PLANNING NOTICE

An application has been received for a Permit under s.57 of the *Land Use Planning Approvals Act 1993*:

APP NO.:	PA\26\0218
APPLICANT:	D Pedder
SITE:	90 Pioneer Drive & Baldocks Road, Mole Creek (CTs: 24257/12 & 15081/1)
PROPOSAL:	Hotel Industry (on-site wastewater system) - driveway, karst management area, flood-prone area, waterway.

The application can be inspected until Friday, 10 April 2026, at www.meander.tas.gov.au or at the Council Office, 26 Lyall Street, Westbury (during normal office hours).

Written representations may be made during this time addressed to the General Manager, PO Box 102, Westbury 7303, or by email to planning@mvc.tas.gov.au. Please include a contact phone number. Please note any representations lodged will be available for public viewing.

If you have any questions about this application please do not hesitate to contact Council's Planning Department on 6393 5320.

Notified on 21 March 2026.

Jonathan Harmey
GENERAL MANAGER

APPLICATION FORM

Meander Valley Council
Working Together

PLANNING PERMIT

Land Use Planning and Approvals Act 1993

- Application form & details MUST be completed **IN FULL**.
- Incomplete forms will not be accepted and may delay processing and issue of any Permits.

OFFICE USE ONLY

Property No: | | | | | | **Assessment No:** | | - | | | | | - | | | | |

DA | | **PA** | | **PC** | |

- Is your application the result of an illegal building work? ☐ Yes ☐ No
- Have you already received a Planning Review for this proposal? ☐ Yes ☐ No
- Is a new vehicle access or crossover required? ☐ Yes ☐ No

Indicate by ✓ box

PROPERTY DETAILS:

Address: 90 Pioneer Drive & Baldocks Road

Certificate of Title: CT: 24257/12 &

Suburb: Mole Creek 7304

Lot No: CT: 15081/1

Land area: m^2 / ha

Present use of land/building: Hotel.

(vacant, residential, rural, industrial, commercial or forestry)

- Does the application involve Crown Land or Private access via a Crown Access Licence: ☐ Yes ☒ No
- Heritage Listed Property: ☐ Yes ☒ No

DETAILS OF USE OR DEVELOPMENT:

Indicate by ✓ box

☒ Building work ☐ Change of use ☐ Subdivision ☐ Demolition
☐ Forestry ☐ Other

Total cost of development *(inclusive of GST)*: $140,000.00

Includes total cost of building work, landscaping, road works and infrastructure

Description of work: New Taylex OnSite Wastewater Managment System

Use of building: Hotel

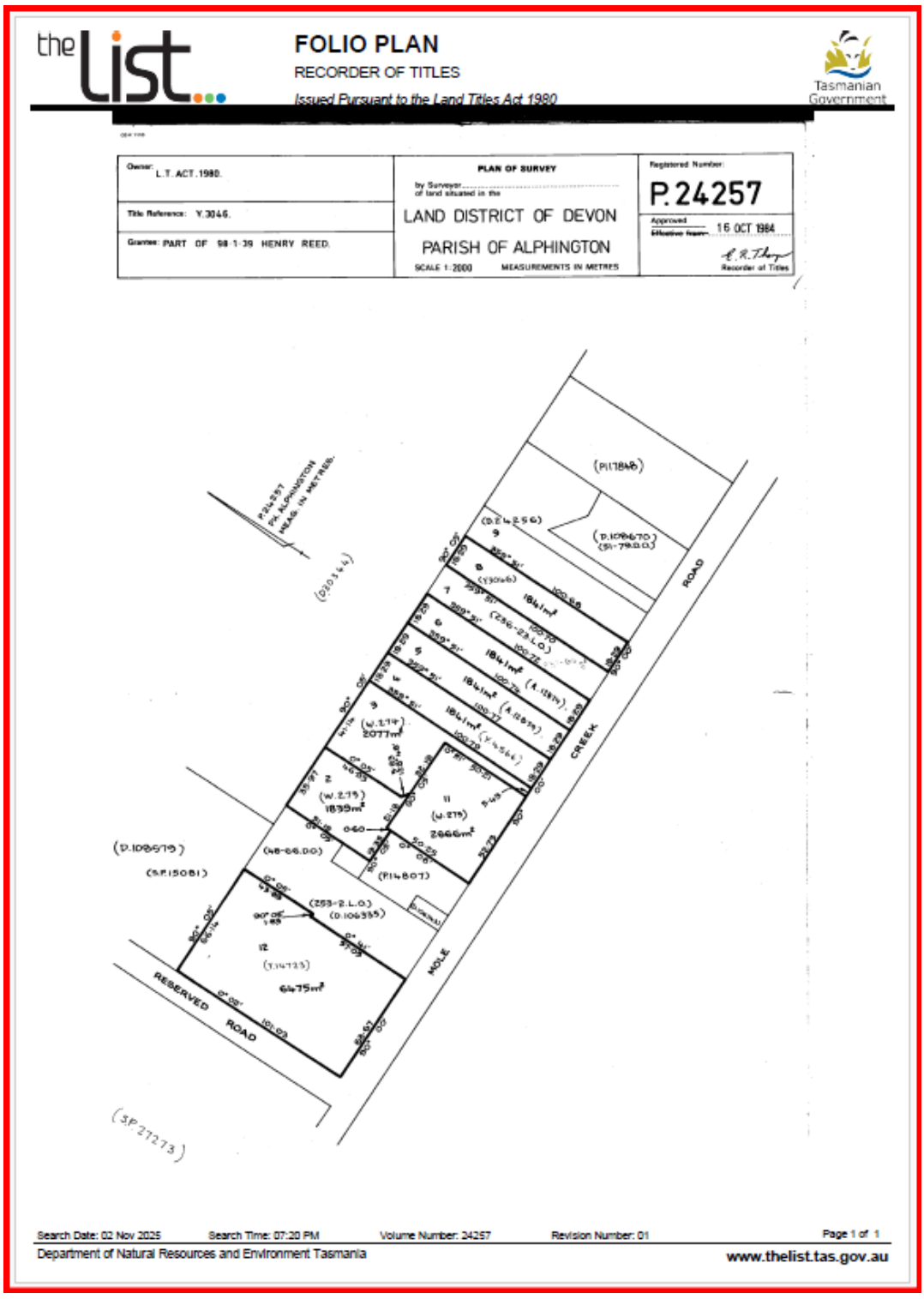
(main use of proposed building – dwelling, garage, farm building, factory, office, shop)

New floor area: m^2 New building height: m

Materials: External walls: Colour:

Roof cladding: Colour:

Appendix 5 Folio Plan & Folio Text



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
24257	12
EDITION	DATE OF ISSUE
6	29-Jul-2025

SEARCH DATE : 02-Nov-2025
SEARCH TIME : 07.20 PM

DESCRIPTION OF LAND

Parish of ALPHINGTON, Land District of DEVON
Lot 12 on Plan 24257
Derivation : Part of 98A-1R-39Ps Gtd to H Reed
Prior CT 4800/74

SCHEDULE 1

N268484 TRANSFER to JK FAMILY INVESTMENTS (TAS) PTY LTD
Registered 29-Jul-2025 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
E419353 MORTGAGE to Commonwealth Bank of Australia
Registered 29-Jul-2025 at 12.01 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

CES Coordinated Engineering Services
William Cameron: 732193008
WJ Cameron

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
15081	1
EDITION	DATE OF ISSUE
4	14-Feb-2018

SEARCH DATE : 16-Mar-2026
SEARCH TIME : 03.40 pm

DESCRIPTION OF LAND

Parish of ALPHINGTON, Land District of DEVON
Lot 1 on Sealed Plan 15081
Derivation : Part of Lot 1196 Gtd to H Reed
Prior CT 3869/36

SCHEDULE 1

C682790 TRANSFER to MOLE CREEK DEVELOPMENTS PTY LTD
Registered 24-Jan-2006 at 12.01 pm

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP 15081 FENCING COVENANT in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

S.P. 15081

Owner: Neil Allan Blair

Title Reference: Deed of Gift 29/2685

Grantee: Part of Lot 1196, 98 A 1 R 39 P gntd. to Henry Reed

PLAN OF SURVEY

by Surveyor R.W. Ranson

of land situated in the

LAND DISTRICT OF DEVON

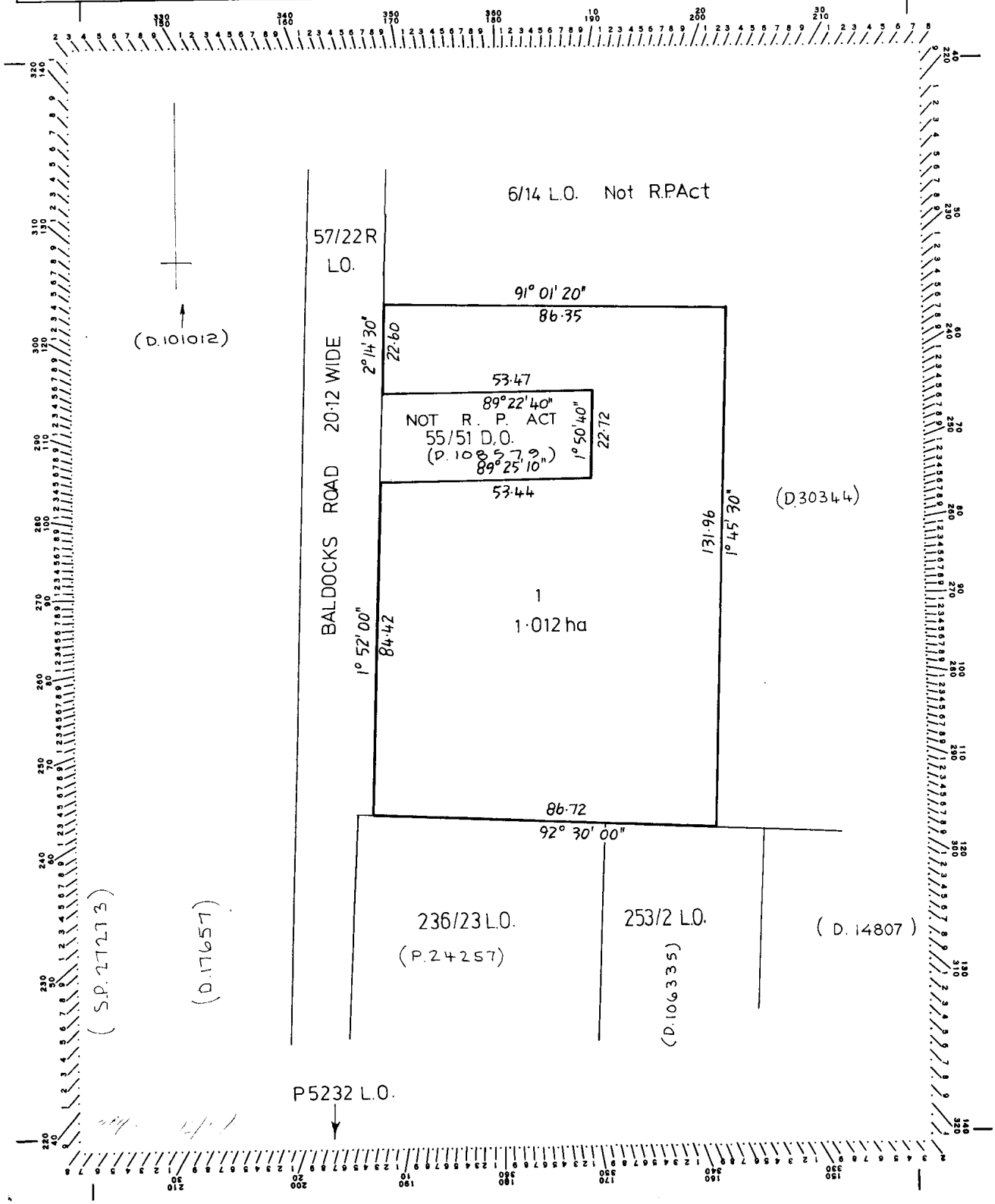
PARISH OF ALPHINGTON

SCALE 1: 1000 MEASUREMENTS IN METRES

Registered Number: S. P. 15081

Effective from: 10 DEC 1980

ACTING DEPUTY Recorder of titles



S. P

SCHEDULE OF EASEMENTS **Plan No.** 15081

NOTE:—The Town Clerk or Council Clerk must sign the certificate on the back page for the purpose of identification.

The Schedule must be signed by the owners and mortgagees of the land affected. Signatures should be attested.

COVENANT:

The owner of Lot 1 on the plan hereby covenants with Neil Allan Blair (hereinafter called "the Vendor") that the Vendor "shall not be required to fence".

NO OTHER easements covenants or profits a prendre are hereby created to benefit or burden the Lot shown on the plan.

SIGNED by NEIL ALLAN BLAIR registered proprieter of the land comprised in Deed of Gift 29/2685.

N.A. Blair
N.A. BLAIR.

Witness to sign
In the presence of :-

Solicitor Devonport
S.M. RITCHIE

DATED this 12th day of August 1980.

15081

Certified correct for the purposes of the Real Property Act 1862, as amended.

N A Blair
Subdivider/~~Solicitor for the Subdivider~~

This is the schedule of easements attached to the plan of NEIL ALLAN BLAIR
(Insert Subdivider's Full Name)

affecting land in

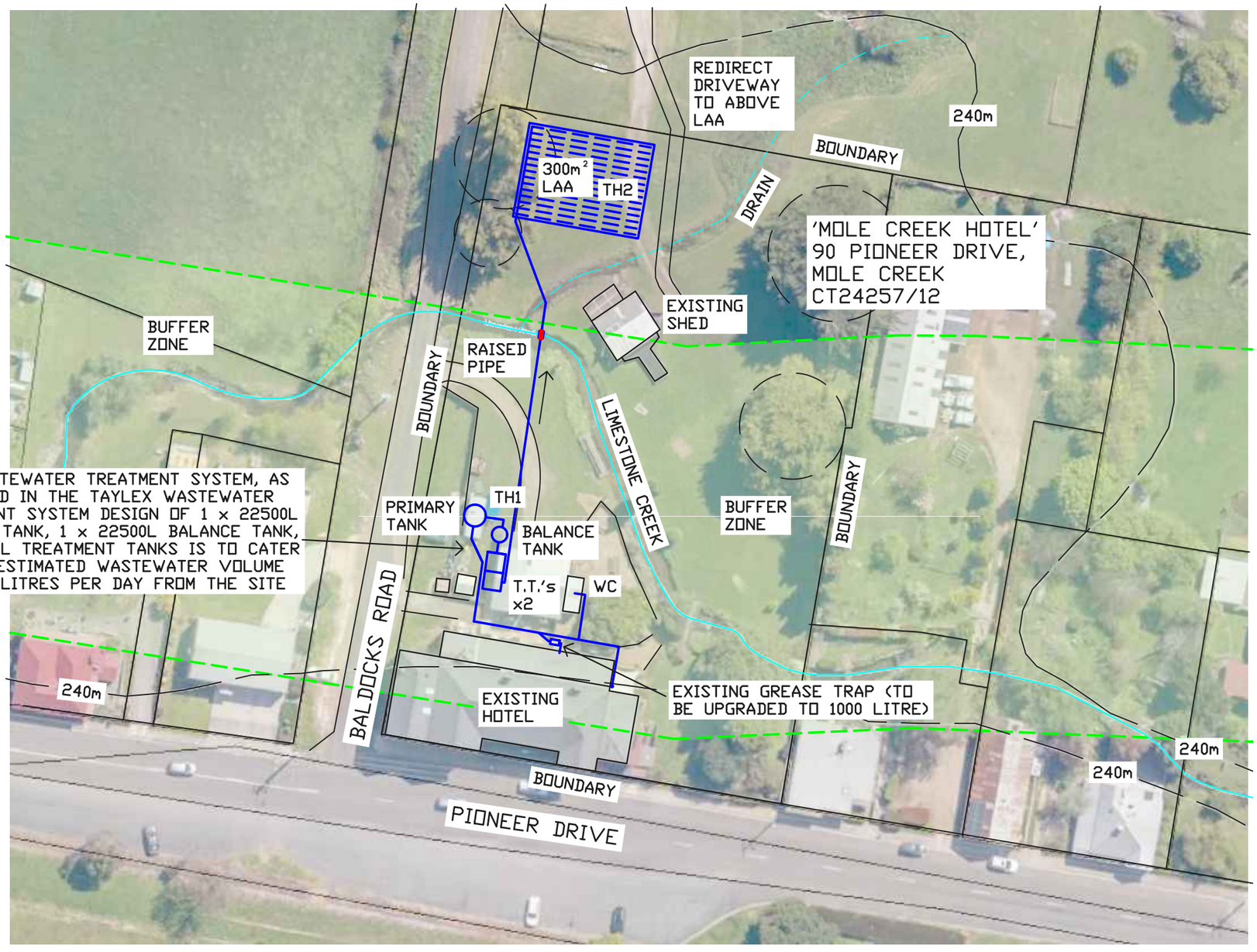
1956 Deed of Gift Registered Number 29/2685
(Insert Title Reference)

Sealed by the Municipality of Deloraine on 15th September 19 80

Council Clerk/~~Town Clerk~~

3629

ALL PLUMBING & DRAINAGE TO COMPLY WITH THE REQUIREMENTS OF ASNZ3500



THE WASTEWATER TREATMENT SYSTEM, AS SPECIFIED IN THE TAYLEX WASTEWATER TREATMENT SYSTEM DESIGN OF 1 x 22500L PRIMARY TANK, 1 x 22500L BALANCE TANK, 2 x 5000L TREATMENT TANKS IS TO CATER FOR AN ESTIMATED WASTEWATER VOLUME OF 8000 LITRES PER DAY FROM THE SITE

Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
W J Cameron

DATE NOVEMBER 2025

Replacement of Existing Onsite Wastewater System

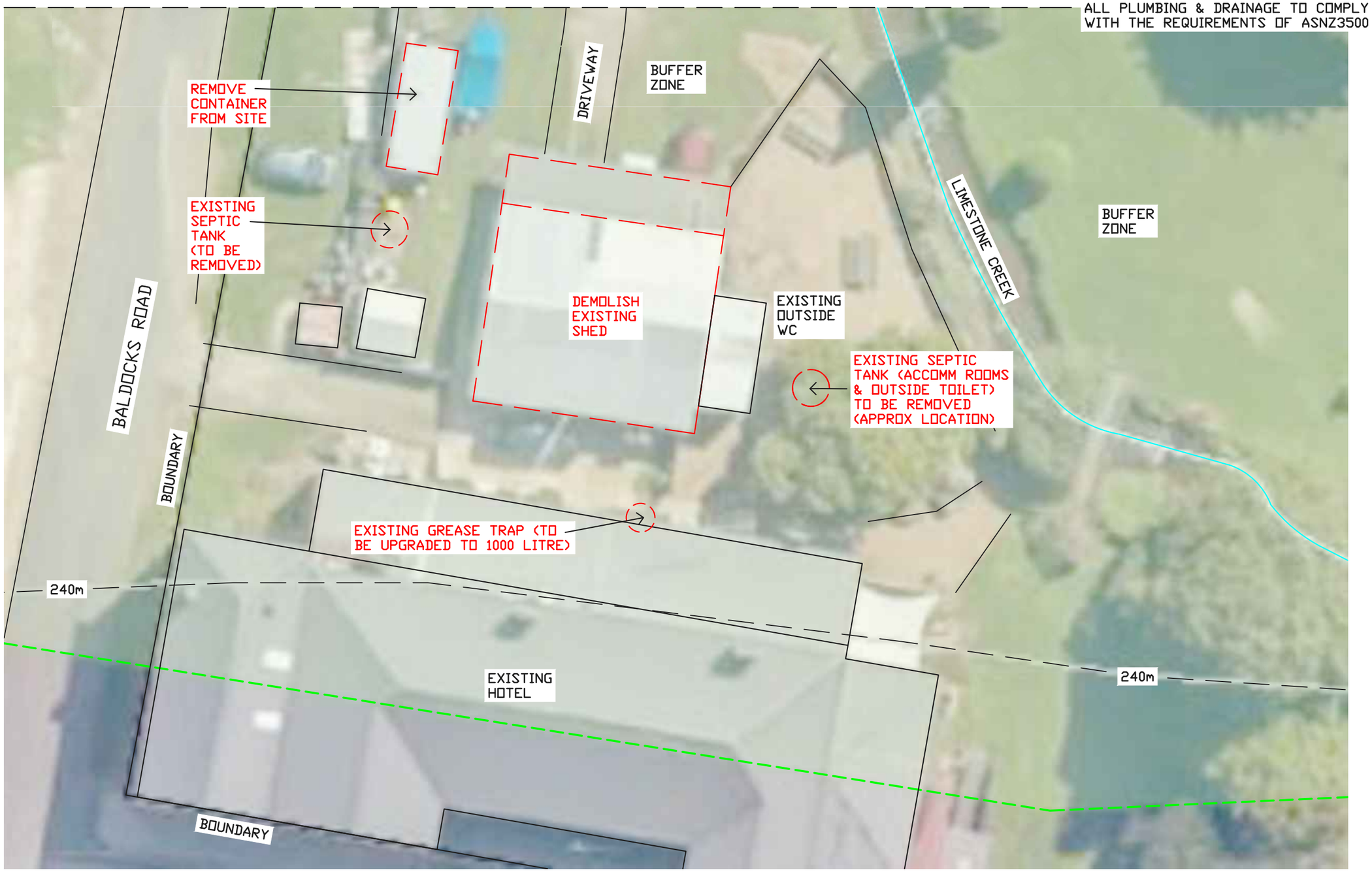
SITE PLAN

Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

SCALES	1:750 AT A3		DATE PLOTTED 01.11.2025
DRAWN	MF		
DESIGNED	JD		
CHECKED	JD		DATE CHECKED 01.11.2025

J DOHERTY, CC6216A

PROJECT No 16-2025 | 01 OF 06 | REV. 02



Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
W J Cameron

ISSUE

DATE NOVEMBER 2025

Replacement of Existing Onsite Wastewater System

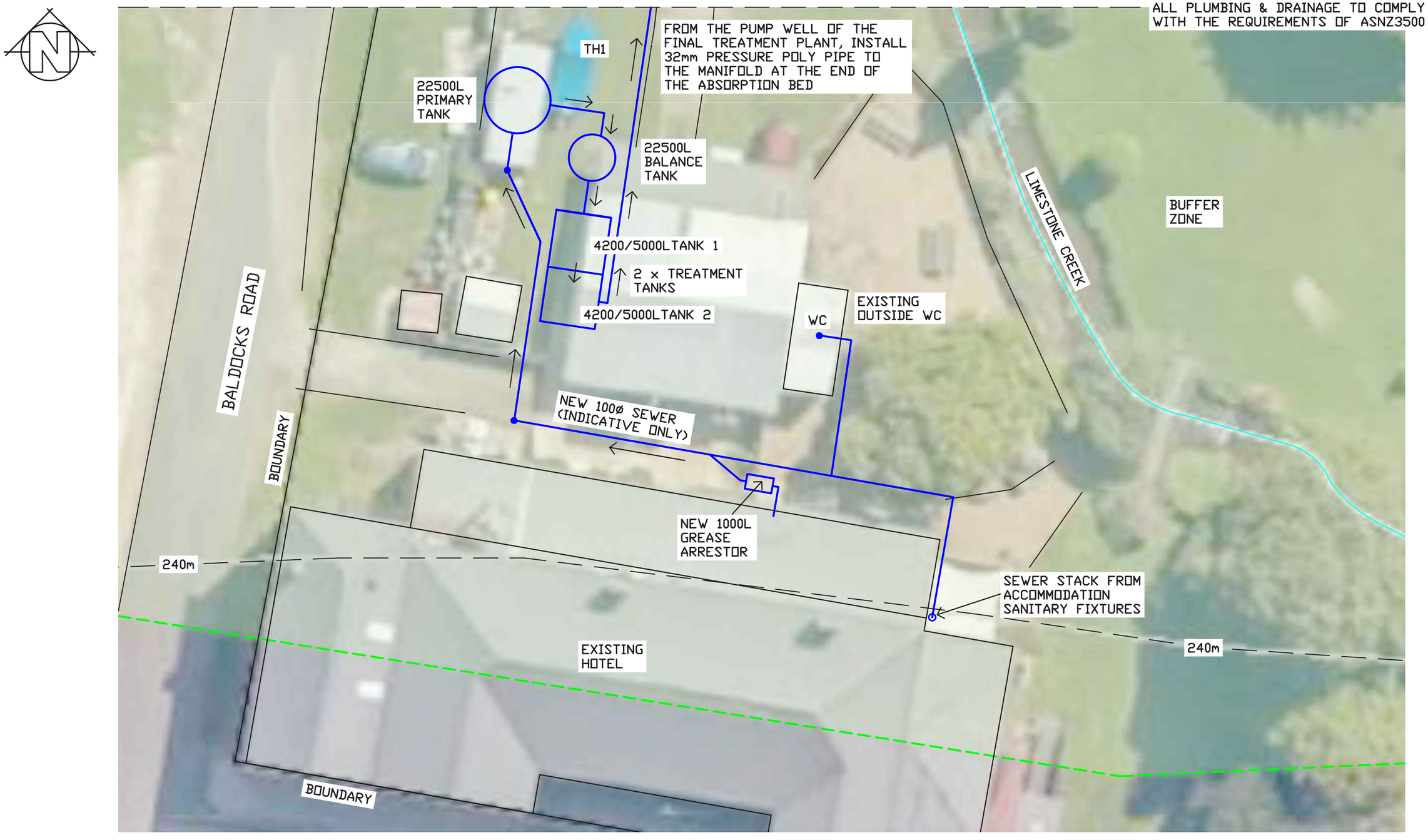
PART SITE PLAN - DEMOLITION

Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

SCALES	1:200 AT A3
DRAWN	MF
DESIGNED	JD
CHECKED	JD
DATE PLOTTED	01.11.2025
DATE CHECKED	01.11.2025

J DOHERTY, CC6216A

PROJECT No 16-2025 | 02 OF 06 | REV. 02



Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
W J Cameron

ISSUE

DATE NOVEMBER 2025

Replacement of Existing Onsite Wastewater System

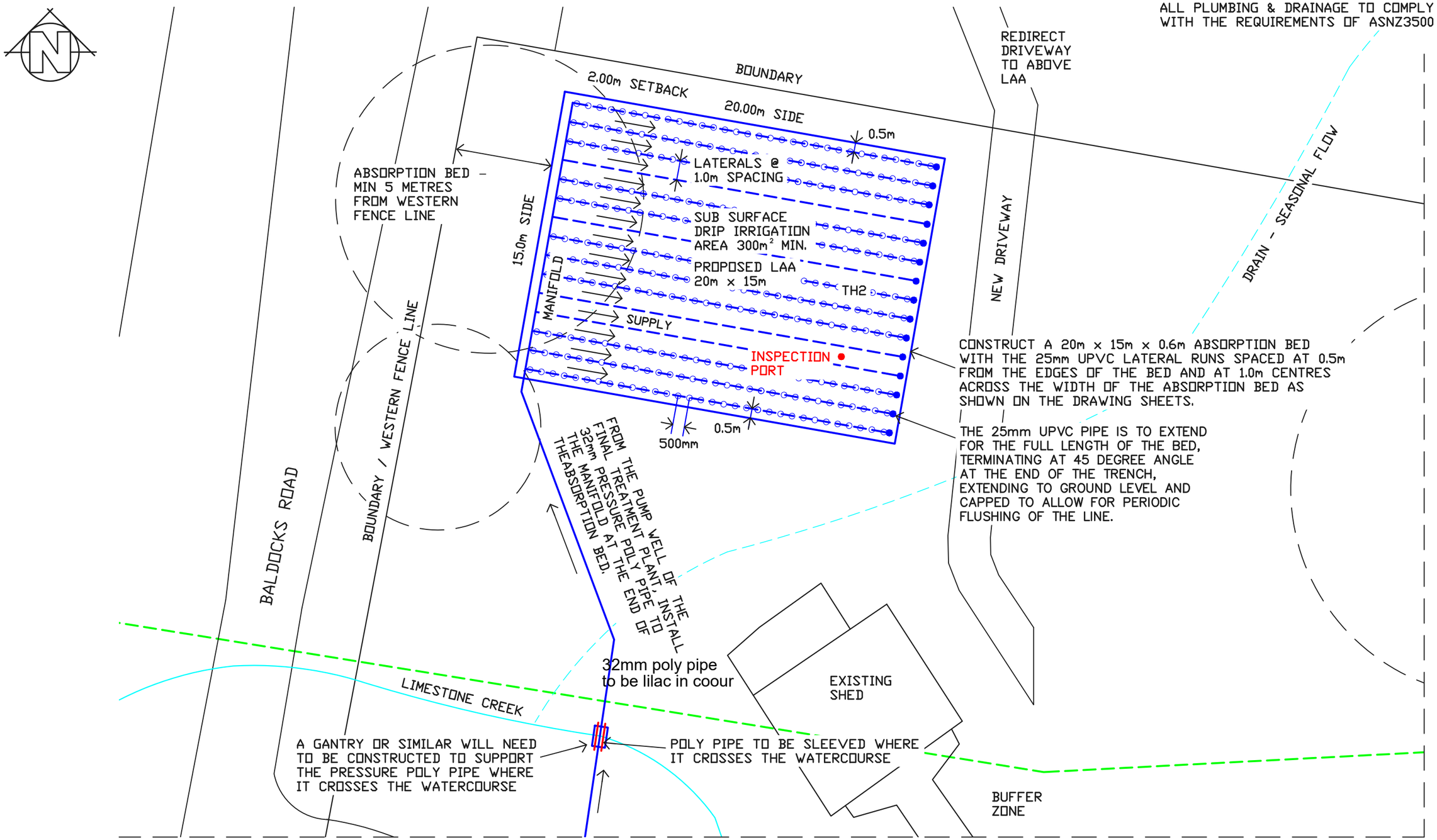
PART SITE PLAN - TANKS LAYOUT

Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

SCALES	1:200 AT A3		DATE PLOTTED 01.11.2025
DRAWN	MF		
DESIGNED	JD		
CHECKED	JD		DATE CHECKED 01.11.2025

J DOHERTY, CC6216A

PROJECT No 16-2025 | 03 OF 06 | REV. 02



Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
WJ Cameron

ISSUE | DATE

Replacement of Existing Onsite Wastewater System

PART SITE PLAN - LAA LAYOUT

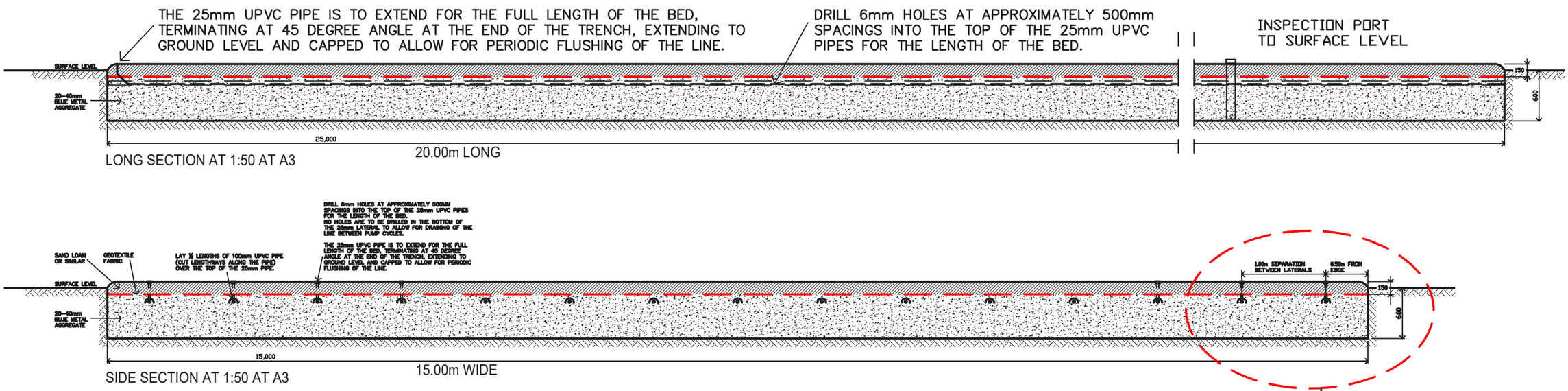
Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

NOVEMBER 2025

SCALES	1:200 AT A3		DATE PLOTTED 01.11.2025
DRAWN	MF		
DESIGNED	JD		
CHECKED	JD		DATE CHECKED 01.11.2025

J DOHERTY, CC6216A

PROJECT No 16-2025 | 04 OF 06 | REV. 02



SUBSURFACE DRIP IRRIGATION DISPOSAL AREA SECTION 1:20 AT A3

ALL PLUMBING & DRAINAGE TO COMPLY WITH THE REQUIREMENTS OF ASNZ3500

Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
W J Cameron

ISSUE | DATE NOVEMBER 2025

Replacement of Existing Onsite Wastewater System

SSDi AREA SECTIONS

Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

SCALES 1:20, 1:50 AT A3		DATE PLOTTED 01.11.2025	
DRAWN MF			
DESIGNED JD			
CHECKED JD		DATE CHECKED 01.11.2025	
J DOHERTY, CC6216A			
PROJECT No 16-2025	05 OF 06	REV. 02	

ALL PLUMBING & DRAINAGE TO COMPLY WITH THE REQUIREMENTS OF ASNZ3500

NOTES: FOR REPLACEMENT OF EXISTING ONSITE WASTEWATER SYSTEM –

ENSURE ALL SEWERAGE FIXTURES ARE IDENTIFIED AND CONNECTED TO THE NEW WASTEWATER TREATMENT AND DISPOSAL SYSTEM.

ENSURE ANY STORMWATER CONNECTIONS ARE NOT CONNECTED TO THE CURRENT SEWER SYSTEMS.

DECOMMISSION THE EXISTING WASTEWATER SYSTEMS (SEPTIC TANKS) WHICH ARE LOCATED ON THE LEFT HAND SIDE OF THE EXISTING SHED AND IN THE GRAVEL AREA OF THE BEER GARDEN.

DUE TO THE LIMITED AREA AVAILABLE, THE EXISTING ROADWAY WILL NEED TO BE RESHAPED AND REDESIGNED AS SHOWN ON THE DRAWING SHEETS.

A GANTRY OR SIMILAR WILL NEED TO BE CONSTRUCTED TO SUPPORT THE PRESSURE POLY PIPE WHERE IT CROSSES THE WATERCOURSE. THE POLY PIPE IS TO BE SLEEVED WHERE IT CROSSES THE WATERCOURSE.

REMOVE THE EXISTING GREASE ARRESTOR AND REPLACE IT WITH A 1000 LITRE UNIT.

INSTALL THE NEW WASTEWATER TREATMENT TANKS AND THE GREASE ARRESTOR AS SHOWN ON THE ACCOMPANYING DRAWING SHEETS.

THE WASTEWATER TREATMENT SYSTEM, AS SPECIFIED IN THE TAYLEX WASTEWATER TREATMENT SYSTEM DESIGN OF 1 x 22500L PRIMARY TANK, 1 x 22500L BALANCE TANK, 2 x 5000L TREATMENT TANKS IS TO CATER FOR AN ESTIMATED WASTEWATER VOLUME OF 8000 LITRES PER DAY FROM THE SITE

FROM THE PUMP WELL OF THE FINAL TREATMENT PLANT, INSTALL 32mm PRESSURE POLY PIPE TO THE MANIFOLD AT THE END OF THE ABSORPTION BED.

CONSTRUCT A 20m x 15m x 0.6m ABSORPTION BED WITH THE 25mm UPVC LATERAL RUNS SPACED AT 0.5m FROM THE EDGES OF THE BED AND AT 1.0m CENTRES ACROSS THE WIDTH OF THE ABSORPTION BED AS SHOWN ON THE DRAWING SHEETS.

REFER TO THE SECTION DETAIL ON THE DRAWING SHEETS FOR THE DEPTH OF THE AGGREGATE AND TOPSOIL AND THE PLACEMENT OF THE GEOTEXTILE FABRIC.

CONNECT ALL RUNS OF 25mm UPVC PIPE TO THE MANIFOLD AS SHOWN ON THE DRAWING SHEETS. ENSURE THE 25mm UPVC PIPE IS LEVEL AND THERE ARE NO OBVIOUS DIPS OR HIGH SPOTS.

DRILL 6mm HOLES AT APPROXIMATELY 500mm SPACINGS INTO THE TOP OF THE 25mm UPVC PIPES FOR THE LENGTH OF THE BED. NO HOLES ARE TO BE DRILLED IN THE BOTTOM OF THE 25mm LATERAL TO ALLOW FOR DRAINING OF THE LINE BETWEEN PUMP CYCLES.

THE 25mm UPVC PIPE IS TO EXTEND FOR THE FULL LENGTH OF THE BED, TERMINATING AT 45 DEGREE ANGLE AT THE END OF THE TRENCH, EXTENDING TO GROUND LEVEL AND CAPPED TO ALLOW FOR PERIODIC FLUSHING OF THE LINE.

LAY ½ LENGTHS OF 100mm UPVC PIPE (CUT LENGTHWAYS ALONG THE PIPE) OVER THE TOP OF THE 25mm PIPE.

INSTALL AN INSPECTION PORT IN THE ABSORPTION BED AS SHOWN TO ALLOW FOR AN INSPECTION OF THE BED AND TO GAUGE THE WATER LEVEL WITHIN THE BED.

ALTERNATIVELY, PRESSURE COMPENSATED (PC) 4 LITRE/HOUR DRIP LINE WITH DRIPPERS SPACED AT 300mm CENTRES ALONG THE LENGTH OF EACH LATERAL AND USING 7 LATERAL LINES COULD BE USED IN CONJUNCTION WITH AN INDEXING VALVE AND SPLITTING THE BED INTO TWO AREAS.

ABSORPTION BED –MIN 5 METRES FROM WESTERN FENCE LINE

All poly pipe in the wastewater system including from the pump well to the LAA is to be lilac in colour as per the Australian Standard

Refer to JD Consulting OSWW Report 16(2)-2025 signed and dated 2.11.2025

James Doherty

2.11.2025

JD Consulting
PO Box 8
Riverside TAS 7250

CES Coordinated Engineering Services
William Cameron: 732193008
WJ Cameron

ISSUE | DATE

Replacement of Existing Onsite Wastewater System

NOTES

Yara Kes, 'Mole Creek Hotel'
90 Pioneer Drive, Mole Creek

NOVEMBER 2025

SCALES	NTS AT A3		DATE PLOTTED 01.11.2025
DRAWN	MF		
DESIGNED	JD		
CHECKED	JD	DATE CHECKED 01.11.2025	

J DOHERTY, CC6216A

PROJECT No 16-2025 | 06 OF 06 | REV. 02

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

MEMO **19 December 2025**

Re: Mole Creek Hotel, 90 Pioneer Drive – Flood Hazard Report

1. Introduction

Hydrodynamica was engaged to provide a flood hazard report for the proposed onsite wastewater disposal upgrades at the Mole Creek Hotel. Figure 1 shows the proposal:

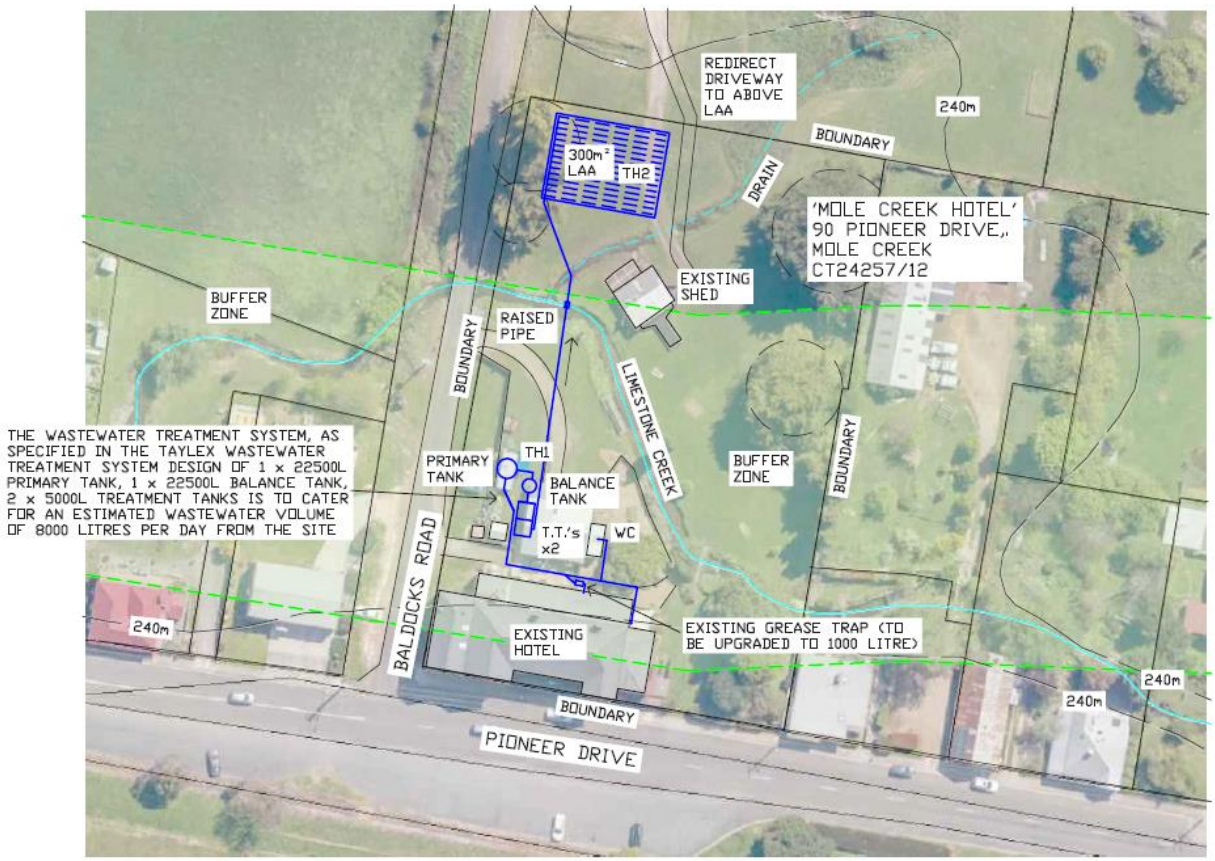


Figure 1. Proposed wastewater treatment system upgrades (JD Consulting drawing 16-2025 rev. 01)

The proposed works include the demolition of a 140m^2 shed, the removal of an existing container, and removal of the existing septic system. Two treatment tanks, a 22.5KL primary tank, a 22.5KL

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

secondary tank, a 32mm diameter HDPE pipeline including a raised section over the creek, and a 300m^2 land application area will be constructed to replace the old system.

The development site has been identified by Meander Valley Council as flood prone, and they have requested a flood hazard report in accordance with C12.0 of the Tasmanian Planning Scheme.

2. Flood Mapping

The proposed works are near Limestone Creek. The Tasmanian Strategic Flood Mapping (TSFM) for the area shows the following 1% AEP climate change (CC) flood extent and hazards:

Figure 2. TSFM 1% AEP CC flood extent and hazards

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

The flood hazards displayed are as per those provided in Australian Rainfall and Runoff 4.2, refer to Figure 3.

The proposed works are affected by flood hazards ranging from H1 to H3.

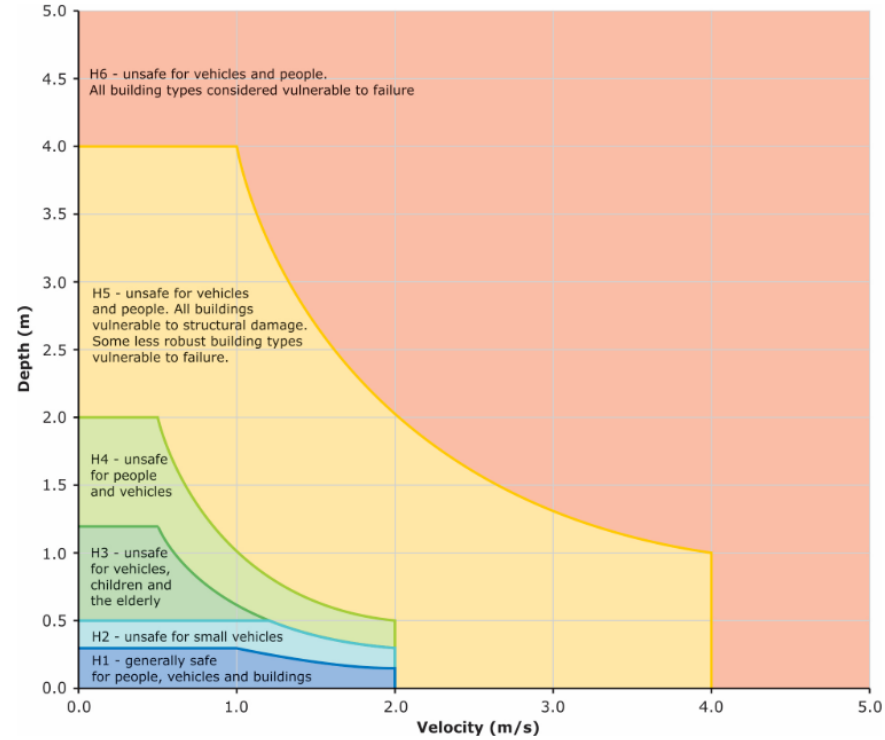


Figure 3. Australian Rainfall and Runoff flood hazard curves

The 1% AEP CC flood elevation ranges from 238.38m AHD adjacent the existing outside toilet, 238.35m AHD at the proposed primary tank, 238.24m AHD at the creek crossing, and 238.3m AHD at the proposed land application area (LAA). The 2% AEP flood levels at the same locations range from 238.28m AHD to 238.17m AHD.

The flood mapping shown in Figure 4 is of the 1% AEP and is from the *Meander Valley Council – Westbury/Deloraine/Mole Creek* Flood and Drainage Analysis (Pitt and Sherry, 2023). It shows a similar but more defined footprint. It not inclusive of climate change and is, as expected, a slightly smaller footprint that that in Figure 2.

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

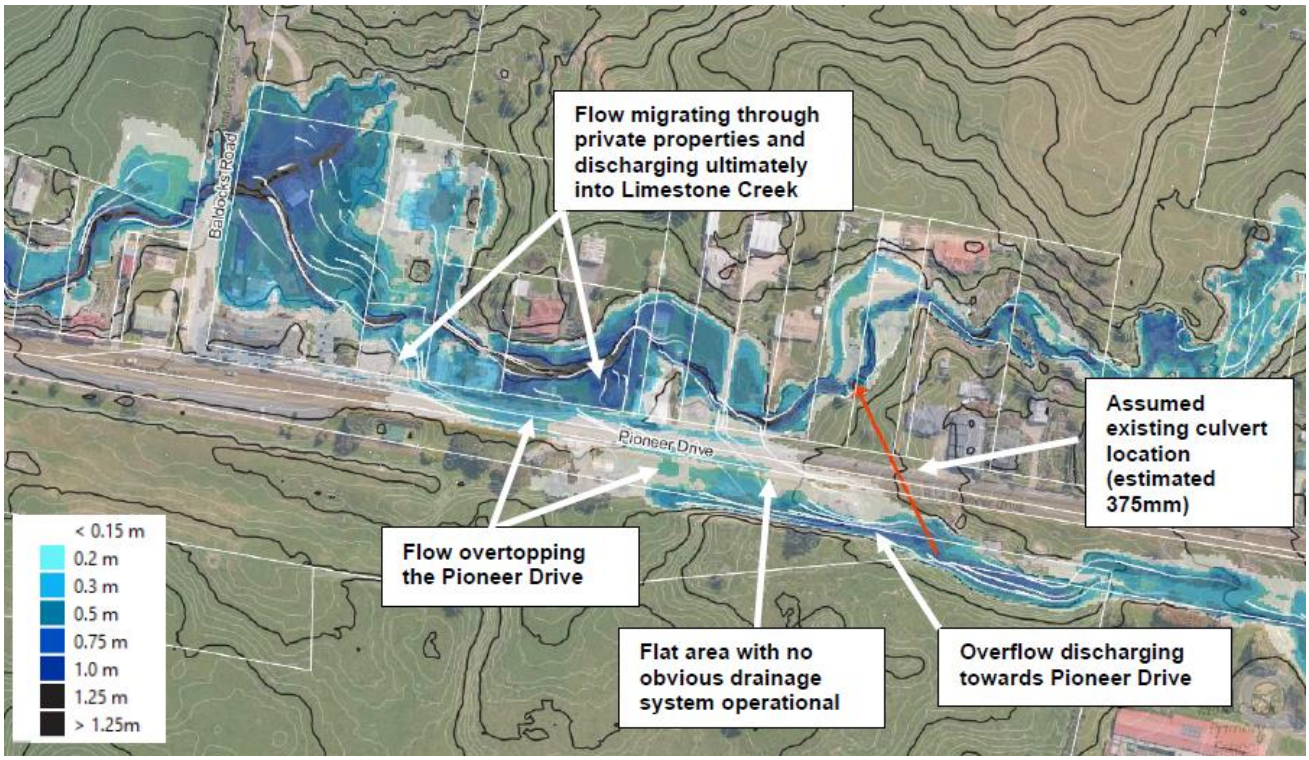


Figure 4. 1% AEP CC flood depths and extent (Pitt and Sherry, 2023)

3. Discussion & recommendations

There is no additional risk to people because of this development. Also, there is no risk of the displacement of flows because of the works, as the removal of the existing shed and container will reduce barriers to flow, and allow floodwater to better follow its natural path.

The tanks will be of concrete construction and be installed below ground, with the top of them finished flush with the existing surface level. The tanks will be designed by others to ensure there is no risk of floatation in a flood event or due to a high groundwater table. The composite access covers on the tanks are sealed, so ingress from flooding is not expected.

The powered blowers and controllers have the potential to be affected if submerged, so to avoid damage it is recommended that they be raised on a stand. These should be above 238.38m AHD. The existing surface level between the creek and the hotel is approximately 238m AHD, so the stands will not be particularly high.

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

The proposed drip irrigation area will be installed below surface level, with the top sand/lop layer filled to approximately 50mm above surface level to allow for settlement. There is no risk of damage to this arrangement.

The last piece of new infrastructure at risk from a flood is the proposed 32mm HDPE pipe which leads from the treatment system, across the Limestone Creek, to the land application area (LAA). This will be installed below ground, except for the length across Limestone Creek. The proposal is to span the creek approximately 300mm below finished height of the riverbank natural surface level with a 100mm galvanised pipe acting as a conduit for the poly irrigation line supplying the LAA. There is a risk to this pipe from debris making its way down creek. If the pipe is damaged in a flood event the small diameter HDPE pipe is relatively flexible and cheap to replace and will be protected day to day by the galvanised conduit.

4. C12 Flood-Prone Areas Hazard Code Response

C12.6.1 response

Responses are provided in red.

P1.1

Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:

(a) the type, form, scale and intended duration of the development;

A tolerable risk is achieved for replacement onsite wastewater disposal system. The risks associated with the system are from floodwater damage. The tanks will be installed below ground level and sealed and thus protected. The LAA and pipelines will be buried except for a section of HDPE pipe which will traverse the creek. There is a risk of damage to the pipeline from flood debris, however it will be protected by a galvanised iron conduit. If damage does occur HDPE is relatively cheap to replace.

There is also a risk to the blowers and controllers. These shall be mounted above the 238.38m AHD 1% AEP climate change flood level on stands.

Risks are therefore tolerable.

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

(b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;

There is no increase in flood risk.

(c) any advice from a State authority, regulated entity or a council; and

No advice provided.

(d) the advice contained in a flood hazard report, and

Advice in this report is as follows:

- Blowers and controllers to be installed on stands above the designated flood level (238.38m AHD) (approximately min. 400mm in height)
- Tanks to be installed below ground and be designed not to float
- Tank access covers to be watertight to prevent floodwater ingress
- Pipeline over creek to be constructed of flexible HDPE pipe with a 100mm galvanised iron conduit pipe.

P1.2

A flood hazard report also demonstrates that the building and works:

(a) do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and

Most of the works are below ground. In addition, the existing shed will be demolished meaning there will be a minor improvement to flows through the site. The site, adjacent land and public infrastructure will be unaffected.

(b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.

The report demonstrates that a tolerable risk is achieved for the works to 2090 in the 1% AEP flood.

HYDRODYNAMICA

44 Penquite Road
LAUNCESTON TAS 7250
M: 0431 208 450
E: cameron.oakley@h-dna.com.au
ABN: 169 442 993 50

5. Conclusion

The proposed development meets performance criteria P1.1 and P1.2 for C12.6.1 and the development should proceed.

Cameron Oakley

CONSULTING ENGINEER

B.Tech, B.Eng (Hons), MBA

Licensed Building Services Provider No. 949718126

A report on the karst features at the site of a proposed upgrade to the waste water disposal system at the Mole Creek Hotel and immediately adjacent areas, at 90 Pioneer Drive, Mole Creek.

Prepared by Philip Cullen

11 Salvator Rd., West Hobart, Tasmania, Ph. 0428108434
4th March, 2026.

EXECUTIVE SUMMARY

The following is a karst survey for a proposed upgrade to the waste water disposal system at the Mole Creek Hotel, 90 Pioneer Drive, Mole Creek Tas., 7304 Title ref: 24257/12.

The site falls within the High Sensitivity Karst Management Zone, as defined in the Tasmanian Planning Scheme – Meander Valley 2021.

Bedrock geology is Ordovician limestone. Quaternary alluvium covers this bedrock and forms river terraces associated with the Limestone Creek. Soils on this alluvium were investigated. They are deep (+2.5 m) and well drained.

One karst feature, a karst outcrop, was mapped in the study area. It is relatively close (10 m) to, but across slope, from the proposed development. Elements of the proposed development adjacent to this feature are unlikely to impact upon it. There are no sinkholes or caves within 100 m of the site.

The proposed developmnet meets most of the Acceptable Solutions of the Karst Code, otherwise Performance Criteria can be met.

It should be noted that this report is based on a survey of surface features and existing geology maps. Apart from soil profiles no sub-surface investigations were undertaken. A detailed geo-technical survey would be required to investigate the nature of underlying karst and other geological features.

TABLE OF CONTENTS

INTRODUCTION

1. Purpose and scope of this assessment

The scope of the current assessment is to:

1. Identify any karst or other geoheritage features associated with, or adjacent to, a proposed upgrade to the waste water disposal system at the Mole Creek Hotel, 90 Pioneer Drive, Mole Creek Tas., 7304, from online and other published sources, that could be impacted by the proposed works.
2. Undertake a field survey of the karst features associated with and adjacent to this proposed development.

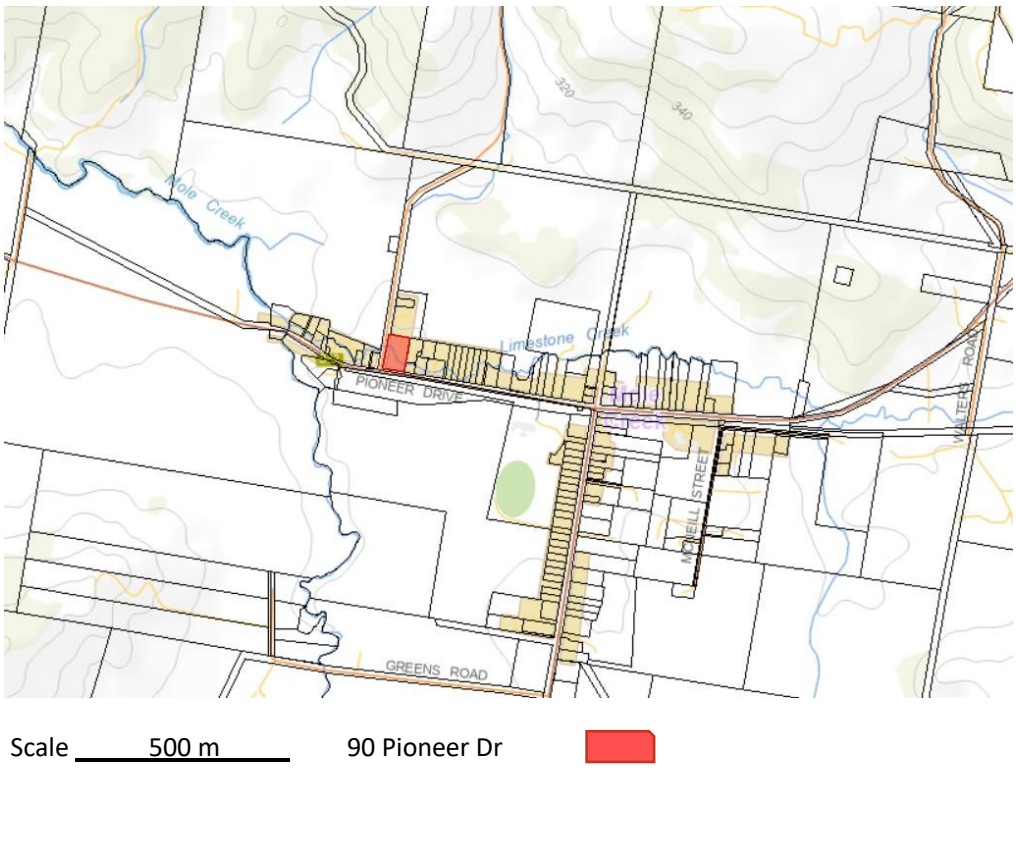
2. Qualification to provide expert advice

Philip Cullen is a geomorphologist, botanist, and landscape ecologist. He has a BSc. in Forestry and a MSc. in ecology. He has worked for universities, local and State government, and the private sector. He has been working as a consultant in relation to geomorphology, threatened species conservation and ecology, in Tasmania and elsewhere in Australia, for the past 30 years.

3. Location

The property is located 90 Pioneer Drive, Mole Creek Tas., 7304, Title ref: 24257/12 (Figure 1). The property lies within the Meander Valley Shire and fall within the High Sensitivity Karst Management Zone as defined in the Tasmanian Planning Scheme – Meander Valley 2021. A detailed map of the property showing the topography and drainage is presented in Figure 2.

Figure 1. Location of 90 Pioneer Drive, Mole Creek.[1]



[1] Source: Land Information System Tasmania, www.thelist.tas.gov.au

4. Definitions
Study Area: 90 Pioneer Drive, Mole Creek and adjacent areas that fall within specified set back distances from karst features, for developments in the High Sensitivity Karst Area as defined in the Tasmanian Planning Scheme – Meander Valley 2021.

Project locality: the area within 5 kilometres of the study area. This is consistent with the extent of database searches.

5. Desktop assessment
The following databases were interrogated to compile a list of geoheritage features for the study area, and within 5 kilometres of the study area.

- *Geoheritage*
  The Natural Values Atlas (Natural Values Atlas: Authoritative, comprehensive information on Tasmania's natural values Version 3.3.0.10) was searched for geoheritage features that could be impacted by the proposal in the study area and within 5 km.

- *Matters of national environmental significance*
  The Protected Matters Search Tool (Department of Environment 2013) was used to identify any wetlands protected under the EPBC Act 1999), known to occur or likely to occur within 5 kilometres of the study area.

6. Field assessment
A field assessment was conducted on 20/2/2026 to gain knowledge of the location and extent of karst features, the drainage and other aspects of geomorphology at the study area. A hand held GPS was used to determine the location of these features. GPS and grid references for any features identified have an estimated accuracy of +/- 3 m. Google satellite imagery and aerial photographs were used to assist in the mapping of these features. A 50 cm contour map was generated from DEM data[2]. This map was used to assist with the identification karst and other features. The soil profile was investigated at 2 locations to determine the nature and potential depth of the regolith (layer of loose, heterogeneous superficial material covering solid rock).

RESULTS AND DISCUSSION

7. Desk-top review
There are no Commonwealth listed wetlands (EPBC Act, 1999) within 5 km of the study area.

The study area lies within one listed geo-conservation site (Natural Values Atlas Version 3.3.0.10). This is the Mole Creek Karst (id 2685). This feature is of continental significance and regional scale. Whilst the Mole Creek Karst is a geo-conservation feature of regional scale it is comprised of many features that are highly sensitive to local scale impacts. The study area is about 3.4k m from the Gog Range Residual Strike Ridge/Cuesta (id 2507) This is bedrock feature and will not be impacted by developments in the study area. The property is within the 'High Sensitivity Karst Management Zone' as defined in the Tasmanian Planning Scheme – Meander Valley 2021.

8. Field Survey
Geology and geomorphology
The underlying bedrock at the study area is Ordovician limestone (Figure 2). Quaternary alluvial sediments cover this bedrock in a series terraces associated with Limestone Creek. The creek has been highly modified in the vicinity of the proposed development, including straightening of the course of the stream bed. The stream is contained within artificial rock walls just upstream of 90 Pioneer Drive. Alluvial sediments and exotic land fill are present at the site of the proposed installation. Profiles along the stream bank (Plate 1) and boreholes[3] (Figure 3) indicate that the

[2] Data source: ELVIS-Elevation and Depth-Foundation. ANZLIC Committee on Survey and Mapping.
[3] Onsite Waste Water Disposal Assessment Report by JD Consulting 2025.

limestone bed rock is cover by at least 2.5 m of alluvial material. Slopes at the site of the proposed development are around 3^{o} or less.

Figure 2. Topography and Geology on and around the study area.[4]

Geology codes: Ol-Ordovician limestone; Qpat- Quaternary sediments (Till, talus and alluvial gravels).

Karst features

There is one karst feature, a small outcrop of limestone, adjacent to the proposed development (Figure 3).

Fine scale topographic mapping and field inspection did not identify any sinkholes or caves within 100 m of the proposed development.

[4] Google Satellite image

Figure 3. The location of soil profile investigations and karst features in relation to the proposed development.

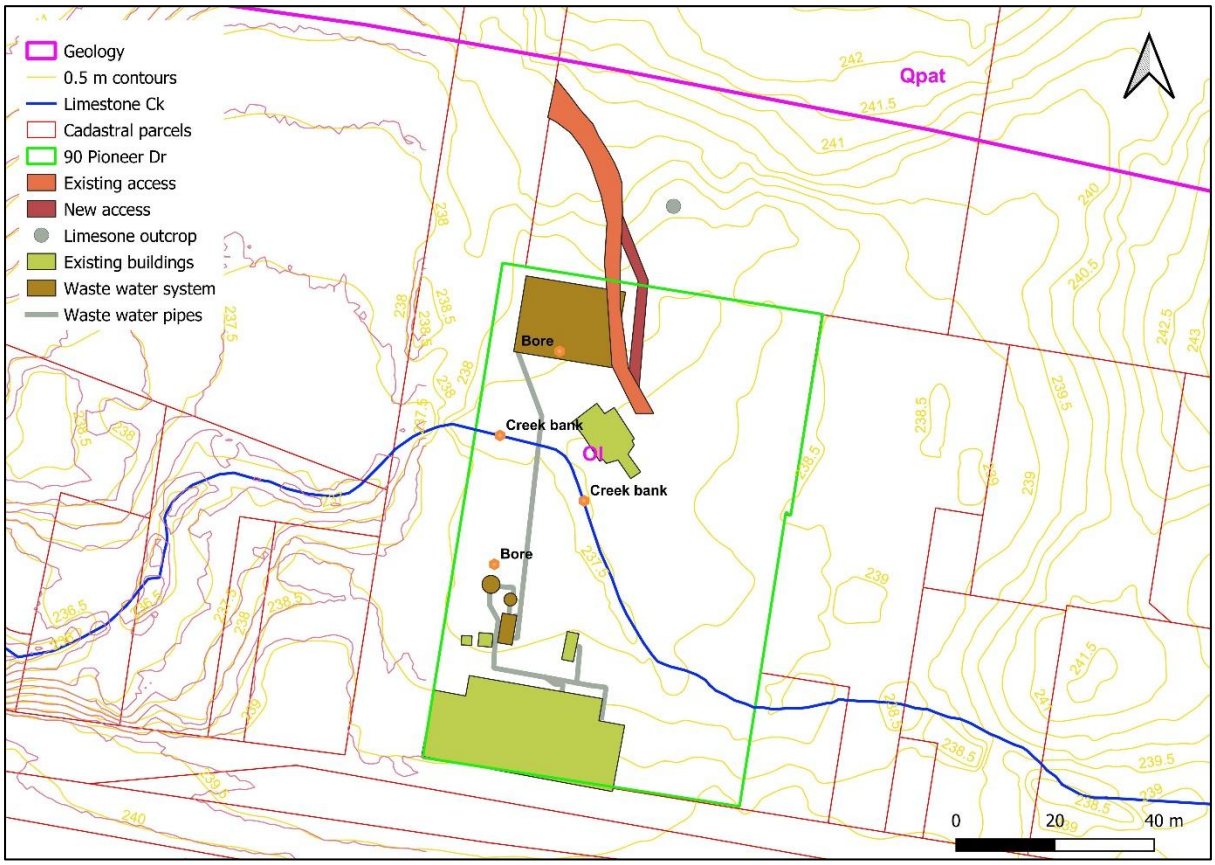


Plate 1. Exposed soil profile on the bank of Limestone Creek revealing sandy loam alluvial horizons and stream gravels.

Soils

The soil profile was investigated at 4 locations (Figure 3). Soils are of a duplex nature. There appears to be at least 2.5 m of brown, sandy loam or sand over clayey sands and clay with rounded pebbles, gravel and cobbles. The soil appears to have formed on alluvial river terrace deposits. This is consistent with other sites investigated on the Limestone Creek flats west of here[5]. Bedrock or decomposing bedrock was not evident at any of the sites investigated.

[5] Previous reports by author

9. Assessment of the proposed development against the Karst Code.

The Karst Code of the Tasmania Planning Scheme – Meander Valley 2021 requires that a number of Acceptable Solutions or Performance Criteria are met for developments within the High Sensitivity Karst Area. The proposed development has been assessed against these acceptable Solutions and Performance Criteria.

Table 1.

MEA-S5.6.1 Use

Objective

To minimise adverse impacts on the karst system through the management of use.

Acceptable Solutions	**Performance Criteria**
A2	**P2**
Within the karst management area, waste water disposal fields must be separated from a sinkhole or cave not less than the following distances.	Within the karst management area, waste water disposal fields must be located at a suitable distance from sinkholes and caves to:
Up slope <5°, 40m 5°–10°, 50m 10°–15°, 60 m 15°–20°, 70 m And add 10m for every additional 5° of slope Down slope All slopes 40m	(a) avoid an increase in potential for ground surface or land instability;
Acceptable solution can be met. There are no sinkholes or caves within 100 m of the proposed development.	(b) avoid pollution of subterranean waterways as a result of runoff directly entering the karst system.
A3	**P3**
Use must not facilitate access to a cave within the karst management area.	A Management Plan is to be submitted that demonstrates how karst natural values will be protected within the karst management area.
Acceptable solution met. No caves have been recorded in the study area and the proposed development will not facilitate access to any cave.	
A4	**P4**
Hard waste must not be disposed of on-site within the karst management area.	Disposal of waste is to be in a manner that ensures protection of the environmental values of the karst system within the karst management area from pollutants and foreign materials.
Acceptable solution can be met. Hard waste will be removed from site.	
A5	**P5**
Use does not involve the abstraction of water within the karst management area.	The abstraction of water must not adversely affect the environmental values of the karst system within the karst management area through the lowering of the water table
Acceptable solution can be met. No water is to be abstracted from the system for the development proposal.	

Table 2.

MEA-S5.7.1 Sedimentation and pollution

Objective

To manage the impacts of development to minimise erosion and to prevent sediment and pollution entering the karst system.

Acceptable Solutions	Performance Criteria
A2.1	**P2.1**
Excavation, buildings, access and subsurface drainage, excluding for plantation forestry, must be located not less than 100m from a karst feature.	Sediment and pollutant loss into the karst system is to be minimised through:
Acceptable solution not met. There is a karst out crop within about 10 m of the new access track and 20 m of the waste water disposal field.	(a) the use of sediment control measures; Response: There are no cavies or fissures in this karst outcrop. The karst outcrop is across the slope from the proposed access and the outcrop will not be affected by any runoff or sediment associated with the track. The waste water disposal field is down slope from this outcrop and will not impact upon the outcrop. Excess sediment created by excavations for the proposed developments can be removed for site if required. All other elements of the proposed development are located on the south side of Limestone Creek.
	(b) the avoidance of karst features and subterranean cavities in the construction of subsurface infrastructure; Response: There appears at least 2.5 m of soil at the site of the proposed development.
	(c) vegetation retention or permanent perennial ground cover between the development and karst features; Response: Vegetation (pasture and road verge vegetation) will be retained between the proposed development and the karst outcrop. Any disturbed areas will be revegetated following construction.
	(d) improvement of vegetation cover in critical areas for soil conservation, such as steep slopes, unstable soils and riparian areas; Response: Not applicable.
	(e) directing on-site effluent disposal away from karst features; Response: The waste water disposal field is down slope and away from the karst outcrop
	(f) the use of specialised, lower impact on-site effluent disposal systems. Response: A specialised, lower impact on-site effluent disposal system is being installed.
A3	**P3**
Vegetation must be retained, excluding for plantation forestry, surrounding a sinkhole, sinking stream or cave not less than the following distances:	Clearance of vegetation must not result in an increase of sediments entering the karst system or increased instability of a karst feature, having regard to:
Up slope <5°, 40m 5°–10°, 50m 10°–15°, 60 m 15°–20°, 70 m And add 10m for every additional 5° of slope Down slope All slopes 40m	(a) the type of vegetation on the site; (b) the type of soil on the site; (c) the existing structure of the sinkhole; and (d) the proposed treatment of the cleared area including replacement vegetation.
Acceptable solution is met. There are no sinkholes or caves within these distances.	
A4	**P4**
Development must not fill a cave or sinkhole	No Performance Criterion.
Acceptable solution met. No caves or sinkholes will be filled.	

Table 3.

MEA-S5.7.2 High Sensitivity Karst Area
Objective
To protect the environmental values of the high sensitivity karst area through the appropriate location and treatment of development.

Acceptable Solutions	Performance Criteria
A1	**P1**
(b) The area for development must not: (i) contain karren, caves and sinking streams; or (ii) have less than 500mm soil coverage.	A report prepared by a suitably qualified person must demonstrate that that the development does not result in the following impacts:
Acceptable solution (b) (i) met. The area does not contain karren, caves or sinking streams. Acceptable solution (b) (ii) met. The area has soils of greater than 2.5 m in depth	(a) damage to sites of scientific significance; (b) damage to a karst feature; (c) blockage of a sinkhole or cave; (d) induce unacceptable levels of surface soil erosion and sedimentation into the karst system; (e) creation of a safety hazard; (f) increase potential for ground surface or land instability; (g) pollution of surface or subterranean waterways; (h) adversely lower the water table; (i) adversely increase subterranean water flow; (j) significant alteration of the surface hydrology The report is to include any measures for the location of development or treatment of development that will mitigate adverse impacts on the karst system.

10. Concluding comments

One karst feature, a karst outcrop, was mapped in the study area. There are no sinkholes or caves within 100 m of the proposed development. The proposed development meets most of the Acceptable Solutions of the Karst Code, otherwise Performance Criteria can be met. Soils of at least 2.5 m in depth are found at the site.

It should be noted that this report is based on a survey of surface features and existing geology maps. Apart from soil exposures and 2 bores holes, no sub-surface investigations were undertaken. A detailed geo-technical survey would be required to investigate the nature of underlying karst and geological features.

REFERENCES

Department of Environment (2013) The Protected Matters Search Tool.
http://www.environment.gov.au/webgis-framework/apps/pmst/pmst.jsf

JD Consulting (2025) Onsite Waste Water Disposal Assessment Report at Mole Creek Hotel.

Tasmania Planning Scheme – Meander Valley 2021
https://iplan.tas.gov.au/pages/plan/book.aspx?exhibit=tpsmea

Natural Values Atlas: Authoritative, comprehensive information on Tasmania's natural values Version 3.3.0.10 https://www.naturalvaluesatlas.tas.gov.au

JD Consulting

PO Box 8

Riverside Tas 7250

Mob: 0457469617

Email: jldoherty581@bigpond.com

Onsite Waste Water Disposal Assessment Report

Prepared for

Craig Green

At

Mole Creek Hotel

90 Pioneer Drive, Mole Creek TAS 7304 (CT 24257/12)

Prepared by James Doherty
Date of Report 10 July 2025

Contents

Site Assessment Report for Onsite Wastewater Treatment System

Owner & Postal Address	Craig Green 52 Union Bridge Road Mole Creek TAS 7304

Site Address	Mole Creek Hotel 90 Pioneer Drive Mole Creek TAS 7304

Property ID	6267080
Title Details	24257/12

1 Introduction

A limited scope investigation has been conducted for Mole Creek Hotel located at 90 Pioneer Drive, Mole Creek with a view to replace the existing on-site wastewater disposal system.

The investigation has been conducted to determine what is the best treatment system to replace the existing one and to identify an area for the disposal of the wastewater.

The existing system is not reusable and will need to be decommissioned and replaced.

The new wastewater treatment system will comprise of a 10Kl primary tank (2of), a 10Kl balance tank, a 10Kl emergency storage tank and 5Kl treatment units (2of) (refer to Appendix 3).

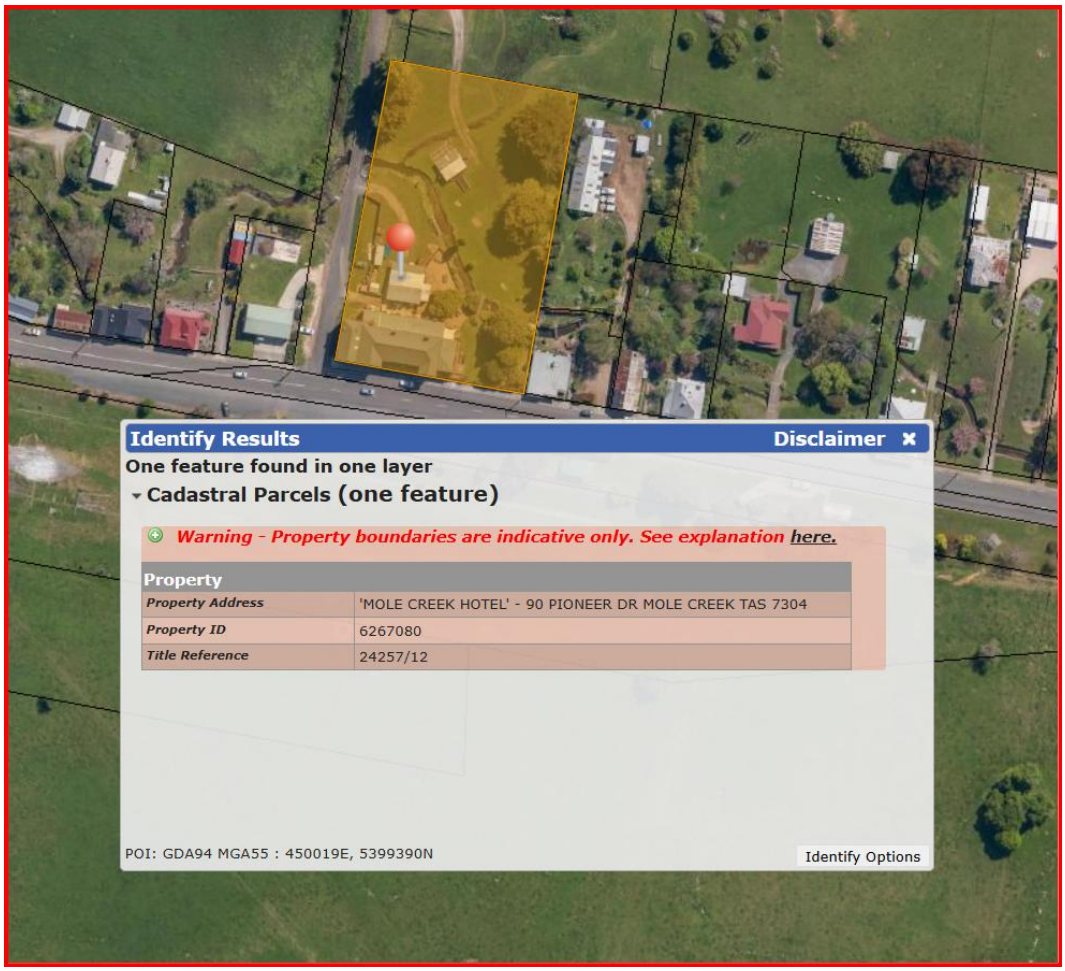


Figure 1 Aerial view of site (highlighted in yellow) and owner information

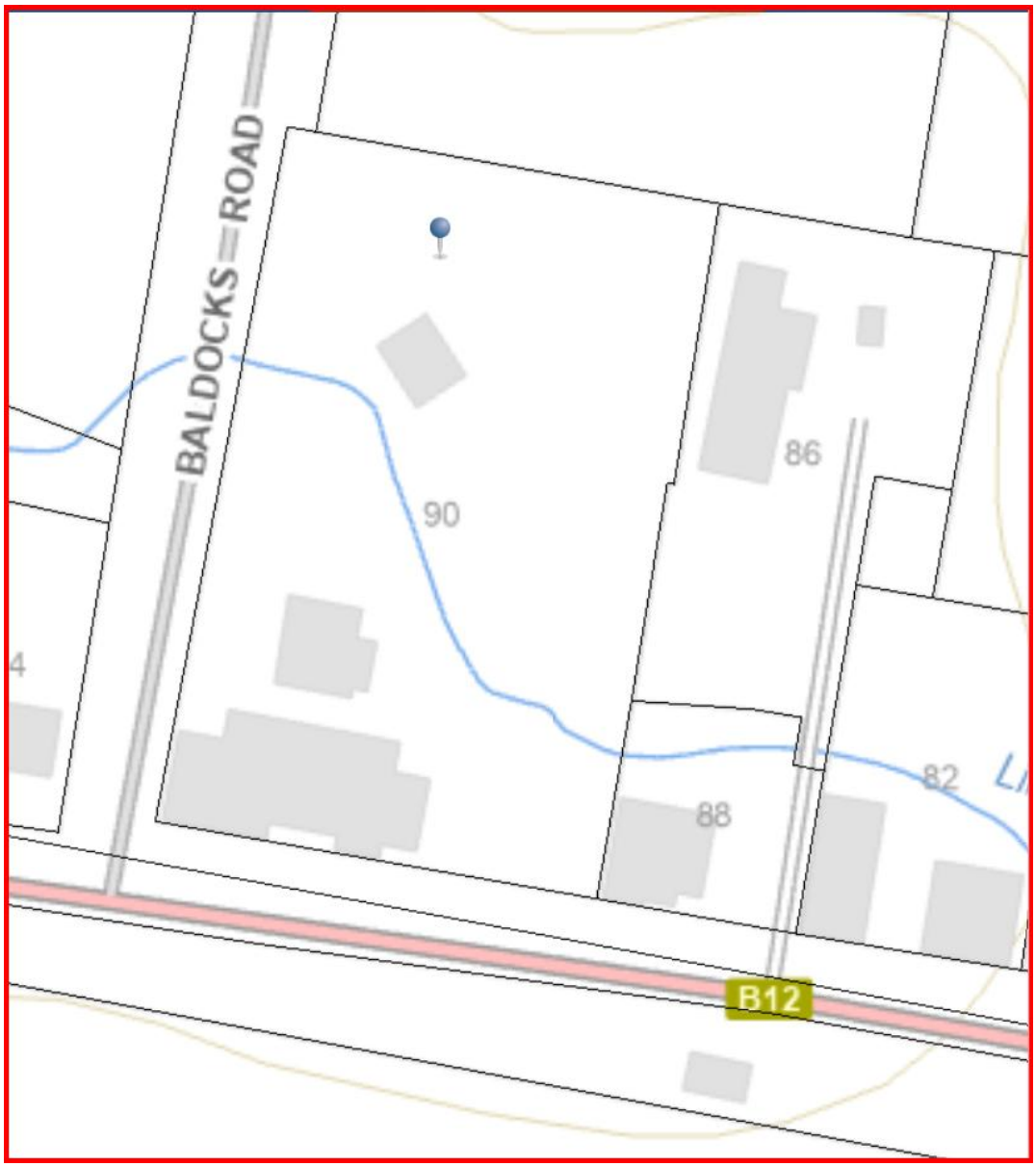


Figure 2 Topographic map with contour lines

Wastewater Assessment Calculations and Recommendations –

2 Input data – Volume of water generated through business

The total volume of water generated through hotel includes the kitchen, bar and restrooms and accommodation rooms have been taken from the water meter readings provided by the business.

2.1 Hydraulic and Organic Load Calculations (Litres/day & grams/day)

Hydraulic & Organic Load Calculations Liters/day & gBOD/day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Totals Per Week	
	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d	Liters/d	grams/d
Persons/day:	40		40		40		40		40		40		40		280	
Motels/hotels/guesthouse: Per Resident Guest & Staff with In-Hou Flowrate: 150 L/p/d BOD Load: 80 g/p/d	6000	3200	6000	3200	6000	3200	6000	3200	6000	3200	6000	3200	6000	3200	42000	22400
Persons/day:	40		40		40		40		40		40		40		280	
Restaurants: premises <50 seats Flowrate: 40 L/p/d BOD Load: 50 g/p/d	1600	2000	1600	2000	1600	2000	1600	2000	1600	2000	1600	2000	1600	2000	11200	14000
Persons/day:	40		40		40		40		40		40		40		280	
Motels/hotels/guesthouse: Bar Meals per Diner Flowrate: 10 L/p/d BOD Load: 10 g/p/d	400	400	400	400	400	400	400	400	400	400	400	400	400	400	2,800	2,800
Persons/day:																
Select Source Flowrate: L/p/d BOD Load: g/p/d																
Persons/day:																
Select Source Flowrate: L/p/d BOD Load: g/p/d																
Persons/day:																
Flowrate: L/p/d BOD Load: g/p/d																
Persons/day:																
Flowrate: L/p/d BOD Load: g/p/d																
Daily Total	8,000	5,600	8,000	5,600	8,000	5,600	8,000	5,600	8,000	5,600	8,000	5,600	8,000	5,600	56,000	39,200
Average															8,000	5,600
Average loading post-primary tank (where added)															8,000	3,192

2.2 Influent Parameters

	Type	Qty	Check	Load per Treatment Plant	
Primary Tank	PT10000	2			
Balance/Invert Tank	BT10000	1			
Emergency Storage Tank	ST10000	1		L/d per unit	g/d per unit
Treatment Plant	ABS5000	2		4,000	1,596

Table 1. Influent Parameters

Characteristics	Units	Value
Weekly Average Flowrate	L/day	8000
BOD_5	mg/L	700
TSS	mg/L	450
Total Nitrogen	mg/L	70
Total Phosphorus	mg/L	10.8
Oil and Grease	mg/L	< 50
pH		6.0 - 9.0

3 Assessment Documents

Assessment documents include the following:

a) Bore log

b) Drawing sheets – Replacement of Existing Onsite Wastewater System.
Site Plan, Part Site Plan – Demolition, Part Site Plan – Tanks Layout, Part Site Plan – LAA Layout, SSDi Area Sections & Notes. Project No 16-2025, drawing sheets 01-06 of 06 Rev 00 dated 10.07.2025.

4 Recommendations

- Ensure all sewerage fixtures are identified and connected to the new wastewater treatment and disposal system.
- Ensure any stormwater connections are not connected to the current sewer systems.
- Decommission the existing wastewater systems (septic tanks) which are located on the lefthand side of the existing shed and in the gravel area of the beer garden.
- Due to the limited area available, the existing roadway will need to be reshaped and redesigned as shown on the drawing sheets.
- A gantry or similar will need to be constructed to support the pressure poly pipe where it crosses the watercourse.
- Remove the existing grease arrestor and replace it with a 1000 litre unit.
- Install the new wastewater treatment tanks and the grease arrestor as shown on the accompanying drawing sheets.
- The wastewater treatment system, as specified in the Taylex wastewater treatment system design of 2 x 10Kl Primary tanks, 1 x 10Kl Balance tank, 1 x 10Kl Emergency storage tank and 2 x 5Kl treatment tanks is to cater for an estimated wastewater volume of 8000 litres per day from the site.
- From the pump well of the final treatment plant, install 32mm pressure poly pipe to the manifold at the end of the absorption bed.
- Construct a 20m x 15m x 0.6m absorption bed with the 25mm Upvc lateral runs spaced at 0.5m from the edges of the bed and at 1.0m centres across the width of the absorption bed as shown on the drawing sheets.
- Refer to the section detail on the drawing sheets for the depth of the aggregate and topsoil and the placement of the geotextile fabric.
- Connect all runs of 25mm Upvc pipe to the manifold as shown on the drawing sheets. Ensure the 25mm Upvc pipe is level and there are no obvious dips or high spots.
- Drill 6mm holes at approximately 500mm spacings into the top of the 25mm Upvc pipes for the length of the bed. No holes are to be drilled in the bottom of the 25mm lateral to allow for draining of the line between pump cycles.
- The 25mm Upvc pipe is to extend for the full length of the bed, terminating at 45 degree angle at the end of the trench, extending to ground level and capped to allow for periodic flushing of the line.
- Lay ½ lengths of 100mm Upvc pipe (cut lengthways along the pipe) over the top of the 25mm pipe.
- Install an inspection port in the absorption bed as shown to allow for an inspection of the bed and to gauge the water level within the bed.
- Alternatively, pressure compensated (PC) 4 litre/hour drip line with drippers spaced at 300mm centres along the length of each lateral and using 7 lateral lines could be used in conjunction with an indexing valve and splitting the bed into two areas.
- Absorption bed – min 5 metres from western fence line and a minimum of 2 metres from the northern boundary.

5 Site Conditions

Area of Land	6420m^2 (whole of site).
Boundaries Confirmed	Yes, where applicable.
Disposal Area Orientation	North.
Existing Buildings	Hotel and outbuildings. The shed shown on the drawing sheets will be removed.
Flood Potential	Low.
Power Supply	Mains power is available and connected to the property.
Slope & % Slope Stability	<3 degrees to the south and west in the area proposed for the disposal of secondary treated wastewater.
Soil type	(See bore log results in Appendix 4).
Surface Drainage	Fair.
Vegetation	Area is grassed.
Water Courses (m)	Limestone Creek flows in an east to west direction through the property.
Water Table Depth	Unknown.
Water Reticulation/Source	Mains (potable) water is available and connected to the property.
Wells/Bores/Groundwater	There are no registered bores in the area.

6 Site Evaluation

This section provides an overview of the site for suitability of onsite wastewater disposal and other environmental considerations.

6.1 Primary Disposal Area (m^2)

A primary disposal area of 300m^2 is required for the disposal of primary treated wastewater.

6.2 Reserve Area

A Reserve area is not shown on the drawing sheets.

6.3 Special requirements

Nil.

6.4 Landslide Hazard Bands

The site is not located in a landslide hazard band area.

6.5 Karst Area

The site is located in a very high integrated conservation Karst area as shown on the below map.

Boreholes were drilled to 3.0m and no karst was identified.

6.6 Capacity Rating

Capacity Rating	Factor	Rating
	Site Drainage	Good
	Flooding Potential	Low
	Impervious Layer Depth	Not identified
	% Gravel	<1Nil
	% Stone	Nil
	% Boulders	Nil
	% Rock Outcrop	Nil

6.6.1 Adopted Permeability

AS/NZS 1547 indicates the upper layer of the soil has a permeability rate of 1.4 to 3.0m/d – (Category 2 –Sandy loam) with a DLR of 50mm per day. The 'B' horizon of the soil has an indicative a permeability of 0.5 to 1.51m/d which is more consistent with the Category 4 –Clay loam which has DLR of 30mm per day.

The adopted Design loading Rate for the wastewater disposal area is 30mm per day.

7 System Design Criteria

The following disposal design is recommended for this application.

Area for wastewater disposal	300m^2 excluding permitter strip.
Depth of absorption bed	Maximum of 0.60m.
Overall dimension of absorption trenches	20m long x 15m wide.
Separation distance to boundaries or other features	LAA A minimum of 5 metres from the western and 2 metres from the northern boundary.

7.1 Comment on Results

The site is deemed appropriate for in-ground absorption of primary treated effluent in the designated area. There is sufficient land available within the proposed property allotment for the construction of a future wastewater disposal area, if or when required.

8 Disclaimer

This report and any associated documents are only valid for a period of 12 months from the date below providing there have been no changes to the proposed plans or the site. Please contact the undersigned to confirm if the documentation is still valid if the work has not been commenced or completed within 12 months of the date below.

This site assessment has been undertaken on the basis of the plans and details provided for this development only. This report should not be applied to any project other than that originally specified at the time this report was issued.

This report is based on the conditions of the site encountered at the time of the inspection only. In the event of significant delays in the commencement of this project it is recommended that a further investigation be conducted to verify the conditions found in this report.

This report should not be used without further consultation from the wastewater designer if significant changes to the development occur. Change may include but are not limited to variations in the location of the proposed building(s), the location of the onsite treatment system and/or the wastewater disposal area (Land Application area), earthworks or other work that may impact upon the building settlement or slope stability, the onsite treatment system and/or the wastewater disposal area (Land Application area).

Please note that because there are many factors affecting the successful operation of an onsite treatment system and the land application area. It is likely that at some time in the future additional work may be required to maintain the system operation.

JD Consulting will not be responsible for the interpretations of the report finding by others involved in the design and construction process for this project. Where any confusion exists clarification should be obtained from JD Consulting.

8.1 Copyright and Use of Documents

Copyright in all drawings, reports, specifications, calculations and other documents provided by JD Consulting in connection with the Services remain vested in JD Consulting. The Client has a licence to use the documents for the purpose of completing the project. However, the Client must not otherwise use the documents, make copies of the documents or amend the documents unless express approval in writing is given in advance by JD Consulting. The Client must not publish or allow to be published, in whole or in part, any document provided by JD Consulting or the name or professional affiliations of JD Consulting, without first obtaining the written consent of JD Consulting as to the form and context in which it is to appear.

8.2 Digital Copies of Report

If any report is provided to the Client in an electronic copy except directly from JD Consulting, the Client should verify the report contents with JD Consulting to ensure.

James Doherty
Date 10.7.2025

Appendices

Appendix 1` Wastewater Loading Certificate

Waste Water Loading Certificate	
System Capacity	8000 litres per day (taken from water meter readings).
Design Summary	
• Effluent Quality	Secondary.
• Adopted Soil Category	4
• Adopted DLR	30mm/day.
• Indicative permeability	0.5-1.5m/day.
• LAA Design	20m x 15m x 0.6m pressure dosed absorption bed.
• Primary LAA	300sq m
• Reserve Area	100% of primary area. A Reserve Area has not been shown on the drawing sheets.
Fixtures	Standard water fixtures including 6/3 litre cistern, spring loaded aerator faucets or similar. Water efficient fitting and fixtures are not taken into consideration when determining the wastewater loading. The installation of water efficient fitting and fixtures will reduce the loading on the wastewater disposal area and are highly recommended.
Allowable variation from design flows (peak loading events)	There is an emergency storage tank for peak load periods.
Consequence of Variation in Effluent Flows	
• High Flows	The land application area is designed for 8000 litres per day of secondary treated wastewater. Flooding of the wastewater disposal area. A reduction in the life of the wastewater disposal area due to flooding or extended wetted periods
• Low Flows	Should not affect system performance.
Consequences of Variation in Effluent Quality	Can cause issues with the processing of wastewater within the sullage tank. Can affect the wastewater disposal field due to the overuse of washing detergents that have high sodium/phosphorus that result in

	clogging the receiving soils.
Consequences of Lack of Maintenance and Monitoring	The system should be maintained in compliance with the recommendations of the wastewater report dated 10 July 2025 and the Plumbing Permit issued by Meander Valley Council. All livestock and vehicles should be excluded from the wastewater disposal area. Any failure to maintain the septic tank and wastewater disposal system may lead to system failure, resulting in foul odours, attraction of pests and weed growth

Appendix 2 Standards for Wastewater Land Application Areas

Objective - PCA FP1.5 (a)-(c)

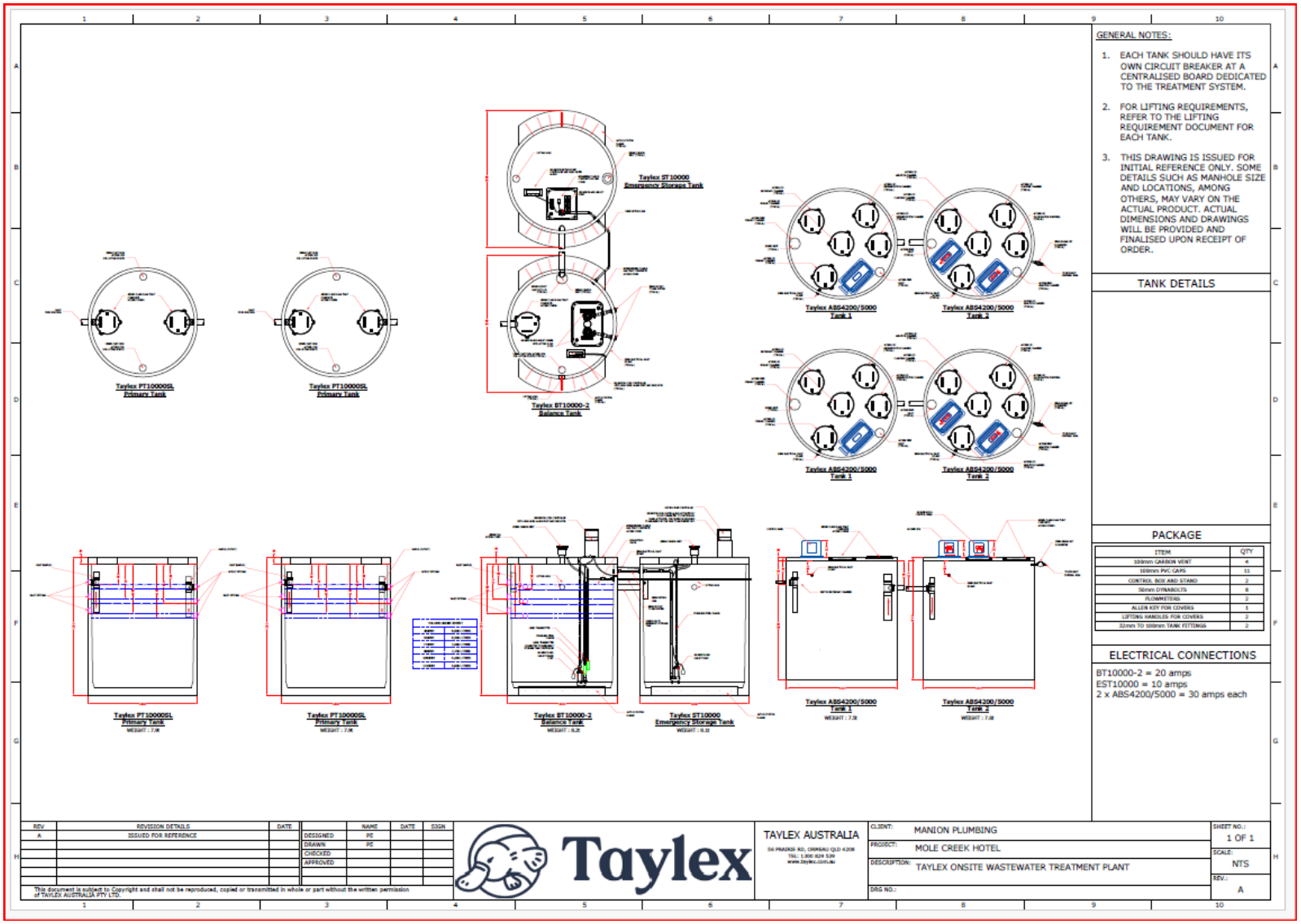
To provide for sustainable onsite wastewater management through the provision of appropriately designed and located land application areas and wastewater treatment units.

Acceptable Solutions	**Performance Criteria**	**Compliance**
A1 Horizontal separation distance from a building to a land application area must comply with one of the following: a) be no less than 6m; b) be no less than: 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 from a downslope building	P1 a) The land application area is located so that the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low	Complies with A1 a) The LAA is located with a separation distance of greater than 6m from the upslope building.
A2 Horizontal separation distance from a downslope surface water to a land application area must comply with (a) or (b) a) be no less than 100m; or	P2 Horizontal separation distance from downslope surface water to a land application area must comply with all of the following; a) Setbacks must be consistent with AS/NZS1547	Complies with A2 a) ii The LAA is located at a distance which is greater than that specified in A2 b) ii.

b) be no less than the following; 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 downslope surface water	Appendix R b) A risk assessment in accordance with Appendix A AS/NZS 1547 has been completed that demonstrates that the risk is acceptable	
A3 Horizontal separation distance from a property boundary to a land application area must comply with either of the following; a) be no less than 40 m from a property boundary; or b) be no less than; i. 1.5m from an upslope or level property boundary; and ii. If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; iii. If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope boundary	P3 Horizontal separation distance from a property boundary to a lined application area must comply with all of the following: a) Setback must be consistent with AS/NSZ1547 Appendix R; and b) A risk assessment in accordance with Appendix A of AS/NZS1547 has been completed that demonstrates that the risk is acceptable	Complies with A3 b i & iii The horizontal separation from the LAA to the upslope or level property boundary is greater than 1.5m. The horizontal separation from the LAA to the downslope property boundary is greater than 1.5m plus 1m for every degree of average gradient from a downslope boundary.
A4 Horizontal separation distance from a	P4 Horizontal separation distance from a downslope bore,	Complies with A4 No wells or bores or similar water supply

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	well or similar water supply to a land application area must comply with all of the following: a) Setback must be consistent with AS/NZS1547 Appendix R; and b) A risk assessment completed in accordance with Appendix A of AS/NZS1547 demonstrates that the risk is acceptable	has been identified within 50m of the wastewater system
A5 Vertical separation distance between groundwater and a land application area must not be less than; a) 1.5m if primary treated effluent; or b) 0.6m if secondary treated effluent	P5 Vertical separation distance between groundwater and a land application area must comply with the following; a) Setbacks must be consistent with AS/NZS1547 Appendix R; and b) A risk assessment completed in accordance with Appendix A of AS/NZS1547 that demonstrates that the risk is acceptable	Complies with P5 b) No groundwater detected at 1.5m.
A6 Vertical separation distance between a limiting layer and a land application area must be no less than; a) 1.5m if primary treated effluent; b) 0.5m if secondary treated effluent	P6 Vertical setback must be consistent with AS/NZS1547 Appendix R	Complies with A6 b) No limiting layer detected at 1.5m
A7 Nil	P7 A wastewater treatment unit must be located a sufficient distance from building or neighbouring properties so that emissions (odours, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties	Complies

Appendix 3 Taylex Onsite Wastewater Treatment System Layout



Appendix 4 Borelog

Job No. 16-2025 Borehole No. 1

Client: C Green

Site Address: 90 Pioneer Drive, Mole Creek

Project: Installation of new secondary treatment system to existing residence

Date: May 2025

Logged by:James Doherty

Equipment Auger

Co-Ords

Method	Penetration 1 2 3 4	Notes Samples Tests	Water		Graphic Log	Classification	Material Description	Moisture condition	Consistency density index	Structure, additional observations
						SW	Sand/gravel	D	F	
							cobbles to 50mm in size to 600mm			
			N							
			I	0.25						
			L							
				0.5						
				0.75						
				1.0						
				1.25						
				1.50						
						Cl	brown	D	S	
							medium plasticity			
				1.75						
				2.0						
				2.25						
				2.5	→		water infiltration	W	F	
				2.75						
									St	
				3.0						
							BOH			

Job No. 16-2025 Borehole No. 2

Client: C Green

Site Address: 90 Pioneer Drive, Mole Creek

Project: Replacement of Existing Onsite Wastewater System

Date: May 2025

Logged by:James Doherty

Equipment Auger

Co-Ords

Method	Penetration 1 2 3 4	Notes Samples Tests	Water		Graphic Log	Classification	Material Description	Moisture condition	Consistency density index	Structure, additional observations
						SW	Sand/gravel	D	F	
							brown			
							cobbles to 50mm in size			
			N							
			I	0.25						
			L							
				0.5						
						SC	Clayey Sand	D	MD	
				0.75			yellow			
							low plasticity			
				1.0						
						Cl	Clay	D	S	
							yellow			
							low plasticity			
				1.25						
				1.50						
				1.75						
								M	F	
				2.0						
				2.25						
				2.5						
				2.75						
								M	St	
				3.0						
							BOH			