necklace sheoak	en
CHENOPODIACEAE			
1 3 4	<i>Einadia nutans subsp. nutans</i>	climbing saltbush	
CONVOLVULACEAE			
2 4 5	<i>Dichondra repens</i>	kidneyweed	
DILLENIACEAE			
3	<i>Hibbertia prostrata</i>	prostrate guineaflower	
ERICACEAE			
3 4 5	<i>Acrotriche serrulata</i>	ants delight	
3	<i>Epacris impressa</i>	common heath	
3 4	<i>Leucopogon virgatus var. virgatus</i>	twiggy beardheath	
2 3 4 5	<i>Styphelia humifusa</i>	native cranberry	

FABACEAE			
1 2 3 4 5	<i>Acacia dealbata subsp. dealbata</i>	silver wattle	
3	<i>Acacia genistifolia</i>	spreading wattle	
1 2 3 5	<i>Acacia mearnsii</i>	black wattle	
4	<i>Ulex europaeus</i>	gorse	d
GENTIANACEAE			
1 2 3 4	<i>Centaurium erythraea</i>	common centaury	i
GERANIACEAE			
2	<i>Erodium botrys</i>	long heronsbill	i
HALORAGACEAE			
3	<i>Gonocarpus tetragynus</i>	common raspwort	
HEMEROCALLIDACEAE			
3 4	<i>Dianella revoluta</i>	spreading flaxlily	
LAMIACEAE			
1	<i>Marrubium vulgare</i>	white horehound	d
1	<i>Prunella vulgaris</i>	selfheal	i
MYRTACEAE			
3	<i>Eucalyptus amygdalina</i>	black peppermint	en
3	<i>Eucalyptus pulchella</i>	white peppermint	en
1 2 3 4	<i>Eucalyptus viminalis subsp. viminalis</i>	white gum	
OXALIDACEAE			
1	<i>Oxalis pes-caprae</i>	soursob	i
4	<i>Oxalis sp.</i>	woodsorrel	
PITTOSPORACEAE			
1 2 3 5	<i>Bursaria spinosa subsp. spinosa</i>	prickly box	
PLANTAGINACEAE			
1 3 4	<i>Plantago coronopus</i>	buckshorn plantain	i
4	<i>Plantago varia</i>	variable plantain	
POLYGONACEAE			
1 4 5	<i>Acetosella vulgaris</i>	sheep sorrel	i
4	<i>Rumex sp.</i>	dock	

PRIMULACEAE			
1	<i>Lysimachia arvensis</i>	scarlet pimpernel	i
RESEDACEAE			
1	<i>Reseda luteola</i>	weld	i
ROSACEAE			
1 2 4	<i>Acaena novae-zelandiae</i>	common buzzy	
1	<i>Rosa rubiginosa</i>	sweet briar	i
RUBIACEAE			
2	<i>Asperula conferta</i>	common woodruff	
2	<i>Asperula scoparia subsp. scoparia</i>	prickly woodruff	r
RUTACEAE			
3	<i>Boronia anemonifolia subsp. variabilis</i>	stinky boronia	
SANTALACEAE			
2 3	<i>Exocarpos cupressiformis</i>	common native-cherry	
SAPINDACEAE			
1 2 3 5	<i>Dodonaea viscosa subsp. spatulata</i>	broadleaf hopbush	
SOLANACEAE			
1 2 4 5	<i>Lycium ferocissimum</i>	african boxthorn	d
THYMELAEACEAE			
2 3 5	<i>Pimelea humilis</i>	dwarf riceflower	
VIOLACEAE			
2	<i>Viola hederacea</i>	ivy leaf violet	
MONOCOTYLEDONAE			
ASPARAGACEAE			
1 3 4 5	<i>Lomandra longifolia</i>	sagg	
CYPERACEAE			
1	<i>Ficinia nodosa</i>	knobby clubsedge	
3	<i>Lepidosperma filiforme</i>	common rapiersedge	
JUNCACEAE			
1	<i>Juncus sarophorus</i>	broom rush	
1 4	<i>Juncus subsecundus</i>	finger rush	

ORCHIDACEAE

3 *Eriochilus cucullatus* autumn orchid

POACEAE

1 3 4 *Aira caryophyllea* silvery hairgrass i

1 2 4 5 *Anthoxanthum odoratum* sweet vernalgrass i

1 2 3 4 5 *Austrostipa rudis subsp. australis* southern speargrass

3 4 5 *Austrostipa stiposa* corkscrew speargrass

1 2 3 4 5 *Cynosurus echinatus* rough dogstail i

1 2 3 4 *Dactylis glomerata* cocksfoot i

3 *Deyeuxia quadriseta* reed bentgrass

4 *Deyeuxia sp.* bent grass

3 *Distichlis distichophylla* australian saltgrass

1 *Festuca arundinacea* tall fescue i

1 *Holcus lanatus* yorkshire fog i

4 *Hordeum sp.* barley, barley grass i

2 3 4 *Microlaena stipoides* weeping grass

1 2 *Phalaris aquatica* toowoomba canarygrass i

1 4 5 *Phalaris sp.* canarygrass i

1 2 3 5 *Poa labillardierei* silver tussockgrass

1 2 3 5 *Poa rodwayi* velvet tussockgrass

1 3 4 5 *Rytidosperma caespitosum* common wallabygrass

1 2 3 4 5 *Themeda triandra* kangaroo grass

PTERIDOPHYTA**DENNSTAEDTIACEAE**

1 2 3 *Pteridium esculentum subsp. esculentum* bracken

Appendix B: Threatened Flora within 500 m and 5 km⁷

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
<i>Asperula minima</i> mossy woodruff		Rare	0	1	Occurs in a range of vegetation types, the common factor being locally impeded drainage. Habitats include near-coastal swamp forests, Melaleuca ericifolia swamp forest, Eucalyptus ovata sedgy forest, "old pasture" regenerating to sedges and rushes, and firebreaks adjacent to clear-felled forest.	LOW	Very little suitable habitat for this species, unlikely to have been overlooked during survey.
<i>Asperula scoparia</i> subsp. <i>scoparia</i> prickly woodruff	-	Rare	1	4	Mainly found in native grasslands and grassy forests, often on fertile substrates such as dolerite-derived soils. Forested sites are usually dominated by Eucalyptus globulus and E. viminalis (lower elevations) and E. delegatensis (higher elevations).	PRESENT	One plant found on the margin of DVG/FAG on lot 8.
<i>Austrostipa bigeniculata</i> doublejointed speargrass		Rare	0	106	Open woodland and grasslands with fertile soils.	LOW	<i>Austrostipa stupeosa</i> and <i>A. rudis</i> common in areas of the site. Nearby records of this species occur on less disturbed sites.
<i>Austrostipa blackii</i> crested speargrass		Rare	2	5	Margins of saline lagoons, creek outfalls, and vegetated dunes. Can also occur in grassy woodlands	VERY LOW	Very little suitable habitat for this species, unlikely to have been overlooked during survey.

⁷ Natural Values Atlas Report, (report nvr_3_06-Apr-2022)

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
<i>Bolboschoenus caldwellii</i> sea clubsedge		Rare	0	22	Widespread in shallow, standing, sometimes brackish water, rooted in heavy black mud.	NONE	No suitable habitat for this species
<i>Brachyscome rigidula</i> cutleaf daisy		Vulnerable	0	5	Found in the Midlands, East Coast and in parts of the eastern Central Highlands of Tasmania, where it occurs in rough pasture, grassland and grassy woodland on dry rocky hills and flats.	LOW	Very little suitable habitat for this species, unlikely to have been overlooked during survey
<i>Calocephalus citreus</i> lemon beautyheads		Rare	0	143	Inhabits disturbed dry grasslands and is found from a few locations in the south-east of the State.	LOW	Although small, this species was likely in flower at time of survey and unlikely to have been overlooked
<i>Calocephalus lacteus</i> milky beautyheads		Rare	0	7	Occurs in open, dry sites in lowland areas of eastern and northern Tasmania and on lower altitudes of the Central Plateau. It requires bare ground for recruitment and may benefit from disturbance. It is often found on roadsides and beside tracks.	LOW	A dense herb unlikely to have been overlooked given the size of the areas surveyed
<i>Carex gunniana</i> mountain sedge		Rare	0	2	Wet eucalypt forest, sandy heathlands, margins of streams, littoral sands, shingle with seepage, damp grasslands within dry forest and rough pasture.	LOW	Some suitable habitat for this species, unlikely to have been overlooked during survey
<i>Colobanthus curtisiae</i> grassland cupflower	Vulnerable	Rare	0	1	Known to occur in lowland grasslands and grassy woodlands but is also prevalent on rocky outcrops and margins of forest on dolerite on the Central Highlands (including disturbed sites such as log landings and snig tracks).	LOW	Very little suitable habitat for this species, unlikely to have been overlooked during survey. One historic record from the NVA within 5 km was made in 1877.

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
<i>Coronidium gunnianum</i> swamp everlasting		Endangered (pending)	0	2	Occurs primarily in the Northern Midlands bioregion. It generally occurs in grasslands on heavy soils, riverine woodlands and on the margins of wetlands, in sites that are often inundated. It mostly occurs at elevations below 100 m ASL but had been recorded at around 600 m ASL at Lake Leake.	LOW	Conspicuous and unlikely to have been overlooked. One historic record from the NVA within 5 km was made in 1900.
<i>Cryptandra amara</i> <i>pretty pearlflower</i>		Endangered	0	12	Grows in some of the driest areas of the State and is typically associated with fertile rocky substrates (e.g., basalt). Its habitat ranges from near-riparian rockplates to grasslands or grassy woodlands.	VERY LOW	The survey was conducted within the flowering time for this conspicuous species, given this, it is unlikely to have been overlooked
<i>Desmodium varians</i> slender ticktrefoil		Endangered	0	4	Occurs locally in the east of the State, growing in native grassland, or open grassy shrubland or woodland, with <i>Themeda triandra</i> (kangaroo grass) and <i>Poa labillardierei</i> (silver tussockgrass) being the most prominent grasses.	LOW	The survey was conducted within the flowering time for this conspicuous species, given this, it is unlikely to have been overlooked.
<i>Dianella amoena</i> grassland flaxlily	Rare	Endangered	0	622	Mainly in the northern and southern Midlands, where it grows in native grasslands and grassy woodlands. Most frequent on basalt substrates in <i>Themeda triandra</i> grasslands.	LOW	Many records of this species within the broader area. Given the level of disturbance and high competition from exotic species likelihood of this species occurring on the site is low.
<i>Eryngium ovinum</i> blue devil		Vulnerable	0	36	Occurs in a range of lowland vegetation types most often on fertile heavy clay soils derived from dolerite. Vegetation types include open grasslands usually dominated by <i>Themeda triandra</i>	VERY LOW	Conspicuous and unlikely to have been overlooked given the size of the areas surveyed.

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
					(kangaroo grass), grassy forests and woodlands on slopes, ridges and broad flats, and roadside verges (representing remnant populations),		
<i>Glycine latrobeana</i> small-leaf glycine	Vulnerable	Vulnerable	0	16	Various soil types and vegetation, mainly occurs in grassy/heathy forests and native grasslands.	LOW	The vast majority of NVA records are from GTL grasslands near Pontville ~ 3 km from the study area. Conspicuous and unlikely to have been overlooked given the size of the survey area
<i>Gratiola pubescens</i> hairy brooklime		Rare	0	1	Permanently or seasonally damp, swampy ground, including the margins of farm dams.	LOW	There are a number of small dams that occur within the study area, however the margins of these dams have been significantly disturbed by cattle from the site. Plants are susceptible to trampling and grazing and therefore are unlikely to occur given both the little suitable habitat and history of grazing on the site.
<i>Haloragis aspera</i> rough raspwort		Rare	0	1	Presumed to occur in wet areas in the eastern part of the State.	VERY LOW	One historic record pre-1950's from the area. Much of the site is dry leaving little suitable habitat.
<i>Haloragis heterophylla</i> variable raspwort		Rare	0	34	Poorly drained sites (sometimes only marginally so), which are often associated with grasslands and grassy woodlands with a high component of <i>Themeda triandra</i> . Also occurs in grassy/sedgy <i>Eucalyptus ovata</i> forest and woodland, shrubby creek lines, and broad sedgy/grassy flats, wet pasture, and margins of farm dams.	LOW	There are scattered records of this species from the area, the nearest is a record from approx. 4 km to the east from 2013. It is possible this species could occur in damp areas on the site. The chances of this species occurring are low.
Hibbertia basaltica	Endangered	Endangered	0	186	Restricted to areas of basalt between Pontville and Bridgewater in southern Tasmania where it occurs on slopes	VERY LOW	Many nearby records along the Midlands Highway and Tea Tree Road. The study area

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
basalt guineaflower					along the lower reaches of the Jordan River and one of its tributaries, in native grassland dominated by <i>Themeda triandra</i> (kangaroo grass) and <i>Austrostipa</i> (spear grass) species with the occasional <i>Bursaria spinosa</i> (prickly box). Rock cover is high, while soils are shallow clay loams. Slopes vary from 0-15 degrees, and altitude 15-45 m above sea level. Note that a very similar taxon, possibly undescribed or within the concept of <i>H. basaltica</i> , occurs in similar habitat but on Jurassic dolerite in the same part of the State, currently all such sites shown on databases as <i>H. basaltica</i> .		consists of either Sandstone or Dolerite derived soils. No suitable habitat for this species.
<i>Isoetopsis graminifolia</i> grass cushion		Vulnerable	3	133	<i>Isoetopsis graminifolia</i> occurs in native grasslands, usually dominated by <i>Themeda triandra</i> , or on rockplates, the underlying substrate being mostly basalt or dolerite. The elevation range of recorded sites is 20-360 m above sea level in areas of low rainfall.	MODERATE	There are numerous records of <i>Isoetopsis</i> from the NVA within the broader area with one record occurring within study area, within 23 m of the lot 2 building area (100 m accuracy), two further records occur on the lot 2 and lot 5 southern boundary. Given the level of disturbance and high competition from exotic species likelihood of this species occurring on the site is moderate.
<i>Lepidium hyssopifolium</i> soft peppergrass	Endangered	Endangered	0	2	Primarily under large exotic trees on roadsides and home yards on farms in eastern Tasmania between sea-level to 500 metres above sea level in dry, warm, and fertile areas on flat ground on weakly acid to alkaline soils derived from a range of rock types. Also occurs	LOW	Occurs on dry fertile soils of shady sites. Little chance of occurring.

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
					on frequently slashed grassy/weedy roadside verges where shade trees are absent.		
<i>Pellaea calidrupium</i> hotrock fern		Rare	0	11	Found in inland, rocky habitats in areas of low to moderate rainfall predominantly in the eastern half of Tasmania. It grows in crevices and on ledges on exposed or semi-exposed rock outcrops.	LOW	No rocky outcrops within the areas surveyed. Some rocky ground occurs on lots 1, 2, 5 and 6, although these areas are subject to trampling and grazing pressure. Given this there is a low chance of this species occurring.
<i>Pterostylis wapstrarum</i> fleshy greenhood	Critically endangered	Endangered	0	7	Restricted to the Midlands and south-east of Tasmania where it occurs in native grassland and possibly grassy woodland. It has been reported from basalt soils.	VERY LOW	Given the substrate type, level of disturbance and high competition from exotic species likelihood of this species occurring on the site is very low.
<i>Pterostylis ziegeleri</i> grassland greenhood	Vulnerable	Vulnerable	0	38	East and north of Tasmania. In coastal areas, the species occurs on the slopes of low stabilised sand dunes and in grassy dune swales, while in the Midlands it grows in native grassland or grassy woodland on well-drained clay.	LOW	Given the level of disturbance and high competition from exotic species likelihood of this species occurring on the site is low.
<i>Pultenaea prostrata</i> silky bushpea		Vulnerable	0	43	Grassy woodlands or grasslands, mostly on Tertiary basalt or Quaternary alluvium.	LOW	Several records north west of the survey area near Pontville. Not observed during the survey.
<i>Rumex bidens</i> mud dock		Vulnerable	0	1	Grows at the margins of lakes, swamps, and slow-moving rivers and streams, and may also occur in drainage channels.	VERY LOW	The little suitable habitat for this species within the study area includes a number of small farm dams, some of which were dry at the time of the survey. These dams are used by cattle and their margins are trampled. There are nearby, historic records species from the Pontville area, which is its southern most record in the state. Distinctive

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
							species, not recorded during the survey and unlikely to have been overlooked.
<i>Schoenoplectus tabernaemontani</i> river clubsedge		Rare	0	1	Inhabits the margins of lagoons on King Island, Flinders Island and on some riverbanks in the Midlands	VERY LOW	No suitable habitat within the survey area.
<i>Scleranthus diander</i> tufted knawel		Vulnerable	0	5	Grassy woodland and is associated with dolerite and basalt substrates.	PRESENT	Several observations for this species were made on both lots 4 and 7. There is a reasonable chance this species is more widespread in the area.
<i>Scleranthus fasciculatus</i> spreading knawel		Vulnerable	0	4	<i>Poa</i> grassland/grassy woodland. It appears to need gaps between the tussock spaces for its survival and both fire and stock grazing maintain the openness it requires. Often found in areas protected from grazing such as fallen trees and branches.	PRESENT	Patch of 20 plants on lot 1.
<i>Senecio squarrosus</i> leafy fireweed		Rare	0	2	Dry grassy forests but can extend into wet forests and other vegetation types.	VERY LOW	Given the level of disturbance and high competition from exotic species likelihood of this species occurring on the site is low.
<i>Siloxerus multiflorus</i> small wrinklewort		Rare	0	2	Occurs in a range of somewhat exposed lowland habitats, including bare soil and rocks amongst dense windswept coastal shrubbery to rock outcrops and bare ground associated with native grassland, grassy woodland and forest.	LOW	Two records 4 km northeast of the study area from grassland. An annual herb not identifiable at the time of survey. Regardless, there is limited habitat for this species and thus a low chance of this species occurring.
<i>Stackhousia subterranean</i>		Endangered	0	6	Native grasslands and grassy woodlands/forests, often associated with fertile soils derived from basalt.	LOW	Known from a single site in the northern midlands, Low likelihood given the substate

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
grassland candle					<i>Themeda triandra</i> is often one of the more prominent grasses.		type and high level of disturbance within the majority of the survey area.
<i>Stuckenia pectinata</i> fennel pondweed		Rare	0	1	Found in fresh to brackish/saline waters in rivers, estuaries, and inland lakes. It forms dense stands or mats, particularly in slow-flowing or static water. The species grows in water of various depth.	VERY LOW	No suitable habitat within the survey area.
<i>Teucrium corymbosum</i> forest germander		Rare	0	2	Occurs in a wide range of habitats from rocky steep slopes in dry sclerophyll forest and Allocasuarina (sheoak) woodland, riparian flats and forest.	LOW	This distinctive, erect perennial herb was not recorded during the survey and is unlikely to have been overlooked.
<i>Triptilodiscus pygmaeus</i> dwarf sunray		Vulnerable	0	49	Grows within grasslands, grassy woodlands or rockplates, with the underlying substrate being mostly Tertiary basalt or Jurassic dolerite. The elevation range of recorded sites in Tasmania is 30-470 m above sea level, with an annual rainfall of about 450-600 mm. The species occurs within native grassland dominated by Themeda triandra (kangaroo grass).	VERY LOW	Rockplate species. No suitable habitat within the survey area.
<i>Vallisneria australis</i> river ribbons		Rare	0	3	Grows rooted and submerged in flowing freshwater habitats such as major rivers of the Midlands.	NONE	No suitable habitat within the survey area.
<i>Velleia paradoxa</i> spur velleia		Vulnerable	0	6	Grassy woodlands or grasslands on dry sites. It has been recorded up to 550 m above sea level at sites with an annual rainfall range of 450-750 mm.	LOW	Occurs in dry grasslands with stony sites. Given its size and the persistence of seed heads the species would be easily identified at the time of survey. Species not observed. Old records from north of the site.

Species	National Status EPBCA	State Status TSPA	Records within 500 m	Records within 5 km	Habitat	Likelihood of Occurrence/Impact	Commentary
<i>Vittadinia burbidgeae</i> smooth new-holland daisy		Rare		2	Native grassland and grassy woodland.	MODERATE	Areas of suitable habitat dominated by exotic species. Unlikely to have been overlooked during the survey.
<i>Vittadinia cuneata</i> var. <i>cuneata</i> fuzzy new-holland daisy		Rare		2	Native grassland and grassy woodland on fertile soils, typically overlying basalt.	PRESENT	Large areas of suitable habitat throughout the study area. Species present on lot 11. Likely to be more widespread within the study area.
<i>Vittadinia gracilis</i> woolly new-holland daisy		Rare		80	Dry grassy habitats, often in relatively degraded grasslands and grassy woodlands. It has been found to occur in low- rainfall areas, on a range of substrates.	PRESENT	Large areas of suitable habitat throughout the study area. Species present on lots 11, 8 and 9. Likely to be more widespread within the study area.
<i>Vittadinia muelleri</i> narrow leaf new holland daisy		Pending delisting	174	1	Occurs in dry native grasslands and grassy woodlands particularly in open areas with lighter grass cover and patches of bare ground such as rock plates. It freely colonises disturbed sites such as roadside cuttings. It is widely dispersed through the Midlands and Southeast.	MODERATE	Large areas of suitable habitat throughout the study area dominated by exotic species. Moderate chance of the species being present within the study area.

Appendix C: Threatened Fauna within 500 m and 5000 m⁸

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
MAMMALS				
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i> Spotted-tailed quoll	Rare / VULNERABLE	0 / 3	Denning: NONE Foraging: LOW	<p>This naturally rare forest-dweller most commonly inhabits wet forest but also occurs in dry forest. It forages and hunts on farmland and pasture, travelling up to 20 km at night, and shelters in logs, rocks, or thick vegetation.</p> <p>There is no denning potential for this species within the survey area, however it may forage at times. The survey area is within the potential range for this species. There are no anticipated impacts to this species.</p>
<i>Dasyurus viverrinus</i> Eastern quoll	- / ENDANGERED	0 / 1	Denning: LOW Foraging: LOW	<p>Occurs in most parts of Tasmania but is recorded infrequently in the wetter western third of the state. This species' distribution is associated with areas of low rainfall and cold winter minimum temperatures. It is found in a range of vegetation types including open grassland (including farmland) where protective cover is available nearby, tussock grassland, grassy woodland, dry eucalypt forest, coastal scrub, and alpine heathland, but is typically absent from large tracts of wet eucalypt forest and rainforest.</p> <p>The habitat is lacking cover for protection of this species from predators and is lacking den opportunities. The survey area is within core range for this species. This proposal is unlikely to impact the persistence of this species in the greater area.</p>
<i>Perameles gunnii</i> Eastern barred bandicoot	- / VULNERABLE	1 / 20	MODERATE	<p>Inhabits grassy woodlands, native grasslands, and mosaics of pasture and shrubby ground cover favouring open grassy areas for foraging with thick vegetation cover for shelter and nesting. It has a widely dispersed range with concentrations in SE, NE and NW Tasmania and some areas of the State from where it is absent or in very low densities. It extends into the urban fringe</p>

⁸ Natural Values Report (nvr_3_06_Apr_2022)

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				<p>where it can survive in large gardens and bushland reserves. It favours a mosaic of open grassy areas for foraging and thick vegetation cover for shelter and nesting.</p> <p>Native vegetation within the survey is suitable for this species to breed and forage. The survey area is within core range for this species. There is one previous record known from this site, however it was recorded in 1977. Works of this scale and nature are unlikely to impact the potential for this species to persist in the area.</p>
<p><i>Sarcophilus harrisi</i></p> <p>Tasmanian devil</p>	Endangered / ENDANGERED	0 / 15	<p>Denning: VERY LOW</p> <p>Foraging: VERY LOW</p>	<p>This species occupies a wide range of habitats across Tasmania and exploits landscapes with a mosaic of pasture and forest with elevated prey densities and is attracted to roadkill hotspots with concentrated scavenging resource. Populations have declined substantially since the first observations of the infectious cancer Devil Facial Tumour Disease (DFTD). DFTD has now spread across much of Tasmania. The reduced population is also likely to be more sensitive to additional threats such as death by roadkill, competition with cats and foxes, and loss or disturbance of areas surrounding traditional dens where young are raised. The protection of breeding opportunities is particularly important for the species due to the mortalities from demographic pressures.</p> <p>The survey area is within the potential range for this species. This species may occur in the survey area to forage at times. This proposal is unlikely to impact the persistence of this species in the greater area.</p>
BIRDS				
<p><i>Accipiter novaehollandiae</i></p> <p>Grey goshawk</p>	Endangered / -	0 / 1	<p>Nesting: NONE</p> <p>Foraging: LOW</p>	<p>Inhabits large tracts of wet forest and swamp forest, particularly patches with closed canopies above an open understorey, but with dense stands of prey habitat nearby. Mature trees provide the best nesting sites. Most nests have been recorded from blackwoods and occasional myrtle beech.</p> <p>There is no habitat suitable for the nesting of grey goshawks on the site, and the survey area is within the potential range for this species. It is possible that</p>

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				goshawks may forage in the area, however no impacts to this species are anticipated.
<i>Aquila audax subsp. fleayi</i> Tasmanian wedge-tailed eagle	Endangered / ENDANGERED	0 / 34	Nesting: NONE Foraging: LOW	This species nests in a range of old growth native forests and is dependent on forest for nesting. Territories can contain up to five alternate nests usually close to each other but may be up to 1 km apart where habitat is locally restricted. This eagle preys and scavenges on a wide variety of fauna including fish, reptiles, birds, and mammals. The survey area is within the potential range for this species. One nest has been recorded 2.8 km east of the site. May utilise the area for foraging on occasion. Given this, no impacts to this species are anticipated, as this proposal is unlikely to impact the persistence of this species in the greater area.
<i>Haliaeetus leucogaster</i> White-bellied sea-eagle	Vulnerable / -	0 / 5	Nesting: NONE Foraging: LOW	In Tasmania, this species is restricted to nesting within 5 km of coastlines, major estuaries, and inland lakes. They typically build nests in large eucalypt trees, much like the Tasmanian wedge-tailed eagle (<i>Aquila audax fleayi</i>), although their specific nesting requirements aren't as strict, such that they often nest in relatively small and exposed coastal trees (including [in a minority of cases] non-native species [e.g. <i>Pinus radiata</i>]), and are also known to nest occasionally on sea cliffs or even piles of rocks at ground level on islands lacking ground predators (e.g. Ninth Island). May utilise the area for foraging on occasion. The survey area is within the potential range for this species. Given this, no impacts to this species are anticipated.
<i>Lathamus discolor</i> Swift parrot	Endangered/ CRITICALLY ENDANGERED	0 / 7	Nesting: NONE Foraging: NONE	The Swift Parrot spends its winter in south-eastern mainland Australian before migrating to Tasmania in late winter/early spring to breed. During the breeding season, nectar from Tasmanian blue gum (<i>Eucalyptus globulus</i>) and black gum (<i>Eucalyptus ovata</i>) flowers is the primary food source for the species. These eucalypts are patchily distributed, and their flowering patterns are erratic and unpredictable, often leading to only a small proportion of Swift

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				<p>Parrot habitat being available for breeding in any one year. Swift Parrots breed in tree hollows in mature eucalypts within foraging range of a flower source.</p> <p>The survey area is within core range for this species, however no suitable foraging or breeding habitat occurs within the survey area. Therefore, there are no anticipated impacts to this species.</p>
<p><i>Tyto novaehollandiae</i> subsp. <i>castanops</i></p> <p>Tasmanian masked owl</p>	Endangered / VULNERABLE	0 / 3	<p>Nesting: LOW</p> <p>Foraging: LOW</p>	<p>Found in a range of habitats which contain some mature hollow-bearing forest, usually below 600 m altitude. This includes native forests and woodlands as well as agricultural areas with a mosaic of native vegetation and pasture. Significant habitat is limited to large eucalypts within dry eucalypt forest in the core range.</p> <p>The project area is within core range for this species. The survey area contains does not contain any trees suitable for nesting. This proposal is unlikely to impact the persistence of this species in the greater area, as such no impacts to this species are anticipated.</p>
<p><i>Pardalotus quadragintus</i></p> <p>Forty-spotted pardalote</p>	Endangered/ ENDANGERED	0 / 0	<p>Nesting: VERY LOW</p> <p>Foraging: VERY LOW</p>	<p>Endemic to Tasmania and occurs in only a few small areas within the State. It is relatively restricted to dry grassy forest and woodland along the east coast containing mature white gum (<i>Eucalyptus viminalis</i>).</p> <p>The project area is within the potential range for this species, however, the nearest known colony is 23 km south in Tarooma. The study site contains some suitable foraging habitat. However, no records exist of this species occurring within 5 km of the survey site. Therefore, no impacts to this species are anticipated.</p>
<p><i>Ceyx azureus</i> subsp. <i>diemenensis</i></p> <p>Tasmanian Azure kingfisher</p>	Endangered/ ENDANGERED	0 / 1	<p>Nesting: NONE</p> <p>Foraging: NONE</p>	<p>This species is found along rivers in the south, west, north and northwest of Tasmania with outlying occurrences in the northeast, east, centre and Bass Strait islands. This species occurs in the forested margins of major river systems where it perches on branches overhanging rivers waiting for prey items such as small fish, insects and freshwater crayfish to come down the river. This species nests in holes along the top of riverbanks and is therefore susceptible to clearing and modification of river-side vegetation. There is</p>

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				<p>thought to be fewer than 250 mature individuals left in Tasmania with the overall distribution of Tasmania's azure kingfisher reflecting the higher rainfalls in the west and north-west regions of Tasmania.</p> <p>One record exists of this species occurring within 5 km of the survey site. The study site contains no suitable foraging or nesting habitat. Therefore, no impacts to this species are anticipated.</p>
<p><i>Podiceps cristatus</i></p> <p>Great crested grebe</p>	Vulnerable / -	0 / 2	<p>Nesting: NONE</p> <p>Foraging: NONE</p>	<p>This species inhabits wetlands, deep lakes, rivers and swamps and prefers a combination of open water and dense reedbeds. This species is relatively rare in Tasmania but can have minor irruptions and periods of regular sightings in some areas.</p> <p>Two records exist of this species occurring within 5 km of the survey site. The study site contains no suitable foraging or nesting habitat. Therefore, no impacts to this species are anticipated.</p>
<p><i>Hirundapus caudacutus</i></p> <p>White-throated needletail</p>	- / VULNERABLE	0 / 2	<p>Nesting: NONE</p> <p>Foraging: LOW</p>	<p>This migratory species breeds in central and north-eastern Asia in Siberia, Mongolia, northern-eastern China and northern Japan. It migrates south through eastern China, Korea and Japan spending its non-breeding season in eastern and south-eastern Australia including Tasmania. This species is almost exclusively aerial, occurring over most types of habitat with a preference to wooded areas, open forests, heathland and rainforests.</p> <p>Two records exist of this species occurring within 5 km of the survey site. The study site contains no suitable nesting habitat. This proposal is unlikely to impact the persistence of this species in the greater area.</p>
<p><i>Botaurus poiciloptilus</i></p> <p>Australasian bittern</p>	- / ENDANGERED	0 / 1	<p>Nesting: NONE</p> <p>Foraging: NONE</p>	<p>A highly cryptic species, utilising wetlands and lakes with a dense cover of vegetation. Whilst once common on Tasmania's north/east coasts, the numbers of Australasian bitterns in the state during the last two decades have declined significantly in both their range and numbers due to habitat loss and extended periods of dryness.</p>

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				One record exists of this species occurring within 5 km of the survey site. The study site contains no suitable foraging or nesting habitat. Therefore, no impacts to this species are anticipated.
REPTILES, AMPHIBIANS AND FISH				
<i>Pseudemoia pagenstecheri</i> Tussock skink	Vulnerable / -	0 / 0	VERY LOW	A ground-dwelling lizard, occurring in grassland and grassy woodland habitats at a range of elevations. Records in Tasmania a few disconnected patches of habitat from Midlands, inland Cradle Coast, and eastern Bass Strait islands. No suitable habitat for this species occurs within the site. The project area is within the potential range for this species. However, no records exist of this species occurring within 5 km of the survey site. Therefore, no impacts to this species are anticipated.
<i>Litoria raniformis</i> Green and gold frog	Vulnerable / VULNERABLE	0 / 0	VERY LOW	In Tasmania, this species is found in lowland areas, primarily coastal. They require permanent or temporary water bodies for survival and tend to inhabit ones containing emergent plants such as <i>Cycnogeton procera</i> or species of <i>Juncus</i> or sedge. They are rarely seen in open water and spend most of their time in vegetation at the water's edges. They depend upon permanent fresh water for breeding, which occurs in Spring and Summer. The project area is within the potential range for this species. However, no records exist of this species occurring within 5 km of the survey site. Given the poor water quality and absence of aquatic vegetation in the small dams in proximity to the site, there is a low likelihood of this species being present.
INVERTEBRATES				
<i>Antipoda chaostola</i> Chaostola skipper	Endangered / ENDANGERED	0 / 0	VERY LOW	This species is restricted to dry forest and woodland supporting sedges of the <i>Gahnia</i> genus and occurs in isolated populations in south-eastern and eastern Tasmania.

Species	Status TSPA / EPBCA	Records within 500 m / 5 km	Potential to Occur	Observations and Preferred Habitat
				The project area is within the potential range for this species. However, no records exist of this species occurring within 5 km of the survey site and no suitable habitat for this species occurs within the site. Therefore, no impacts to this species are anticipated.
<i>Discocharopa vigena</i> Ammonite Pinwheel Snail	Endangered/ CRITICALLY ENDANGERED	0 / 0	VERY LOW	<p>This snail has been recorded from the following seven locations in the Hobart metropolitan area: Mount Wellington, Mount Nelson, The Domain, Hillgrove, Grasstree Hill, South Hobart and Austins Ferry. Species is thought to be extinct from Mt Nelson. Habitat of the species includes dry and wet eucalypt forests below 400 m in altitude. To date the species has only been found under dolerite rocks.</p> <p>The project area is within 5km of the potential range for this species. However, no records exist of this species occurring within 5 km of the survey site. Therefore, no impacts to this species are anticipated.</p>



ADDENDUM TO NATURAL VALUES ASSESSMENT

JANUARY

BACK TEA TREE ROAD, TEA TREE
PROPOSED 11 LOT SUBDIVISION

CLIENT: Southern Waste Solutions

Report version 1.0

Report Date: January 2025

Field Survey and report: Ben Poortenaar (BSc) and Hein Poortenaar

Project management, mapping and report review: Hein Poortenaar (BE, civil)

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1. TABLE OF CONTENTS

2. BACKGROUND	2
3. METHODS	2
4. FINDINGS.....	2
4.1 Vegetation Communities.....	2
4.2 Flora	6
4.2.1 Plant species of conservation significance	6
4.2.2 Weeds	6
4.3 Threatened Fauna and habitat.....	7
4.4 Freshwater ecosystem values	7
5. SUMMARY OF POTENTIAL IMPACTS.....	8
6. LEGISLATIVE REQUIRMENTS.....	8
6.1.1 Tasmanian Planning Scheme 2021 – Brighton.....	8

ADDENDUM TO NATURAL VALUES ASSESSMENT

BACK TEA TREE ROAD, TEA TREE

PROPOSED 11 LOT SUBDIVISION

2. BACKGROUND

Brighton Council is considering a subdivision proposal for 11 rural lots at Back Tea Tree Road. Council require a setback from the treated effluent irrigation and storage area which requires the building envelopes in lots 9, 10 and 11 to be moved further from the boundary. This requires the natural values assessment for the new building envelopes to be reassessed. The original NVA report was undertaken by North Barker. Poortenaar Consulting was contracted to write the addendum.

Lot 9 building envelope is moving from a knoll 220 further west up the ridge. The area is pasture with little apparent change in grassland community.

Lot 10 building envelope is moving from the foot of the hill up on top of a ridge 220m to the west. The top of the ridge is rocky grasslands but the ridge is narrow and drops off steeply with woodland on the south side. The driveway is steep and crosses a steep cross slope so earthworks are extensive.

Lot 11 building envelope is moving 100m west up the slope. The area is pasture with little apparent change in grassland community.

3. METHODS

All findings made in the North Barker report still stand. The changes simply require a reassessment of the building envelope within the 3 lots.

Thus, in our field assessment (17th of December, 2024) we visited the new locations, made an assessment of the affected vegetation, searched for threatened species (both those previously identified in the report and any additional ones), and assessed habitat suitability for fauna.

A desktop assessment was done before and after surveying. This was mainly assessing how TASVEG communities and TPS code overlays overlapped with the new building envelopes. All other desktop assessments (eg, natural values atlas records) would be unchanged since the original report.

The desktop assessment, field survey method, and report are consistent with the recommendations of *Guidelines for Natural Values Surveys - Terrestrial Development Proposals*.

4. FINDINGS

4.1 VEGETATION COMMUNITIES

Site-wide vegetation communities are unchanged from the original report. Vegetation affected in each lot is summarized:

The community affected by lot 9's building envelope does not change, remaining as Lowland grassland complex (GCL). This is priority vegetation under the Tasmanian Planning Scheme.

Lot 10 moves from Agricultural land (FAG) to an area spanning FAG and GCL. This brings it into a priority vegetation area. The agricultural land it is moving into is listed as FAG with a woodland forest structure, which resembles the *Eucalyptus viminalis* grassy forest and woodland (DVG) described in the main report, although somewhat degraded.

Lot 11 similarly moves from FAG to FAG and GCL, but none of the agricultural land is woodland.



Figure 1. Aerial view of lots 10, 11, and 9.



Figure 2. Tasveg 4 (Yellow stripe= lowland grassland complex, Green= E.Viminalis)



Figure 3. Looking uphill to lot 9's building envelope.



Figure 4. Lot 10 building envelope.



Figure 5. Lot 11 building envelope.

4.2 FLORA

4.2.1 Plant species of conservation significance

No plants of conservation significance were observed in the new building envelopes. This is supported by the distributions of threatened species shown in the original report (original report, figure 4).

Some threatened species that would have been affected by the original layout are now preserved: lot 10's building envelope covered a *Vittadinia cuneata* plant, and lot 11 covered a patch of *Vittadinia gracilis*.

4.2.2 Weeds

The changes don't affect findings and recommendations surrounding weed control. Some Californian thistle was the only weed specifically observed within the new building envelopes, and should be treated with the rest of the property.

Without mitigation, the proposal runs the risk of spreading and/or worsening the declared weeds on site. It is recommended that all occurrences of declared weeds are treated prior to works. Best practice construction hygiene⁵ should be practiced to prevent the spread of weed propagules in contaminated soil. This should involve cleaning all machinery before leaving the works area, as well as not bringing dirty machinery into the site. Follow-up weed control will be required 6-12 and 24 months after works to treat any individuals that have colonised the disturbance area.

No plant disease or soil pathogens were observed.

4.3 THREATENED FAUNA AND HABITAT

No signs of fauna nesting/foraging habitat were observed. The new building envelopes are extremely unlikely to impact on nesting habitat for any threatened species, as no significant trees will be cleared.

As detailed in the main report foraging habitat could be minimally affected:

The proposal may impact foraging habitat for threatened fauna that may occur in modified land and the surrounding native vegetation: Tasmanian wedge-tailed eagle, masked owl, eastern barred bandicoot, quolls, Tasmanian devil, and grey goshawk. These are wide-ranging fauna and the development of the proposal is expected to have a low impact on these species. The study area is unlikely to support a population or be important to the survival of a local population for any of these species. Accordingly, no mitigation measures are recommended for these species.

4.4 FRESHWATER ECOSYSTEM VALUES

No freshwater ecosystem values are present within the new building envelopes. The Waterway and Coastal Protection Areas overlay does not occur within the building envelopes.

5. SUMMARY OF POTENTIAL IMPACTS

For threatened flora, fauna and weeds the impacts and associated mitigation measures remain the same.

The affected vegetation communities have changed, and due to their status as priority vegetation a reassessment of whether the development meets C7.7.2 is required.

6. LEGISLATIVE REQUIRMENTS

The following requirements are unaffected by the changes:

- Commonwealth Environment Protection and Biodiversity Conservation Act 1999
- Tasmanian Threatened Species Protection Act 1995
- Tasmanian Nature Conservation Act 2002
- Tasmanian Biosecurity Act 2019
- Tasmanian Planning Scheme 2021 -Brighton
 - Landscape Conservation zone
 - Natural Assets Code: Subdivision within a Waterway and Coastal Protection Area or a Future Coastal Refugia Area (C7.6.1)

However, lots 10 and 11 are now within a priority vegetation area.

6.1.1 Tasmanian Planning Scheme 2021 – Brighton

Natural Assets Code: Subdivision within a Priority Vegetation Area (C7.6.2)

The original report proposed that the development met the performance criteria for this code. Continued compliance is demonstrated below.

COMPLIANCE WITH C7.7.2

E10.2 Application	
ACCEPTABLE SOLUTION	COMPLIANCE
A1	The proposed development does not meet the acceptable solution.
<p>P1.1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within a priority vegetation area must be for:</p> <ul style="list-style-type: none"> (a) subdivision for an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmania Fire Service or an accredited person; (b) subdivision for the construction of a single dwelling or an associated outbuilding; (c) subdivision in the General Residential Zone or Low Density Residential Zone; (d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design; (e) subdivision involving clearance of native vegetation where it is demonstrated that ongoing pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or (f) subdivision involving clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site. 	<p>The original report showed that the proposal met performance criteria P1 (e) and (f).</p> <p>(e) The original reports observation that under the current land usage (sheep grazing) has led to the degradation of native vegetation. In the case of lots 10 and 11 the priority vegetation is the lowland grass complex (GCL), which is directly affected by grazing, and may be outcompeted by less palatable invasive grass species (eg. <i>the Holcus lanutus</i> prevalent on the site).</p> <p>(f) There are 50.5 hectares of GCL present on the property. The proposed changes will impact 0.5 hectares.</p>
<p>P1.2</p> <p>Works association with subdivision within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:</p> <ul style="list-style-type: none"> (a) the design and location of any works, future development likely to be facilitated by the subdivision, and any constraints such as topography or land hazards; (b) any particular requirements for the works and future development likely to be facilitated by the subdivision; (c) the need to minimise impacts resulting from bushfire hazard management measures through siting and fire-resistant design of any future habitable buildings; (d) any mitigation measures implemented to minimise the residual impacts on priority vegetation; 	<p>The development meets all requirements. The only changes from the original report is that siting is now also constrained by the increased setbacks from the boundary due to treated effluent irrigation and storage dams.</p> <ul style="list-style-type: none"> (a) Impacts to priority vegetation have been minimised by siting building areas and their associated hazard management areas to the extent possible given the constraints of topography and the new setbacks from the boundary. (b) So long as impacts to priority vegetation is minimised through siting this criteria can be met. (c) Impacts to priority vegetation have been minimised by siting building areas and their associated hazard management areas outside of the priority vegetation overlay area to the extent possible given the constraints of topography and the new setbacks from

<p>(e) any on-site biodiversity offsets; and (f) any existing cleared areas on the site.</p>	<p>the boundary. The proposal can therefore meet this criterion.</p> <p>(d) Residual impacts to priority vegetation are not anticipated and, in fact, the change in land use may indeed provide scope for recovery of the vegetation on the site.</p> <p>(e) Given the small area of impacted GCL relative to the site, no on-site biodiversity offsets are warranted.</p> <p>(f) The building envelopes remain on cleared land, and the small area which is uncleared in lot 10 is classed as agricultural land not subject to this code.</p>
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BACK TEA TREE ROAD, TEA TREE Landscape and Visual Impact Assessment





**inspiring
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Version 01 - May 2023

Equivalent terms:

visual impact = scenic landscape impact

visual values = scenic landscape values

List of abbreviations used:

DEM – Digital Elevation Model

DSM – Digital Surfaces Model

LCT – Landscape Character Type

TFS – Tasmanian Fire Service

BHMP – Bushfire Hazard Management Plan

Contents

1. Introduction	5
1.1 The need for a visual values impact analysis	5
1.2 Scope and process	5
2. Existing situation	8
2.1 The landscape setting	8
2.2 Visual character	10
3. The proposed subdivision and associated works	13
3.1 Proposal extent and stages	13
3.2 Bushfire hazard management and vegetation	14
4. Understanding the potential visual impact	17
4.1 Factors influencing potential visual impact	17
4.1.1 Scenic overlay criteria	17
4.1.2 Visual impact criteria	18
4.2 Critical influences on the visual impact	20
4.2.1 Distance	20
4.2.2 Observer position and sensitivity	30
4.2.3 Duration of viewing	30
4.2.4 Screening potential	30
5. Evaluation and mitigation of impacts arising from the development	33
5.1 Visual values	33
5.1.1 Impacts	33
5.1.2 Mitigation measures	34
6. Conclusion	36
6.1 Scenic landscape overlay summary	36
6.2 Visual impact conclusion	36



1 / Introduction

1.1 The need for a visual values impact analysis

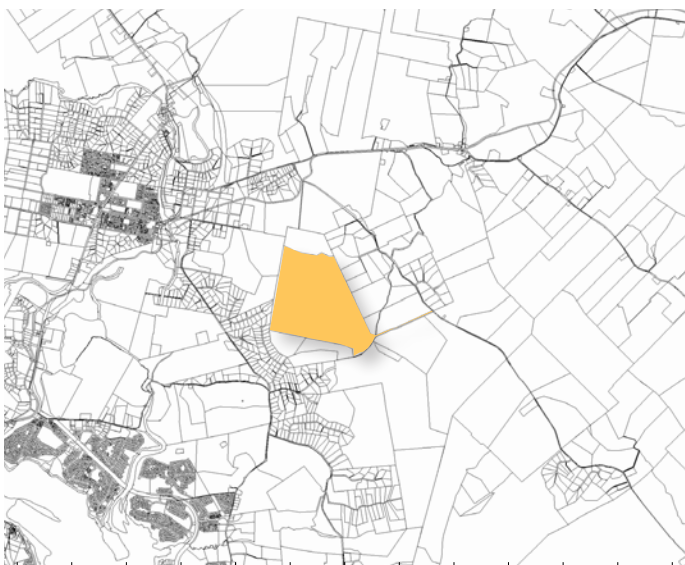
Southern Waste Management proposes to build an 11 lot subdivision within the Landscape Conservation zone in the area of Jews Hill off Back Tea Tree Road, Tea Tree (Map 1).

The Tasmanian Planning Scheme -Brighton requires a visual impact statement because of the zoning and the requirement for each lot to protect and conserve landscape values (Map 2)¹.

The site has three codes apply: C7 Natural Assets Code C7.0, Bushfire-prone Areas Code C13.0, and Landslip Hazard C15.

Inspiring Place have been engaged by D.G. Potter to assess the visual impact of the proposal and how the proposal might comply with the performance criteria in Clause 22.5.1 P1 (a) - (e) as well as consider the Bushfire Hazard Management Plan and Natural Values Assessment prepared by North Barker Ecosystem Services (June 2022).

This report assesses the proposal's impact on its landscape setting and recommends mitigation approaches to ensure landscape values are protected and conserved.



Map 1. Study area with Brighton and Pontville townships to west (Source: The LIST)

1. Tasmanian Planning Scheme - Brighton, Tasmanian Planning Commission, www.iplan.tas.gov.au

2. Landscape character is the overall impression created by the unique combination of visual features in the landscape. Factors that combine to create landscape character include, amongst other things, the configuration of the land, the pattern and colours of the vegetation, soil and rock outcrops and the scale of individual elements.

3. Forestry Commission Tasmania (undated, c1990). "A Manual for Forest Landscape Management." Forestry Commission Tasmania, Hobart

4. For instance, Inspiring Place and Bruce Chetwynd 2011. "Wellington Park Landscape and Visual Character Quality Assessment" unpublished report to the Wellington Park Management Trust.

1.2 Scope and process

This investigation focuses on the proposal to create an eleven lot subdivision at Back Tea Tree Road. (Map 2). The scope of this study is to:

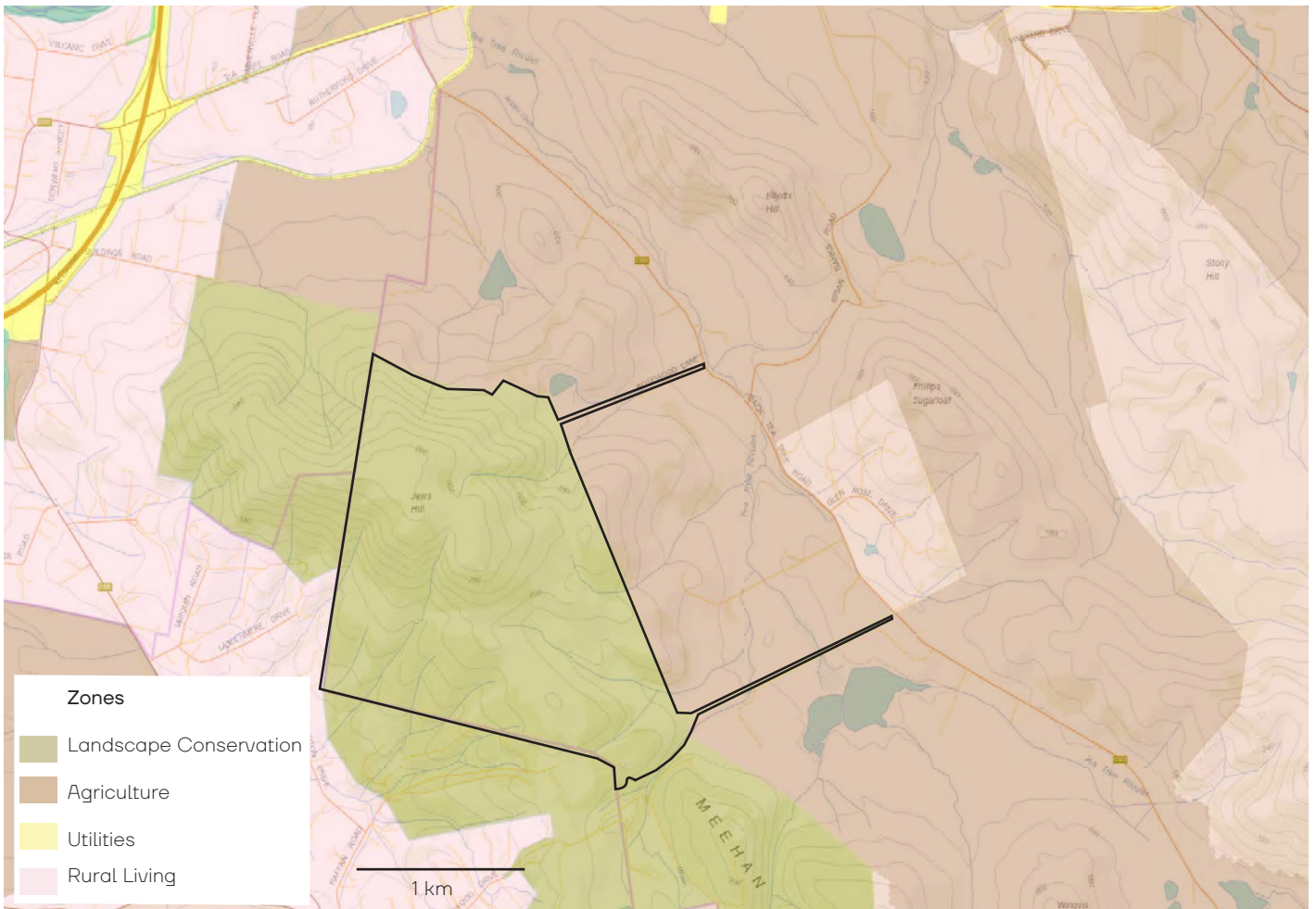
- describe the setting and visual character of the study site;
- assess the sensitivity of the site's landscape character to the impacts of constructing the proposed sub-division²;
- recommend options for mitigating the visual impacts that arise; and
- make comment as to the acceptability of the proposed change.

In Tasmania, the assessment of visual impact is grounded in the work of the Forestry Commission in the 1990s³ and later work by landscape architects in the evaluation of proposed developments in non-forestry settings⁴. The methods used herein follow those precedents to evaluate the visual character and potential visual impacts of the new dwelling and associated works.

Evaluation of the visual impact of the proposed dwelling has included:

- discussions with D.G. Potter about the design and siting of the proposed layout and related infrastructure;
- a desktop review of the proposed sub-division plans and reporting provided by D.G. Potter;
- a review of the Tasmanian Planning Scheme - Brighton Scenic Landscape Overlay;
- a review of reports by others⁵;
- on ground inspection and photography by Inspiring Place and photography; and
- a review of a seen view analysis created by Esk Mapping for the purpose of this investigation.

Note weather patterns can affect visibility but are considered too transient for this assessment.



Map 2. Study area outlined showing both access roads with Tasmanian Planning Scheme - Brighton zones (Source: The List).

2 / Existing situation



2.1 The landscape setting

The property is on the northern hills of the Meehan Range rising from 90m near Back Tea Tree Road to 305 m above sea level on Jews Hill. The land gently rises to moderately sloped and consists of cleared land, native grassland and woodland. The vegetation is a reflection of the relatively low rainfall, with a veral annual precipitation of around 500mm at Campania 10 km north.



Photograph 1. Outlook from Back Tea Tree Road near Glen Rose Drive subdivision and to the immediate east of the study site (Source: Google Maps)

Existing residences along Back Tea Tree Road have intimate views of the valley as well as views to distant hills. Substantial parts of the valley and hills have been cleared, rendering the remaining isolated trees and remnant patches of vegetation important to the visual appeal as well as being natural assets in the landscape (Photograph 1).

The proposed sub-division has a predominantly east aspect with some northern aspects. The north facing, drier slopes are predominantly Lowland grassland complex (GCL) and there is some Lowland *Themeda triandra* grassland (GTL) on more protected aspects on the hill⁶. There is *Eucalyptus viminalis* grassy forest and woodland (DVG) as well as *Eucalyptus amygdalina* forest and woodland on sandstone (DAS) and *Bursaria-Acacia* woodland (NBA).

A large percentage of the property's slopes are classified *Agricultural land* (FAG; Photograph 2) but

significant parts are mapped Priority vegetation area in the planning scheme overlay.

Outside of the property the landscape is a mix of uses with the subdivision of Honeywood (postcode 7017) to the southwest (Photograph 3) and township of Brighton (7030) to the north. There is pivot irrigation and other agricultural land uses, including horse agistment, in the Back Tea Tree Road valley.

The paucity of vegetation on farmland to the north and east mean clear views to and from the site. The slopes and higher points on the Meehan Range have higher landscape values, as evidenced by the Natural Assets Code mapping showing that a significant amount of the site has priority vegetation⁷.

Macro-features, such as the entirety of the ridgeline, the wooded slopes of Jews Hill and the open agricultural valley, influence the visibility of the site and the level of sensitivity to change.

In addition to the macro controls on the setting, the area is influenced by varied ephemeral conditions that add atmosphere to the experience of the landscape including:

- changing lighting through the day and often stunning lighting effects at sunrise or back-lighting at sunset; and
- patterns of cloud and occasional fog.

This report is based on fieldwork and GIS seen views that assume clear conditions.

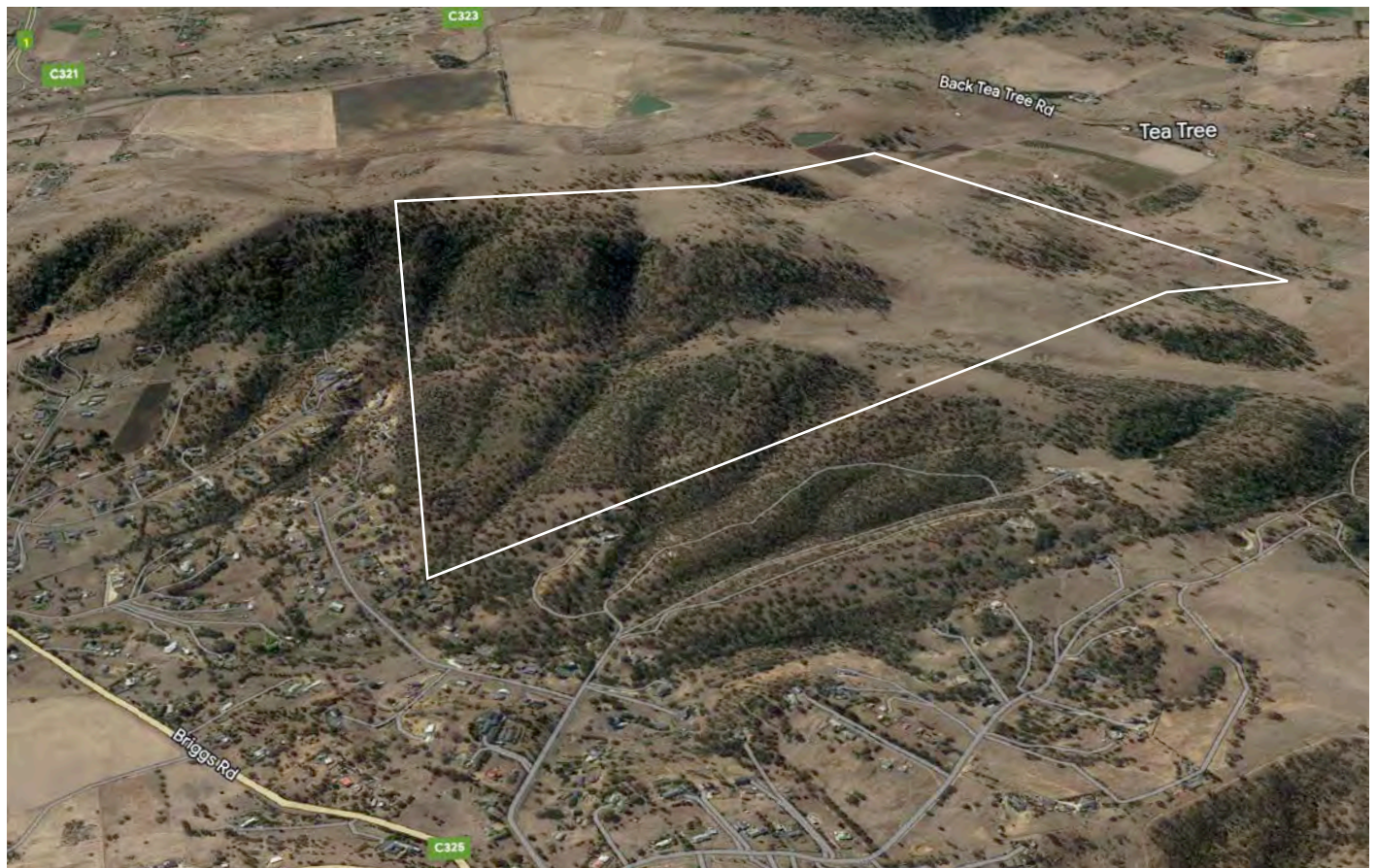
Finally, the micro-scenery of the site strongly influences the scenic quality of the landscape. Isolated mature eucalypts in the cleared valley floor and patches of *Themeda* grassland and pockets of remnant woodland create granularity and interest to the site.

6. The List, 2023. 'TasVeg 4.0'. Accessed on March 28th 2023.

7. Tasmanian Planning Scheme - Brighton, 2023. 'Natural Assets Code'



Photograph 2. Landscape context of site showing the approximate location of the cadastral parcel. Rosewood Lane is shown in orange. Image looking southeast in the direction of Dulcot and Pittwater. (Source: Google Earth)

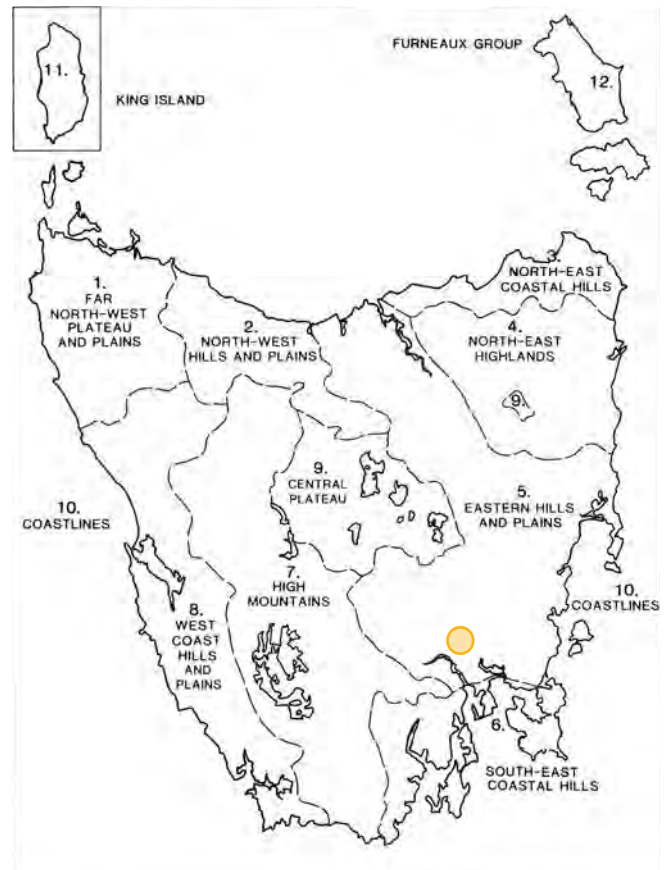


Photograph 3 Landscape context looking northeast from the suburb of Honeywell in the direction of Campania (Source: Google Earth)

2.2 Visual character

Landscape character is created by a combination of visual features in the landscape including the configuration of the land, the pattern and colour of the vegetation, soil and rock and the scale of the individual parts of the landscape. The accepted Statewide analysis of Landscape Character Types (LCT)⁸ places the study area in the South-East Coastal Hills LCT (Map 3) and a ‘frame of reference’ for the LCT establishes guidelines for evaluating scenic quality within such a unit.

In the case of the sub-division at Back Tea Tree Road, scenic quality is rated **moderate** based on its rounded hilltops and ridges, the regular steepness of its slopes, the moderately defined valley, the slight variation in pattern and breadth of vegetation, and the presence of Tea Tree Rivulet (Table 1).



Map 3 Landscape Character Types (LCT) Tasmania (Source: Forestry Commission)

8. Forestry Commission Tasmania c1990 (updated 2006) A manual for forest landscape management, Hobart.

6 South-east Coastal Hills Landscape Character Type

	HIGH SCENIC QUALITY	MODERATE	LOW
LANDFORM	<ul style="list-style-type: none"> • Distinctive isolated hills or small peaks. • Very steep hills and ridges (greater than 50% slope). • Deep lateral valleys on slopes and deeply incised V-shaped valleys with dramatic spatial definition. • Rock outcrops and cliff faces of large to moderate size and strong colour contrast. 	<ul style="list-style-type: none"> • Rounded hills and ridges. • Regular slopes (10% to 50%) • Valleys with moderate spatial definition. • Rock outcrops and cliff faces of small size, regular shape and low colour contrast. 	<ul style="list-style-type: none"> • Extensive flat to undulating areas (less than 10% slope) with little dissection or spatial definition.
VEGETATION	<ul style="list-style-type: none"> • Strongly defined patterns and texture due to different vegetation age classes, fire history and species type. • In forest areas, combinations of openings of different sizes and shapes with irregular edges. • Significant areas of dramatic seasonal colour (e.g. silver wattle). • Stands of unusually tall eucalypts. 	<ul style="list-style-type: none"> • Forest canopy varying slightly in texture and with subdued pattern due to changes in age classes, distribution and species type. • Seasonal colour muted. 	<ul style="list-style-type: none"> • Extensive areas of similar vegetation without discernible pattern.
WATERFORM	<ul style="list-style-type: none"> • Major streams and rivers. All lakes. 	<ul style="list-style-type: none"> • Small streams and lagoons, often with slight flow in summer. 	<ul style="list-style-type: none"> • No waterforms.

Table 1. Landscape Character Type (LCT) – Frame of Reference – Scenic Quality Classification Criteria



3 / The proposed subdivision and associated works

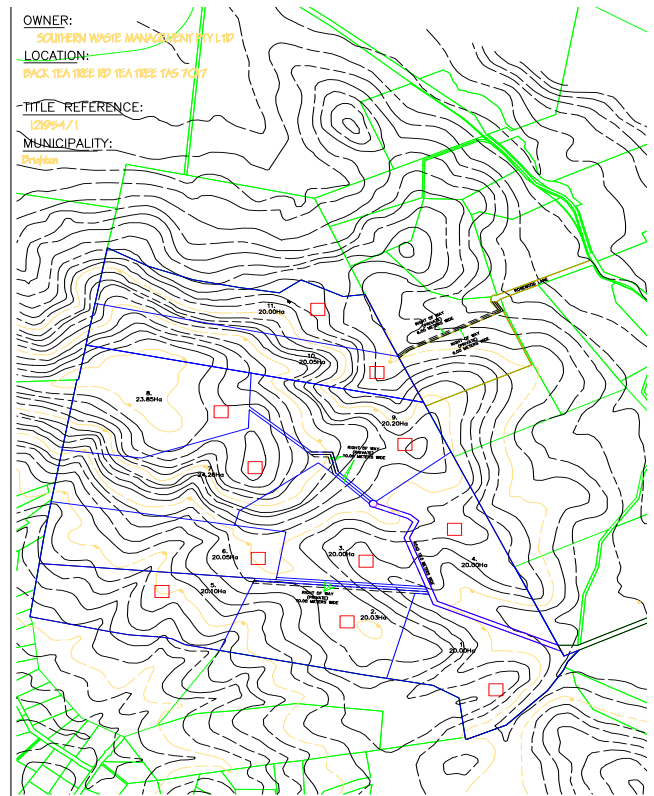
3.1 The proposal extent and stages

The proposed works consist of the following:

- eleven lot low density subdivision (Drawing 1);
- associated access road and staged turning areas (for domestic and firefighting vehicles);
- associated services including sub-surface trenches; and
- BHMA fuel reduction / vegetation thinning.⁸

Access to lots 1-9 is from an unnamed road 900m off Back Tea Tree Road. Access to lots 10 and 11 is from Rosewood Lane, also off Back Tea Tree Road. The access road is to be a dark bitumen surface with concrete drive thresholds to each lot. Services such as telecommunications and power will be supplied underground.

On the sloped portions of the site the typical building will adhere to the 8m maximum height envelope from natural groundline.



Drawing 1: Site plan with contours (Source: DGJ Potter March 27th, 2023)

8. North Barker Ecosystem Services, June 2022. 'Back Tea Tree Road, Tea Tree - Proposed subdivision Bushfire Report and Hazard Management Plan', prepared for Southern Waste Management.

3.2 Bushfire Hazard Management and Vegetation

To meet BHM requirements for the proposed lots for a BAL19 solution, as noted in Bushfire Report and Hazard Management Plan⁹, the Hazard Management Area (HMA) must be maintained in a low fuel state by:

- keeping ground cover vegetation less than 100mm tall; and
- pruning low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers.

It is recommended that the following be applied in the HMA:

- gardens exclude shrubs from within 5 m of the building;
- all aspects to be mineral surface to a minimum of 0.5m from the building;
- no trees or shrubs within 10 m of any building to exceed the height of the gutters unless leaf shedding gauze is fitted;
- minimise the storage of flammable materials such as firewood on site;
- maintain vegetation clearance around driveways and internal roads and water supply points;
- use low-flammability plant species for landscaping purposes where possible; and
- clear out accumulated leaf and other debris from roof gutters and other debris accumulation points.

It is not necessary to remove all vegetation from the nominated Hazard Management Areas (Drawings 2 and 3). Trees and shrubs may provide protection from wind borne embers and radiant heat if the fuel loads noted above are appropriately managed.

Proposed roads are typically required to have 2m


horizontal clearance either side and required to maintain 4m vertical clearance for fire vehicle access. The Bushfire Report report determined that private property access however, due to the provision of targeted fire hydrants, will not require particular vegetation clearance setbacks.⁷

The HMA shows how much vegetation will need to be removed to facilitate the development and the extent to which buildings on lots within the development will be visible from public places; the latter of which is addressed in section 4.2.

Drawing 3 is an indicative zoned tree removal diagram to allow construction of the carrageway clearances, required by the BHMP, and private driveway apron access points provided. Within the lots, each building design will be unique albeit following base design guidelines. It is difficult to predict future building footprints and resultant clearing. Clearing pattern will affect the visibility of building from public places.

This report examines suggested maximum building areas as outlined in the Bushfire Hazard Management areas identified in the North Barker report.

⁹. North Barker Ecosystem Services, June 2022. 'Back Tea Tree Road, Tea Tree - Proposed subdivision Bushfire Report and Hazard Management Plan', prepared for Southern Waste Management.
¹⁰. Ibid.



**4 / Understanding
the potential
visual/ scenic
landscape impact**

4.1 Factors influencing potential visual impact

4.1.1 Landscape Conservation Zone Criteria

The Landscape Conservation Zone provides a clear priority for the protection of landscape values and for compatible use or development, with residential use being permitted only if for a home-based business or a single dwelling¹². All other use is Discretionary with the objective being that the location, scale and extent of a use listed as Discretionary is compatible with landscape values.

The purpose of the Landscape Conservation Zone is:

22.1.1 To provide for the protection, conservation and management of landscape values.

22.1.2 To provide for compatible use or development that does not adversely impact on the protection, conservation and management of the landscape values.

The development standards for subdivision (22.5) have three objectives for lot design under the Tasmanian Planning Scheme - Brighton¹¹:

That each lot:

(a) has an area and dimensions appropriate for use and development in the zone;

(b) contain areas which are suitable for development, located to protect and conserve landscape values; and

(c) is provided with appropriate access to a road.

Some performance criteria will need to be relied on in the planning application assessment. In the case of wastewater management, there is no acceptable solution.

4.1.2 Visual Impact Criteria

Various criteria that influence the potential significance of the visual impact of the development are set out in Table 3.

Shading within the table indicates the assessed significance of the potential visual impacts of the proposed subdivision and associated works at Tea Tree [as opposed to an assessment of each individual element]. The evaluation of potential impacts follows the established methods of evaluation described in Section 1.2.

None of the factors for evaluating impacts addresses the degree to which an alteration might improve an existing impacted circumstance. Rather the evaluation asks whether an impact is acceptable or not. The evaluation of the impact of this subdivision and associated works, therefore, is focused on the degree to which they impact on visual quality, not the degree to which they may or may not improve existing impacts or add to existing amenity.

Some of the assessed impacts in Table 3 are obvious, such as the low potential impact arising from local soil colour. Some, however, require further discussion. Of importance are viewing distance, position and the length of time of viewing and mitigating influences such as screening provided by topography and vegetation.

11. Tasmanian Planning Scheme - Brighton, Tasmanian Planning Commission. www.tas.gov.au
12. Tasmanian Planning Commission. Guideline No. 1 Local Provisions Schedule. Accessed March 28th, 2023.

— Understanding the potential visual impact

CATEGORY	CRITERIA	POTENTIAL SIGNIFICANCE OF IMPACT ¹³		
		HIGH	MEDIUM	LOW
VIEWING SITUATION	number of viewers/ views	high	moderate	low
	sensitivity of viewers	high	moderate	low
	viewing time	long	moderate	short
	viewing distance	near (e.g. foreground) (on arrival)	middleground (from local roads)	far (from highway / public grounds)
	viewing angle to aspect	facing perpendicular to view	oblique (from public vantage points)	angled away from view
	observer position/ target position	proposal seen in a prominent site without a backdrop	proposal seen in a prominent site but set on the hillside within a larger landscape setting of higher ridges behind.	proposal not viewed or seen on the skyline or is subordinate to existing features
EXISTING CHARACTER	degree of existing modification/ dominance of man- made elements verses naturalness and stability	unmodified (e.g. naturally appearing/ wilderness)	predominantly natural but with some existing modification	modified to highly modified (e.g. developed or previously disturbed land)
	features of scenic quality	many	moderate	few
NATURE OF PROPOSED ALTERATION	scale	major	moderate	minor (relative to scale of landscape)
	relation to existing uses and/or pattern	introduces new land-use type that contrast to colour or form/pattern of existing land-uses	introduces new land-use type	consistent with existing land-uses/ existing land-uses continue
	deviation from existing character	introduces contrasting line, form, colour and texture against natural elements	borrow from existing line, form, colour and texture	repeats existing line, form, colour, texture, scale
	scenic interest ¹³	low scenic interest	moderate scenic interest	high scenic interest

Table 3. Factors affecting visual impact (cont. next page)

13. This table was first developed in Inspiring Place 2002a. "Mussetroe Wind Farm and Associated Transmission Line: Visual Values Inventory and Impact Assessment" unpublished report to Hydro Tasmania and has since been applied to studies elsewhere including by Inspiring Place for the windfarm at Heemskirk (Inspiring Place 2002b. "Heemskirk Wind Farm and Associated Transmission Line: Visual Values Inventory and Impact Assessment" unpublished report to Hydro Tasmania and Inspiring Place and Bruce Chetwynd 2011. Most recently it has been used to assess the visual impact of proposed new facilities at Dove Lake (Inspiring Place 2018. "Dove Lake Visitor Facilities: Visual and Wilderness Impact Analyses" unpublished report to TWS.

— Understanding the potential visual impact

CATEGORY	CRITERIA	POTENTIAL SIGNIFICANCE OF IMPACT		
		HIGH	MEDIUM	LOW
ENVIRONMENTAL CONDITIONS¹⁴	soil colour	bright	medium	dark
	soil erosion potential	high	moderate	low
	existing vegetation pattern	uniformly dense or expansively open	open, with some higher clumps set against dense backdrop	varied, partially open
	vegetation screening potential	low vegetation	moderate height	tall vegetation
	topographic screening potential	none	some	high
	slope	steep	moderate	flat
CULTURAL CONDITIONS	interferes with artistic/cultural associations with past landscapes (Aboriginal or European)	substantially modifies the identified cultural or artistic value so as to make it unrecognizable	modifies the identified cultural or artistic value	maintains artistic or cultural links to past landscapes
	interferes with the social or recreational enjoyment (e.g. by overpowering presence or effect)	on-going interference or interference at high use times	noticeable presence	minimal interference or interference at low-use times only
MANAGEMENT CONSIDERATIONS	potential for mitigation of impacts (alternatives)	low	moderate	high
	cost of mitigation measures	high	moderate	low

Table 3. Factors affecting visual impact (cont. from previous page)

14. Scenic interest derives from the symbolism or fascination found in the workings or outward expression of those workings of buildings or infrastructure/industrial elements. Thus, a well-designed building might be more interesting than a pre-fabricated shed, a complex industrial site more interesting than scattered buildings or a large-scale industrial element more fascinating than a common one. The degree to which a development is 'scenically interesting' may mitigate the degree to which it is visually unacceptable

4.2 Critical influences on the visual impact

4.2.1 Distance

‘Seen view analyses’ or ‘view sheds’ are computer generated diagrams highlighting where a location can be seen from in the absence (DEM) or presence (DSM) of vegetation¹⁵. The impact of views varies with distance. In foreground views (up to 1km), colour and detail are readily visible. In middle ground views (1-5km), some detail will still be perceptible, but features are largely viewed in the context of the larger landscape.

Map 2 shows the points on each of the theoretical 8m high buildings within the building envelope of each of the 11 lots. Eight metres represents the maximum height of typical dwellings. Places that can see those points are limited in Back Tea Tree valley by the series of ridges within 10km of the study site. In particular, views are contained by Meehan Range to the southwest and Hammonds Tier to the east.

Although there is substantial clearing in the valley, many residential lots have tall windbreak trees and tall garden vegetation that substantially break up views. Locations such as public roads or residences that have clear views of the development site generally have low vegetation that affords views to the site.

The 11 proposed build locations are highly variable in their position in the landscape and therefore their visibility from outside the site (Map 2). Build locations that are higher in the landscape and close to the ridgeline while also having desirable views are more visible in the landscape. Places that the development will be seen from are also highly variable in terms of whether the view is screened by other houses, gardens, windrows and other tall structures.

The internal road in the subdivision is relatively low in the landscape, is dark in colour, and can only be seen from some locations on Back Tea Tree Road to

the south of the site. Removal of screening vegetation on site will make the road more visible so as with the built locations, vegetation needs to be retained except where required to reduce bushfire hazards and essential operations. This report concentrates on the more visible components of the sub-division – the 11 build locations.

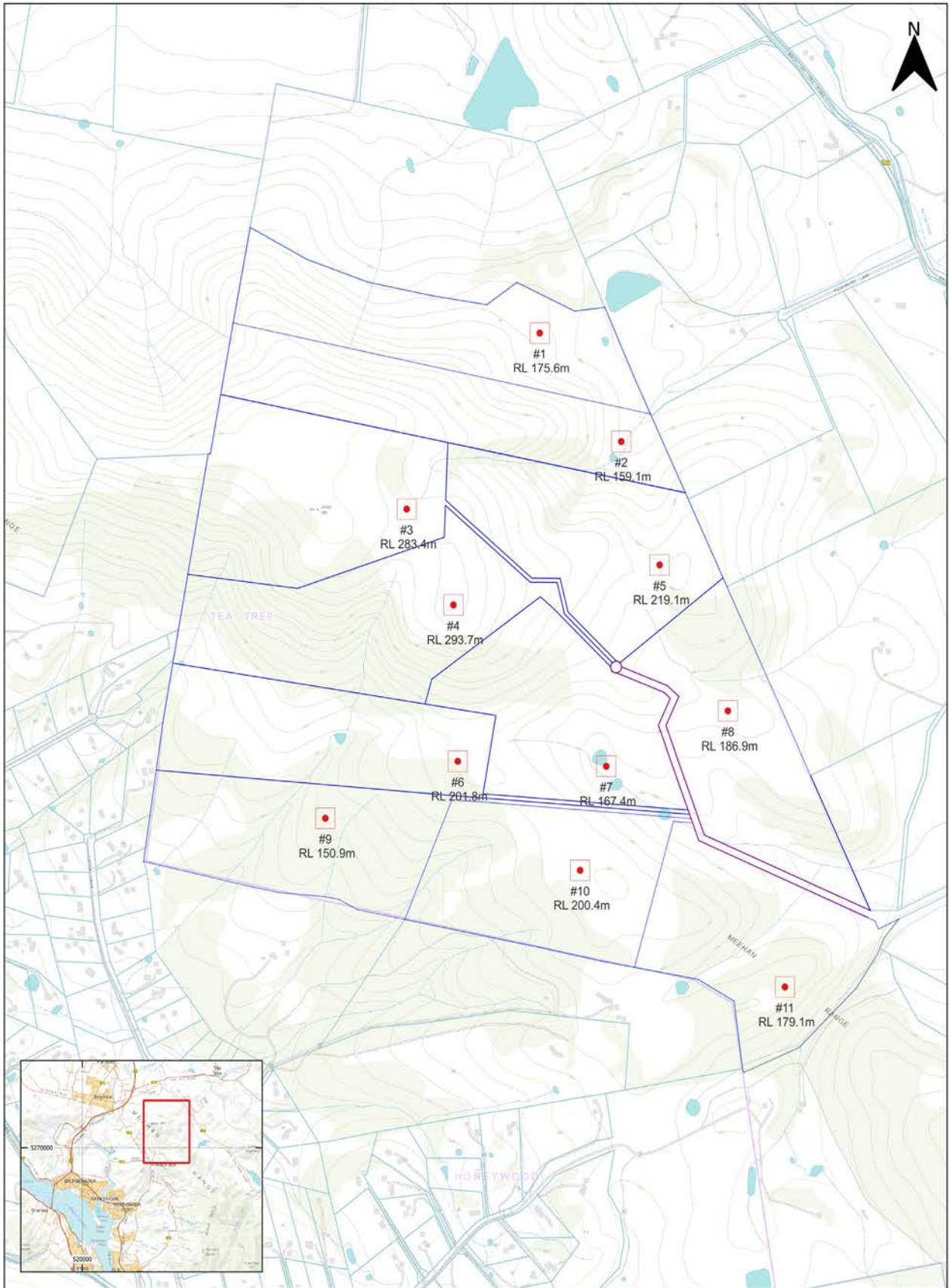


Photograph 4. Foreground view to lots 10 and 11 from Rosewood Lane. Existing house is at the end of the lane (Source: Inspiring Place).



Photograph 5. View from nearby residence on Glen Rose Drive to lots 5, 7 and 8 showing filtering by foreground structures including utilities, fences and vegetation (Source: Inspiring Place)

15. Note: Viewshed or visible area analyses were performed by Esk Mapping & GIS. GIS layers were projected in GDA 94 and a Digital Elevation Model (DEM) and Digital Surface Model (DSM) were produced based on 10m grid. A relative height of viewpoints of 2m above the ground surface of the DEM and DSM were used for visible area analyses, assuming no local vegetation or viewing obstructions at viewpoints. Note the analysis does not account for variations in topography of less than 5m.



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis

Site Overview

- Build Locations
- Proposed Boundaries
- 50x50m Build Envelope
- Proposed Road
- Cadstral Parcels
- Contours 10m

Map ID: 1.1 Datum/Projection: GDA94 MGA Zone 55
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:8500
 Prepared By: C.I.



0 300 600 m

Map 2. Points used for the GIS analysis. Each lot has a point set at 8m in the dwelling envelope (esk mapping & GIS)



Basemap: the LIST © State of Tasmania

Back Tea Tree Rd, Tea Tree - Viewpoint Analysis

Visibility Overview - 10km

1m LiDAR Digital Surface Model (DEM)

Number Visible Build Points	
1	6
2	7
3	8
4	9
5	10

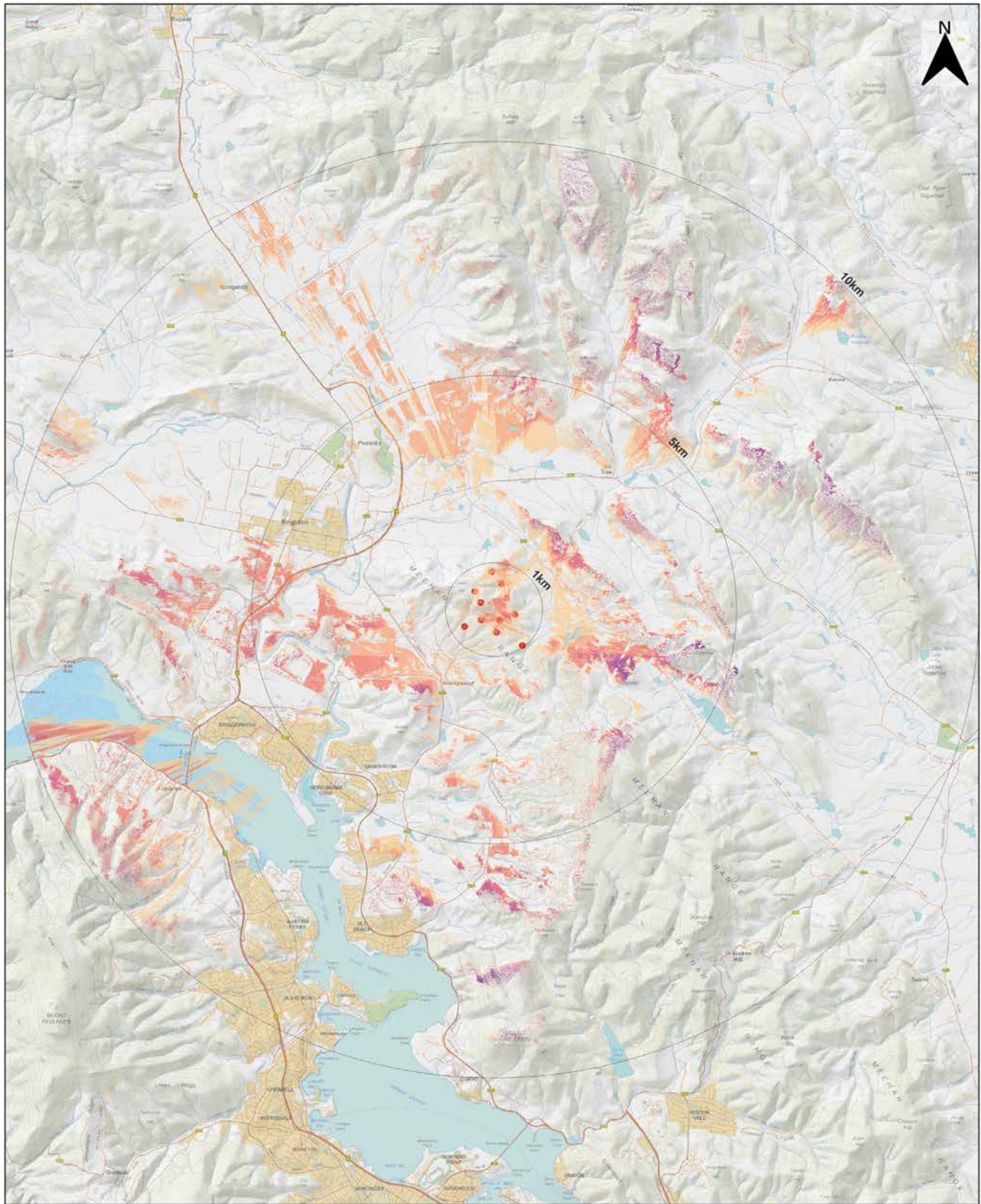
● 50x50m Building Centroids

Map ID: 2.1 Datum/Projection: GDA94 MGA Zone 55
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:70000 Prepared By: C.I.

Viewpoint analysis has been completed based on 1m resolution LiDAR DEM data captured from between 2008 to 2019. Visibility for building locations have been calculated based on a height 8m above the LiDAR surface model. All data elevation data sourced from <https://elevation.fsdf.org.au/>



Map 3. Seen view analysis (10km radius) showing the calculated visibility of the proposed subdivision without vegetation factored in (Digital Elevation Model)



Basemap: the LIST © State of Tasmania

Back Tea Tree Rd, Tea Tree - Viewpoint Analysis

Visibility Overview - 10km

1m LiDAR Digital Surface Model (DSM)

Number Visible Build Points	Color
1	Light Yellow
2	Yellow
3	Orange
4	Red
5	Dark Red
6	Purple
7	Dark Purple
8	Dark Purple
9	Dark Purple
10	Dark Purple

● 50x50m Building Centroids

Map ID: 2.1
 Map Date: 19/04/2023
 Scale: 1:70000
 Datum/Projection: GDA94 MGA Zone 55
 Vertical Datum: AHD
 Prepared By: C.I.



Viewpoint analysis has been completed based on 1m resolution LiDAR DSM data captured from between 2008 to 2019. Visibility for building locations have been calculated based on a height 8m above the LiDAR surface model. All data elevation data sourced from <https://elevation.fsdf.org.au/>



Map 4. Seen view analysis (10km radius) showing the calculated visibility of the proposed subdivision with vegetation factored in (Digital Surface Model).

The importance of the screening capacity of the vegetation is strongly underlined by the GIS seen view mapping. To see this, the bare earth model (Digital Elevation Model, DEM) is compared with the model draped with the existing vegetation (Digital Surface Model, DSM). Map 3 shows the DEM results of all 11 potential buildings and the resulting locations that can see those points out to a distance of 10km. There are some hot spots that can see most of the 11 points, including the higher locations on the Coal River Tier, Hammonds Tier and other locations on the Meehan Range itself.

When this same modelling is done using the existing vegetation screening (DSM), the number of locations that can see the buildings is drastically reduced and the number of lots that can be seen is reduced to fewer than five (Map 4).

In terms of the individual building envelopes and their seen view, this is highly variable but the effect of vegetation screening is still consistently valuable. There are four types of views to the tops of the proposed buildings. Those are: well protected by the topography (such as lot 7), visible to the north (lot 1), visible to the south (lot 6) and visible both north and south (lot 4). It should be noted that much of the views to the proposed development from the south are from uninhabited areas. The seen view for the bare earth model is shown in the four lots in Map 5.

In all four cases, vegetation reduces the number of locations that can see the 8m point on the building envelope. This is particularly evident for the buildings that are in more exposed topographic positions. The vegetation screen makes a substantial difference to the number and distance from which the building point can be seen.

The building envelope for lot 7 is already well concealed in the landscape on a watercourse and the vegetation screening makes the least amount of difference to the DEM-DSM view comparison.

Photographs from east and west of the proposed locations help illustrate what the sub-division might look like if the build locations are constructed. Photograph 5 shows the view from a location on Back Tea Tree Road that has a clear view west across to Jews Hill and the existing treed slopes. Similarly Photograph 6 shows the view east from the suburb of Honeywood looking at the other side of Jews Hill. Both views show the vegetated ridgeline and the landscape values of the treed slopes.

In terms of views from a vehicle rather than views

from residences, the site is mostly viewed obliquely visible from a vehicle with first views to the southeast on Back Tea Tree Road from approximately 2.5km away. Views to the proposed development from the road are regularly interrupted by existing houses, gardens and windbreaks.

The view is directly in focus only once turning down streets that come off Back Tea Tree Road or in the suburb of Honeywood. The through roads also tend to have oblique rather than focused views, including Back Tea Tree and Tea Tree Road on one side of the range and Briggs Road, Baskerville Road and the Midland Highway on the other.

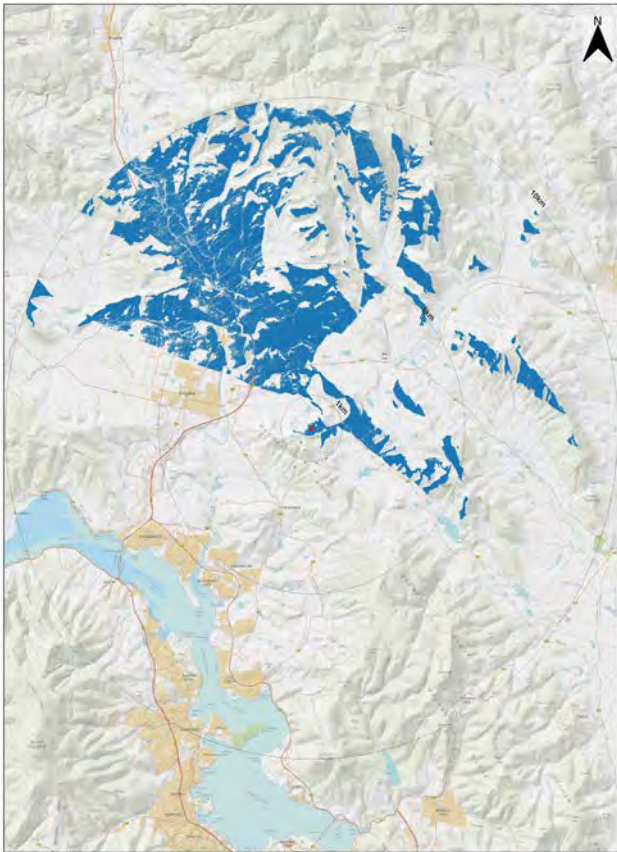
The number of vehicles on Back Tea Tree Road is unknown, however around 2651 daily vehicle movements were recorded for Tea Tree Road in 2018. Back Tea Tree Road has significantly less traffic. This is the road that will have the clearest and nearest views to the proposed sub-division.

Vegetation loss on site for BHMP may change the results of the modelling quite significantly. If larger canopy trees are retained, particularly around the perimeter of each lot, then the foreground visual impact will be greatly reduced.

Another factor to consider in seen view analysis is that the local residents occupy a physical setting similar to what is being proposed for the proposed subdivision. This could be expected to lower their sensitivity to development because the proposal is not substantially changing the valley patterning. There will remain a variegated landscape with pockets of infrastructure, vegetation, gardens, agriculture and residences.

The site is more clearly visible from the two access roads, particularly the existing residences and vineyard on Rosewood Lane, off Back Tea Tree Road. From these positions, lots 1 and 2 are in the foreground and higher up the slope. This would likely mean that there would be sustained views that would be quite different to the current relatively natural state of this land. The visual focus of these vantages is drawn to the vegetated skyline with its moderate-high scenic value and careful consideration of vegetation retention and dwelling location is desirable.

Maps 7 and 8 show some of the other more exposed build locations. These are lots 3 and 5 that can be seen north and south along with lot 4 that is already in Maps 5 and 6. Two sites that are visible from the Brighton side of the Range are lots 9 and 10.



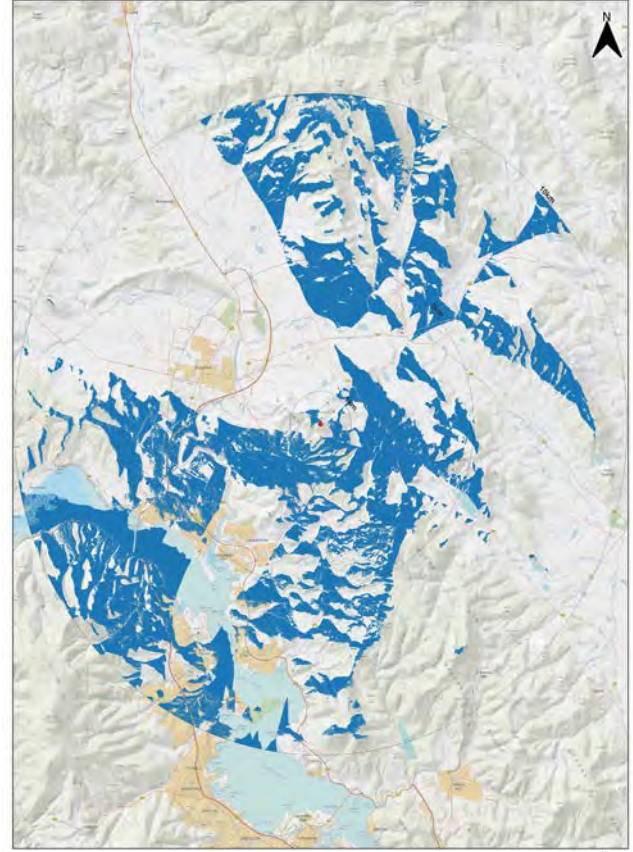
Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility
 Lot 1 - 10km
 1m LIDAR Digital Surface Model (DEM)

Proposed Building Locations
 Current Building
 Other Building
 Infill Area

Map ID: 3.1
 Map Date: 18/06/2023
 Scale: 1:10000
 Datum/Projection: GDA94 MGA Zone 58
 Vertical Datum: AHD
 Prepared By: C.J.

esk mapping GIS

Viewshed analysis has been completed based on 1m resolution LIDAR DEM data captured from between 2008 to 2019. Visibility for building footprints has been calculated based on a height 8m above the LIDAR surface model. All data resolution data sourced from https://data.queensland.gov.au/



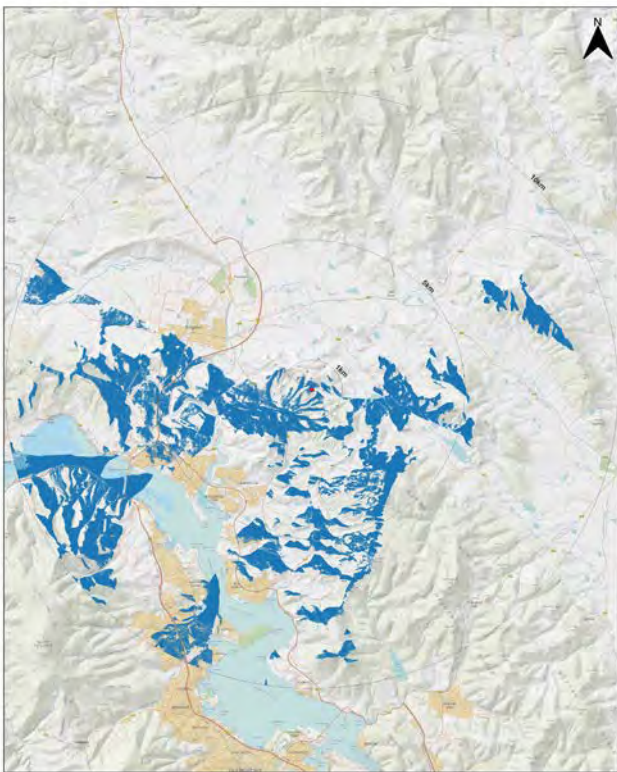
Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility
 Lot 4 - 10km
 1m LIDAR Digital Surface Model (DEM)

Proposed Building Locations
 Current Building
 Other Building
 Infill Area

Map ID: 3.1
 Map Date: 18/06/2023
 Scale: 1:10000
 Datum/Projection: GDA94 MGA Zone 58
 Vertical Datum: AHD
 Prepared By: C.J.

esk mapping GIS

Viewshed analysis has been completed based on 1m resolution LIDAR DEM data captured from between 2008 to 2019. Visibility for building footprints has been calculated based on a height 8m above the LIDAR surface model. All data resolution data sourced from https://data.queensland.gov.au/



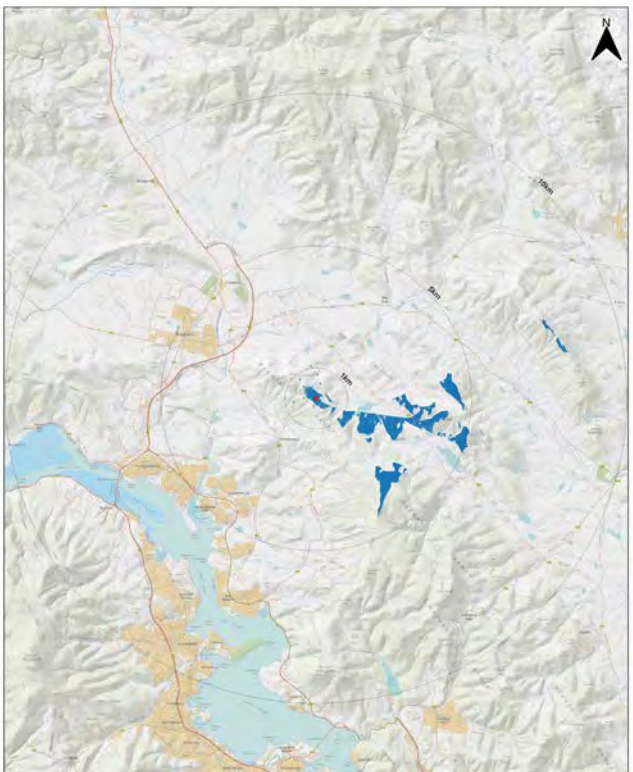
Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility
 Lot 6 - 10km
 1m LIDAR Digital Surface Model (DEM)

Proposed Building Locations
 Current Building
 Other Building
 Infill Area

Map ID: 3.6
 Map Date: 18/06/2023
 Scale: 1:10000
 Datum/Projection: GDA94 MGA Zone 58
 Vertical Datum: AHD
 Prepared By: C.J.

esk mapping GIS

Viewshed analysis has been completed based on 1m resolution LIDAR DEM data captured from between 2008 to 2019. Visibility for building footprints has been calculated based on a height 8m above the LIDAR surface model. All data resolution data sourced from https://data.queensland.gov.au/



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility
 Lot 7 - 10km
 1m LIDAR Digital Surface Model (DEM)

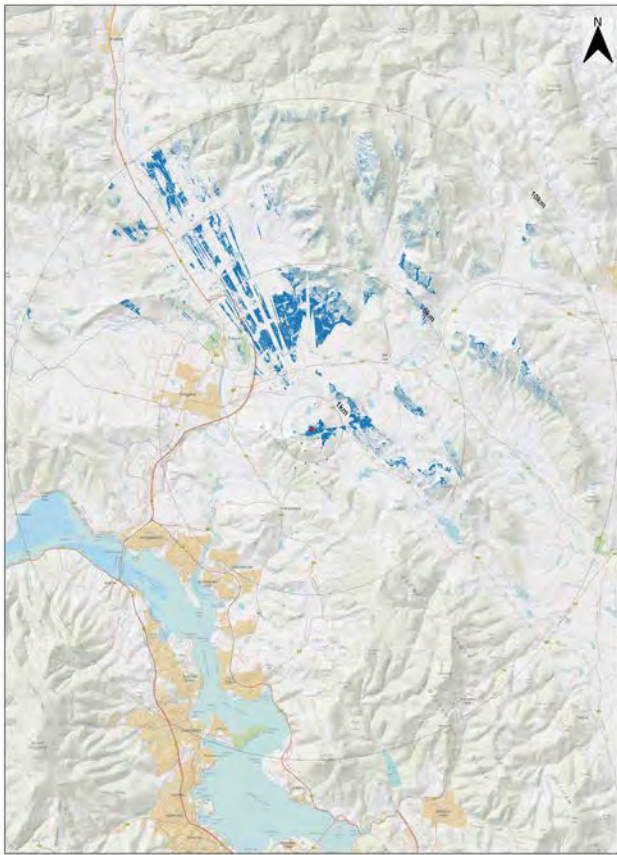
Proposed Building Locations
 Current Building
 Other Building
 Infill Area

Map ID: 3.7
 Map Date: 18/06/2023
 Scale: 1:10000
 Datum/Projection: GDA94 MGA Zone 58
 Vertical Datum: AHD
 Prepared By: C.J.

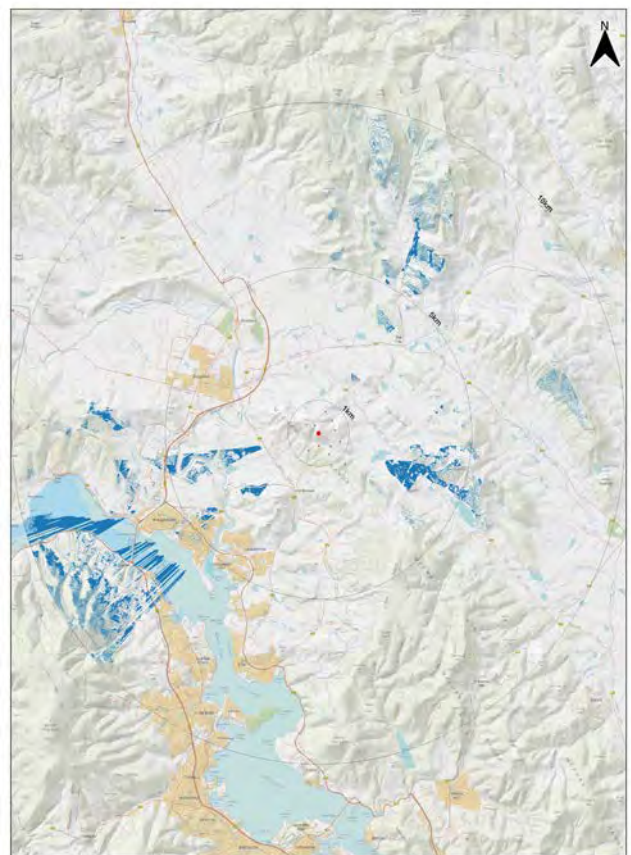
esk mapping GIS

Viewshed analysis has been completed based on 1m resolution LIDAR DEM data captured from between 2008 to 2019. Visibility for building footprints has been calculated based on a height 8m above the LIDAR surface model. All data resolution data sourced from https://data.queensland.gov.au/

Map 5. Four DEM (bare earth) seen views (lots 1, 4, 6, 7) out to 10km showing the variation between the sites resulting from their differing positions in the landscape (Source: Esk Mapping e GIS).



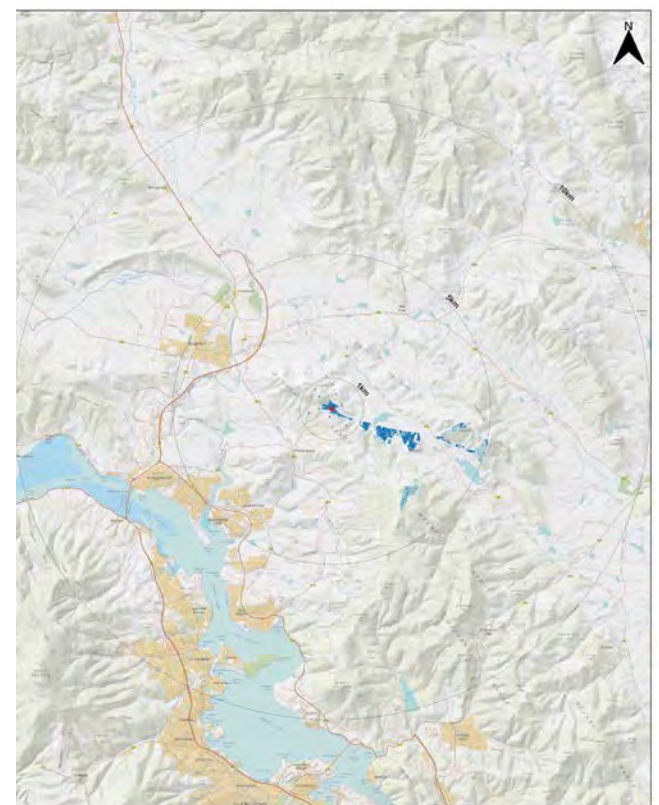
Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 1 - 10km



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 4 - 10km



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 6 - 10km



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 7 - 10km

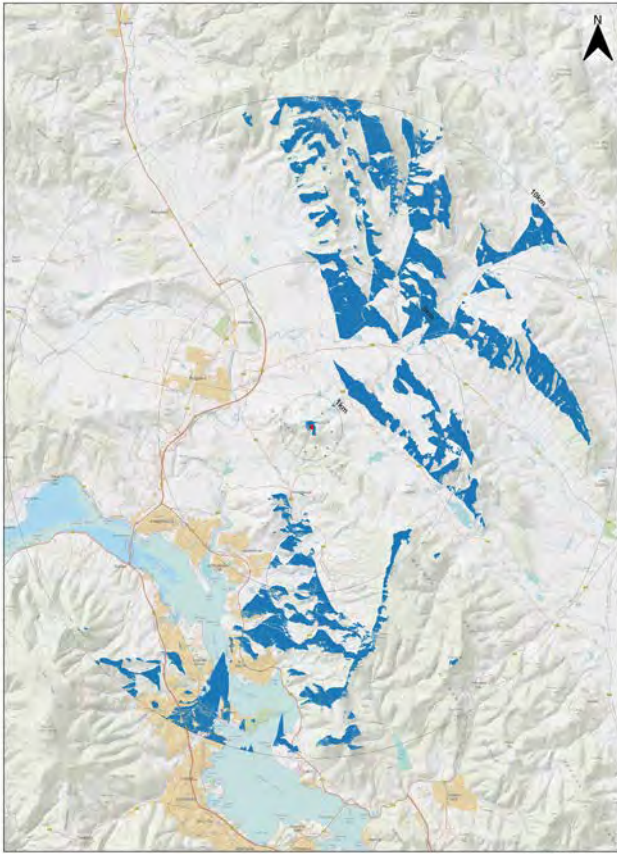
Map 6. Four seen views (lots 1, 4, 6, 7) out to 10km but this time with screening of the existing vegetation draped over the model (Source: Esk Mapping & GIS).



Photograph 5. Unobstructed view from Back Tea Tree Road looking west to the approxiamte area of the southern end of the subdivision (lots 7, 8, 10 and 11) (Source: Inspiring Place)



Photograph 6. View from Honeywood Drive east to lots 6, 9 and 10 (Source: Inspiring Place)

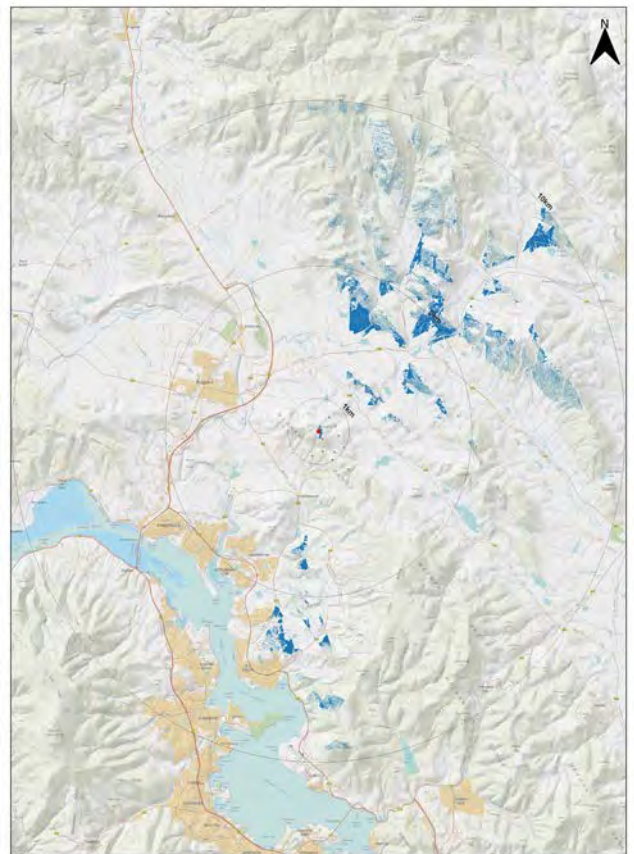


Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility Lot 3 - 10km

Proposed Building Locations
 Current Building
 Other Buildings

Map ID: 3.3 Datum/Projection: GDA94 MGA Zone 56
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:70000 Prepared By: C.I.

esk mapping GIS



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility Lot 3 - 10km

Proposed Building Locations
 Current Building
 Other Buildings

Map ID: 3.3 Datum/Projection: GDA94 MGA Zone 56
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:70000 Prepared By: C.I.

esk mapping GIS



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility Lot 5 - 10km

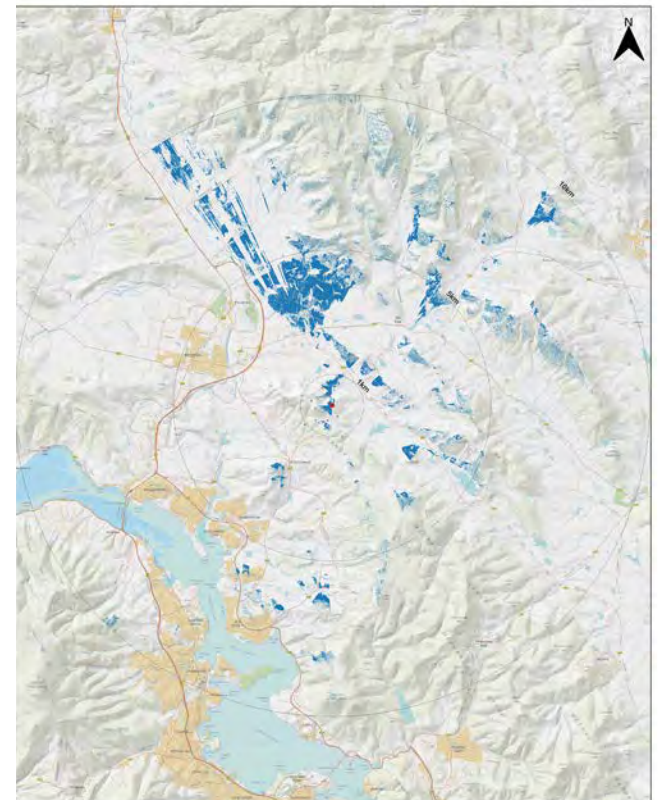
Proposed Building Locations
 Current Building
 Other Buildings
 Visible Area

Map ID: 3.3 Datum/Projection: GDA94 MGA Zone 56
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:70000 Prepared By: C.I.

esk mapping GIS

1m LIDAR Digital Surface Model (DEM)

Vertical analysis has been completed based on 1m resolution LiDAR DSM data collected from between 2008 to 2016. Visibility for existing buildings has been calculated based on a height of 10m above the ground for a 10m radius around all data collection data sourced from <https://data.mim.gov.au/>



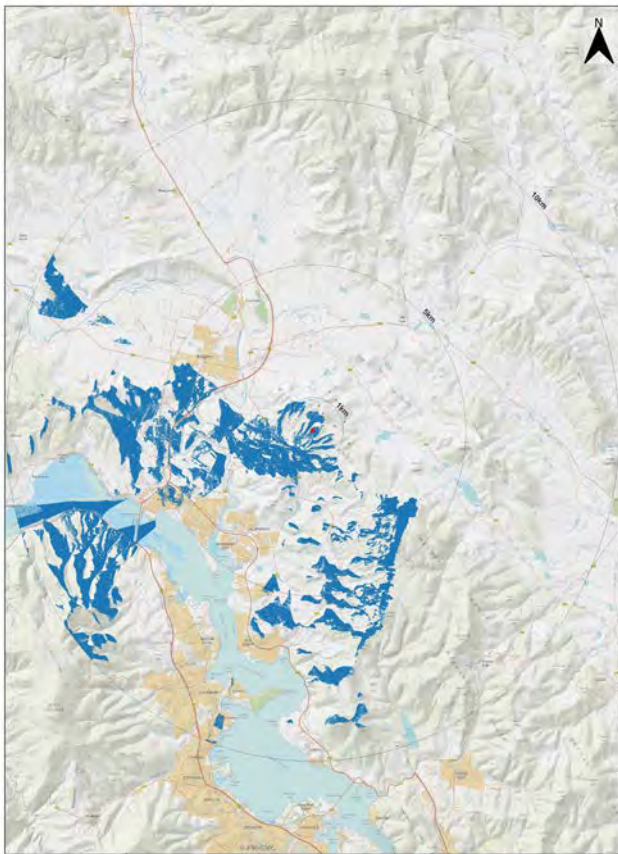
Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
 Visibility Lot 5 - 10km

Proposed Building Locations
 Current Building
 Other Buildings
 Visible Area

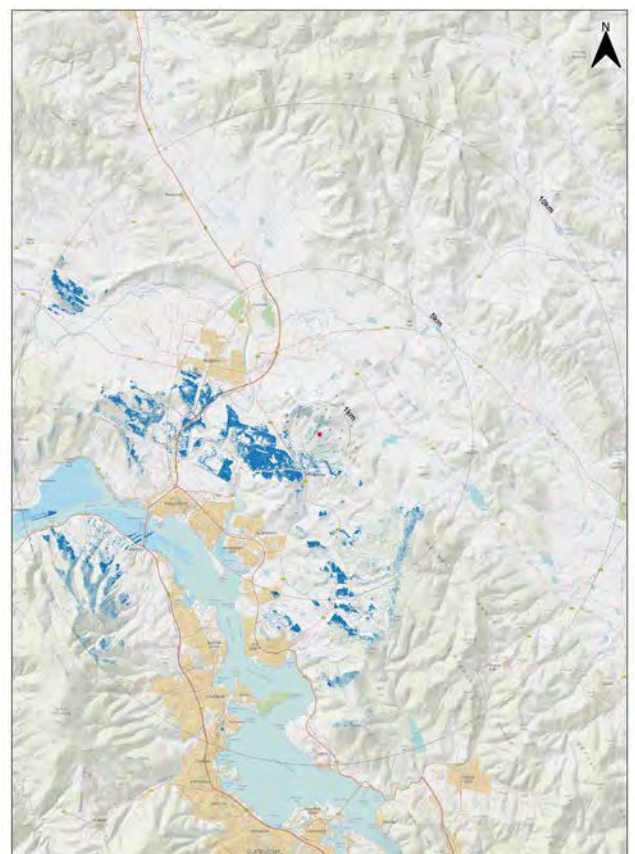
Map ID: 3.3 Datum/Projection: GDA94 MGA Zone 56
 Map Date: 19/04/2023 Vertical Datum: AHD
 Scale: 1:70000 Prepared By: C.I.

esk mapping GIS

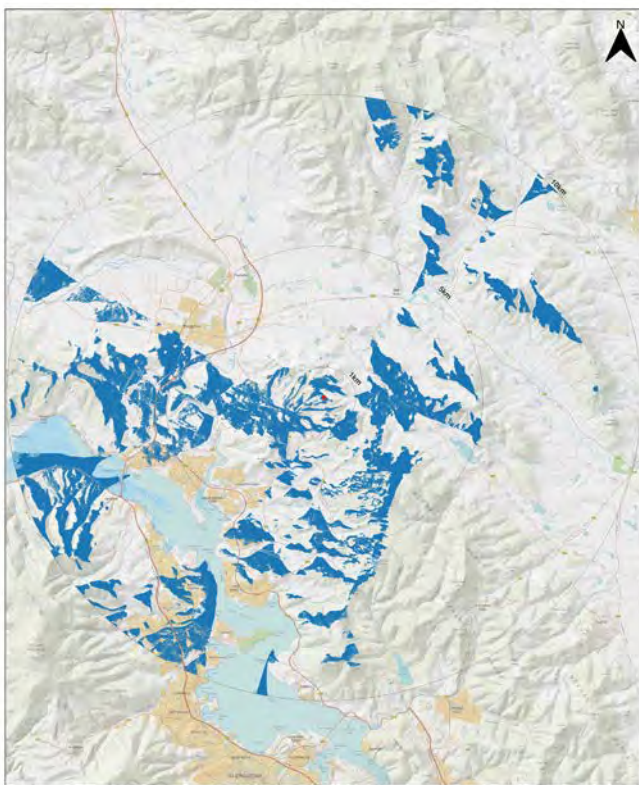
Map 7. Four seen views in pairs of DEM and DSM for direction comparison of the bare earth (DEM) and vegetated view (DSM) for two sites at high points with the landscape that can be seen from both the south and north (Lot 3 and Lot 5) (Source: Esk Mapping & GIS).



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 9 - 10km
 Proposed Building Locations
 Current Building
 Other Buildings
 Map ID: 3.9
 Map Date: 18/04/2023
 Scale: 1:70000
 Datum/Projection: GDA94 MGA Zone 56
 Vertical Datum: AHD
 Prepared By: C.I.



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 9 - 10km
 Proposed Building Locations
 Current Building
 Other Buildings
 Lidar Area
 Map ID: 3.9
 Map Date: 18/04/2023
 Scale: 1:70000
 Datum/Projection: GDA94 MGA Zone 56
 Vertical Datum: AHD
 Prepared By: C.I.



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 10 - 10km
1m LIDAR Digital Surface Model (DEM)
 Proposed Building Locations
 Current Building
 Other Buildings
 Lidar Area
 Map ID: 3.10
 Map Date: 18/04/2023
 Scale: 1:70000
 Datum/Projection: GDA94 MGA Zone 56
 Vertical Datum: AHD
 Prepared By: C.I.
 Visibility analysis has been completed based on 1m resolution LIDAR DSM Data captured from between 2008 to 2019. Visibility for building locations have been calculated based on a height of above the LIDAR surface mask. All data resolution data sourced from Mapbox.com/DEM/Original



Back Tea Tree Rd, Tea Tree - Viewpoint Analysis
Visibility Lot 10 - 10km
 Proposed Building Locations
 Current Building
 Other Buildings
 Lidar Area
 Map ID: 3.10
 Map Date: 18/04/2023
 Scale: 1:70000
 Datum/Projection: GDA94 MGA Zone 56
 Vertical Datum: AHD
 Prepared By: C.I.

Map 8. Four seen views in pairs of DEM and DSM for direction comparison of the bare earth (DEM) and vegetated view (DSM) for two sites with westerly aspects facing Brighton and Honeywood (Lot 9 and Lot 10) (Source: Esk Mapping e- GIS).

4.2.2 Observer position and duration of view

Observer position is critical to an understanding of the viewing sensitivity. As introduced above, parts of the subdivision will be visible from lower positions in the landscape in the near view, such as the development at lots 10 and 11. However, the majority of the views will be filtered by vegetation. These views are also likely to be short duration rather than sustained. Nearby residences are likely to be the most affected because views will be sustained and at a distance where several of the lots will be within view. Retaining vegetation that filters views from building locations as well as to the locations is recommended.

Special attention needs to be paid to the lots that are higher in the landscape, including 3, 4 and 5 that can be seen both north and south, and 6, 9 and 10

that can be seen to the south.

Length of time influences visual impact as the longer an element is observed, the greater the awareness of its presence and detailing. The majority of views will be from traffic on Back Tea Tree Road and local roads in Honeywood. These views are mostly oblique, but there might be some focused views of the proposed changes from Honeywood.

The longer time of viewing will be from private residences to both the east of the site in Tea Tree Valley and the west of the site in Honeywood and the Baskerville Road area. The residences with a focal view and outdoor vantage space will more clearly note the effects of the outcome of BHMP vegetation management. However their sensitivity to sighting residences in a patterned landscape is lowered by this being consistent with some of the main land uses in these valleys. The Tea Tree valley is slowly changing from largely agricultural land use with large titles to more of a mixed use that includes residential properties.

4.2.3 Screening potential

Vegetation and topography both play a role in how visible the subdivision and associated works will be in the landscape.

Vegetation around the build locations are important for reducing site visibility from foreground positions. Views are mostly to the north and south given the screening of the Meehan Range itself and the other nearby ranges such as Hammonds Tier. Sites with the most views of the 11 build locations are high on those ridgelines and they do not currently have residences in those locations. The topography combined with vegetation are valuable in screening the site from much of the views from both roads and residences.

Screening from individual residence in the valley is highly variable with some, such as the established Glen Quoin, having a mature garden and screening windbreaks, and others having clear views to the site. Photograph 7 shows a house with a less well developed garden that will have some views to the northern end of the sub-division (lots 1, 2).

Views from the Midland Highway, Brighton, Cove Hill, Bridgewater and the Brighton Transport Hub will be ameliorated by the distance from the site and also the busyness of the landscape (Photograph 8). There is a high diversity of land uses in these views that include residences of different densities, open space, agriculture, natural assets, both European and Aboriginal heritage, heavy industry, and the full suite of road hierarchies.

The degree to which vegetation will be retained during construction will mitigate the visibility of the subdivision. The proposal notes to maintain existing vegetation and remnant pockets of vegetation communities within the site boundaries in adherence with BHMP guidelines.



Photograph 7. View from the north approximately 2km from the site at the north end of Back Tea Tree Road near Rutherford Drive (Source: Inspiring Place)



Photograph 8. View from Brighton Transport Hub to the general area of lots 6, 9 and 10. Note the presence of high voltage power lines and telecommunications towers in the broader landscape (Source: Inspiring Place)

5 / Evaluation and mitigation of the impacts arising from the development

5.1 Visual / Scenic Landscape Values

5.1.1 Impacts

Table 3 evaluated the significance of the potential impacts arising from the development against the range of factors that influence the relativity of a visual impact and found the potential impacts to be **low to moderate** across the majority of factors. In vantages from the foreground to far distance, the proposed forms are low in profile compared to the more expansive landscape they sit in.

Importantly, the proposal is consistent with an existing land use. Visitors will be expecting to see dwellings within the area and along the hillside; as is currently the case. Any negative response to the view (i.e. to the placement, scale or number of the

dwellings), will be offset, to some extent, by their advance knowledge that such dwellings exist within the modified landscape.

Photograph 9 shows the aerial view of the landscape around the Jews Hill part of the Meehan Range. The settlements of Tea Tree and Honeywood are clearly visible and there are indications of the dotted residences in the Tea Tree valley. The mix of land uses is evidence, including native vegetation, agriculture, roads, commercial and residential uses.

Build locations that are higher in the landscape may have some impact on visual landscape values. There is potential for houses at these locations to have good views, but equally they will be seen. The purpose of this zone is to provide for development that does not adversely impact on the protection, conservation and management of the landscape values. Retaining as much vegetation as possible is important in an area with a priority vegetation overlay as well as for filtering views to the development.



Photograph 9: View to northeast showing the growing residential areas around Honeywood and the more rural landscape of Tea Tree valley (Source: Google Earth)

—Evaluation and mitigation of the impacts arising from the development

5.1.2 Mitigation Measures

Under the Tasmanian Planning Scheme - Brighton Landscape Conservation Zone requirements of 22.5.1. P1 (a) - (e) and in particular that 'each lot must have sufficient useable area and dimensions suitable for its intended use, having regard to'...(c) the ability to retain vegetation and protect landscape values on each lot'.

This visual impact assessment has been completed by suitably qualified persons to address the requirements in the table below.

In addition to these general recommendations about retaining vegetation screening, avoiding reflective

cladding and keeping building heights as low as practical, the role of topography needs to be emphasised. Topography can help protect natural landscape views, including in the event of a bushfire in this bushfire-prone area. All lots except lot 7 can be seen out to distances of 10 km in the absence of vegetation. In particular, lots 3, 4, 5, 6, 9 and 10 are in more exposed locations.

Lots 3, 4 and 5 are the most exposed and can be seen both north and south from their position on the Meehan Range itself. Consideration needs to be give as to whether any of these lots and particularly 3, 4 and 5 could be more concealed with a change in built location.

CLAUSE	PERFORMANCE CRITERIA P1	ANALYSIS OF PROPOSAL AND MITIGATION RECOMMENDATIONS
22.5.1 LOT DESIGN OBJECTIVE “That each lot (a) has an area and dimensions appropriate to the zone; (b) contain areas which are suitable for development, located to protect and conserve landscape values; and (c) is provided with appropriate access to a road:”	Each lot, or a proposed lot in a plan of subdivision, must have sufficient useable area and dimensions suitable for its intended use, having regard to:	
	(a) the relevant Acceptable Solutions for development of buildings on the lots;	Clause 22.4.2 A1 requires that building height must be not more than 6m. Modelling of building heights has been done to a maximum of 8m however any effort to keep intended buildings out of seen views through keeping building heights as low as possible will assist in protecting landscape values.
	(b) existing buildings and the location of intended buildings on the lot;	Buildings need to be sited to protect skylines as much as possible and ideally light reflectance of cladding materials to be less than 40% to further reduce their prominence in the landscape. Concrete aprons to use dark oxide to reduce their visibility.
	(c) the ability to retain vegetation and protect landscape values on each lot;	The difference between the bare earth modelling (DEM) and vegetation modelling (DSM) show the effectiveness of retaining the <i>Eucalyptus amygalina</i> and <i>E.viminalis</i> forest and woodland. Within the constraints of the BHMP requirements, retention of existing established trees and pockets of vegetation on each lot and surrounding the subdivision will assist in mitigating the level of visibility.
	(d) the topography of the site;	Topography plays a vital primary role in concealing intended residences from being widely seen in the landscape. Should vegetation be removed through means such as bushfire, the topography can be relied on to conceal some of the build sites from views. Siting of build locations lower in the landscape reduces their visibility. Residence rooflines should be kept as low as achievable within site constraints.
	(c) be located below skylines;	Part of the increased visibility of build locations on some of the lots is their presence on higher points of the site. Care needs to be taken to retain treed skylines, particularly from locations such as the residences in Honeywood and on Rosewood Lane that are relatively close to the site.
	and must not have an area not less than 20ha.	

6 / Conclusion



6.0 Conclusion

6.1 Protecting and conserving landscape values

This report is part of statutory planning process for a subdivision wherein the lot locations have been chosen to conserve landscape values. The site has overlays of low and medium Landslip Hazard (Code 15), Bushfire-prone Areas (13), and priority vegetation under the Natural Assets code (7).

The build locations on the site sit on the hillface of the Meehan Range, but below the local ridgeline and the skyline. Removal of vegetation to suit BHMP requirements reduce some of the vegetation screening capacity seen in the digital surface modelling but there is still significant capacity for dwellings to be sensitively located to protect landscape values.

Vegetation screening is important for all lots with the exception of lot 7 on the creek line. Lots 3, 4, and 5 are particularly visible both north and south because of their placement at higher points on the site. We recommend that for lots 4 and 5 in particular to be closer to the internal road and away from those higher points in the landscape. We recommend that Lot 3 is located further downslope, closer to the northern boundary. This will reduce its visibility to the south in particular.

Care needs to be taken with materials to reduce their visibility. Low contrast roof, wall cladding and driveway surfaces (i.e. dark, matte and textured finishes) is recommended to reduce surface reflectivity and reduce the starkness of uniform planes against the varied grain of vegetation.

Scenic landscape values can be maintained, as per the requirements of TPS - Brighton Clause 22.5.1 P1. Care will need to be taken to retain large trees and screen views from the residences to in turn protect the views of people looking towards the site. All vegetation should be retained outside of the areas where the BHMP requires it to be removed.

6.2 Visual Impact Assessment Conclusion

The evaluation of potential impacts at Table 3 suggests the potential for visual impacts in this Landscape Conservation Zone setting (Table 1) is **low to moderate** with some variation depending on the location of the lot in the landscape and the ability of retained vegetation to screen the views.

In conclusion, none of the potential visual impacts arising from the proposed subdivision and its associated works, in its proposed form and location, should preclude the development from progressing.



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GEO-ENVIRONMENTAL
SOLUTIONS

ON-SITE WASTEWATER ASSESSMENT
Back Tea Tree Road, Tea Tree



December 2024



Contents

1. Introduction2

2. Planning Context.....4

3. Site Information.....4

 3.1 *Geology*.....4

 3.1 *Soil Distribution*5

4. Site Suitability for Onsite Wastewater Disposal6

5. Conclusions8

Appendix 1 –Trench summary reports.....9

Appendix 2 – Bore Logs 12

Appendix 3 – Test Hole Locations 17

Appendix 4 – Building Act 2016 Compliance 18

1. Introduction

The proposed subdivision site is located on Back Tea Tree Road Tea Tree, Tasmania (C.T 121954/1). The total current land area of the lot is approximately 231.8ha, of which it is proposed to create eleven residential lots (see Figure 2 for proposed lots). The site is not serviced by mains sewer, therefore onsite wastewater disposal would be required on each of the lots (see Figure 1 for study area).

The land area in question is on hilly terrain, with a few gullies and no dominant aspect. Slopes range from gentle to steep hillsides approximately 20°.

It is the scope of this report to consider the capability of the said land to support sustainable residential use including on site wastewater disposal without sustaining environmental harm.



Figure 1 – Site location

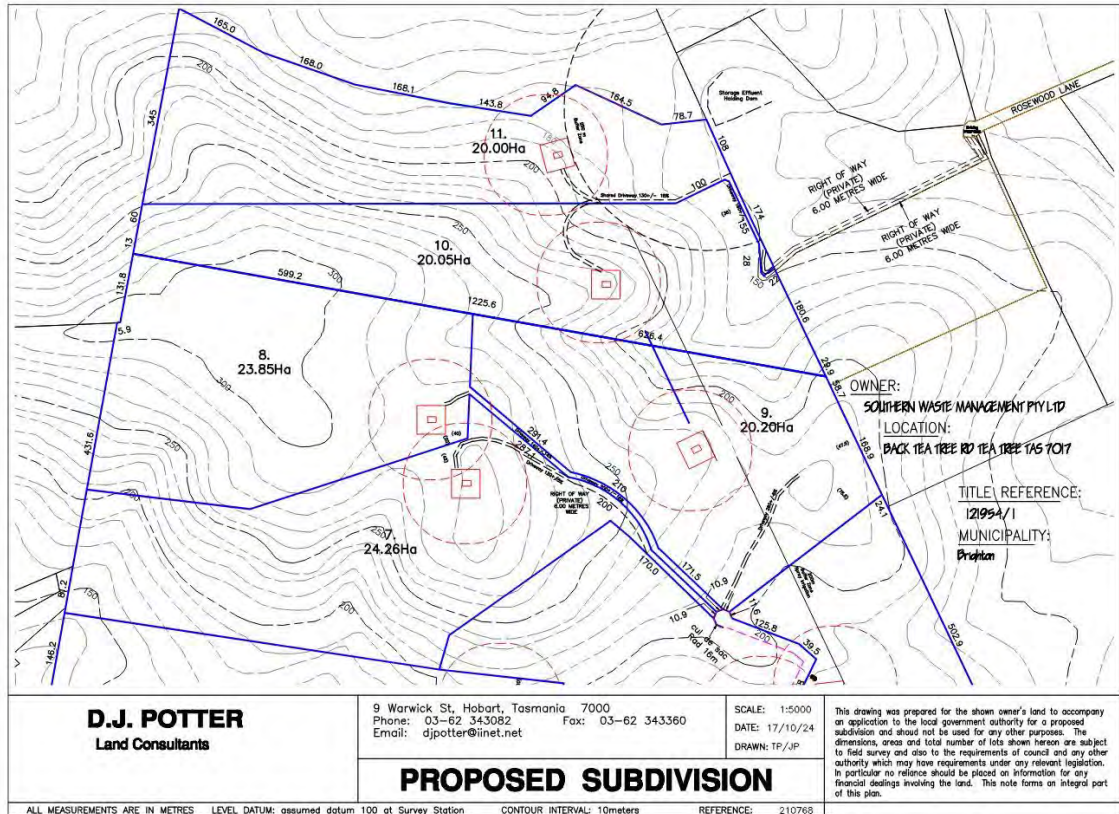
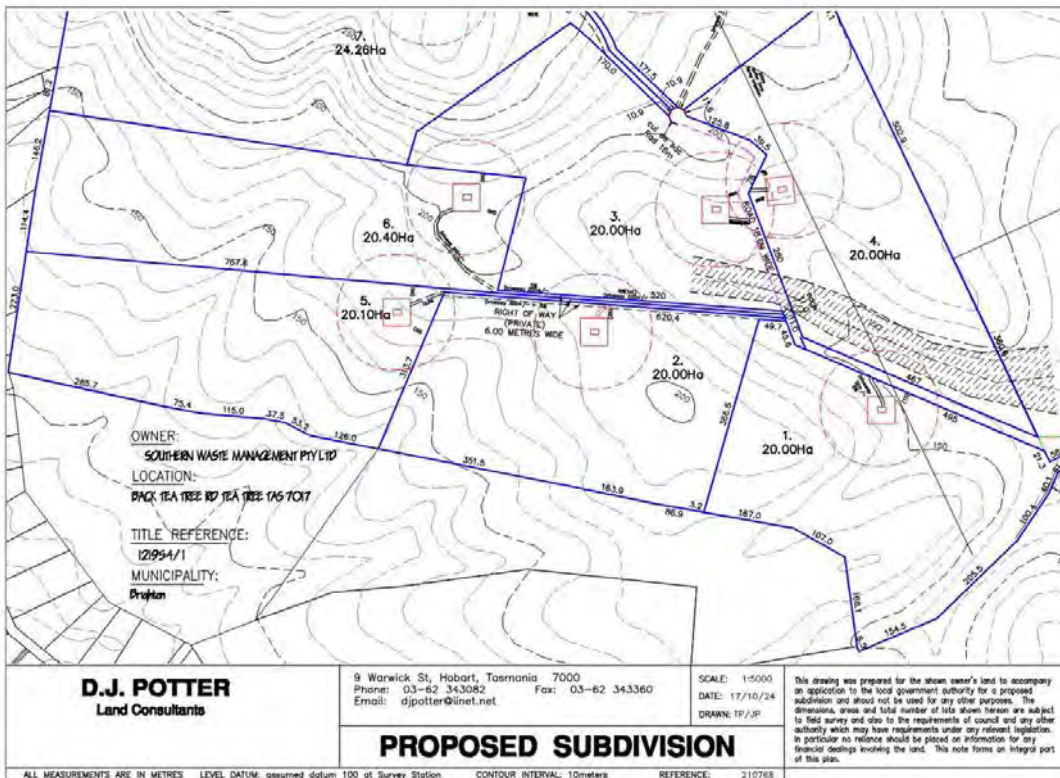


Figure 2 – Subdivision location with proposed lots in this application shown



2. Planning Context

The land area proposed for subdivision appears to fall within the Land scape conservation Zone as defined by the Tasmanian Planning Scheme (see Figure 3). Therefore, the subdivision must comply with the requirements for the Zone as set out Brighton Tasmanian Planning Scheme. Each lot must be capable of accommodating onsite wastewater disposal adequate for the future use and development of the land. As there is no instrument within the Scheme this is best demonstrated by examination against the Guidelines for on-site wastewater within the Building Act framework. Provided that the requirements are met regarding the provision of infrastructure, and the land is suitable for residential construction/on-site wastewater management the application to develop the land should proceed.

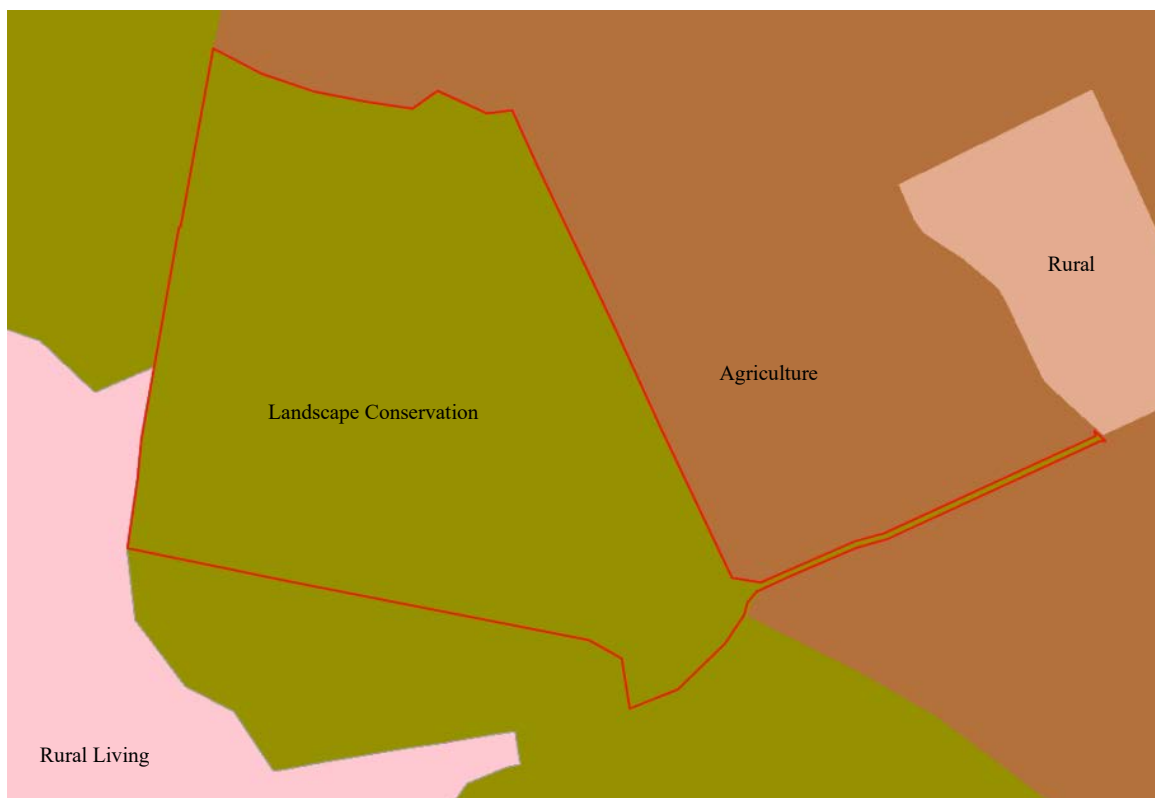


Figure 3 – Planning Zones – Tasmanian Planning Scheme (subdivision site outline in red)

3. Site Information

Site information pertaining to the capability of the land to sustain residential development without causing environmental harm was collected from desktop and field survey. Field survey was undertaken utilising an AMS Power Probe – Direct Push with soil samples assessed according to AS1547-2012 for suitability for on-site wastewater management.

3.1 Geology

The study area falls within the Mineral Resources Tasmania, 1:250000 sheet which indicates the area is underlain by Jurassic Dolerite as well as Triassic rocks dominantly sandstone, lithic sandstone and mudstone. The soil found on the

4. Site Suitability for Onsite Wastewater Disposal

The capability of the proposed new lots to support a typical residential dwelling and on-site wastewater disposal must be evaluated to ensure environmental values are maintained. Modelling of wastewater application on the proposed lot was undertaken utilising the Trench program, long term weather average for Tea Tree, and estimated flows from an average three-bedroom home.

The soils are moderately structured, have a moderate permeability and moderate CEC for retention of nutrients. The soils across the site area classified according to AS/NZS1547-2012 as Category 5 – Light Clay. The topsoils are moderately well drained; however, the subsoils have a moderately low permeability in the range of 0.12-0.20m/day. A range of wastewater disposal options are suitable for the proposed lots.

Assuming the construction of a typical three-bedroom dwelling with tank water supply, the expected loading under AS/NZS1547-2012 and the Directors Guidelines for On-site Wastewater 2016 is 600L/day (5 persons @120L/day). Due to the relatively shallow soil steep topography and the clay subsoils it is expected that secondary treatment of effluent would be utilised on the lots. Based upon secondary treatment with irrigation (surface or subsurface) with a slope reduced DIR of 2.4mm/day, an irrigation area of 250m² would be required. Alternatively, if secondary treatment and an absorption bed or mound was employed on the site, then a DLR of 10L/m²/day and an area of 60m² would be required.

Wastewater irrigation areas can generally be replaced relatively quickly and easily within a one to two-day period, such that a reserve area is often not prescribed, or required. However, where a more intensive form of disposal area such as an absorption trench or bed is proposed then a reserve area would be prescribed. Therefore, for standard shallow subsurface irrigation with drippers, or surface irrigation with sprinklers a reserve area would not be required and an area of 250m² would be sufficient for a three bedroom dwelling. If an absorption bed or beds were designed a reserve area would be recommended, such that a total area of 120m² would be required (i.e. 60m² primary and 60m² reserve). This is consistent with AS/NZS1547-2012 which states that a reserve area may be reduced or eliminated for secondary treated effluent.

Based upon the modelling undertaken, a wastewater disposal area in the range of 200-250m² would be required on each lot for a typical three-bedroom dwelling. If this area is combined with a typical dwelling size of 200-250m², and the setbacks calculated below, then there is more than sufficient room for access, parking, and private open space on a lot with an area of over 20ha.

It is recommended the final decision of wastewater system approval rest with the permit authority at the time of site specific design to ensure the most compatible environmental and economic outcomes. Therefore, it is not warranted to restrict the lot to a single wastewater system type at the subdivision approvals stage, as each dwelling will have individual nuances which may be more suited to any one of a range of designs allowable within AS1547-2012. The assessment concludes that the proposed lots would be more than sufficient to accommodate wastewater from future residential development.

Nutrient balance and sustainable wastewater application

The soils across the site have developed from Tertiary sediments and have a good estimated Cation Exchange Capacity (CEC). The soils returned negative results to all Emerson dispersion tests. Therefore, the soils have a good capacity to retain nutrients in applied wastewater. Soils derived from Jurassic dolerite and Triassic Sandstone are known to exhibit dispersive behaviour. Under some circumstances the presence of dispersive soils can also lead to significant erosion, and in particular tunnel erosion. Evidence of erosion is present in the southern slopes of the subdivision as well as the Northern slope. Lots 1, 2, 5, 6, 10 and 11 may be affected by dispersion. It is recommended that adequate dispersion testing and soil classification is undertaken in proposed development areas on each lot to ensure the predicted soil behaviour and effluent disposal standards are met. On lots that exhibit soil dispersion an AWTS with irrigation is the recommended disposal method.

Setbacks distances to boundaries and sensitive features

The proposed lots have very gentle slopes and the average slope of approximately 3% or up to 2 degrees has been utilised to represent the indicative required setbacks. The acceptable solutions for setbacks according to the Building Act 2016 for onsite wastewater management are outlined below.

Table 2.0 – Building Act 2016 setback requirements

	3% (20 degrees)	
	Subsurface Irrigation	Surface Irrigation
Upslope/Level Boundary	1.5m	1.5m
Downslope Boundary	21.5m	40m
Upslope/Level Building	3m	6m
Downslope Building	6m	6m
Downslope Surface Water	29m	100m
Groundwater	0.6m	0.6m
Limiting Layer	0.5m	0.5m

Note: See Appendix 4 for Building Act compliance.

A subdivision proposal with lots of a minimum area of approximately 20ha should allow for significant space on each lot for wastewater disposal with adequate setbacks in regards boundaries and sensitive features. Therefore, it is concluded that current subdivision plan results in lots compliant with the onsite wastewater guidelines and the Tasmanian Planning Scheme.

The actual down slope boundary setbacks applied will require fine tuning at the special plumbing permit stage as access, parking, and building footprints are finalised in conjunction with wastewater disposal areas. Modelling at this planning stage does however suggest that sufficient room would be available on each lot to accommodate the required setbacks.

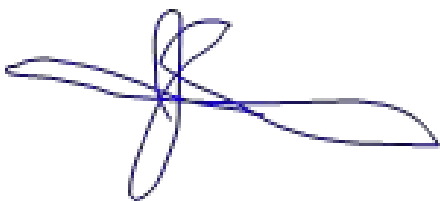
Note – Permanent surface water in the form of dams is located on lot 3 and 6 of the proposed subdivision. Most of the lots are close to minor creeks located in the gullies. Provided required setbacks are met there is deemed to be low risk involved with onsite wastewater and sensitive environmental features.

5. Conclusions

In conclusion, the land area examined is capable of supporting residential development provided that the identified landscape constraints are addressed with appropriate site-specific management strategies.

- The land surveyed is suitable for on site wastewater disposal utilising packaged treatment plants or other secondary treatment units.
- Based upon the modelling undertaken a lot size of 20ha would easily accommodate residential development and on-site wastewater disposal
- A range of minimum down slope setbacks from wastewater application areas have been recommended and should be utilised in the site-specific building and wastewater design phase.
- The variation in soil depth across lots must be considered in system design and secondary treatment of effluent is likely to be required with additional loam added to meet the required setback of 0.5m to bedrock.
- All earthworks on site must comply with AS3798-2007 and consideration should be given to drainage and sediment control on site during and after construction.
- The final approval for construction and wastewater disposal rests with the permit authority at the building approvals stage, and the recommendations in this report should not be viewed as blanket approval for any scale or type of residential development on each lot. Sites must be revisited for individual onsite wastewater assessments.
- The scale and type of residential development on each lot should therefore be appropriate to the environmental constraints of each lot – therefore I recommend that geotechnical information be provided to prospective purchasers to allow informed decisions.

It is my professional opinion that the land surveyed is suitable to support residential development and on-site wastewater without sustaining environmental harm.

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD
Environmental and Engineering Soil Scientist

Appendix 1 – Trench Summary Reports

GES P/L

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report

Site assessment for on-site waste water disposal

Assessment for	D.G. Potter Land Surveys	Assess. Date	28-Sep-23
		Ref. No.	
Assessed site(s)	Back Tea Tree Road, Tea Tree	Site(s) inspected	8-Sep-23
Local authority	Brighton	Assessed by	John Paul Cumming

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and system sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 600 (using the 'No. of bedrooms in a dwelling' method)
 Septic tank wastewater volume (L/day) = 200
 Sullage volume (L/day) = 400
 Total nitrogen (kg/year) generated by wastewater = 1.8
 Total phosphorus (kg/year) generated by wastewater = 1.1

Climatic assumptions for site

(Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	41	36	36	45	36	29	46	47	40	48	44	56
Adopted rainfall (R, mm)	41	36	36	45	36	29	46	47	40	48	44	56
Retained rain (Rr, mm)	33	29	29	36	29	23	37	38	32	38	35	45
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	97	81	62	27	13	6	-5	4	31	46	70	81
Annual evapotranspiration less retained rain (mm) =												514

Soil characteristics

Texture = Light Clay Category = 5 Thick. (m) = 0.6
 Adopted permeability (m/day) = 0.12 Adopted LTAR (L/sq m/day) = 2 Min depth (m) to water = 3

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site: All wastewater will be disposed of on the site
 The preferred method of on-site primary treatment: In a package treatment plant
 The preferred method of on-site secondary treatment: In-ground
 The preferred type of in-ground secondary treatment: None
 The preferred type of above-ground secondary treatment: None
 Site modifications or specific designs: Not needed

Suggested dimensions for on-site secondary treatment system

Total length (m) = 25
 Width (m) = 10
 Depth (m) = 0.2
 Total disposal area (sq m) required = 250
 comprising a Primary Area (sq m) of: 250
 and a Secondary (backup) Area (sq m) of:

Sufficient area is available on site

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The assigned DIR for the application area is 2.4L/m²/day requiring a minimum absorption area of 250sqm. Therefore the system will have the capacity to cope with predicted climatic and loading events.

GES P/L

Land suitability and system sizing for on-site wastewater management
Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report
Site assessment for on-site waste water disposal

Assessment for D.G. Potter Land Surveys	Assess. Date	28-Sep-23
	Ref. No.	
Assessed site(s) Back Tea Tree Road, Tea Tree	Site(s) inspected	8-Sep-23
Local authority Brighton	Assessed by	John Paul Cumming

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
	Expected design area	sq m	10,000	V. high	Very low		
	Density of disposal systems	/sq km	10	Mod.	Very low		
	Slope angle	degrees	10	High	Moderate		
	Slope form	Straight simple		High	Low		
	Surface drainage	Imperfect		High	Moderate		
	Flood potential	Site floods <1:100 yrs		High	Very low		
	Heavy rain events	Infrequent		High	Moderate		
	Aspect (Southern hemi.)	Faces N		V. high	Very low	Moderate	
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	600	High	Moderate	No change	
	SAR of septic tank effluent		1.2	High	Low		
	SAR of sullage		2.1	High	Moderate		
	Soil thickness	m	0.6	V. high	Moderate		
AA	Depth to bedrock	m	0.6	Mod.	Very high		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		7.0	High	Very low		
	Soil bulk density	gm/cub. cm	1.5	High	Low		
	Soil dispersion	Emerson No.	8	V. high	Very low		
	Adopted permeability	m/day	0.12	Mod.	Very low		
A	Long Term Accept. Rate	L/day/sq m	2	High	High		

To enter comments, click on the line below 'Comments' . (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

This site is limited by depth to bedrock therefore secondary treatment of effluent is required.

GES P/L

Land suitability and system sizing for on-site wastewater management
Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report
Site assessment for on-site waste water disposal

Assessment for D.G. Potter Land Surveys

Assess. Date 28-Sep-23

Ref. No.

Assessed site(s) Back Tea Tree Road, Tea Tree

Site(s) inspected 8-Sep-23

Local authority Brighton

Assessed by John Paul Cumming

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
	Cation exchange capacity	mmol/100g	100	High	Low		
	Phos. adsorp. capacity	kg/cub m	0.6	High	Moderate		
	Annual rainfall excess	mm	-514	High	Very low		
	Min. depth to water table	m	3	High	Very low		
	Annual nutrient load	kg	2.9	High	Very low		
	G'water environ. value	Agric non-sensit		V. high	Low		
	Min. separation dist. required	m	3	High	Very low		
	Risk to adjacent bores	Very low		V. high	Very low		
	Surf. water env. value	Agric non-sensit		V. high	Low		
A	Dist. to nearest surface water	m	70	V. high	High		
	Dist. to nearest other feature	m	31	V. high	Moderate	No change	
	Risk of slope instability	Very low		V. high	Very low		
AA	Distance to landslip	m	20	V. high	Very high		

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

There is low risk of environmental degradation associated with wastewater disposal at this site provided required setbacks are observed.

Appendix 2 – Bore Logs

Borehole 1

Depth (m)	Category	Horizon	Description
0.0 - 0.20	SM	A1	TOPSOIL – Silty SAND: dark brown, slightly moist to dry, medium dense
0.20 – 0.60	CI	B2	Sandy CLAY trace gravel: medium plasticity, grey, slightly moist, stiff
0.60 – 0.70	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on rock.

Borehole 2

Depth (m)	Category	Horizon	Description
0.0 - 0.20	SM	A1	TOPSOIL – Silty SAND: dark brown, slightly moist to dry, medium dense
0.20 – 0.80	CI	B2	Sandy CLAY trace gravel: medium plasticity, grey, slightly moist, stiff
0.80 – 0.85	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on rock.

Borehole 3

Depth (m)	Category	Horizon	Description
0.0 - 0.20	SM	A1	TOPSOIL – Silty SAND: dark brown, slightly moist to dry, medium dense
0.20 – 0.60	CI	B2	Sandy CLAY trace gravel: medium plasticity, grey, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on rock.

Borehole 4

Depth (m)	Category	Horizon	Description
0.0 - 0.20	SM	A2	Gravelly Sandy Silt (ML): yellow-grey, dry, very stiff, refusal on rock

Borehole 5

Depth (m)	Category	Horizon	Description
0.0 - 0.20	ML	A1	Sandy SILT: dark brown, slightly moist, stiff.
0.20 – 0.60	CI	B2	Sandy CLAY trace gravel: medium plasticity, orange, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on rock.

Borehole 6

Depth (m)	Category	Horizon	Description
0.0 - 0.10	SC	A2	Clayey SAND: yellow-grey, dry, very stiff, refusal on rock.

Borehole 7

Depth (m)	Category	Horizon	Description
0.0 - 0.20	MH	A1	Clayey SILT: medium plasticity, black, moist, soft.
0.20 – 0.60	CH	B2	Gravelly CLAY: medium plasticity, orange, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/brown, dry, dense to refusal on extremely weathered dolerite.

Borehole 8

Depth (m)	Category	Horizon	Description
0.0 - 0.05	MH	A1	Clayey SILT: medium plasticity, black, moist, soft.
0.05 – 0.45	CH	B2	Gravelly CLAY: medium plasticity, orange, slightly moist, stiff
0.45 – 0.50	GC	C	Clayey GRAVEL: orange/brown, dry, dense to refusal on extremely weathered dolerite.

Borehole 9

Depth (m)	Category	Horizon	Description
0.0 - 0.20	ML	A1	Clayey SILT: medium plasticity, black, moist, soft
0.20 – 0.60	CI	B2	Gravelly CLAY: medium plasticity, orange, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/brown, dry, dense to refusal on extremely weathered dolerite.

Borehole 10

Depth (m)	Category	Horizon	Description
0.0 - 0.20	ML	A1	Sandy SILT: dark brown, slightly moist, stiff.
0.20 – 0.60	CI	B2	Sandy CLAY trace gravel: medium plasticity, orange, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on rock.

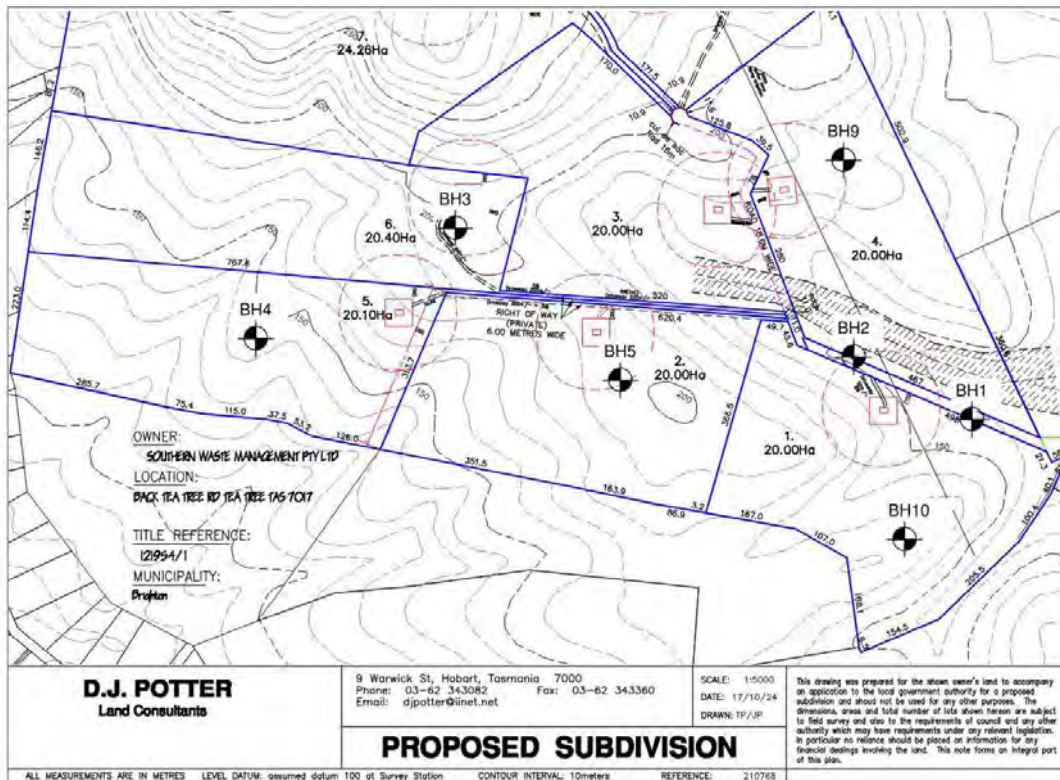
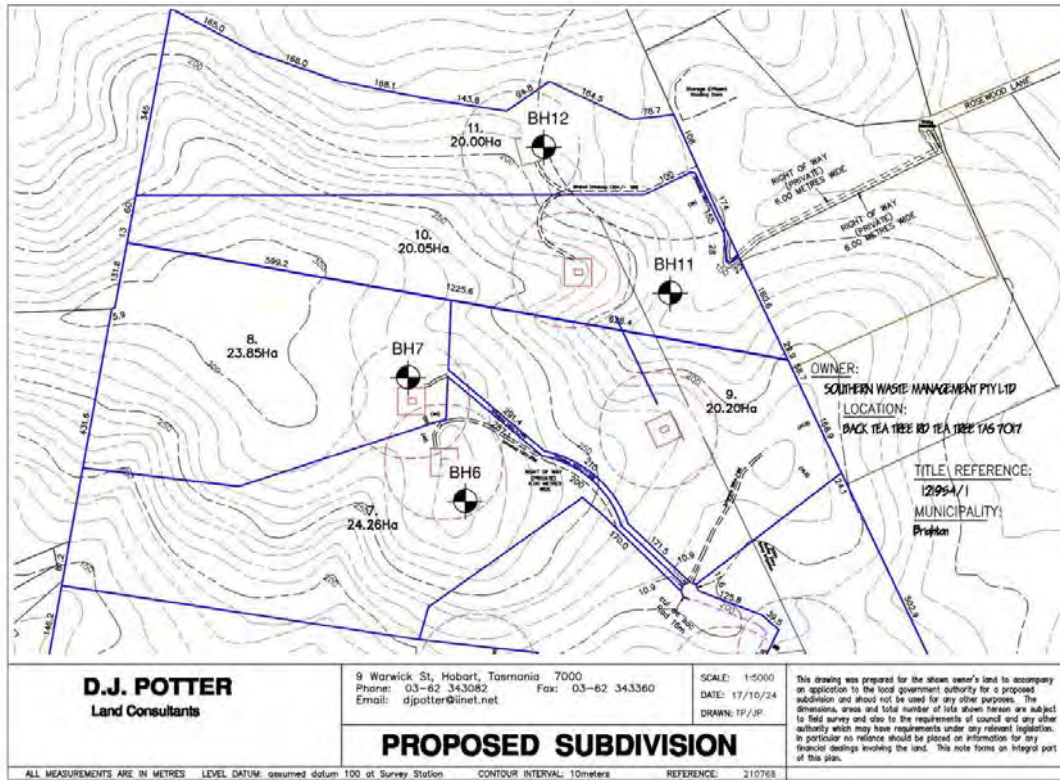
Borehole 11

Depth (m)	Category	Horizon	Description
0.0 - 0.20	ML	A1	Sandy SILT: dark brown, slightly moist, stiff.
0.20 – 0.70	CI	B2	Gravelly CLAY: medium plasticity, orange, slightly moist, stiff
0.70 – 0.80	GC	C	Clayey GRAVEL: orange/grey, dry, dense to refusal on extremely weathered dolerite.

Borehole 12

Depth (m)	Category	Horizon	Description
0.0 - 0.10	MH	A1	TOPSOIL – Silty SAND: dark brown, slightly moist to dry, medium dense
0.10 – 0.60	CH	B2	Gravelly CLAY: medium plasticity, orange, slightly moist, stiff
0.60 – 0.65	GC	C	Clayey GRAVEL: orange/brown, dry, dense to refusal on extremely weathered dolerite.

Appendix 3 – Test Hole Locations



Appendix 4 – Building Act 2016 Compliance

Acceptable Solutions	Performance Criteria	Compliance
<p>A1</p> <p>Horizontal separation distance from a building to a land application area must comply with one of the following:</p> <ul style="list-style-type: none"> a) be no less than 6m; or b) be no less than: <ul style="list-style-type: none"> (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building. 	<p>P1</p> <ul style="list-style-type: none"> a) The land application area is located so that <ul style="list-style-type: none"> (i) the risk of wastewater reducing the bearing capacity of a building’s foundations is acceptably low.; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation 	<p>Complies with A1 (a)</p> <p>Land application area can be located with minimum separation distance of 6m from buildings.</p>
<p>A2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b)</p> <ul style="list-style-type: none"> (a) be no less than 100m; or (b) be no less than the following: <ul style="list-style-type: none"> (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface 	<p>P2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with all of the following:</p> <ul style="list-style-type: none"> a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. 	<p>Surface irrigation Complies with A2 (b) Land application area can be located with minimum separation distance 100m from surface water</p> <p>Subsurface irrigation Complies with A2 (b) (ii) Land application area can be located with minimum separation distance 45m from surface water.</p>

GES – Onsite Wastewater Assessment – - Back Tea Tree Road Tea Tree

<p>A3</p> <p>Horizontal separation distance from a property boundary to a land application area must comply with either of the following:</p> <p>(a) be no less than 40m from a property boundary; or</p> <p>(b) be no less than:</p> <p style="padding-left: 40px;">(i) 1.5m from an upslope or level property boundary; and</p> <p style="padding-left: 40px;">(ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or</p> <p style="padding-left: 40px;">(iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.</p>	<p>P3</p> <p>Horizontal separation distance from a property boundary to a land application area must comply with all of the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and</p> <p>(b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.</p>	<p>Complies with A3 (b) (i) Land application area can be located with a minimum separation distance of 1.5m from an upslope or level property boundary</p> <p>Complies with A3 (b) (iii) Land application area can be located with a minimum separation distance of 21.5m of downslope property boundary</p>
<p>A4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient.</p>	<p>P4</p> <p>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and</p> <p>(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable</p>	<p>Complies with A4 No bore or well identified within 50m</p>

GES – Onsite Wastewater Assessment – - Back Tea Tree Road Tea Tree

<p>A5</p> <p>Vertical separation distance between groundwater and a land application area must be no less than:</p> <p>(a) 1.5m if primary treated effluent; or</p> <p>(b) 0.6m if secondary treated effluent</p>	<p>P5</p> <p>Vertical separation distance between groundwater and a land application area must comply with the following:</p> <p>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and</p> <p>(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable</p>	<p>Complies with A5 (b)</p> <p>No groundwater encountered</p>
<p>A6</p> <p>Vertical separation distance between a limiting layer and a land application area must be no less than:</p> <p>(a) 1.5m if primary treated effluent; or</p> <p>(b) 0.5m if secondary treated effluent</p>	<p>P6</p> <p>Vertical setback must be consistent with AS/NZS1547 Appendix R.</p>	<p>Complies with A6 (b)</p> <p>No limiting layer identified</p>
<p>A7</p> <p>nil</p>	<p>P7</p> <p>A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties</p>	<p>Complies</p>



GEO-ENVIRONMENTAL
SOLUTIONS

LANDSLIP RISK ASSESSMENT

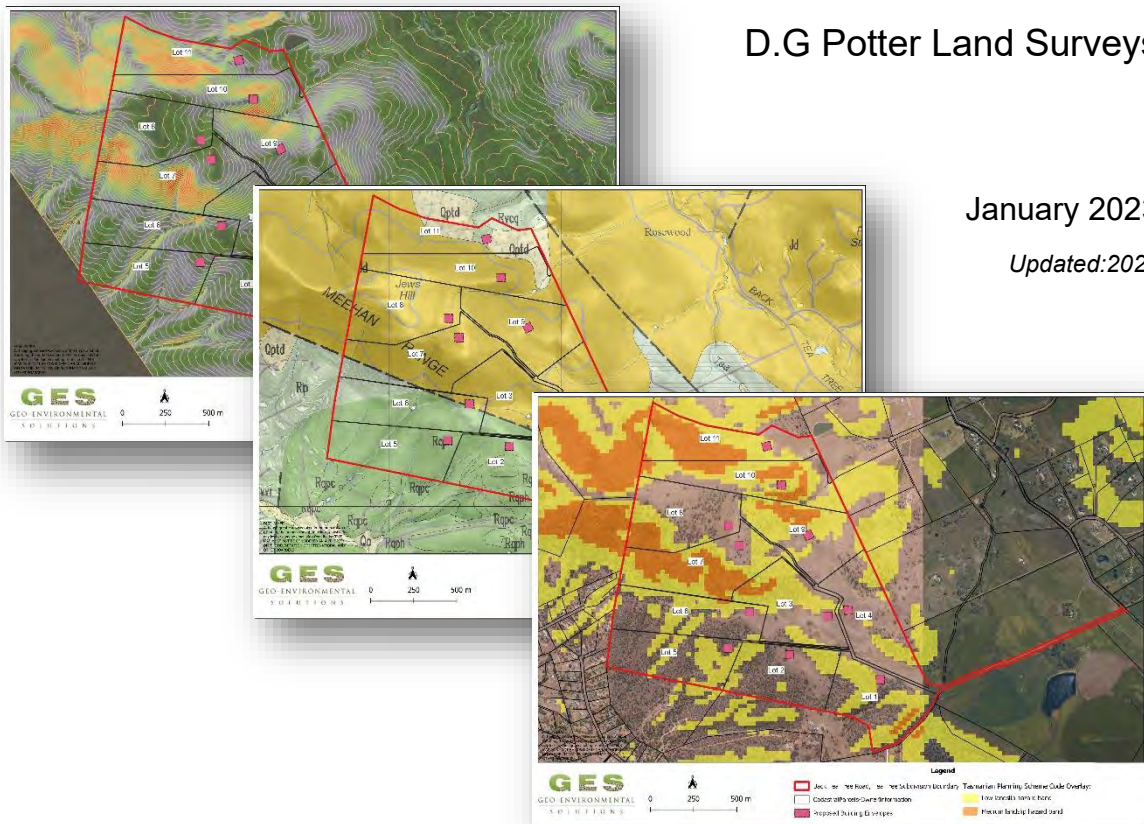
Project: Back Tea Tree Road Subdivision, Tea Tree TAS 7017

CLIENT

D.G Potter Land Surveys

January 2023

Updated:2024



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DOCUMENT CONTROL RECORD.....	2
1 Introduction	5
2 Objectives	5
3 Site Details.....	5
3.1 Project Area Land Title	5
4 Planning.....	7
4.1 Australian Building Code Board.....	7
4.2 The Tasmanian Building Regulations 2016	7
4.3 Tasmanian Planning Scheme Overlay – Brighton Council.....	8
4.3.1 Landslip Overlay	8
4.4 Site and Proposed Works	9
4.5 Development & Works Acceptable Solutions	10
4.5.1 Landslip Hazard Code (LHC)	10
4.6 Development Performance Criteria	10
5 Site Mapping.....	10
5.1 Site Geology.....	10
5.2 Site Geomorphology	11
5.3 Field Investigation	12
6 Landslip Hazard and Risk Analysis.....	13
6.1 Hazard Analysis	13
6.1.1 Landslip Characteristics	13
6.1.2 Frequency Analysis	13
6.2 Risk Analysis	14
6.2.1 Risk to Property	14
6.2.2 Risk to Life.....	15
7 Conclusions and Recommendations	16
8 References.....	17
Appendix 1 - Acceptable & Performance Solutions	18
Appendix 2 - Quantitative Risk Assessment Tables.....	19
Appendix 3 - Qualitative Risk Assessment	25
Appendix 4 – Batter Angles for Embankment	26

Tables

Table 1 Typical Soil Profile Summary..... 12
Table 2 Frequency analysis for Landslip hazards 1 & 3 13
Table 3 Consequence analysis for landslip hazards 14
Table 4 Quantitative consequence analysis for landslip hazards – Life – Treated Risk – Scenarios 1 and 3 15

Figures

Figure 1 Regional Location of Project Area (The LIST) 6
Figure 2 Local Project Area Setting (The LIST) 6
Figure 3 Proposed Development with Landslip Overlay of the Site (The LIST) 9
Figure 4 Plans for proposed lots..... 10
Figure 5. Geological Map of Site (1:25,000 scale Geology Map of Tea Tree) 11
Figure 6. Slope Angle Map generated using Brighton 2014 LiDAR data. 12

1 Introduction

Geo-Environmental Solutions Pty Ltd (GES) were contracted by D.G. Potter Land Surveys to provide geotechnical assessment to assess landslip risk for a proposed subdivision at Tea Tree, which lays within Tasmanian Planning Scheme - Brighton Council mapped low landslip zone.

The proposed development is located at cadastral title (CT 121954/1) at Back Tea Tree Road, Tea Tree (The Site). GES are to undertake this geotechnical assessment relating to the proposed new subdivision development in conjunction with the requirements of the Landslip Hazard Code, part of the Tasmanian Planning Scheme - Brighton Council. GES have written this report with reference to the Australian Geomechanics Guidelines (AGS 2007) and following the Directors Determination – Landslip Hazard Areas (Version 1.1, 12 April 2021)

GES have undertaken this assessment through using site observations and investigation, photographs and publicly available datasets. Estimations are determined by approximation with regional information applied where appropriate to site specific information. Data collection and site-specific modelling was undertaken in assessment of the site.

2 Objectives

The objective of the site investigation is to:

- Identify the requirements of the Landslip Hazard Code;
- Conduct a landslip risk assessment of the proposed developments excavations with reference to the Australian Geomechanics Society (AGS) *Landslide Risk Management (2007) guidelines*;
- Identify which codes need to be addressed in terms of landslip and identify the relevant performance criteria relevant to the project which need addressing;
- Conduct a site risk assessment for the proposed subdivision ensuring relevant performance criteria are addressed; and
- Where applicable, provide recommendations on remediation of the earthworks to ensure safe slope management.

3 Site Details

3.1 Project Area Land Title

The land studied in this report is defined by the following title reference:

- CT 121954/1 (Figure 1 and Figure 2)

This parcel of land is referred to as the 'Site' and/or the 'Project Area' in this report.

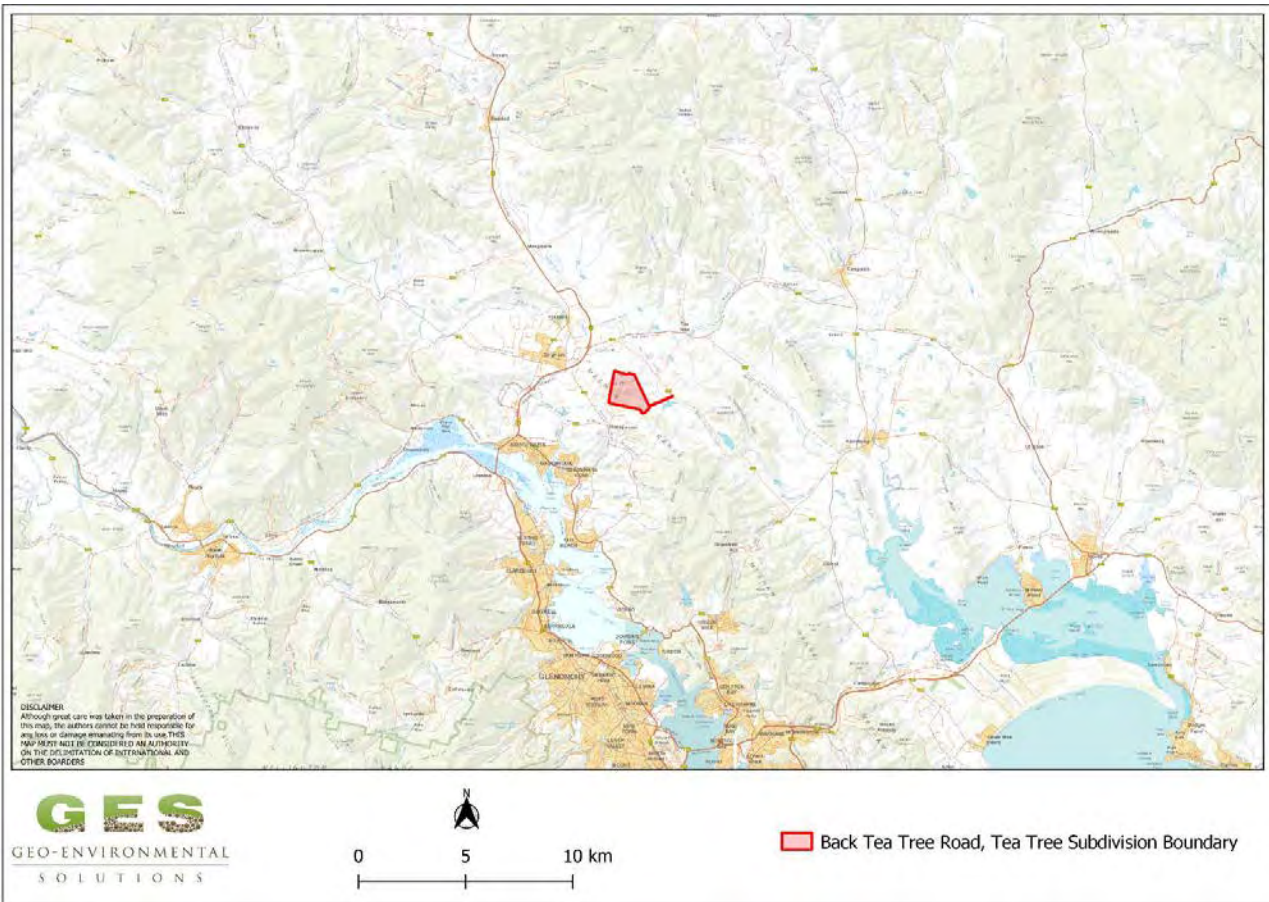


Figure 1 Regional Location of Project Area (The LIST)

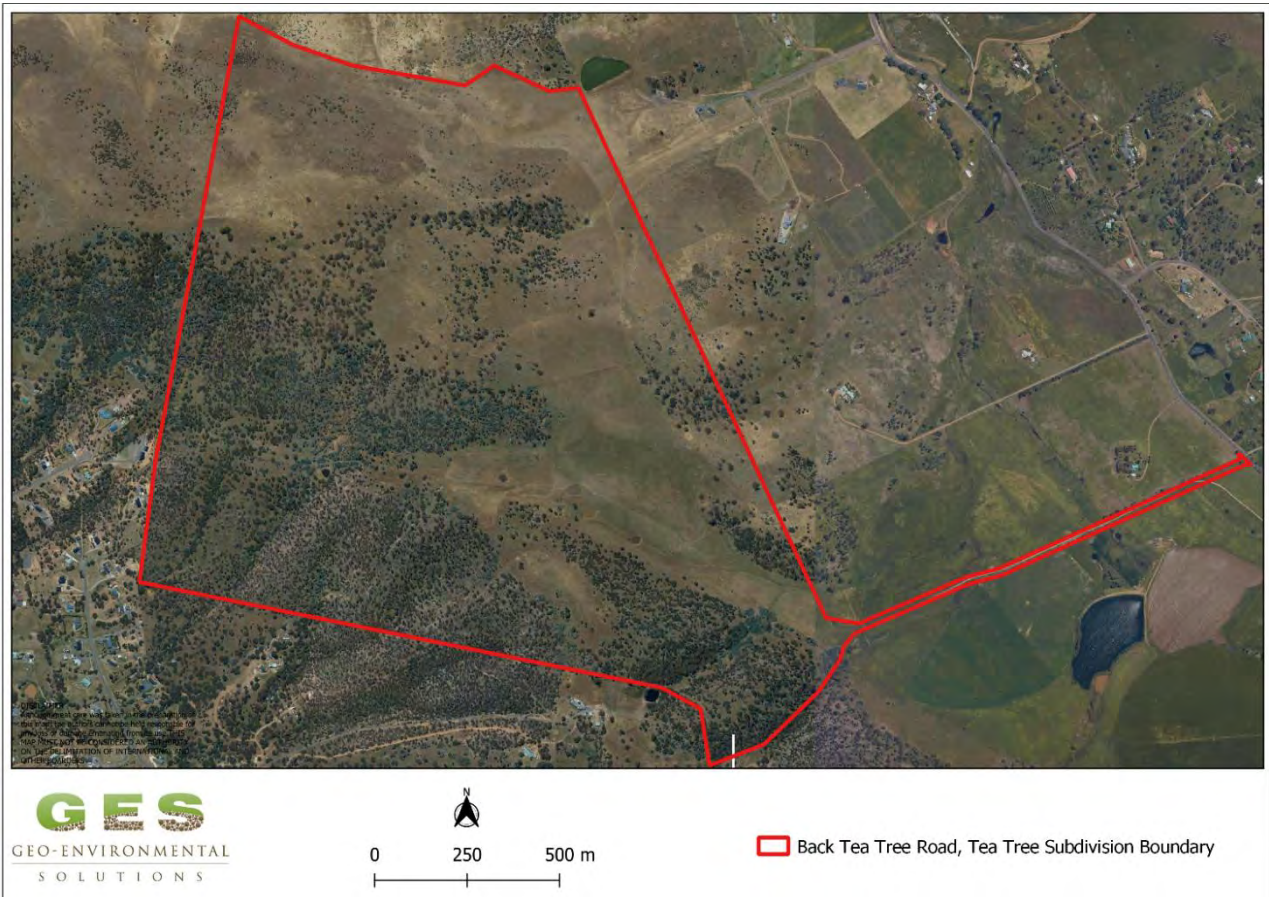


Figure 2 Local Project Area Setting (The LIST)

4 Planning

4.1 Australian Building Code Board

This report presents a summary of the overall site risk to landslip hazards. This assessment has been conducted for the year 2068 which is representative of a 'normal' 50-year building design life category.

Per the Australian Building Code Board (ABCB 2015), when addressing building minimum design life:

'The design life of buildings should be taken as 'Normal' for all building importance categories unless otherwise stated.'

As per Table 3-1, the building design life is 50 years for a normal building.

Table 3-1 Design life of building and plumbing installations and their components

Building Design Life Category	Building Design Life (years)	Design life for components or sub systems readily accessible and economical to replace or repair (years)	Design life for components or sub systems with moderate ease of access but difficult or costly to replace or repair (years)	Design life for components or sub systems not accessible or not economical to replace or repair (years)
Short	1 < dl < 15	5 or dl (if dl<5)	dl	dl
Normal	50	5	15	50
Long	100 or more	10	25	100

Note: Design Life (dl) in years

4.2 The Tasmanian Building Regulations 2016

Building in hazardous areas

As outlined in the Department of Justice web site:

http://www.justice.tas.gov.au/building/building-and-plumbing/building_in_hazardous

Hazardous areas include areas which are bushfire prone, comprise reactive soils or substances, or are subject to coastal erosion, coastal flooding, riverine flooding, and landslip.

59. Landslip hazard areas

- 1) For the purposes of the Act, land is a landslip hazard area if –
 - a. the land is shown on a planning scheme overlay map as being land that is within a landslip hazard area; and
 - b. the land is classified as land within a hazard band of a landslip hazard area.
- 2) For the purposes of the definition of hazardous area in section 4(1) of the Act –
 - a. classification under a landslip determination as being land that is within a hazard band of a landslip hazard area is a prescribed attribute; and
 - b. a landslip hazard area is a hazardous area.

60. Works in landslip hazard areas

- 1) A person must not perform work in a landslip hazard area unless he or she is authorised to do so under the Act.
- 2) A responsible person for work being performed in a landslip hazard area must ensure that the work is being performed in accordance with the Act and the landslip determination.
- 3) A person performing work in a landslip hazard area must ensure that the work complies with the Act and the landslip determination.

61. Significant works in landslip areas

- 1) In this regulation – significant work includes the following work:
 - a. excavation equal to or greater than one metre in depth, including temporary excavations for the installation or maintenance of services and pipes;
 - b. excavation or depositing of material greater than 100 cubic metres, whether or not the material is sourced on the site or imported;
 - c. felling, or removal, of vegetation, over a contiguous area greater than 1 000 square metres;
 - d. the collection, pooling or storage of water in a dam, pond, tank or swimming pool with a volume greater than 45 000 litres;
 - e. removal, redirection or introduction of drainage for surface water or subsoil water;
 - f. discharge of stormwater, sewage, water storage overflow or other wastewater.
- 2) A person must not perform significant work as part of permit work, or notifiable plumbing work, in a landslip hazard area unless the relevant permit authority has authorised the significant work in writing.
- 3) A person must not perform significant work as part of notifiable building work or notifiable demolition work, in a landslip hazard area unless the relevant building surveyor for the notifiable work has authorised the significant work in writing.
- 4) A person must not perform significant work not covered by sub regulation (2) or (3) in a landslip hazard area unless –
 - a. the person has written authorisation under sub regulation (2) or (3) to perform the work; or
 - b. the relevant general manager has given written authorisation for the work.
- 5) For the avoidance of doubt, a written authorisation by a permit authority, or building surveyor, under this regulation may form part of a document issued or given under the Act by the permit authority, or building surveyor, in respect of the relevant work.

4.3 Tasmanian Planning Scheme Overlay – Brighton Council

4.3.1 Landslip Overlay

The proposed subdivision development lays approx. 45% within the low and medium landslip hazard overlay. However, only proposed building envelopes of Lots 1, 6, 9, 10 and 11 are within this overlay. The areas with no landslip hazard overlay are associated with slope angles <11° and the low landslip hazard overlay, consists of slope angles between 11° and 20° within the low landslip overlay as defined by the Tasmanian Planning Scheme – Brighton Council Overlay Mapping (Figure 3).

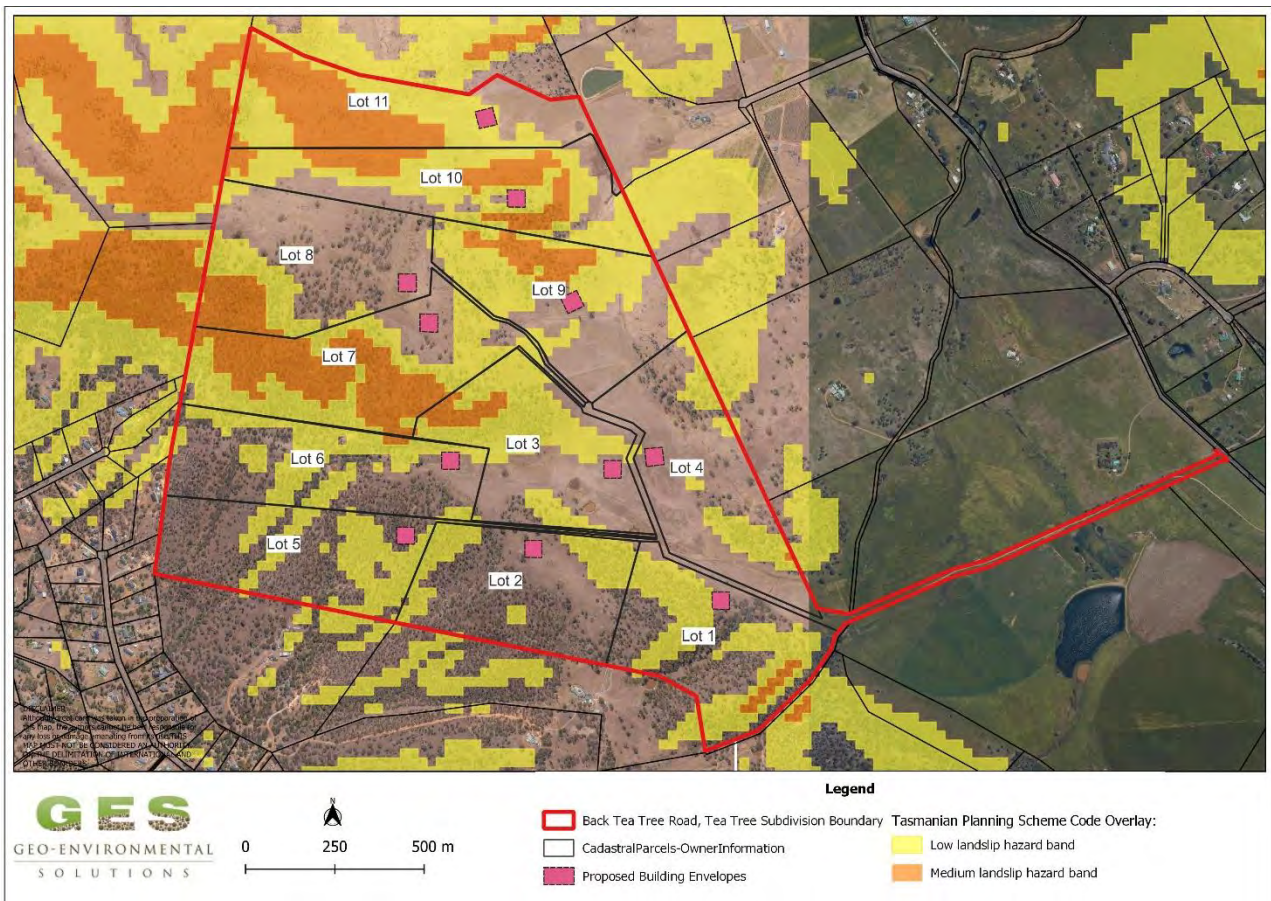


Figure 3 Proposed Development with Landslip Overlay of the Site (The LIST)

4.4 Site and Proposed Works

The project site is situated in the rural locality of Tea Tree, approximately 10 kilometers northeast of the town of Brighton. The site spans approximately 231.8 hectares and currently there are no existing buildings or structures. The planned subdivision aims to create 11 lots, each of which will be larger than 20 hectares in size.

For access, the subdivision will incorporate two driveways. The first driveway is the existing access point located on the southeast corner of the site, which will provide access to Lots 1 through Lot 9. The second access driveway will be positioned on the northeast side of the subdivision, primarily serving Lots 10 and 11. Both of these access points will connect directly to Tea Tree Road.

Plans have been provided to GES from D.G.J Potter (Reference:210768, Dated 14/09/2021 (Figure 4).

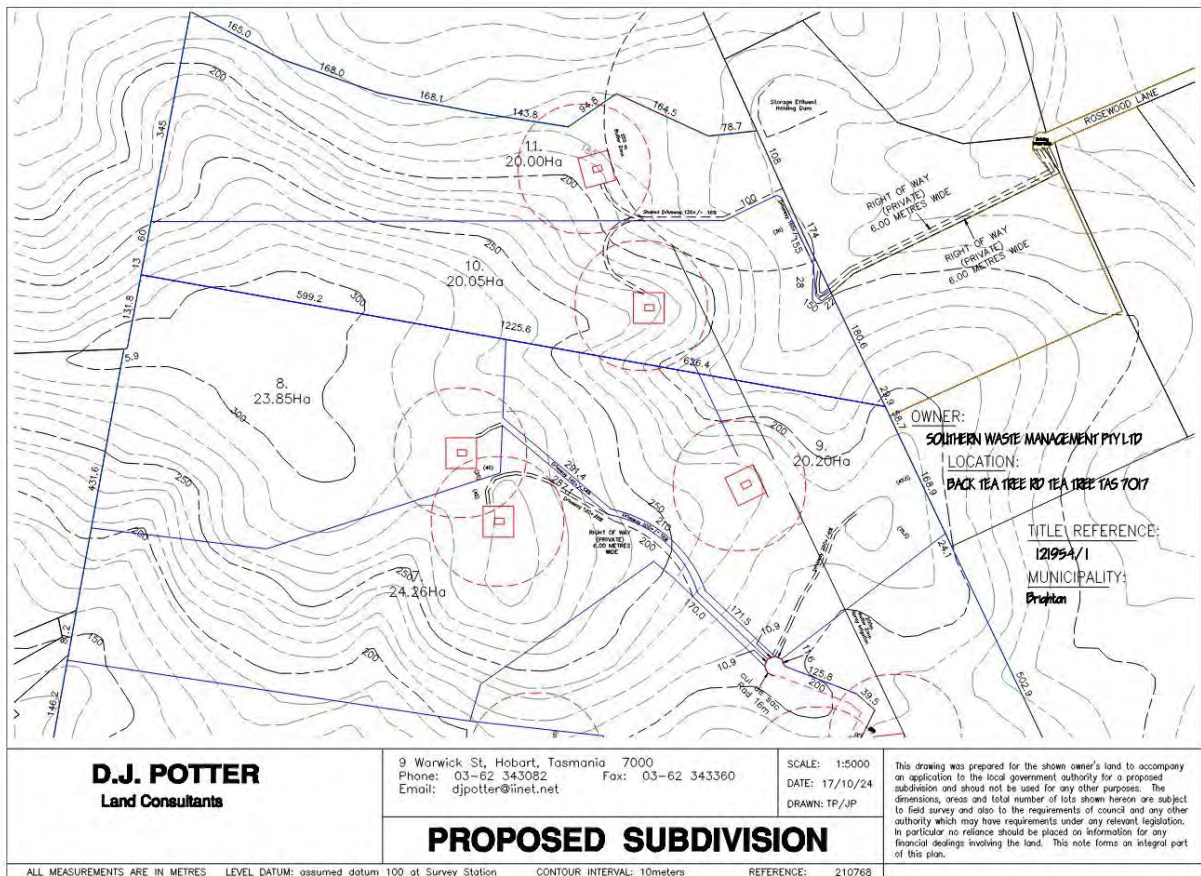


Figure 4 Plans for proposed lots

4.5 Development & Works Acceptable Solutions

Where applicable, the need for further performance criteria compliance is outlined in Appendix 1.

4.5.1 Landslip Hazard Code (LHC)

Given that the proposed subdivision development resides in Landslip Hazard Areas, the code C15.7.1 performance criteria will need to be addressed.

4.6 Development Performance Criteria

The following performance criteria need to be addressed:

- C15.7.1 P1

5 Site Mapping

5.1 Site Geology

The majority of the proposed subdivision is located on the Jurassic Dolerite. The geological map for the site has been presented in Figure 5. Based on the MRT 1:25,000 Mineral Resources Tasmania (MRT) mapping (Sheet Name: Tea Tree), the proposed site covered by three different types of geology:

Jurassic (Map Unit: Jdl) - Dolerite and related rocks

Permian – Triassic (Map Unit: Rlp) - Dominantly medium-course-grained sandstone, minor mudstone, minor mica and feldspar content, contains clay pellet beds, sandstone to mudstone ratio is 3:1 or less.

Permian - Triassic (Map Unit: Rqph) - Freshwater predominantly cross-bedded quartzose to feldspathic sandstone commonly with overturned cross-bedding, subordinate siltstone with sparse plant and vertebrate fossils (Knocklofty Formation).

Quaternary (Map Unit: Qptd) - Talus consisting dominantly of dolerite boulders.

Triassic (Map Unit: Rvcg) - Thickly- to thinly-bedded volcanic lithic sandstone, siltstone, mudstone and coal seams, fossil plants on some horizons (Newtown Coal Measures).

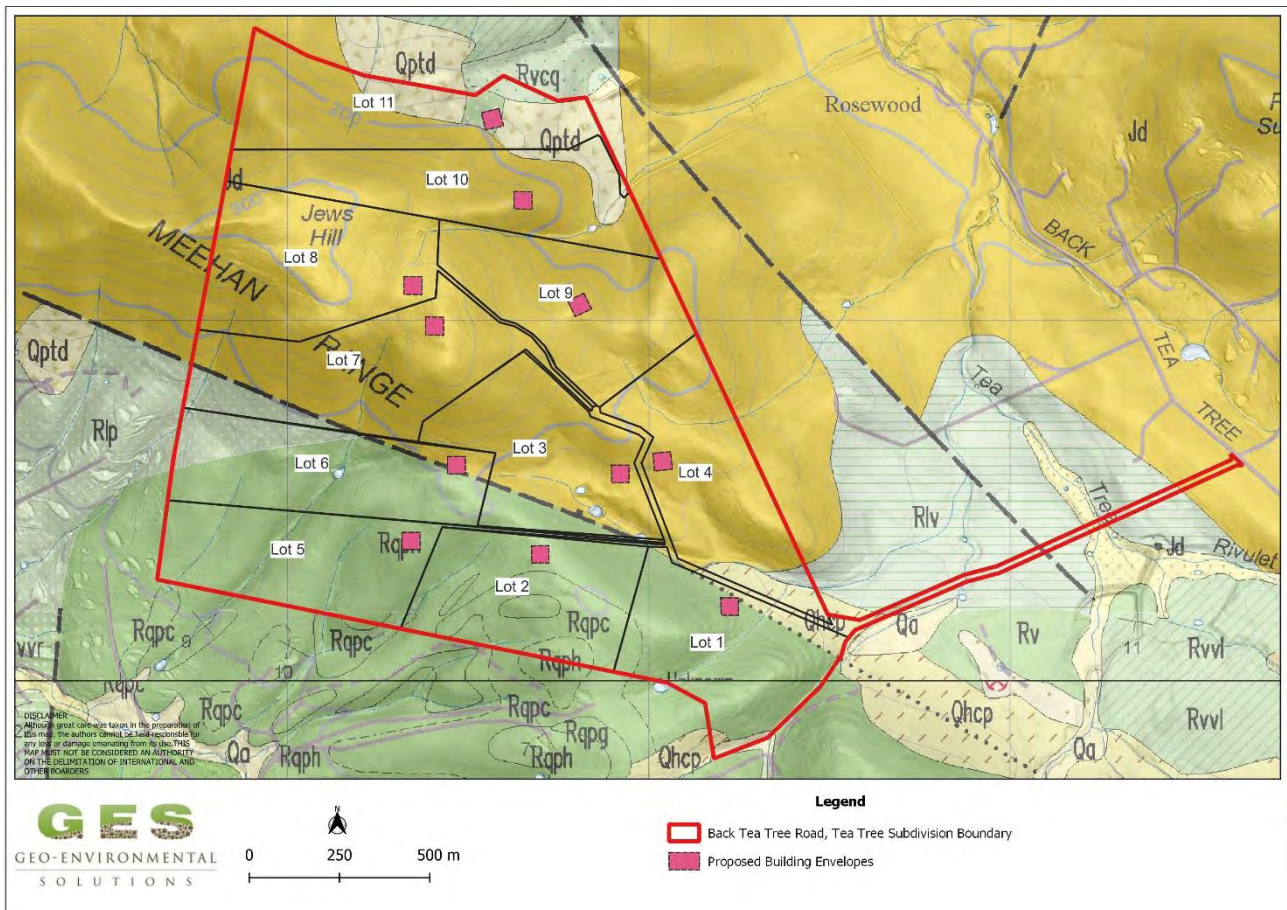


Figure 5. Geological Map of Site (1:25,000 scale Geology Map of Tea Tree)

5.2 Site Geomorphology

The proposed subdivision is situated on a hilly terrain with a few gullies, with the site's slopes being linked to Jews Hill, a part of the Meehan Range. The natural slopes of each individual lot vary significantly. Lots 1, 2, and 5 have slopes that extend from the Meehan Range. Lot 1's building envelope is positioned at the top of the hill, while Lots 2 and 5 are situated on south-facing slopes. On the opposite side of the subdivision, where proposed Lots 10 and 11 are located, the slopes extend from Jews Hill. The building envelope for Lot 10 is in close proximity to a tributary and an existing dam, and it is recommended to slightly relocate the building upslope. Lot 11 is situated on northeast-facing slopes. The proposed building envelopes exhibit varying degrees of gentle to moderate slopes. Although some sections of the subdivision have slopes exceeding 20 degrees, it is important to note that no proposed works are planned for these areas. Due to the topography of the subdivision, there are several tributaries present on the site. Figure 6 presents a slope

angles and hill shade map of the site showing areas of steep slope angles in purple which has been generated using QGIS software based on the Brighton 2014 LiDAR.

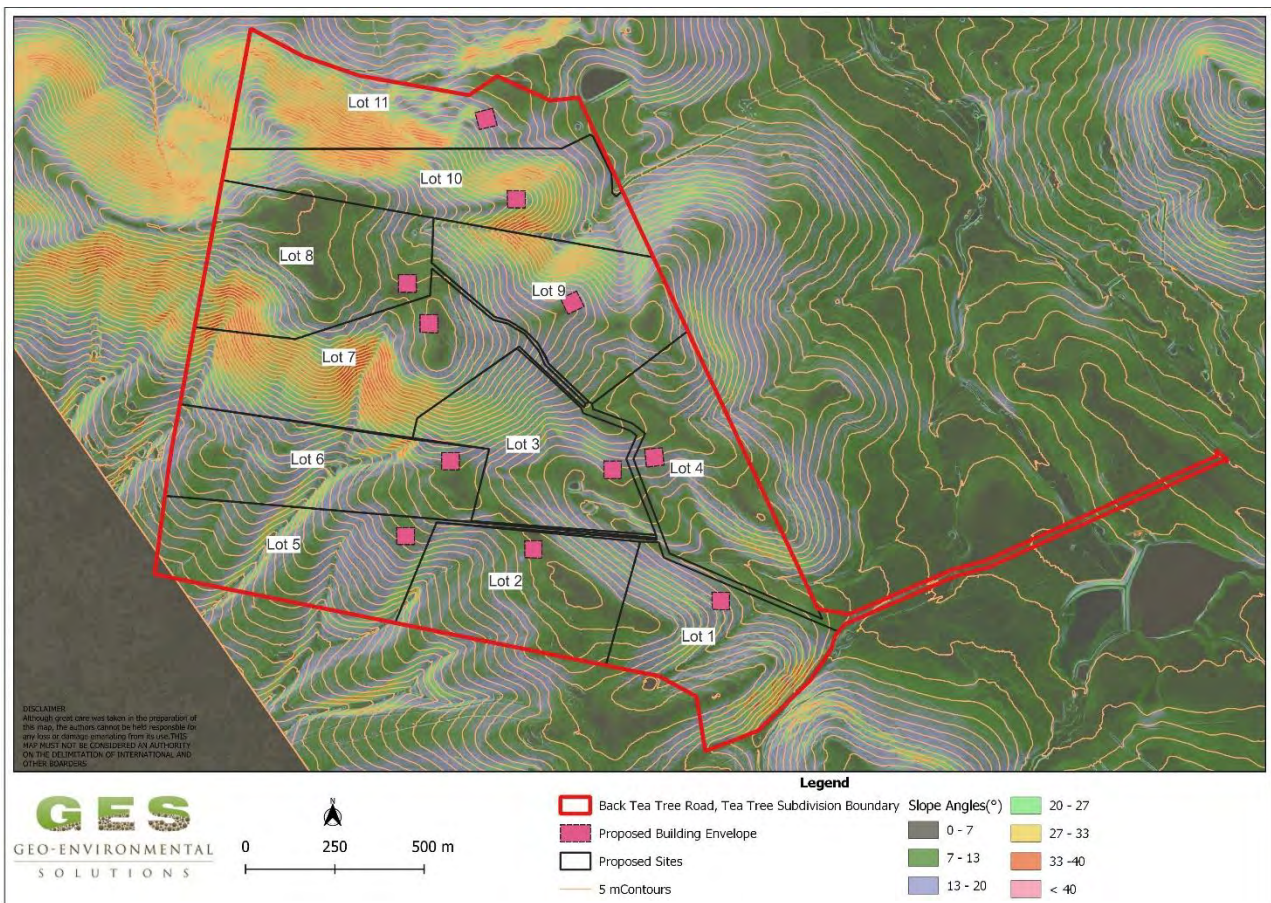


Figure 6. Slope Angle Map generated using Brighton 2014 LiDAR data.

5.3 Field Investigation

A number of test holes were completed by GES to identify the distribution of and variation in soil materials on the site. Soils on the site are developing from Triassic Sandstone and Jurassic Dolerite that consists of medium plasticity clays. Refusal was encountered on rock in all test locations at depths ranging 0.00mgsb to 0.8mgsb. Some parts of the subdivision are exposed by rock at the surface. The site is predominantly covered with residual soils, and appears stable in its present form, with no evidence of potential instability due to unconsolidated sediments/boulders. The table 1 below contains a typical soil profile from subsurface investigations undertaken of the subdivision.

Table 1 Typical Soil Profile Summary

Depth (m)	USCS	Description
0.00 – 0.20	SM	<i>TOPSOIL – Silty SAND: dark brown, slightly moist to dry, medium dense</i>
0.20 – 0.60	CI	<i>Sandy CLAY trace gravel: medium plasticity, grey, slightly moist, stiff</i>
0.60 - 0.80	GC	<i>Clayey GRAVEL: orange/grey, dry, dense to refusal.</i>

6 Landslip Hazard and Risk Analysis

The following risk assessment is based upon the Australian Geomechanics Society Sub-committee report (March 2007) Landslide Risk Management Concepts and Guidelines. *Australian Geomechanics Journal 35 (1) p49-92*. The geotechnical risk associated with residential development on the site is classified as **Low** according to *Australian Geomechanics Society Guidelines*.

6.1 Hazard Analysis

6.1.1 Landslip Characteristics

Based on the slope characteristics including site geology, slope geometry and slope angles, MRT landslip mapping/inventory and site observations, the following scenario has been identified as an existing and potential slope failure mechanism for the site:

- **Scenario 1** – Shallow translational slide failure within shallow residual soils immediately below the estimated dwellings from removal of vegetation with potential for regression;
- **Scenario 2** – Shallow translational slide within shallow residual soils in cuttings above development, caused by oversteepening of natural soil slopes, with no allowance for drainage;
- **Scenario 3** - Shallow translational slide within natural soils and fill materials caused by loading of natural soil slopes and unstable batter angles, with no allowance for drainage;

6.1.2 Frequency Analysis

Table 2 presents the frequency analysis for the identified slope failure mechanisms. Terminology used is in accordance with the Australian Geomechanics Society (AGS) guidelines for Landslip risk management (2007a,b,c,d) (Table 2).

Table 2 Frequency analysis for Landslip hazards 1 & 3

Scenario	Failure Mechanism	Unit Affected	Observed in the field	Potential Size	Potential Speed	Water Content	Current Likelihood	Treated Likelihood
Scenario 1	Shallow translational slide - residual soils from removal of vegetation with potential regression	Surficial residual soils	No	Small with potential regression upslope towards dwelling	Slow to moderate	Wet/saturated	Possible	Unlikely
Scenario 2	Shallow translational slide - cut	Over-steepened surficial residual soils	No	Small	Slow to moderate velocities	Wet/saturated	Possible	Unlikely
Scenario 3	Shallow translational slide - fill	Potential fill	No	Small	Slow to moderate	Wet/Saturated	Possible	Unlikely

6.2 Risk Analysis

6.2.1 Risk to Property

Risk has been considered for the proposed development pre and post construction. The risk for Scenarios 1 and 3 has been considered for during and post construction. The untreated risk for Scenarios 1 and 3 is low to moderate with treatment both can be reduced to 'Low' (Table 3).

Table 3 Consequence analysis for landslip hazards

Scenario	Issue	Current Risks			Recommended risk treatment	Post Treatment Risk
		Likelihood of occurrence	Consequence to property	Level of risk to property		
Scenario 1	Shallow Slide Failure	Possible	Medium	Moderate	All proposed development to have site soil class assessment for residential dwellings as per AS2870-2011 foundations for all residential dwellings. Foundations of the proposed dwellings should be extended into underlying bedrock and designed in accordance with good hillside construction practices should be adopted as per Australian Geoguide LR8. Lots within a landslip area should be assessed for specific landslip risk during the development application stage for each proposed dwelling.	Low
Scenario 2	Shallow Slide Failure	Possible	Minor	Low	Cut slopes for the construction of titles should be constructed using the following slope angles: <ul style="list-style-type: none"> • Residual Soils – 1V: 2H; and • Rock - 1V: 1H. Alternatively, slopes can be retained using suitably engineered retaining walls. All cutting should include a cut-off v-drain above the cutting and a graded toe drain immediately below the cutting face. Cutting for the lots within a landslip area should be assessed at the development application stage.	Low
Scenario 3	Shallow Slide Failure	Possible	Minor	Moderate	Prior to placement of proposed fill all topsoil should be stripped from the fill pad footprint and benches should be keyed into the slope (preferably onto underlying bedrock). Fill batter angles should not exceed 1V: 3H and fill heights should not exceed 2.0m without prior assess that should be conducted from specific plans/volumes.Good hillside construction practices should be adopted as per Australian Geoguide LR8.	Low

6.2.2 Risk to Life

The risk to life has been assessed for the scenarios listed above (Table 4). The risk to life is generally considered acceptable for Scenarios 1 and 3 after implementing the recommended risk treatments.

Table 4 Quantitative consequence analysis for landslip hazards – Life – Treated Risk – Scenarios 1 and 3

Hazard	Scenario 1	Scenario 2	Scenario 3
Factor	Shallow Translational Slide - Residual Soils from Removal of Vegetation with Potential Regression	Shallow Slope Failure – Cut	Shallow Slope Failure - Fill
Likelihood	Unlikely	Unlikely	Unlikely
Indicative Annual Probability	0.001	0.001	0.001
Use of Affected Structure/Site	Residential Property – Assumed 50%	Residential Property – Assumed 10%	Residential Property – Assumed 10%
Probability of Spatial Impact	0.5	0.1	0.1
Probability of Not Evacuating	Residual soils should exhibit signs of stress (tension cracking prior to failure), resulting in time for evacuation and/or remediation. 0.3	Anticipated failure volumes <20m ³ 0.2	Fill batters and residual soils should exhibit signs of stress (tension cracking prior to failure), resulting in time for evacuation and/or remediation. 0.3
Vulnerability	Structure unlikely to collapse 0.3	Expected volumes unlikely to cause death. 0.3	Structure unlikely to collapse
Risk for Person Most at Risk	2.25x10 ⁻⁵	6.0 x10 ⁻⁵	3X10 ⁻⁵

Note 1 It has been assumed that each person has an equal probability of death for each of the hazards. Societal risk has not been assessed.

7 Conclusions and Recommendations

Based on the observations made during the investigation and the outcome of the hazard analysis and risk assessment, the following conclusions are made:

- Only the proposed building envelopes of Lots 1, 6, 9, 10 and 11 which are in consists of slope angles between 11° and 20° within the low landslip overlay as defined by the Tasmanian Planning Scheme – Brighton Council Mapping.
- The soils on site consist of moderately reactive silty sand/clayey gravel mixture. Refusal was encountered on rock in all test locations at depths ranging 0.00mgsb to 0.8mgsb.
- Foundations of the future dwellings should be extended into underlying bedrock and designed in accordance with good hillside construction practices should be adopted as per Australian Geoguide LR8.
- According to “AS2870-2011 Residential slabs & footings” indicative soil classification for lots within a landslip area (Lots 1, 6, 9, 10 and 11) are Class P due to landslip risk. As such, specific assessment for site soil class and landslip risk will need to be conducted at the development application stage for each lot, once house plans are produced.
- Cutting for the lots within a landslip area should be assessed at the development application stage.
- Cut slopes for the construction of titles should be constructed using the following slope angles:
 - Residual Soils – 1V: 2H; and
 - Bedrock - 1V: 1H.
 - Alternatively, slopes can be retained using suitably engineered retaining walls.
- All cutting must include adequate drainage.
- Prior to placement of proposed fill all topsoil should be stripped from the fill pad footprint and benches should be keyed into the slope (preferably onto underlying bedrock).
- Fill batter angles should not exceed 1V: 3H and fill heights should not exceed 2.0m without prior assessment that should be conducted from specific plans/volumes.
- All earthworks on site must comply with AS3798-2007 and a sediment and erosion control plan should be implemented on site during and after construction.
- Good hillside construction practices should be adopted as per Australian Geoguide LR8.
- The proposed works will not cause or contribute to landslide on the site, adjacent land, or on public infrastructure the recommendations are followed.
 - The development is compliant with section 15.7.1 of the Planning Scheme as it represents a tolerable risk for the life of the use and development.

GES should be contacted immediately should conditions greatly differ to that which are stated in this report.

8 References

- AGS (2007a). Guideline for Landslide Susceptibility, Hazard and Risk Zoning. Australian Geomechanics, Vol 42 No 1 March 2007
- AGS (2007b). Commentary on Guideline for Landslide Susceptibility, Hazard and Risk Zoning. Australian Geomechanics, Vol 42 No 1 March 2007
- AGS (2007c). Practice Notes Guidelines for Landslide Risk Management. Australian Geomechanics Vol 42 No 1 March 2007
- AGS (2007d). Commentary on Practice Notes Guidelines for Landslide Risk Management. Australian Geomechanics Vol 42 No 1 March 2007
- AGS (2007e). The Australian Geoguides for Slope Management and Maintenance. Australian Geomechanics Vol 42 No 1 March 2007
- Calver, C.R. (compiler) 2010. Digital Geological Atlas 1:25 000 Scale Series. Sheet 5225 Hobart. Mineral Resources Tasmania.

Appendix 1 - Acceptable & Performance Solutions

Landslip Code Areas

C15.7.1 Subdivision within a landslip hazard area

Objective:	
That subdivision within a landslip hazard area does not create an opportunity for use or development that cannot achieve a tolerable risk from a landslip.	
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within a landslip hazard area, must:</p> <ul style="list-style-type: none"> (a) be able to contain a building area, vehicle access, and services, that are wholly located outside a landslip hazard area; (b) be for the creation of separate lots for existing buildings; (c) be required for public use by the Crown, a council or a State authority; or (d) be required for the provision of Utilities. 	<p>P1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within a landslip hazard area must not create an opportunity for use or development that cannot achieve a tolerable risk from landslip, having regard to:</p> <ul style="list-style-type: none"> (a) any increase in risk from a landslip for adjacent land; (b) the level of risk to use or development arising from an increased reliance on public infrastructure; (c) the need to minimise future remediation works; (d) any loss or substantial compromise, by a landslip, of access to the lot on or off site; (e) the need to locate building areas outside the landslip hazard area; (f) any advice from a State authority, regulated entity or a council; and (g) the advice contained in a landslip hazard report.

Appendix 2 - Quantitative Risk Assessment Tables

Likelihood & Consequence Index

QUALITATIVE MEASURES OF LIKELIHOOD

Approximate Annual Probability		Implied Indicative Landslide Recurrence Interval		Description	Descriptor	Level
Indicative Value	Notional Boundary					
10 ⁻¹	5x10 ⁻²	10 years	20 years	The event is expected to occur over the design life.	ALMOST CERTAIN	A
10 ⁻²		100 years		The event will probably occur under adverse conditions over the design life.	LIKELY	B
10 ⁻³	5x10 ⁻³	1000 years	200 years	The event could occur under adverse conditions over the design life.	POSSIBLE	C
10 ⁻⁴	5x10 ⁻⁴	10,000 years	2000 years	The event might occur under very adverse circumstances over the design life.	UNLIKELY	D
10 ⁻⁵	5x10 ⁻⁵	100,000 years	20,000 years	The event is conceivable but only under exceptional circumstances over the design life.	RARE	E
10 ⁻⁶	5x10 ⁻⁶	1,000,000 years	200,000 years	The event is inconceivable or fanciful over the design life.	BARELY CREDIBLE	F

Note: (1) The table should be used from left to right; use Approximate Annual Probability or Description to assign Descriptor, not *vice versa*.

QUALITATIVE MEASURES OF CONSEQUENCES TO PROPERTY

Approximate Cost of Damage		Description	Descriptor	Level
Indicative Value	Notional Boundary			
200%	100%	Structure(s) completely destroyed and/or large scale damage requiring major engineering works for stabilisation. Could cause at least one adjacent property major consequence damage.	CATASTROPHIC	1
60%		Extensive damage to most of structure, and/or extending beyond site boundaries requiring significant stabilisation works. Could cause at least one adjacent property medium consequence damage.	MAJOR	2
20%	40%	Moderate damage to some of structure, and/or significant part of site requiring large stabilisation works. Could cause at least one adjacent property minor consequence damage.	MEDIUM	3
5%	10%	Limited damage to part of structure, and/or part of site requiring some reinstatement stabilisation works.	MINOR	4
0.5%	1%	Little damage. (Note for high probability event (Almost Certain), this category may be subdivided at a notional boundary of 0.1%. See Risk Matrix.)	INSIGNIFICANT	5

Notes: (2) The Approximate Cost of Damage is expressed as a percentage of market value, being the cost of the improved value of the unaffected property which includes the land plus the unaffected structures.

(3) The Approximate Cost is to be an estimate of the direct cost of the damage, such as the cost of reinstatement of the damaged portion of the property (land plus structures), stabilisation works required to render the site to tolerable risk level for the landslide which has occurred and professional design fees, and consequential costs such as legal fees, temporary accommodation. It does not include additional stabilisation works to address other landslides which may affect the property.

(4) The table should be used from left to right; use Approximate Cost of Damage or Description to assign Descriptor, not *vice versa*

QUALITATIVE RISK ANALYSIS MATRIX – LEVEL OF RISK TO PROPERTY

LIKELIHOOD		CONSEQUENCES TO PROPERTY (With Indicative Approximate Cost of Damage)				
	Indicative Value of Approximate Annual Probability	1: CATASTROPHIC 200%	2: MAJOR 60%	3: MEDIUM 20%	4: MINOR 5%	5: INSIGNIFICANT 0.5%
A – ALMOST CERTAIN	10 ⁻¹	VH	VH	VH	H	M or L (5)
B – LIKELY	10 ⁻²	VH	VH	H	M	L
C – POSSIBLE	10 ⁻³	VH	H	M	M	VL
D – UNLIKELY	10 ⁻⁴	H	M	L	L	VL
E – RARE	10 ⁻⁵	M	L	L	VL	VL
F – BARELY CREDIBLE	10 ⁻⁶	L	VL	VL	VL	VL

- Notes: (5) For Cell A5, may be subdivided such that a consequence of less than 0.1% is Low Risk.
 (6) When considering a risk assessment it must be clearly stated whether it is for existing conditions or with risk control measures which may not be implemented at the current time.

RISK LEVEL IMPLICATIONS

Risk Level		Example Implications (7)
VH	VERY HIGH RISK	Unacceptable without treatment. Extensive detailed investigation and research, planning and implementation of treatment options essential to reduce risk to Low; may be too expensive and not practical. Work likely to cost more than value of the property.
H	HIGH RISK	Unacceptable without treatment. Detailed investigation, planning and implementation of treatment options required to reduce risk to Low. Work would cost a substantial sum in relation to the value of the property.
M	MODERATE RISK	May be tolerated in certain circumstances (subject to regulator’s approval) but requires investigation, planning and implementation of treatment options to reduce the risk to Low. Treatment options to reduce to Low risk should be implemented as soon as practicable.
L	LOW RISK	Usually acceptable to regulators. Where treatment has been required to reduce the risk to this level, ongoing maintenance is required.
VL	VERY LOW RISK	Acceptable. Manage by normal slope maintenance procedures.

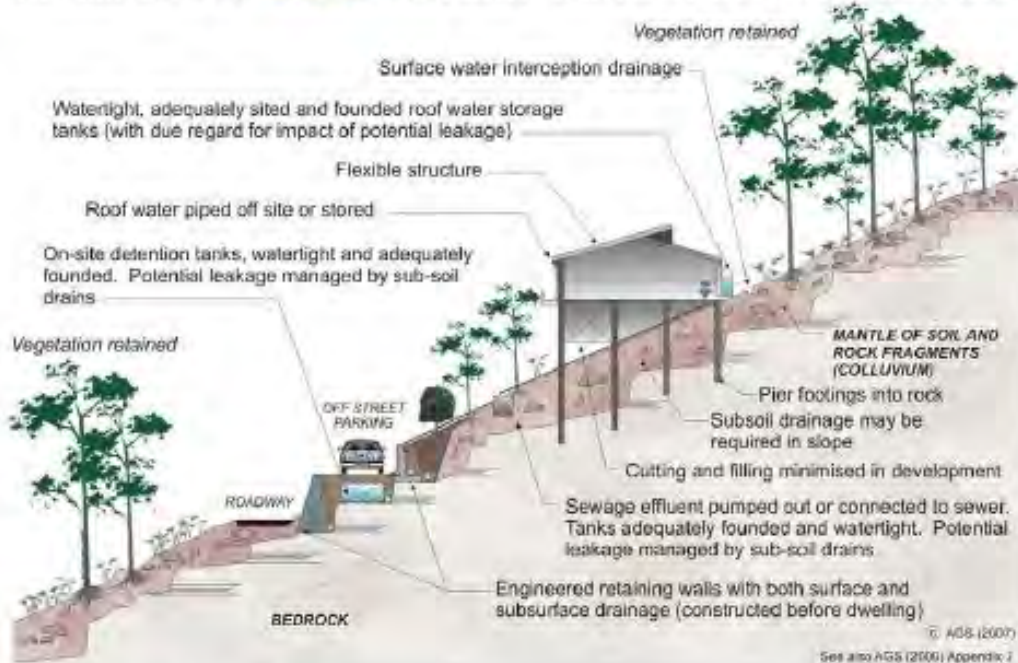
Note: (7) The implications for a particular situation are to be determined by all parties to the risk assessment and may depend on the nature of the property at risk; these are only given as a general guide.

AUSTRALIAN GEOGUIDE LR8 (CONSTRUCTION PRACTICE)

HILLSIDE CONSTRUCTION PRACTICE

Sensible development practices are required when building on hillsides, particularly if the hillside has more than a low risk of instability (GeoGuide LR7). Only building techniques intended to maintain, or reduce, the overall level of landslide risk should be considered. Examples of good hillside construction practice are illustrated below.

EXAMPLES OF GOOD HILLSIDE CONSTRUCTION PRACTICE



WHY ARE THESE PRACTICES GOOD?

Roadways and parking areas - are paved and incorporate kerbs which prevent water discharging straight into the hillside (GeoGuide LR5).

Cuttings - are supported by retaining walls (GeoGuide LR8).

Retaining walls - are engineer designed to withstand the lateral earth pressures and surcharges expected, and include drains to prevent water pressures developing in the backfill. Where the ground slopes steeply down towards the high side of a retaining wall, the disturbing force (see GeoGuide LR8) can be two or more times that in level ground. Retaining walls must be designed taking these forces into account.

Sewage - whether treated or not is either taken away in pipes or contained in properly founded tanks so it cannot soak into the ground.

Surface water - from roofs and other hard surfaces is piped away to a suitable discharge point rather than being allowed to infiltrate into the ground. Preferably, the discharge point will be in a natural creek where ground water exits, rather than enters, the ground. Shallow, lined, drains on the surface can fulfil the same purpose (GeoGuide LR5).

Surface loads - are minimised. No fill embankments have been built. The house is a lightweight structure. Foundation loads have been taken down below the level at which a landslide is likely to occur and, preferably, to rock. This sort of construction is probably not applicable to soil slopes (GeoGuide LR3). If you are uncertain whether your site has rock near the surface, or is essentially a soil slope, you should engage a geotechnical practitioner to find out.

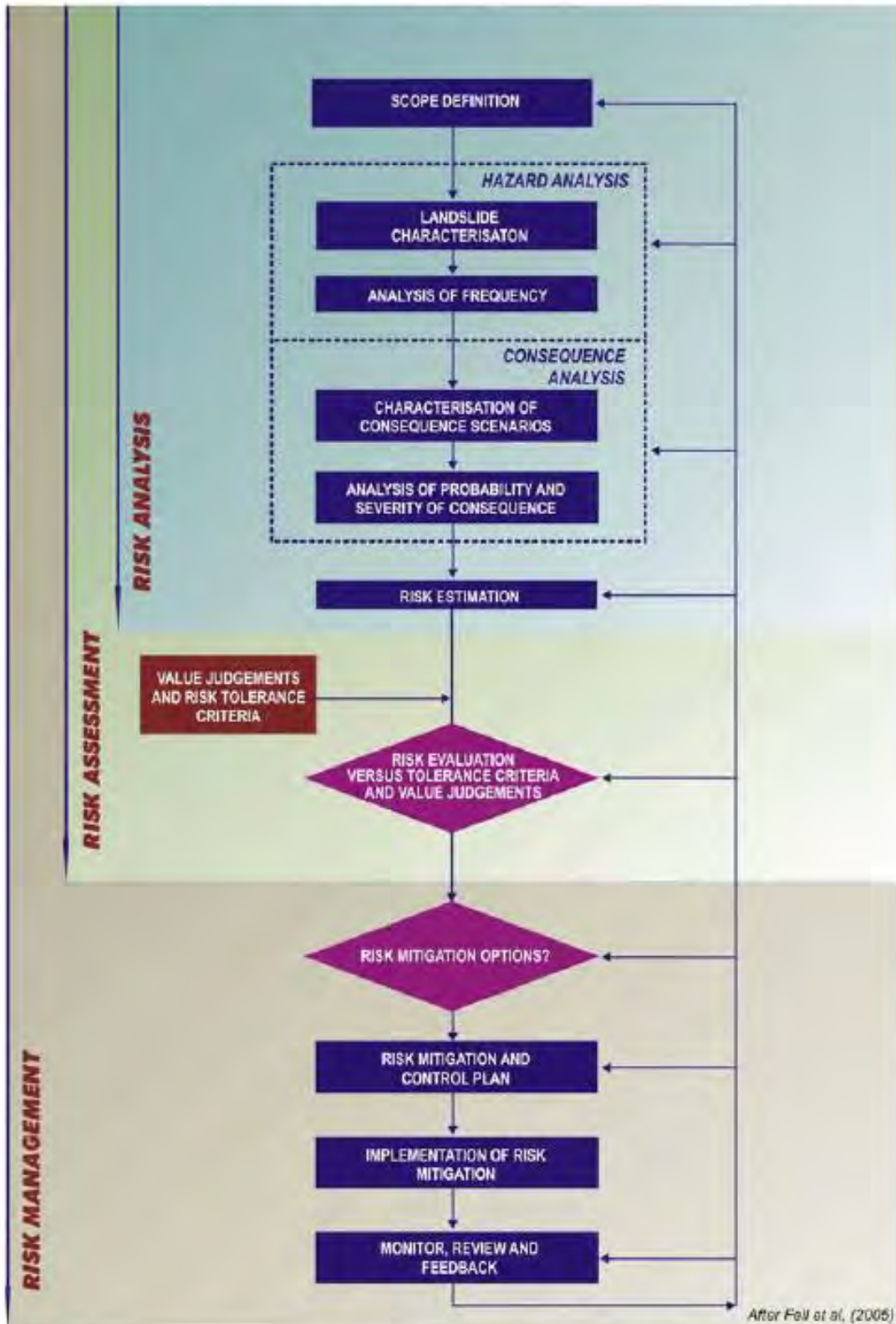
Flexible structures - have been used because they can tolerate a certain amount of movement with minimal signs of distress and maintain their functionality.

Vegetation clearance - on soil slopes has been kept to a reasonable minimum. Trees, and to a lesser extent smaller vegetation, take large quantities of water out of the ground every day. This lowers the ground water table, which in turn helps to maintain the stability of the slope. Large scale clearing can result in a rise in water table with a consequent increase in the likelihood of a landslide (GeoGuide LR5). An exception may have to be made to this rule on steep rock slopes where trees have little effect on the water table, but their roots pose a landslide hazard by dislodging boulders.

Possible effects of ignoring good construction practices are illustrated on page 2. Unfortunately, these poor construction practices are not as unusual as you might think and are often chosen because, on the face of it, they will save the developer, or owner, money. You should not lose sight of the fact that the cost and anguish associated with any one of the disasters illustrated, is likely to more than wipe out any apparent savings at the outset.

ADOPT GOOD PRACTICE ON HILLSIDE SITES

FRAMEWORK FOR LANDSLIDE RISK MANAGEMENT



APPENDIX B - LANDSLIDE TERMINOLOGY

The following provides a summary of landslide terminology which should (for uniformity of practice) be adopted when classifying and describing a landslide. It has been based on Cruden & Varnes (1996) and the reader is recommended to refer to the original documents for a more detailed discussion, other terminology and further examples of landslide types and processes.

Landslide

The term *landslide* denotes “the movement of a mass of rock, debris or earth down a slope”. The phenomena described as landslides are not limited to either the “land” or to “sliding”, and usage of the word has implied a much more extensive meaning than its component parts suggest. Ground subsidence and collapse are excluded.

Classification of Landslides

Landslide classification is based on Varnes (1978) system which has two terms: the first term describes the material type and the second term describes the type of movement.

The material types are *Rock*, *Earth* and *Debris*, being classified as follows:-

The material is either rock or soil.

- Rock:** is “a hard or firm mass that was intact and in its natural place before the initiation of movement.”
- Soil:** is “an aggregate of solid particles, generally of minerals and rocks, that either was transported or was formed by the weathering of rock in place. Gases or liquids filling the pores of the soil form part of the soil.”
- Earth:** “describes material in which 80% or more of the particles are smaller than 2 mm, the upper limit of sand sized particles.”
- Debris:** “contains a significant proportion of coarse material; 20% to 80% of the particles are larger than 2 mm and the remainder are less than 2 mm.”

The terms used should describe the displaced material in the landslide before it was displaced.

The types of movement describe how the landslide movement is distributed through the displaced mass. The five kinematically distinct types of movement are described in the sequence *fall*, *topple*, *slide*, *spread* and *flow*.

The following table shows how the two terms are combined to give the landslide type:

Table B1: Major types of landslides. Abbreviated version of Varnes’ classification of slope movements (Varnes, 1978).

TYPE OF MOVEMENT		TYPE OF MATERIAL		
		BEDROCK	ENGINEERING SOILS	
			Predominantly Coarse	Predominantly Fine
FALLS		Rock fall	Debris fall	Earth fall
TOPPLES		Rock topple	Debris topple	Earth topple
SLIDES	ROTATIONAL	Rock slide	Debris slide	Earth slide
	TRANSLATIONAL			
LATERAL SPREADS		Rock spread	Debris spread	Earth spread
FLOWS		Rock flow (Deep creep)	Debris flow (Soil creep)	Earth flow
COMPLEX		Combination of two or more principle types of movement		

Figure B1 gives schematics to illustrate the major types of landslide movement. Further information and photographs of landslides are available on the USGS website at <http://landslides.usgs.gov>.

PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

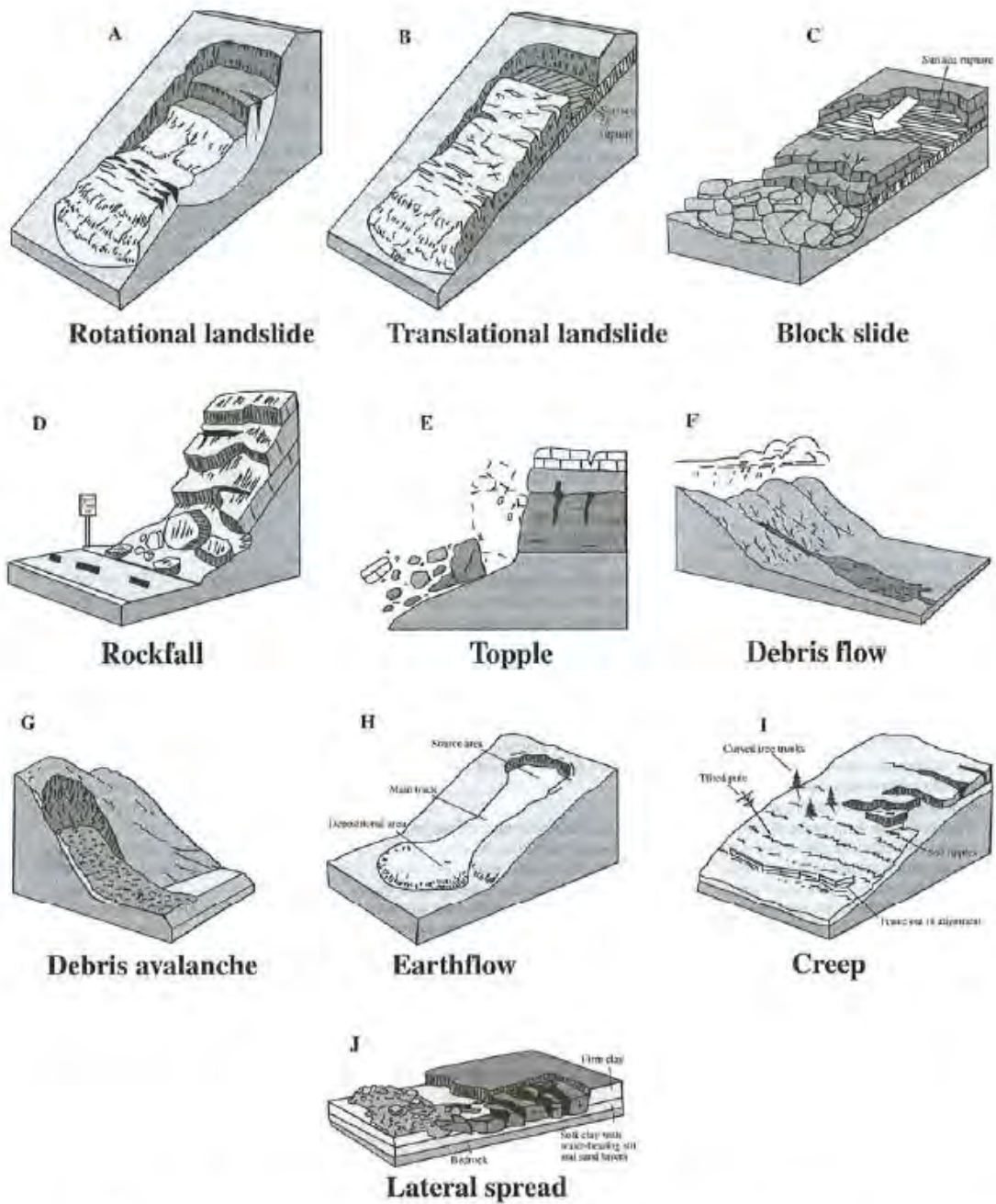


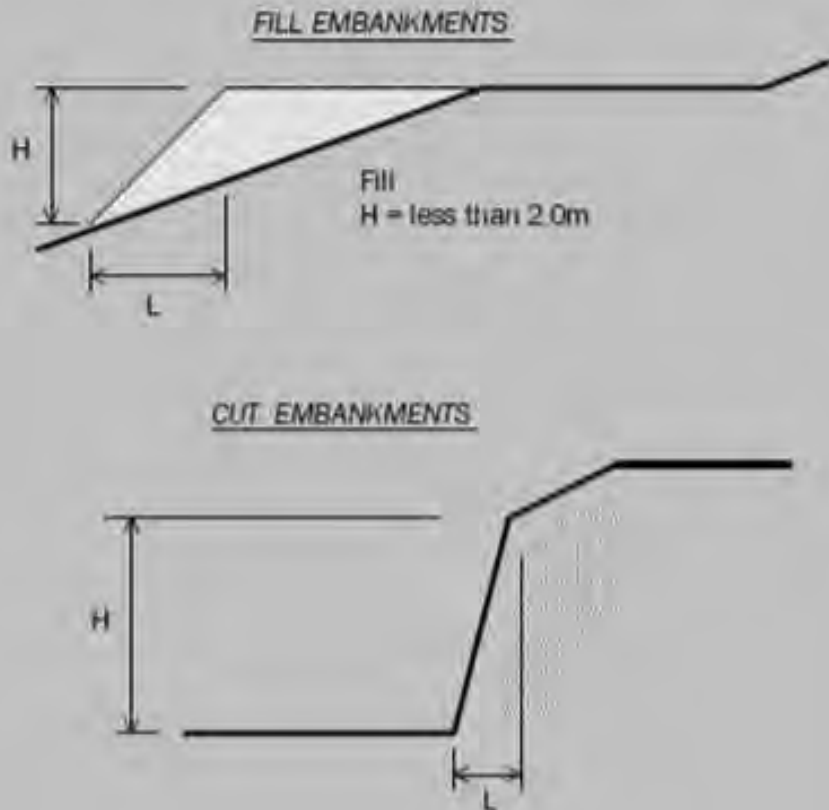
Figure B1: These schematics illustrate the major types of landslide movement.
(From US Geological Survey Fact Sheet 2004-3072, July 2004, with kind permission for reproduction.)

Appendix 3 - Qualitative Risk Assessment

Performance Criteria C15.7.1 That subdivision within a landslip hazard area does not create an opportunity for use or development that cannot achieve a tolerable risk from a landslip:	Relevance	Management Options	Managed (treated) Risk Assessment			Further Assessment Required
			Consequence	Likelihood	Risk	
<p>P1</p> <p>Each lot, or a lot proposed in a plan of subdivision, within a landslip hazard area must not create an opportunity for use or development that cannot achieve a tolerable risk from landslip, having regard to:</p> <ul style="list-style-type: none"> (a) any increase in risk from a landslip for adjacent land; (b) the level of risk to use or development arising from an increased reliance on public infrastructure; (c) the need to minimise future remediation works; (d) any loss or substantial compromise, by a landslip, of access to the lot on or off site; (e) the need to locate building areas outside the landslip hazard area; (f) any advice from a State authority, regulated entity or a council; (g) the advice contained in a landslip hazard report. 		Refer to recommendations.	Minor	Unlikely	Low	Yes

Appendix 4 – Batter Angles for Embankment

Note : Retaining walls or other form of soil retaining methods must be adopted where the slope ratio is greater than that indicated in the table below :-



MATERIAL TYPE (refer soils report)		EMBANKMENT SLOPES (Height : Length)	
		Compacted Fill	Cutting
Stable Rock (A*)		2 : 3	6 : 1
Sand (A*)		1 : 2	2 : 3
Silt (P*)		1 : 4	1 : 4
Clay	Firm Clay	1 : 2	1 : 1
	Soft Clay	Not Suitable	2 : 3
Soft Soils (P*)		Not Suitable	Not Suitable



TRAFFIC IMPACT ASSESSMENT

Hubble Traffic

November 2024 Updated

**11 LOT SUBDIVISION FOR
LOT 121954/1, BACK TEA
TREE ROAD, TEA TREE**

Disclaimer: This report has been prepared based on and in reliance upon the information provided to Hubble Traffic Consulting by the client and gathered by Hubble Traffic Consulting during the preparation of the report. Whilst all reasonable skill, care and diligence has been used in preparation of the report, Hubble Traffic Consulting take no responsibility for errors or omissions arising from misstatements by third parties.

This report has been prepared specifically for the exclusive use of the client named in the report and to the extent necessary, Hubble Traffic Consulting disclaim responsibility for any loss or damage occasioned by use of or reliance upon this report, or the data produced herein, by any third party.

Version	Date	Reason for Issue
Draft	August 2023	Draft issued for client feedback
Final	August 2023	Final issued
Updated	December 2023	Incorporate Council feedback
Updated	November 2024	Change in layout to Lots 9, 10 and 11

Table of Contents

1. Introduction	1
2. Site Description	2
3. Development proposal	3
4. Trip generation by this development	5
5. Existing traffic Conditions	6
5.1 Back Tea Tree Road characteristics	6
5.2 Rosewood Lane characteristics	7
5.3 Junction of Back Tea Tree Road and Rosewood Lane	8
5.4 Traffic activity on the surrounding roads	9
5.5 Traffic safety along Back Tea Tree Rd near the proposed junction	9
6. Impact from traffic generated by this development	10
6.1 Sight distance at the proposed junction with Back Tea Tree Road	10
6.2 Sight distance at the proposed new accesses at the end of Rosewood Lane	11
6.3 Traffic efficiency and impact at the junction of Tea Tree Rd and Back Tea Tree Rd	12
6.4 Traffic lane capacity on Tea Tree Road and Back Tea Tree Road	13
6.5 Traffic impact on Rosewood Lane users	14
6.6 Need for turning treatments on Back Tea Tree Road	14
7. Subdivision layout and internal road arrangements	15
7.1 New junction location and angle of intersection	16
7.2 Subdivisional road standard	16
7.3 Junction layout	17
7.4 Turning facility	17
7.5 New accesses onto Rosewood Lane	17
7.6 On-site parking provisions	18
7.7 Road gradients	18
8. Feedback from Brighton Council	19
8.1 Clause 22.5.1 P2	19
8.2 Clause 22.5.1 P3	21
9. Planning scheme	22
9.1 C3.5.1 Road accesses and junctions	22
9.2 C2 Parking and Sustainable Transport Code	24

10. Conclusion..... 26

11. Appendix A – Traffic modelling results..... 27



1. Introduction

D.G. Potter Land Surveys have engaged Hubble Traffic on behalf of the developers, to prepare an independent Traffic Impact Assessment, to consider the traffic impacts from the provision of an 11 Lot residential subdivision at Tea Tree. The surveyor advised the parcel of land to be subdivided is titled 121954/1 (development site) and has an existing right of way to Back Tea Tree Road.

This assessment has considered the amount of traffic this subdivision is likely to generate, and how the additional traffic movements will enter and leave the development site using a new junction with Back Tea Tree Road and two right of ways onto Rosewood Lane.

The development has been assessed against the Tasmanian Planning Scheme (planning scheme) Codes, C2 Parking and Sustainable Transport, C3 Road and Railway Assets, and Australian Standard 2890.1:2004 (The Standard).

This report has been prepared to satisfy the requirements of Austroads, Guide to Traffic Management Part 12: Traffic Impacts of Developments, 2019, and referred to the following information and resources:

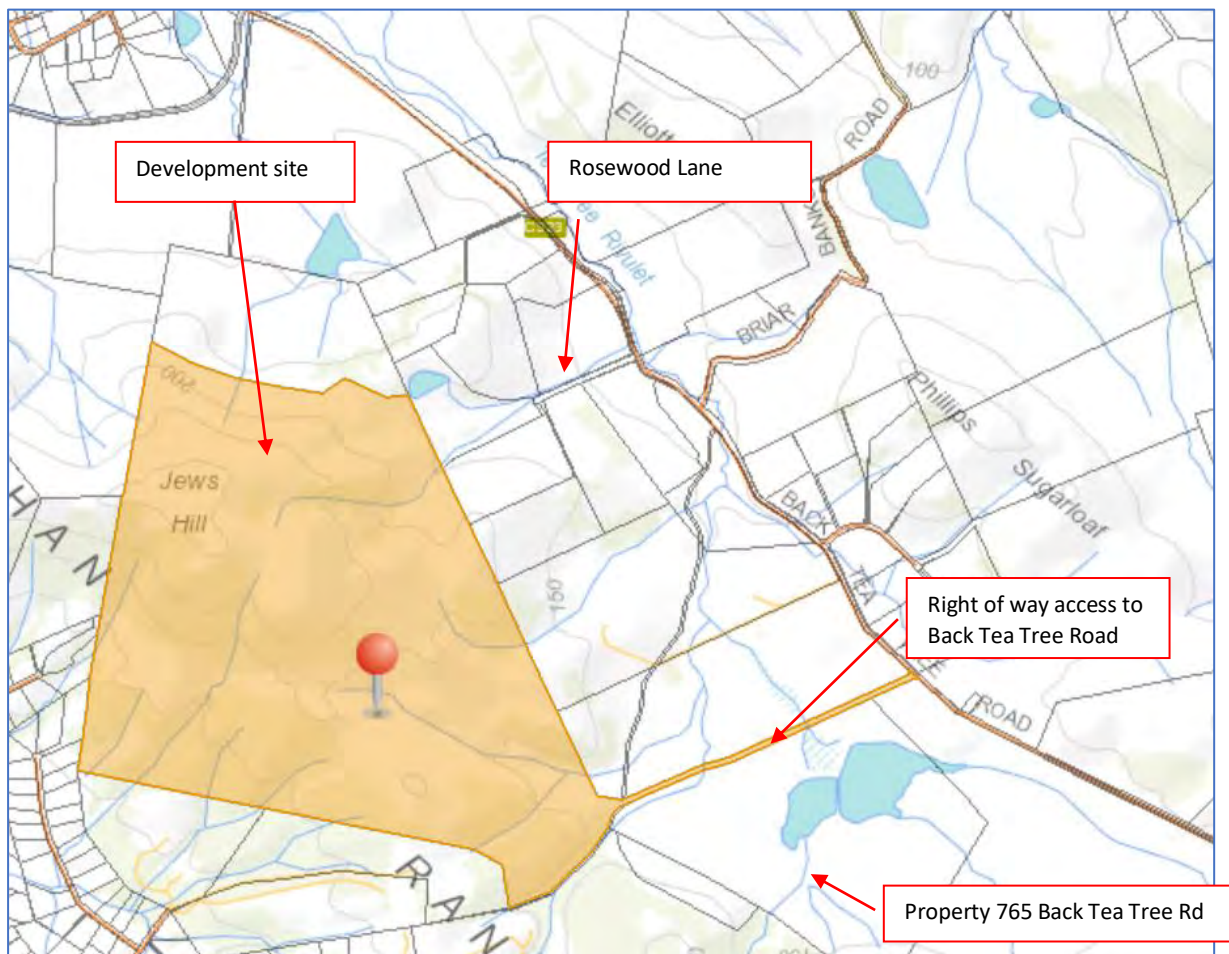
- Tasmanian Planning Scheme (Brighton Council)
- Road Traffic Authority NSW (RTA) Guide to Traffic Generating Developments
- Australian Standards AS2890 parts 1, 2 and 6
- Austroads series of Traffic Management and Road Design
 - Part 4: Intersection and crossings, General
 - Part 4a: Unsignalised and Signalised Intersections
 - Part 12: Traffic Impacts of Development
- Department of State Growth crash database
- LIST – Land Information Database

2. Site Description

The development site is a large undeveloped parcel of land, located behind properties along Back Tea Tree Road. The site has a right of way, located adjacent to the property at 765 Back Tea Tree Road, which runs from Back Tea Tree Road to the site.

According to LIST Land Information Database the land title is 121954/1 and the site is zoned as Landscape Conservation, with the purpose of this zone to provide for compatible use, or development that does not adversely impact on the protection, conservation, and management of the landscape values. The surrounding land use is Agriculture and Rural Living.

Diagram 2.0 – Extract from LIST Land Information Database showing the development site



3. Development proposal

The developer has advised that the large parcel of land will be subdivided into 11 lots, with each of the lots to be a minimum of 20 hectares in size and suitable for a single rural residential dwelling only.

Nine of the lots will be served from the existing right of way that connects onto Back Tea Tree Road, which will require the construction of a new junction. The other two lots will each have a right of way that will connect onto Rosewood Lane, which then connects back onto Back Tea Tree Road, 1.3 kms west of the property's right of way.

Diagram 3.0A – Proposed subdivision layout for Lots 7-11

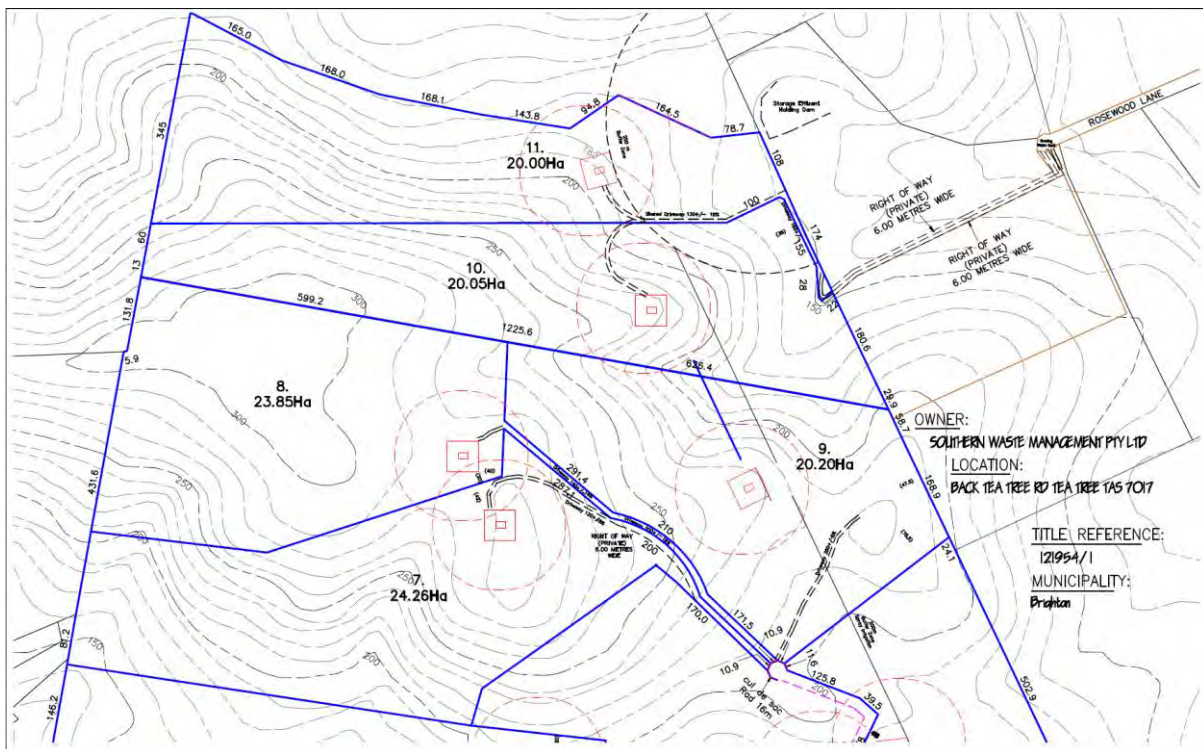
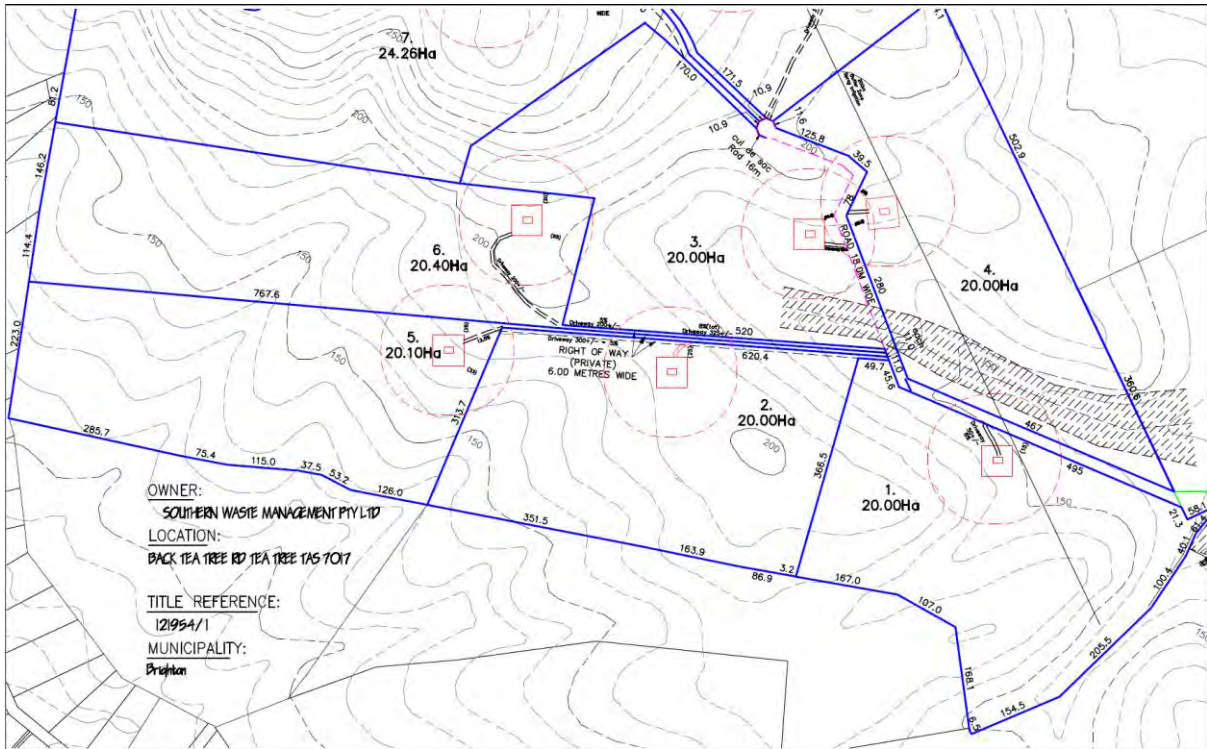


Diagram 3.0B – Proposed subdivision layout for Lots 1-7



4. Trip generation by this development

A trip in this report is defined as a one-way vehicular movement from one point to another, excluding the return journey. Therefore, a return trip to and from a land use is counted as two trips.

To determine the number of trips likely to be generated by this development, reference has been taken from the RTA Guide to Traffic Generating Developments (RTA Guide), section 3.3 residential housing.

This Guide recommends for low density residential dwellings in regional areas (RTA update 4a - August 2013):

- Daily vehicle trips of 7.4 per dwelling and
- Weekday peak trips of 0.78 per dwelling

Based on the RTA Guide the 11 subdivisional lots are predicted to generate 81 daily trips, with nine of these trips likely to occur during the morning and evening peak periods, as demonstrated in the table below.

Table 4.0 – Predicted number of trips to be generated from the 11 lots

Dwelling Type	RTA Generation rate	Number of dwellings	Daily trips	Peak trips
Single dwelling	7.4 per day 0.78 per peak	11	81	9

5. Existing traffic Conditions

Back Tea Tree Road extends between Grasstree Hill Road and Tea Tree Road and would function as a local access road within the surrounding road network. Tea Tree Road is part of the State Road network and classified as a Category 5 – Other Roads, which are primarily used as access roads for private properties, with a low frequency of heavy vehicle movements.

With Midland Highway the nearest arterial road, this assessment assumes the majority of traffic generated by the development, is likely to commute to and from the Midland Highway via Tea Tree Road.

5.1 Back Tea Tree Road characteristics

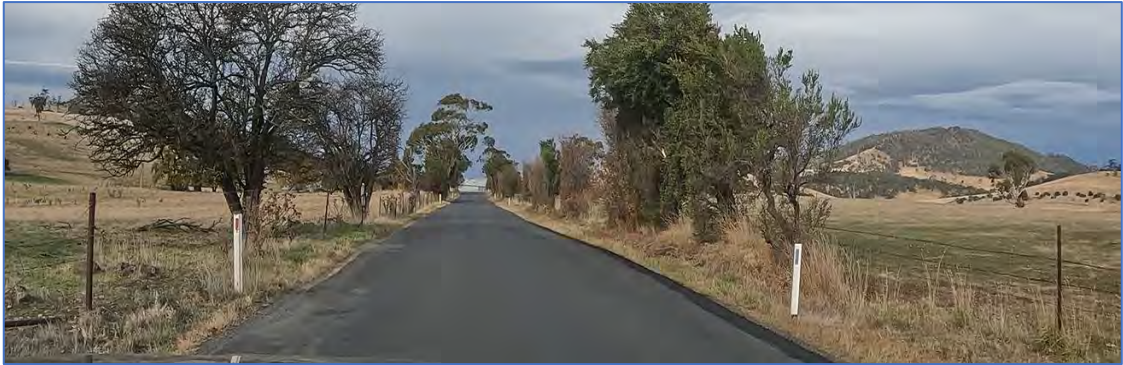
Back Tea Tree Road runs in a north to south orientation, at the development site proposed right of way access the road alignment is generally straight with reasonably flat vertical gradients, while either side of the proposed access the horizontal alignment is curved, with a vertical crest located on the western approach. The road is built to a rural standard, sealed bitumen surface measuring six metres wide, with narrow grassed verges along both sides. There are no centreline markings, signifying the road does not have a major road function.

Along the western side of the road is a shallow table drain, with delineation of the road alignment provided by guideposts. Along this section of Back Tea Tree Road there is a posted 80 km/h speed limit.

Photograph 5.1A – Back Tea Tree Road viewing north



Photograph 5.1B – Back Tea Tree Road viewing south



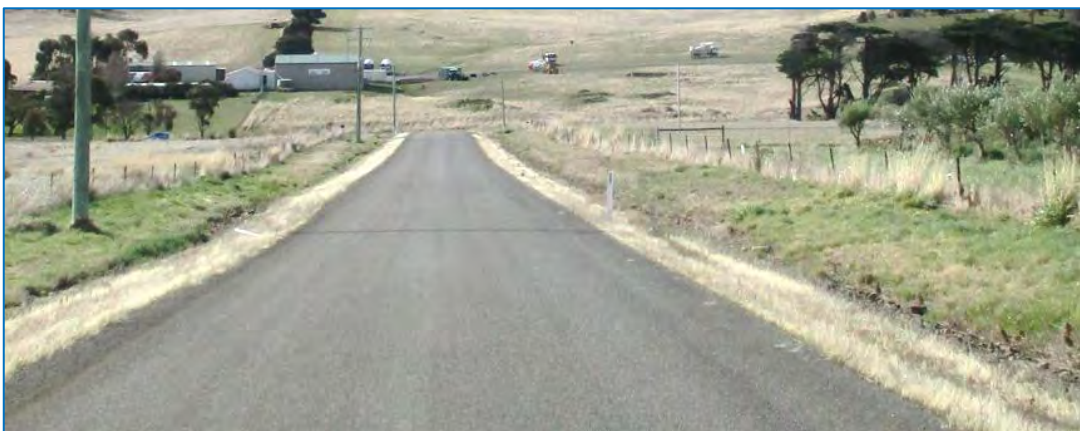
5.2 Rosewood Lane characteristics

Rosewood Lane is an existing local access road extending from Back Tea Tree Road for approximately 380 metres, terminating in an unformed cul-de-sac. The horizontal road alignment is straight with a gentle vertical incline extending from Back Tea Tree Road. The road has been built to a rural standard, with a sealed carriageway width of 5.5 metres, suitable to accommodate two-way traffic flow, supported with narrow gravel shoulders and shallow table drains.

The speed limit along Rosewood Lane is undefined, with no posted speed limit the surrounding land-use would suggest the rural default speed limit could apply. However, due to the road length, the nature of traffic and condition of the road, the operating speed of vehicles is likely to be 50 to 60 km/h.

According to the LIST database, Rosewood Lane serves approximately seven residential properties, based on the RTA Guide, these seven properties are likely to generate less than 55 daily vehicle movements, with six of these movements occurring in the peak hour periods. This means Rosewood Lane is lightly trafficked.

Photograph 5.2 – Typical road standard of Rosewood Lane



5.3 Junction of Back Tea Tree Road and Rosewood Lane

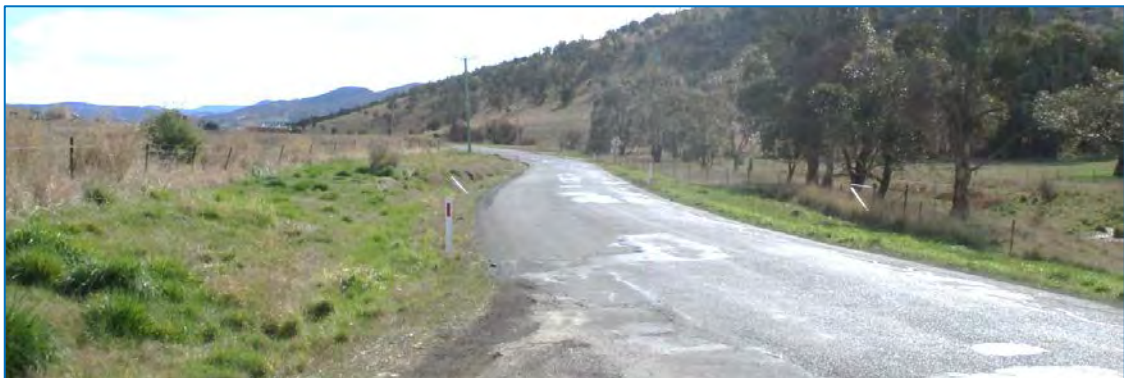
With two of the new lots connecting to the end of Rosewood Lane, it is important for this assessment to consider the suitability of the current junction onto Back Tea Tree Road.

The junction has an asphalt surface that is in good condition, with the junction throat widened to accommodate the swept path of vehicles turning, providing sufficient pavement width to accommodate two-way traffic movements. The vertical grades through the junction are relatively gentle, causing no adverse impact for vehicles turning, the road alignment at the junction is generally straight, while both approaches are curved.

Available sight distance was measured at the Rosewood Lane junction, based on the driver being 1.05 metres above the road surface, with approaching vehicles being 1.2 metres high. In both directions the available sight distance exceeds 200 metres, as shown in the following two photographs.

Austrroads Guide to Road Design provides guidance of Safe Intersection Sight Distance (SISD), based on the speed environment, for an 80 km/h speed limit the recommended SISD is 170 metres, based on a driver reaction time of 1.5 seconds, and three seconds observation time. With the available sight distance exceeding 200 metres in both directions, there is sufficient sight distance for vehicles to turn at the junction in a safe and efficient manner, without causing adverse impact to other users.

Photograph 5.3a – Available sight distance to the left



Photograph 5.3b - Available sight distance to the right

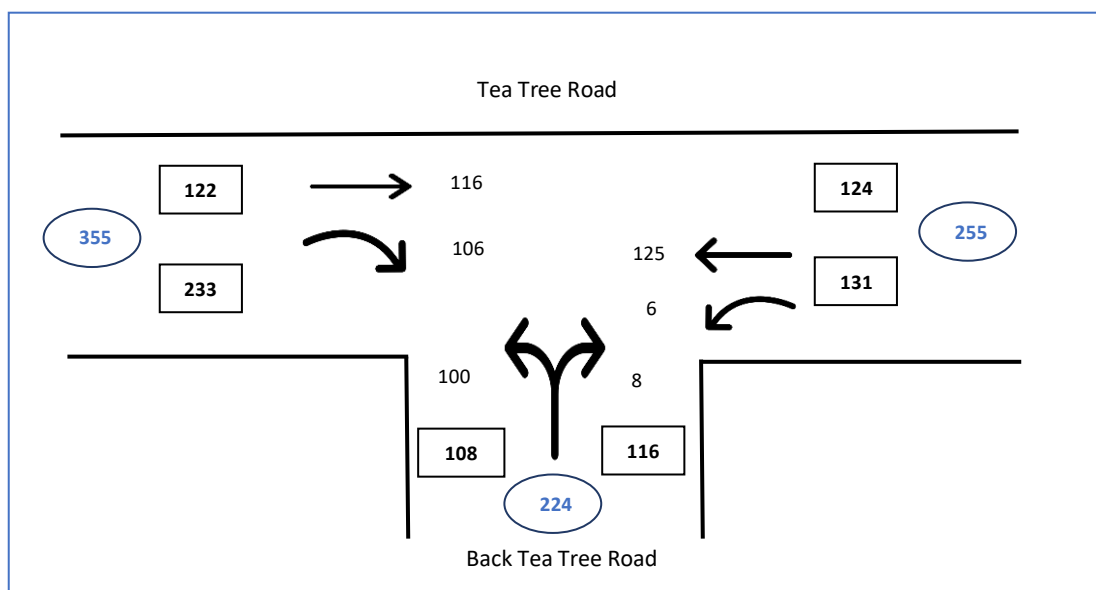


5.4 Traffic activity on the surrounding roads

As discussed earlier, with the Midland Highway (highway) being the nearest arterial road, the majority of traffic generated by the development is expected to commute to and from the highway, turning at the Tea Tree Road junction with Back Tea Tree Road. Consequently, it is important to evaluate the impact of the additional traffic at this junction.

A recent manual survey was undertaken at the junction of Tea Tree Road and Back Tea Tree Road during the morning peak period, with the peak hour flows extracted and shown in the diagram below. The traffic flows using this junction is considered low and will be used within this assessment.

Diagram 5.4 – Morning peak hour turning movements



5.5 Traffic safety along Back Tea Tree Rd near the proposed junction

The Department of State Growth maintains a database of reported road crashes, a check of this database found no reported crashes within 200 metres of the proposed new junction on Back Tea Tree Road, in the last five years.

There have been two reported crashes near the junction of Rosewood Lane and Back Tea Tree Road. Both of these crashes resulted in a single vehicle losing control while negotiating the alignment, one crashed resulted in property damage, and the other causing a minor injury.

This crash report does not indicate motorists are having any difficulty in entering or leaving properties along Back Tea Tree Road.

6. Impact from traffic generated by this development

As determined by section 4 of this report, the development site is estimated to generate 81 daily vehicle movements, with nine of these movements expected to occur during the morning and evening peak periods. It is common with residential properties, that 90 percent of the trips leave the site during the morning peak, with the opposite occurring in the evening peak.

6.1 Sight distance at the proposed junction with Back Tea Tree Road

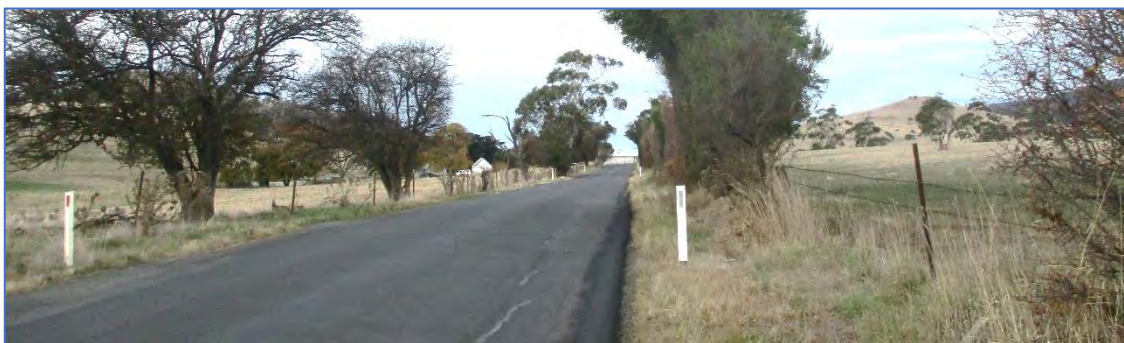
It is important that drivers leaving the development site have suitable sight distance to undertake turning manoeuvres in a safe manner, without impacting motorists travelling along Back Tea Tree Road.

Safe Intersection Sight Distance (SISD) is the optimum distance to enable a vehicle leaving the development site, to see approaching vehicles, and then have sufficient time to enter Back Tea Tree Road without impacting the approaching vehicles, meaning that vehicles do not need to slow. SISD is based on the operating speed of approaching vehicles and the gradient of the approaching road. For this location, with the road having a posted 80 km/h speed limit, the operating speed of approaching vehicles can be assumed to be 80 km/h, with the road having a mostly flat gradient, Austroads Guide to Road Design part 4a: Unsignalised and signalised intersections, table 3.2 specifies SISD as 170 metres, based on a driver reaction time of 1.5 seconds, with observation time of three seconds.

Measurements were undertaken on site and based on a driver being 1.05 metres above the road surface, and an approaching vehicle being 1.2 metres high, the available sight distance in both directions was found to exceed 200 metres.

Although there is a slight vertical crest on Back Tea Tree Road, to the north of the proposed junction location, approaching vehicles remain visible and do not adversely impact the available sight distance. In both directions the available sight distance exceeds the SISD requirements, demonstrating vehicles will be able to enter and leave the development site in a safe and efficient manner, without impacting other road users.

Photograph 6.1A – Available sight distance to the right (exceeding 200 metres)



Photograph 6.1B – Available sight distance to the left (exceeding 200 metres)



6.2 Sight distance at the proposed new accesses at the end of Rosewood Lane

Two of the new lots will have access to the end of Rosewood Lane, these additional accesses are not expected to cause any adverse impact and be consistent with other properties along Rosewood Lane with direct access.

There is a range of sight distance parameters that can be applied to various situations, with SISD being the highest parameter, suitable for new junctions, where traffic flows are much higher than a single residential lot, and where some users may be unfamiliar with the junction layout. Sight distance requirements for a single domestic property access is different, as traffic generation is significantly lower, and users are familiar with the access configuration.

These two lots will be assessed as a domestic property under the Australian Standard 2890.1:2004 (the Standard), which specifies a domestic property is a property comprising three or less domestic units. Section 3.2.4 and figure 3.2 of the Standard specifies for an operating speed of 50 km/h, the desirable sight distance is 69 metres based on a five second gap, with the minimum sight distance for a domestic property being 40 metres.

The two new accesses will be located at the end of the unformed cul-de-sac, with sight distance unrestricted, as shown in photograph 6.2. Available sight distance of 100 metres for both access locations would be expected, and exceed the Standard 69 metre desirable sight distance, ensuring vehicles can enter and leave the properties in a safe and efficient manner.

Photograph 6.2 – Available sight distance at end of Rosewood Lane



6.3 Traffic efficiency and impact at the junction of Tea Tree Rd and Back Tea Tree Rd

As discussed earlier, with the Midland Highway being the nearest arterial road, it is assumed the majority of the traffic generated by the development, will turn at the junction of Back Tea Tree and Tea Tree Roads. The simplest method to determine the traffic performance at a junction is to use SIDRA Intersection traffic modelling software, which uses gap acceptance theory to determine the average delay, queue lengths and degree of saturation, which are all measures of traffic congestion and level of service.

Level of Service (LOS) is a quantifiable assessment of the factors that contribute to the traffic performance, which includes traffic density, gaps in traffic streams, expected delays, and queues. For junctions, there are five levels from A to E, with A providing the highest level for give-way controlled junctions, meaning motorists are not incurring delays, with ample gaps in the traffic stream for vehicles to turn freely and safely without disrupting other users. The following table provides a reference to the level of service for the various traffic controls.

Diagram 6.3 – RTA Level of service for intersections and junctions

Table 4.2
Level of service criteria for intersections

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	< 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays Roundabouts require other control mode	At capacity, requires other control mode

A traffic model has been developed within the SIDRA software to replicate the junction of Tea Tree Road and Back Tea Tree Road, with the recent morning peak hour traffic flows entered. Traffic modelling predicts that the junction is performing at the highest level of service possible, LOS A, where motorists are not likely to incur any delays or queues.

The additional traffic generated by the development has been assigned to the junction, based on all trips using this junction. The traffic modelling predicts no adverse traffic impact, with no deterioration in the level of service. The Degree of Saturation (DOS) is predicted to operate at 0.09 with the additional vehicle movements, this represents the junction operating at nine percent of capacity, demonstrating that the junction has spare traffic capacity for future growth.

Table 6.3 – Traffic modelling comparison of the new junction with Back Tea Tree Road

Junction	Period	Total vehicles	DOS	Worst average delay	LOS	Max queue
Morning peak hour	Existing	485	0.083	7.9 sec	A	2.4m
	With development	495	0.090	7.9 sec	A	2.6m

6.4 Traffic lane capacity on Tea Tree Road and Back Tea Tree Road

In evaluating the impact of additional vehicle movements on Tea Tree Road and Back Tea Tree Road users, it is important to understand the Level of Service (LOS) motorists are currently receiving. The RTA Guide provides guidance for rural roads, based on peak hour directional traffic flows and the percent of heavy vehicles. Both Tea Tree Road and Back Tea Tree Road have level terrain, with approximately five percent of heavy vehicles using the roads.

Diagram 6.4 – RTA Guide for level of service for rural roads

Table 4.5
peak hour flow on two-lane rural roads (veh/hr)
(Design speed of 100km/hr)

Terrain	Level of Service	Percent of Heavy Vehicles			
		0	5	10	15
Level	B	630	590	560	530
	C	1030	970	920	870
	D	1630	1550	1480	1410
	E	2630	2500	2390	2290
Rolling	B	500	420	360	310
	C	920	760	650	570
	D	1370	1140	970	700
	E	2420	2000	1720	1510
Mountainous	B	340	230	180	150
	C	600	410	320	260
	D	1050	680	500	400
	E	2160	1400	1040	820

Based on the existing traffic flows during the morning peak hour, both Tea Tree Road and Back Tea Tree Road are operating at the highest level of service possible, LOS B. This means that the traffic flow is stable, motorists have freedom to select their own operating speed, there should be sufficient gaps in the traffic stream to enable vehicles to enter and leave, without causing any adverse impacts.

The additional trips generated from the development have been assigned to both Tea Tree Road and Back Tea Tree Road. The table below demonstrates that the development is not expected to cause any deterioration, in the current level of service motorists are receiving on either road.

Table 6.4 – Level of service comparison for Tea Tree and Back Tea Tree Roads

	Tea Tree Road				Back Tea Tree Road			
	Existing		Development		Existing		Development	
	WB	EB	WB	EB	NB	SB	NB	SB
Directional flows	233	124	241	125	108	116	116	117
Level of Service	B	B	B	B	B	B	B	B

6.5 Traffic impact on Rosewood Lane users

Rosewood Lane currently services seven properties, with these properties generating less than 55 two-way vehicle movements per day, with six of these movements expected to be occurring during the peak periods.

The development site is predicted to increase the daily traffic flow by an additional 15 vehicle movements, with two of these movements likely to occur during the peak periods. This is a low increase in traffic flow, which is not expected to cause any adverse traffic impact to motorists using Rosewood Lane.

6.6 Need for turning treatments on Back Tea Tree Road

With nine lots accessing Back Tea Tree Road via the new junction, a maximum of seven vehicles are expected to turn at the junction in each of the peak hour periods. While it is expected that the majority of traffic movements will be left-out and right-in, the number of traffic movements generated by the development is considered low, and the need for a dedicated turning treatment is considered unwarranted, with Back Tea Tree Road being lightly trafficked.

This will be consistent with the rest of Back Tea Tree Road, where turning treatments have not been provided at side roads, with these side roads serving a similar number of properties as the new junction.

As discussed earlier, the vertical crest north of the proposed junction does not restrict sight distance, allowing an approaching driver to have adequate forward sight distance to see a vehicle waiting to turn right, with sufficient distance to stop and avoid a collision.

7. Subdivision layout and internal road arrangements

As the site is an internal lot, the development will need to create a subdivisional road within the existing right of way, to connect on to Back Tea Tree Road. This new subdivisional road will provide access to nine of the new lots, while the other two lots will require two new right of ways to Rosewood Lane.

Diagram 7.0A – Proposed access arrangement for Lots 10 and 11

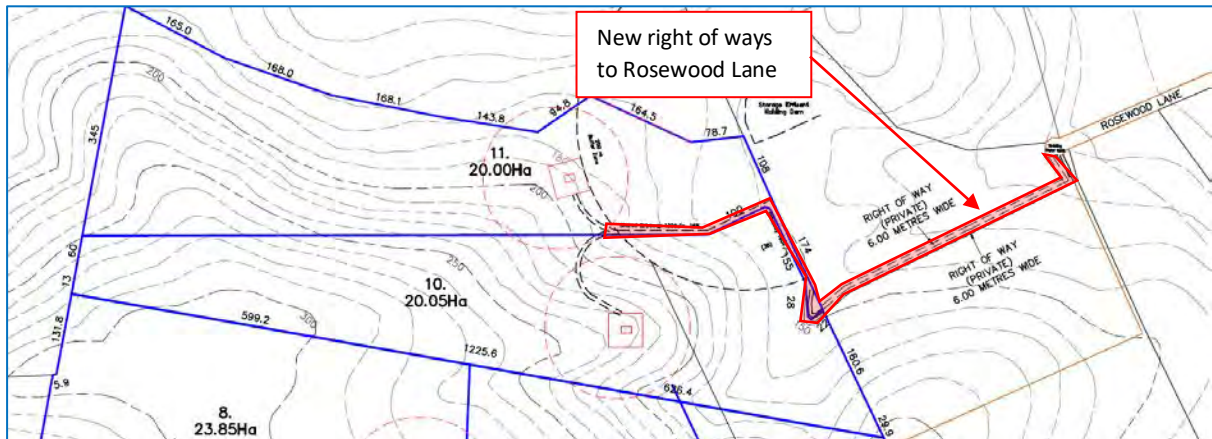
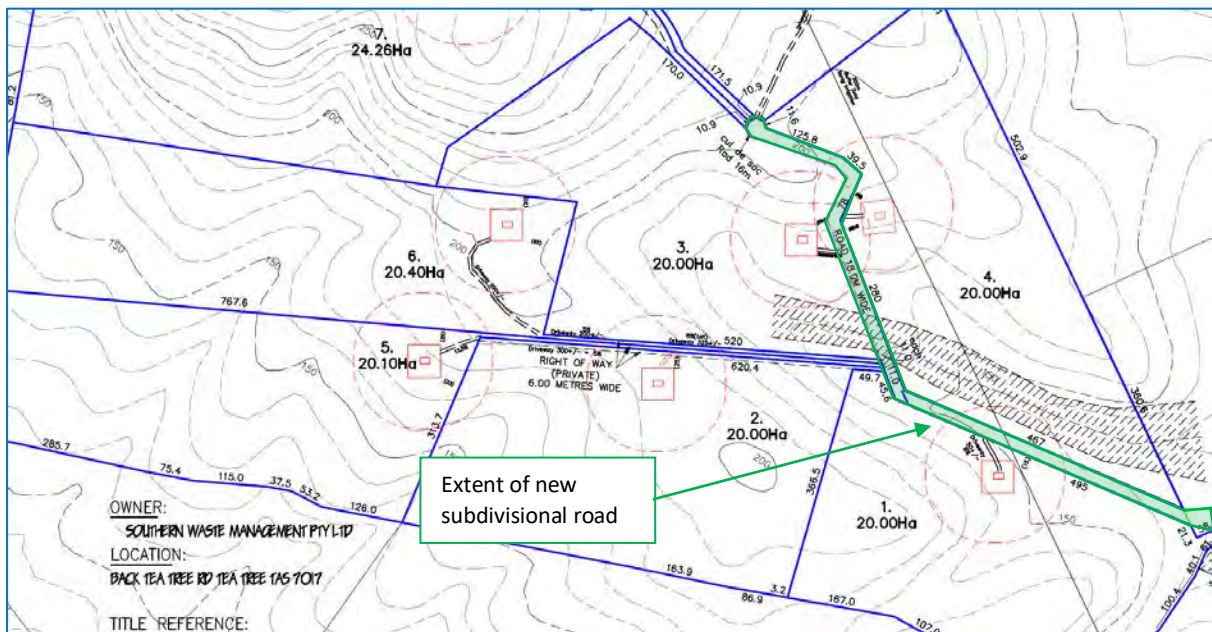


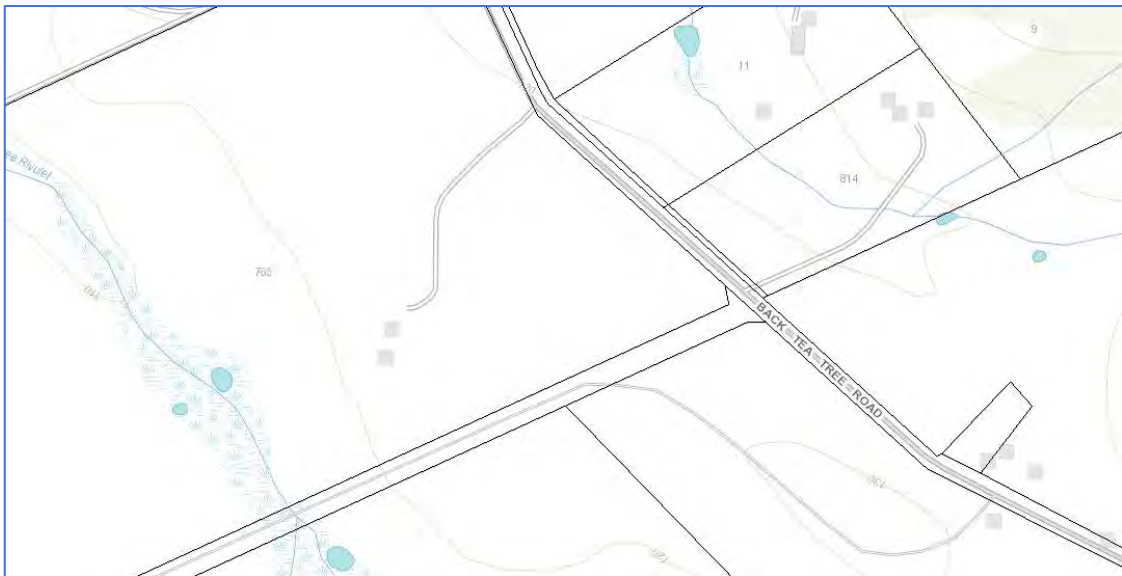
Diagram 7.0B – Proposed access arrangement for Lots 1-9



7.1 New junction location and angle of intersection

The development site has an existing right of way adjacent to 765 Back Tea Tree Road and will connect onto the roadway opposite the access to property 814. The right of way intersects Back Tea Tree Road at approximately 70 degrees which is acceptable, as Austroads Guide to Road Design (Part 4a) indicates it is desirable for the angle of an intersection or junction, to be in the range of 70 to 110 degrees, which is within the acceptable range for drivers, to turn their heads to see approaching vehicles on the major roadway.

Diagram 7.1 - Location of right of way and angle of junction



7.2 Subdivisional road standard

A new subdivisional road will be constructed within the existing right of way adjacent to 765 Back Tea Tree Road, extending approximately 900 metres from Back Tea Tree Road and terminating in a cul-de-sac. The standard of this new subdivisional road will comply with the Local Government Association of Tasmania (LGAT) standard drawing for rural sealed roads TSD-R02-v1. The road will have a sealed surface width of 5.5 metres to accommodate two-way traffic flow, supplemented with guideposts to delineate the road alignment.

This new subdivisional road should be signed with a posted 50 km/h speed limit at the beginning of the road, to moderate operating speeds and allow for the road alignment to be designed to a lower standard, in respect to horizontal curvature.

7.3 Junction layout

Based on Austroads Guide to Road Design part 4 (intersections and crossing-general) table 5.1, the design vehicle for this new junction can be a medium rigid vehicle (8.8 metres in length), based on Back Tea Tree Road being a rural collector and the new subdivisional road being a local residential road.

Using a medium rigid vehicle as the design vehicle, the corner radius of the junction only needs to have a nine metre radius, to accommodate a medium rigid vehicle turning without encroaching the theoretical road centreline. The junction also needs to accommodate a single truck/bus (12.5 metres) to turn, allowing some encroachment in the opposite traffic lane, as this type of vehicle using this junction would be infrequent.

Although the volume of vehicles using the junction is predicted to be low, the junction will be off set as far as possible to the opposite property access (814), to minimise conflict between turning vehicles, complying with the Standards section 3.2.3.

Underneath the junction, suitably sized culvert is required to maintain the water flow within the table drain along Back Tea Tree Road, due to the speed environment being 80km/h, the end walls of the culvert should be a driveable type.

This development will generate a low volume of light vehicle movements turning at the junction, with this type of vehicles not generating significant shear force when turning, pavement improvements (such as asphalt surface) of Back Tea Tree Road through the junction is considered unnecessary.

While the new subdivisional road will intersect Back Tea Tree Road forming a standard T-Junction, a Give Way and holding line should be provided to reinforce the give way control.

7.4 Turning facility

At the end of the new subdivisional road an 18 metre circular turning head will be provided, complying with LGAT standard drawing TSD-R07-V1. This turning facility will accommodate a standard waste collection vehicle and allow all vehicles to enter and leave in a forward-driving direction.

7.5 New accesses onto Rosewood Lane

Lots 10 and 11 will create two new accesses with Rosewood Lane, with these lots not having direct access to the new internal road, the accesses will use private right of ways between properties 40 and 41 Rosewood Lane.

7.6 On-site parking provisions

Each lot will have suitable area to accommodate on-site parking spaces, including visitor parking spaces.

7.7 Road gradients

Civil design plans for the subdivision have not been provided by the client.

8. Feedback from Brighton Council

In assessing the development application, Brighton Council has requested additional information on the lot design, and compliance with planning scheme clause 22.5 development standards for subdivision, from a traffic engineering perspective.

There are a total of 11 lots, with nine lots obtaining vehicular access from a new subdivisional road and six of these lots requiring use of a right of way. As it is impractical for each lot to have a 40 metre road frontage, these six lots are to be assessed under the performance criteria P2.

The remaining two lots will require two new right of ways through an established property to Rosewood Lane and will need to be assessed against performance criteria P3.

The development site is located behind established properties, and all the right of ways will serve a single low density residential property. Each right of way will be six metres wide and provide for safe and efficient traffic flow. The rolling terrain of the land is expected to allow for the right of ways to have appropriate vertical grades to suit light vehicles associated with low density residential development and provide suitable access for an occasional emergency vehicle.

8.1 Clause 22.5.1 P2

Lots 1, 3 and 4 will have more than 40 metres of road frontage with the new internal subdivisional road, complying with the acceptable solution. While the remaining lots will have less than 40 metres of road frontage and will need to be assessed against the performance criteria P2, ensuring each lot has a legal connection to a road by a right of carriageway.

Performance criteria	Assessment
Each lot, or a proposed lot in a plan of subdivision, must be provided with a frontage, or legal connection to a road by a right of carriageway that is sufficient for the intended use, having regard to:	
a) the number of other lots which have the land subject to the right of carriageway as their sole or principal means of access;	The new subdivisional road will provide vehicular access to nine lots, which will have adequate traffic capacity to support this number of properties. Due to the size and location of the development site, six of the lots will require access using right of ways. Three of the right of ways will extend from the cul-de-sac, with the other three right of ways obtaining access midway along the road, location of the accesses is not expected to cause adverse traffic outcomes.
b) the topography of the site;	The natural topography of the site is rolling hills, which should allow for right of ways to be constructed with suitable vertical grades to provide appropriate level of service for low density residential properties, and to accommodate an occasional emergency vehicle.

c) the functionality and useability of the frontage;	Due to the development site located behind established properties, it is necessary for some of the lots to rely on a right of way to obtain vehicular access. The new subdivisional road will have limited road frontage, and it is impractical to provide 40 metres of road frontage for each lot.
d) the anticipated nature of vehicles likely to access the site;	The development is for low density residential lots, with the typical access vehicle being less than 5.5 metres in length, these types of vehicles are associated with rural residential living, and compatible with the existing vehicles using the surrounding local road network.
e) the ability to manoeuvre vehicles on the site;	Each right of way will serve a single lot, and be of sufficient size to accommodate vehicles turning on-site, allowing vehicles to enter and leave each lot in a forward-driving direction.
f) the ability for emergency services to access the site; and	The right of ways will be of sufficient width to accommodate large vehicles and are expected to have appropriate vertical grades to accommodate an occasional emergency vehicle to enter and leave in a forward-driving direction.
g) the pattern of development existing on established properties in the area,	Within the surrounding area there are many other rural residential properties operating with less than 40 metres of road frontage. For example, there are a number of properties accessing Glen Rose Drive using right of ways, and land subdivided at 1039 and 1041 Back Tea Tree Road that are of a similar nature, where the land is situated behind other properties located along Back Tea Tree Road, with properties having less than 40 metres of road frontage. It appears this access arrangement is not causing adverse traffic impact.
h) and is not less than 3.6 metres wide.	Each right of way will be a minimum of six metres wide.

8.2 Clause 22.5.1 P3

The lot design requires lots 10 and 11 to gain access to Rosewood Lane, via two separate right of ways through an established property at 40 Rosewood Lane. This will need to be assessed against performance criteria P3, to ensure each lot is provided with a reasonable vehicular access to a road.

Performance criteria	Assessment
Each lot, or a lot proposed in a plan of subdivision, must be provided with reasonable vehicular access to a boundary of a lot, if any, having regard to:	
a) the topography of the site;	The development site is located behind established properties. Although the development site has rolling terrain, right of ways with appropriate vertical grades are expected to be achievable, to provide an appropriate level of service for vehicles accessing low density residential properties.
b) the length of the access;	The length of each right of way is approximately 460 metres and provides for the most direct route.
c) the distance between the lot or building area and the carriageway;	The closest carriageway to lots 10 and 11 is Rosewood Lane, a distance of approximately 400 metres.
d) the nature of the road and the traffic; and	Rosewood Lane is a short cul-de-sac extending south from Back Tea Tree Road and operates as a local rural residential road within the surrounding road network. The road is built to a rural standard, with a sealed roadway width suitable to accommodate two-way traffic flow, and straight road alignment on a slight vertical grade extending from Back Tea Tree Road. With all properties well set back from the road, motorists have unrestricted visibility. The two new right of ways will be extending from the end of the cul-de-sac and will have appropriate sight lines to allow for vehicles to enter and leave in a safe and efficient manner. This assessment determined the seven existing residential properties are likely to generate less than 55 daily vehicle movements, and the increase in vehicle movements generated by the two additional lots can be absorbed by the road, without causing adverse impact to other users.
e) the anticipated nature of vehicles likely to access the site.	The development is for low density residential properties, with most vehicle movements to be generated by the development to be less than 5.5 metres in length. These types of vehicles are associated with rural residential living, and compatible with the existing vehicles using the surrounding local road network.

9. Planning scheme

9.1 C3.5.1 Road accesses and junctions

The development will create a new junction with Back Tea Tree Road to serve lots 1 to 9 and will create two new accesses with Rosewood Lane to serve lots 10 and 11, using private right of ways. With the development creating a new junction and two new accesses, they will need to be assessed against the performance criteria P1, ensuring both can operate safely and efficiently.

Performance criteria	Assessment
To ensure that the safety and efficiency of roads is not reduced by the creation of a new access and junctions.	
a) Any increase in the traffic caused by the use;	The new junction with Back Tea Tree Road will serve lots 1 to 9, which are predicted to generate 66 daily vehicle movements, with seven of these trips occurring during both peak periods. The two new accesses with Rosewood Lane will serve lots 10 and 11, and are predicted to generate 15 daily vehicle movements, with two of these trips occurring during both peak periods.
b) The nature and frequency of the traffic generated by the use;	The development is for rural residential lots, with most vehicle movements to be generated by the development to be less than 5.5 metres in length, these types of vehicles are associated with rural residential living, and compatible with the existing vehicles using the surrounding local road network.
c) The nature of the road;	Back Tea Tree Road operates as a local rural access road, while Rosewood Lane would operate as a local rural residential road within the surrounding road network. The primary purpose for both roads is to support the land-uses, by providing safe and accessible access to the nearest arterial road network. Both roads are built to an appropriate standard for the traffic function. The new junction onto Back Tea Tree Road and accesses onto Rosewood Lane, are expected to have adequate sight distance for the prevailing operating speed of approaching vehicles, enabling vehicles to enter and leave in a safe and efficient manner, without impacting other users.
d) The speed limit and traffic flow of the road;	Back Tea Tree Road has a posted speed limit of 80 km/h, while Rosewood Lane has an undefined speed limit, which would likely have an operating speed of 50 km/h, due to the conditions of the road and the road being a short cul-de-sac. A recent manual survey at the Tea Tree Road junction found Back Tea Tree Road is lightly trafficked, with 224 two-way traffic movements in the morning peak period. Motorists are currently receiving the highest level of traffic service possible, and the increase in traffic generated by the development is not expected to cause a deterioration in traffic flow. Traffic modelling at the intersection of Tea Tree Road and Back Tea Tree Road found motorists are receiving a high level of traffic performance, and additional traffic generated by the development is not expected to cause a deterioration in traffic performance or have an adverse impact on traffic flow.

e) Any alternative access;	None.
f) The need for the access or junction;	The new junction with Back Tea Tree Road and two new accesses with Rosewood Lane will provide an increase of rural residential properties, which will be similar in nature to the surrounding residential properties and optimise the existing road infrastructure.
g) Any traffic impact assessment; and	An independent traffic assessment found no reason for this development not to proceed.
h) Any written advice received from the road authority.	Aware of none.

9.2 C2 Parking and Sustainable Transport Code

C2.5.1 Car parking numbers.	Each lot will be of sufficient size to accommodate on-site parking facilities to meet the reasonable demand generated.
C2.5.2 Bicycle parking numbers.	Not applicable for a residential subdivision.
C2.5.3 Motorcycle parking numbers.	Not applicable for a residential subdivision.
C2.5.4 Loading bays.	While loading bays are not applicable for a residential subdivision, the subdivisional road will have sufficient width to accommodate commercial vehicles, including waste collection and fire emergency vehicles.
C2.5.5 Number of car parking spaces within the General Residential Zone and Inner Residential Zone.	Not applicable for a residential subdivision.

C2.6. Development standards

C2.6.1 Construction of parking areas.	Not applicable.
C2.6.2 Design and layout of parking areas.	Not applicable.
C2.6.3 Number of accesses for vehicles.	As the development will create a new junction with Back Tea Tree Road and two new accesses with Rosewood Lane, it must be assessed against the performance criteria, which is provided on the next page of this report.
C2.6.4 lighting of parking areas within the general business zone and central business zone	Not applicable.
C2.6.5 Pedestrian access.	Not applicable.
C2.6.6 Loading bays.	Not applicable.
C2.6.7 Bicycle parking and storage facilities	Not applicable.
C2.6.8 Siting of parking and turning areas.	Not applicable.

C2.6.3 Number of accesses for vehicles

The development site will create a new junction with Back Tea Tree Road and two new vehicle accesses with Rosewood Lane. With the development having an existing right of way with Back Tea Tree Road, the two new accesses with Rosewood Lane will need to be assessed against the performance criteria P1.

Performance criteria	Assessment
The number of accesses for each road frontage must be minimised, having regard to:	
a) any loss of on-street parking; and	The development site is located behind properties along Back Tea Tree Road and Rosewood Lane, which are rural roads, built to a rural standard where on-street parking is not expected. There will be no loss of on-street parking by the creation of the two new accesses onto Rosewood Lane.
b) pedestrian safety and amenity;	With the rural location, pedestrians are not expected to arrive or leave the development site, and there are no formal pedestrian facilities on the surrounding road network. Two new accesses onto Rosewood Lane are not expected to cause any adverse impact to pedestrian safety or amenity.
c) traffic safety;	According to LIST, Rosewood Lane services seven rural residential properties, likely generating less than 55 daily vehicle movements, with six movements occurring during the peak periods. This means Rosewood Lane is lightly trafficked, with the volume of traffic generated by the two lots accessing Rosewood Lane is considered low. There will be sufficient sight distance and the accesses will be designed so that vehicles can enter, and leave in a safe and efficient manner, without causing adverse impact to existing users.
d) residential amenity on adjoining land; and	The surrounding land is zoned as agricultural, with rural residential properties occupying the large parcels of land. With the large parcels of land containing a small number of rural residential properties, no adverse impact to residential amenity is expected.
e) the impact on streetscape.	The proposed access arrangement is not expected to cause any adverse impact to the streetscape.

10. Conclusion

From a traffic engineering and road safety perspective, additional traffic generated from this development site is not expected to create any adverse safety, amenity, or traffic efficiency problems, as:

- the amount of traffic generated is considered to be low and there is sufficient capacity within the current road network to absorb the extra traffic movements,
- traffic analysis has determined creating a new junction onto Back Tea Tree Road, is not expected to cause any adverse safety or traffic efficiency impact, and motorists will continue to operate with the highest level of traffic service,
- the new junction with Back Tea Tree Road will have sufficient Safe Intersection Sight Distance that will comply with Austroads requirements, and this will ensure safe traffic movements between Back Tea Tree Road and the new subdivisional road,
- the two new accesses for lots 10 and 11 with Rosewood Lane, will have sufficient sight distance that complies with the Standard for domestic driveway accesses,

This Traffic Impact Assessment found no reason for this development not to proceed.

11. Appendix A – Traffic modelling results

Moring peak hour – existing traffic conditions

MOVEMENT SUMMARY								
▽ Site: 101 [Back Tea Tree and Tea Tree - Existing moring]								
New Site Site Category: (None) Giveaway / Yield (Two-Way)								
Movement Performance - Vehicles								
Mov ID	Turn	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m
South: Back Tea Tree Road								
1	L2	105	0.0	0.083	6.0	LOS A	0.3	2.4
3	R2	8	0.0	0.083	7.9	LOS A	0.3	2.4
Approach		114	0.0	0.083	6.1	LOS A	0.3	2.4
East: Tea Tree Road								
4	L2	6	0.0	0.075	5.5	LOS A	0.0	0.0
5	T1	132	10.0	0.075	0.0	LOS A	0.0	0.0
Approach		138	9.5	0.075	0.3	NA	0.0	0.0
West: Tea Tree Road								
11	T1	122	10.0	0.067	0.0	LOS A	0.0	0.0
12	R2	112	0.0	0.070	5.9	LOS A	0.3	2.3
Approach		234	5.2	0.070	2.8	NA	0.3	2.3
All Vehicles		485	5.2	0.083	2.9	NA	0.3	2.4

Moring peak hour – with development traffic

MOVEMENT SUMMARY								
▽ Site: 101 [Back Tea Tree and Tea Tree - Existing moring - with additional developmnet traffic]								
New Site Site Category: (None) Giveaway / Yield (Two-Way)								
Movement Performance - Vehicles								
Mov ID	Turn	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m
South: Back Tea Tree Road								
1	L2	114	0.0	0.090	6.0	LOS A	0.4	2.6
3	R2	9	0.0	0.090	7.9	LOS A	0.4	2.6
Approach		123	0.0	0.090	6.1	LOS A	0.4	2.6
East: Tea Tree Road								
4	L2	6	0.0	0.075	5.5	LOS A	0.0	0.0
5	T1	132	10.0	0.075	0.0	LOS A	0.0	0.0
Approach		138	9.5	0.075	0.3	NA	0.0	0.0
West: Tea Tree Road								
11	T1	122	10.0	0.067	0.0	LOS A	0.0	0.0
12	R2	112	0.0	0.070	5.9	LOS A	0.3	2.3
Approach		234	5.2	0.070	2.8	NA	0.3	2.3
All Vehicles		495	5.1	0.090	2.9	NA	0.4	2.6



ROAD DESIGN

12th
January
2025

PROPOSED 11 LOT SUBDIVISION
BACK TEA TREE ROAD, TEA TREE

PREPARED FOR SOUTHERN WASTE MANAGEMENT P/L

REPORT PREPARED BY:

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LIMITATIONS AND DISCLAIMER

This report is based on the readily available information from public sources and selective field investigation of the study area. It is for the purposes of informing authorities and stakeholders for assessing the planning application and should not be relied upon for any other purpose.

Contents

1. INTRODUCTION	3
2. SCOPE	3
3. PROPERTY PARTICULARS.....	3
4. JUNCTION DESIGN	4
5. INTERNAL ROADS	5
6. SHARED DRIVEWAYS.....	5
7. GRADE.....	6
8. PAVEMENT.....	6
9. DRAINAGE.....	7
10. BUSH FIRE CODE	7
11. ROAD AND RAILWAYS ASSET CODE.....	8
13. CONCLUSION.....	9
14. ATTACHMENTS	10

road design

PROPOSED 11 LOT SUBDIVISION BACK TEA TREE ROAD, TEA TREE

1. INTRODUCTION

A 11 lot subdivision is proposed on Back Tea Tree Road. Poortenaar Consulting were engaged to undertake a Road design. Hein Poortenaar is a Civil Engineer with 35 year experience in general civil engineering.

2. SCOPE

The report addresses the safety of the new junction on Back Tea Tree Road.
It also addresses the particulars, functionality and safety of the roads within the subdivision.

3. PROPERTY PARTICULARS

Table 1. Property details (Source: the LIST)

Owner of the land	Southern Waste Management P/L
Location	Back Tea Tree Road, Tea Tree. The property has not been assigned a rural address.
Municipality	Brighton Council
Title	121954/1
PID	1698711
Planning controls	Tasmanian Planning Scheme (Brighton)
Existing buildings	Nil
Property size	231Ha
Zoning	Rural Living

Planning overlays	<ul style="list-style-type: none"> • Bushfire Prone Area – Entire site • Landslide Hazard Area (low) – • Landslide Hazard Area (medium) • Waterways protection – Eastern boundary • Natural assets – Priority vegetation
Geology	Jurassic Dolerite for the study area
Elevation (study area)	140 -300m
Slope (study area)	10-25%
Existing drainage paths	A number
Mapped landslip history	None

4. JUNCTION DESIGN

The proposed junction is on a straight section of road. Back Tea Road Road reserve is 14m wide and bushes along the boundary obscure the sight distance unless the vehicle is far forward. There is a driveway opposite and a wider gravel shoulder which could be a school bus stop.

The required SISD for the 80km/hr design speed is 175m per TSD RF01.

With some bushes removal the sight distance is 214m southwards.

There is a slight hump 200m to the north but it is only 1.0m so a vehicle is visible over it. The sight distance is 400m.

The new road reserve is 20m wide. The terrain is relatively flat. There are no particular difficulties in constructing a new junction to comply with TSD R05. The junction will be sealed to 12m back from Back Tea Tree Road.

There are no overhead power services. There is a 100mm diameter water main that comes along the road reserve 5m off the northern boundary and turns north. The water main will be under the junction. Taswater may require its relocation clear of the carriageway.

The new road reserve alignment is at 67degrees to back Tea Tree Road. There is sufficient road reserve width to square the approach.

There is an existing culvert with headwalls but it is only 5m wide and does not appear to have much cover. A new longer culvert with driveable endwalls will be constructed. The location is a slight highpoint and falls to the north.

The new road reserve is 20m wide. The terrain is relatively flat. There are no particular difficulties in constructing a new junction to comply with TSD R05. The junction will be sealed to 12m back from Back Tea Tree Road.

There are no overhead power services. There is a 100mm diameter water main that comes along the road reserve 5m off the northern boundary and turns north. The water main will be under the junction. Taswater may require its relocation clear of the carriageway.

The new road reserve alignment is at 67degrees to back Tea Tree Road. There is sufficient road reserve width to square the approach.

There is an existing culvert with headwalls but it is only 5m wide and does not appear to have much cover. A new longer culvert with driveable endwalls will be constructed. The location is a slight highpoint and falls to the north.

5. INTERNAL ROADS

On road reserves the road will be constructed to Council standard and Council will take over the maintenance of the road.

The proposed road follows an existing road along a road reserve for 1130m. This road currently serves one dwelling and the farm and will be upgraded to council standards.

Based on TSD R01 Rural Roads Unsealed and 74 trips per day the carriageway width will be 4.0m with 1.0m shoulders – a total width of 6m. The road is flat and low use in a dry area on good soils and a gravel road is appropriate for a rural area.

A new road reserve will be extended 1100m into the property to serve lots. The road follows the valley to chainage 1700m with grades around 5%. The road then ascents up the side of a hill where it terminates in a turning circle. The average grade is 10% but there is one section that is 18%. This will be regraded vertically to ensure grades to not exceed the maximum 18% for a gravel road. The proposed road follows existing farm routes as they are the most practical route with respect to grades and drainage.

The total length of new public road is 1700m.

6. SHARED DRIVEWAYS

Shared driveways are privately maintained roads along access strips shared by 2 or 3 properties.

Driveways are summarised

A 540m long shared driveway serves lots 2, 4 and 5. This ascends diagonally up a steep slope with a cross grade of 30%. The maximum longitudinal grade is 16.9%. To minimize earthworks the width will be minimized with a 3m carriageway and 1m shoulders – including drain.

A 340m long shared driveway serves lots 7 and 8. This heads up the hill before into two driveways. The maximum longitudinal grade is 15%.

Table 3. Driveways lengths

Lot 1	50m	
Lot 2, 5, 6	534m	
Lot 2	50m	
Lot 5	160m	
Lot 6	210m	
Lot 3	40m	
Lot 4	40m	
Lot 7 & 8	340m	
Lot 7	270m	
Lot 8	280m	
Lot 9	168m	
Lot 7 & 8	1050m	
Lot 10 & 11	886m	
Lot 10	86m	
Lot 11	256m	
Total	4420m	

7. GRADE

The maximum grade for a gravel driveway per the Bushfire code is 18%. All roads and private driveways are less than 18% with the exception of the driveway up to lot 10 house site. This driveway will need to be sealed.

8. PAVEMENT

The subgrade is a red dolerite clay and weather rock. It has a good CBR and a standard pavement depth of 300mm is likely sufficient.

9. DRAINAGE

The roads cross a number of watercourses:

Table 1. Watercourses

	Description	Catchment	Q20 (m3/s)	Pipe size
Ch 420	Tea Tree Rivulet – 2 x 750mm pipes	550Ha	6.6	2 x900mm
Ch 820	2 x 375mm pipes	100Ha	1.5	750mm
Ch 1400		15Ha	0.43	450mm
Ch 1700		30Ha	0.7	600mm
Ch 50 Lot 2,5&6 driveway		20Ha	0.46	450mm
Ch 575 Lot 10 & 11		6.2ha	0.15	375mm

Tea Tree Rivulet has a 10.8Ha dam on it which is a recycled water storage and is used to irrigate the adjacent farm land with pivot irrigators. This has a significant detention of peak flows off the Meehan Range. If the existing 2 x 750mm pipes do not have a history of being overtopped then it is presumed their size is adequate.

There is unlikely to be any change in flows due to the subdivision. Roof water is reused. The roads generally discharge to adjacent paddock to soak in.

Even with a wet winter none of the watercourses were flowing. There was standing water in the 2 x750mm pipes indicative of a low flow. It is therefore concluded that flows are short lived during rain events.

10. BUSH FIRE CODE

The site comprises paddock and open woodland. If farmed it is generally in a low fuel condition. It is a dry hilly area and grass fires are fast moving.

A Bush Fire Hazard Assessment has been prepared. The proposed roads and driveways are designed to comply with table E2 of the Bushfire Prone Areas Code, these requirements being as follows:

- (a) all-weather construction;
- (b) load capacity of at least 20t, including for bridges and culverts;
- (c) minimum carriageway width of 4m (includes drain and verges;

- (d) minimum vertical clearance of 4m;
- (e) minimum horizontal clearance of 0.5m from the edge of the carriageway;
- (f) cross falls of less than 3 degrees (1:20 or 5%);
- (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
- (h) curves with a minimum inner radius of 10m;
- (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and
- (j) terminate with a turning area for fire appliances provided by one of the following:
 - (i) a turning circle with a minimum outer radius of 10m; or
 - (ii) a property access encircling the building; or
 - (iii) a hammerhead “T” or “Y” turning head 4m wide and 8m long
- (b) passing bays of 2m additional carriageway width and 20m length provided every 200m

Turn around locations are provided for fire trucks at junctions and the turning circle at chainages 1100, 1700, and 2250. Future house sites will also have tanker turn around areas.

11. ROAD AND RAILWAYS ASSET CODE

E5.6.2 Road accesses and junctions

This subdivision will require the provision of a new road junction onto Back Tea Tree Road, and use of an existing access to Rosewood Lane. A new access under the Brighton planning scheme requires assessment under the Performance Criteria, and the following information is provided to support the application.

12. Performance criteria Assessment

To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and junctions.

a) the nature and frequency of the traffic generated by the use;

The subdivision is for rural residential living, Each new lot is expected to generate 7.4 daily vehicle trips, and these trips are expected to be residential vehicles in nature. This type of land-use is compatible to the surrounding properties.

b) the nature of the road;

Within the surrounding road network, Back Tea Tree Road performs a minor collector function, where it provides an alternative connection between Brighton and Richmond supporting efficient traffic movement. The road also provides direct access to the adjacent properties.

c) the speed limit and traffic flow of the road;

This section of Back Tea Tree Road is posted with a 80 km/h speed limit in recognition of the narrow windy road with a large number of accesses. The traffic increase generated by this use will be negligible.

d) any alternative access to a road

The subdivision makes use of the existing Rosewood Lane and replaces an existing farm entrance. There are no other practical alternatives but use of the existing reserved roads .

e) the need for the access or junction;

As the population grows, so does the need for more housing. This new subdivision will utilise the current infrastructure and facilities of the connecting road network and is in close proximity to existing community services and infrastructures. The proposed land-use is compatible to the surrounding area, and is not expected to create any adverse safety or traffic efficiency issues.

Performance Criteria P1 is satisfied

13. CONCLUSION

This large property is one of the last large properties in the area with the surrounds all previously subdivided into rural residential and hobby farms as it is on the fringes of greater Hobart. There would be considerable demand for such a spectacular site with views, rolling woodland and pasture, pleasant climate and low bushfire risk.

The development will require the following:

- 2220m of new council road
- 2200m of shared and individual driveways

The roads proposed generally follow existing farm tracks and are the most practical way of accessing the areas of the property most suitable for dwellings.

The only new route is the shared driveway to lots 2, 5 & 6 which traverses a steep woodland slope and the final sections of driveway to lots 10 and 11.

The roads and driveways comply with Council standards, the Bush fire code and the TPS Access and parking code.

14. ATTACHMENTS

PHOTOS

DRAWINGS



Lot 7 & 8 driveway



Lot 7 & 8 driveway



Lot 9 driveway



Cul de sac looking up lot 7 & 8 driveway



Lot 5 & 6 driveway



Lot 2, 5 & 6 driveway



Road looking back from ch 1750



Route with watercourse at ch 1400



End of existing road at ch1150



Existing road ch 700m



Existing culverts ch 425m



Existing road Ch 100



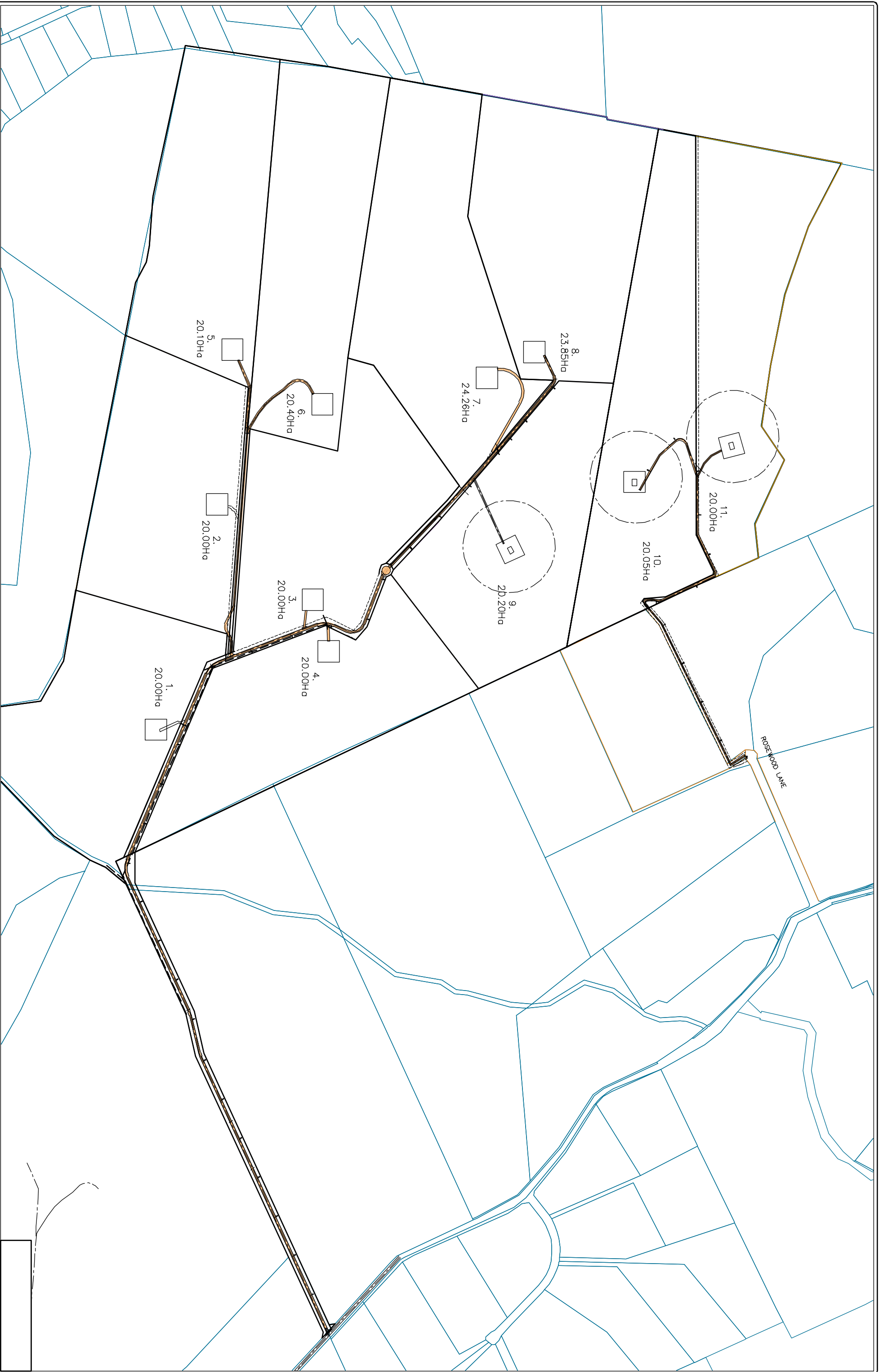
End of Rosewood lane



Existing track to lot 10 and 11

Flood Estimation
Determination of AEP 1:20 Flow

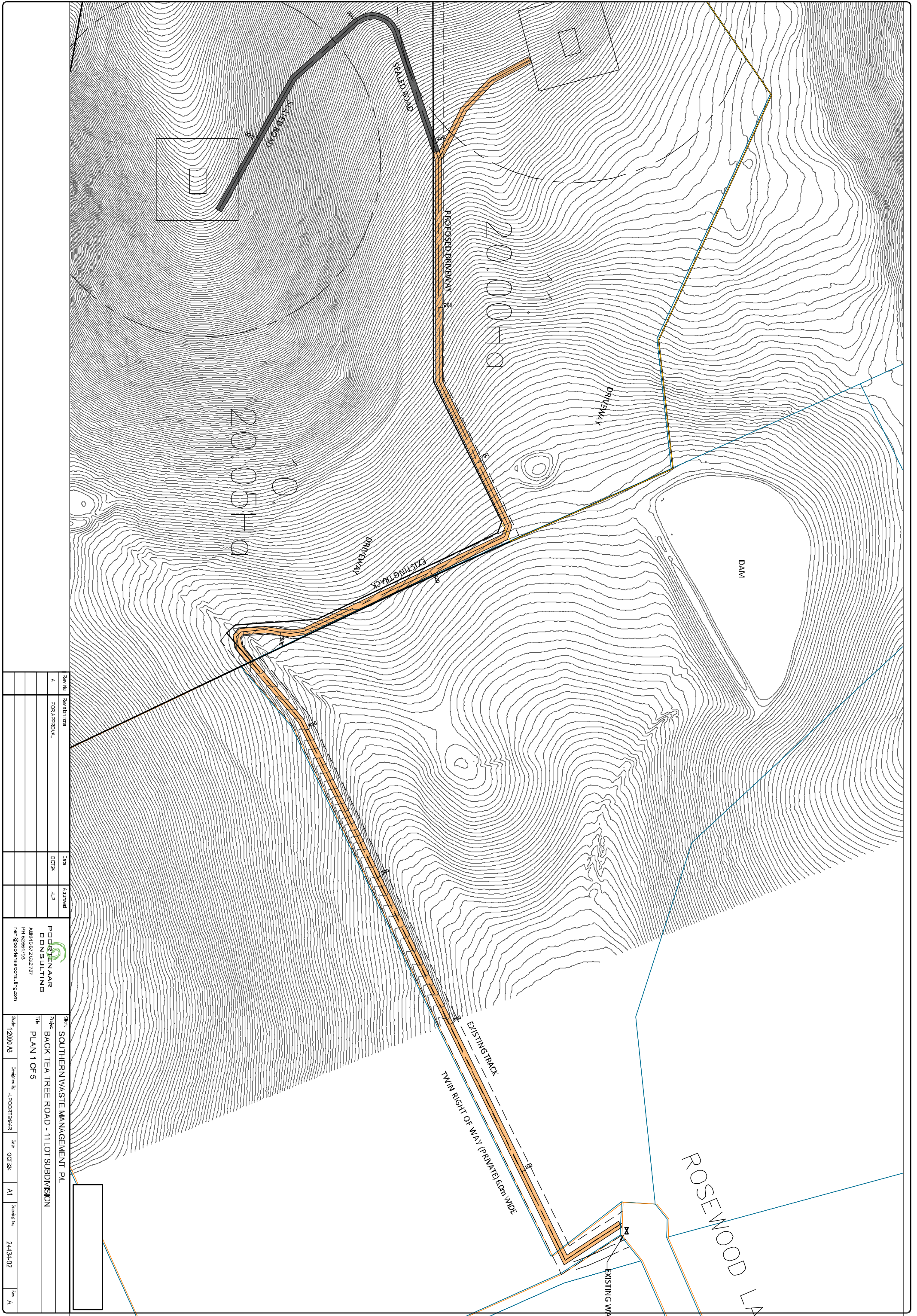
	Ch 420	Ch 820	Ch 1400	Ch 1700	Ch 50	
Time Of Concentration, Tc - slope						
Length Of Catchment Divide	= 3 (Km)	= 1.8	= 0.5	= 0.95	= 0.9	
Area Of Catchment	= 5.5 (Km ²)	= 1	= 0.15	= 0.3	= 0.2	
Difference in elevation av	= 120 (Km ²)	= 60	= 30	= 100	= 85	
Total Equal area slope	= 40 (m)	= 33	= 60	= 105	= 94	
S.e	= 40.00	= 33.33	= 60.00	= 105.26	= 94.44	
Tc(mins)	= 70.16	= 2.479981 51.78	= 2.016396 15.46	= 1.876028 24.49	= 2.249922 24.69	= 2.114162
Tc (Hours)	= 1.2	= (Hours) 0.9	= 0.3	= 0.4	= 0.4	
(V)m/s)	= 0.7	= 0.6	= 0.5	= 0.6	= 0.6	
IFD 1 in Y Yrs						
Intensity ₂₀	= 23 mm	= 21	= 12	= 15.5	= 15.5	
Intensity ₁₀₀	= 31 mm	= 29	= 19	= 22.5	= 22.5	
Intensity ₂₀	= 20	= 24	= 47	= 38	= 38	
Intensity ₁₀₀	= 27 (mm/Hr)	= 34	= 74	= 55	= 55	
Calculate Flow AEP 1:Y						
f	= 0.20	= 0.20	= 0.20	= 0.20	= 0.20	
C ₂₀	= 0.22	= 0.22	= 0.22	= 0.22	= 0.22	
C ₁₀₀	= 0.26	= 0.26	= 0.26	= 0.26	= 0.26	
F ₂₀	= 1.10	= 1.10	= 1.10	= 1.10	= 1.10	
F ₁₀₀	= 1.20	= 1.20	= 1.20	= 1.20	= 1.20	
Q ₂₀	= 6.62	= 1.49	= 0.43	= 0.70	= 0.46	
Q ₁₀₀	= 10.70	= 2.47	= 0.81	= 1.21	= 0.80	
Pipe capacity						
	= 2 x 750mm @ 1.5m HW	= 2 x 375mm @ 1.0m HW				
	= 2.4 m3/s	= 0.6				
	= 2x900mm	= 750mm	= 450mm	= 600mm	= 450mm	



ROSEWOOD LANE

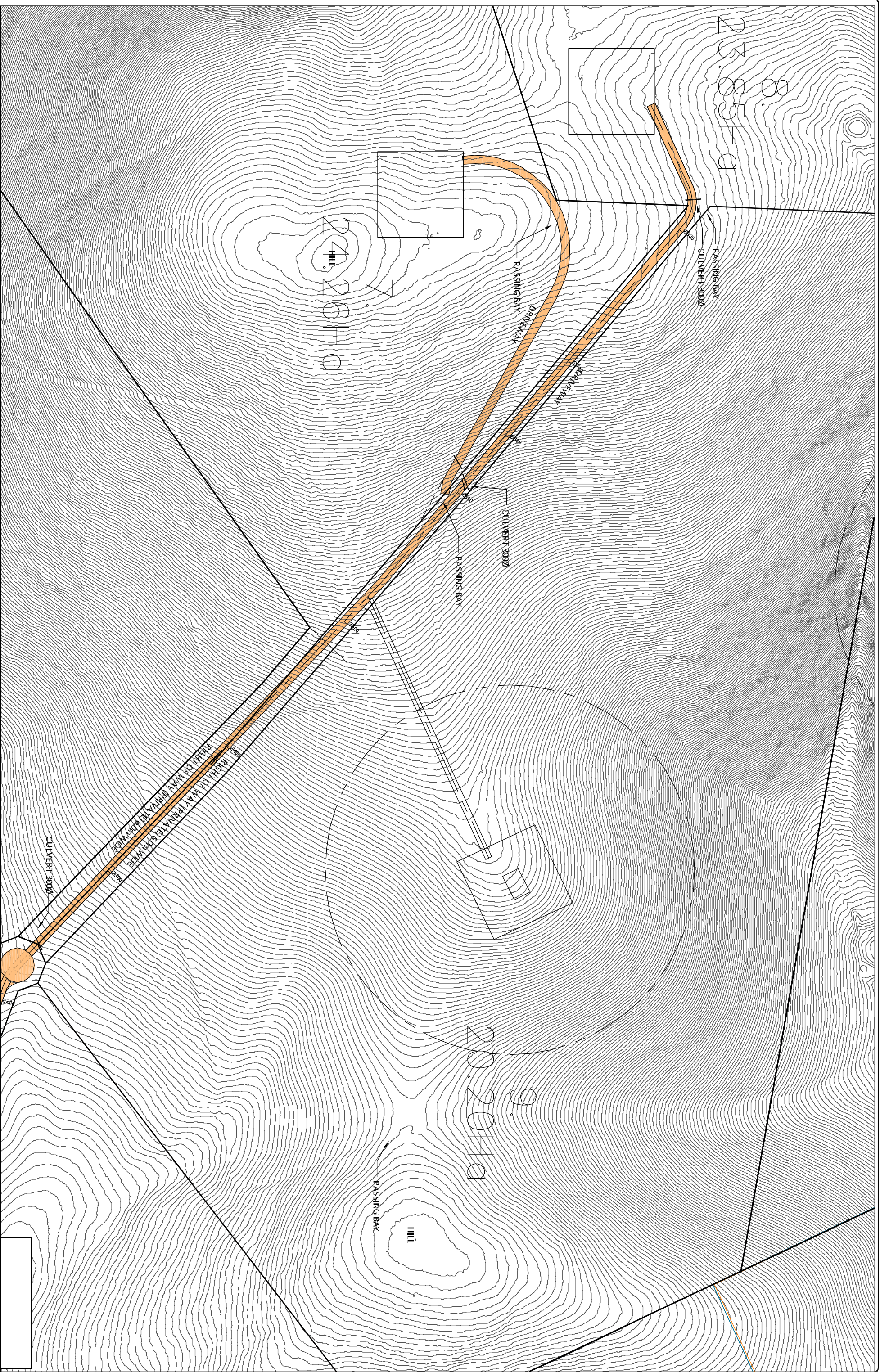
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 PH 628661703
 /enr@podsilnar.com.au / p.com

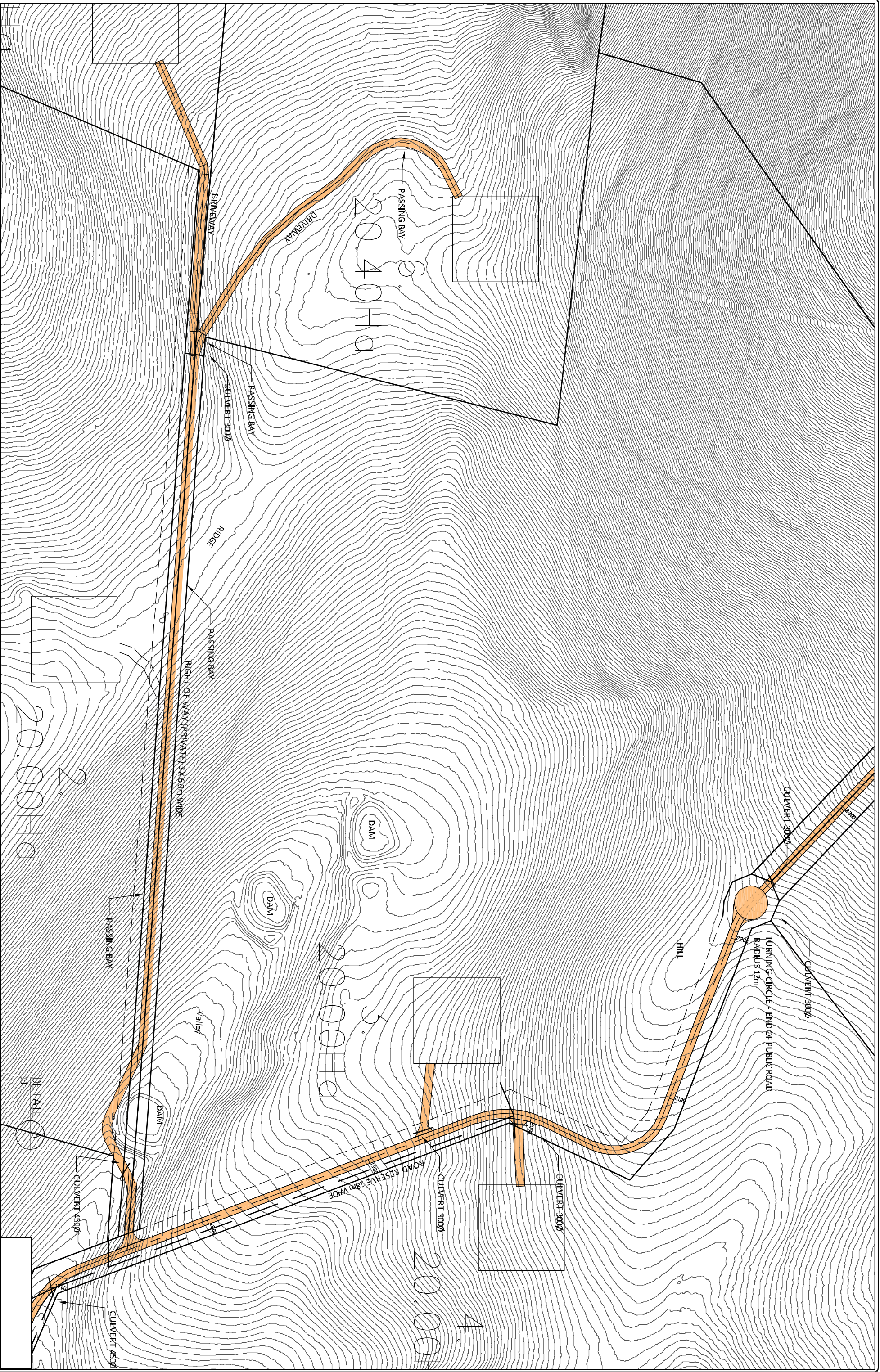


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					PODSUNAR CONSULTING AR/ING/2022/23/ PH 62861703 /ar@podsunar.com.au/eng.com

Scale	Author	Date	Sheet No.	Total Sheets
1:2000 AS	AJ	OCT 24	A1	24434-02



Sheet No.	Submittal No.	Date	Drawn	Checked	Project Name
A	FOR APPROVAL	OCT 24	A. P.		SOUTHERN WASTE MANAGEMENT PL
					BACK TEA TREE ROAD - 111 LOT SUBDIVISION
					PLAN 2 OF 5
PODSLENAAR CONSULTING ARLING 672932/33 PH 62866703 /ar@podsleenaar.com.au, hq.com					
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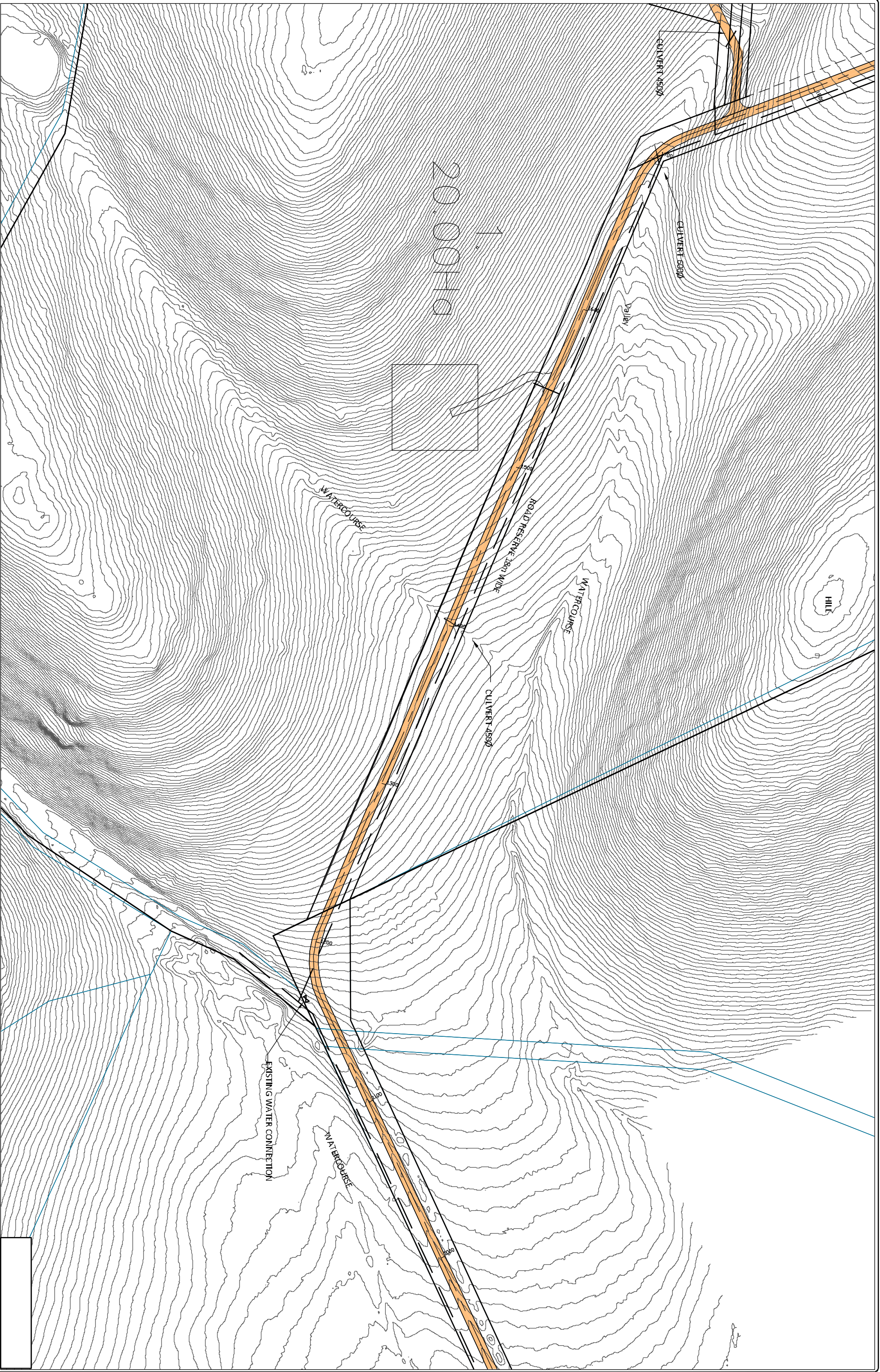
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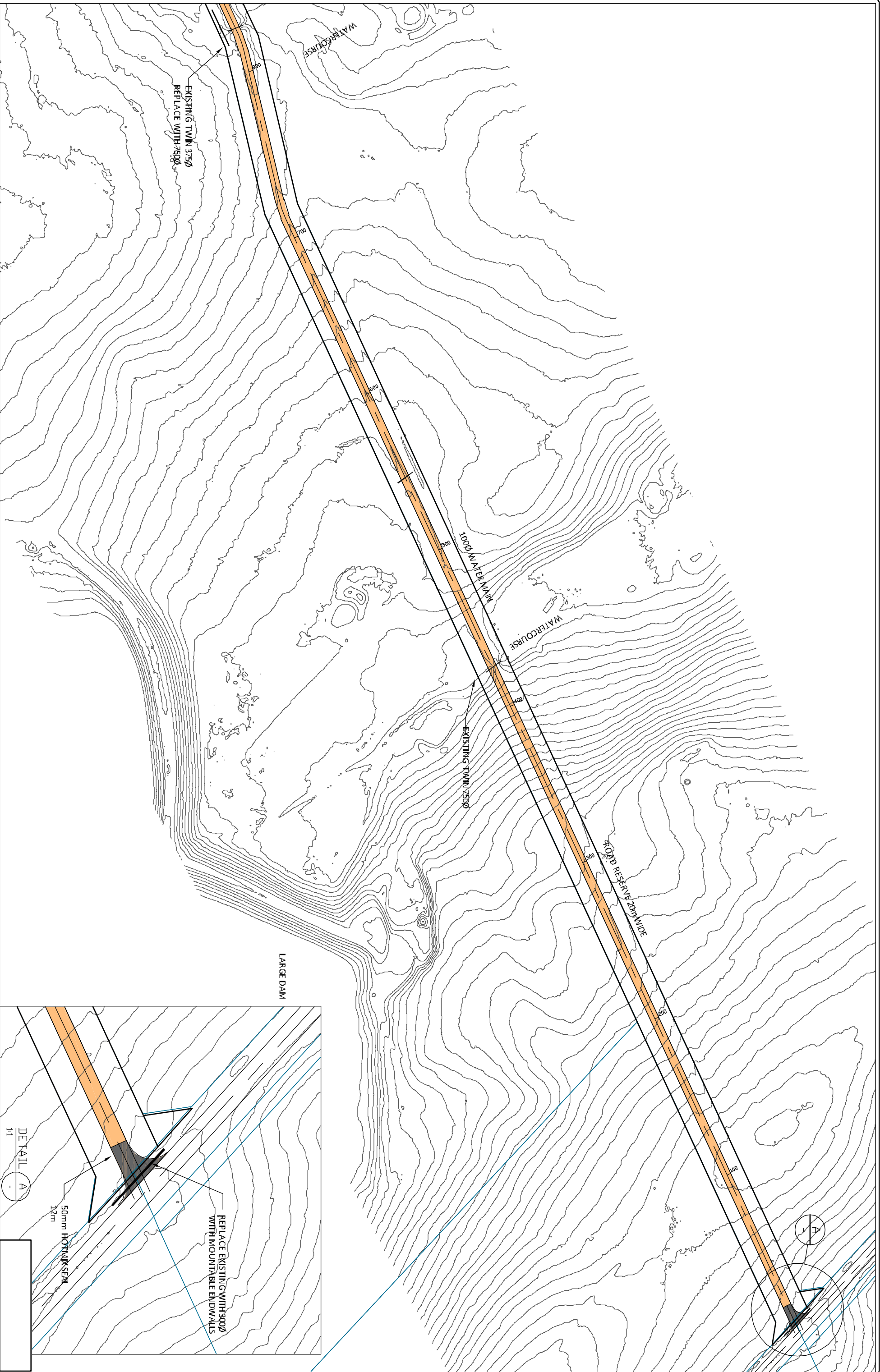
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Checked		Approved	1/2/2008
<p>PODOLSKAAR CONSULTING AR110/6/2/932/737 PH 62861703 /e/er@podolskaar.co.za, h/eg.com</p>			
<p>Client: SOUTHERN WASTE MANAGEMENT PL Title: BACK TEA TREE ROAD - 111 LOT SUBDIVISION Plan: PLAN 3 OF 5</p>			
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Checked		Sheet No.	A



Rev No	Revision	Date	Drawn	Checked	Scale	Author	Date	Drawn	Checked	Scale	Author	Date
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<p>PODSUNAAR CONSULTING AR/16/2/932/33 PH 62864703 /ar@podsunaar.com.au, hq.com</p>	<p>Sheet: 11 Title: SOUTHERN WASTE MANAGEMENT PL BACK TREE ROAD - 11 LOT SUBDIVISION PLAN 4 OF 5</p>
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Rev No	Description	Date	By
A	FOR APPROVAL	OCT 24	A.P.


PODS SENIAR CONSULTING
 ABN 16 672 932 737
 PH 02 8611 0105
 info@podseniars.com.au | p.c.a.com.au

Project: SOUTHERN WASTE MANAGEMENT P/L
 Title: BACK TEA TREE ROAD - 11 LOT SUBDIVISION
 Plan: PLAN 5 OF 5
 Scale: 1:2000 AS
 Date: 24 OCT 24
 Sheet: A1
 Scale: 1:2000
 Date: 24 OCT 24
 Rev: A

NOTES

GENERAL

1. LOCATE ALL SERVICES PRIOR TO COMMENCEMENT.
2. ALL CONCRETE TO BE GRADE N25 UNLESS NOTED OTHERWISE

ROADS

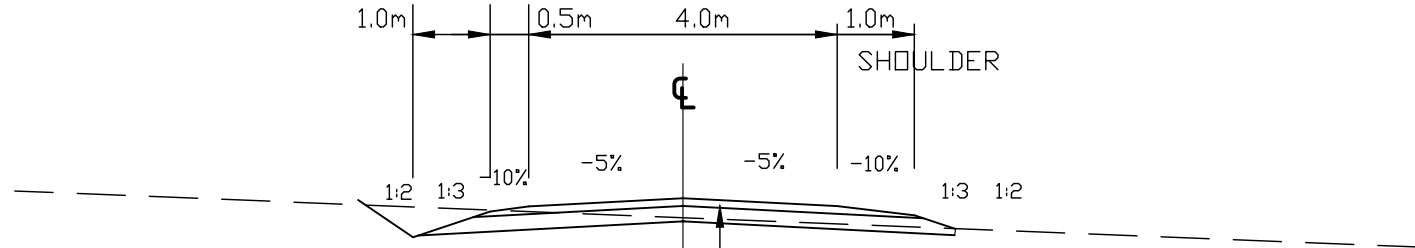
1. ALL ROAD WORKS TO BE IN ACCORDANCE WITH IPWEA TASMANIAN STANDARD DRAWINGS AND SPECIFICATIONS AND IPWEA TASMANIAN SUBDIVISION GUIDELINES. RELEVANT DRAWINGS INCLUDE:
 TSD-R02-V3 RURAL ROADS SEALED
 TSD-R03-V3 RURAL ROADS TYPICAL PROPERTY ACCESS
 TSD-R04-V3 RURAL ROADS TYPICAL DRIVEWAY PROFILE
 TSD-R12-V3 SUB SOIL DRAINS

2. ALL ROAD AND STORMWATER WORKS ARE TO BE IN ACCORDANCE WITH DSG (FORMERLY DIER) SPECIFICATIONS:
 R21 CLEARING AND GRUBBING
 R22 EARTHWORKS
 R23 SUBGRADE ZONE
 R24 GEOTEXTILES
 R31 OPEN DRAINS AND CHANNELS
 R32 DRAINAGE: CULVERTS, PIPELINES AND RELATED STRUCTURES
 R33 SUBSURFACE DRAINAGE
 R40 PAVEMENT BASE AND SUB-BASE

4. THE CONTRACTOR SHALL ARRANGE FOR A TRAFFIC MANAGEMENT PLAN (PREPARED BY A SUITABLY QUALIFIED PERSON) IN ACCORDANCE WITH AS1742.3 (2019) AND AUSTRROADS GUIDE TO TEMPORARY TRAFFIC MANAGEMENT. THE TMP SHALL BE SUBMITTED TO COUNCIL FOR REVIEW PRIOR TO COMMENCING WORKS.

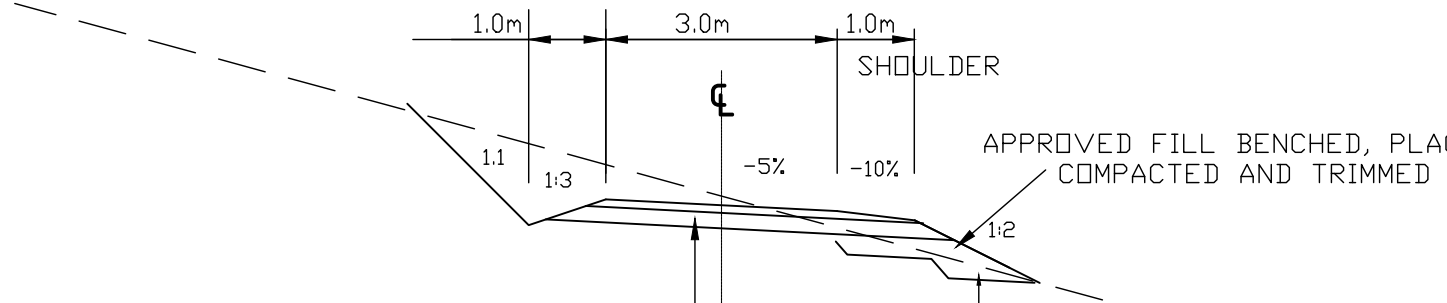
WATER

1. ALL WATER WORKS ARE TO BE IN ACCORDANCE WITH WSA 03-2011-3.1 MRWA ED V2.0 AND TASWATER'S SUPPLEMENT.
2. PROPERTY CONNECTIONS ARE TO BE IN ACCORDANCE WITH TW-SD-W-0002 SHEET 5&6 WITH METER WITH INTEGRAL DUAL CHECK VALVE, GATE VALVE AND PVC BOX AS SPECIFIED BY TASWATER
3. DETECTOR TAPE IS TO BE INSTALLED OVER ALL NON-METALLIC WATER MAINS
4. ALL WATER WORKS MUST BE TESTED AND INSPECTED BY TASWATER PRIOR TO BACKFILL



50mm SURFACE COURSE RED GRAVEL
 200mm SUBBASE 1
 OVER APPROVED SUBGRADE
 STRIP 150mm TOPSOIL
CROSS SECTION PUBLIC ROAD
 SCALE 1:100

AS PER TSD R01 RURAL ROADS UNSEALED
 ONE WAY CROSS FALL ON STEEP CROSS SLOPES

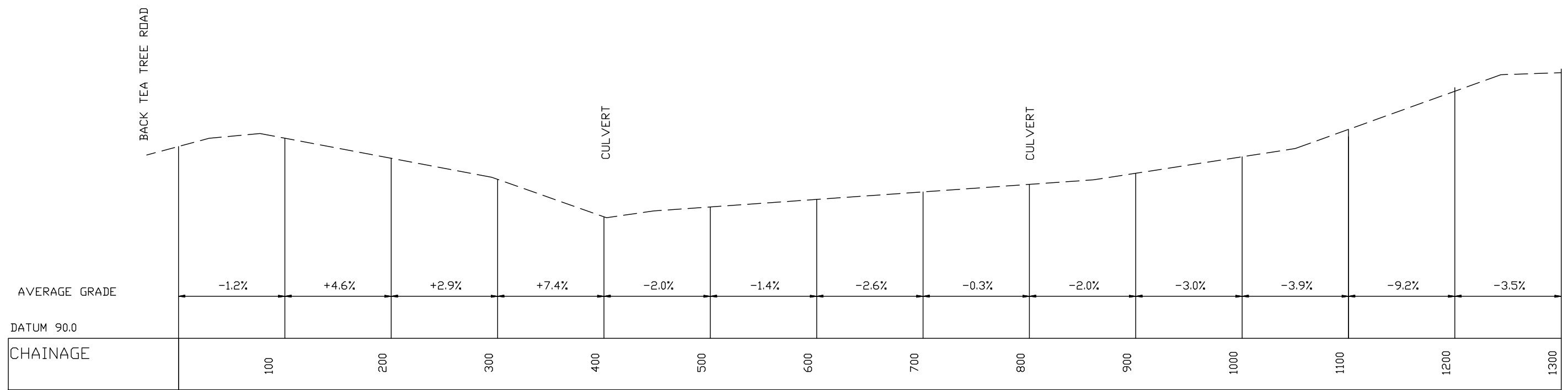


50mm SURFACE COURSE RED GRAVEL
 200mm SUBBASE 1
 OVER APPROVED SUBGRADE
 STRIP 150mm TOPSOIL
CROSS SECTION PRIVATE DRIVEWAY
 SCALE 1:100

20m LONG (5.5m TOTAL WIDTH) PASSING BAYS AT 200m

Rev No	Revision note	Date	Approved	Client
A	FOR APPROVAL	OCT24	HJP	SOUTHERN WASTE MANAGEMENT P/L
				Project BACK TEA TREE ROAD - 11 LOT SUBDIVISION
				Title NOTES AND TYPICAL; SECTIONS
				Scale NTS
				Designed By: H.POORTENAAR
				Date OCTS 24
				A1
				Drawing No. 24434-07
				Rev A





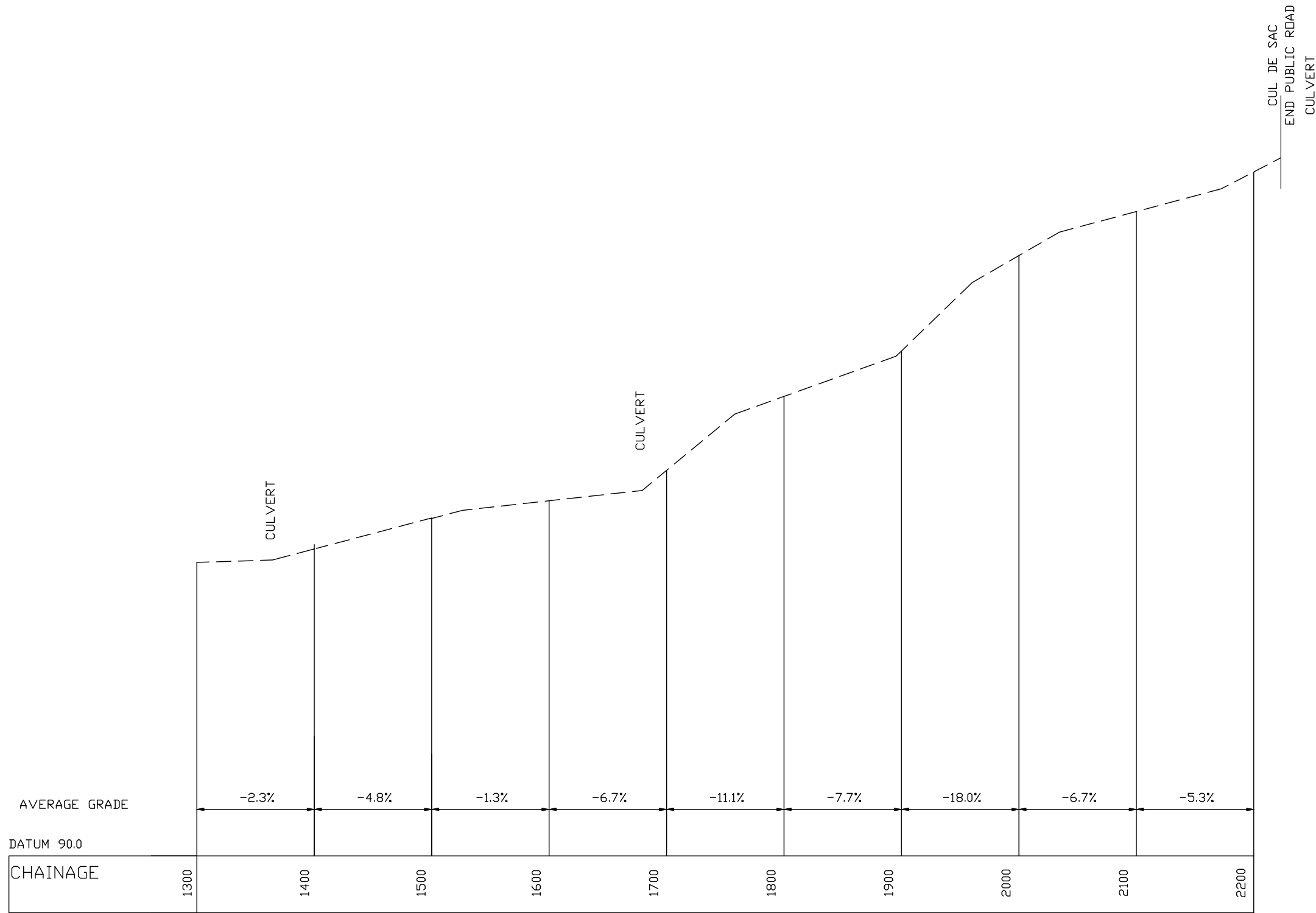
ROAD A LONG SECTION
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 SCALE 1:200 VERTICAL A3.

Rev No	Revision note	Date	Approved
A	FOR APPROVAL	OCT24	HJP

POORTENAAR CONSULTING
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 hein@poortenaarconsulting.com

Client	SOUTHERN WASTE MANAGEMENT P/L				
Project	BACK TEA TREE ROAD - 11 LOT SUBDIVISION				
Title	LONG SECTIONS				
Scale	AS SHOWN	Designed By:	H.POORTENAAR	Date	OCT24
				A1	Drawing No. 24434-08
					Rev A

datum = 90 vscale = 5x vscale= 1x chainage every 100m

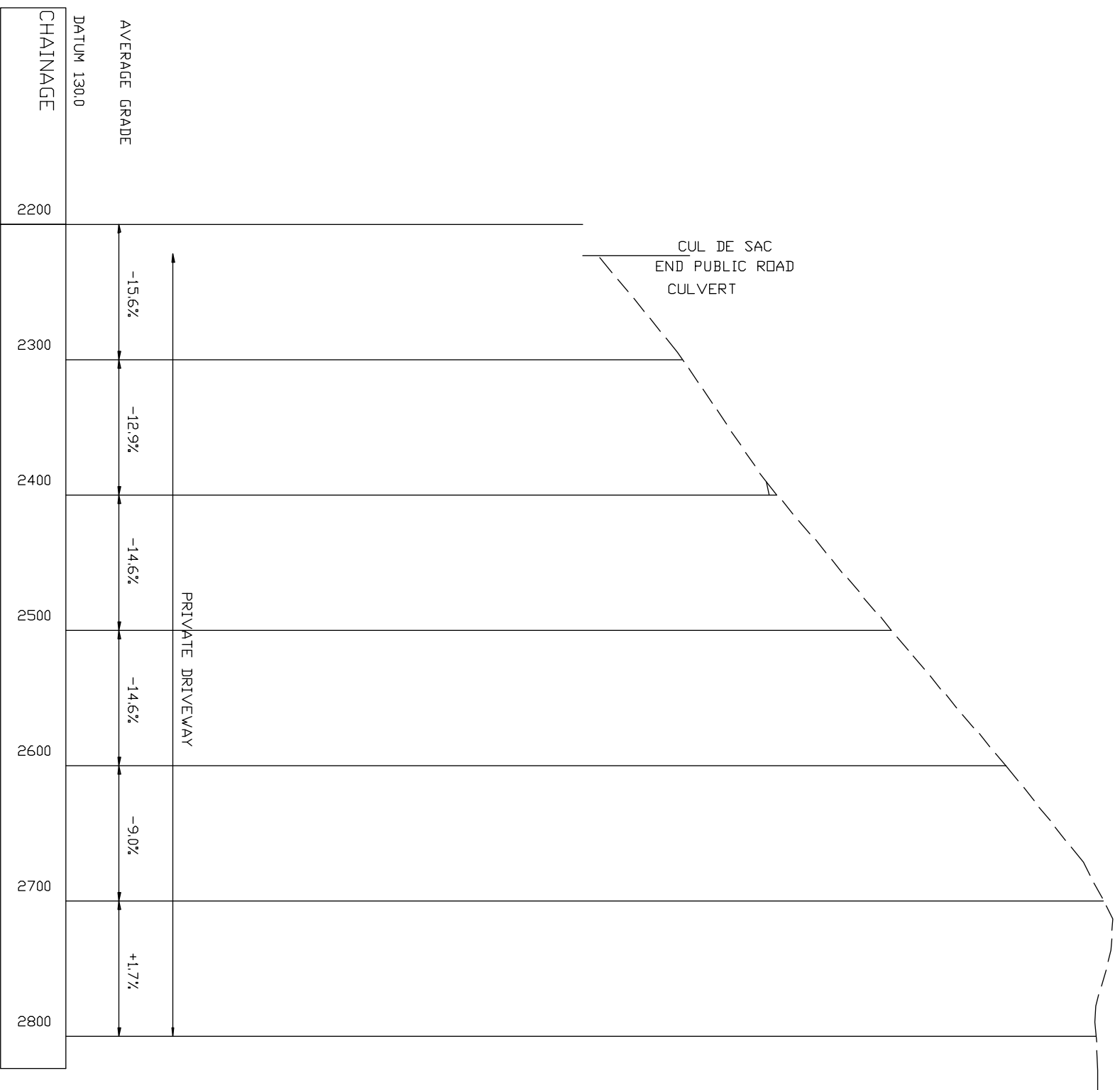


ROAD A LONG SECTION
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Rev No	Revison note	Date	Approved
A	FOR APPROVAL	OCT24	HJP

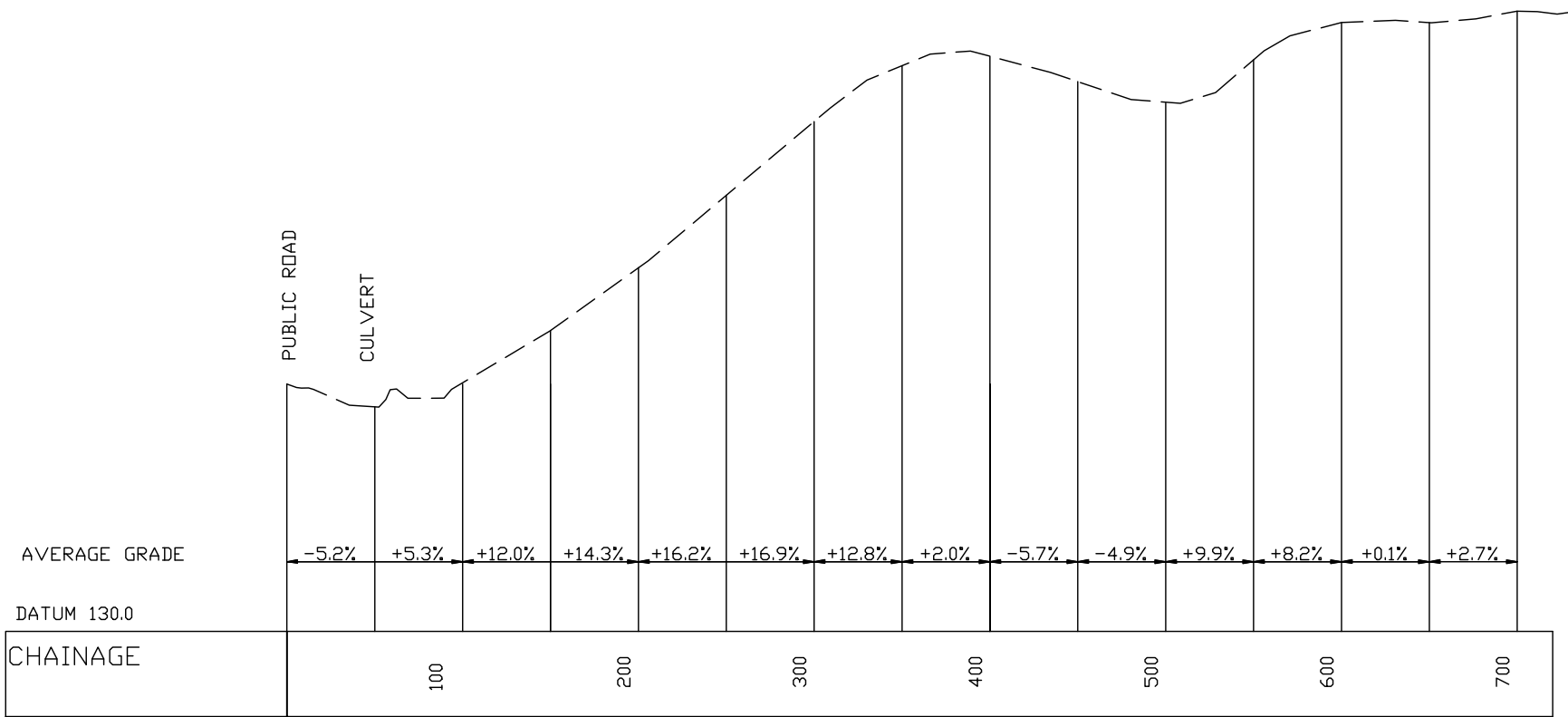
POORTENAAR CONSULTING
ABN 40 672 032 737
PH 62664708
hein@poortenaarconsulting.com

Client	SOUTHERN WASTE MANAGEMENT P/L				
Project	BACK TEA TREE ROAD - 11 LOT SUBDIVISION				
Title	LONG SECTIONS				
Scale	AS SHOWN	Designed By:	H.POORTENAAR	Date	OCT24
				A1	Drawing No. 24434-09
					Rev A



LOT 7 & 8 LONG SECTION
SCALE 1:100 HORIZONTAL, AS
SCALE 1:500 VERTICAL, AS

Sheet No.	Substation	Date	Revision	 PODSUNAR CONSULTING ARING 672932/31 PH 62861703 /ar@podsunar.com.au, ar@podsun.com	Scale: AS SHOWN Project: SOUTHERN WASTE MANAGEMENT PL Title: BACK TEA TREE ROAD - 111 LOT SUBDIVISION LONG SECTIONS Date: 1:200 OCT 2014 Size: OCT 2014 Scale: A1 Station: 24434-10 Rev: A
A	FOR APPROVAL	OCT 2014	1.3		



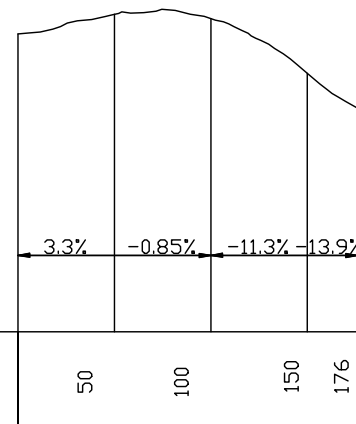
LOT 2, 5 & 6 DRIVEWAY LONG SECTION
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 SCALE 1:200 VERTICAL A3.

Rev No	Revision note	Date	Approved
A	FOR APPROVAL	OCT24	HJP

POORTENAAR CONSULTING
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 PH 62664708
 hein@poortenaarconsulting.com

Client SOUTHERN WASTE MANAGEMENT P/L				
Project BACK TEA TREE ROAD - 11 LOT SUBDIVISION				
Title LONG SECTIONS				
Scale AS SHOWN	Designed By: H.POORTENAAR	Date OCT24	A1	Drawing No. 24434-11
				Rev A

AVERAGE GRADE

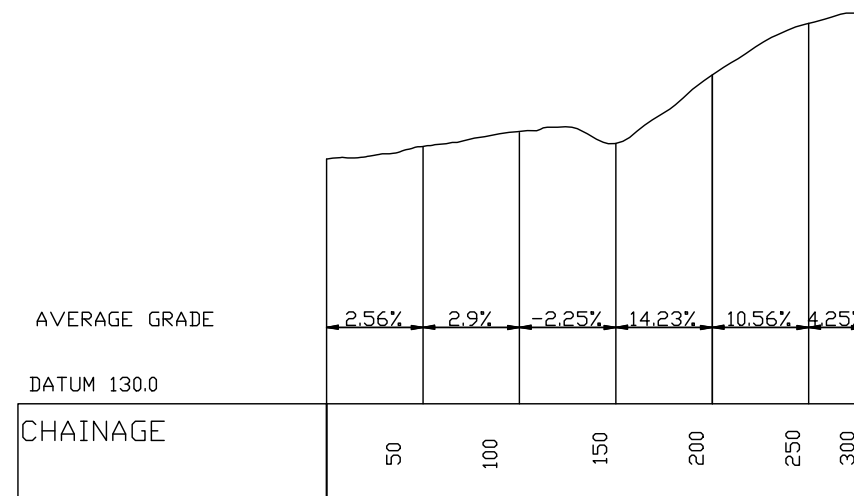


DATUM 160.0

CHAINAGE

LOT 5 DRIVEWAY
SCALE 1:1000 HORIZONTAL A3.
SCALE 1:200 VERTICAL A3.

AVERAGE GRADE



DATUM 130.0

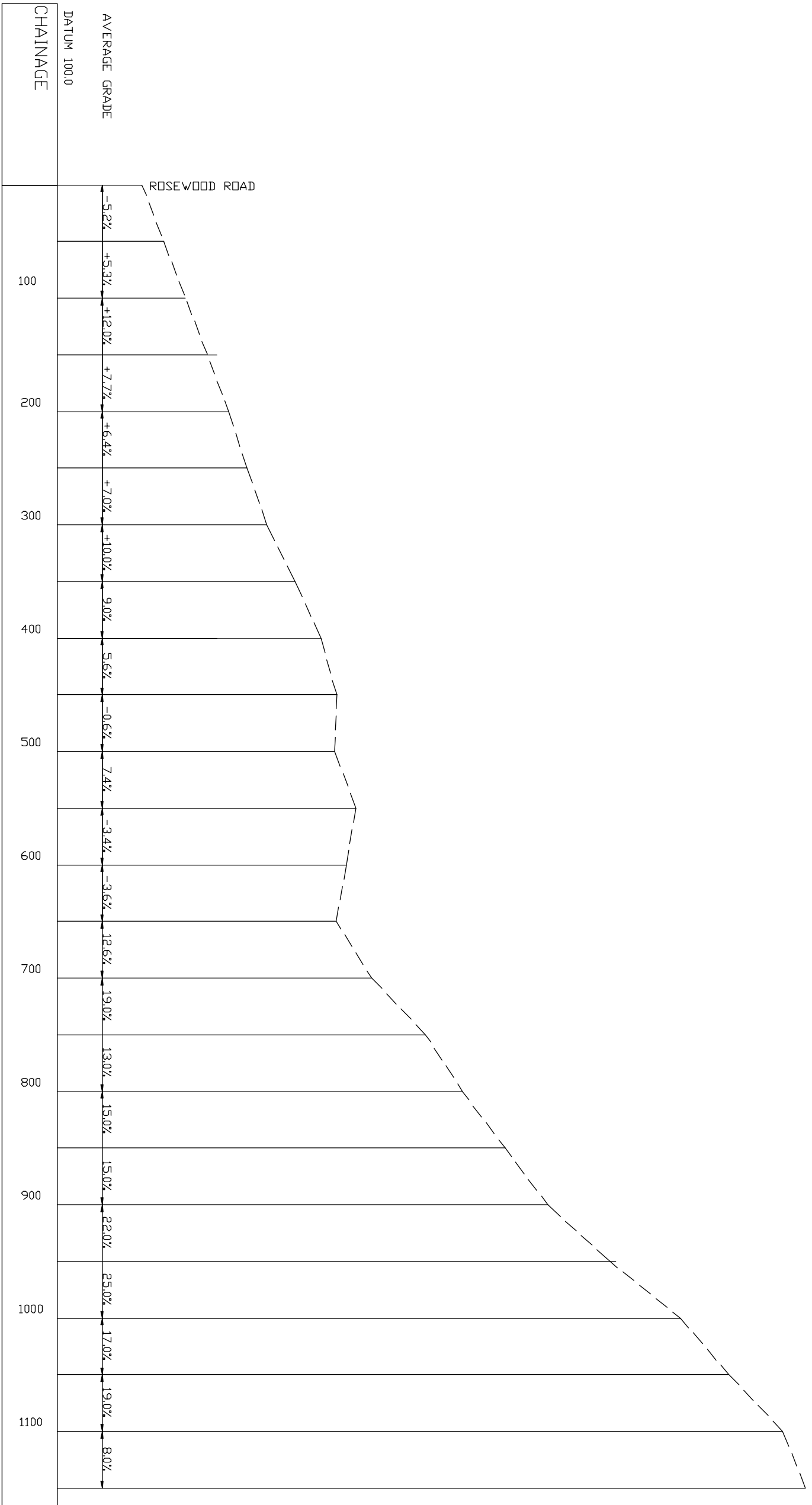
CHAINAGE

LOT 9 DRIVEWAY LONG SECTION
SCALE 1:1000 HORIZONTAL A3.
SCALE 1:200 VERTICAL A3.

Rev No	Revision note	Date	Approved
A	FOR APPROVAL	OCT24	HJP



Client	SOUTHERN WASTE MANAGEMENT P/L									
Project	BACK TEA TREE ROAD - 11 LOT SUBDIVISION									
Title	LONG SECTIONS									
Scale	AS SHOWN	Designed By:	H.POORTENAAR	Date	OCT24	A1	Drawing No.	24434-12	Rev	A



LOT 10 & 11 DRIVEWAY LONG SECTION

SCALE 1000 HORIZONTAL, AS
SCALE 1000 VERTICAL, AS

Sheet No.	Revision No.	Date	Author	POOTJENNAAR CONSULTING ABN 69 572 002 737 114 52564105 Tel: 0800 98 88 00 or 9411 9200	Sheet	SOUTHERN WASTE MANAGEMENT P/L	
A	FOR AS SHOWN	OCT 24	L.P.		Project	BACK TEA TREE ROAD - 11 LOT SUBDIVISION	Scale
						Sheet	1 - FOOTING
						Sheet	OCT 24
						Sheet	A1
						Sheet No.	24434-13
						Sheet	A

From: moiradavidson@[REDACTED]
Sent: Friday, 28 February 2025 2:34 PM
To: Angela Turvey <Angela.Turvey@brighton.tas.gov.au>
Cc: Sheryl Rainbird <sherylrainbird@[REDACTED]>
Subject: Bridgewater Jerry Statue

ATTACHMENT
AGENDA ITEM **14.1**

Hi Angela,

Thank you so much for taking the time to come to Café Connections on Tuesday last.

We appreciate the consideration shown by Council in allowing us some say in the possible placement of the refurbished Jerry Statue.

The main points that we raised when considering placement were:

A place that had good overview by people (in a place an eye can be kept on him but not in an area too frequented by younger residents)

That there is signage with information about the meteorological phenomenon, and history of name, and history of statue (Including reason for first placement)

That is be placed not too close to parking or the proposed jetty/boat ramp, but with parking nearby so that it can be a “destination” for foreshore walkers.

A question was raised regarding who would be responsible for the upkeep/maintenance of Jerry?

Suggestions were made that it could be part of a Keep Australia Beautiful Day annual cleanup.

The majority decision was for Place B or similar, but definitely not under the bridge in Place A.

Regards,

Maira Davidson

Facilitator

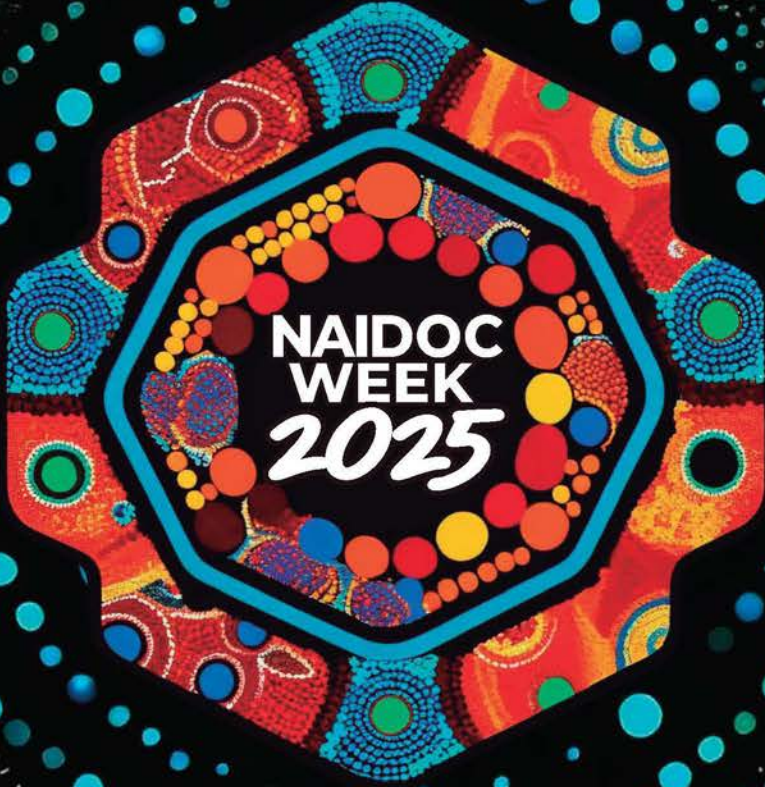
Café Connections



Potential locations for relocation of Bridgewater Jerry sculpture.

Option 1 - underneath the new bridge, near the new / reinstated boat ramp and jetty.

Option 2 - Bridgewater foreshore, near boat ramp carpark / playground area.



PROPOSAL DOCUMENT

NAIDOC WEEK 2025 School Initiatives

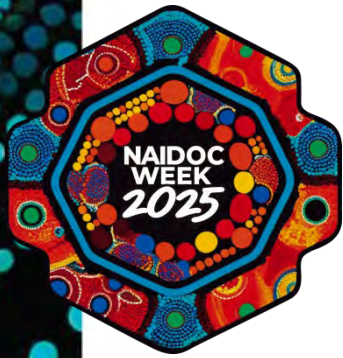
Dylan Williams
Executive Director

Thank you for your continued support



ATTACHMENT
AGENDA ITEM **14.2**

NAIDOC WEEK 2025 – 6TH – 13TH July



Firstly, we would like to convey our appreciation for the support that has been provided the initiatives in previous years. It is only through the dedicated partnerships that we can receive such a vast and creative response to the initiatives from students across the LGA.

The 2024 NAIDOC Week School initiatives have again proven to be an overwhelming success. The positive feedback received from many principals and teachers was overwhelming; "We just wanted to say the biggest thank you. One of our students was a winner in the 2024 initiatives and his family and our whole school community were just so proud of the effort, Thank you for this wonderful project." " Thank you so much for this initiative and the prize and medal is so beautiful." "Congratulations to Koori Kids, our local council and all stakeholders for this amazing annual initiative that our school takes part in each year."

The initiatives annually bring out the best creativity of school students. We are taking the opportunity through our *secondary creative initiative this year to ask students to [Design a Creative Invitation to the Prime Minister inviting him to attend a NAIDOC event either at your school or within your community. The invitation must focus on NAIDOC Week, Cultural significance and your local community and its importance to first nations people](#)*

The NAIDOC Week School Initiative Competitions bring a coordinated educational component to the week-long celebrations. The competitions have been overwhelmingly successful and last year was no



exception which produced over 10,776 entries from schools who participated in a variety of competitions, and we are delighted to announce the "2025 NAIDOC Week" Colouring-in/poem writing and Creative/Essay writing Competitions. Entry is open to all primary and secondary school students in communities.

The aim of these initiatives is to provide our kids with a greater understanding on the **I** of friendship and cultural diversity. The competitions reflect Aboriginal ancestry and promote the growth of positive attitudes in all students towards Aboriginal people. They are broadly based around each year's national NAIDOC theme. The colouring-in/ poem writing competitions are open to all primary school students and the creative art / essay writing competitions are open to all secondary students. **The winning students are each year awarded prizes and or NAIDOC Medals of Excellence.**

As part of National NAIDOC Week celebrations Koori Kids coordinates, with the support of various government departments and local councils an educational component to provide a link of cultural diversity to our kids with the NAIDOC Week School Initiative Competitions. These competitions have been a successful part of NAIDOC Week and to date we have received over 3,443,918 entries which include coloring-in, poem writing, creative art, and essay writing. As a result, we have awarded over 105 major prizes including Computers,

Televisions, Mountain Bikes, Xbox consoles, DVD Players, MP3 Players, Mini Stereos, and Encyclopedia's. We have presented some 1250 encouragement awards including CDS, DVDS, Movie Tickets and certificates to all participants.

This year our highlighted Indigenous role models include a broader spectre recognising Indigenous talent in entertainment and sport and their contribution to the national identity **Kid Laroi (Indigenous Entertainer) and Lance 'Buddy' Franklin (Indigenous sportsman)**. Our message this year is that education is knowledge and knowledge is **GOLD**.

The logistics of the initiatives involve packages being sent to all school principals inviting students to participate in the competitions. Prizes will be awarded to the winning students along with the "NAIDOC Medal of Excellence" The Prime Minister has annually provided a message of support for the initiatives encouraging students to participate. "The wonderful work of student winners – and indeed all entrants – gives me great confidence for the future and our ability to forge a more united, harmonious, and respectful future together in the spirit of reconciliation. We can draw inspiration from their idealism and creativity, and their instinctive sense of possibility and openness to change. That is why I am so delighted to be associated with the successful NAIDOC Week School Initiatives."

The judging of entries last year was adjudicated by a panel including our patron, Aboriginal Elders and Sponsoring agency delegates. The judging this year will take a similar precedent. At an awards presentation held during NAIDOC Week the Minister praised the competitions and their purpose "*The initiative we are here to celebrate today provides a perfect illustration of how public awareness has been raised around these issues in recent times. The NAIDOC School Initiative competitions are a perfect opportunity to bring Australians together. They have clearly done so*".

We acknowledge and appreciate the support of the council last year and seek your involvement again to maintain this year's competitions. **We are asking that you assist this year by preparing a report to council and continuing your support to the initiative with a \$450.00 contribution towards printing and distribution for students within councils LGA.** Support last year was recognised by the Prime Minister and Minister – Indigenous Affairs at the NAIDOC Awards presentation held during NAIDOC Week. Logo was displayed on all materials sent to both principals and students across council's LGA and a proof of the 2025 competition entry forms for your information is attached. Support was also recognised in all media which included the Advertiser, National Indigenous media, ABC Radio, Local media, and ABC TV'.

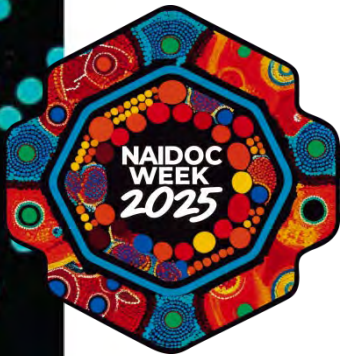


Without support these initiatives would not have been an overwhelming success and we hope that you will be able to assist us with this small community contribution. For further please contact the co-ordinator on (02) 8088-0791 or send an Email to director@koorikids.com

Warm Regards

**Dylan Williams
Executive Director
NAIDOC Week Initiatives**





ANNEXURE

NAIDOC Week 2025 School Initiatives

Koori Kids – Request for financial partnership

Mayor,
Chief Executive Officer
CC: Director: Community Services

REPORT IN BRIEF

Koori Kids is a community organisation that engages young people in a range of school initiatives to promote education and awareness of Aboriginal & Torres Strait Islander culture. Each year Koori Kids conducts the NAIDOC Week School Initiative Competitions for school aged children. This is broken up into primary and secondary school categories being colouring-in, poem writing and creative and essay writing. Koori Kids is seeking continued support from council and request consideration of council to be an associate partner with a **\$450** towards the program.

Purpose

The purpose of this annexure to the proposal is to inform council of the Koori Kids 2025 School Initiatives program. The initiatives are coordinated in partnership with the Department of Education, Tasmanian Department of Education, Department of Health & Aged Care and Catholic Education Tasmania.

Koori Kids has provided a proposal and draft entry forms for the 2024 initiatives. The contribution sought (**\$450**) will be utilised towards the costs for printing and distribution of information packs, posters, and entry forms to schools across councils LGA. These initiatives are designed to educate all students on cultural diversity and involve a whole of community approach in the spirit of reconciliation and bringing us 'all together as one community'.

Costing	Description	Cost
Printing	Entry forms – (LGA Schools)	325.00
Distribution	Postage and Delivery	125.00

Summary

This worthwhile established cross-cultural initiative has been operating very successfully and is aligned with NAIDOC Week, celebrated in July each year. Hundreds of entries are received each year from schools within councils LGA, and the success of the program is due to the support of councils and partner organisations.



Strategic

Strategic Plan – People and Culture

- A harmonious community based on respect and responsibility, where everyone is valued.
- Recognition of Aboriginal & Torres Strait Islander heritage
- Cultural and community activity encouraging harmony and reconciliation.

Environmental

The initiatives will enable participants to explore concepts linking environmental; and social/ cultural issues and foster harmony in the community.

Social

The initiatives enable a diverse range of children to benefit from discussion and curriculum topics focused on the development of NAIDOC Week and the broader history of Indigenous culture.

Recreation

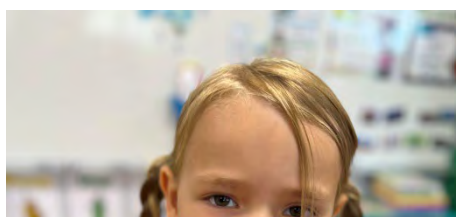
Each year at some of the winning schools Koori Kids host some 'Healthy Lifestyle Clinics' with visiting celebrity sports persons the aim of these clinics is to encourage an active lifestyle, including nutrition, sportsmanship, and skill development. All Students participating are provided a T-Shirt, Water Bottle and Ball.

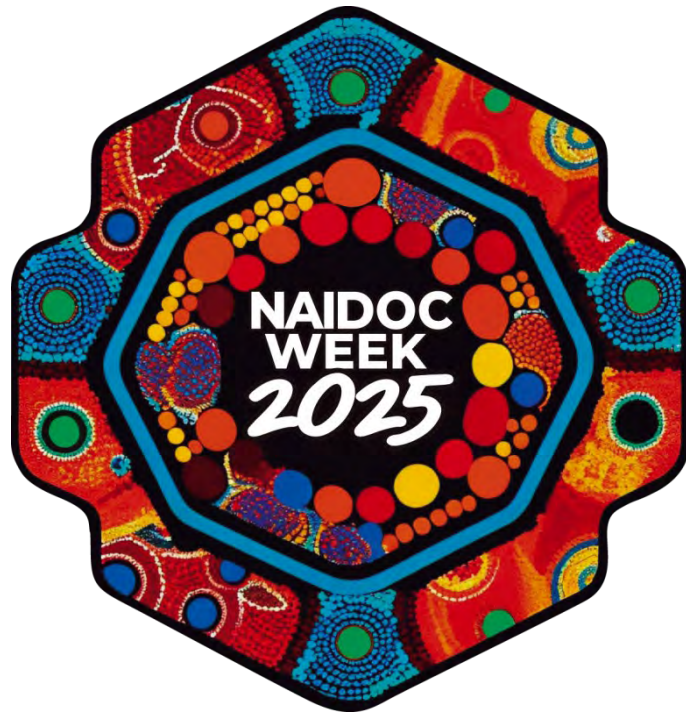
Council Acknowledgement

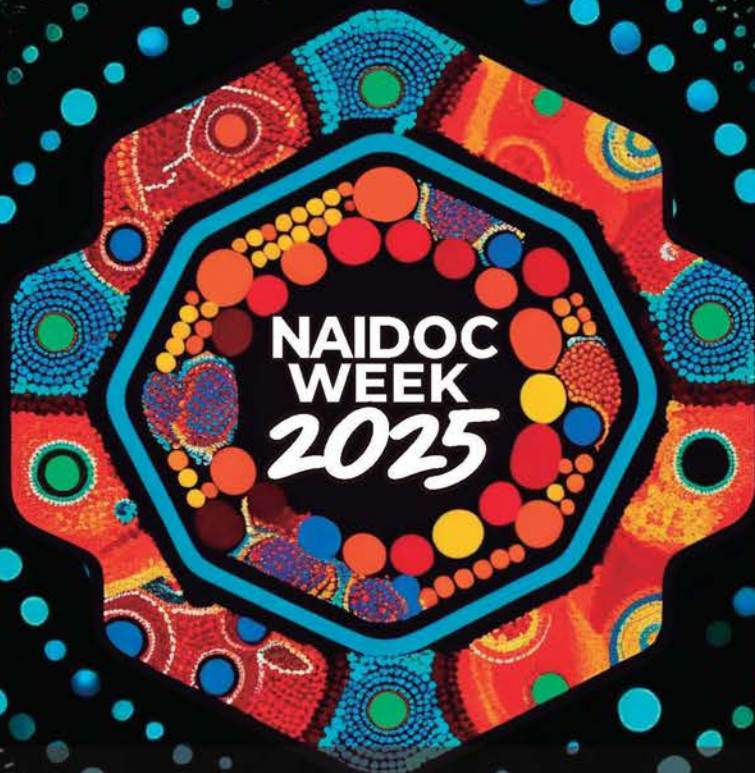
Council is acknowledged through logo inclusion as an associate partner on information packs sent to schools throughout councils LGA. If there is a winner from a school within council LGA, an invitation for the mayor and or a representative is invited to attend the school, along with Executive Director, NAIDOC Week Initiatives, Director, Social Wellbeing and other dignitaries to make special presentation of the NAIDOC Medal of Excellence and the student's prize. (30+ NAIDOC Medals of Excellence are issued across the state). Media release for the winning school is prepared in consultation with council's media officer. Council is also forwarded a final report.

Conclusion

The NAIDOC Week School Initiatives are the only activity throughout NAIDOC Week that provides students with an educational component to NAIDOC Week and Indigenous culture and heritage. Our research and statistics confirm that schools within councils LGA are participating in the initiatives with increased participation from both state and catholic-independent schools.







Thank you for your continued support



The NAIDOC Week Celebrations are held across Australia each July to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander Peoples

colouring in competition

Entry is open to all students in Years K-2

PRIZES



HUNDREDS OF IN-SEASON MOVIE PASSES TO WATCH 'HOW TO TRAIN YOUR DRAGON'

SPONSORS



Cecily Wellington-Carpenter

Name _____ Age _____ School _____ Year _____

All competitions: Entries must be received by close of business on Friday 27th June 2025 at the co-ordination centre, GPO Box 454, Sydney NSW 2001. Judging will take place on Friday 11th July 2025. Winners will be notified through principals, presentations will take place at school assemblies with your local Mayor, Elders and other dignitaries.

NAIDOC WEEK
School Initiatives 2025



The NAIDOC Week Celebrations are held across Australia each July to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander Peoples

Entry is open to all students in Years 3 - 6

Poem Writing Competition

Write a Poem entitled:

RESPECT

(Everyone has a culture, and it must be respected)

**Entry must be typed and on A4 Paper. Entries will be judged on quality, meaning and creativity. Please ensure the name grade and class are clearly included on both your story and on the official NAIDOC School Initiatives entry form.

Lance 'Buddy' Franklin
All-time Indigenous AFL Player



Indigenous people we should aspire to:

The Kid Laroi
(Indigenous Singer)
& Lance 'Buddy' Franklin
(all-time Indigenous AFL Player)
as Indigenous Australians to aspire.

"Be Smart, Stay Clean and Live the Dream".

The Kid Laroi
Indigenous Singer



PRIZES



FUJI INSTAX CAMERA

ELEMENT SKATEBOARD



THE ULTIMATE KIDS GIFT CARD



HUNDREDS OF IN-SEASON MOVIE PASSES TO WATCH 'HOW TO TRAIN YOUR DRAGON'



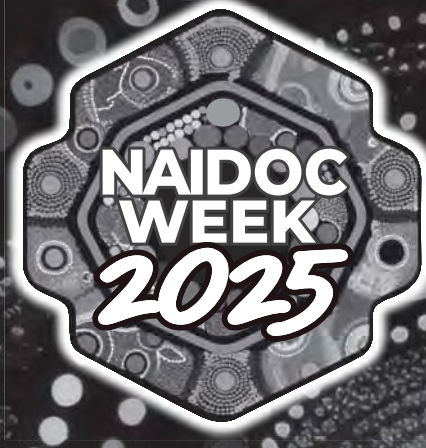
SPONSORS



Name _____ Age _____ School _____ Year _____

All competitions: Entries must be received by close of business on Friday 27th June 2025 at the co-ordination centre, GPO Box 454, Sydney NSW 2001. Judging will take place on Friday 11th July 2025. Winners will be notified through principals, presentations will take place at school assemblies with your local Mayor, Elders and other dignitaries.

NAIDOC WEEK
School Initiatives 2025



The NAIDOC Week Celebrations are held across Australia each July to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander Peoples

Entry is open to all students in Years 7 - 9

Creative Writing Competition

Design a Creative Invitation

... to the Prime Minister inviting him to attend a NAIDOC event either at your school or within your community. The invitation must focus on NAIDOC Week, Cultural significance and your local community and its importance to first nations people.

**Entry must be designed as A5 on A4 Paper. Entries will be judged on quality, meaning and creativity. Please ensure the name grade and class are clearly included on both your story and on the official NAIDOC School Initiatives entry form.

Lance 'Buddy' Franklin
All-time Indigenous AFL Player



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(Indigenous Singer)
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(all-time Indigenous AFL Player)
as Indigenous Australians to aspire.

"Be Smart, Stay Clean and Live the Dream".

The Kid Laroi
Indigenous Singer



PRIZES



\$500 CLOTHING VOUCHERS



PLAYSTATION PORTAL



ULTIMATE STUDENTS GIFT CARD



SPONSORS



Name _____ Age _____ School _____ Year _____

All competitions: Entries must be received by close of business on Friday 27th June 2025 at the co-ordination centre, GPO Box 454, Sydney NSW 2001. Judging will take place on Friday 11th July 2025. Winners will be notified through principals, presentations will take place at school assemblies with your local Mayor, Elders and other dignitaries.

NAIDOC WEEK
School Initiatives 2025



The NAIDOC Week Celebrations are held across Australia each July to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander Peoples

Entry is open to all students in Years 10 - 12

Essay Writing Competition

Moving Forward - Looking Back

Explain how Justice and Health have improved throughout the years and pinpoint either an Indigenous justice or health initiative that has made significant improvements for first nations people.

**Entry must be typed and on A4 Paper. Entries will be judged on quality, meaning and creativity. Please ensure the name grade and class are clearly included on both your story and on the official NAIDOC School Initiatives entry form.

Lance 'Buddy' Franklin
All-time Indigenous AFL Player



Indigenous people we should aspire to:

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(Indigenous Singer)
& Lance 'Buddy' Franklin
(all-time Indigenous AFL Player)
as Indigenous Australians to aspire.

"Be Smart, Stay Clean and Live the Dream".

The Kid Laroi
Indigenous Singer



PRIZES

PLAYSTATION 5



APPLE MAC PRO



DIGITAL CAMERA



SAFE DRIVING LESSONS



\$500 GLOTHING VOUCHERS

SPONSORS



Name _____ Age _____ School _____ Year _____

All competitions: Entries must be received by close of business on Friday 27th June 2025 at the co-ordination centre, GPO Box 454, Sydney NSW 2001. Judging will take place on Friday 11th July 2025. Winners will be notified through principals, presentations will take place at school assemblies with your local Mayor, Elders and other dignitaries.

From: Jaimes Wiggins
Sent: Thursday, 2 January 2025 6:18 PM
To: Gray, Leigh (Mayor) <cr.gray@brighton.tas.gov.au>
Subject: RE: "RELIVE THE RIVALRY" Legends Charity Game No.13 in 2025

Apologies Leigh – I failed to mention the following

In return –

- We would acknowledge the Brighton Council (BC) as a PARTNER of “RELIVE THE RIVALRY” on all our social media outlets – Facebook, Instagram, and Website
- The BC logo on all our promotional material including TV advertising and our Match Day Program
- Invite for (2) guests of the BC to attend our official match day function

Cheers

Jaimes

From: Jaimes Wiggins
Sent: Thursday, 2 January 2025 5:31 PM
To: cr.gray@brighton.tas.gov.au
Subject: "RELIVE THE RIVALRY" Legends Charity Game No.13 in 2025
Importance: High

Good afternoon, Leigh

Thanks for the chat prior to Christmas. We have made a decision for Game 12 of our charity match in 2025 but want to jump on the front foot and nail our venue for 2026.

As mentioned to you there are a lot of exciting things happening in your municipality and you have a great oval and an amazing venue at the Pontville Oval.

We would love the Brighton Council to consider coming onboard as a **PARTNER** of our game and allowing us to play Version 13 of the charity game at the Pontville Oval on the 1st Saturday in October 2026.

We obviously would need the following at no cost –

- Full access to the ground (with line markings for Australian rules football)
- Full access to Brighton’s changerooms and umpire’s facilities
- Access to Timekeepers Area and Electronic Scoreboard
- Full access to the Upstairs Venue at the Ground

For your information we would approach the Football Club to consider taking on the catering of the event – beverages and food.

I think this would be fantastic for everyone and showcase what is available at the Pontville Oval but also opening people's eyes to what is available in the Brighton area.

Any queries don't hesitate to yell out. I look forward to your response.

Best wishes for this New Year.

Kind Regards



Infinity DrillDance Team Hobart Tasmania
544 Main Road
GRANTON TAS 7030
infinitydrilldance@gmail.com
Mobile: 0407 867 524

ATTACHMENT
AGENDA ITEM 14.4

14 February 2025

To whom it may concern,

Hello, I am writing to enquire about hiring the Brighton Civic Centre at Green Point Rd, Bridgewater as a weekly training venue. We are a newly formed DrillDance Masters team whose members are aged 30 plus and are passionate and dedicated to our sport.

Our sport is not only about learning DrillDance routines but so much more. Our mission is to foster fun, friendship, leisure and pleasure, mind and body fitness and personal achievement while working together as a team. We are creating a positive and inclusive environment with the aim of maintaining our mental and physical health and offering opportunities to develop skills in fundraising, the different roles of committee membership and learning the importance of being a team member.

Working together as a team adds to our quality of life with positive social engagement, while learning routines exercises our memory function as well as our skeletal and muscle health, as we mature.

Our goal is to recruit more people, including juniors, from all areas so that we may be able to engage a new positive interest in the area, for social inclusion and positive benefits, for new members.

We are part of DrillDance Australia, a nationwide organisation with representatives from Victoria, New South Wales, Western Australia, South Australia, Queensland and Tasmania. Teams compete in the Australian National Championships every year in a different State.

We are seeking a venue to train weekly which is proving to be a very difficult task. National standards require a training space of around 28 x 15 metres for the best training outcomes and a carpeted area would also be a bonus as the championships are always performed on carpet.

The Brighton Civic Centre could be a good option for us. We are requesting a regular space on Monday evenings from 6:30 to 8:30 pm. Our season usually starts mid-July and ends mid-April. We do have regular breaks during the year and can provide dates for you to book other events when we are not there.

We have insurance through DrillDance Australia and we will provide you with a copy of the Certificate of Currency once we have received a copy of the renewed policy.

Please feel free to ask any questions. We are still a very small group of around 12 members and our budget is around \$23 per hour for a venue. We are hoping to attain some funding to help us train in such an amazing venue. Should the Centre prove a suitable place for us to train, there is a possibility that other Southern Tasmanian DrillDance teams may enquire to use your Centre and increase your Centre's business and awareness of the venue. We would respect and look after the venue and be compliant with your rules and regulations.

We invite you to have a look at DrillDance Australia's website to find out for yourselves how unique our sport is <https://www.drilldance.com.au/> and also our own Facebook page: <https://www.facebook.com/groups/453847237621836/>.

Your faithfully

Lara Anning
Fundraising Co-ordinator
Infinity DrillDance

3/3/2025

Dear Brighton Council,

I am writing on behalf of Uniting and Communities for Children to request a fee waiver for hire of the Pontville Memorial Hall for the dates of 23rd April, 9th July, 16th July and 8th October and hours 10 am – 2 pm.

Uniting in partnership with Communities for Children – Southeast Tasmania are delivering 4 free sessions for mothers/female carers and their daughters.

The program is called Blossom Circle and is building upon our successful mother-daughter one off event last July.

The 4 sessions will be underpinned by the evidence based programs Parents under Pressure (PuP) and Bringing up Great Kids (BUGK) and will be facilitated by a Uniting Family support worker trained in facilitating PuP and BUGK. Both programs aim to enhance the relationship between parent/carer and child. Key messaging of both programs will be delivered in an informal manner and will be supplemented by fun activities such as cooking healthy lunch box friendly food and self-care/mindfulness activities.

While we acknowledge the importance of all parental-child relationships, the significance of the mother-daughter relationship is widely recognised, hence our focus on this. The research points to the efficacy of the mother-daughter relationship and its potential to be a major factor in establishing a strengths based foundation for girls as they enter adulthood.

A recent study from the University of Georgia found that more than any other family dynamics, the mother-daughter relationship determines a *girl's future relationship skills and self-esteem*. It is important in a multitude of ways - it is a female's first experience of an intimate relationship, and through this relationship girls learn about trust, about separation and connection, about balancing their needs against others, and about who they are as individuals. (1)

The nature of the mother and daughter relationship carries a determining role in the daughter's social and psychological well-being and self-esteem (2) This relationship serves as *the cornerstone of the future of any relationships a woman may have* with those around her. The mother-daughter relationship holds the internal working model of attachment - which dictates a woman's future connections with others. (3)

Last year we were lucky to enjoy an unexpected windfall of \$1,000 to use to deliver the mother-daughter event. This was through the ABCD (Asset Based Community Development) training run by the Jeder Institute and funded by Brighton Council for Brighton Alive and local community members.

Unfortunately, this year we do not have funding for the program other than what Uniting are able to spare from the funding from Communities for Children for the Family Support worker role in Brighton LGA. This funding will be needed to purchase resources for the cooking and self-care activities.

If we are not able to secure a fee waiver, there will not be adequate money to cover the costs of the required resources for the activities.

Consequently, we would deeply appreciate the waiver of the full hire fee, please. We do understand the costs of maintaining the hall and in the least, a partial waiver would be most helpful.

I would like to also mention our deep appreciation of past support from Brighton Council waiving the hire fee for the Civic Centre last year for the music event, Bridgewater Celebrates Music. Thank you.

If you require further information, please contact myself.

Thank you for taking the time to consider our request.

Warm wishes,

Nicki Kastner

Brighton Family and Community Support Worker

nicki.kastner@vt.uniting.org

0466946979

62441144

(Monday to Thursday)

References:

1: <https://www.webmd.com/parenting/features/mother-daughter>

2: Selin Onayli, Ozgur Erdur-Baker,

Mother-daughter Relationship and Daughter's Self Esteem, Procedia - Social and Behavioral Sciences, Volume 84, 2013,

https://www.sciencedirect.com/science/article/pii/S1877042813016273?ref=cra_js_challenge&fr=RR-1

3: <https://www.stylecraze.com/articles/mom-and-daughter-relationship/>