PLAN 1

PLANNING APPLICATION PLN-18-0296

32 NORFOLK STREET, PERTH

ATTACHMENTS

A Application & plans, correspondence with applicant

B Responses from referral agencies

C Representation

D Record of old well by David Denman & Associates

PLANNING APPLICATION

Proposal

Description of proposal: 2 LOT SUBDIVISION, ~~demolition of SHED & tree removal~~

(attach additional sheets if necessary)

If applying for a subdivision which creates a new road, please supply three proposed names for the road, in order of preference:

1..... 2..... 3.....

Site address: 32 NORFOLK ST, PERTH

CT no: 46063/1

Estimated cost of project $ 4000 *(include cost of landscaping, car parks etc for commercial/industrial uses)*

Are there any existing buildings on this property? (Yes) / No
If yes – main building is used as HOUSE

If variation to Planning Scheme provisions requested, justification to be provided:

(attach additional sheets if necessary)

Is any signage required? NO
(if yes, provide details)

FOLIO PLAN 1-109

RECORDER OF TITLES

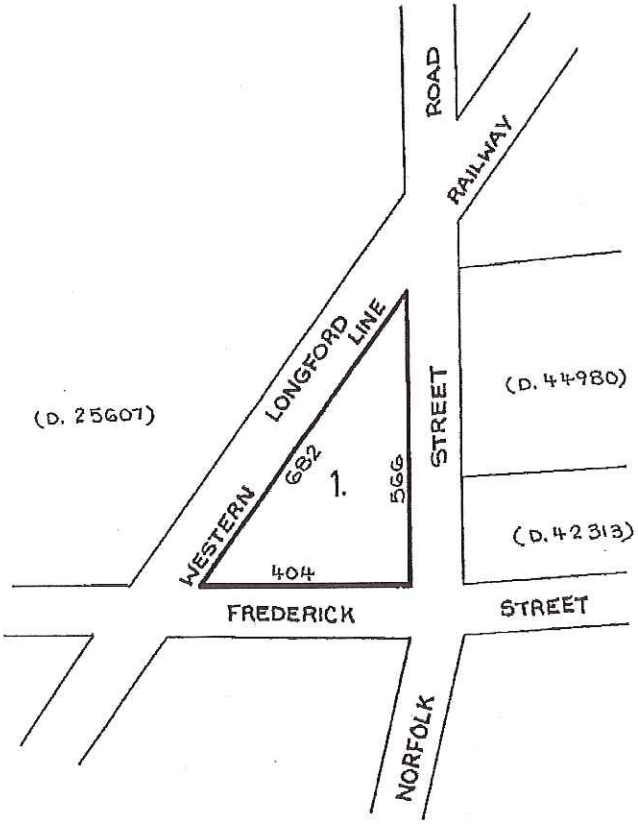
Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

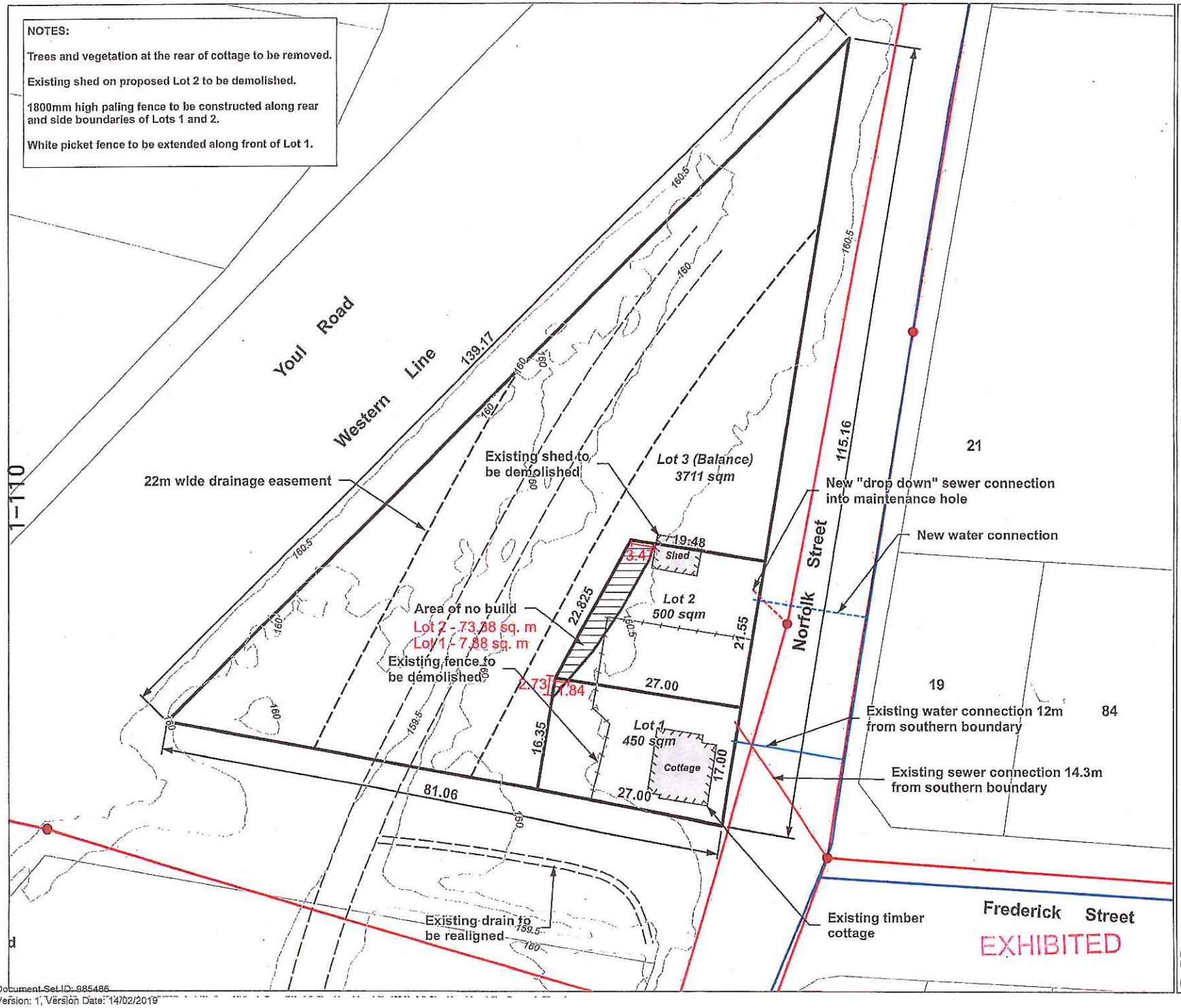
APPROVED 9 OCT 1990 RECORDER OF TITLES	CONVERSION PLAN CONVERTED FROM 65/9586	REGISTERED NUMBER D.46063
FILE NUMBER Y. 12893	GRANTEE: PART OF LOTS 2 & 3, 11-1-4 GTD. TO ADYE DOUGLAS & F. J. HOUGHTON.	DRAWN 26/9/90

SKETCH BY WAY OF ILLUSTRATION ONLY

~~CITY~~/TOWN OF PERTH (SEC. X)
~~LAND DISTRICT OF~~
~~PARISH OF~~
~~LENGTHS ARE IN METRES.~~ NOT TO SCALE.
LENGTHS ~~IN BRACKETS~~ IN LINKS~~/FEET & INCHES.~~



EXHIBITED



32 Norfolk Street Perth

Plan of Subdivision

To be acquired:
PID 6744695
C/T 46063/1
Area = 4661sqm

Legend

- Proposed Lots
- No build zone
- Land Titles
- Existing buildings
- Drainage Easement
- Existing Fence
- Proposed Swale Drain
- Ground Contour
- Existing Water Connection
- Proposed Water Connection
- Existing Water Main
- Existing Sewer Connection
- Proposed Sewer Connection
- Existing Sewer Gravity Main
- Existing Sewer Maintenance Hole

Disclaimer:
This map is intended for proposal purposes only.

Dimensions and areas are indicative only and are based on the LIST cadastre which may vary from that shown on the certificate of title issued by the Titles Office.

Final lot size and areas are subject to survey performed by a licensed surveyor.

Service locations are indicative only and should be confirmed on site.

N

0 5 10 15 20 25
Metres

1:500 when printed at A3
1 centimetre = 5 metres
All lengths are in metres

Coordinate System GDA 1994 MGA Zone 55
Base data from theLIST, © State of Tasmania

GDA

NORTHERN MIDLANDS COUNCIL

HYDRODYNAMICA

Map Created by: M.McGovern
Map Version: 05

Map Date: 21st November 2018

esk mapping &GIS

32 Norfolk Street Perth

Plan of Subdivision

To be acquired:
PID 6744695
C/T 46063/1
Area = 4661sqm

Legend

- Proposed Lots
- No build zone
- Proposed Swale Drain
- Land Titles
- Existing Water Connection
- Proposed Water Connection
- Existing Water Main
- Existing Sewer Connection
- Proposed Sewer Connection
- Existing Sewer Gravity Main
- Existing Sewer Maintenance Hole

Disclaimer:
This map is intended for proposal purposes only.

Dimensions and areas are indicative only and are based on the LIST cadastre which may vary from that shown on the certificate of title issued by the Titles Office.

Final lot size and areas are subject to survey performed by a licensed surveyor.

Service locations are indicative only and should be confirmed on site.

EXHIBITED

N

0 5 10 15 20 25
Metres

1:500 when printed at A3
1 centimetre = 5 metres
All lengths are in metres

Coordinate System GDA 1994 MGA Zone 55
Base data from theLIST, © State of Tasmania

GDA

NORTHERN MIDLANDS COUNCIL

HYDRODYNAMICA

Map Created by: M.McGovern
Map Version: 04
Image Source: LIST Orthophoto
Map Date: 5th November 2018

esk mapping & GIS

STORMWATER DRAINAGE 32 NORFOLK ST

It is proposed to drain the stormwater from both lots to a 150mm pipe which will connect into the open drain in the Frederick St road reserve which is part of Council's stormwater system. This drain takes connects existing overland flow and piped stormwater water from the Frederick St area to Sheepwash Creek (see 32 Norfolk St Stormwater Concept Plan).

The amount of water generated by these two small lots will only be a very small increase to the amount of water which is currently drained by this part of the Council stormwater system.

This complies with acceptable solution A1 – "All stormwater must be connected to a reticulated stormwater system..."

The reticulated stormwater discharges into an open drain which is part of the existing Council system. This complies with acceptable solution A2.1 – "No point source discharge directly into a wetland or water course..."

The amount of water generated by these two lots will be insignificant in comparison to the flows coming from Frederick St, which complies with acceptable solution A2.2 – "For existing point source discharges into a wetland or watercourse there is to be no more than 10% increase over the discharge which existed at the effective date."

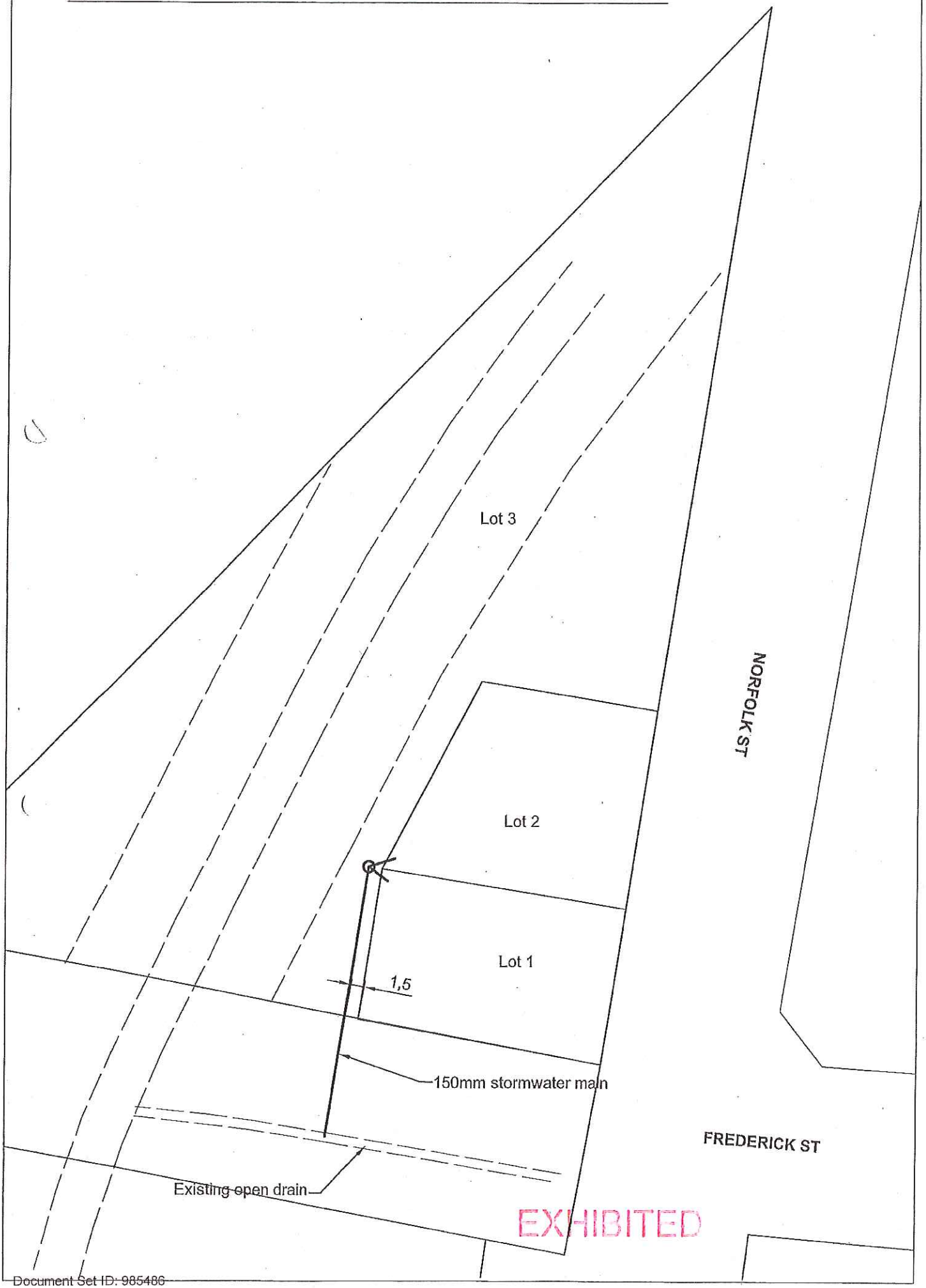
E9.6.2 Water Quality Management

Objective

To maintain water quality at a level which will not affect aquatic habitats, recreational assets, or sources of supply for domestic, industrial and agricultural uses.

Acceptable Solutions	**Performance Criteria**
A1 All stormwater must be: a) connected to a reticulated stormwater system; or b) where ground surface runoff is collected, diverted through a sediment and grease trap or artificial wetlands prior to being discharged into a natural wetland or watercourse; or c) meet emission limit guidelines from the Board of the Environment Protection Authority in accordance with the *State Policy for Water Quality Management 1997*.	P1 Stormwater discharges to watercourses and wetlands must minimise loss of hydrological and biological values, having regard to: i (i) natural flow regimes, water quality and biological diversity of any waterway or wetland; ii (ii) design and operation of any buildings, works or structures, on or near the wetland or waterway; iii (iii) sources and types of potential contamination of the wetland or waterway; iv (iv) devices or works to intercept and treat waterborne contaminants; v (v) opportunities to establish or retain native riparian vegetation or continuity of aquatic habitat.
A2.1 No new point source discharge directly into a wetland or watercourse. A2.2 For existing point source discharges into a wetland or watercourse there is to be no more than 10% increase over the discharge which existed at the effective date.	P2.1 New and existing point source discharges to wetlands or watercourses must implement appropriate methods of treatment or management to ensure point sources of discharge: a) do not give rise to pollution as defined under the *Environmental Management and Pollution Control Act 1994*; and b) are reduced to the maximum extent

STORMWATER CONCEPT PLAN 32 NORFOLK ST



Tarkarri Engineering

Air Quality • Acoustics • Environment • Vibration

Technical Memo

8 January 2019

Northern Midlands Council
13 Smith St
Longford, TAS 7301

5219_ACVIB_R
AJM

Attn: Mr Johnathan Galbraith

Dear Sir,

RE: 32 Norfolk St, Perth, environmental noise and ground vibration impact assessment.

Please find below an environmental noise and ground vibration impact assessment for a proposed subdivision at 32 Norfolk St, Perth.

1. INTRODUCTION

Tarkarri Engineering has been engaged by the Northern Midlands Council (NMC) to assess noise and ground vibration levels on the boundary of a proposed residential subdivision at 32 Norfolk St, Perth.

The testing was commissioned to assess the potential for excessive ground vibration and airborne noise, generated from the nearby railway, and to identify effective mitigation strategies, if required. The proposed subdivision bounds the southern side of TasRail's Western Line. Assessment is applicable under clause E4.7.1 P1 (b) the Northern Midlands Council's interim planning scheme 2013 which is as follows: -

> **Performance Criteria states**:
>
> P1 Development including buildings, road works, earthworks, landscaping works and level crossings on or within 50m of a category 1 or 2 road, in an area subject to a speed limit of more than 60km/h, a railway or future road or railway must be sited, designed and landscaped to:
>
> **b)** mitigate significant transport-related environmental impacts, including noise, air pollution and vibrations in accordance with a report from a suitably qualified person.

Tarkarri Engineering proposed the following to address Performance Criteria requirements outlined above:-

- Measure noise levels from rail pass-by events at the site of the proposed development and assess against *NSW EPA (2013) Rail Infrastructure Noise Guideline* criteria. Provide recommendations for mitigation if required.

e info@tarkarri.com
w tarkarri.com
p +61 (0) 3 6343 2077

Tarkarri Engineering Pty Ltd
ABN 98 009 561 488
PO Box 506 Kings Meadows
Tasmania 7249 Australia

- Measure ground vibration levels from rail pass-by events at the site of the proposed development and assess against '*NSW Department of Environment and Conservation (2006) Assessing Vibration: a technical guideline*' criteria. Provide recommendations for mitigation if required

  NB: Air pollution impacts are not addressed in this report.

Figure 1 presents an aerial view of 32 Norfolk St, Perth, with the approx. measurement location indicated in yellow. Measurement and assessment is for lots 1 and 2 of the proposed subdivision with lot 3 for non-residential use.

Figure 1 – Aerial view of 32 Norfolk St, Perth (provided by NMC).

2. MEASUREMENT PROCEDURE

A logging sound level meter (SLM) and ground vibration meter (GVM) were located at 32 Norfolk St for a period of approximately 4 days (see figure 1 for approx. location). The meters were positioned at the following approx. distances from the rail corridor track centreline: -

- SLM: 44 m
- GVM: 44 m.

Figure 2 shows the SLM and GVM geophone location. The following instrumentation was utilised: -

- Larson Davis 870B measuring A-weighted Ln and L_{Aeq} statistics at 5-minute intervals.
- Instantel Minimate Plus GVM measuring peak particle velocity in mm/s at 5-minute intervals.

EXHIBITED

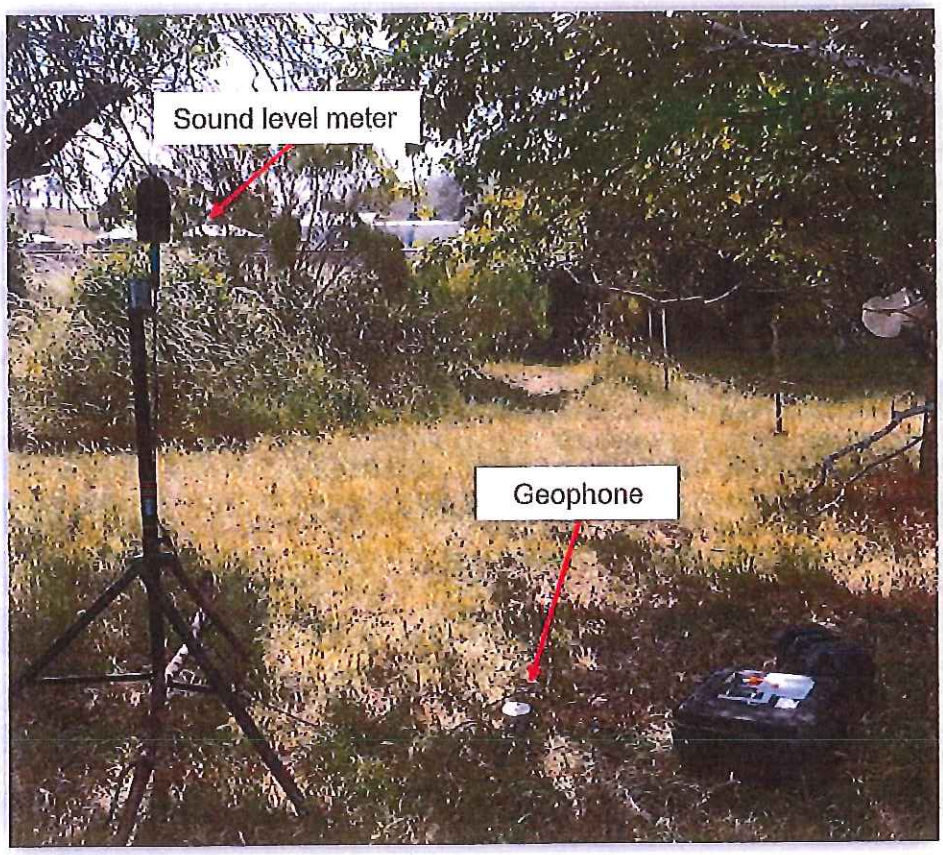


Figure 2 – Photo of SLM and GVM locations.

3. ENVIRONMENTAL NOISE ASSESSMENT

3.1 Assessment criteria

For the assessment of train pass-by noise, guidance is taken from *NSW Environmental Protection Agency (2013) Rail Infrastructure Noise Guideline.*

The following trigger level applies to heavy rail noise generated at a receiver location:-

- 80 dBA L_{Amax} (New rail line development)

NB: L_{Aeq} limits that apply under this guideline are not considered here due to the infrequent nature of train pass-bys on the Western Line.

NB: The above guideline states that L_{Amax} trigger levels exclude safety warning devices such as warning horns and bells at level crossings. L_{Amax} levels were likely to have been controlled by train horn noise, and as such $L_{A1,5min}$ measurements have been used for this assessment to represent maximum noise levels generated by locomotive noise.

The *Rail Infrastructure Noise Guideline* cited above refers to the *NSW Department of Planning (2008) Development near rail corridors and busy roads – Interim guideline* for proposed residential developments adjacent to existing rail corridors (Clause 87). However, this interim guideline was deemed to be not applicable for this assessment for the following reasons:-

- No assessment process exists within the interim guideline for freight only services

- An assessment process accounting for the infrequent train pass-by events was not available under the interim guideline.

3.2 Measured levels

Figure 3 below provides a graph of measured $L_{A1,5min}$ levels with the 80 dBA trigger level marked in red.

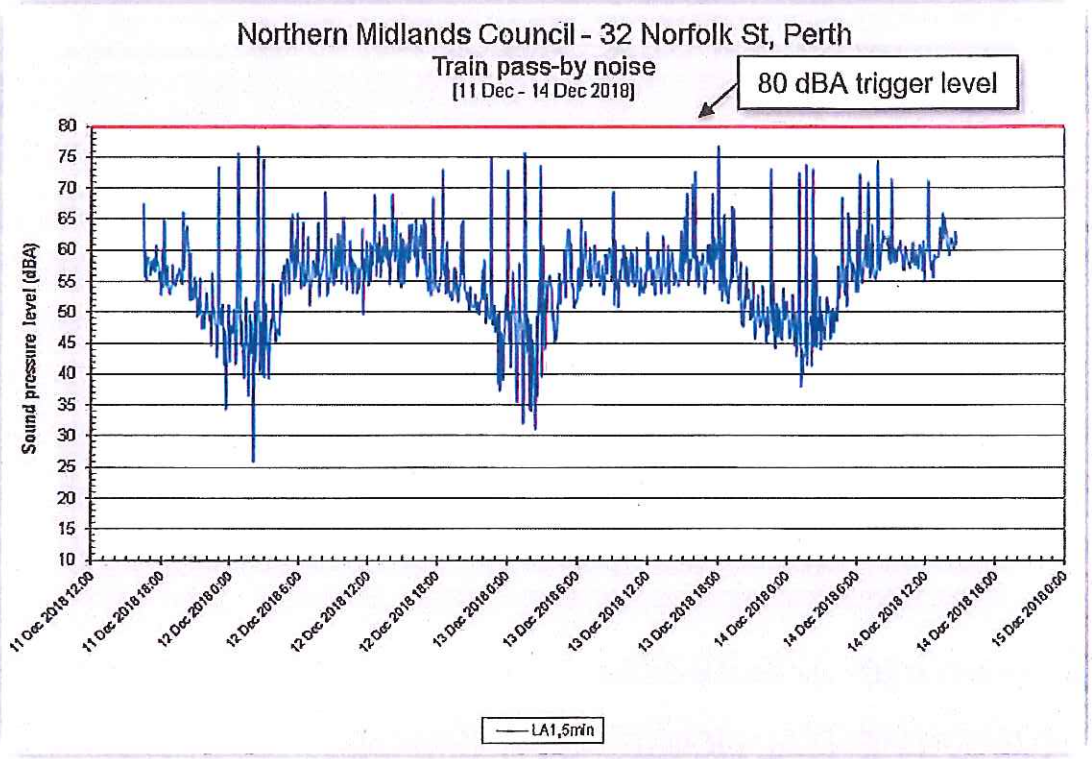


Figure 3 – Measured $L_{A1,5min}$ levels with trigger level indicated.

From the above we note the following:-

- The highest $L_{A1,5min}$ level measured was 76.7 dBA, 3 dBA below the assessment criteria.

NB: Horn blow noise is not assessed here against the trigger level outlined above. However, L_{Amax} levels, likely to be controlled by horn blows during a past-by event, measured during this assessment were as high as 106 dBA.

3.3 Recommendations

The measured $L_{A1,5min}$ levels were below 80 dBA and therefore an increased sound transmission loss beyond that of a standard building envelope is not required under the assessment criteria adopted here. Standard building envelopes typically have a transmission loss of 20 to 25 dBA (lightweight constructions such as fibre cement cladding or fully glazed facades typically have a lower performance than this). Tarkarri Engineering recommends that in the design of facade building elements for living and sleeping areas the following constructions upgrades are considered to further reduce train pass-by noise intrusion:-

Ceiling/roof: Colorbond roof; 13mm plasterboard ceiling (surface mass of 10.4/kg/m^2); R 4.0 fibreglass insulation over plasterboard.

NB: To maintain the performance of the above construction lights should be surface mounted any down lights that penetrate the plasterboard ceiling should be fully sealed units.

Windows: Double glazed with at least one pane of laminated glass.

NB: The glazing must be in frames to suit the glazing weight and thickness with appropriate acoustic seals such that the glazing transmission loss performance is not compromised. The frames must also be well sealed to the brick wall to ensure there is no weak acoustic path between the frames and the wall.

Doors: Solid core doors with appropriate acoustic seals to give the required acoustic performance. Glazed doors and sliding or by-fold patio doors would require specialist acoustic consideration.

4. GROUND VIBRATION ASSESSMENT

4.1 Assessment criteria

Under the *NSW EPA (2013) Rail Infrastructure Noise Guideline* for the assessment of vibration generated by train movements, assessors are redirected to the *NSW Department of Environment and Conservation (2006) Assessing Vibration: a technical guideline* and advised to consider rail generated vibration as intermittent. The frequency of train pass-bys on the Western Line is deemed not suitable for an intermittent assessment and the guideline's impulsive vibration exposure criteria for night are applied here. These are as follows:-

- Preferred: 2.8 mm/s (peak velocity)
- Maximum: 5.6 mm/s (peak velocity)

4.2 Measured levels

Figure 4 below present longitudinal (direction of highest vibration amplitude) peak particle velocity levels measured by the geophone. The preferred and maximum trigger levels are marked in blue and red respectively on the graph.

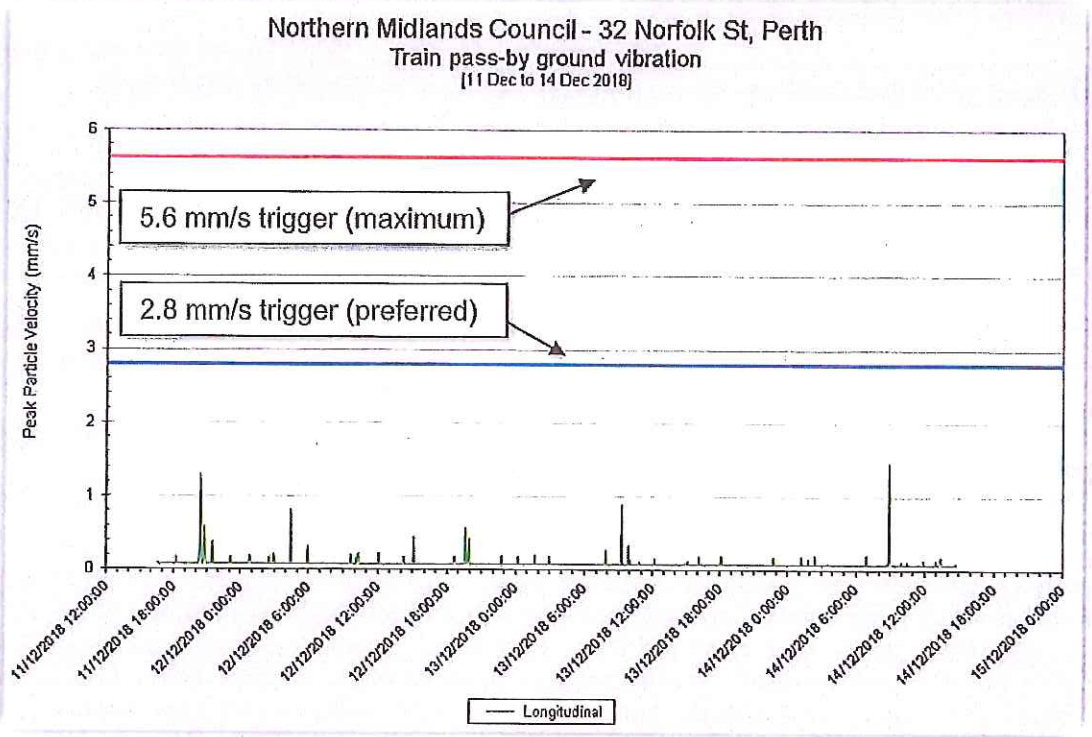


Figure 4 – Measured longitudinal PPV levels with guideline trigger levels.

From the above we note the following:-

- Peak velocity levels were below the preferred trigger level at all times.

4.3 Recommendations

Measured ground vibration levels were well below the criteria outlined above and therefore no recommendations are given here. At the levels measured, vibration may be perceptible but highly unlikely to result in adverse health effects or structural damage to buildings.

I hope this information meets your immediate requirements.

Please contact me directly if you have any questions concerning this work.

Yours faithfully,
Tarkarri Engineering Pty Ltd

Dr. Alex McLeod
Principal Consultant

m. +61(0)439 357 297
email: alex.mcleod@tarkarri.com

Rebecca Green & Associates

Bushfire Hazard Assessment Report &

Bushfire Hazard Management Plan

32 Norfolk Street, Perth

Rebecca Green & Associates

Prepared for (Client)

Northern Midlands Council

PO Box 156

LONGFORD TAS 7301

Assessed & Prepared by

Rebecca Green

Senior Planning Consultant & Accredited Bushfire Hazard Assessor

Rebecca Green & Associates

PO Box 2108 LAUNCESTON TAS 7250

Mobile: 0409 284 422

Version 1

5 February 2019

Job No: RGA-B1039

Rebecca Green & Associates

Executive Summary

The proposed development at 32 Norfolk Street, Perth, is subject to bushfire threat. A bushfire attack under extreme fire weather conditions is likely to subject buildings at this site to considerable radiant heat, ember attack along with wind and smoke.

The site requires bushfire protection measures to protect the buildings and people that may be on site during a bushfire.

These measures include provision of hazard management areas in close proximity to the buildings, implementation of safe egress routes, establishment of a water supply and construction of buildings as described in AS 3959-2009 Construction of Buildings in Bushfire Prone Areas.

Rebecca Green & Associates

Contents

Rebecca Green & Associates

Schedule 1 – Bushfire Report

1.0 Introduction

The Bushfire Attack Level (BAL) Report and Bushfire Hazard Management Plan (BHMP) has been prepared for submission with a Planning Permit Application under the *Land Use Planning and Approvals Act 1993; Bushfire-Prone Areas Code* and/or a Building Permit Application under the *Building Act 2016 & Regulations 2016.*

The Bushfire Attack Level (BAL) is established taking into account the type and density of vegetation within 100 metres of the proposed building site and the slope of the land; using the simplified method in AS 3959-2009 Construction of Buildings in Bushfire Prone Areas; and includes:

- The type and density of vegetation on the site,
- Relationship of that vegetation to the slope and topography of the land,
- Orientation and predominant fire risk,
- Other features attributing to bushfire risk.

On completion of assessment, a Bushfire Attack Level (BAL) is established which has a direct reference to the construction methods and techniques to be undertaken on the buildings and for the preparation of a Bushfire Hazard Management Plan (BHMP).

1.1 Scope

This report was commissioned to identify the Bushfire Attack Level for the existing property. ALL comment, advice and fire suppression measures are in relation to compliance with *Bushfire-Prone Areas Code* of the Northern Midlands Interim Planning Scheme 2013, the Building Code of Australia and Australian Standards, *AS 3959-2009, Construction of buildings in bushfire-prone areas.*

1.2 Limitations

The inspection has been undertaken and report provided on the understanding that:-

1. The report only deals with the potential bushfire risk, all other statutory assessments are outside the scope of this report.
2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.
3. Impacts of future development and vegetation growth have not been considered.

No action or reliance is to be placed on this report; other than for which it was commissioned.

1.3 Proposal

The proposal is for the development of a 3 Lot Subdivision.

Lot 1 will have an area of 450m^2 and will contain an existing cottage. Lot 1 will have frontage to Norfolk Street.

Lot 2 will have an area of 500m^2 and will be vacant. Lot 2 will have frontage to Norfolk Street.

Rebecca Green & Associates

Lot 3 (Balance) will have an area of 3711m^2 and will be vacant Lot 3 will have frontage to Norfolk Street and Western Line/Youl Road.

2.0 Site Description for Proposal (Bushfire Context)

2.1 Locality Plan

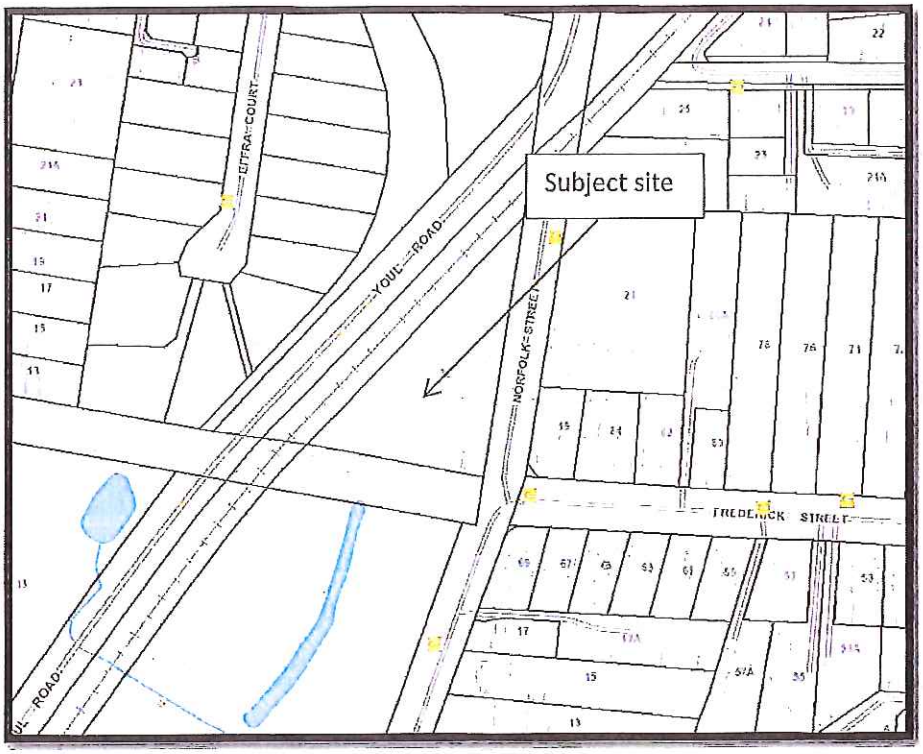


Figure 1: Location Plan of 32 Norfolk Street, Perth

2.2 Site Details

Property Address	'Norfolk Cottage', 32 Norfolk Street, Perth
Certificate of Title	Volume 46063 Folio 1
Owners	Northern Midlands Council
Existing Use	Residential/rural
Type of Proposed Work	3 Lot Subdivision
Water Supply	Reticulated TasWater Supply
Road Access	Norfolk Street and Youl Road/Western Line

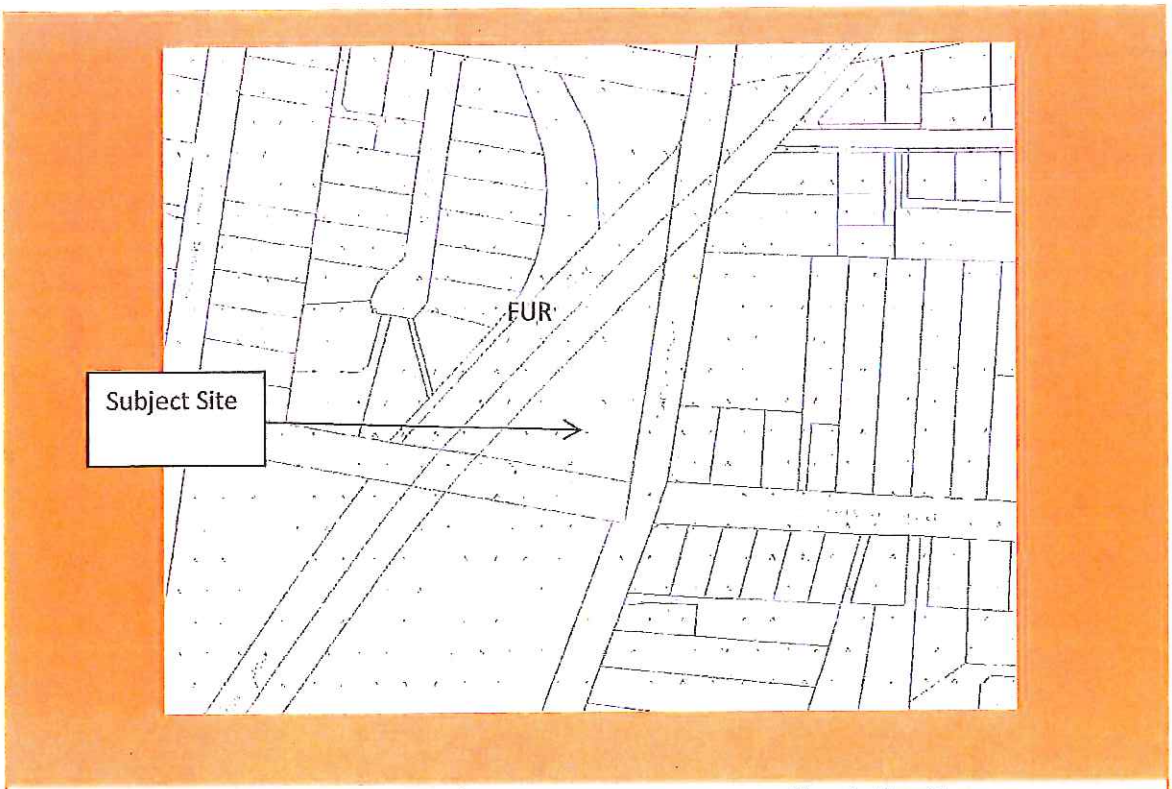
Rebecca Green & Associates

3.0 Bushfire Site Assessment

3.1 Vegetation Analysis

3.1.1 TasVeg Classification

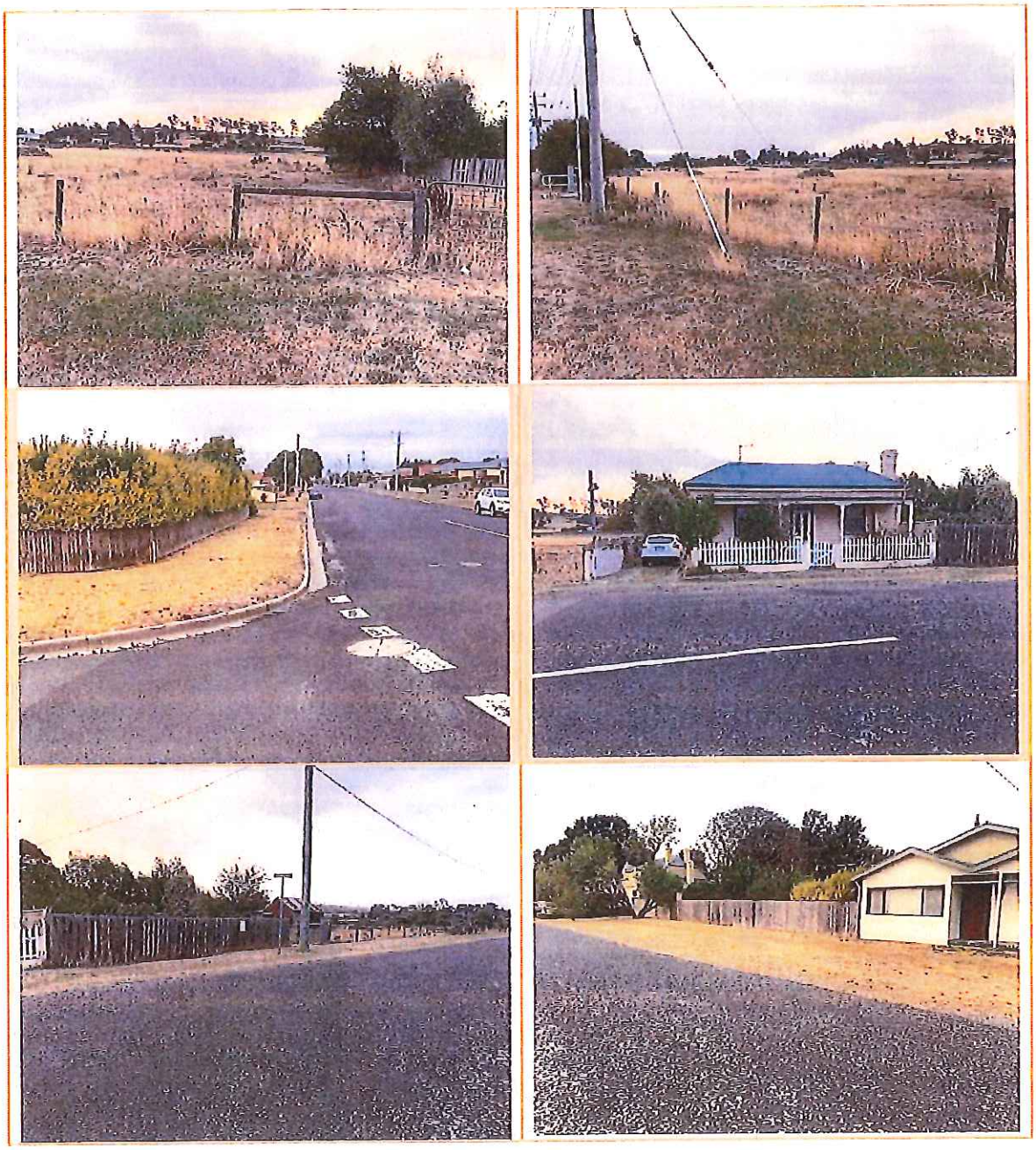
Reference to Tasmanian Vegetation Monitoring & Mapping Program (TASVEG) indicates the land in and around the property is generally comprising of varying vegetation types including:



Code	Species	Vegetation Group
FUR	• Urban areas	Agricultural, urban and exotic vegetation

Rebecca Green & Associates

3.1.2 Site & Vegetation Photos



Rebecca Green & Associates

Rebecca Green & Associates

3.2 BAL Assessment – Subdivision

The Acceptable Solution in Clause 1.6.1 of Planning Directive No. 5.1 Bushfire-Prone Areas Code requires all lots within the proposed subdivision to demonstrate that each lot can achieve a Hazard Management Area between the bushfire vegetation and each building on the lot with distances equal to or greater than those specified in Table 2.4.4 of AS3959-2009 Construction of Buildings in Bushfire Prone Areas for **BAL 19.**

Lot 1

Vegetation classification AS3959	North ☒ North-East ☐	South ☒ South-West ☐	East ☒ South-East ☐	West ☒ North-West ☐
Group A	☐ Forest	☐ Forest	☐ Forest	☐ Forest
Group B	☐ Woodland	☐ Woodland	☐ Woodland	☐ Woodland
Group C	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land
Group D	☐ Scrub	☐ Scrub	☐ Scrub	☐ Scrub
Group E	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga
Group F	☐ Rainforest	☐ Rainforest	☐ Rainforest	☐ Rainforest
Group G	☒ Grassland	☒ Grassland	☐ Grassland	☒ Grassland
	☒ Managed Land	☐ Managed Land	☒ Managed Land	☒ Managed Land
Effective slope (degrees)	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0
	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0
	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0
	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0
	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0
Likely direction of bushfire attack	☐	☒	☐	☒
Prevailing winds	☐	☐	☐	☒
REQUIRED Distance to classified vegetation for BAL 19	N/A (Lot 2)	10-<14m	N/A	10-<14m
REQUIRED Distance to classified vegetation for BAL 12.5	N/A (Lot 2)	14-<50m	N/A	14-<50m

Rebecca Green & Associates

Lot 2

Vegetation classification AS3959	North ☒ North-East ☐	South ☒ South-West ☐	East ☒ South-East ☐	West ☒ North-West ☐
Group A	☐ Forest	☐ Forest	☐ Forest	☐ Forest
Group B	☐ Woodland	☐ Woodland	☐ Woodland	☐ Woodland
Group C	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land
Group D	☐ Scrub	☐ Scrub	☐ Scrub	☐ Scrub
Group E	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga
Group F	☐ Rainforest	☐ Rainforest	☐ Rainforest	☐ Rainforest
Group G	☒ Grassland	☒ Grassland	☐ Grassland	☒ Grassland
	☐ Managed Land	☒ Managed Land	☒ Managed Land	☒ Managed Land
Effective slope (degrees)	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0
	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0
	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0
	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0
	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0
Likely direction of bushfire attack	☒	☐	☐	☒
Prevailing winds	☐	☐	☐	☒
REQUIRED Distance to classified vegetation for BAL 19	10-<14m	N/A (Lot 1)	N/A	10-<14m
REQUIRED Distance to classified vegetation for BAL 12.5	14-<50m	N/A (Lot 1)	N/A	14-<50m

Rebecca Green & Associates

Lot 3 (Balance)

Vegetation classification AS3959	North ☒ North-East ☐	South ☒ South-West ☐	East ☒ South-East ☐	West ☒ North-West ☐
Group A	☐ Forest	☐ Forest	☐ Forest	☐ Forest
Group B	☐ Woodland	☐ Woodland	☐ Woodland	☐ Woodland
Group C	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land	☐ Shrub-land
Group D	☐ Scrub	☐ Scrub	☐ Scrub	☐ Scrub
Group E	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga	☐ Mallee-Mulga
Group F	☐ Rainforest	☐ Rainforest	☐ Rainforest	☐ Rainforest
Group G	☒ Grassland	☒ Grassland	☐ Grassland	☒ Grassland
	☒ Managed Land	☒ Managed Land	☒ Managed Land	☒ Managed Land
Effective slope (degrees)	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0	☒ Up/0^0
	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0	☐ >0-5^0
	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0	☐ >5-10^0
	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0	☐ >10-15^0
	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0	☐ >15-20^0
Likely direction of bushfire attack	☐	☒	☐	☒
Prevailing winds	☐	☐	☐	☒
REQUIRED Distance to classified vegetation for BAL 19	10-<14m	10-<14m	N/A	10-<14m
REQUIRED Distance to classified vegetation for BAL 12.5	14-<50m	14-<50m	N/A	14-<50m

BAL – 12.5	**The risk is considered to be LOW.** There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5 kW/m^2.
BAL – 19	**The risk is considered to be MODERATE.** There is a risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m^2.

EXHIBITED

Rebecca Green & Associates

3.3 Outbuildings

Not applicable.

3.4 Road Access

Roads are to be constructed to provide vehicle access to the site to assist firefighting and emergency personnel to defend the building or evacuate occupants; and provide access at all times to the water supply for firefighting purposes on the building site.

Private access roads are to be maintained from the entrance to the property cross over with the public road through to the buildings on the site.

All Lots	Access is likely to be less than 30m – no specified access requirements.

3.5 Water Supply

A building that is constructed in a designated bushfire prone area must provide access at all times to a sufficient supply of water for firefighting purposes on the building site.

The exterior elements of a Habitable building in a designated Bushfire prone area must be within reach of a 120m long hose (lay) connected to –

(i) A fire hydrant with a minimum flow rate of 600L per minute and pressure of 200kpa; or
(ii) A stored water supply in a water tank, swimming pool, dam or lake available for firefighting at all times which has the capacity of at least 10,000L for each separate building.

All Lots	Lots are all within 120m of existing fire hydrants in Norfolk Street.

It should be recognised that although water supply as specified above may be in compliance with the requirements of the Building Code of Australia, the supply may not be adequate for all firefighting situations.

4.0 Bushfire-Prone Areas Code Assessment Criteria

Assessment has been completed below to demonstrate the BAL and BHMP have been developed in compliance with the Acceptable Solutions and/or the Performance Criteria as specified in the Bushfire-Prone Areas Code.

E1.4 – Exemptions – Not applicable.

E1.6.1 Subdivision

E1.6.1.1 Hazard Management Areas		
		Comments
☒ **A1**	(a) & (b)	Specified distances for Hazard Management Areas for BAL 19 and BAL 12.5 as specified on the plan are in accordance with AS3959. The

EXHIBITED

Rebecca Green & Associates

		proposal complies.
☐ P1		
E1.6.2 Public Access		
		Comments
☒ A1	(a)	Lot 1 contains an existing dwelling. Adequate separation to boundaries is existing. There is insufficient increase in risk to the existing dwelling by the proposed subdivision.
☒ A1	(b)	The private driveway to Lots 2 & 3 will be constructed/maintained in accordance with Table E2A.
☐ P1		
☒ A2		Not applicable.
☐ P2	No PC	
E1.6.3 Water supply for fire fighting purposes		
		Comments
☒ A1	(a)	No increase in risk to existing dwelling on Lot 1.
☐ P1	No PC	
☐ A2	(b)	Not applicable.
☒ A2	(c)	Fire Hydrants are located within Norfolk Street and within 120 metres of the building areas – complies with Table E4.
☐ P2	No PC	

5.0 Layout Options

Not relevant to this proposal.

6.0 Other Planning Provisions

In order to increase the buildable area on Lots 1 and 2 and achieve BAL 12.5, the proponents will need to enter into a formal agreement to satisfy bushfire requirements. A 10m wide hazard management area on the western side of Lots 1 and 2 and northern side of Lot 2 is to be established.

The owner or its successors in Title from time to time of Lot 3 (Balance) is and will be responsible for the maintenance of the hazard management area marked "10.0m Wide Bushfire Hazard Management Area" as demonstrated on the Bushfire Hazard Management Plan.

The total maintained width must be at least 10m wide, this can either be road pavement or grasses that are mown regularly, grass must be kept less than 100mm high and preferable green. If planting other than grasses occurs in the 10.0m Wide Bushfire Hazard Management Area, it should be with low flammability species.

Rebecca Green & Associates

7.0 Conclusions and Recommendations

Mitigation from bushfire is dependent on the careful management of the site by maintaining reduced fuel loads within the hazard management areas and within the site generally and to provide sources of water supply dedicated for firefighting purposes and the construction and maintenance of a safe egress route.

The site has been assessed as demonstrating a building area that have the dimensions equal to or greater than the separation distance required for BAL 19 and BAL 12.5 (with the inclusion of a Part V Agreement to ensure 10m wide hazard management area on Lot 3) in Table 2.4.4 of AS 3959 – 2009 Construction of Buildings in Bushfire Prone Areas.

Access

All Lots – Access is likely to be less than 30m – no access requirements.

Water Supplies

All Lots – Reticulated water supply is provided in Norfolk Street.

Fuel Managed Areas

Hazard Management Areas as detailed within the plan shall be constructed and maintained as detailed in Schedule 2.

EXHIBITED

Rebecca Green & Associates

Schedule 2 – Bushfire Hazard Management Plan

NOTES

* PROPERTY ACCESS & ROAD REQUIREMENTS - REFER TO SECTION 3.4 OF BUSHFIRE HAZARD ASSESSMENT REPORT

* FIREFIGHTING WATER SUPPLY - REFER TO SECTION 3.5 OF BUSHFIRE HAZARD ASSESSMENT REPORT

* HAZARD MANAGEMENT AREA TO BE MAINTAINED IN A MINIMUM FUEL CONDITION - REFER TO SECTION 3.2 OF BUSHFIRE HAZARD ASSESSMENT REPORT

* THIS BHMP MUST BE READ IN CONJUNCTION WITH BUSHFIRE HAZARD ASSESSMENT REPORT REF: RGA-B1039, R. GREEN, 5 FEBRUARY 2019

* THIS BHMP HAS BEEN PREPARED TO SATISFY THE REQUIREMENTS OF THE *DIRECTORS DETERMINATION - REQUIREMENTS FOR BUILDING IN BUSHFIRE PRONE AREAS (V2.1)*

N

BUSHFIRE HAZARD MANAGEMENT PLAN
BUSHFIRE ATTACK LEVEL (BAL) - 19 & 12.5
3 LOT SUBDIVISION

32 NORFOLK STREET, PERTH
VOLUME 46063 FOLIO 1
PROPERTY ID 6745695

DATE: 5 FEBRUARY 2019
VERSION: 1
DRAWN: REBECCA GREEN
PHONE: 0409 284 422
EMAIL: ADMIN@RGASSOCIATES.COM.AU

Rebecca Green & Associates

Rebecca Green & Associates

Form 55

EXHIBITED

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form 55

To: Northern Midlands Council *Owner /Agent*
PO Box 156 *Address*
LONGFORD TAS 7301 *Suburb/postcode*

Qualified person details:

Qualified person: Rebecca Green
Address: PO Box 2108
Launceston 7250
Phone No: 0409 284 422
Fax No:
Licence No: BFP-116
Email address: admin@rgassociates.com.au

Qualifications and Insurance details: Accredited to report on bushfire hazards under Part IVA of the *Fire Services Act 1979*
(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: Analysis of hazards in bushfire prone areas
(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

Address: 32 Norfolk Street
PERTH 7300
Lot No: 1
Certificate of title No: 46063

The assessable item related to this certificate: 3 Lot Subdivision
(description of the assessable item being certified)
Assessable item includes –
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Bushfire Hazard
(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work: ☑

or

a building, temporary structure or plumbing installation: ☐

EXHIBITED

In issuing this certificate the following matters are relevant –

Documents:	Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan (Rebecca Green & Associates, 5 February 2019, Job No. RGA-B1039)
Relevant	N/A
References:	*Planning Directive No 5.1, Bushfire-Prone Areas Code* *Australian Standard 3959-2009*

Substance of Certificate: (what it is that is being certified)

1. Assessment of the site Bushfire Attack Level (to Australian Standard 3959)
2. Bushfire Hazard Management Plan showing BAL-19 and BAL-12.5 solutions.

Scope and/or Limitations

Scope

This report and certification was commissioned to identify the Bushfire Attack Level for the existing property. All comment, advice and fire suppression measures are in relation to compliance with *Planning Directive No 5.1, Bushfire-Prone Areas Code* issued by the Tasmanian Planning Commission, the *Building Act 2016* & *Regulations 2016*, *Building Code of Australia* and *Australian Standard 3959-2009, Construction of buildings in bushfire-prone areas*.

Limitations

The assessment has been undertaken and report provided on the understanding that:-

1. The report only deals with the potential bushfire risk all other statutory assessments are outside the scope of this certificate.
2. The report only identifies the size, volume and status of vegetation at the time the inspection was undertaken and cannot be relied upon for any future development.
3. Impacts of future development and vegetation growth have not been considered.
4. No assurance is given or inferred for the health, safety or amenity of the general public, individuals or occupants in the event of a Bushfire.
5. No warranty is offered or inferred for any buildings constructed on the property in the event of a Bushfire.

No action or reliance is to be placed on this certificate or report; other than for which it was commissioned.

I certify the matters described in this certificate.

	Signed:	*Certificate No:*	*Date:*
Qualified person:	R Green	RG-021/2019	5 February 2019

EXPIRED

Rebecca Green & Associates

Attachment 1 – Certificate of Compliance to the Bushfire-prone Area Code

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE[1] UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

1. Land to which certificate applies[2]

Land that is the Use or Development Site that is relied upon for bushfire hazard management or protection.

Name of planning scheme or instrument:	Northern Midlands Interim Planning Scheme 2013
Street address:	32 Norfolk Street, Perth
/Certificate of Title / PID:	CT46063/1

Land that is not the Use or Development Site that is relied upon for bushfire hazard management or protection.

Street address:	
Certificate of Title / PID:	

2. Proposed Use or Development

Description of Use or Development:

3 Lot Subdivision

Code Clauses:

- ☐ **E1.4 Exempt Development**
- ☐ **E1.5.1 Vulnerable Use**
- ☐ **E1.5.2 Hazardous Use**
- ☒ **E1.6.1 Subdivision**

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

[2] If the certificate relates to bushfire management or protection measures that rely on land that is not in the same lot as the site for the use or development described, the details of all of the applicable land must be provided.

3. Documents relied upon

Documents, Plans and/or Specifications

Title:	Plan of Subdivision		
Author:	Northern Midlands Council		
Date:	21st November 2018	**Version:**	

Bushfire Hazard Report

Title:	Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan		
Author:	Rebecca Green		
Date:	5 February 2019	**Version:**	1

Bushfire Hazard Management Plan

Title:	Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan		
Author:	Rebecca Green		
Date:	5 February 2019	**Version:**	1

Other Documents

Title:			
Author:			
Date:		**Version:**	

4. Nature of Certificate

☐	E1.4 – Use or development exempt from this code		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☐	E1.4 (a)	Insufficient increase in risk	

☐	E1.5.1 – Vulnerable Uses		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☐	E1.5.1 P1	Residual risk is tolerable	
☐	E1.5.1 A2	Emergency management strategy	
☐	E1.5.1 A3	Bushfire hazard management plan	

☐	E1.5.2 – Hazardous Uses		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☐	E1.5.2 P1	Residual risk is tolerable	
☐	E1.5.2 A2	Emergency management strategy	
☐	E1.5.2 A3	Bushfire hazard management plan	

☒	E1.6 – Development standards for subdivision		
	E1.6.1 Subdivision: Provision of hazard management areas		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☐	E1.6.1 P1	Hazard Management Areas are sufficient to achieve tolerable risk	
☒	E1.6.1 A1 (a)	Insufficient increase in risk	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 1.
☒	E1.6.1 A1 (b)	Provides BAL 19 for all lots	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 2 and 3.

☐	E1.6.1 A1 (c)	Consent for Part 5 Agreement	

	E1.6.2 Subdivision: Public and fire fighting access		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☐	E1.6.2 P1	Access is sufficient to mitigate risk	
☒	E1.6.2 A1 (a)	Insufficient increase in risk	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 1.
☒	E1.6.2 A1 (b)	Access complies with Tables E1, E2 & E3	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 2 and 3.

	E1.6.3 Subdivision: Provision of water supply for fire fighting purposes		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
☒	E1.6.3 A1 (a)	Insufficient increase in risk	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 1.
☒	E1.6.3 A1 (b)	Reticulated water supply complies with Table E4	Refer to Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan, prepared by Rebecca Green, 5 February 2019 – Lot 2 and 3.
☐	E1.6.3 A1 (c)	Water supply consistent with the objective	
☐	E1.6.3 A2 (a)	Insufficient increase in risk	
☐	E1.6.3 A2 (b)	Static water supply complies with Table E5	
☐	E1.6.3 A2 (c)	Static water supply is consistent with the objective	

5. Bushfire Hazard Practitioner[3]

Name:	Rebecca Green	**Phone No:**	0409 284 422
Address:	PO Box 2108	**Fax No:**	
		Email Address:	admin@rgassociates.com.au
	Launceston, Tas 7250		
Accreditation No:	BFP – 116	**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 –

The use or development described in this certificate is exempt from application of Code E1 – Bushfire-Prone Areas in accordance with Clause E1.4 (a) because there is an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measure in order to be consistent with the objectives for all the applicable standards identified in Section 4 of this Certificate.	☐

or

There is an insufficient increase in risk from bushfire to warrant the provision of specific measures for bushfire hazard management and/or bushfire protection in order for the use or development described to be consistent with the objective for each of the applicable standards identified in Section 4 of this Certificate.	☐

and/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 can deliver an outcome for the use or development described that is consistent with the objective and the relevant compliance test for each of the applicable standards identified in Section 4 of this Certificate.	☒

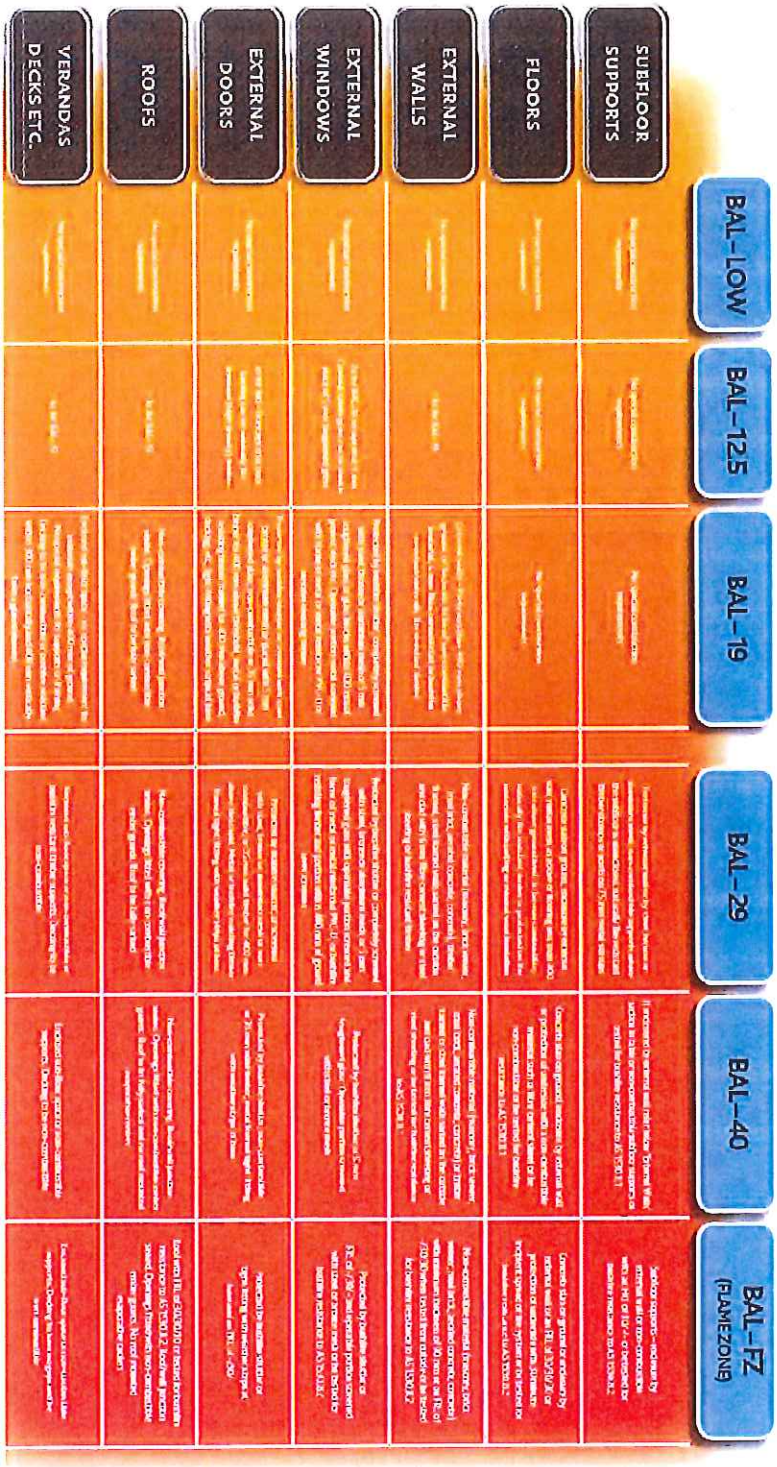
Signed: *certifier* R Green

Date: 5 February 2019 **Certificate No:** RGA-103/2019

[3] A Bushfire Hazard Practitioner is a person accredited by the Chief Officer of the Tasmania Fire Service under Part IVA of *Fire Service Act 1979*. The list of practitioners and scope of work is found at www.fire.tas.gov.au.

Rebecca Green & Associates

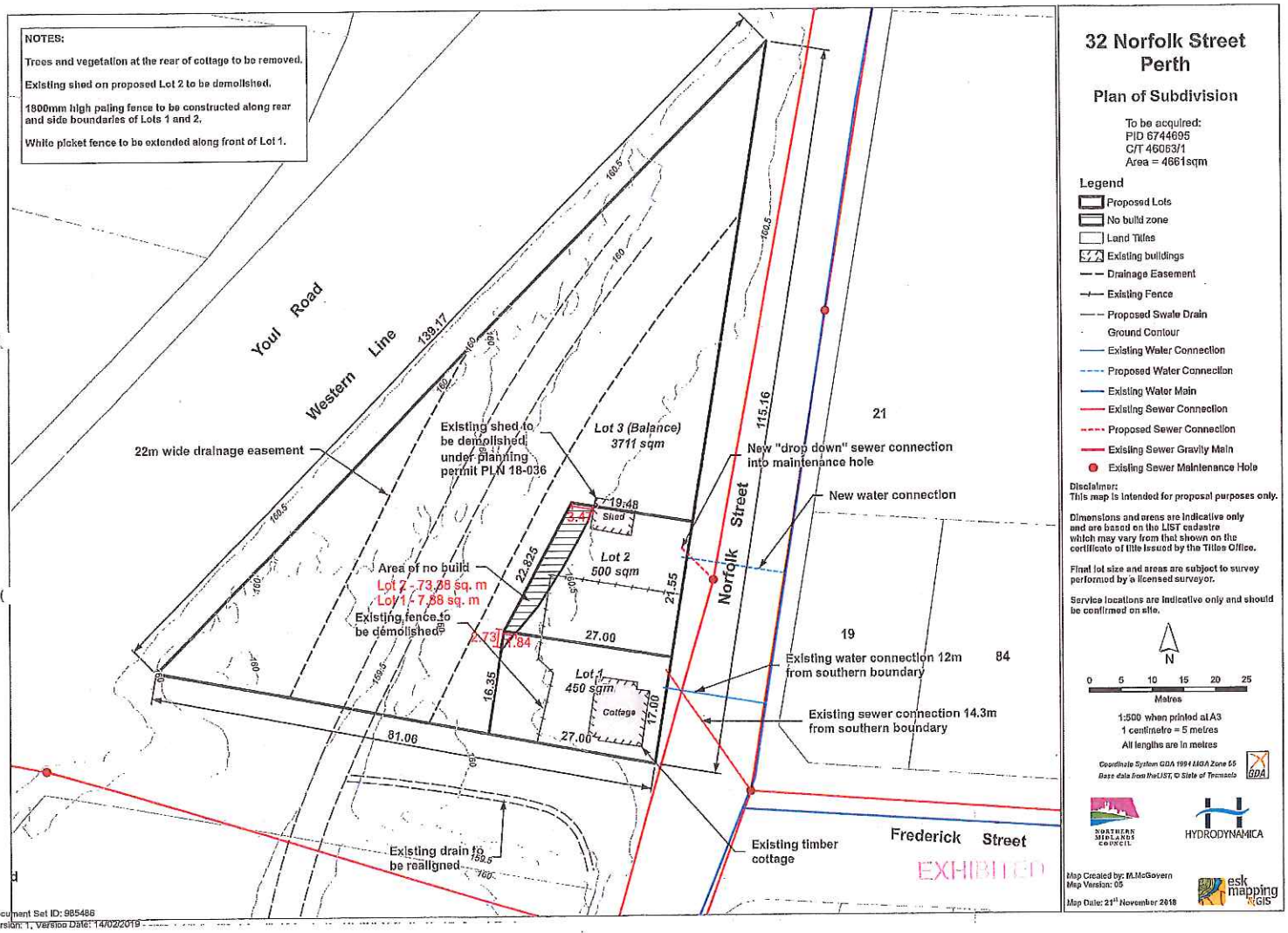
Attachment 2 – AS3959-2009 Construction Requirements



Rebecca Green & Associates

Attachment 3 – Proposed Subdivision

Northern Midlands Council



Rebecca Green & Associates

References

(a) Tasmanian Planning Commission 2017, *Tasmanian Planning Directive No. 5.1, Bushfire-Prone Areas Code*, Tasmania.

(b) Australian Standards, AS 3959-2009, *Construction of buildings in bushfire-prone areas*, Standards Australia, Sydney NSW.

(c) Resource Management & Conservation Division of the Department Primary Industry & Water September 2006, TASVEG, *Tasmanian Vegetation Map*, Tasmania.

(d) Tasmanian Government, Land Information System Tasmania, www.thelist.tas.gov.au

HYDRODYNAMICA

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

MEMO **18 March 2019**

Re: 32 Norfolk Street Subdivision: Risk Assessment for Flood Prone area

Northern Midlands Council (NMC) is proposing to subdivide 32 Norfolk Street, Perth - refer to 32 Norfolk Street Perth Land Acquisition Proposal Plan (Hydrodynamica, 30/10/2018). The existing property contains a dwelling in close proximity to the intersection Norfolk and Frederick Streets. A creek-line runs between the dwelling and the western railway line. The property is zoned 'General Residential' within NMC's Interim Planning Scheme 2013 and it is proposed to be subdivided into 3 lots. Lot 1 (450 m^2) will contain the existing dwelling, lot 2 (500 m^2) will be an additional residential lot, and lot 3 (3711 m^2) will contain the balance. It is proposed that the balance lot will be retained by NMC in the long term to enable flood mitigation works including creek widening.

Hydrodynamica has undertaken extensive modelling work for NMC to give an understanding of flood risks in the catchment. From this work a flood plan has been created for the 100 year (1% AEP) storm event which has since been adopted by NMC as the defined flood level (DFL) (refer to Sheepwash Creek Flood Map, 17/10/2018). This flood map was used to inform the dimensions of the proposed subdivision of 32 Norfolk Street.

NMC require a flood prone area risk assessment to be undertaken as per Section E5.7 in the Interim Planning Scheme for lots 1 and 2. The risk assessment is to be undertaken in the context of the 100 year event which registers as a 'rare' likelihood in E5.7(c). The consequences of such flooding are covered in the consequence criteria listed in E5.7(b), the definitions of which range from 'insignificant' to 'catastrophic' depending on the level of property damage and the effects on human life.

The minority of lots 1 and 2 are excluded by the hatched 'no build' zone (refer to the Acquisition Proposal Plan), these areas are below the DFL. The areas within the lots on which building will be permitted therefore have no risk rating as defined in Table E5.1. It should also be noted that access from Norfolk Street to lots 1 and 2 is not affected or compromised by flooding.

HYDRODYNAMICA

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

There remains some overlap between the DFL and lots 1 and 2, although this can be seen as only as very small area in the northwest corner of lot 1. The area in lot 2 runs along the extent of its western boundary. The depth of this flooding at the boundary will be approximately 100-300mm deep. Being designated a 'no build' zone there is no possibility of dwellings being located within DFL, however it is extremely likely there will be boundary fences and potentially small sheds (which do not require Council approval).

In order to determine the correct consequence criteria the flood hazard needs to be determined in accordance with section 5 of Australian Disaster Resilience Handbook Collection Handbook 7 (*Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia*, Handbook 7, 3rd ed., 2017). These requirements also align with recommendations in *Australian Rainfall and Runoff* (2016) Book 6 Chapter 7. The peak flood hazard occurs at the time of the peak depth-velocity product.

The Sheepwash Creek modelling was undertaken using the ISIS 2D flood modelling software which generates a slightly different formula to determine flood hazard (based on UK guidelines):

D(V+0.5)+DF, where DF is a debris factor (default of 1). See Figure 1 for hazard values:

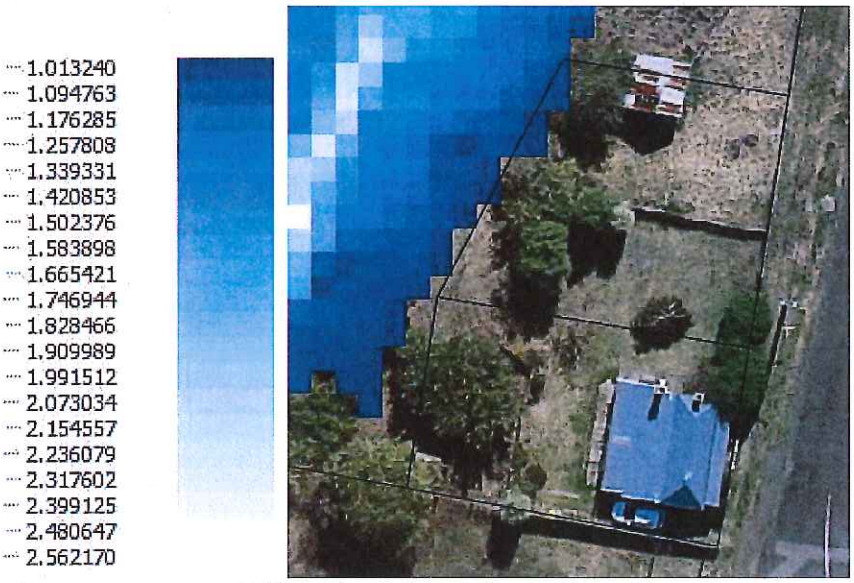


Figure 1. 32 Norfolk Street flood hazard and key

HYDRODYNAMICA

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

Flood hazard values of less than 1 indicate either velocity = 0, or depth = 0 in which case they are absent from Figure 1. It can be seen that no flood hazard is identified within lot 1. The peak hazard value within lot 2 is 1.085. Removing the debris factor of 1 from this value gives a product:

D(V+0.5)=0.085, which gives DV +0.5D = 0.085

The hazard vulnerability classifications in ARR2016 are as follows:

Hazard Vulnerability Classification	Description
H1	Generally safe for vehicles, people and buildings.
H2	Unsafe for small vehicles.
H3	Unsafe for vehicles, children and the elderly.
H4	Unsafe for vehicles and people.
H5	Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust buildings subject to failure.
H6	Unsafe for vehicles and people. All building types considered vulnerable to failure.

Table 6.7.4. Combined Hazard Curves - Vulnerability Thresholds Classification Limits (Smith et al., 2014)

Hazard Vulnerability Classification	Classification Limit (D and V in combination)	Limiting Still Water Depth (D)	Limiting Velocity (V)
H1	D*V ≤ 0.3	0.3	2.0
H2	D*V ≤ 0.6	0.5	2.0
H3	D*V ≤ 0.6	1.2	2.0
H4	D*V ≤ 1.0	2.0	2.0
H5	D*V ≤ 4.0	4.0	4.0
H6	D*V > 4.0	-	-

The lowest classification H1 requires a D*V product less than or equal to 0.3 with a limiting still water depth of 0.3 m and limiting velocity of 2 m/s.

Assuming a worst case depth of 0.3m gives:

0.3*V +0.5*0.3 = 0.085, or

0.3V = -0.065

HYDRODYNAMICA

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

Which gives a negative velocity which not possible, so the depth must be less than 0.3m, and H1 is applicable.

Assuming a worst case velocity of 2 m/s gives:

D(2.5)=0.085 or

D = 0.034m = 34mm

Flood depth is great that 34mm so velocity must be less than 2 m/s, and H1 is applicable.

Finally, a check of the DV product. If we assume DV =0.3 as per the classification limit for H1, then:

0.3 +0.5D = 0.085
D = -0.215m

Which gives a negative depth, which is also not possible, so DV is less than 0.3.

These results indicate that both velocity and depth and the DV product are within the H1 classification within the flood footprint on lot 2 of H1 which is 'generally safe for vehicles, people and buildings'. Therefore, with a likelihood of 'rare' and a consequence of 'insignificant' the risk assessment results in a 'low' classification.

Despite these results and given the uncalibrated nature of the model it is not recommended that the 'no build' zone be altered to allow building within the DFL. It is also recommended that nominal floor height above the natural surface level be specified by Council to allow for an additional margin of safety from future flooding.

HYDRODYNAMICA

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

Cameron Oakley

B.TECH, B.ENG (Hons), MBA

HYDRODYNAMICA

Our ref: 110500.13; PLN-18-0296
Enquiries: Erin Boer

NORTHERN MIDLANDS COUNCIL

6/02/2020

Jonathan Galbraith
P.O. Box 156
LONGFORD 7301
via email: jonathan.galbraith@nmc.tas.gov.au

Dear Mr Galbraith

Additional Information Required for Planning Application PLN-18-0296- 3-lot subdivision (vary solar orientation, Bushfire-prone area, Road & Railway Assets Code) at 32 Norfolk Street, Perth

I refer to the abovementioned application, which has been further reviewed by Council's Planners. The following information is required to allow consideration of your application under the *Northern Midlands Interim Planning Scheme 2013*:

- Provided details of stormwater connections for each lot.
- Bushfire report/exemption (note: Despite the the area being mapped by the TFS as being not within a Bushfire Prone Area, the amendment to implement these maps into the planning scheme is still in progress. Therefore, the definition of planning scheme applies, which results in the area being considered as Bushfire-Prone. A report or exemption from an accredited bushfire practioner is therefore required.)
- Journal Fees (please provide Council's Corporate Services Department approval to endorse planning application fees of $1282 for this application).

Therefore, in accordance with Section 54 of the *Land Use Planning and Approvals Act* 1993, the statutory period for processing the application will not recommence until the requested information has been supplied to the satisfaction of the Planning Authority. It is a requirement of the Planning Authority that all correspondence, if emailed, is sent to planning@nmc.tas.gov.au and referenced with the planning application number PLN-18-0296. If you have any queries, please contact Council's Planning Section on 6397 7301, or e-mail planning@nmc.tas.gov.au

Yours sincerely

Erin Boer
URBAN & REGIONAL PLANNER

Our ref: 110500.13;PLN-18-0296
Enquiries: Erin Boer

NORTHERN MIDLANDS COUNCIL

18/02/2019

Jonathan Galbraith
P.O. Box 156
LONGFORD 7301
via email: jonathan.galbraith@nmc.tas.gov.au

Dear Mr Galbraith

Additional Information Required for Planning Application PLN-18-0296- 3-lot subdivision (vary solar orientation, Bushfire-prone area, Road & Railway Assets Code) at 32 Norfolk Street, Perth

I refer to the abovementioned application, which is currently on public exhibition and was referred to TasWater (the water and sewer authority). They have requested additional information (see attached RAI). If you have any queries, please contact TasWater's Development Co-ordinator directly:

☎ 13 6992
✉ development@taswater.com.au

The information requested must be provided to Council for forwarding to TasWater (preferably by email to Planning@nmc.tas.gov.au).

Therefore, in accordance with Section 54 of the *Land Use Planning and Approvals Act* 1993, the statutory period for processing the application will not recommence until the requested information has been supplied to the satisfaction of the Planning Authority. It is a requirement of the Planning Authority that all correspondence, if emailed, is sent to Planning@nmc.tas.gov.au and referenced with the planning application number **PLN-18-0296-**. If you have any queries, please contact Council's Planning Section on 6397 7301, or e-mail planning@nmc.tas.gov.au

Yours sincerely

Rosemary Jones
Administration Officer

Copy: leigh.mccullagh@nmc.tas.gov.au

Submission to Planning Authority Notice

Council Planning Permit No.	PLN-18-0296		Council notice date	14/02/2019
TasWater details				
TasWater Reference No.	TWDA 2019/00178-NMC		Date of response	04/03/2019
TasWater Contact	Anthony Cengia	Phone No.	(03) 6237 8243	
Response issued to				
Council name	NORTHERN MIDLANDS COUNCIL			
Contact details	Planning@nmc.tas.gov.au			
Development details				
Address	32 NORFOLK STREET, PERTH		Property ID (PID)	6745695
Description of development	Subdivision 2 lots + Balance			

Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Date of Issue
Hydrodynamica	Plan of Subdivision	5	21/11/2018

Conditions

SUBMISSION TO PLANNING AUTHORITY NOTICE OF PLANNING APPLICATION REFERRAL

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater imposes the following conditions on the permit for this application:

CONNECTIONS, METERING & BACKFLOW

1. A suitably sized water supply with metered connection / sewerage system and connection to lots 1 & 2 of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

FINAL PLANS, EASEMENTS & ENDORSEMENTS

4. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for sealing is made.
   Advice: Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

DEVELOPMENT ASSESSMENT FEES

5. The applicant or landowner as the case may be, must pay a development assessment and Consent to Register a Legal Document fee to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date they are paid to TasWater, as follows:
   a. $211.63 for development assessment; and

b. $149.20 for Consent to Register a Legal Document

The payment is required within 30 days of the issue of an invoice by TasWater.

Advice

General

For information on TasWater development standards, please visit http://www.taswater.com.au/Development/Development-Standards

For application forms please visit http://www.taswater.com.au/Development/Forms

Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

Authorised by

Jason Taylor
Development Assessment Manager

TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

REFERRAL OF DEVELOPMENT APPLICATION PLN-18-0296 TO WORKS & INFRASTRUCTURE DEPARTMENT

Property/Subdivision No: 110500.13
Date: 14.02.19
Applicant: NMC
Proposal: 46063/1
Location: 32 Norfolk Street, Perth

W.1 Stormwater

Each lot must be provided with a connection to the Council's stormwater system, constructed in accordance with Council standards and to the satisfaction of Council's Works & Infrastructure Department.

W.2 Access (Rural)

a) A hotmix sealed driveway crossover must be constructed from the edge of Norfolk St to the property boundary of lots 1 and 2 in accordance with Council standards.

W.3 As constructed information

As Constructed Plans and Asset Management Information must be provided in accordance with Council's standard requirements.

W.4 Municipal standards & certification of works

Unless otherwise specified within a condition, all works must comply with the Municipal Standards including specifications and standard drawings. Any design must be completed in accordance with Council's subdivision design guidelines to the satisfaction of the Works & Infrastructure Department. Any construction, including maintenance periods, must also be completed to the approval of the Works & Infrastructure Department.

W.6 Separation of stormwater services

a) All existing hydraulic services and connections must be located.
b) Where required, pipes are to be rerouted to provide an independent system for each lot.
c) Certification must be provided that stormwater services have been separated between the lots.

W.7 Easements to be created

Easements must be created over all Council owned services in favour of the Northern Midlands Council. Such easements must be created on the final plan to the satisfaction of the General Manager.

W.8 Pollutants

a) The developer/property owner must ensure that pollutants such as mud, silt or chemicals are not released from the site.
b) Prior to the commencement of the development authorised by this permit the developer/property owner must install all necessary silt fences and cut-off drains to prevent soil, gravel and other debris from escaping the site. Material or debris must not be transported onto the road reserve (including the nature strip, footpath and road pavement). Any material that is deposited on the road reserve must be removed by the developer/property owner. Should Council be required to clean or carry out works on any of their infrastructure as a result of pollutants being released from the site the cost of these works may be charged to the developer/property owner.

W.9 Nature strips

Any new nature strips, or areas of nature strip that are disturbed during construction, must be topped with 100mm of good quality topsoil and sown with grass. Grass must be established and free of weeds prior to Council accepting the development.

Jonathan Galbraith (Engineering Officer)
Date: 1/3/18

Paul Godier

From: Jennifer Jarvis <Jennifer.Jarvis@tasrail.com.au>
Sent: Thursday, 7 March 2019 7:35 PM
To: Rosemary Jones
Subject: PLN-18-0296 32 Norfolk Street Perth

Categories: Sent to ECM

Hello Rosemary, thank you for your patience on this one.

As with other subdivisions, TasRail's main concerns will arise following sale of the proposed lots when the new owners of the lots submit planning applications to build inside the 50 metre attenuation zone.

TasRail notes and endorses the recommendations by Tarkarri Engineering. However, TasRail's main concern will be that the occupants of dwellings on the proposed lots are likely to object/complain to the use of the train horn, particularly given that freight rail services operate 24/7 with a majority of trains passing through Perth late at night/very early hours of the morning.

For the above reasons, TasRail requests that the planning permit require the seller of the lots to formally advise prospective purchasers of the following:

- train operating times and the use of the train horn, which is required to be sounded twice per level crossing and at any time a train driver perceives a risk.
- The discharge of stormwater or any other run-off onto rail land or the rail drainage system is strictly prohibited.

TasRail also asks the below information be included in the planning permit under the heading 'TasRail Notes':

- Unauthorised access to railway land is strictly prohibited for any purpose including for structures, vehicles, drainage, water pipes, stormwater discharge, electrical or service infrastructure.
- Should a service or asset require installation on rail land, a separate permit application to TasRail applies with approval subject to terms and conditions.
- Under Section 24 of the *Rail Infrastructure Act 2007*, the Rail Infrastructure Manager (TasRail) may give an adjoining landholder a notice to clear an obstruction as circumstances require. In the event that the adjoining landholder fails to comply with the clearance notice, then the Rail Infrastructure Manager may apply to a justice for a warrant to access the land to clear the obstruction and recover the costs as a debt due to the railway entity from the landholder.
- Parking of vehicles within rail land is not permitted.
- Dumping of rubbish or green waste into the rail corridor is not permitted.
- As railway land is Crown Land, the Rail Infrastructure Manager is not required to contribute to the cost of boundary fencing.

Please don't hesitate to contact me if you have any questions or need additional information.

Kind regards

21 Norfolk St
Perth 7300
Tasmania

The General Manager
Northern Midlands Council
PO BOX 156
Longford 7301
Tasmania

2/3/19

Dear Mr Jennings,

I am writing to oppose the development application for a three-lot subdivision at 32 Norfolk St. Perth, PLN-18-0296.

The site has already been the subject of a previous development application that was approved at the February meeting of the Council with the condition that trees must be replanted within 12 months. This condition is not mentioned in the new application and I would like to know if the previous condition still applies if this current DA is approved?

I am concerned that the application is a deviation from the Council approved and published Sheepwash Creek plan. The published and agreed plan clearly shows that the block is to be subdivided into two blocks, one with the cottage and one for the Sheepwash creek flood mitigation program. I have made personal enquiries with some Councillors who have stated that the Council approved the purchase of the block and that the intention was as published for the Sheepwash creek development. I now find that those Councillors and the public have been deceived and lied to as the plan by the Council is for a 3-block subdivision. This type of deceptive behaviour is intolerable, and is highly irregular for an organisation such as a Council to be involved in.

The application also seeks a variation to solar orientation. This variation, or reason for it, is not included in the application, which make it extremely difficult for me to assess. It seems highly irregular that Council seek approval but give no background, no evidence or reason why it seeks a variation. I also note that there is no proposed solution if the variation is to be granted.

The proposed subdivision is in a flood prone area, often in heavy rain the block is underwater, and at times the water has been observed reaching the front fence and nature strip. It seems very strange that Council would approve a building

block subdivision in a flood area when the whole idea of purchasing the land was for flood mitigation!

The prosed subdivision is extremely close to the railway line. I note with some bemusement that the application has been assessed by a local engineering company using guidelines from NSW. It seems most inappropriate that you would consider a NSW situation as being similar to a Tasmanian situation, especially considering that we have different types of trains, different gauge tracks, we only have freight trains and no passenger services, and that our locomotives are all engines rather than some electric as in NSW.

I believe it is also ridiculous to discount engine whistle noise in this application as the proposed subdivision is located almost half way between two level crossings, where trains blow their whistles at least two times as they approach both crossings. This is a significant noise and should form part of the assessment criteria. I believe that the noise assessment should also look beyond the current situation and be projected into the future when there are likely to be more trains rather than fewer trains.

I believe that his is one of the most inappropriate development applications in which the Council have been involved, it reeks of deception and deceitful behaviour, and can only be considered a blatant attempt to recoup money spent on purchasing the land for flood mitigation.

Yours sincerely

Michael Mcwilliams

From: Geoff Clark <geoff@denman.studio>
Sent: Wednesday, 17 April 2019 3:15 PM
To: Trent Atkinson <trent.atkinson@nmc.tas.gov.au>
Subject: Extant Record - "Well" - 32 Norfolk Street, Perth

Good afternoon Trent,

Please find below a DROPBOX link to the Extant Record to the above.

https://www.dropbox.com/sh/fl9bshjq7t127v9/AABwYtjBlcN-cbr7fZsX5mipa?dl=0

You will note of course that this is significantly slimmer than the previous ER for 40 Burghley Street, but of course the scope is dramatically less.

The well is a very interesting structure I have to confess and to obliterate it would be a shame. I have included a separate drawing indicating where the well is located relative to the proposed cottage and note that it would be quite feasible to cast a slab over the top of the well, or place a pre-cast slab over, and retain it intact. Such a slab would be a 'porch' adjacent to the deck on the northern side, which would seem a good fit.

This decision may be left to a 'new owner', but the well, as well as individuals accessing the site should be protected in the meantime by some sort of cover.

Please consider the attachments and let me know if there is anything to add, or subtract.

Regards,

Geoff Clark
Architect
David Denman and Associates

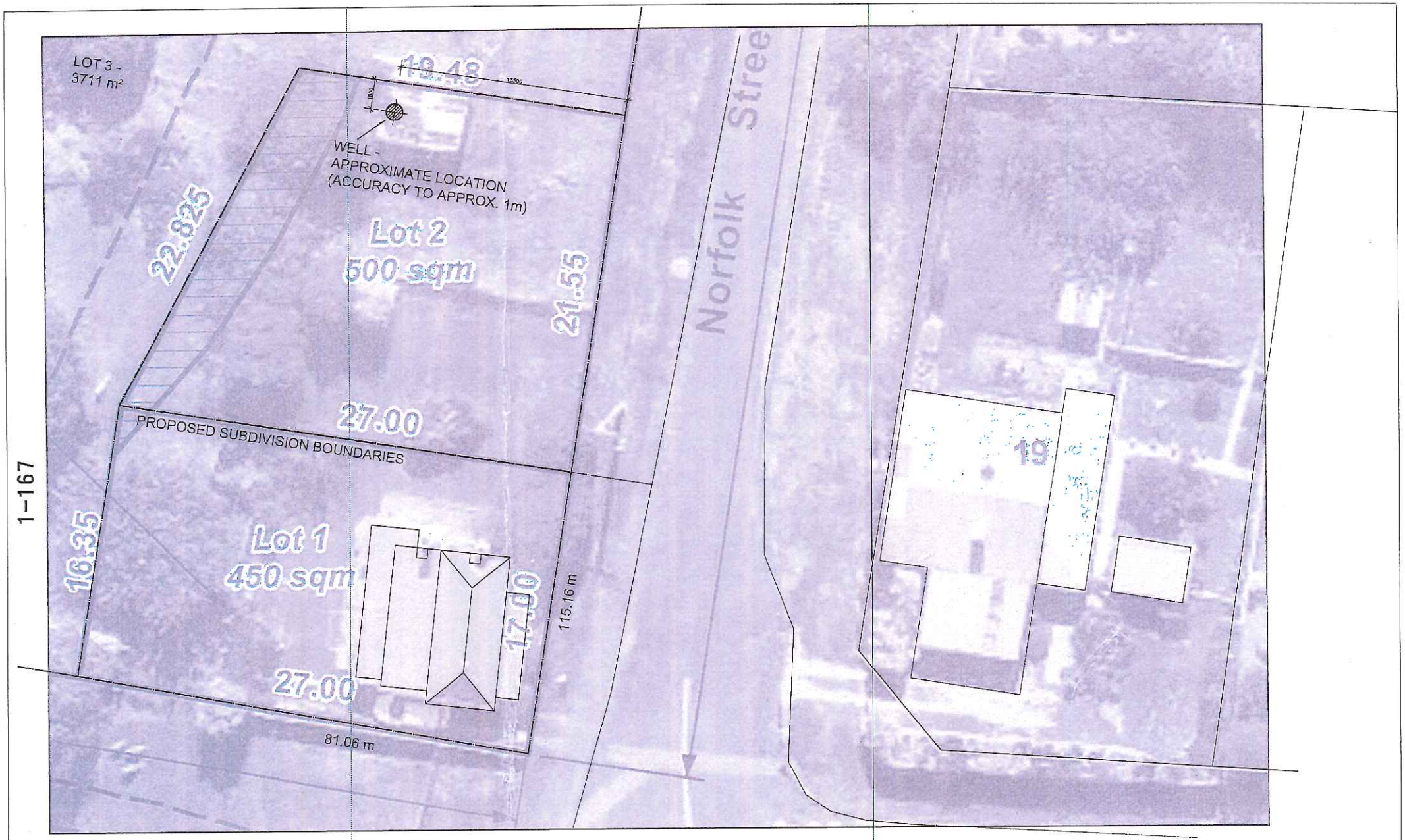
Extant Record – "Well"

Lot 2, 32 Norfolk Street
Perth, 7300

David Denman and Associates
7 / 59 William Street
Launceston, 7250

17th April, 2019

CONTENTS



NORTH

Issue ID	Revision ID	Description	Date
A		For Review	17.04.19

PROJECT: Extant Record - Well

ADDRESS: Lot 2, 32 Norfolk Street, Perth

CLIENT: NMC

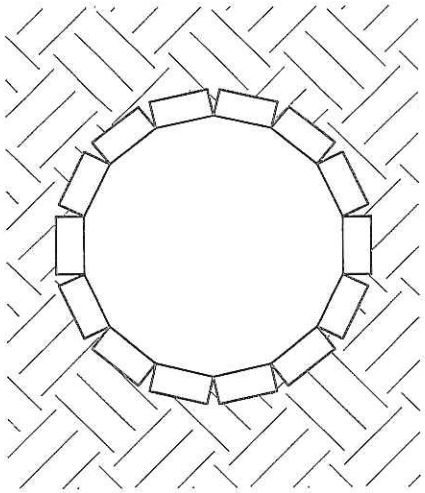
drawing: Site / Location Plan
scale: 1:200 @ A3
date: 17.04.19
dwg #: A01 -

7 / 59 WILLIAM STREET
LAUNCESTON, TAS 7250
phone: 03 6334 4899
email: admin@denman.studio
www: denman.studio

NORTHERN MIDLANDS COUNCIL

ARCHITECTS + HERITAGE CONSULTANTS
DAVID DENMAN

1-168

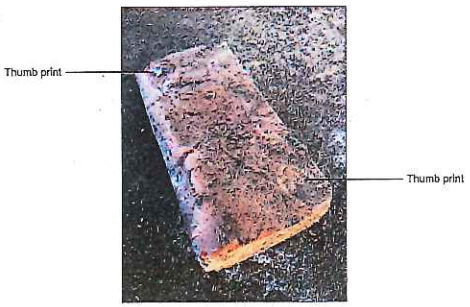


PLAN

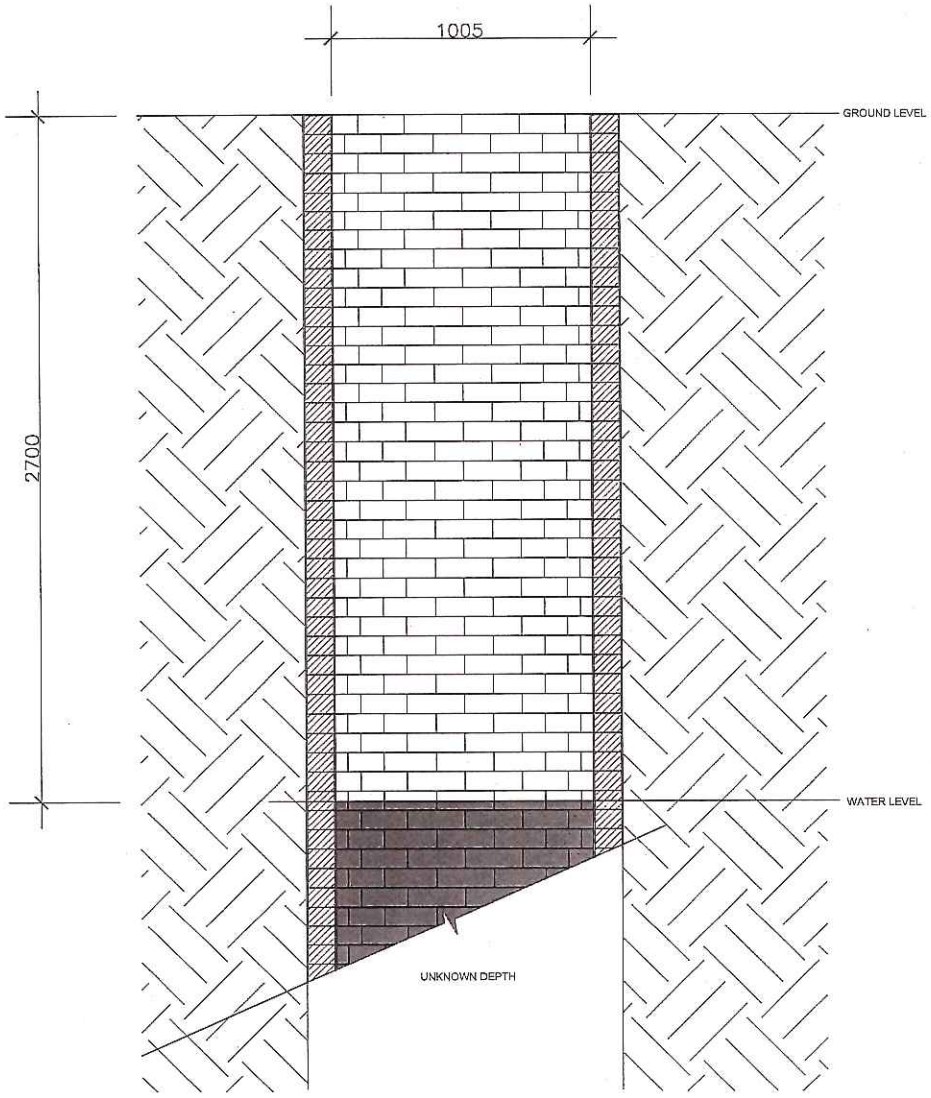
230 x 110 x 76 convict bricks
Dry layed in Stretcher bond

14 Bricks per course
36 Courses visible

TOTAL	504 bricks visible



TYPICAL BRICK



SECTION - INTERNAL ELEVATION

Issue ID	Revision ID	Description	Date
A		For Review	17.04.19

PROJECT: Extant Record - Well

ADDRESS: Lot 2, 32 Norfolk Street, Perth

CLIENT: NMC

drawing: Plan - Section - Internal Elevation
scale: 1:20 @ A3
date: 17.04.19

dwg #: A02 -

7 / 59 WILLIAM STREET
LAUNCESTON, TAS 7250
phone: 03 6334 4699
email: admin@denman.studio
www: denman.studio

NORTHERN MIDLANDS COUNCIL

ARCHITECTS + HERITAGE CONSULTANTS
DAVID DENMAN

Photo 1 – View of site from the far side of Norfolk Street
The Well is located in front of and slightly to the right of the fruit tree and is covered by a steel plate

Photo 2 – View of site from front fence

Photo 3 – View of well from NE

Photo 4 – View down well

Photo 5 – Close view of well from SW

Photo 6 – Detail from NE

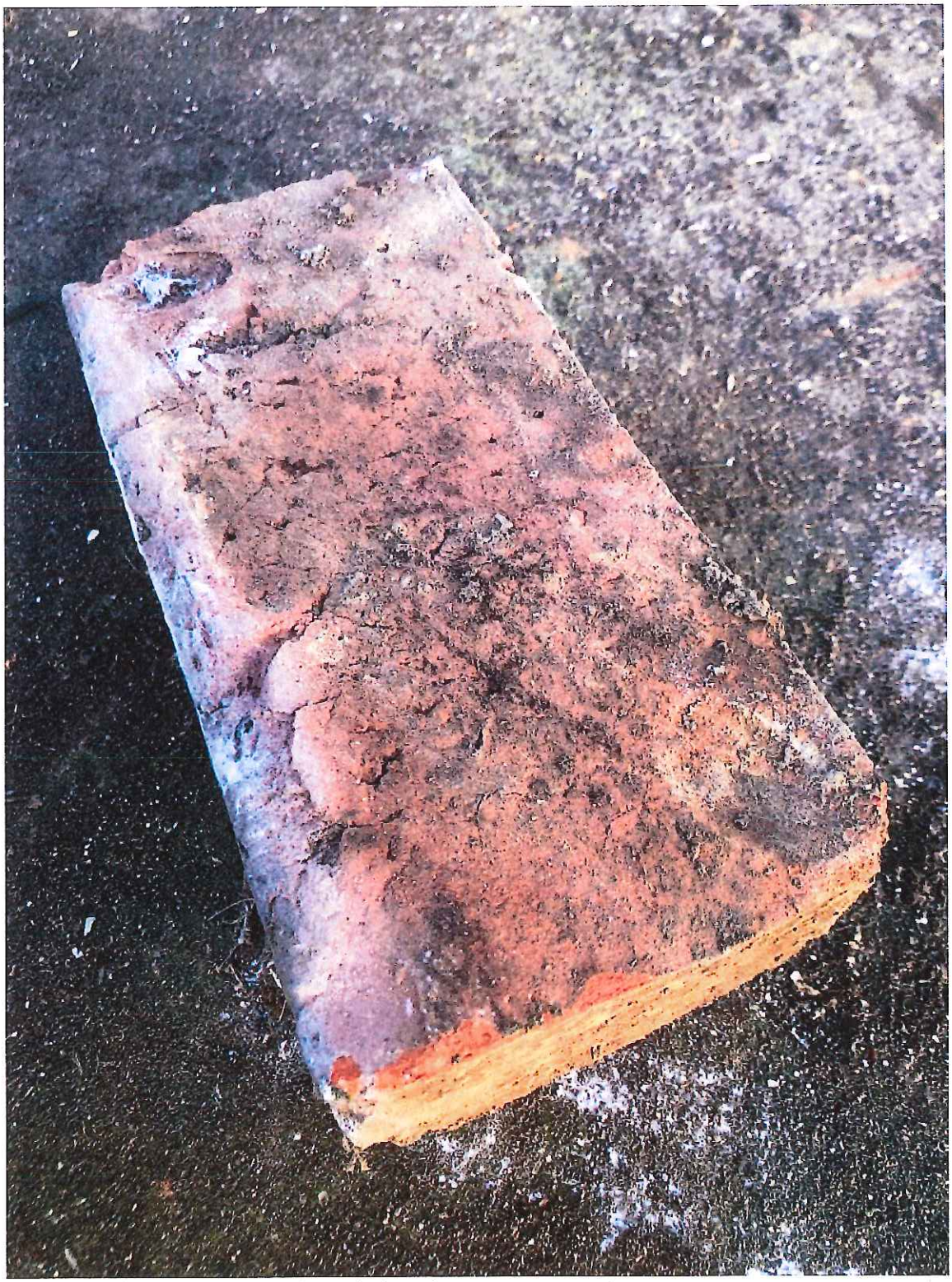
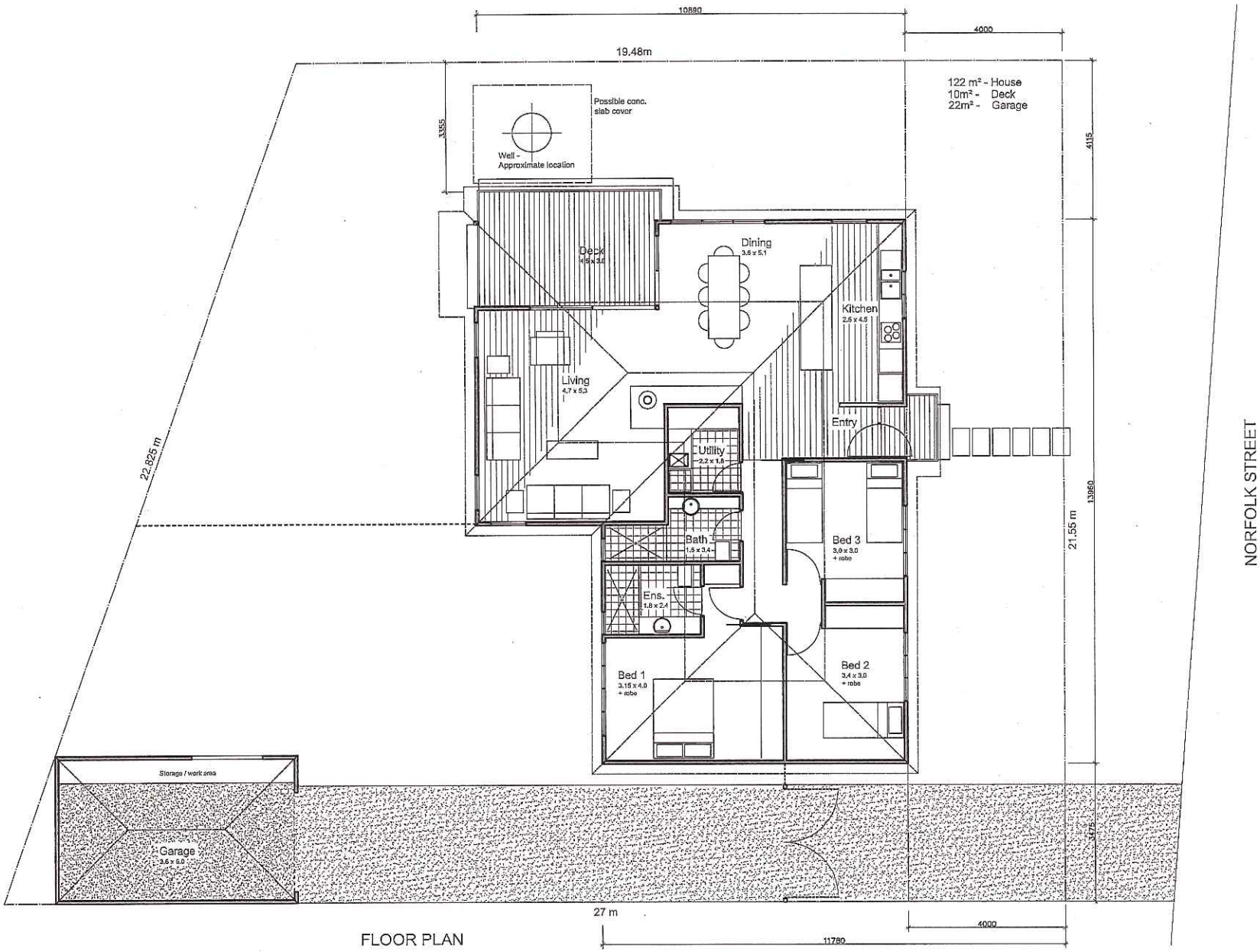


Photo 7 – Typical convict brick, with thumb prints on opposite corners

1-174



FLOOR PLAN

Issue ID	Revision ID	Description	Date

PROJECT: New House

ADDRESS: Lot 2, Norfolk Street, Perth

CLIENT: NMC

drawing: Sketch Plan
scale: 1:100 @ A3
date: 17.12.18

dwg #: A02 -

7 / 59 WILLIAM STREET
LAUNCESTON, TAS 7250
phone: 03 6334 4899
email: admin@denman.studio
www: denman.studio

NORTHERN MIDLANDS COUNCIL

ARCHITECTS + HERITAGE CONSULTANTS
DAVID DENMAN