



NORTHERN MIDLANDS COUNCIL
MINUTES – ORDINARY MEETING
17 FEBRUARY 2020

051/20 PLANNING APPLICATION PLN-18-0296: 32 NORFOLK STREET, PERTH

Attachments: Section 1 – Page 107

File Number: 110500.13; CT 46063/1
Responsible Officer: Amanda Bond, Community & Development Manager
Report prepared by: Chloe Lyne, Planning Consultant

1 INTRODUCTION

This report assesses an application for 32 Norfolk Street, Perth for a 3-lot subdivision.

2 BACKGROUND

Applicant: Northern Midlands Council	Owner: Northern Midlands Council
Zone: General Residential Zone	Codes: Bushfire-Prone Areas Code; Road and Railway Assets Code; Flood Prone Areas Code, Water Quality Code; Recreation and Open Space Code
Classification under the Scheme: Discretionary	Existing Use: Residential
Deemed Approval Date: 22 February 2020	Recommendation: Approve subject to conditions

Discretionary Aspects of the Application

- Solar orientation of lots;
- Creation of Public Open Space;
- Proximity to railway; and
- Flood risk.

Planning Instrument: *Northern Midlands Interim Planning Scheme 2013, Version 29, Effective 3 June 2019*

Preliminary Discussion

Prior to submission of the application, the applicant held discussions with Council officers regarding the application.



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Subject site



3 STATUTORY REQUIREMENTS

The proposal is an application pursuant to section 57 of the *Land Use Planning & Approvals Act 1993* (i.e. a discretionary application).

Section 48 of the *Land Use Planning & Approvals Act 1993* requires the Planning Authority to observe and enforce the observance of the Planning Scheme. Section 51 of the *Land Use Planning & Approvals Act 1993* states that a person must not commence any use or development where a permit is required without such permit.

4 ASSESSMENT

4.1 Proposal

It is proposed to:

- Create a 3-lot subdivision.

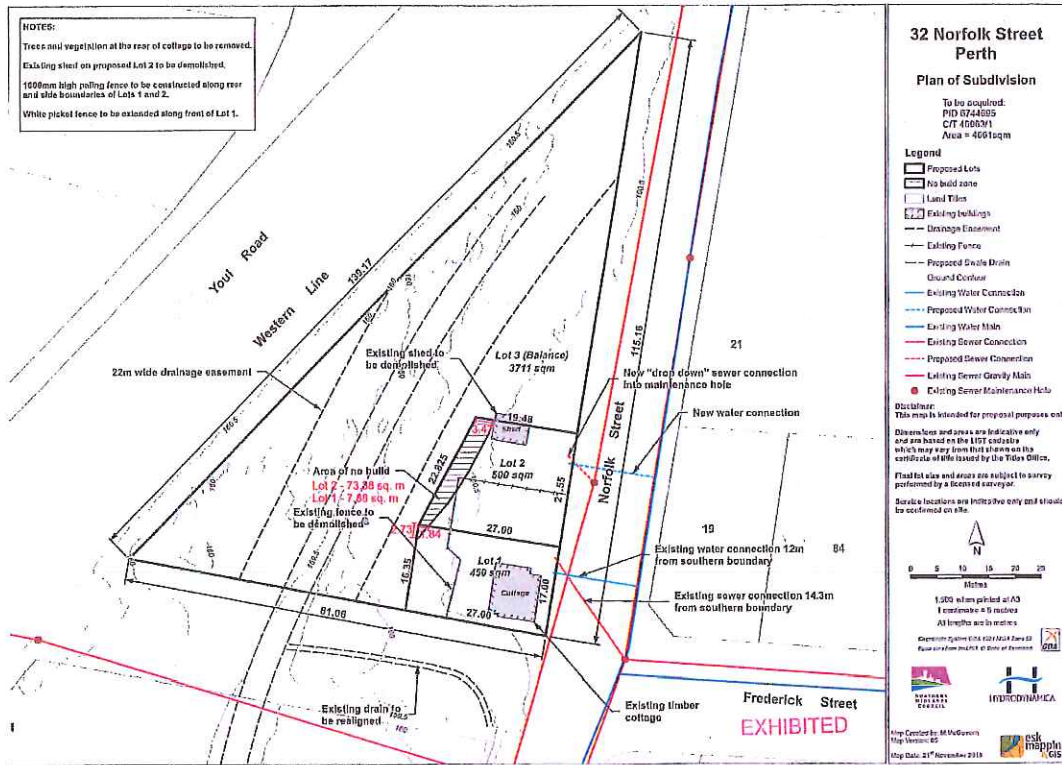
Lot 1 will have an area of 450m² and contain an existing single storey dwelling. Lot 2 will have an area of 500m² and will be a vacant residential lot. Lot 2 will include a 'no build' zone at the rear of the lot. Lot 3 (balance) will have an area of 3711m² and is intended to be used as public open space. All three lots have frontage and access via Norfolk Street.

Council currently owns the entire site which it purchased to enable works under the Sheep Wash Creek Water Sensitive Urban Design Master Plan Project to be undertaken to improve flood flows. Lots 1 and 2 are suitable for residential development and as such will be sold off to help fund the works.

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Proposed Plan of Subdivision



Proposed Plan of Subdivision – Aerial Photo

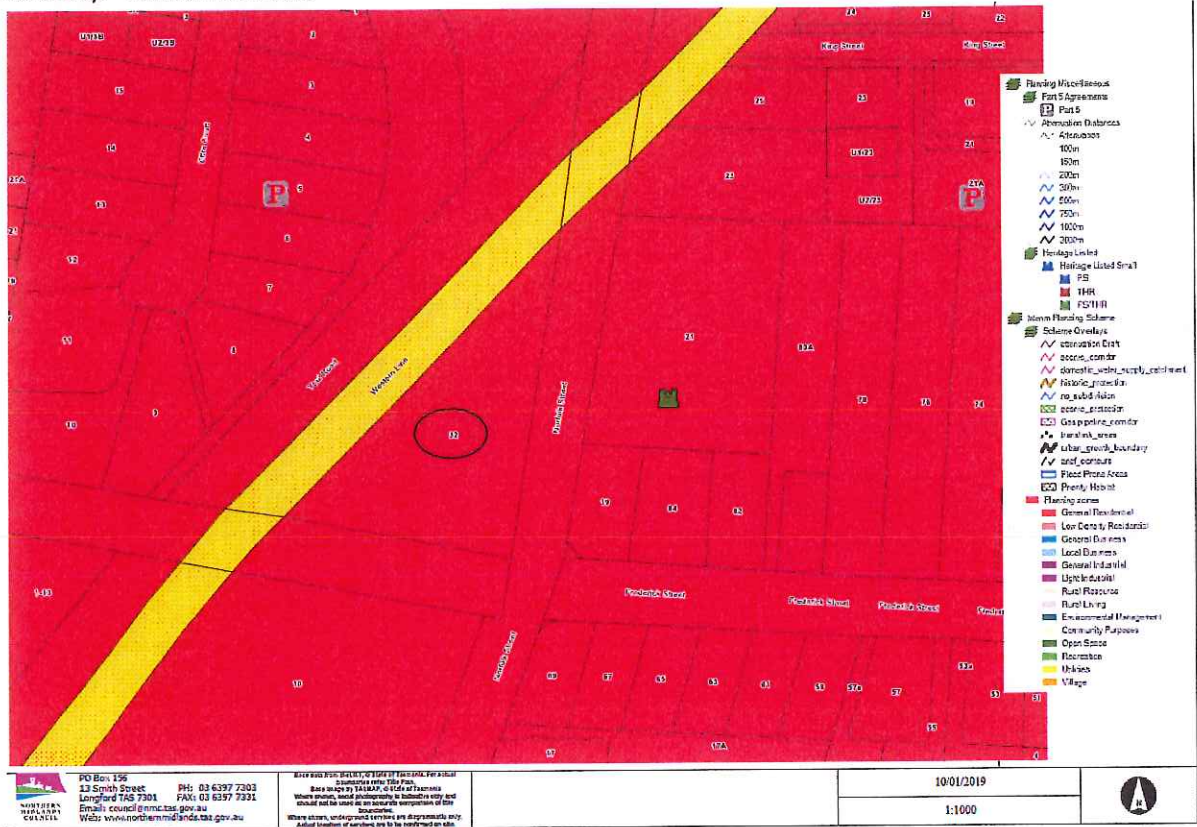




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4.2 Zone and land use

Zone Map – General Residential



The land is zoned General Residential.

4.3 Subject site and locality

The author of this report carried out a site visit on 5th March 2019. The subject site is a triangular shaped piece of land situated between Norfolk Street (to the east) and the railway line (to the west). It is currently developed with a single storey dwelling. It is noted that approval was granted to remove the outbuilding via Permit PLN – 18-0306.



Access to the site is via Norfolk Street via a crossover in the south-eastern corner. An existing drainage line runs along the western boundary adjacent to the railway corridor.



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Aerial photograph of area – 2019



 PO Box 156 13 Smith Street Longford TAS 7301 Email: council@nmc.tas.gov.au Web: www.northernmidlands.tas.gov.au	Base data from the JST, © State of Tasmania. For actual boundaries refer Title Plan. Base image by TASMAP, © State of Tasmania Where shown, aerial photography is indicative only and should not be used as an accurate comparison of title boundaries. Where shown, underground services are diagrammatic only. Actual location of services are to be confirmed on site.	3/02/2020	
		1:1250	

Photographs of subject site



View of existing dwelling (lot 1)



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View of part of proposed lot 2 and balance lot



View of site from Youl Main Road (railway line in foreground) including representor's house (cream)



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4.4 Permit/site history

Relevant permit history includes:

- PLN-18-0306 – Demolition of shed, tree and vegetation removal.
- Old well (see attached record)

4.5 Representations

Notice of the application was given in accordance with Section 57 of the *Land Use Planning & Approvals Act 1993*. A review of Council's Records management system after completion of the public exhibition period revealed that a representation (attached) was received from:

- Michael McWilliams, 21 Norfolk Street, Perth

Map showing location of representor's property in relation to subject site



The matters raised in the representation are outlined below followed by the planner's comments.

Issue 1

- The previous DA approved at the February Council meeting had a condition that new trees must be replanted on the site within 12 months. The condition is mentioned in the new application and representor would like to know if the previous condition still stands if the current DA is approved?

Planner's comment:

Any condition relating to previous permits still stands.

Issue 2

- Representor is concerned that the Council has deviated from the published plans for Sheepwash Creek which shows that the lot will be subdivided into two blocks. The representor was told by Councillors that the site was purchased for the Sheepwash Creek development and finds that the plan to subdivide into three lots is deceptive.



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Planner's comment:

This issue is not a relevant consideration under the Planning Scheme. The size of the existing lot means it is capable of being subdivided into more than two lots.

Issue 3

- The application seeks a variation to solar orientation with no reason for the variation included in the application.

Planner's comment:

The application material does not include an assessment against the relevant performance criteria under Clause 10.4.15.3 Solar Orientation. However, the assessment in this report has determined the lots are of sufficient size to allow future development that has adequate access to sunlight.

Issue 4

- The proposed subdivision is in a flood prone area, often in heavy rain the block is under water. It is strange that Council would approve a building block subdivision in a flood area when the whole intention of purchasing the land was for flood mitigation.

Planner's comment:

The subject site is currently in a flood prone area with the majority of the site being inundated in a 1:100 year flood. The previously approved works on the subject site along with a number of other mitigation measures along Sheepwash Creek (channel clearing, removal of a culvert and removal of trees in Lions Park) was approved by Council under PLN-18-171 are part of a program of works being undertaken by Council to reduce flood impacts in Perth and improve drainage along Sheepwash Creek. The image below shows the modelled extent of flooding in a 1:100 year event following the drainage channel works. The subdivision has been designed taking into account the revised flood levels and includes a no-build area within Proposed Lot 2 to ensure future dwelling and outbuildings on that lot are not impacted by the 1:100 year event. The flood improvement works have now been completed.





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Issue 5

- Representor is concerned about proximity of subdivision to the railway line and the fact that the acoustic assessment refers to guidelines from NSW which don't take account of the Tasmanian situation. Representor states that the engine whistle noise should not be discounted given the site is between two railway crossings.

Planner's comment:

The acoustic assessment refers to NSW guidelines because there are no specific rail noise guidelines for Tasmania. The EPP guidelines for noise generally in Tasmania don't provide specific guidelines or levels for rail noise as railway infrastructure is classified as necessary infrastructure. For this reason, the more detailed NSW guidelines were used as a basis for determining criteria for the assessment.

The engine whistle noise cannot be included in the assessment as it is regarded as a safety device and therefore exempt from any criteria.

4.6 Referrals**Council's Works Department**

Precis: Council's Works & Infrastructure Department (Jonathan Galbraith) reviewed the application and provided recommended conditions of approval for a permit, if issued.

TasWater

Precis: A TasWater Submission to Planning Authority Notice was issued on 14th February 2019 (TasWater Ref: TWDA 2019/00178-NMC).

TasRail (adjoining landowner)

Precis: TasRail was contacted regarding the application and the following response was received on 7th March 2019

As with other subdivisions, TasRail's main concerns will arise following sale of the proposed lots when 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 or complain about the use of the train horn, particularly given the freight rail services operate 24/7 with a majority of trains passing through Perth late at night or the 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 and any other run-off onto rail land or the rail drainage system is strictly prohibited.

TasRail also asks that 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 the 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.

4.7 Planning Scheme Assessment**GENERAL RESIDENTIAL ZONE****ZONE PURPOSE**

To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.

To provide for compatible non-residential uses that primarily serve the local community.



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Non-residential uses are not to be at a level that distorts the primacy of residential uses within the zones, or adversely affect residential amenity through noise, activity outside of business hours traffic generation and movement or other off-site impacts.

To encourage residential development that respects the neighbourhood character and provides a high standard of residential amenity.

Assessment: The proposal meets the zone purpose. The proposal to create an additional residential lot at densities allowable under the planning scheme is in accordance with the zone purpose.

LOCAL AREA OBJECTIVES

To consolidate growth within the existing urban land use framework of the towns and villages.

To manage development in the General residential zone as part of or context to the Heritage Precincts in the towns and villages.

To ensure developments within street reservations contribute positively to the Heritage Precincts in each settlement.

Assessment: The proposal meets the local area objectives. The subject site does not form part of a Heritage Precinct.

10.3 Use Standards

Not applicable

10.4 Development Standards

Not applicable

10.4.15 Subdivision

10.4.15.1 Lot Area, Building Envelopes and Frontage

Objective

To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, private open space, vehicle access and parking, easements and site features.

Acceptable Solutions

- A1 Lots must:
- a) have a minimum area of at least 450m² which:
 - i) is capable of containing a rectangle measuring 10m by 15m; and
 - ii) has new boundaries aligned from buildings that satisfy the relevant acceptable solutions for setbacks; or
 - b) be required for public use by the Crown, an agency, or a corporation all the shares of which are held by Councils or a municipality; or
 - c) be for the provision of utilities; or
 - d) be for the consolidation of a lot with another lot with no additional titles created; or
 - e) be to align existing titles with zone boundaries and no additional lots are created.

A2 Each lot must have a frontage of at least 3.6m.

Performance Criteria

- P1 Each lot for residential use must provide sufficient useable area and dimensions to allow for:
- a) a dwelling to be erected in a convenient and hazard-free location; and
 - b) on-site parking and manoeuvrability; and
 - c) adequate private open space.
- P2 Each lot must have appropriate, permanent access by a Right of Carriageway registered over all relevant titles.

Comment: Satisfies A1 and A2

Lot 1 has a site area of 450m², has a depth of 27 metres and width of 17 metres at the frontage and therefore meets A1a). The setback of the existing cottage to the front boundary remains unaltered as a result of the subdivision and compliance with side and rear setbacks is achieved.

Lot 2 has a site area of 500m² a minimum depth of 19.48 metres and width of 21.55 metres and therefore meets A1a). Lot 2 will be vacant once the shed is demolished.

Lot 3 has a site area of 3711m² and meets minimum width and depth requirements. It will be a vacant lot retained by Council.

Lot 1 has a frontage of 17 metres, Lot 2 of 21.55 metres and Lot 3 well in excess of the 3.6m required.

10.4.15.2 Provision of Services

Objective

To provide lots with appropriate levels of utility services.

Acceptable Solutions

A1 Each lot must be connected to a reticulated:

Performance Criteria

P1 Each lot created must be:



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<p>a) water supply; and b) sewerage system.</p>	<p>a) in a locality for which reticulated services are not available or capable of being connected; and b) capable of accommodating an on-site wastewater management system.</p>
<p>A2 Each lot must be connected to a reticulated stormwater system.</p>	<p>P2 Each lot created must be capable of disposal of stormwater to a legal discharge point.</p>
<p>Comment: Satisfies A1 and A2 Lots 1 and 2 are able to be connected to a water supply and sewerage system and subject to works, a reticulated stormwater system. Lot 3 will be dedicated public open space and as such does not require water and sewerage connections. It will have a legal point of stormwater discharge being the water course that runs through it.</p>	

10.4.15.3 Solar Orientation of Lots

<p><i>Objective</i> To provide for solar orientation of lots and solar access for future dwellings.</p>	
Acceptable Solutions	Performance Criteria
<p>A1 At least 50% of lots must have a long axis within the range of: a) north 20 degrees west to north 30 degrees east; or b) east 20 degrees north to east 30 degrees south.</p>	<p>P1 Dimensions of lots must provide adequate solar access, having regard to the likely dwelling size and the relationship of each lot to the road.</p>
<p>A2 The long axis of residential lots less than 500m², must be within 30 degrees east and 20 degrees west of north.</p>	<p>P2 Lots less than 500 m² must provide adequate solar access to future dwellings, having regard to the: a) size and shape of the development of the subject site; and b) topography; and c) location of access way(s) and roads.</p>
<p>Comment: Satisfies P1 and P2 Lots 1 and 2 do not have a long axis within the prescribed ranges. Lot 3 meets A1 and A2 does not apply to it. Lot 1 has an existing dwelling on it which is orientated in an east west direction and does not have many northern facing windows. It is conceivable that a rear extension to that dwelling could be constructed with north facing windows which would be able to be adequately setback from the northern boundary such that solar access would be gained. Lot 2 is irregular in shape but is closer to square than rectangular. It is considered that it is of sufficient size that a dwelling can be built on it that won't impede solar access on Lot 1 to the south and can be oriented to the north.</p>	

10.4.15.4 Interaction, Safety and Security

This clause was not used in this planning scheme

10.4.15.5 Integrated Urban Landscape

<p><i>Objective</i> To provide attractive and continuous landscaping in roads and public open spaces that contribute to the: a) character and identity of new neighbourhoods and urban places; or b) to existing or preferred neighbourhood character, if any.</p>	
Acceptable Solutions	Performance Criteria
<p>A1 The subdivision must not create any new road, public open space or other reserves.</p>	<p>P1 For subdivision that creates roads, public open space or other reserves, the design must demonstrate that: a) it has regard to existing, significant features; and b) accessibility and mobility through public spaces and roads are protected or enhanced; and c) connectivity through the urban environment is protected or enhanced; and d) the visual amenity and attractiveness of the urban environment is enhanced; and e) it furthers the local area objectives, if any.</p>
<p>Comment: Satisfies the Performance Criteria</p>	



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Lot 3 will be public open space (a condition of permit needs this to be shown on the final plan of survey).
The public open space is part of the Sheepwash Creek WSUD Open Space Corridor Master plan and allows connectivity along Sheepwash Creek.

10.4.15.6 Walking and Cycling Network

Objective

- a) To provide safe, convenient and efficient movement through and between neighbourhoods by pedestrians and cyclists; and
- b) To design footpaths, shared path and cycle path networks that are safe, comfortable, well constructed and accessible.
- c) To provide adequate provision to accommodate wheelchairs, prams, scooters and other footpath bound vehicles.

Acceptable Solutions

A1 The subdivision must not create any new road, footpath or public open space.

Performance Criteria

- P1 Subdivision that creates new roads, footpaths, or public open spaces must demonstrate that the walking and cycling network is designed to:
- a) link to any existing pedestrian and cycling networks; and
 - b) provide the most practicable direct access for cycling and walking to activity centres, community facilities, public transport stops and public open spaces; and
 - c) provide an interconnected and continuous network of safe, efficient and convenient footpaths, shared paths, cycle paths and cycle lanes based primarily on the network of arterial roads, neighbourhood roads and regional public open spaces; and
 - d) promote surveillance along roads and from abutting dwellings.

Comment: Satisfies P1

The dedication of lot 3 as public open space will assist in the creation of an integrated walking/cycling path along Sheepwash Creek which winds through residential areas. It will connect Drummond Street in the south to Phillip Street in the north.

10.4.15.7 Neighbourhood Road Network

Objective

- a) To provide for convenient, safe and efficient movement through and between neighbourhoods for pedestrians, cyclists, public transport and other motor vehicles using the neighbourhood road network; and
- b) To design and construct road carriageways and verges so that the road geometry and traffic speeds provide an accessible and safe neighbourhood road system for all users.

Acceptable Solutions

A1 The subdivision must not create any new road.

Performance Criteria

- P1 The neighbourhood road network must:
- a) take account of the existing mobility network of arterial roads, neighbourhood roads, cycle paths, shared paths, footpaths and public transport routes; and
 - b) provide clear hierarchy of roads and physical distinctions between arterial roads and neighbourhood road types; and
 - c) provide an appropriate speed environment and movement priority for the safe and easy movement of pedestrians and cyclists and for accessing public transport; and
 - d) provide safe and efficient access to activity centres for commercial and freight vehicles; and
 - e) ensure connector roads align between neighbourhoods for safe, direct and efficient movement of pedestrians, cyclists, public transport and other motor vehicles; and
 - f) provide an interconnected and continuous network of roads within and between neighbourhoods for use by pedestrians, cyclists, public transport and other vehicles and 255inimize the provision of cul-de-sacs; and
 - g) provide for service and emergency vehicles to safely turn at the end of a dead-end road; and
 - h) take into account of any identified significant features.

Comment: Satisfies A1. The subdivision does not create any new road.

CODES



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E1.0	BUSHFIRE PRONE AREAS CODE	Complies subject to conditions
E2.0	POTENTIALLY CONTAMINATED LAND	N/A
E3.0	LANDSLIP CODE	N/A
E4.0	ROAD AND RAILWAY ASSETS CODE	Complies subject to conditions
E5.0	FLOOD PRONE AREAS CODE	Complies
E6.0	CAR PARKING AND SUSTAINABLE TRANSPORT CODE	Complies
E7.0	SCENIC MANAGEMENT CODE	N/A
E8.0	BIODIVERSITY CODE	N/A
E9.0	WATER QUALITY CODE	Complies
E10.0	RECREATION AND OPEN SPACE CODE	Complies subject to conditions
E11.0	ENVIRONMENTAL IMPACTS & ATTENUATION CODE	N/A
E12.0	AIRPORTS IMPACT MANAGEMENT CODE	N/A
E13.0	LOCAL HISTORIC HERITAGE CODE	N/A
E14.0	COASTAL CODE	N/A
E15.0	SIGNS CODE	N/A

E1.0 Bushfire Prone Areas Code

E1.5 Use Standards

E1.5.1 Vulnerable uses

Not applicable. Subdivision for residential purposes does not constitute a vulnerable use.

E1.5.2 Hazardous uses

Not applicable

E1.6 Development Standards

E1.6.1 Subdivision: Provision of hazard management areas

Objective: Subdivision provides for hazard management areas that:	
<ul style="list-style-type: none"> (a) facilitate an integrated approach between subdivision and subsequent building on a lot; (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and (c) provide protection for lots at any stage of a staged subdivision. 	
Acceptable solutions	Performance criteria
<p>A1</p> <ul style="list-style-type: none"> (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or (b) The proposed plan of subdivision: <ul style="list-style-type: none"> (i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision; (ii) shows the building area for each lot; (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas; and (iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas; and (c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written 	<p>P1</p> <p>A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:</p> <ul style="list-style-type: none"> (a) the dimensions of hazard management areas; (b) a bushfire risk assessment of each lot at any stage of staged subdivision; (c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability; (d) the topography, including site slope; (e) any other potential forms of fuel and ignition sources; (f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development; (g) an instrument that will facilitate management of fuels located on land external to the subdivision; and (h) any advice from the TFS.



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consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.

Comment: Satisfies A1

The Bushfire Assessment accompanying the application has determined that subject to Hazard Management Areas being implemented on the plan of subdivision that the proposal complies.

E1.6.2 Subdivision: Public and fire fighting access

Objective: Access roads to, and the layout of roads, tracks and trails, in a subdivision:

- (a) allow safe access and egress for residents, fire fighters and emergency service personnel;
- (b) provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;
- (c) are designed and constructed to allow for fire appliances to be manoeuvred;
- (d) provide access to water supplies for fire appliances; and
- (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.

Acceptable solutions

A1

- (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of fire fighting; or
- (b) A proposed plan of subdivision showing the layout of roads, fire trails, and the location of property access to building areas is included in a bushfire hazard management plan that:
 - (i) demonstrates proposed roads will comply with Table E1, proposed private accesses will comply with Table E2 and proposed fire trails will comply with Table E3; and
 - (ii) is certified by the TFS or accredited person.

Performance criteria

P1

A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:

- (a) appropriate design measures, including:
 - (i) two way traffic;
 - (ii) all weather surfaces;
 - (iii) height and width of any vegetation clearances;
 - (iv) load capacity;
 - (v) provision of passing bays;
 - (vi) traffic control devices;
 - (vii) geometry, alignment and slope of roads, tracks and trails;
 - (viii) use of through roads to provide for connectivity;
 - (ix) limits on the length of cul-de-sacs and dead-end roads;
 - (x) provision of turning areas;
 - (xi) provision for parking areas;
 - (xii) perimeter access; and
 - (xiii) fire trails;
- (b) the provision of access to:
 - (i) bushfire-prone vegetation to permit the undertaking of hazard management works; and
 - (ii) fire fighting water supplies; and
- (c) any advice from the TFS.

Comment: Satisfies A1

Lot 1 contains an existing dwelling. Adequate separation to boundaries exists. There is insufficient increase in risk to the existing dwelling by the proposed subdivision.

The private driveway to Lots 2 and 3 will be constructed/maintained in accordance with Table E2A.

Table E2 Standards for property access

Element	Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.
	There are no specified design and construction requirements.



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E4 Road and Railway Assets Code

E4.1 Purpose of Code

E4.1.1 The purpose of this provision is to:

- a) ensure that use or development on or adjacent to a road or railway will not compromise the safety and efficiency of the road or rail network; and*
- b) maintain opportunities for future development of road and rail infrastructure; and*
- c) reduce amenity conflicts between roads and railways and other use or development.*

E4.2 Application of Code

E4.2.1 This code applies to use or development of land that:

- a) requires a new access, junction or level crossing; or*
- b) intensifies the use of an existing access, junction or level crossing; or*
- c) involves a sensitive use, a building, works or subdivision on or within 50 metres of a railway or land shown in this planning scheme as:

 - i) a future road or railway; or*
 - ii) a category 1 or 2 road where such road is subject to a speed limit of more than 60 kilometres per hour.**

E4.3. Definition of Terms

E4.3.1 In this code, unless the contrary intention appears:

<i>Category 1 – Trunk Road</i>	<i>means as defined in Tasmania State Road Hierarchy (DIER, 2007)</i>
<i>Category 2 – Regional Freight Route</i>	<i>means as defined in Tasmania State Road Hierarchy (DIER, 2007)</i>
<i>Category 3 – Regional Access Road</i>	<i>means as defined in Tasmania State Road Hierarchy (DIER, 2007)</i>
<i>Category 4 – Feeder Road</i>	<i>means as defined in Tasmania State Road Hierarchy (DIER, 2007)</i>
<i>Category 5 – Other Road</i>	<i>means as defined in Tasmania State Road Hierarchy (DIER, 2007)</i>
<i>Future road or railway</i>	<i>means a future road or railway shown on the plans of this planning scheme.</i>
<i>Junction</i>	<i>means an intersection of two or more roads at a common level, including intersections of on and off ramps and grade-separated roads.</i>
<i>Limited access road</i>	<i>means a road proclaimed as limited access under Section 52A of the Roads and Jetties Act 1935.</i>

E4.4 Use or development exempt from this Code

E4.4.1 There are no exemptions from this Code.

E4.5 Requirements for a Traffic Impact Assessment (TIA)

E4.5.1 A TIA is required to demonstrate compliance with performance criteria.

E4.5.2 A TIA for roads must be undertaken in accordance with Traffic Impact Assessment Guidelines, Department of Infrastructure, Energy and Resources September 2007. Australian Guidelines and Australian Standards are to be used as the basis for any required road or junction design.

E4.5.3 A TIA must be accompanied by written advice as to the adequacy of the TIA from the:

- a) road authority in respect of a road; and*
- b) rail authority in respect of a railway.*

E4.5.4 The Council must consider the written advice of the relevant authority when assessing an application which relies on performance criteria to meet an applicable standard

E4.6 Use Standards

E4.6.1 Use and road or rail infrastructure

Objective

To ensure that the safety and efficiency of road and rail infrastructure is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.

Acceptable Solutions

A1 Sensitive use 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 not result in an increase to the annual average daily traffic (AADT) movements to or from the site by more than 10%.

Performance Criteria

P1 Sensitive use 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 demonstrate that the safe and efficient operation of the infrastructure will not be detrimentally affected.



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<p>A2 For roads with a speed limit of 60km/h or less the use must not generate more than a total of 40 vehicle entry and exit movements per day</p>	<p>P2 For roads with a speed limit of 60km/h or less, the level of use, number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.</p>
<p>A3 For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic (AADT) movements at the existing access or junction by more than 10%.</p>	<p>P3 For limited access roads and roads with a speed limit of more than 60km/h:</p> <p>a) access to a category 1 road or limited access road must only be via an existing access or junction or the use or development must provide a significant social and economic benefit to the State or region; and</p> <p>b) any increase in use of an existing access or junction or development of a new access or junction to a limited access road or a category 1, 2 or 3 road must be for a use that is dependent on the site for its unique resources, characteristics or locational attributes and an alternate site or access to a category 4 or 5 road is not practicable; and</p> <p>c) an access or junction which is increased in use or is a new access or junction must be designed and located to maintain an adequate level of safety and efficiency for all road users.</p>

Comment: Satisfies P1, A1 and A2 Not applicable.

One new residential lot within 50 metres of a railway corridor is created being proposed lot 2 and therefore upon development of that lot, there will be an increase in traffic movements per day of more than 10%. It is noted that Lot 1 already has a dwelling on it and the separation of that dwelling to the railway corridor will remain unchanged. Lot 3 will be public open space.

The addition of one new residential lot which does not directly abut railway corridor and is separated from it by public open space will not impact on the safe and efficient operation of that railway infrastructure.

E4.7 Development Standards

E4.7.1 Development on and adjacent to Existing and Future Arterial Roads and Railways

<p><i>Objective</i></p> <p>To ensure that development on or adjacent to category 1 or 2 roads (outside 60km/h), railways and future roads and railways is managed to:</p> <p>a) ensure the safe and efficient operation of roads and railways; and</p> <p>b) allow for future road and rail widening, realignment and upgrading; and</p> <p>c) avoid undesirable interaction between roads and railways and other use or development.</p>	
Acceptable Solutions	Performance Criteria
<p>A1 The following must be at least 50m from a railway, a future road or railway, and a category 1 or 2 road in an area subject to a speed limit of more than 60km/h:</p> <p>a) new road works, buildings, additions and extensions, earthworks and landscaping works; and</p> <p>b) building areas on new lots; and</p> <p>c) outdoor sitting, entertainment and children's play areas</p>	<p>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:</p> <p>a) maintain or improve the safety and efficiency of the road or railway or future road or railway, including line of sight from trains; and</p> <p>b) mitigate significant transport-related environmental impacts, including noise, air pollution and vibrations in accordance with a report from a suitably qualified person; and</p> <p>c) ensure that additions or extensions of buildings will not reduce the existing setback to the road, railway or future road or railway; and</p> <p>d) ensure that temporary buildings and works are removed at the applicant's expense within three years or as otherwise agreed by the road or rail authority.</p>

Comment: Satisfies P1

One new residential lot will be created within 50m of the railway corridor and therefore the application must be



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assessed against the Performance Criteria. An acoustic assessment has been submitted with the application to assist in that regard.

Taking account the matters to be considered under the Performance Criteria, the following assessment is made:

- a) The proposed subdivision will not impact the safety or efficiency of the railway line or impede sight distances. No new access across the railway corridor is proposed;
- b) An environmental noise and ground vibration assessment was undertaken by Tarkarri Engineering to determine if Lot 2 requires any specific mitigation measures. The sound and vibration logging monitor was in place on the site for 4 days. The assessment utilised Rail Infrastructure Noise Guidelines from NSW to determine base levels given the absence of such guideline specific to Tasmania. The guidelines recommend a trigger level for heavy rail noise at a receiver location of 80dBA L_{max} . The maximum noise measured was 76.7dBA and therefore the report concludes there is no need for any noise mitigation measures to be installed at the subdivision stage. There are recommendations made at the building construction phase regarding installation of double glazing and the like. Given any future dwelling constructed on the site will need to be assessed against this performance criteria, it is considered appropriate that the recommendations in the report are adopted at that stage via permit condition if necessary.

With respect to ground vibration, the peak velocity levels recorded were below the preferred trigger level at all times and no recommendations in regards to mitigation measures were proposed.

It is noted that TasRail requires a number of notes on the permit to advise future owners the restrictions around entering or interfering with the rail corridor. TasRail also asked that the planning permit require future purchasers to be made aware of the train horn and that stormwater discharge into the rail corridor or system is strictly prohibited.

- c) No addition or extension of an existing building is proposed.
- d) No temporary buildings or works are proposed.

E4.7.2 Management of Road Accesses and Junctions

<i>Objective</i>	
<i>To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>For roads with a speed limit of 60km/h or less the development must include only one access providing both entry and exit, or two accesses providing separate entry and exit.</i>	P1 <i>For roads with a speed limit of 60km/h or less, the number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.</i>
A2 <i>For roads with a speed limit of more than 60km/h the development must not include a new access or junction.</i>	P2 <i>For limited access roads and roads with a speed limit of more than 60km/h:</i> a) <i>access to a category 1 road or limited access road must only be via an existing access or junction or the development must provide a significant social and economic benefit to the State or region; and</i> b) <i>any increase in use of an existing access or junction or development of a new access or junction to a limited access road or a category 1, 2 or 3 road must be dependent on the site for its unique resources, characteristics or locational attributes and an alternate site or access to a category 4 or 5 road is not practicable; and</i> c) <i>an access or junction which is increased in use or is a new access or junction must be designed and located to maintain an adequate level of safety and efficiency for all road users.</i>

Comment: Complies with A1, A2 Not applicable



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Each lot will have a single crossover providing both access and egress.

E4.7.3 Management of Rail Level Crossings

<i>Objective</i> To ensure that the safety and the efficiency of a railway is not unreasonably reduced by access across the railway.	
Acceptable Solutions	Performance Criteria
<p>A1 Where land has access across a railway:</p> <p>a) development does not include a level crossing; or</p> <p>b) development does not result in a material change onto an existing level crossing.</p>	<p>P1 Where land has access across a railway:</p> <p>a) the number, location, layout and design of level crossings maintain or improve the safety and efficiency of the railway; and</p> <p>b) the proposal is dependent upon the site due to unique resources, characteristics or location attributes and the use or development will have social and economic benefits that are of State or regional significance; or</p> <p>c) it is uneconomic to relocate an existing use to a site that does not require a level crossing; and</p> <p>d) an alternative access or junction is not practicable.</p>

Comment: Not applicable

E4.7.4 Sight Distance at Accesses, Junctions and Level Crossings

<i>Objective</i> To ensure that use and development involving or adjacent to accesses, junctions and level crossings allows sufficient sight distance between vehicles and between vehicles and trains to enable safe movement of traffic.	
Acceptable Solutions	Performance Criteria
<p>A1 Sight distances at</p> <p>a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.7.4; and</p> <p>b) rail level crossings must comply with AS1742.7 Manual of uniform traffic control devices - Railway crossings, Standards Association of Australia; or</p> <p>c) If the access is a temporary access, the written consent of the relevant authority has been obtained.</p>	<p>P1 The design, layout and location of an access, junction or rail level crossing must provide adequate sight distances to ensure the safe movement of vehicles.</p>

Comment: Complies with A1

An access point with adequate sight distance can be achieved for all three lots.

E6 Parking and Sustainable Transport Code

E6.6 Use Standards

E6.6.1 Car Parking Numbers

<i>Objective</i> To ensure that an appropriate level of car parking is provided to service use.	
Acceptable Solutions	Performance Criteria
<p>A1 The number of car parking spaces must not be less than the requirements of:</p> <p>a) Table E6.1; or</p> <p>b) a parking precinct plan contained in Table E6.6: Precinct Parking Plans (except for dwellings in the General Residential Zone).</p>	<p>P1 The number of car parking spaces provided must have regard to:</p> <p>a) the provisions of any relevant location specific car parking plan; and</p> <p>b) the availability of public car parking spaces within reasonable walking distance; and</p> <p>c) any reduction in demand due to sharing of spaces by multiple uses either because of variations in peak demand or by efficiencies gained by consolidation; and</p> <p>d) the availability and frequency of public transport within reasonable walking distance of the site; and</p> <p>e) site constraints such as existing buildings, slope, drainage, vegetation and landscaping; and</p> <p>f) the availability, accessibility and safety of on-road parking, having regard to the nature of the roads, traffic management and other uses in the vicinity; and</p> <p>g) an empirical assessment of the car parking demand; and</p> <p>h) the effect on streetscape, amenity and vehicle, pedestrian and cycle safety and convenience; and</p>



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	<ul style="list-style-type: none"> i) the recommendations of a traffic impact assessment prepared for the proposal; and j) any heritage values of the site; and k) for residential buildings and multiple dwellings, whether parking is adequate to meet the needs of the residents having regard to: <ul style="list-style-type: none"> i) the size of the dwelling and the number of bedrooms; and ii) the pattern of parking in the locality; and iii) any existing structure on the land.
<p>Comment: Complies with A1 Both residential lots are capable of providing the two spaces per dwelling required by Table E6.1.</p>	

E5 Flood Prone Areas Code

E5.1 Purpose of the Code

E5.1.1 The purpose of this provision is to:

- a) ensure that use or development subject to risk from flooding is appropriately located and that adequate measures are taken to protect human life and property and to prevent adverse effects on the environment.
- b) determine the potential impacts of flooding through the assessment of risk in accordance with the Australian Standard.

E5.2 Application of this Code

E5.2.1 This code applies to use or development of land:

- a) mapped as flood risk on the planning scheme maps; or
- b) even if not mapped under subparagraph (a) if it is:
 - i) potentially subject to flooding at a 1% annual exceedance probability; or
 - ii) less than the height indicated on the coastal inundation risk height map; or
 - iii) identified in a report prepared by a suitably qualified person in accordance with the development application which is lodged or required in response to a request under Section 54 of the Act as actually or potentially subject to flooding at a 1% annual exceedance probability.

E5.3 Definition of Terms

Flooding	means the situation that results when land that is usually dry is covered with water as a result of watercourses overflowing, significant overland flows or water flowing into land associated with a rising tide and/or storms, and may include a combination of these factors.
1% Annual Exceedance Probability(AEP)	means the level which has a 1% probability of being exceeded in any year.
Flood Level	

E5.4 Use or Development Exempt from this Code

E5.4.1 The following use or development is exempt from this code:

- a) use and development for agriculture (not including development for dairies and controlled environment agriculture) and agricultural infrastructure such as farm tracks, culverts and the like.
- b) use and development for Forestry.
- c) extensions to existing development where floor area does not increase by more than 10% over the floor area which existed as at the effective date.

E5.5 Use Standards

E5.5.1 Use and flooding

Objective To ensure that use does not compromise risk to human life, and that property and environmental risks are responsibly managed.	
Acceptable Solutions	Performance Criteria
A1 The use must not include habitable rooms.	P1 Use including habitable rooms subject to flooding must demonstrate that the risk to life and property is mitigated to a low risk level in accordance with the risk assessment in E5.7.
A2 Use must not be located in an area subject to a medium or high risk in accordance with the risk assessment in E5.7.	P2 Use must demonstrate that the risk to life, property and the environment will be mitigated to a low risk level in accordance with the risk assessment in E5.7.



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Comment: Complies with A1 and A2

No new use is proposed.

E5.6 Development Standards

E5.6.1 Flooding and Coastal Inundation

<i>Objective</i>	
<i>To protect human life, property and the environment by avoiding areas subject to flooding where practicable or mitigating the adverse impacts of inundation such that risk is reduced to a low level.</i>	
<i>Acceptable Solutions</i>	<i>Performance Criteria</i>
A1 <i>No acceptable solution.</i>	<p>P1.1 <i>It must be demonstrated that development:</i></p> <p>a) <i>where direct access to the water is not necessary to the function of the use, is located where it is subject to a low risk, in accordance with the risk assessment in E5.7 a); or</i></p> <p>b) <i>where direct access to the water is necessary to the function of the use, that the risk to life, property and the environment is mitigated to a medium risk level in accordance with the risk assessment in E5.7.</i></p> <p>P1.2 <i>Development subject to medium risk in accordance with the risk assessment in E5.7 must demonstrate that the risk to life, property and the environment is mitigated through structural methods or site works to a low risk level in accordance with the risk assessment in E5.7.</i></p> <p>P1.3 <i>Where mitigation of flood impacts is proposed or required, the application must demonstrate that:</i></p> <p>a) <i>the works will not unduly interfere with natural coastal or water course processes through restriction or changes to flow; and</i></p> <p>b) <i>the works will not result in an increase in the extent of flooding on other land or increase the risk to other structures;</i></p> <p>c) <i>inundation will not result in pollution of the watercourse or coast through appropriate location of effluent disposal or the storage of materials; and</i></p> <p>d) <i>where mitigation works are proposed to be carried out outside the boundaries of the site, such works are part of an approved hazard reduction plan covering the area in which the works are proposed.</i></p>

Comment: Complies with Performance Criteria

P1.1 – There is no change to the use of the site and therefore P1.1 is not applicable.

P1.2 – Not applicable. The risk of the works is assessed as insignificant.

Complies with P1.3

P1.3 – Hydrodynamica have prepared a flood risk assessment based on hydraulic modelling on the 1:100 year event following the improvement works along Sheepwash Creek (approved under PLN-18-171 and recently completed). The risk assessment determines that even in the no build area on Lot 2, the risk assessment is low and therefore the proposal complies with P1.1.

E9 Water Quality Code

E9.1 Purpose of the Code

E9.1.1 *The purpose of this provision is to:*

- a) *consider the impacts of development to limit adverse effects on the following:*
- i) *wetland and watercourse ecosystems; and*
 - ii) *flow regimes, water levels, biological activity and physical characteristics; and*
 - iii) *the variety of flora and fauna; and*
 - iv) *the role of wetlands and watercourses for water supply, flood mitigation, environmental protection, water regulation and nutrient filtering, as resources for recreational activities and as attractive features in the landscape; and*
- b) *improve the sustainable management of surface water through development.*

E9.2 Application of this Code

E9.2.1 *This code applies to use or development of land:*



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- a) within 50 metres of a wetland or watercourse; or
- b) within a Ben Lomond Water catchment area – inner or outer buffer.

E9.3 Definitions of Terms

Ben Lomond Water

means Tasmanian Water and Sewerage Corporation (Northern Region) Pty Ltd

Ben Lomond Water catchment area - inner buffer

means the area defined at Figure E9.6.1.

Ben Lomond Water catchment area - outer buffer

means the area defined at Figure E9.6.2.

Soil and water management plan

means a site-specific plan or drawing that details sediment and erosion control measures on a site.

E9.4 Use or Development Exempt from this Code

E9.4.1 *The following use or development is exempt from this code:*

- a) *forestry subject to a certified forest practices plan;*
- b) *use for agriculture;*
- c) *private tracks on agricultural properties that are used for agricultural purposes;*
- d) *use and development for natural and cultural values management within parks, reserves and State Forest under State Government or Council ownership.*
- e) *use and development that is connected to reticulated sewer and stormwater.*
- f) *Level 2 activities assessed by the Environment Protection Authority.*

E9.5 Use Standards

Not used in this Scheme.

E9.6 Development Standards**E9.6.1 Development and Construction Practices and Riparian Vegetation**

Objective	
<i>To protect the hydrological and biological roles of wetlands and watercourses from the effects of development.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>Native vegetation is retained within:</i> a) <i>40m of a wetland, watercourse or mean high water mark; and</i> b) <i>a Ben Lomond Water catchment area - inner buffer.</i>	P1 <i>Native vegetation removal must submit a soil and water management plan to demonstrate:</i> a) <i>revegetation and weed control of areas of bare soil; and</i> b) <i>the management of runoff so that impacts from storm events up to at least the 1 in 5 year storm are not increased; and</i> c) <i>that disturbance to vegetation and the ecological values of riparian vegetation will not detrimentally affect hydrological features and functions.</i>
A2 <i>A wetland must not be filled, drained, piped or channelled.</i>	P2 <i>Disturbance of wetlands must minimise loss of hydrological and biological values, having regard to:</i> (i) <i>natural flow regimes, water quality and biological diversity of any waterway or wetland;</i> (ii) <i>design and operation of any buildings, works or structures on or near the wetland or waterway;</i> (iii) <i>opportunities to establish or retain native riparian vegetation;</i> (iv) <i>sources and types of potential contamination of the wetland or waterway.</i>
A3 <i>A watercourse must not be filled, piped or channelled except to provide a culvert for access purposes.</i>	P3 <i>A watercourse may be filled, piped, or channelled:</i> a) <i>within an urban environment for the extension of an existing reticulated stormwater network; or</i> b) <i>for the construction of a new road where retention of the watercourse is not feasible.</i>

Complies with A1, A2 and A3

No vegetation removal is proposed as part of the subdivision works.



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E9.6.2 Water Quality Management

<i>Objective</i>	
<i>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.</i>	
<i>Acceptable Solutions</i>	<i>Performance Criteria</i>
<p>A1 All stormwater must be:</p> <p>a) connected to a reticulated stormwater system; or</p> <p>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</p> <p>c) meet emission limit guidelines from the Board of the Environment Protection Authority in accordance with the State Policy for Water Quality Management 1997.</p>	<p>P1 Stormwater discharges to watercourses and wetlands must minimise loss of hydrological and biological values, having regard to:</p> <p>(i) natural flow regimes, water quality and biological diversity of any waterway or wetland;</p> <p>(ii) design and operation of any buildings, works or structures, on or near the wetland or waterway;</p> <p>(iii) sources and types of potential contamination of the wetland or waterway;</p> <p>(iv) devices or works to intercept and treat waterborne contaminants;</p> <p>(v) opportunities to establish or retain native riparian vegetation or continuity of aquatic habitat.</p>
<p>A2.1 No new point source discharge directly into a wetland or watercourse.</p> <p>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.</p>	<p>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:</p> <p>a) do not give rise to pollution as defined under the Environmental Management and Pollution Control Act 1994; and</p> <p>b) are reduced to the maximum extent that is reasonable and practical having regard to:</p> <p>i) best practice environmental management; and</p> <p>ii) accepted modern technology; and</p> <p>c) meet emission limit guidelines from the Board of Environmental Management and Pollution Control in accordance with the State Policy for Water Quality Management 1997.</p> <p>P2.2 Where it is proposed to discharge pollutants into a wetland or watercourse, the application must demonstrate that it is not practicable to recycle or reuse the material.</p>
<p>A3 No acceptable solution.</p>	<p>P3 Quarries and borrow pits must not have a detrimental effect on water quality or natural processes.</p>

Comment: Complies with A1, A2.1 and A2.2 and A3 not applicable

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 connects existing overland flow and piped stormwater water from the Frederick St area to Sheepwash Creek.

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.

E9.6.3 Construction of Roads

<i>Objective</i>	
<i>To ensure that roads, private roads or private tracks do not result in erosion, siltation or affect water quality.</i>	
<i>Acceptable Solutions</i>	<i>Performance Criteria</i>
<p>A1 A road or track does not cross, enter or drain to a watercourse or wetland.</p>	<p>P1 Road and private tracks constructed within 50m of a wetland or watercourse must comply with the requirements of the Wetlands and Waterways Works Manual, particularly the guidelines for siting and designing stream crossings.</p>

Not applicable



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E9.6.4 Access

Objective <i>To facilitate appropriate access at suitable locations whilst maintaining the ecological, scenic and hydrological values of watercourses and wetlands.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>No acceptable solution.</i>	P1 <i>New access points to wetlands and watercourses are provided in a way that minimises:</i> a) <i>their occurrence; and</i> b) <i>the disturbance to vegetation and hydrological features from use or development.</i>
A2 <i>No acceptable solution.</i>	P2 <i>Accesses and pathways are constructed to prevent erosion, sedimentation and siltation as a result of runoff or degradation of path materials.</i>

Not applicable

E9.6.5 Sediment and Erosion Control

Objective <i>To minimise the environmental effects of erosion and sedimentation associated with the subdivision of land.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>The subdivision does not involve any works.</i>	P1 <i>For subdivision involving works, a soil and water management plan must demonstrate the:</i> a) <i>minimisation of dust generation from susceptible areas on site; and</i> b) <i>management of areas of exposed earth to reduce erosion and sediment loss from the site.</i>

Not applicable

E9.6.6 Ben Lomond Water Catchment Areas

Objective <i>To address the effects of use and development within defined buffer areas for water catchments.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>Development located within a Ben Lomond Water catchment area - outer buffer must be developed and managed in accordance with a soil and water management plan approved by Ben Lomond Water.</i>	P1 <i>No performance criteria.</i>
A2 <i>Development located within a Ben Lomond Water catchment area - inner buffer must not involve disturbance of the ground surface.</i>	P2 <i>Development located within a Ben Lomond Water catchment area - inner buffer that involves disturbance of the ground surface must not have a detrimental effect on water quality for the reticulated water intakes.</i>

Not applicable

**ASSESSMENT AGAINST E10.0
RECREATION AND OPEN SPACE CODE**

E10.6 Development Standards**E10.6.1 Provision of Public Open Space**

Objective a) <i>To provide public open space which meets user requirements, including those with disabilities, for outdoor recreational and social activities and for landscaping which contributes to the identity, visual amenity and health of the community; and</i> b) <i>To ensure that the design of public open space delivers environments of a high quality and safety for a range of users, together with appropriate maintenance obligations for the short, medium and long term.</i>	
Acceptable Solutions	Performance Criteria
A1 <i>The application must:</i>	P1 <i>Provision of public open space, unless in accordance with Table E10.1, must:</i> a) <i>not pose a risk to health due to contamination; and</i>



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<p>a) include consent in writing from the General Manager that no land is required for public open space but instead there is to be a cash payment in lieu.</p>	<p>b) not unreasonably restrict public use of the land as a result of:</p> <p>i) services, easements or utilities; and</p> <p>ii) stormwater detention basins; and</p> <p>iii) drainage or wetland areas; and</p> <p>iv) vehicular access; and</p> <p>c) be designed to:</p> <p>i) provide a range of recreational settings and accommodate adequate facilities to meet the needs of the community, including car parking; and</p> <p>ii) reasonably contribute to the pedestrian connectivity of the broader area; and</p> <p>iii) be cost effective to maintain; and</p> <p>iv) respond to the opportunities and constraints presented by the physical characteristics of the land to provide practically useable open space; and</p> <p>v) provide for public safety through <i>Crime Prevention Through Environmental Design</i> principles; and</p> <p>vi) provide for the reasonable amenity of adjoining land users in the design of facilities and associated works; and</p> <p>vii) have a clear relationship with adjoining land uses through treatment such as alignment, fencing and landscaping; and</p> <p>ix) create attractive environments and focal points that contribute to the existing or desired future character statements, if any.</p>
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Relies on P1

Proposed Lot 3 (balance) will have an area of 3711m² and is intended to be used as public open space. The area is of sufficient size and topographical profile to provide for a large useable area of private open space that affords the opportunity to provide pedestrian and cycling linkages with other trails and open space networks in the community including the area around Sheepwash Creek to the south

SPECIFIC AREA PLANS		
F1.0	TRANSLINK SPECIFIC AREA PLAN	N/a
F2.0	HERITAGE PRECINCTS SPECIFIC AREA PLAN	N/a
SPECIAL PROVISIONS		
9.1	Changes to an Existing Non-conforming Use	N/a
9.2	Development for Existing Discretionary Uses	N/a
9.3	Adjustment of a Boundary	N/a
9.4	Demolition	N/a
STATE POLICIES		
The proposal is consistent with all State Policies.		
OBJECTIVES OF LAND USE PLANNING & APPROVALS ACT 1993		
The proposal is consistent with the objectives of the <i>Land Use Planning & Approvals Act 1993</i> .		
STRATEGIC PLAN/ANNUAL PLAN/COUNCIL POLICIES		
<i>Strategic Plan 2017-2027</i>		
•	<i>Statutory Planning</i>	

5 FINANCIAL IMPLICATIONS TO COUNCIL

Not applicable to this application.

6 OPTIONS

Approve subject to conditions, or refuse and state reasons for refusal.



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7 DISCUSSION

Discretion to refuse the application is limited to:

- Solar orientation of lots;
- Creation of Public Open Space;
- Proximity to railway; and
- Flood risk

Conditions are required regarding land for public open space and also from TasRail requiring the vendor of the lots to inform purchasers of the proximity to railway line and use of horns by the trains.

It is considered that both lots are of sufficient size to obtain adequate solar orientation to existing and new dwellings.

It is recommended that the application be approved with the conditions given below.

8 ATTACHMENTS

- Application & plans, correspondence with applicant
- Responses from referral agencies
- Representation
- Record of old well by David Denman & Associates

RECOMMENDATION

That land at 32 Norfolk Street, Perth be approved to be developed and used for a 3-lot subdivision (vary solar orientation, Bushfire-prone area, Road & Railway Assets Code) in accordance with application PLN-18-0296, and subject to the following conditions:

1 Layout not altered

The use and development shall be in accordance with the endorsed documents:

- P1 (Plan of Subdivision Dated 21/11/2018);
- P2 (Stormwater Concept Plan 32 Norfolk St);
- P3 (Bushfire Hazard Assessment Report and Bushfire Hazard Management Plan Dated 5/02/2019);
- P4 (Tarkarri Engineering Technical Memo Dated 08/02/2019);
- P5 (Hydrodynamica memo dated 18/3/2019).

2 Land Set Aside for Public Open Space

When the Final Survey Diagram is submitted for sealing, lot 3 must be dedicated as Public Open Space.

3 Final Plan Endorsement

The final plan of subdivision must be endorsed with a note in accordance with Section 83 (5) of the Local Government (Building and Miscellaneous Provisions) Act 1993 that –

- a) Council will not permit a development within the areas so indicated on the plan

4 Council's Works Department conditions

4.1 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.

4.2 Access

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.



**NORTHERN MIDLANDS COUNCIL
MINUTES – ORDINARY MEETING
17 FEBRUARY 2020**

4.3 As constructed information

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

4.4 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.

4.5 Separation of stormwater services

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

4.6 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.

4.7 Pollutants

- The developer/property owner must ensure that pollutants such as mud, silt or chemicals are not released from the site.
- 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.

4.8 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.

5 TasWater conditions

Sewer and water services shall be provided in accordance with TasWater's Planning Authority Notice (reference number TWDA 2019/00178-NMC).

6 Agreement under Part 5 of Land Use Planning Approval Act 1993 - TasRail

The applicant must enter into, and comply with all conditions of an agreement under Part 5 of the Act with the Northern Midlands Council to provide for the following:

The owners of Lots 1 and 2, formally acknowledge:

- the dwellings will be exposed to train noise;
- that train services operate 24/7 with the timetable subject to change at any time; and
- the train horn is required to be sounded twice per level crossing and at any other time a train driver perceives a risk.

7 Sealing of Plans

The final plan of survey will not be sealed until all conditions have been compiled with

PERMIT NOTES

TasRail Notes



**NORTHERN MIDLANDS COUNCIL
MINUTES – ORDINARY MEETING
17 FEBRUARY 2020**

- (a) *Unauthorised access to railway land is strictly prohibited for any purpose including for structures, vehicles, drainage, water pipes, stormwater discharge, electrical or service infrastructure.*
- (b) *Should a service or asset require installation on rail land, a separate permit application to TasRail applies with approval subject to terms and conditions.*
- (c) *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.*
- (d) *Parking of vehicles within rail land is not permitted.*
- (e) *Dumping of rubbish or green waste into the rail corridor is not permitted.*
- (f) *As railway land is Crown Land, the Rail Infrastructure Manager is not required to contribute to the cost of boundary fencing.*

DECISION

Cr Polley/ Goninon

That the matter be discussed.

Carried unanimously

Cr Adams/ Polley

That land at 32 Norfolk Street, Perth be approved to be developed and used for a 3-lot subdivision (vary solar orientation, Bushfire-prone area, Road & Railway Assets Code) in accordance with application PLN-18-0296, and subject to the following conditions:

1 Layout not altered

The use and development shall be in accordance with the endorsed documents:

- P1 (Plan of Subdivision Dated 21/11/2018);
- P2 (Stormwater Concept Plan 32 Norfolk St);
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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.

4.2 Access

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.

4.3 As constructed information



**NORTHERN MIDLANDS COUNCIL
MINUTES – ORDINARY MEETING
17 FEBRUARY 2020**

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

4.4 Municipal standards & certification of works

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- Where required, pipes are to be rerouted to provide an independent system for each lot.
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4.8 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.

4.9 Roadworks

Kerb and channel, a 1.8m wide concrete footpath, and widening of Norfolk street on western side shall be constructed along the frontage Lots 1 & 2.

An engineering design plan showing the road, footpath and drainage system including pavement long sections and cross sections is to be approved by Council before the commencement of works on site.

5 TasWater conditions

Sewer and water services shall be provided in accordance with TasWater's Planning Authority Notice (reference number TWDA 2019/00178-NMC).

6 Agreement under Part 5 of Land Use Planning Approval Act 1993 - TasRail

The applicant must enter into, and comply with all conditions of an agreement under Part 5 of the Act with the Northern Midlands Council to provide for the following:

The owners of Lots 1 and 2, formally acknowledge:

- the dwellings will be exposed to train noise;



**NORTHERN MIDLANDS COUNCIL
MINUTES – ORDINARY MEETING
17 FEBRUARY 2020**

- that train services operate 24/7 with the timetable subject to change at any time; and
- the train horn is required to be sounded twice per level crossing and at any other time a train driver perceives a risk.

7 Sealing of Plans

The final plan of survey will not be sealed until all conditions have been compiled with

PERMIT NOTES

TasRail Notes

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- (e) *Dumping of rubbish or green waste into the rail corridor is not permitted.*
- (f) *As railway land is Crown Land, the Rail Infrastructure Manager is not required to contribute to the cost of boundary fencing.*

Carried unanimously

1-123

1-107

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

1-124

1-108

PLANNING APPLICATION Proposal

Description of proposal: 2 LOT SUBDIVISION, ~~DEMOLITION OF STED~~
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: A6063/1

Estimated cost of project \$ 4,000 (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:
.....
.....
.....

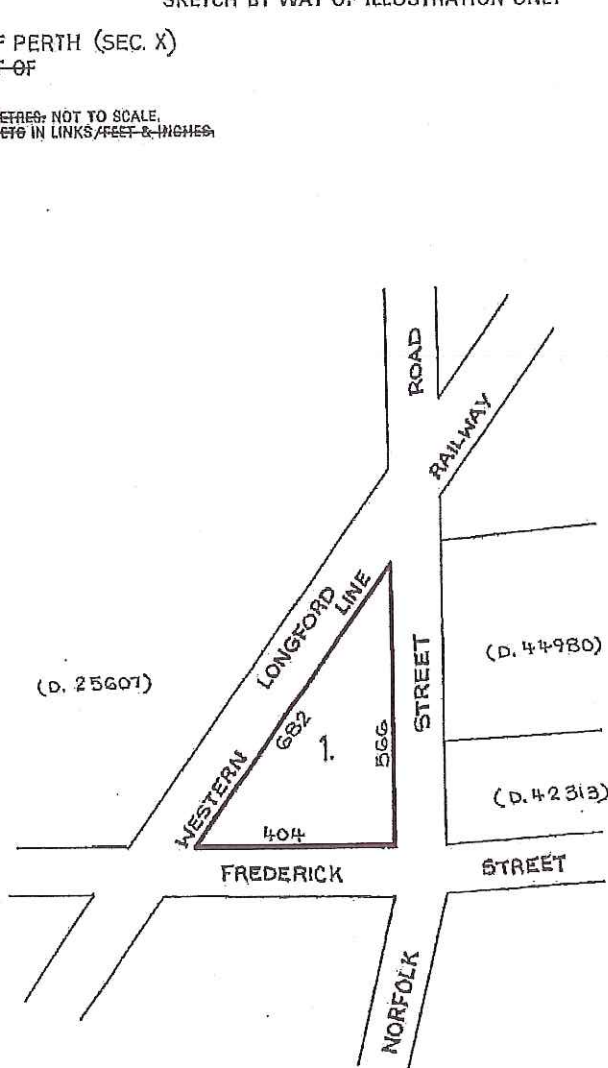
(attach additional sheets if necessary)

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

APPROVED..... 9 OCT 1990 <i>M. J. O'Brien</i> 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 <i>JH</i> 26/9/90

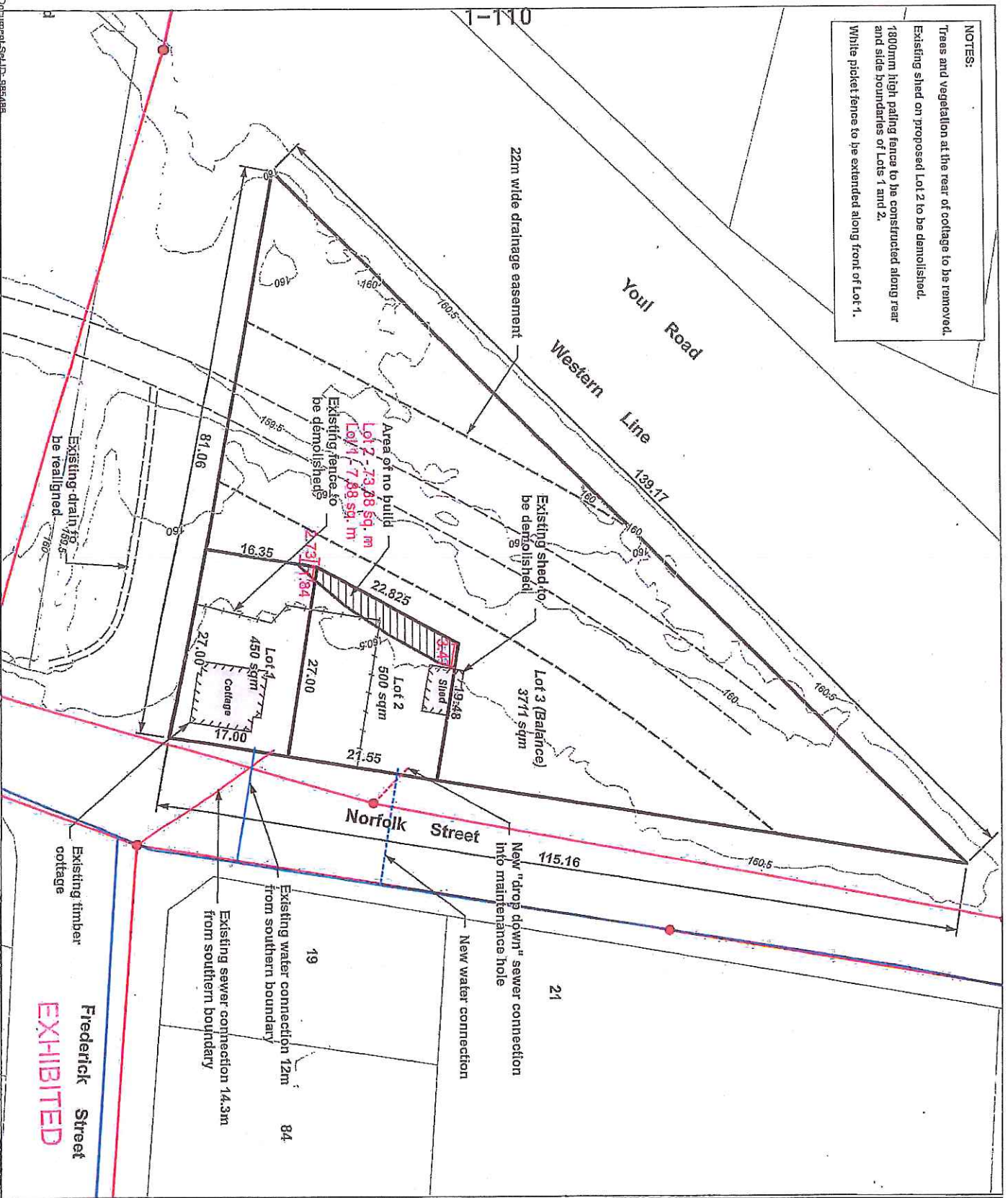
SKETCH BY WAY OF ILLUSTRATION ONLY

~~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

NOTES:
 Trees and vegetation at the rear of cottage to be removed.
 Existing shed on proposed Lot 2 to be demolished.
 1800mm high paling fence to be constructed along rear and side boundaries of Lots 1 and 2.
 White picket fence to be extended along front of Lot 1.



32 Norfolk Street Perth

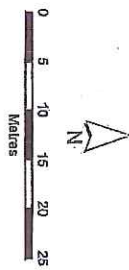
Plan of Subdivision

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

Legend

- Proposed Lots
- No built zone
- Land Titles
- Existing buildings
- Drainage Easement
- Existing Fence
- Proposed Swale Drain
- Ground Colour
- Existing Water Connection
- Proposed Water Connection
- Existing Water Main
- Existing Sewer Connection
- Proposed Sewer Connection
- Existing Sewer Gravelly 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.



Coordinate System GDA 1994, UTM Zone 55
 Data scale from the LIST, © State of Western Australia
 GDA



Map Created by: M.McGovern
 Map Version: 05
 Map Date: 21st November 2018

Frederick Street
EXHIBITED



32 Norfolk Street Perth

Plan of Subdivision

To be acquired:
PID 6744895
CT 450531
Area = 4651sqm

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 LST cells for 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.

EXHIBIT A



1:500 when printed at A3

1 centimetre = 5 metres

All heights are in metres

Coordinate system GDA 1994 MGA Zone 55
Base title from IM/ST/0 State of Tasmania



Map Created by: Madsgevern
Map Version: 03
Image Source: LST Cadastre
Map Date: 8 November 2018

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

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*.

Performance Criteria

- 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.

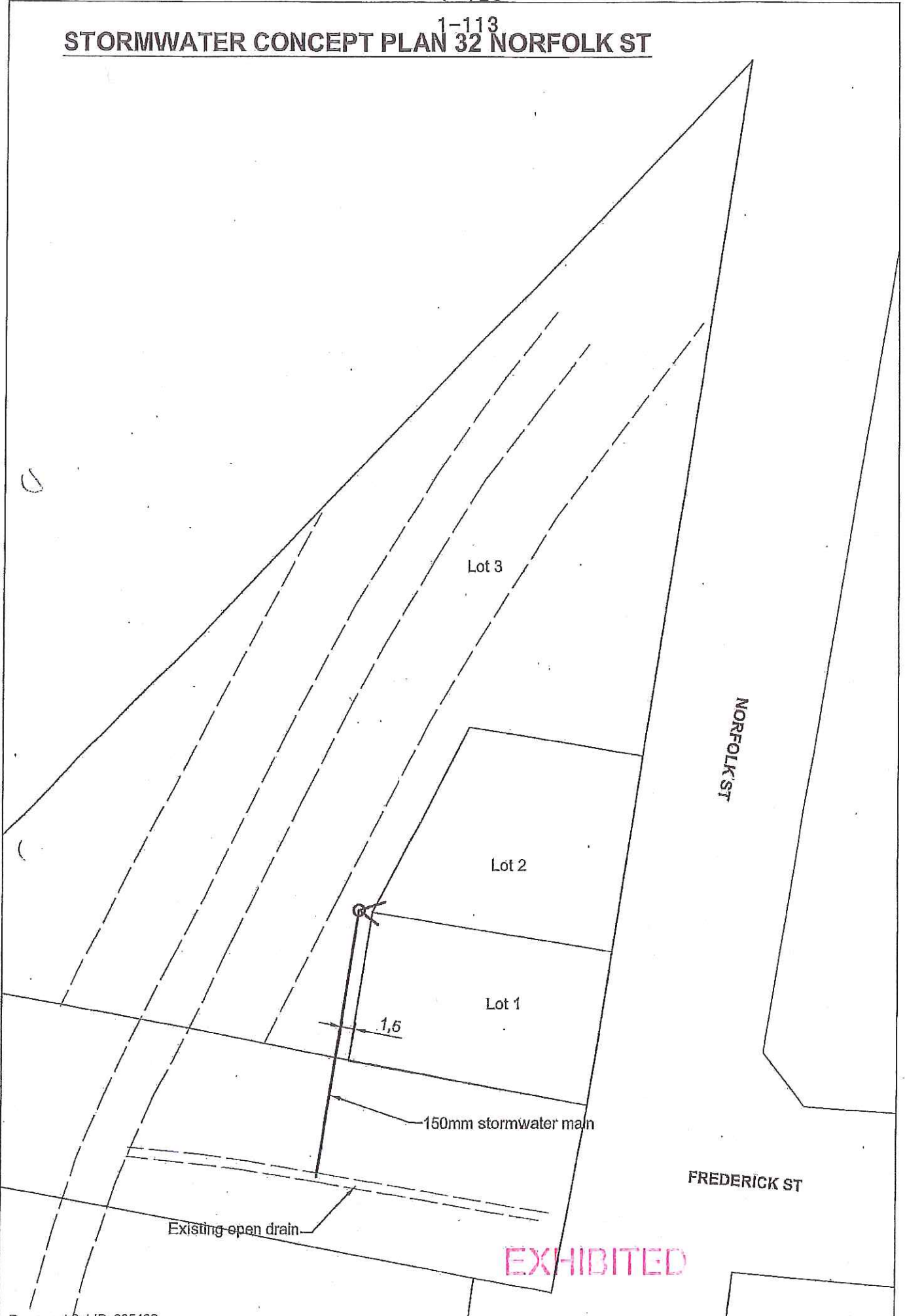
A2.2 For existing point source discharges into a wetland or watercourse there is to be no more than 10% increase over the discharge which existed at the effective date.

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

EXHIBITED

1-113
STORMWATER CONCEPT PLAN 32 NORFOLK ST



1-130

1-114

**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

Attr: 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.

EXHIBITED

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



NMC -- 32 Norfolk St, Perth, rail environmental noise and ground vibration impact assessment.

- 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.

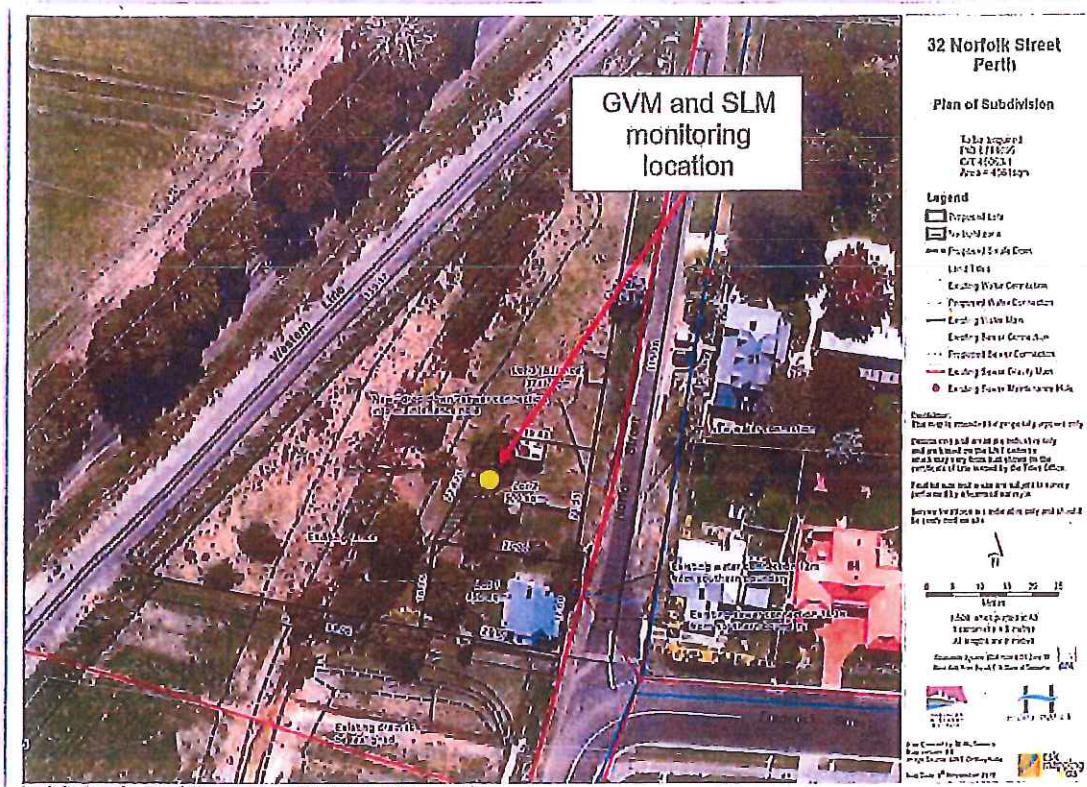


Figure 1 – Aerial view of 32 Norfolk St, Perth (provided by NMC).

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 L_n and L_{Aeq} statistics at 5-minute intervals.
- Instantel Minimate Plus GVM measuring peak particle velocity in mm/s at 5-minute intervals.

EXHIBIT D



NMC – 32 Norfolk St, Perth, rail environmental noise and ground vibration impact assessment.

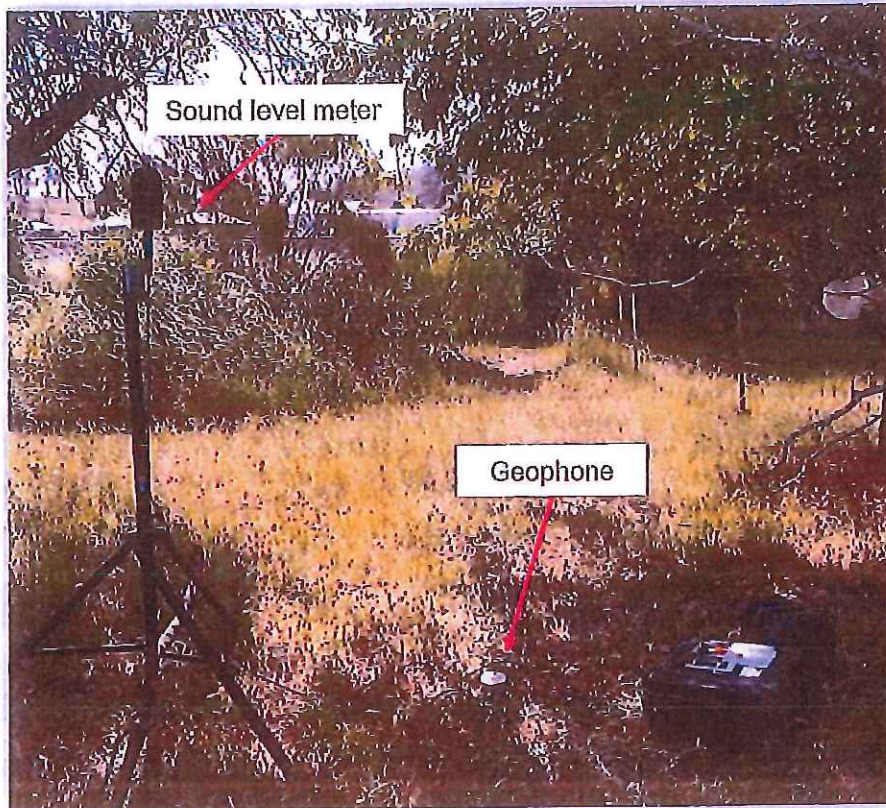


Figure 2 – Photo of SLM and GVM locations.

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

EXHIBITED



NMC – 32 Norfolk St, Perth, rail environmental noise and ground vibration impact assessment.

- 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.

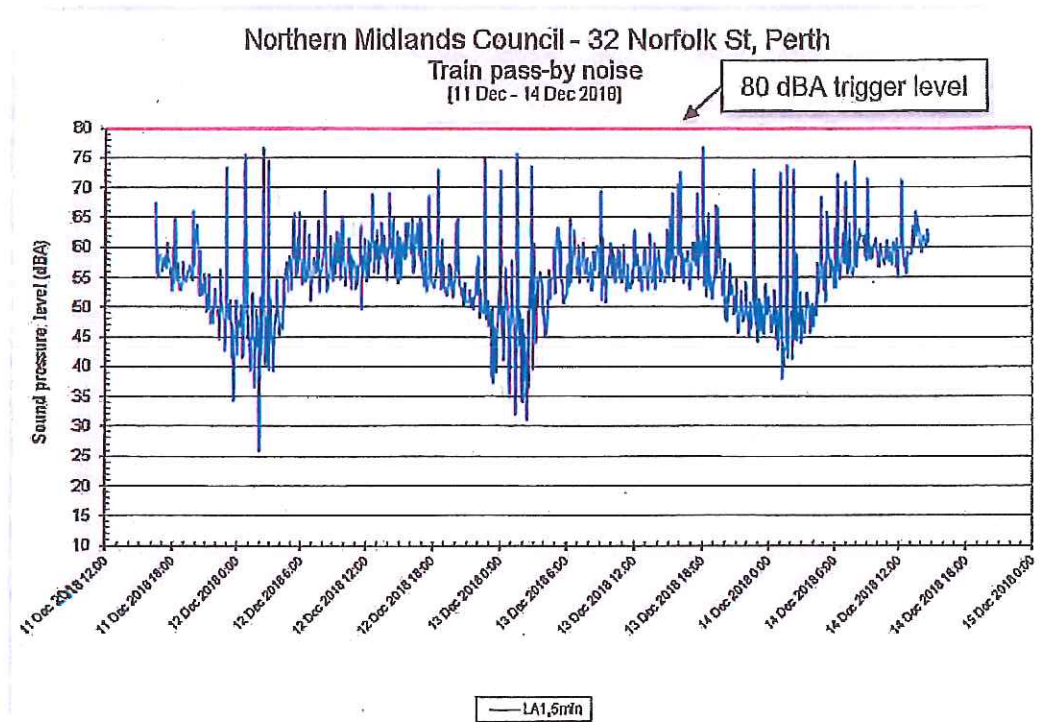


Figure 3 – Measured $L_{A1,5min}$ levels with trigger level indicated.

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 pass-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). Tarkari Engineering recommends that in the design of facade building elements for living and sleeping areas the following construction upgrades are considered to further reduce train pass-by noise intrusion:-



Ceiling/roof: Colorbond roof; 13mm plasterboard ceiling (surface mass of 10.4/kg/m²); 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.

EXHIBITED



NMC – 32 Norfolk St, Perth, rail environmental noise and ground vibration impact assessment.

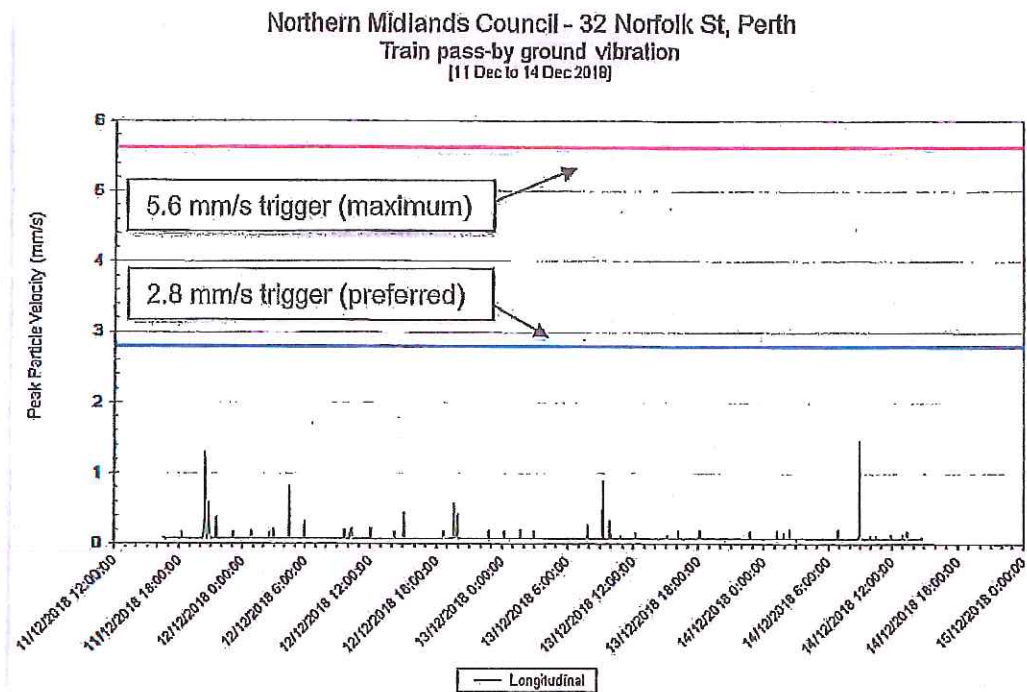


Figure 4 – Measured longitudinal PPV levels with guideline trigger levels.

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.

EXHIBITED

1-136

1-120



NMC – 32 Norfolk St, Perth, rail environmental noise and ground vibration impact assessment.

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

A handwritten signature in black ink that reads 'Alex McLeod'.

Dr. Alex McLeod
Principal Consultant

m. +61(0)439 357 297

email: alex.mcleod@tarkarri.com

EXHIBITED

1-137

1-121



Bushfire Hazard Assessment Report & Bushfire Hazard Management Plan

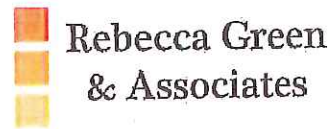
32 Norfolk Street, Perth



EXHIBIT D

1-138

1-122



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

EXHIBITED

1-139

1-123



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.

EXHIBIT D

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EXHIBITED

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.

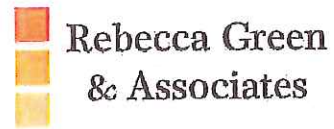
Lot 1 will have an area of 450m² and will contain an existing cottage. Lot 1 will have frontage to Norfolk Street.

Lot 2 will have an area of 500m² and will be vacant. Lot 2 will have frontage to Norfolk Street.

EXHIBITED

1-142

1-126



Lot 3 (Balance) will have an area of 3711m² 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

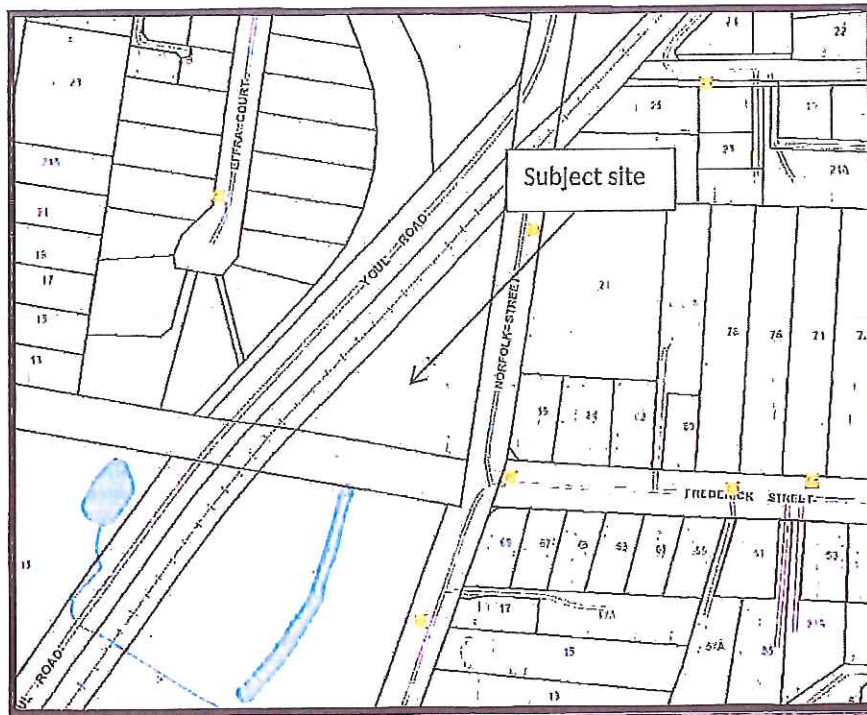


Figure 1: Location Plan of 32 Norfolk Street, Perth

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

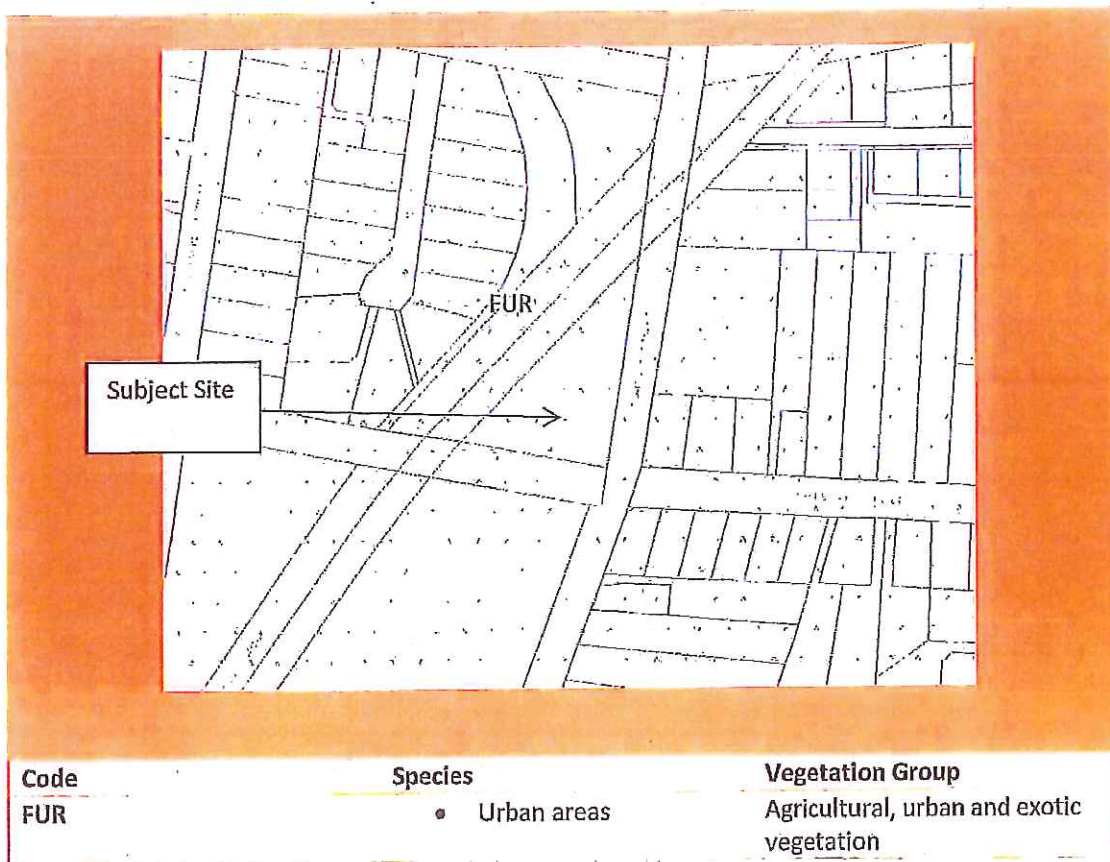
UNLIMITED

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:

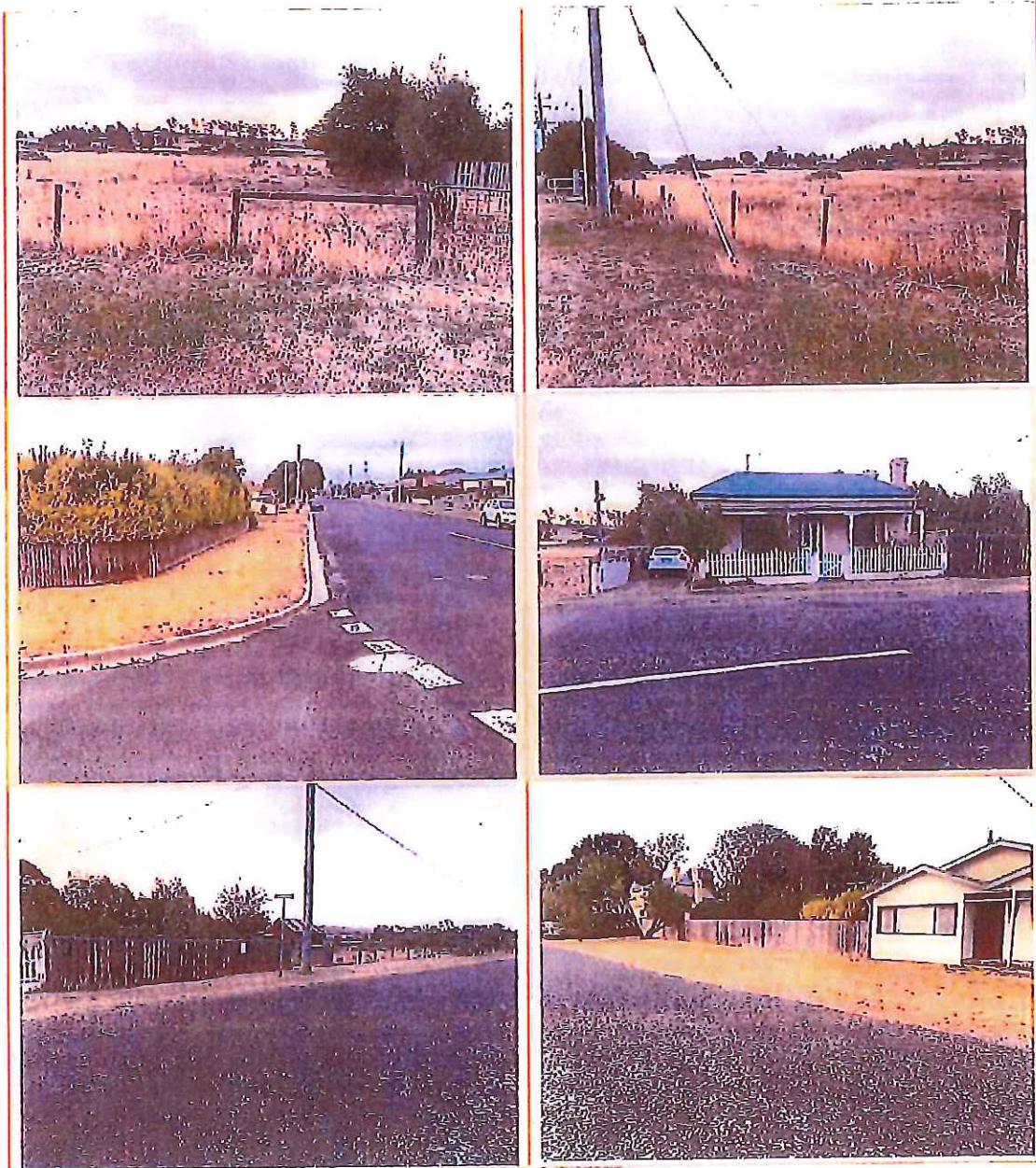


EXHIBITED

1-144

1-128


3.1.2 Site & Vegetation Photos



EXHIBITED

1-145

1-129

 Rebecca Green
& Associates



EXHIBIT

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 <input checked="" type="checkbox"/> North-East <input type="checkbox"/>	South <input checked="" type="checkbox"/> South-West <input type="checkbox"/>	East <input checked="" type="checkbox"/> South-East <input type="checkbox"/>	West <input checked="" type="checkbox"/> North-West <input type="checkbox"/>
Group A	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest
Group B	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland
Group C	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land
Group D	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub
Group E	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga
Group F	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest
Group G	<input checked="" type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland	<input type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland
	<input checked="" type="checkbox"/> Managed Land	<input type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land
Effective slope (degrees)	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°
	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°
	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°
	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°
	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°
Likely direction of bushfire attack	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prevailing winds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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

Lot 2

Vegetation classification AS3959	North <input checked="" type="checkbox"/> North-East <input type="checkbox"/>	South <input checked="" type="checkbox"/> South-West <input type="checkbox"/>	East <input checked="" type="checkbox"/> South-East <input type="checkbox"/>	West <input checked="" type="checkbox"/> North-West <input type="checkbox"/>
Group A	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest
Group B	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland
Group C	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land
Group D	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub
Group E	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga
Group F	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest
Group G	<input checked="" type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland	<input type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland
	<input type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land
Effective slope (degrees)	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°
	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°
	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°
	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°
	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°
Likely direction of bushfire attack	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prevailing winds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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

Lot 3 (Balance)

Vegetation classification AS3959	North <input checked="" type="checkbox"/> North-East <input type="checkbox"/>	South <input checked="" type="checkbox"/> South-West <input type="checkbox"/>	East <input checked="" type="checkbox"/> South-East <input type="checkbox"/>	West <input checked="" type="checkbox"/> North-West <input type="checkbox"/>
Group A	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Forest
Group B	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland	<input type="checkbox"/> Woodland
Group C	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land	<input type="checkbox"/> Shrub-land
Group D	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub	<input type="checkbox"/> Scrub
Group E	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga	<input type="checkbox"/> Mallee-Mulga
Group F	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest	<input type="checkbox"/> Rainforest
Group G	<input checked="" type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland	<input type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Grassland
	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land	<input checked="" type="checkbox"/> Managed Land
Effective slope (degrees)	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°	<input checked="" type="checkbox"/> Up/0°
	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°	<input type="checkbox"/> >0-5°
	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°	<input type="checkbox"/> >5-10°
	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°	<input type="checkbox"/> >10-15°
	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°	<input type="checkbox"/> >15-20°
Likely direction of bushfire attack	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prevailing winds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 .

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
<input checked="" type="checkbox"/>	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

		proposal complies.
<input type="checkbox"/>	P1	
E1.6.2 Public Access		
		Comments
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	A1 (b)	The private driveway to Lots 2 & 3 will be constructed/maintained in accordance with Table E2A.
<input type="checkbox"/>	P1	
<input checked="" type="checkbox"/>	A2	Not applicable.
<input type="checkbox"/>	P2	No PC
E1.6.3 Water supply for fire fighting purposes		
		Comments
<input checked="" type="checkbox"/>	A1 (a)	No increase in risk to existing dwelling on Lot 1.
<input type="checkbox"/>	P1	No PC
<input type="checkbox"/>	A2 (b)	Not applicable.
<input checked="" type="checkbox"/>	A2 (c)	Fire Hydrants are located within Norfolk Street and within 120 metres of the building areas – complies with Table E4.
<input type="checkbox"/>	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.

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

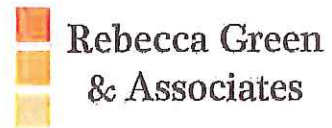
All Lots – Reticulated water supply is provided in Norfolk Street.

Fuel Managed Areas

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

1-152

1-136



Schedule 2 – Bushfire Hazard Management Plan

UNCLASSIFIED

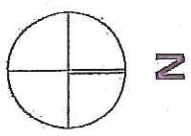


NOTES

- * 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-81039, R. GREEN, 5 FEBRUARY 2019

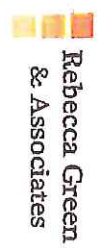
* THIS BHMP HAS BEEN PREPARED TO SATISFY THE REQUIREMENTS OF THE DIRECTORS DETERMINATION - REQUIREMENTS FOR BUILDING IN BUSHFIRE PRONE AREAS (V2.1)



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



1-154

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Form 55

EXHIBIT D

1-155

1-139

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Owner /Agent
 Address
 Suburb/postcode

Form **55**

Qualified person details:

Qualified person:
Address: Phone No: 0409 284 422
Fax No:
Licence No: Email address: admin@rgassociates.com.au

Qualifications and Insurance details: (description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

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

Details of work:

Address: Lot No: 1
Certificate of title No: 46063
The assessable item related to this certificate: (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: (description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items i)

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:

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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.

Qualified person:

Signed:



Certificate No:

RG-021/2019

Date:

5 February
2019

1-157

1-141



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

BUSHFIRE-PRONE AREAS CODE

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

1. Land to which certificate applies²

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:

Author:

Date: **Version:**

Bushfire Hazard Report

Title:

Author:

Date: **Version:**

Bushfire Hazard Management Plan

Title:

Author:

Date: **Version:**

Other Documents

Title:

Author:

Date: **Version:**

UNRECORDED

4. Nature of Certificate

<input type="checkbox"/>	E1.4 – Use or development exempt from this code		
	Assessment Criteria	Compliance Requirement	Reference to Applicable Document(s)
<input type="checkbox"/>	E1.4 (a)	Insufficient increase in risk	

<input type="checkbox"/>	E1.5.1 – Vulnerable Uses		
	Assessment Criteria	Compliance Requirement	Reference to Applicable Document(s)
<input type="checkbox"/>	E1.5.1 P1	Residual risk is tolerable	
<input type="checkbox"/>	E1.5.1 A2	Emergency management strategy	
<input type="checkbox"/>	E1.5.1 A3	Bushfire hazard management plan	

<input type="checkbox"/>	E1.5.2 – Hazardous Uses		
	Assessment Criteria	Compliance Requirement	Reference to Applicable Document(s)
<input type="checkbox"/>	E1.5.2 P1	Residual risk is tolerable	
<input type="checkbox"/>	E1.5.2 A2	Emergency management strategy	
<input type="checkbox"/>	E1.5.2 A3	Bushfire hazard management plan	

<input checked="" type="checkbox"/>	E1.6 – Development standards for subdivision		
	E1.6.1 Subdivision: Provision of hazard management areas		
	Assessment Criteria	Compliance Requirement	Reference to Applicable Document(s)
<input type="checkbox"/>	E1.6.1 P1	Hazard Management Areas are sufficient to achieve tolerable risk	
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.

<input type="checkbox"/>	E1.6.1 A1 (c)	Consent for Part 5 Agreement	
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E1.6.2 Subdivision: Public and fire fighting access			
	Assessment Criteria	Compliance Requirement	Reference to Applicable Document(s)
<input type="checkbox"/>	E1.6.2 P1	Access is sufficient to mitigate risk	
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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)
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	E1.6.3 A1 (c)	Water supply consistent with the objective	
<input type="checkbox"/>	E1.6.3 A2 (a)	Insufficient increase in risk	
<input type="checkbox"/>	E1.6.3 A2 (b)	Static water supply complies with Table E5	
<input type="checkbox"/>	E1.6.3 A2 (c)	Static water supply is consistent with the objective	

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5. Bushfire Hazard Practitioner³

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 –

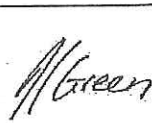
<i>The use or development described in this certificate is exempt from application of Code E1 – Bushfire-Prone Areas in accordance with Clause E1.4 (a) because there is an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measure in order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

or

<i>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.</i>	<input type="checkbox"/>
--	--------------------------

and/or

<i>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.</i>	<input checked="" type="checkbox"/>
--	-------------------------------------

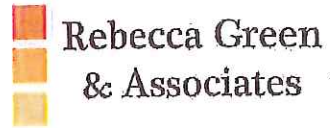
Signed: certifier 

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.

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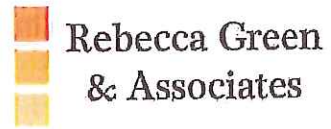


Attachment 2 – AS3959-2009 Construction Requirements

	BAL-LOW	BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-FZ (FLAMEZONES)
SUBFLOOR SUPPORTS				Subfloor supports must be constructed to resist the effects of fire for the duration of the fire resistance period. The supports must be protected with a fire resistant material.	Subfloor supports must be constructed to resist the effects of fire for the duration of the fire resistance period. The supports must be protected with a fire resistant material.	Subfloor supports must be constructed to resist the effects of fire for the duration of the fire resistance period. The supports must be protected with a fire resistant material.
FLOORS				Floors must be constructed to resist the effects of fire for the duration of the fire resistance period. The floor must be protected with a fire resistant material.	Floors must be constructed to resist the effects of fire for the duration of the fire resistance period. The floor must be protected with a fire resistant material.	Floors must be constructed to resist the effects of fire for the duration of the fire resistance period. The floor must be protected with a fire resistant material.
EXTERNAL WALLS				External walls must be constructed to resist the effects of fire for the duration of the fire resistance period. The walls must be protected with a fire resistant material.	External walls must be constructed to resist the effects of fire for the duration of the fire resistance period. The walls must be protected with a fire resistant material.	External walls must be constructed to resist the effects of fire for the duration of the fire resistance period. The walls must be protected with a fire resistant material.
EXTERNAL WINDOWS				External windows must be constructed to resist the effects of fire for the duration of the fire resistance period. The windows must be protected with a fire resistant material.	External windows must be constructed to resist the effects of fire for the duration of the fire resistance period. The windows must be protected with a fire resistant material.	External windows must be constructed to resist the effects of fire for the duration of the fire resistance period. The windows must be protected with a fire resistant material.
EXTERNAL DOORS				External doors must be constructed to resist the effects of fire for the duration of the fire resistance period. The doors must be protected with a fire resistant material.	External doors must be constructed to resist the effects of fire for the duration of the fire resistance period. The doors must be protected with a fire resistant material.	External doors must be constructed to resist the effects of fire for the duration of the fire resistance period. The doors must be protected with a fire resistant material.
ROOFS				Roofs must be constructed to resist the effects of fire for the duration of the fire resistance period. The roof must be protected with a fire resistant material.	Roofs must be constructed to resist the effects of fire for the duration of the fire resistance period. The roof must be protected with a fire resistant material.	Roofs must be constructed to resist the effects of fire for the duration of the fire resistance period. The roof must be protected with a fire resistant material.
VERANDAS DECKS ETC.				Verandas, decks, etc. must be constructed to resist the effects of fire for the duration of the fire resistance period. The structure must be protected with a fire resistant material.	Verandas, decks, etc. must be constructed to resist the effects of fire for the duration of the fire resistance period. The structure must be protected with a fire resistant material.	Verandas, decks, etc. must be constructed to resist the effects of fire for the duration of the fire resistance period. The structure must be protected with a fire resistant material.

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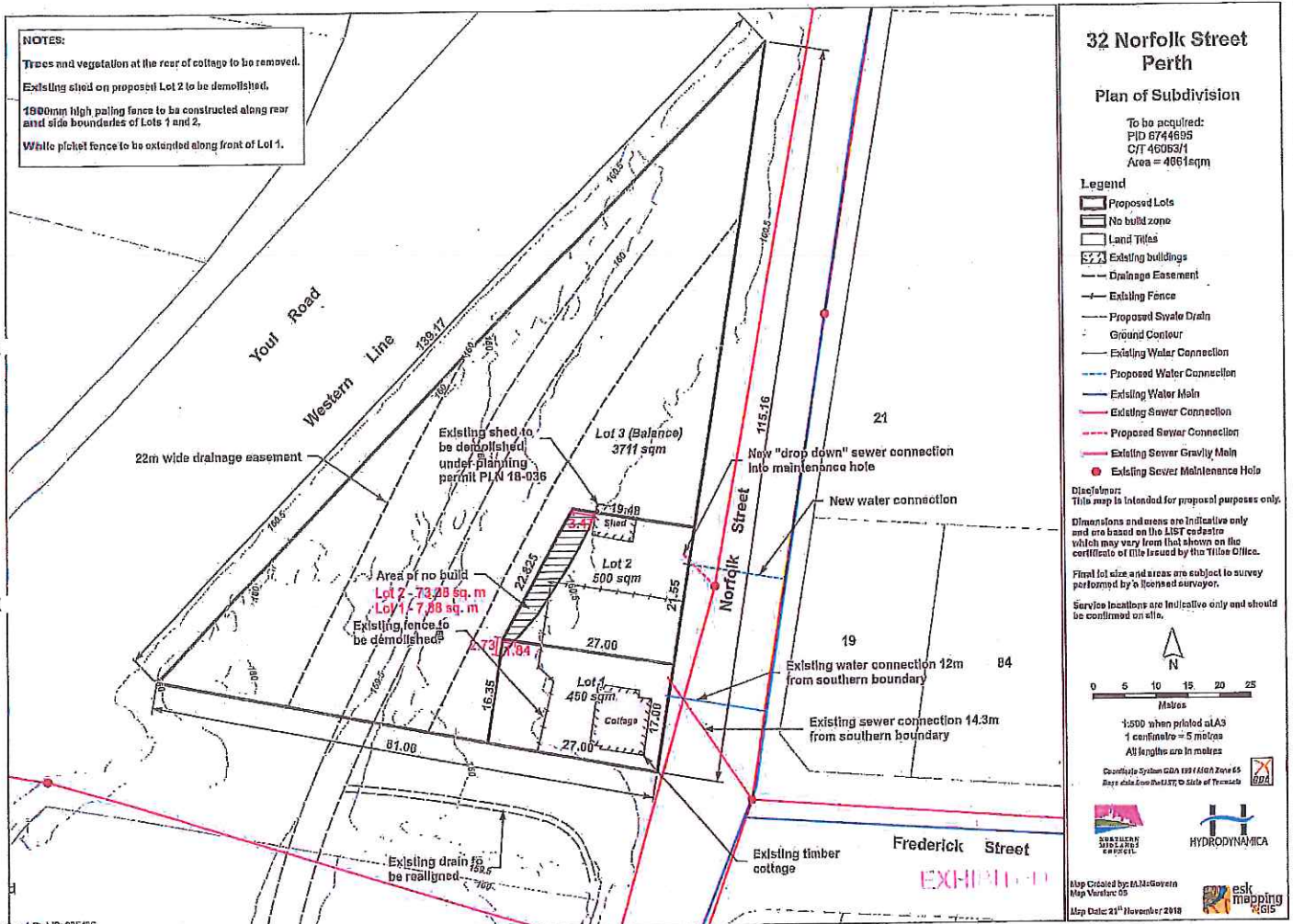


Attachment 3 – Proposed Subdivision

Northern Midlands Council

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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

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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 m²) will contain the existing dwelling, lot 2 (500 m²) will be an additional residential lot, and lot 3 (3711 m²) 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.

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44 Penquite Road
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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:

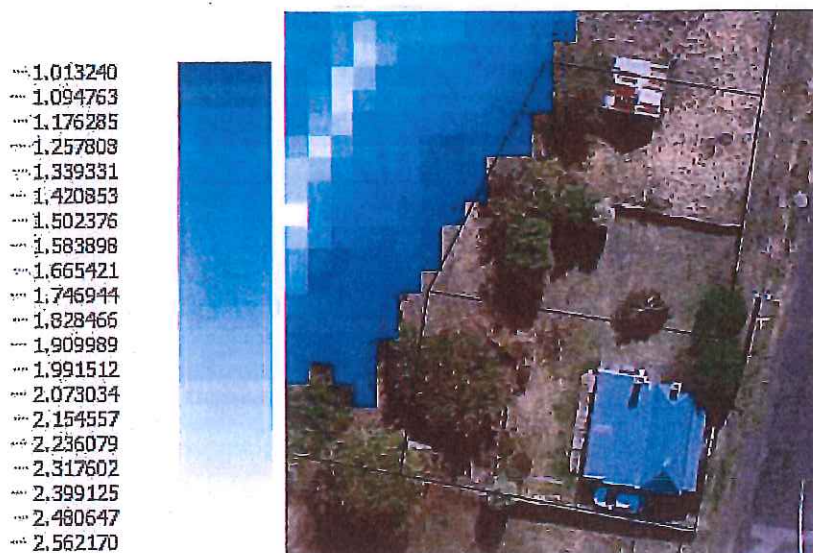


Figure 1. 32 Norfolk Street flood hazard and key

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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	$D*V \leq 0.3$	0.3	2.0
H2	$D*V \leq 0.6$	0.5	2.0
H3	$D*V \leq 0.6$	1.2	2.0
H4	$D*V \leq 1.0$	2.0	2.0
H5	$D*V \leq 4.0$	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

$0.3V = -0.065$

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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:

$$D(2.5) = 0.085 \text{ or}$$

$$D = 0.034\text{m} = 34\text{mm}$$

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:

$$0.3 + 0.5D = 0.085$$

$$D = -0.215\text{m}$$

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.

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

A handwritten signature in dark ink, appearing to read 'Cameron Oakley', is written over the printed name.

Cameron Oakley

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

HYDRODYNAMICA

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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

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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

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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			
<p>SUBMISSION TO PLANNING AUTHORITY NOTICE OF PLANNING APPLICATION REFERRAL</p> <p>Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:</p> <p>CONNECTIONS, METERING & BACKFLOW</p> <ol style="list-style-type: none"> 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. <p>FINAL PLANS, EASEMENTS & ENDORSEMENTS</p> <ol style="list-style-type: none"> 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. <i>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.</i> <p>DEVELOPMENT ASSESSMENT FEES</p> <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> a. \$211.63 for development assessment; and 			

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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, PerthW.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

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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

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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

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

The proposed 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 this 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

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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

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Extant Record – “Well”

Lot 2, 32 Norfolk Street
Perth, 7300

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

17th April, 2019

1-182

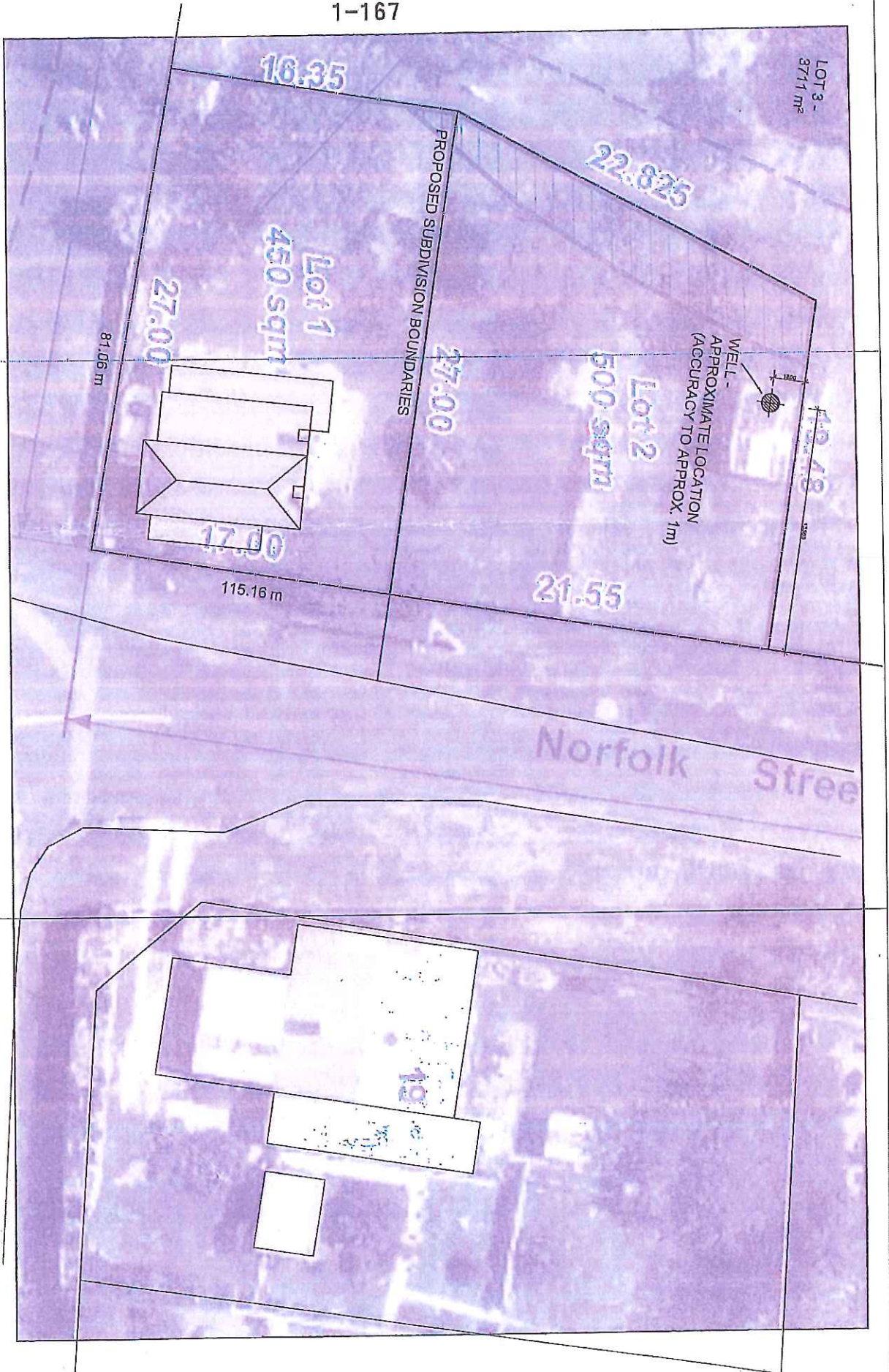
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Scale ID	Revision ID	Description	Date
A		For Review	17/04/19

PROJECT: Ekant Road - Well
 ADDRESS: Lot 2, 32 Norfolk Street, Perth
 CLIENT: NMC

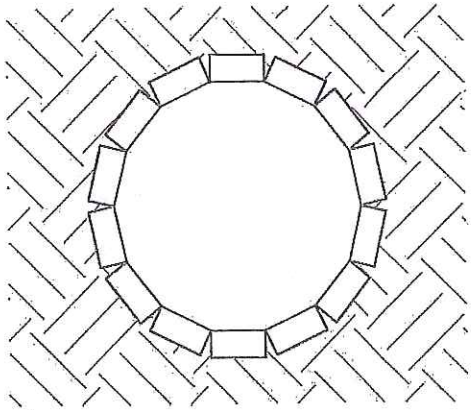
drawing: 7/51 WILLIAM STREET
 scale: 1:300 @ A3
 date: 17/04/19

Site / Location Plan
 7/51 WILLIAM STREET
 LANCASTER, WA 6150
 phone: 08 9438 4888
 www: demeridigital.com



1-184

1-168

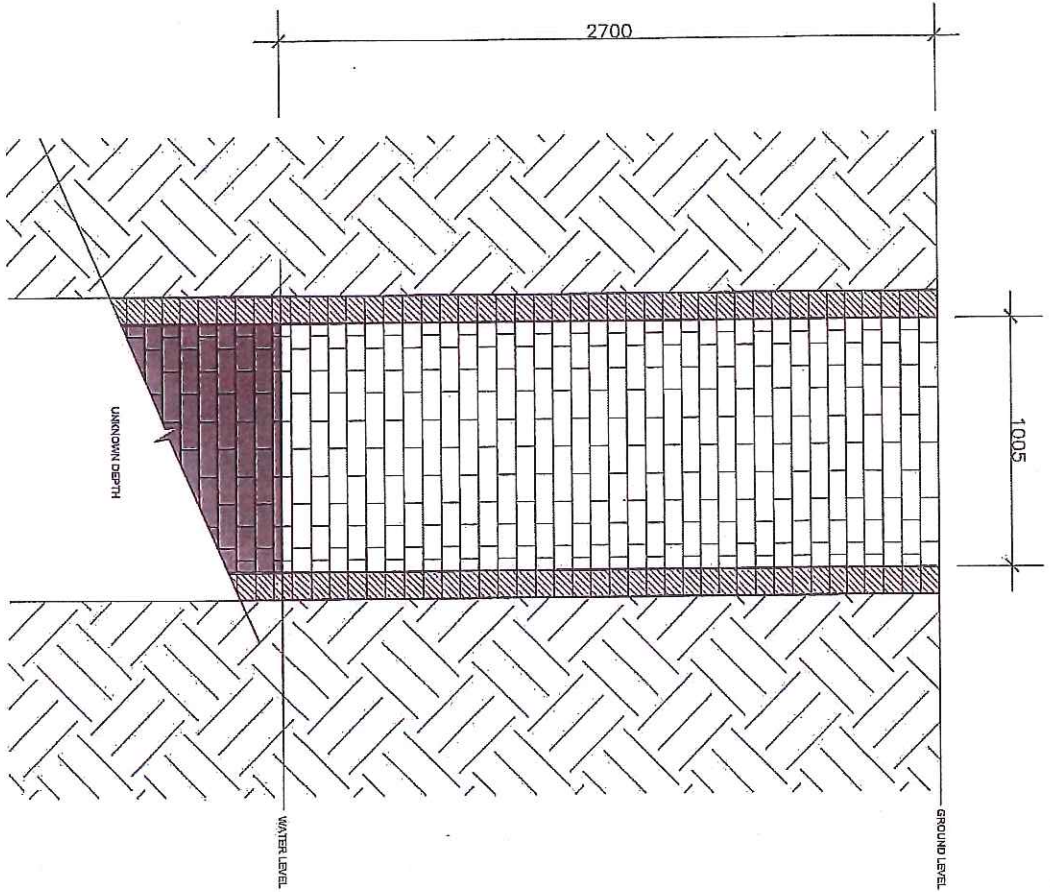


PLAN

230 x 110 x 70 corbel bricks
 Dry layed in Scaffolding sand
 14 Bricks per course
 38 Courses visible
TOTAL: 502 Bricks visible



TYPICAL BRICK



SECTION - INTERNAL ELEVATION

Issue ID	Revision ID	Description	Date
A		For Review	17.04.19

PROJECT: Exant Record - Wall
 ADDRESS: Lot 2, 32 Norfolk Street, Perth
 CLIENT: NMC

drawing: Plan - Section - Internal Elevation
 scale: 1:20 @ A3
 date: 17.04.19
 7.1.81 WILLIAM STREET
 LAININGSTON, WA 6050
 phone: 08 9234 4589
 email: info@hollandandmerritt.com.au
 www: hollandandmerritt.com.au



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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

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Photo 3 – View of well from NE



Photo 4 – View down well

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Photo 5 – Close view of well from SW

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Photo 6 – Detail from NE

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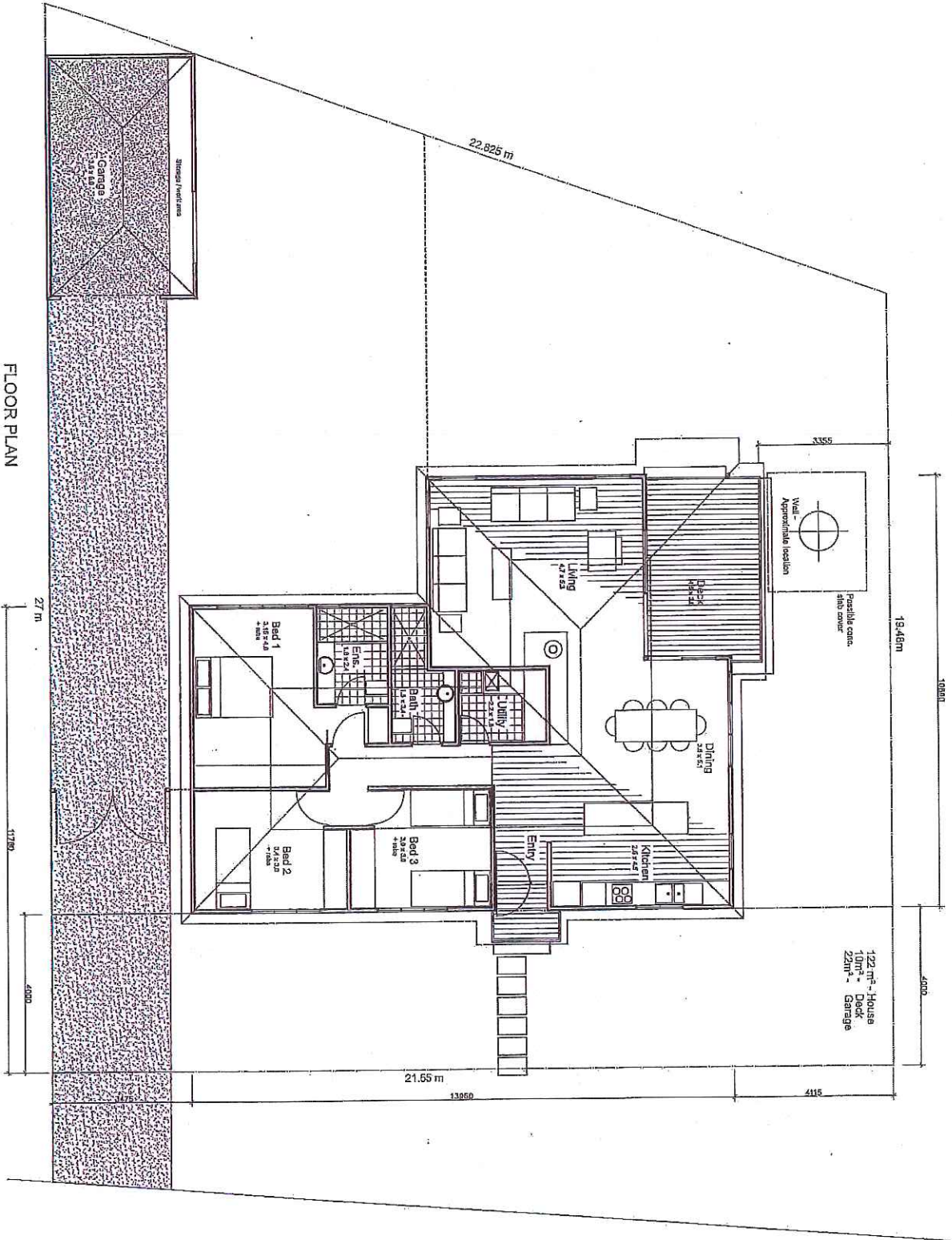
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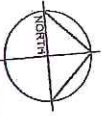
Photo 7 – Typical convict brick, with thumb prints on opposite corners

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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

7/150 WILLIAM STREET
 LONDON/PERTH, WA 6150
 phone: 08 9328 4589
 www: edmondshades.com.au





Tasmanian Heritage Council
GPO Box 618 Hobart Tasmania 7000
Tel: 1300 850 332
enquiries@heritage.tas.gov.au
www.heritage.tas.gov.au

27 January 2021

Ms Barbara Rees

Via email: brees2007@bigpond.com

Dear Ms Rees

I write in response to your email of 20 January 2021 in which you request that the Tasmanian Heritage Council place a stop work notice on the current kerb and gutter works being undertaken in the vicinity of 32 Norfolk Street Perth by the Northern Midlands Council.

I also note receipt of the Darren Watton Report (Southern Archaeology - December 2020) on 32 Norfolk Street commissioned by the Perth Historical Action Group (PHAG).

I recognise the strong interest shown by you and PHAG in the discovery and recognition of historic cultural heritage in Perth.

After careful consideration, I must advise that in this instance the Heritage Council is not able to provide the requested stop works notice. This position is based on the following:

- The *Historic Cultural Heritage Act 1995* is explicit in limiting the Heritage Council's regulatory powers to any place that is entered in the Tasmanian Heritage Register or, in section 57, to places that the Heritage Council considers should be entered in the Tasmanian Heritage Register.
- In this particular case, neither 32 Norfolk Street or the associated well are entered in the Heritage Register, and the Heritage Council has no information that leads it to believe that either of these sites have State historic cultural heritage values that would meet the criteria for entry in the Heritage Register. The recent report by Darren Watton does not provide information or expert advice that indicates this to be the case.
- The Watton report does recommend that the site has local heritage significance, with Southern Archaeology's stated opinion that protection of the property would be best sought through local government means.
- Even if the current works in the road corridor in the vicinity of 32 Norfolk Street, were deemed to be diminishing the heritage values of the place, by changing aspects of the place's setting that contribute to its historic cultural heritage significance, the Heritage Council would not have jurisdiction to regulate such works.

While the Heritage Council has no ability to intervene with the current roadworks, it remains committed to updating the Tasmanian Heritage Register entry for the former inn at 21 Norfolk Street, Perth, to include information on Dalrymple Johnston and her initial land grant as part of the place's history.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Brett Torossi', written in a cursive style.

Ms Brett Torossi
Chair
Tasmanian Heritage Council

**32 Norfolk St, Perth, Tasmania Community Interest Historical Heritage
Assessment Report (HHAR)**

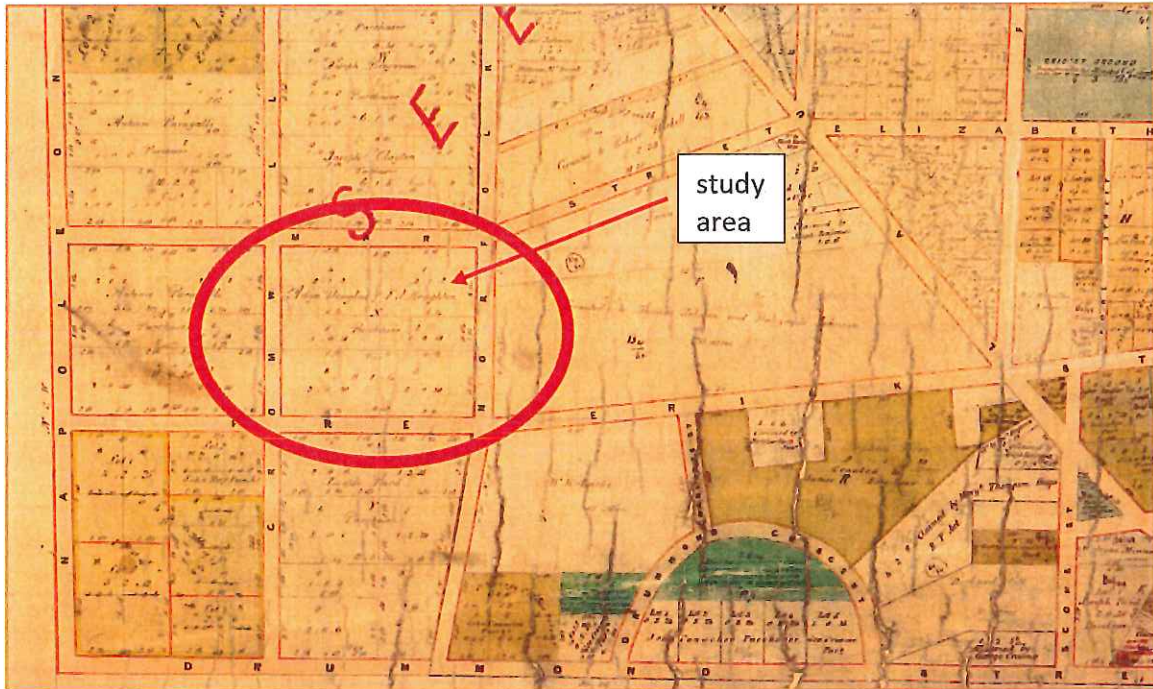


Figure 1: Section of 1800s Grant Plan showing the study area. Source: Libraries Tasmania Ref: AF721-1-511 2 accessed 2020.


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**For: Perth Historical Interest Group
Contact: Barbara Rees
Perth, Tasmania**

**Version 1
Author: Darren Watton**

Date: 9th December 2020.

1 Executive summary

1.1 Introduction

Southern Archaeology (SA) has been asked by the Perth Historical Action Group (PHAG) to prepare a Historical Heritage Assessment Report (HHAR) for 32 Norfolk Street Perth, Tasmania (the study area). A late 1800s house and recently found handmade (sandstock) brick well are located on the study area block. The study area is currently owned by the Northern Midlands Council (NMC) and is being subdivided for residential housing and open space.

The well was found at the study area located under an old shed during subdivision and remedial works. The well has since been capped with concrete by the NMC. There has been considerable media attention around the site since the property was purchased by the NMC, subdivision was proposed and after the historic well was discovered.

An Extant Report was prepared by David Denman's and Associates in 2019 for the NMC. This provides some measurements for the well and refers to the sandstock bricks as being 'convict' bricks. There is no evidence that convicts built this well. No historical background is provided in the 2019 Extant Report by David Denman and Associates (2019) and this is the purpose of this HHAR.

PHAG wishes further heritage protection for the study area especially in relation to the house and well on the property. An ideal outcome would be for the house and well to remain on one title and for no structure or development to occur on or between these two structures that will impact or take away from the heritage values and association (relationship) between the two.

This report was completed as a desktop review. Physical inspection of the site has not been possible at this point especially since the well has already been capped with concrete by the NMC.

1.2 Location and description summary

The study area is located on the corner of Norfolk Street and Drummond Street in Perth. The study area contains a small dwelling (probably built around 1885 to 1890 - **Figure 3**) known as Lot 1/32 Norfolk Street. Lot 2/32 Norfolk Street contains a handmade (sandstock) brick well (probably also built around 1885 to 1890 - Error! Reference source not found.) which was originally attached and associated with the dwelling. Both these structures face Norfolk Street. A section of railway line (currently still operating), a section of creek known as Sheepwash Creek and some open space currently occupies the rest of the study area (known as Lot 3/32 Norfolk Street) and is currently being developed for subdivision (see **Figure 1 to Figure 3**). This property is not listed on the Tasmanian Heritage Register or any national registers.

Historically, this land was first granted to Adye Douglas and Frederick James Houghton in 1848. Douglas and Houghton sold the property in 1855 and it has had a string of private

owners since that time. The Launceston and Western Railway Company (L&WR Co.) acquired some of the land for the railway in 1868.

The dwelling and well were built by William Dennis the Younger around 1885 to 1890. The Dennis family owned the property from 1885 to c. 1987. This is based upon historical evidence contained within this report, oral history analysis and professional opinion.

This document provides a historical overview of the property including a summary of the history of Perth, a brief overview of the study area's significance (considering its historic and archaeological potential, disturbance and values) and some recommendations for the property.

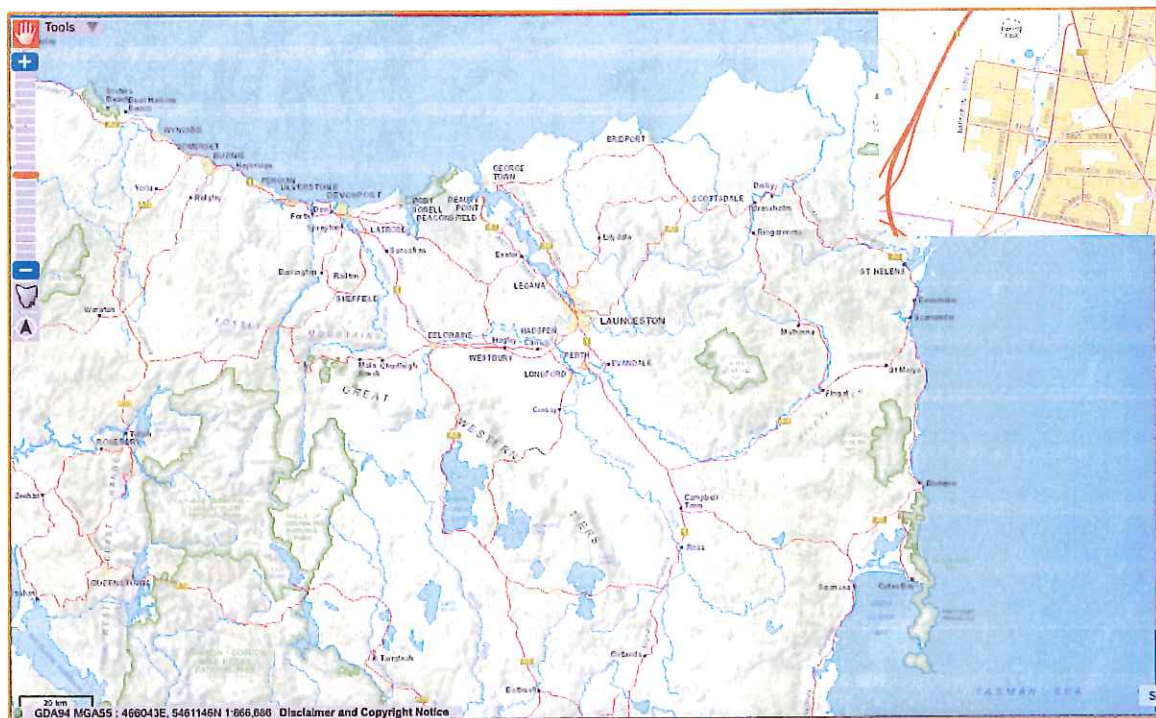


Figure 2: Location of the study area. Compiled by Darren Watton using List Map and Adobe Illustrator 2020.



Figure 3: dwelling located at 32 Norfolk St, Perth. Photograph by Darren Watton 2020.

1.3 Summary of recommendations

The relationship between the house and well at 32 Norfolk Street is significant at a local level. The following two recommendations are made for the study area:

1. Recommendation 1:

It is recommended that the house and well at 32 Norfolk Street remain or be returned to a single title and the integrity of the structures be maintained. It is Southern Archaeology's opinion that the separation of the well from the house interrupts the relationship and association between the two structures and impacts the site's local heritage values.

2. Recommendation 2:

It is further recommended that the property be protected from any further development either on or between the house and well at 32 Norfolk Street. This would preserve the relationship and association between the two structures. This could possibly be managed through Section 71 of the *Land Use Planning and Approvals Act 1993* (a Part V agreement) that prohibits building on or between the two structures and preserves the integrity and relationship between the two structures.

Note: An application may be made to place this property on the Heritage register through Heritage Tasmania. However, it is Southern Archaeology's opinion that protection of the property would be best sought through local government means.

32 Norfolk St, Perth, Tasmania Community Interest Historical Heritage Assessment Report (HHAR)

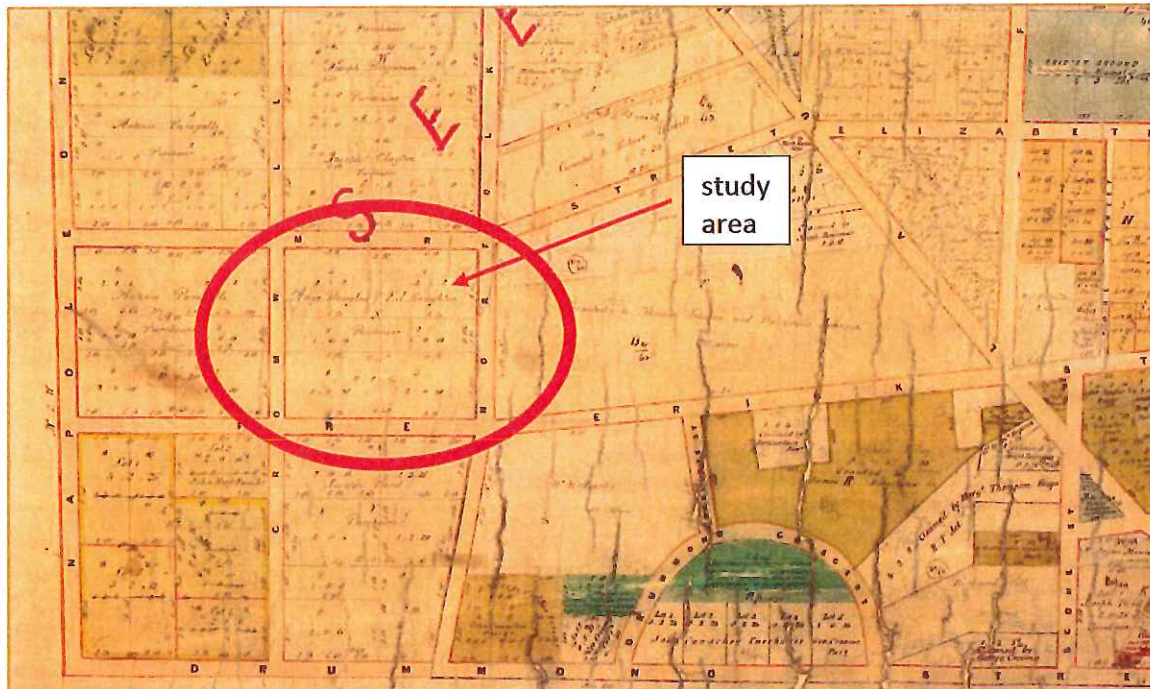


Figure 1: Section of 1800s Grant Plan showing the study area. Source: Libraries Tasmania Ref: AF721-1-511 2 accessed 2020.



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For: Perth Historical Interest Group

Contact: Barbara Rees

Perth, Tasmania

Version 1

Author: Darren Watton

Date: 6th December 2020.



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**32 Norfolk St, Perth, Tasmania Community Interest Historical Heritage
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1 Quality assurance

Item	Comment
Version	Version 1
Reason for review	Ensure standards of reporting met and approved
Status	Draft 1
Prepared by	Darren Watton Principal Archaeologist Southern Archaeology
Reviewed and recommended by	Perth Historical Interest Group
Authorised by	Darren Watton
Issued Date and contacts	Issued to John Dent 3 rd December 2020 for editing; 6 th December edits completed. Issued to Barbara Rees and John Dent 6 th December 2020 for first edit. 8 th December 2020 edits completed. Final issued 9 th December 2020.



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2 Executive summary

2.1 Introduction

Southern Archaeology (SA) has been asked by the Perth Historical Action Group (PHAG) to prepare a Historical Heritage Assessment Report (HHAR) for 32 Norfolk Street Perth, Tasmania (the study area). A late 1800s house and recently found handmade (sandstock) brick well are located on the study area block. The study area is currently owned by the Northern Midlands Council (NMC) and is being subdivided for residential housing and open space.

The well was found at the study area located under an old shed during subdivision and remedial works. The well has since been capped with concrete by the NMC. There has been considerable media attention around the site since the property was purchased by the NMC, subdivision was proposed and after the historic well was discovered.

An Extant Report was prepared by David Denman's and Associates in 2019 for the NMC. This provides some measurements for the well and refers to the sandstock bricks as being 'convict' bricks. There is no evidence that convicts built this well. No historical background is provided in the 2019 Extant Report by David Denman and Associates (2019) and this is the purpose of this HHAR.

PHAG wishes further heritage protection for the study area especially in relation to the house and well on the property. An ideal outcome would be for the house and well to remain on one title and for no structure or development to occur on or between these two structures that will impact or take away from the heritage values and association (relationship) between the two.

This report was completed as a desktop review. Physical inspection of the site has not been possible at this point especially since the well has already been capped with concrete by the NMC.

2.2 Location and description summary

The study area is located on the corner of Norfolk Street and Drummond Street in Perth. The study area contains a small dwelling (probably built around 1885 to 1890 - **Figure 3**) known as Lot 1/32 Norfolk Street. Lot 2/32 Norfolk Street contains a handmade (sandstock) brick well (probably also built around 1885 to 1890 - **Figure 4**) which was originally attached and associated with the dwelling. Both these structures face Norfolk Street. A section of railway line (currently still operating), a section of creek known as Sheepwash Creek and some open space currently occupies the rest of the study area (known as Lot 3/32 Norfolk Street) and is currently being developed for subdivision (see **Figure 1 to Figure 3**). This property is not listed on the Tasmanian Heritage Register or any national registers.



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Historically, this land was first granted to Adye Douglas and Frederick James Houghton in 1848. Douglas and Houghton sold the property in 1855 and it has had a string of private owners since that time. The Launceston and Western Railway Company (L&WR Co.) acquired some of the land for the railway in 1868.

The dwelling and well were built by William Dennis the Younger around 1885 to 1890. The Dennis family owned the property from 1885 to c. 1987. This is based upon historical evidence contained within this report, oral history analysis and professional opinion.

This document provides a historical overview of the property including a summary of the history of Perth, a brief overview of the study area's significance (considering its historic and archaeological potential, disturbance and values) and some recommendations for the property.



Figure 2: Location of the study area. Compiled by Darren Watton using List Map and Adobe Illustrator 2020.



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Figure 3: dwelling located at 32 Norfolk St, Perth. Photograph by Darren Watton 2020.

2.3 Summary of recommendations

The relationship between the house and well at 32 Norfolk Street is significant at a local level. The following two recommendations are made for the study area:

1. Recommendation 1:

It is recommended that the house and well at 32 Norfolk Street remain or be returned to a single title and the integrity of the structures be maintained. It is Southern Archaeology's opinion that the separation of the well from the house interrupts the relationship and association between the two structures and impacts the sites local heritage values.

2. Recommendation 2:

It is further recommended that the property be protected from any further development either on or between the house and well at 32 Norfolk Street. This would preserve the relationship and association between the two structures. This could possibly be managed through Section 71 of the *Land Use Planning and Approvals Act 1993* (a Part V agreement) that prohibits building on or between the two structures and preserves the integrity and relationship between the two structures.



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Note: An application may be made to place this property on the Heritage register through Heritage Tasmania. However, it is Southern Archaeology's opinion that protection of the property would be best sought through local government means.



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3 Previous Report by David Denman and Associates (2019)

3.1 Introduction

David Denman and Associates of 7/59 William Street in Launceston provided an Extant Report for Lot 2/32 Norfolk Street on the 17th April 2019. This was provided at the request of the Northern Midlands Council and was in response to media attention and community interest after a handmade sandstock brick well was found at the property. The Extant Report briefly records the well (location and basic measurements), provides some photographs and refers to the well as containing 'convict' bricks due to the handmade nature (thumbprints etc.) of the bricks used in its construction. No other markings were recorded on the bricks. Media attention and community interest has since intensified. The Perth Historic Action Group (PHAG) was formed in response and has since voiced concerns over the protection of the well and the associated dwelling at the study area.

Details about the history of the property and any further recommendations were not provided in the Extant Report. The NMC has used this report and other information as a basis for further protection (a concrete cap) and a Part 5 Agreement for the property. This Part 5 agreement does not limit building and development at the site and the house and well have been separated on the title.

Southern Archaeology has not been able to inspect the well or property at this time, so the following map and photographs have been provided from the Extant Report (**Figure 4 to Figure 6**). These show some details of the well.





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Figure 4: Series of photos of the well. Source: David Denman and Associates 2019.



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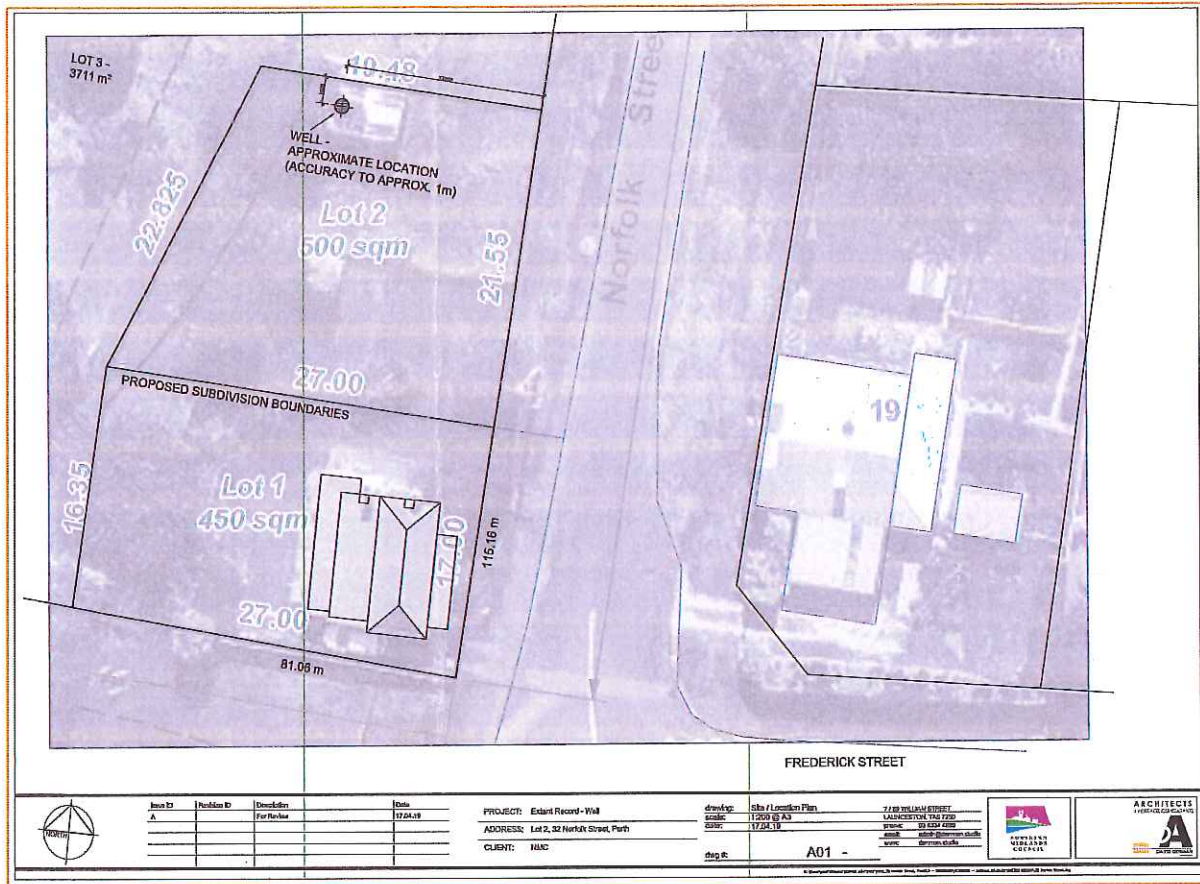


Figure 5: Location of the well at the study area. Source: David Denman and Associates 2019.



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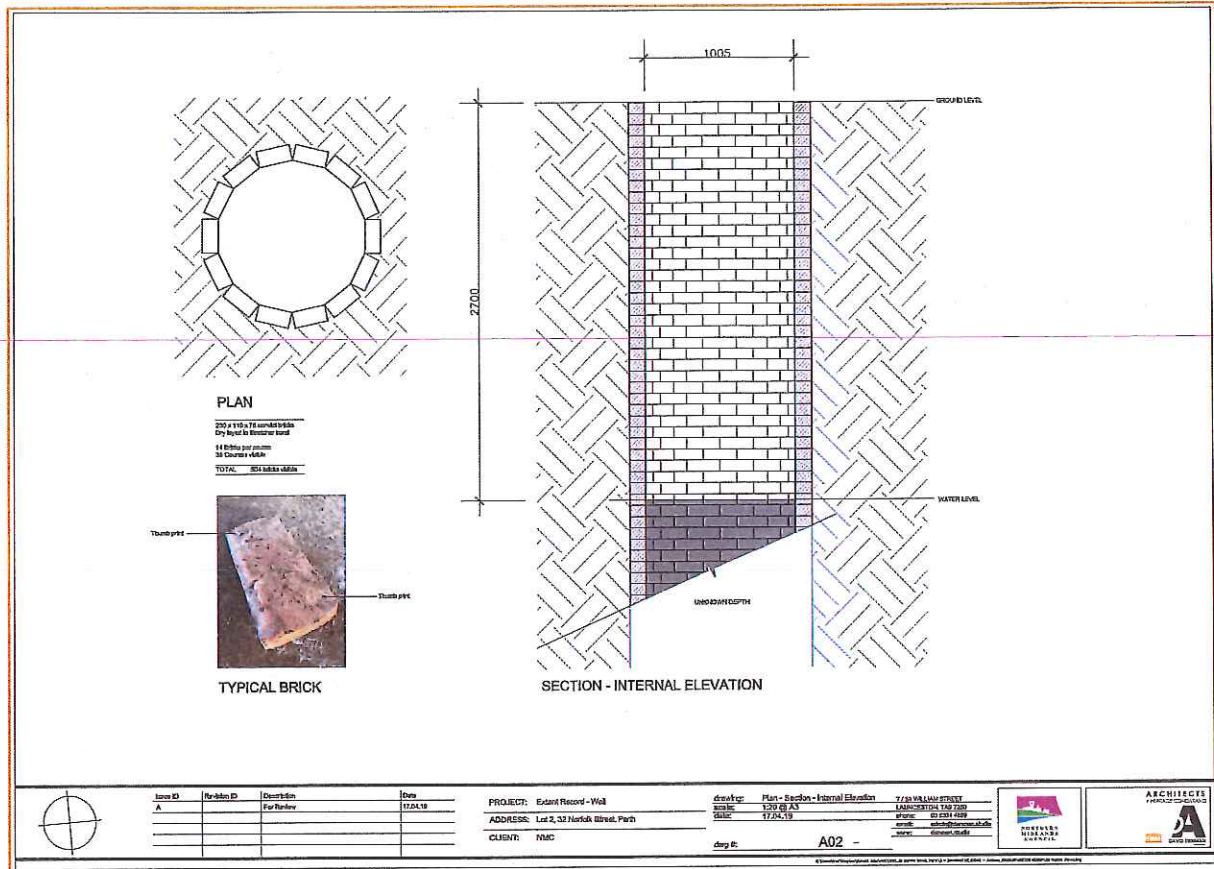


Figure 6: Sketch plan of the well at the study area. Source: David Denman and Associates 2019.

3.2 Is the well convict built?

There are issues with this well being associated with convicts. These are:

- Association to convicts is difficult to substantiate as not all handmade bricks are convict made. Handmade bricks were made by a variety of people including convicts, government people, contractors and organisations, private builders and contractors and private citizen's including for their private homes.
- Convict brick making and convict made bricks declined rapidly after the 1850s when convict transportation ended.
- Handmade or sandstock bricks were generally made before the 1880s (although handmade bricks are known to have been made (especially in smaller and rural centres) after this and possibly to as late as the 1920s). After the 1880s machine made bricks had virtually taken over most manufacturing for construction.
- The only way to tell if bricks were made by convicts is if an association can be made to a known convict-built structure or site or if the brick has a convict or government incused stamp upon it (i.e a broad arrow or other device such as RE - Royal Engineers stamp or ED – Engineers Department) - Although, it is also sometimes possible that these were not made by convicts but by private contractors to the Government.



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The difficulty that arises from associating a convict construction to structure such as a well like this is that there are preconceptions and associations tied to convictism. This can cause great media and community interest in the site such as has occurred at 32 Norfolk Street. The generic use of 'convict' made in relation to materials or structures is misleading and problematic. A better description for the bricks are that they are handmade sandstock bricks.

This report will show that the well (and associated dwelling) does not have an association with convicts and the well was most likely built between 1885 to 1890, well after convict transportation ended in Tasmania. The well was most likely built by the private citizen, William Dennis the Younger for private use.



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4 Historical Heritage Assessment Report (HHAR)

4.1 Overview

This HHAR has been requested by the local Perth Historical Action Group (PHAG) due to concern for the site and to further understand the historical background of the site due to the impact of the subdivision development. The PHAG are also concerned that the current protection of the well (and dwelling) are not sufficient moving forward. They would like to see the house and well protected together on one title and for the association between the two not to be lost.

The background history and significance of the site are provided in this HHAR as far as is possible given the tight time frame for this work pending decisions being made for this site. Original 1800s maps/plans, photographs, aerials, books and documents have been consulted to document the evolution of the site. Also included is:

- An overview and description of the site.
- A background history of Perth (for context) and for the study area specifically.
- An assessment of specific archaeological or historical potential, significance and disturbance of the site
- Some recommendations for the site



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4.2 Limitations and constraints

This desktop report considers historical and archaeological values within the confines of the statutory requirements of the *Coroners Act 1995*, *the Burra Charter (2013)*, *Historical Cultural Heritage Act 1995*

While Southern Archaeology makes every effort in its investigations to research all aspects of a site's historical development, it cannot be held accountable for previous work inaccuracies and limited accessibility to data leading to omissions or oversights in this report.

All maps orientate North to the top of the page unless otherwise stated.



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5 The Tasmanian Environment

5.1 Introduction

In order to understand the location and characteristics of the study area it is necessary to provide a brief overview of the area's environmental and geographical setting. This includes a brief assessment of local geomorphology, geography, geology, soils, vegetation and climatic factors. Historic and Aboriginal sites tend to be located in areas of optimum environmental and geographical conditions exist or where specific resources can be found. For example, Aboriginal sites and European sites such as townships and properties are often located in elevated well-drained positions that afford good views of the surrounding area, are generally close to resources and/or in positions that are accessible to fresh water. Analysis of the local environmental and geographical features may help to contextualize the location and position of the sites and help with a broader understanding of occupation of the area.

5.2 Climatic conditions

Tasmania has 'a modified marine Mediterranean climate, where heat absorption and storage by the surrounding ocean produces abnormally mild winters and cool summers' (Reid et al. 2005:14). On the coast, maximum temperatures rarely fall below 10°C but in the mountains (above 1000m) temperatures can fall below 10°C for greater than six months of the year (Reid et al. 2005:14). Tasmania lies near the upper margin of the zonal wind system, the 'Roaring Forties' and this produces a marked precipitation gradient from west to east (Reid et al. 2005:15). Mountains in both the east and the west produce a rain shadow effect for the midlands region with some areas in the west receiving over 3600mm of rain per year and some areas in the east receiving less than 500mm per year (Reid et al. 2005:15). Rainfall in the east is highly variable, while in the west it is reliable (Reid et al. 2005:18). The study area is within some of the driest areas in Tasmania receiving less than 750mm per year. The mean annual temperature is around 10 to 11°. The township of Perth grew out of the need for an overland and communication route between Launceston and Hobart. Its location on the banks of the South Esk River provided a necessary crossing point over the river and the surrounding land (known as Norfolk Plains) provided good agricultural opportunities.

5.3 Geography and geomorphology

Perth is located beside and on the western bank of the South Esk River approx. 17.7 kilometres south of Launceston. This point of the river is relatively steep banked and dolerite bedrock confined which causes a narrowing of the river in this area. At times the river can flow quite rapidly (especially in flood) and this one of the reasons that the building of a Perth Bridge has experienced difficulties in the past here and has been subject to damage from flooding. It is also why mill races have been constructed in the area in the early European history of the area.



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Surrounding the area are flood plains, old inland (aeolian) dune complexes, wetter low-lying areas and low hills which have been developed extensively for agriculture.

At the study area is Sheepwash Creek. This is a small creek running roughly north south over the study area and entering the South Esk River to the south. This creek has also been prone to flooding.

5.4 Geology

The study area contains Quaternary undifferentiated sediments and siliceous pebble gravel and sand known as the 'Brickendon soil association'. These were formed in the last 1.8 million years, so relatively recently in geological terms. The area around the region includes dolerite outcrops. This dolerite probably features as a bedrock in most areas including the study area which has been overlaid by the sediments mentioned above. There are also sections of aeolian sediments of sheet or low hummocky form in the area especially around Norfolk Plains to the west.

5.5 Soils

The dominant soil types at the study area are Brown Sodosols (grazing and cropping are the predominant uses) on the terrace plains and Brown-Orthic Tenosols (conservation (in the west) and grazing are the dominant uses) are found on old inland and coastal dune complexes (Crotching et al. 2009). The characteristics of each of these are shown in **Figure 7** and **Figure 8**. The List also mentions Chromosols in the area around Perth.

SODOSOLS: Soils high in sodium and an abrupt increase in clay

- Abrupt clay increase down the profile and high sodium content, which may lead to soil dispersion and instability.
- Seasonally perched water tables are common and subsoil horizons have a striking prismatic or columnar appearance.
- Usually associated with a dry climate and widely distributed in the eastern half of Australia and western portion of Western Australia.
- Common land uses include grazing of native or improved pastures for both dryland and irrigated agriculture, and forestry.
- Many will hardset when dry and are prone to crust formation.
- Dispersive subsoils makes them particularly prone to tunnel and gully erosion. Arid zone Sodosols may be strongly saline.

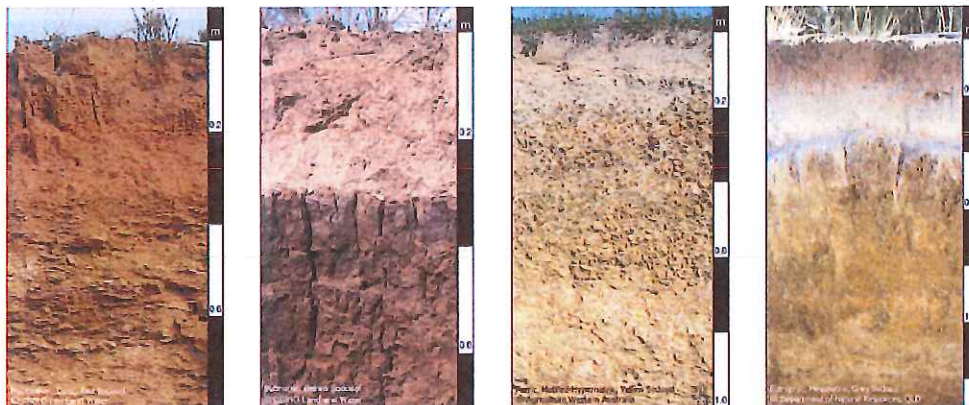


Figure 7: Characteristics of Sodosol soils. Source: CSIRO Soil Mapp App 2020.

TENOSOLS: Weakly developed soils

- Widespread in the eastern half of the continent where vast areas occur as red and yellow sand-plains.
- Large areas in Western Australia have red loamy soils with red-brown hardpan at shallow depths.
- Due to their poor water retention, almost universal low fertility and occurrence in regions of low and erratic rainfall, Tenosols are mainly used for the grazing of native pastures.
- In the better-watered areas landform prevents cultivation, but limited areas support forestry (east coast and southwest Western Australia).





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Figure 8: Characteristics of Tenosol soils. Source: CSIRO Soil Mapp App 2020.

5.6 Vegetation

The vegetation type at the study area is current grassy pasture and introduced plants. It is defined as urban on List Map (2020).

The dominant native vegetation of the area at the time of settlement was dry eucalyptus woodland dominated by *Eucalyptus viminalis* (white gum). Some areas would have also comprised native grasses and low shrubs and trees with some wetter areas comprising wetland and bog sedges and plants.



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6 Ethno-history

6.1 Overview

It is not the purpose of this report to provide a detailed analysis of Aboriginal history within the area (that is usually completed within an AHAR report to AHT if required). However, this brief analysis is provided to contextualise the Aboriginal history and values of the study area.

6.2 Aboriginal social relations in Tasmania

Ryan (2012:11) determined that upon European contact the Tasmanian Aborigines operated within a complex social system of three units (**Table 1**):

- The domestic unit, or *family group* (or sometimes called the *hearth group*).
- The basic social unit, or *clan* (or sometimes band).
- The political unit, or *nation*.

Ryan (2012:11) suggests that it is the family group, clan and nation that Aboriginal people prefer as the naming system for their community. This will be the terminology used in this report. Much of this information is derived from Robinson's observations, made when many of the Tasmanian Aboriginal groups were already largely displaced after around 30 years of contact and conflict with Europeans (Tindale, 1974:325). A summary of the social organization of each social system is shown below in **Table 1** and the clans associated with this area are shown in **Table 2 and Figure 9 and Figure 10** (Tindale 1974:324-350; Ryan 2012). Detail of the clan associated with study area is shown in **Table 2 and Table 3**.

Social Unit	Approx. Size in 1803	Characteristics
Family Group	Two to eleven individuals	<ul style="list-style-type: none"> - Husband, wife, children, relatives and sometimes friends - Cooked around single fire/occupied hut - Monogamous or usually monogamous. Men and women married at maturity and were generally around the same age. - Often married quickly after a spouse's death and assumed responsibility for children. Divorce, infidelity, jealousy and raids for women occurred. - Division of labour – women collected shellfish, vegetable foods, hunted possums and other small animals and did many of the household chores; men manufactured weapons, hunted and fought other groups.



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<p>Clan</p>	<p>48 known clans in Tasmania; could have been up to 100 originally (Ryan estimates 70-85 clans); Estimated 40-50 individuals per clan</p>	<ul style="list-style-type: none"> - Led by a chief, usually a man of note with prowess as a hunter/fighter - Clans were made up of a chief, his family and other family groups who controlled a foraging area. - Clans had seasonal and ceremonial obligations, which brought them into contact with other clans and nations. - Clans usually went to other clans for marriage. - Clans were the basic war-making unit in disputes but cooperation between clans against a common enemy was common, usually in the form of ambushes or personal fights.
<p>Nation</p>	<p>Approx. Nine Nations; Conservative estimated population in Tasmania in 1803 – 2500-5000 (Robinson estimated 6000-8000; Jones [1974] 3000-4000)</p>	<ul style="list-style-type: none"> - Agglomeration of clans that lived in a contiguous region. - Usually shared a common language or dialect (although this could be shared by other nations), cultural traits, usually intermarried, similar pattern of seasonal movement, met together habitually for economic and ceremonial reasons and who shared a common relationship with outside groups for conflict, trade or other reasons.

Table 1: Social units in Tasmania. Source: Ryan 2012.

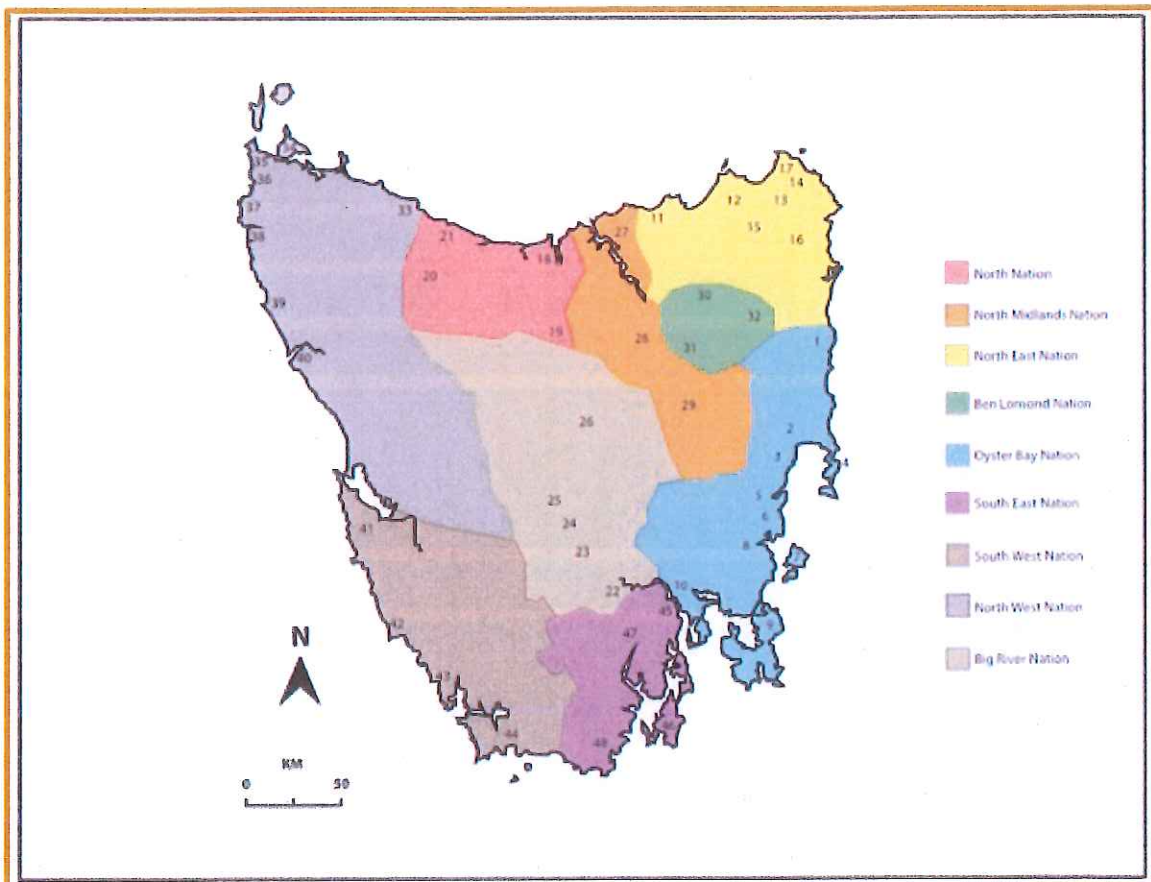


Figure 9: Location of Aboriginal Nations and Clans within Tasmania. Source: Ryan 2012.



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Nation	Clan	Clan Location	References and Regional Reports
North Midlands	<ol style="list-style-type: none"> 1. Leterremairrener 2. Panninher 3. Tyerrernotepanner 	East Tamar River Norfolk Plains Campbell Town	Reports: Kee, 1990

Table 2: Clans within the Northern Midlands Nation. The Panninher is the most likely Clan to have occupied the Study area. Source: Ryan 2012.

Nation	Characteristics/Features	Comments
North Midlands	Min. est. population – 300-400 individuals (including two extra clans, which are thought to have disappeared after contact [Ryan, 2012:29]). Controlled both coastal and coastal regions. Had extensive relations, not always good, with the North, North East, Big River, Ben Lomond and Oyster Bay nations because they had one of the largest kangaroo hunting grounds in their region at Campbell Town and rich birdlife along the Tamar. Winter some clans went to Oyster Bay for sea life while others foraged around the Tamar for shellfish and eggs; In spring returned to hunt kangaroo near Campbell Town and in summer hunted in the Great Western Tiers. Autumn saw a return to kangaroo grounds at Campbell Town. In January, some clans went mutton birding. All clans relied on reciprocal arrangements to gather ochre.	This nation relied upon extensive trade and reciprocal arrangements with other nations due to its hunting resources and the dryness of its region, especially in the midlands. Eumarrah was noted for opposing the colonists and was from this area.

Table 3: Characteristics of the Northern Midlands Nation. Source: Ryan 2012.

6.3 Midlands Nation and Clans (and the study area)

This area is the traditional region of the North Midlands Nation (Figure 9 and Figure 10). The clan associated with this area is the Panninher (Table 2, Table 3 and Figure 10).

The Panninher clan spent winter on the lower reaches of the Tamar where shellfish and swan eggs were collected (Ryan 2012:31). In spring the clan would have travelled south to kangaroo hunting grounds around Campbell Town possibly travelling through the study area following the major local rivers. This travel would have focused on the rich resources of the area including around the South Esk and the Macquarie and Lake Rivers and the associated local hunting and foraging opportunities. Key known sites such as a stone quarry on Mill Road and others near Perth were most likely a focus of camping and resource gathering in the area. In the summer the clan would have travelled further south to the Great Western Tiers and then possibly travelled to the west for the ochre at Mount Van Dyke (returning to their own country in autumn) (Roth 1890; Ryan 2012:31).



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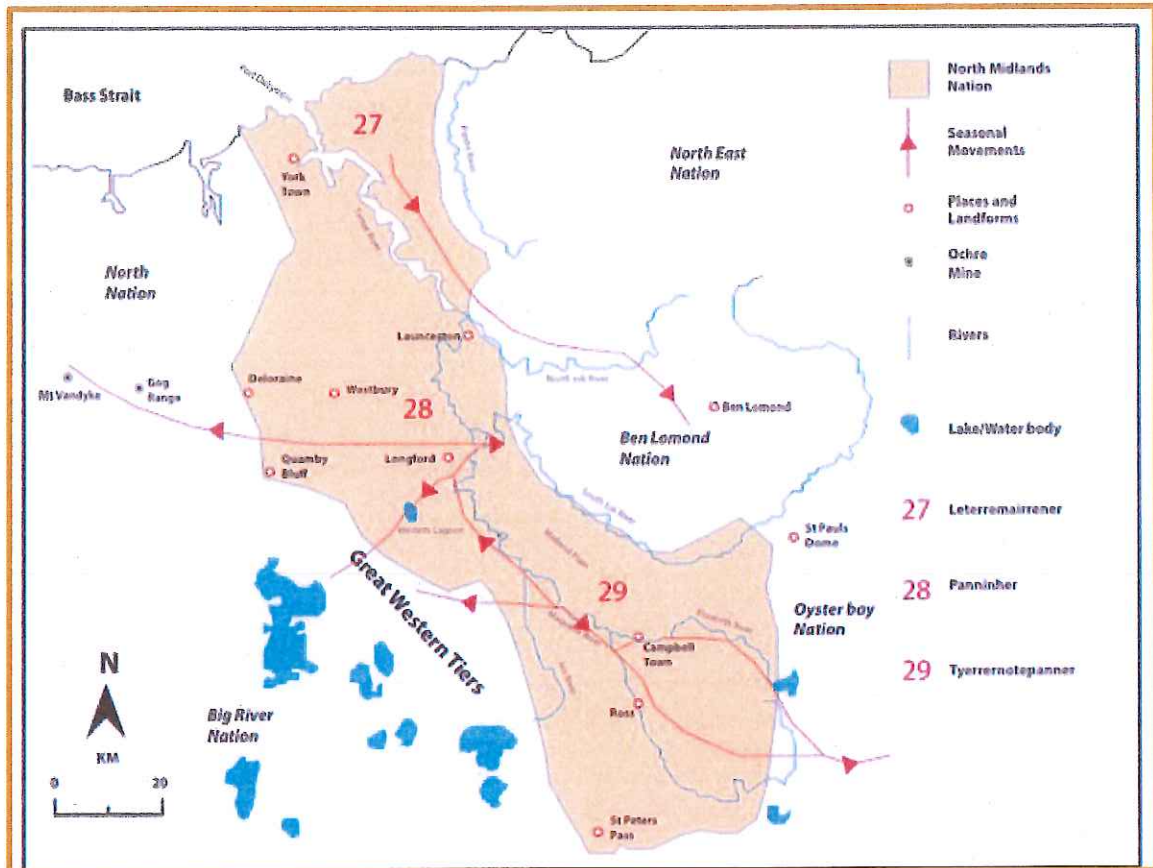


Figure 10: North Midlands Nation and Clans. Source: Ryan 2012.



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7 Historical development at the study area

7.1 Aboriginal people and the European occupation

Research of the historical records has revealed few accounts of Aboriginal living in the Perth region after European occupation. Ryan (2012:29) suggests that because the Northern Midlands Nation was one of the first Nations to experience European settlement firsthand it is likely that they were also one of the first Nations to be displaced.

The area around Yorktown on the Tamar was settled in 1804, Launceston a few years later and historical accounts indicate a military base at Perth (to secure the crossing of the South Esk River and the major overland link between Launceston and Hobart) at least as early 1814 (and probably as early as 1811) (Stancombe 1968:204). In 1811 (and again in 1821), Governor Macquarie highlighted the region for settlement because of the rich farmland and the access across the South Esk River. While already in operation, Macquarie also ordered an upgraded official ferry service to be installed on the South Esk River on his second visit in 1821 (Stancombe 1968:201; Boyce 2010:147).

The Aborigines of Tasmania, written by H. Ling Roth in 1890 (and added to in an 1899 version), documents a major gathering of Aboriginal people at Native Point, on the South Esk River opposite Perth:

Once 200 of them proceeded from the neighbourhood of Launceston, by way of Paterson's Plains (Evandale) to the Lake River. Native Point, near Perth, [was] a favourite haunt. Here they got stone for their implements, they probably roamed westward as far as Longford and Westbury, if not further. The districts they occupied are some of the finest in Tasmania; in its native state, a well grassed country with abundance of game (Roth 1890)

This account is also supported by Rait (1971) in his brief history of Perth. While it is not clear where Roth or Rait got their information, surveys by Southern Archaeology have recorded a large and significant Aboriginal site in the Perth area probably the same site referred to by Roth (1890).

What is clear is that this region was known in colonial times to have been occupied by Aboriginal people with a focus on the rich resources in the area. Lake River is also mentioned as significant by Roth (1890). The midlands area between Lake River, Campbell Town and the South Esk (and to the south of here) were known to be some of the best kangaroo hunting grounds in the State (Haygarth 2013; Ryan 2012) and this area was probably a focus for Aboriginal people travelling through the area from the coast and the Tamar. From here they dispersed from important gathering points such as at Native Point across the midlands and beyond to the highlands or to the west - to ochre mines (in the Gog and at Hampshire Hills) and the mutton bird areas and coastal areas in the west. This was involved important



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reciprocal arrangements with other Nations. This notion is supported by a diversity of local sites and sites further afield.

Early conflict in these areas with Europeans would have dispersed and upset these traditional movements. Certainly, a military contingent at Native Point from 1811 would have made this important gathering point a place to avoid. There are few local reports in this period that detail any conflict. A newspaper article from May 1831 describes Aboriginal people spearing a 13-year-old girl at Jacob's Sugarloaf near Campbelltown (Trove Launceston Advertiser accessed 2018). While this is some way south of the Perth area it may have involved people from the Panninher clan and/or others from the North Midlands Nation. There is also the famous account of Dolly Dalrymple's stand-off with members of the Big River Nation at Dairy Plains in the late 1820s (Johnson and Macfarlane 2015). The well-known Aboriginal leader, Eumarrah was from the Northern Midlands Nation (Ryan 2012).

7.2 European settlement at Perth

7.2.1 Introduction

Occupation of the Perth area centres on six main points:

1. The importance of the midlands for the hunting of native animals particularly wallabies and kangaroos by Aboriginal people and subsequently, European settlers to support the colony (Boyce 2010; Haygarth 2013:5) prior to c. 1811. Other resources such as fresh water were also important.
2. The occupation and securing of the major fords on the South Esk by the military and others (from 1811).
3. The settling of 108 people from the penal colony at Norfolk Island in the area to the west at Pateena (Norfolk Plains) in 1813.
4. The importance of the crossing at the South Esk River to provide overland access and communication between Launceston in the north and the Hobart in the south via the midlands (from 1811 and officially from 1821).
5. The cultivation and agricultural opportunities of the immediate area and,
6. The access to wider agricultural centres such as Norfolk Plains, Longford, Cressy and areas further to the west.

Perth was, at the beginning of the settlement of North, a military focused occupation and a major hub for access to important areas around the region. The area was recognised early for its agricultural potential and the preferred place to settle Norfolk Islanders when the penal settlement was being disbanded there. It would not be too far of a stretch to say that initially at least "all roads led to Perth".

Today, Perth is known as a small town with a major highway linking Launceston, Hobart and the west via a bridge crossing the South Esk. In days gone by Perth was the centre of many



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roads radiating in all directions with no clear direct route either to the south or west. It was not until the 1830s that the preferred options for a route south was established at its current point on the South Esk and other routes to Hobart were largely abandoned as major official southern routes.

7.2.2 Phase 1 – The early years - 1806 to 1811

The initial settlements in the north and the south struggled to survive and there is evidence that the hunting of local native wildlife was relied upon to support these colonies at least in the earliest period (prior to 1811). The importance of opening up the midlands and establishing a direct over land route between Launceston and Hobart was recognised early. As early as 1806, Colonel William Paterson and other officers made excursions up the South Esk. In 1807, Lieutenant Thomas Laycock made the first overland journey between Launceston and Hobart travelling through the area around Perth (Rait 1971; Haygarth 2013:5). He described the area around Perth as being “level...moderately woody [country] and [with] fine herbage” (Haygarth 2013:5). The surveyor, Charles Grimes, surveying the area between the Tamar and Hobart followed the route taken by Laycock across the Central Plateau (**Figure 11**). He describes most of the area around Perth and Norfolk Plains as either “hilly good land” or “fine hilly country”.



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Figure 11: Section of Grimes 1807 survey of the area between Lake River and Launceston including the study area. Source: Libraries Tasmania Ref: AF395-1-42 accessed 2020.

7.2.3 Phase 2 – Macquarie’s first visit and the Norfolk Islanders - 1811-1818

On the 7th December 1811, the Governor of New South Wales, Colonel Lachlan Macquarie, visiting the colony of Van Diemen’s Land, crossed the South Esk River at Perth to view the possibility of grants to settlers from Norfolk Island in this area (Rait 1971; Haygarth 2013:7). Macquarie was impressed with the area for agriculture (particularly for cattle and sheep grazing) and ordered the surveyor, James Meehan to (Haygarth 2013:7):

Proceed to that tract of land in the neighbourhood of Launceston on the right bank of the South Esk River, and which I have named ‘Norfolk Plains’ (after the settlers from Norfolk Island) and there measure and mark out fifty separate farms for that number of free men now at Norfolk Island, but who are to be removed from thence to become settlers in the district of Norfolk Plains, measuring the said fifty farms of the following proportions of land: Viz four of eighty acres each; eight of sixty acres each;



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sixteen of fifty acres each and twenty-two of forty acres each. These fifty farms are to be distinctly numbered and accurately described, so as to render it easy and practicable to assign them to the Norfolk Island settlers on their arrival at Port Dalrymple to their respective claims.

Sixty-five settlers were eventually brought to the area from Norfolk Island along with a further 21 other settlers and their families (44 people) – a total of 108 people (Haygarth 2013:7). They were settled along the South Esk River west of Perth at Pateena, compensated for livestock and houses left behind and given different grant sizes, victuals, clothes and assigned convict labour for a certain period depending on a Class system (Haygarth 2013:9). The original grants are shown in **Figure 12** below.

Macquarie wanted Meehan to supervise the arrival of the Norfolk Island settlers in 1813 so that there was no confusion as to who got what. Despite this, conditions were difficult and primitive for some time after this. By 1818, good crops of wheat and corn were being harvested and the Norfolk Plains which now included a large area was the 'breadbasket' for Launceston.

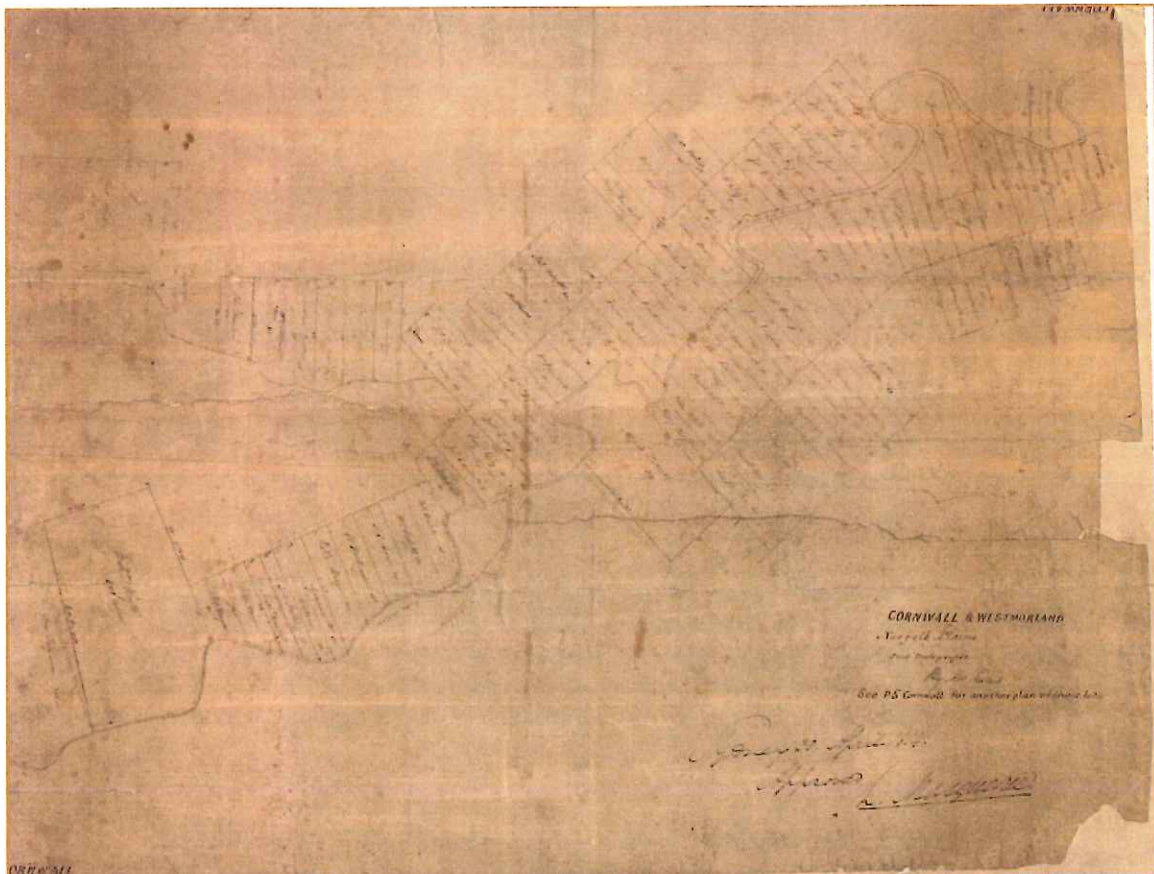


Figure 12: Meehan's grant plan for the Norfolk Islanders signed by Macquarie. Source: Libraries Tasmania Westmorland and Cornwall 1 accessed 2020.

The earliest grant at Perth is thought to have been to Captain John Ritchie in the area around where 'Eskleigh' is located in about 1809. He did little with this property at this time



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but was in charge of building the first road to Norfolk Plains in 1812 for the Norfolk Island settlers at a cost of one cow, the contractor preferring this payment than the 30 pounds originally offered (Rait 1971; Haygarth 2013:9). The road is reported to have been quite rough and was improved by convicts in 1820. The road is not the road past the study area and is most likely the Pateena Road which was moved to its current position in the 1830s due to persistent flooding. This road appears in the Westmorland Roads 1 (and 2) plans (Figure 13). The road past the study area to Brumby's Ford was probably built in the 1820s to access land and grants to the south and at Cressy.



Figure 13: Section of early plan showing the Norfolk Plains Road from Launceston to Pateena. Source: Libraries Tasmania Ref: Westmorland Roads 1 AF398-1-454(1) accessed 2020.

In 1813, Ritchie transferred his property at Perth (he was being transferred to India) to his brother, Thomas Ritchie. Thomas Ritchie built a house and mill on the property (called Scone). This was the property later owned by Gibson who built 'Eskleigh' to the south of Perth.



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In 1814, the chief constable of Launceston, Thomas Massey received a grant for the area of the township of Perth. It is likely that Massey never took up this grant as this area later became the Perth Township. At this time there was a military establishment at the South Esk to control the crossing and to examine passes of people travelling between Hobart and Launceston (Rait 1971).

Between 1811 and 1818 there were few other settlers in the Perth area but there are known to have been some such as Gibson at Pleasant Banks near Evandale and Brumby at Gibson's ford who was made constable of the area in 1818.

7.2.4 Phase 3 – Further settlement, Macquarie's second visit and the birth of Perth - 1818-1830

Further afield from Perth settlers such as Thomas Archer (in 1819) were granted properties and some larger farms such as Woolmer's and Brickendon were built concentrating on growing grain and farming sheep and cattle. These places were developed using convict labour. The importance of the area for livestock (particularly sheep) and for the supply of food especially grain cannot be underestimated.

Work had also begun on an official road between Port Dalrymple and Hobart around 1820 but there were still many different routes around the area at this time such as the one to the south going through Longford and Cressy.

In 1821, Macquarie visited again. This was to be pivotal to the development of Perth itself. On the 30th of May 1821, Macquarie, standing beside the South Esk near where the Perth bridge now stands, made the following entry in his diary:

Sent off our baggage early this morning so as to be a stage before us, having resolved on remaining ourselves another day at Gibson's. We all took a ride this afternoon to look at the new punt now building for crossing the South Esk about 3 miles lower down the river than Gibson's. I fixed upon a place for the public ferry (see **Figure 15** below), and also on the site for a township for this part of the country, adjoining the ferry on a rich point of land, which I have named Perth. Mr Gibson is a native of that town, having promised to build a good inn there directly. Perth is only 14 miles from Launceston and within 3 miles of Norfolk Plains.

Thus, the township of Perth was officially born and by June 1821 Macquarie had taken measures for the towns he had selected between Launceston and Hobart to be established including the designation and completion of the Hobart/Launceston main road and orders that special consideration were to be made encouraging mechanics, blacksmiths, carpenters and other craftsmen to settle these towns. Other orders included the reservation of 1000 acres for the de-pasturing of the townspeople's cattle, 400 acres for a glebe for a clergyman and 200 acres for a schoolmaster (Rait 1971).

Gibson made good his promise to establish an Inn and built the St Andrews Inn in Perth in 1821. Several other Inns followed such as the Plough Inn (on Punt Road) established in 1823, the Jolly Farmer (located opposite the study area) in 1826, the Crown Inn (established



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in the 1830s by John Dryden who owned the study area block at one stage later in the 1800s) and the Queens Head Hotel established in the early 1840s and still operating on Perth's main road (Rait 1971).

7.2.5 Phase 4 – The Growth of Perth - 1830s

A photograph of the Tasmania Inn built in 1836 and originally located on the corner of Drummond Street and the Main Road is shown below in **Figure 14**. The town began to grow from here. The following two sections deal with important developments within the area that contributed to Perth's importance as a centre of agriculture and its focus as an access point between the north and the south.



Figure 14: The Tasmanian Inn built 1836. Source: Haygarth 2013.

7.2.5.1 Perth bridge construction and the Perth Bridge Convict Station (Chatsworth)

On the southern bank of the South Esk River are the remains of Chatsworth Convict Station (CCS). Initially, a military post was established there in the early 1800s (probably around 1811) at the site of the river punt crossing, approximately 400m to the north of today's Perth Bridge. This was the first period of its use and probably included a military barracks and ferry house. Old Punt Road follows the original access point for the punt on the Perth side of the South Esk River. The etching by Thomas Bock from 1830 in **Figure 15** below shows the punt and the buildings located here at the time.



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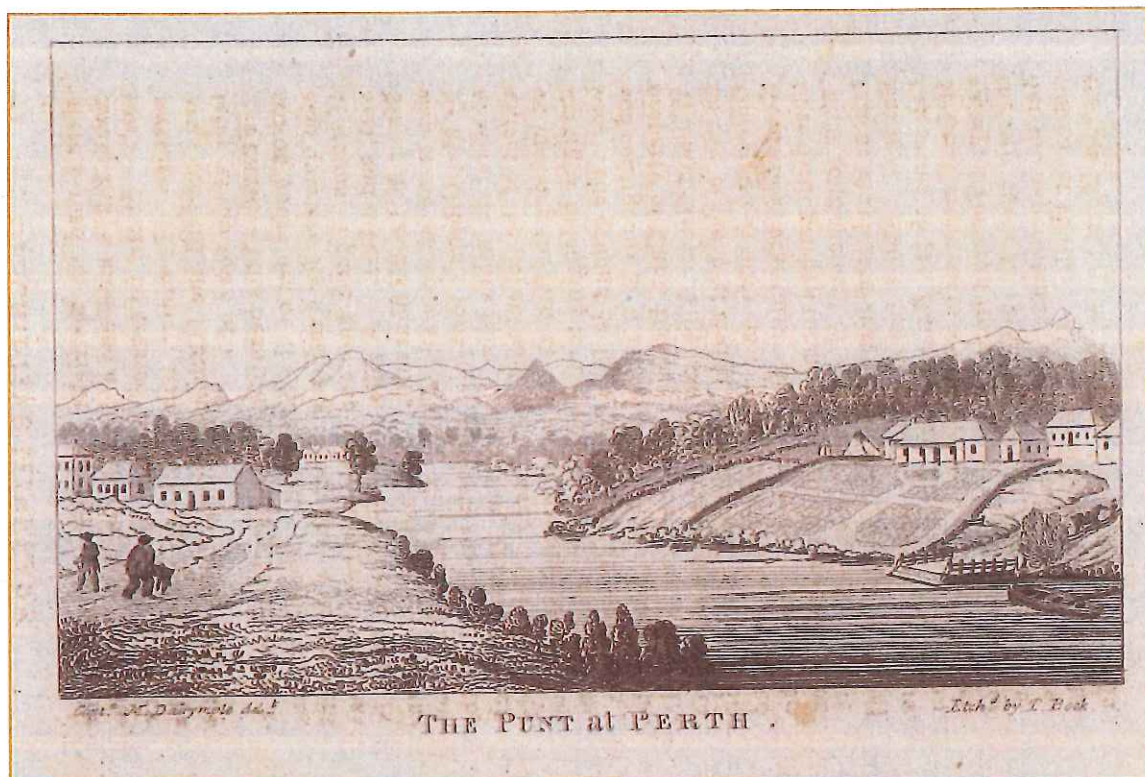


Figure 15: 1830 etching by Thomas Bock titled 'The Punt at Perth'. Source: National Gallery of Australia accessed 2020.

The Chatsworth Convict Station (CCS) was added to and expanded at the site around 1835. It is listed on the now defunct register of the National Estate (12931) and described under the heritage places inventory as the site of a convict station and punt house since 1814. It is also listed on the Tasmania Heritage Register (THR). The CCS comprises buildings associated with the adjacent river crossing and two plans for the site are shown below in **Figure 16** (a survey by Scott from 1858) and **Figure 17** (an original plan for the convict station from c. 1835). In these plans, buildings are described as dating from the bridge construction in the late 1830s and as random rubble bluestone buildings. The remains and existing buildings are '...excellent examples of rough simple building types executed with elegant details to create structures of considerable distinction' (THR listing 2018).

Other building ruins are also present and some are likely to be the former military buildings, cells and associated convict buildings. James Scott's survey of the site (completed prior to the sale of the site) from 1858 (**Figure 16**) is very detailed and shows 8 lots with evidence of existing structures (a small cell block, workshops and cottage, and a larger 'stone house of 8 rooms' with some areas already in ruins and described as the 'remains of [the] probation station' (Scott 1858). The larger stone house appears to be the former house of Captain Cheyne (overseer) and the visiting Magistrate apartments marked on a plan prepared for the convict station (**Figure 17**), presumably around 1835 when the station was used for the construction of the Perth Bridge. This same plan shows post and beam structures associated with the convict cells blocks, which had likely deteriorated by the time of Scott's 1858



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survey. Scott's 1858 survey indicates land on the edge of the study area acquired for forestry purposes gazetted most likely in 1937 (although the exact date is unclear on the map as it is added in red ink).

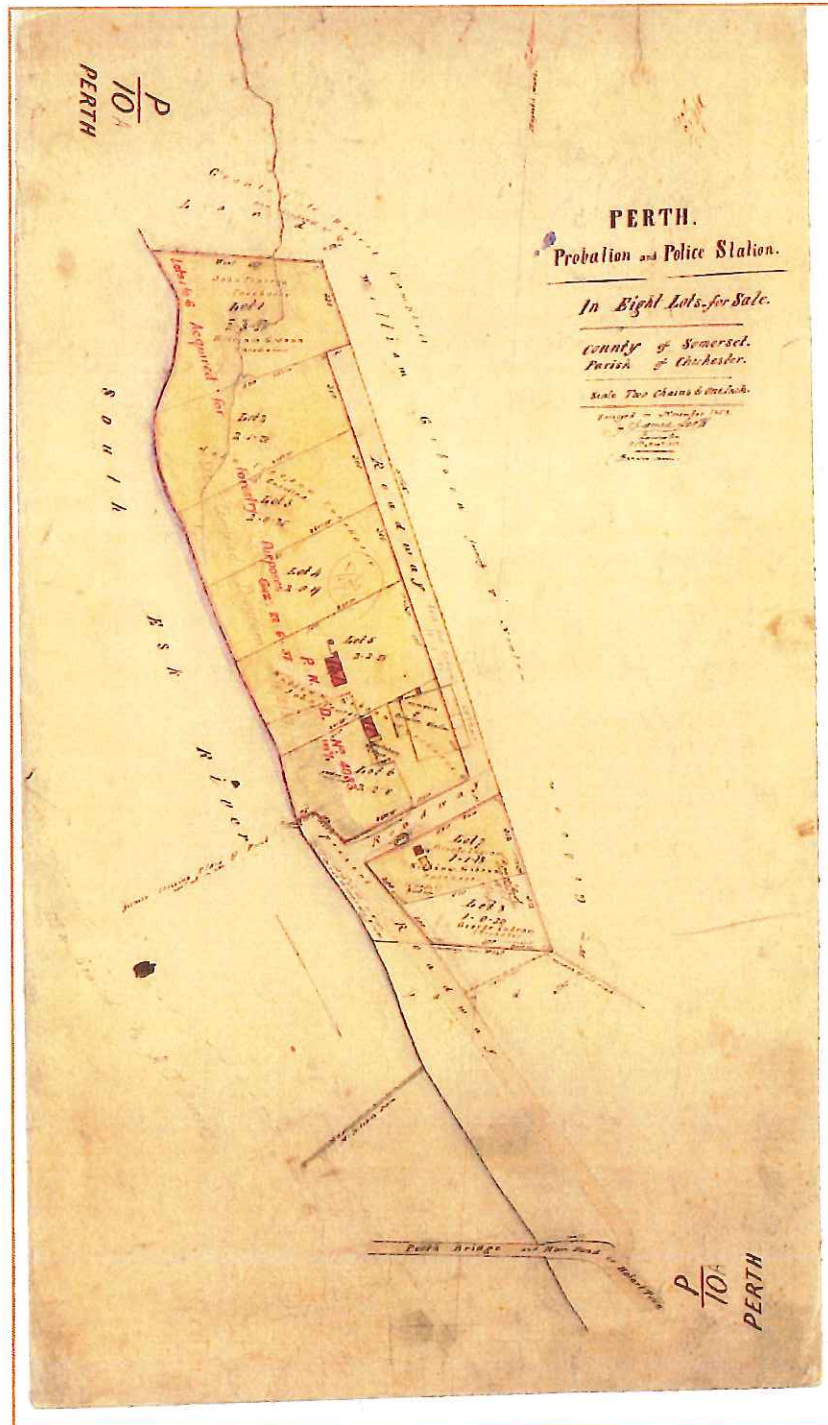


Figure 16: Scott's 1858 survey map showing the Perth Bridge Convict Station and the study area. Source: LINC Library.



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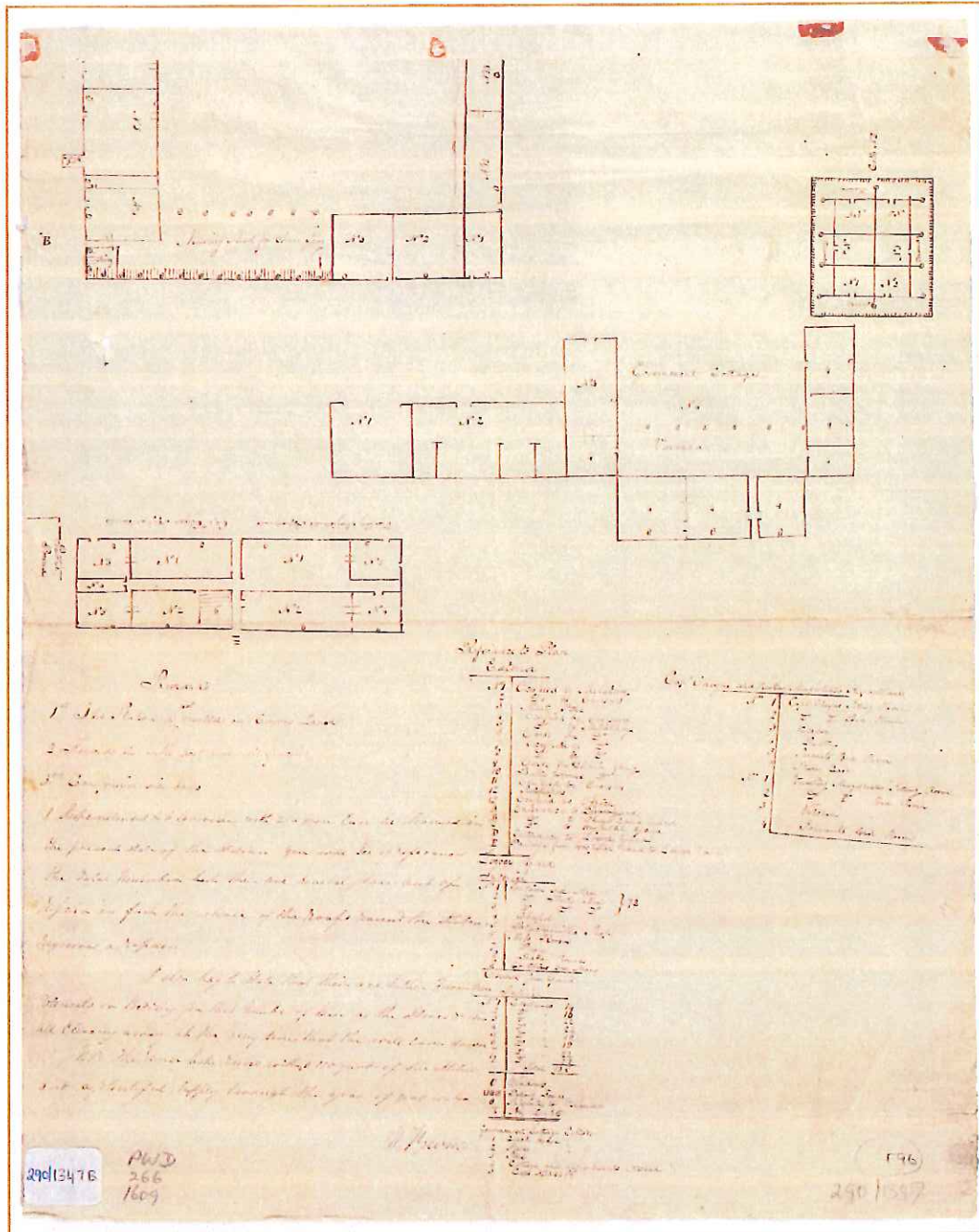


Figure 17: Plan of Perth Bridge Convict Station. Source: LINC Library.

Convict stations were established for the benefit of the provision of labour for major infrastructure developments such as road and bridge construction. Other stations established in the region were located at Kerry's Lodge (1844-1877), Cocked Hat Hill (1849-1851), Westbury (1842-1847), and Snake Banks (1836-1839). All were within a few miles of each other and existed within the established probation period (Brand 1990). Another station existed at Kings Meadows (approx. 1836-1838) and was excavated by Southern



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Archaeology in 2019. There were also other stations established at Pateena and Muddy Plains for the building of the roads (and bridges etc) that radiated out from Perth. Many of these roads are no longer used but are marked on early maps.

The probation system was introduced by Lieutenant Governor Franklin in the late 1830s in response to repeated criticism of the assignment system, coinciding with calls for abandonment of convict transportation (Thompson 2007; West 1971). The employment of convicts under the probation system saw a shift away from private assignment of convicts for the benefit of individuals. Road gangs engaged in public infrastructure development projects were seen as an economically viable alternative form of punishment, meeting the needs of a colony expanding beyond the town boundaries (Nicholas 1988).

For early settlers north and south of Perth, the South Esk River represented a significant barrier to movements to and from Launceston. A river punt service and military station was established and in official operation by at least 1814, facilitating passage of people, livestock, carriages and goods across the river. The punt service was hailed as expensive, unreliable and subject to weather conditions influencing river heights and flows (Newitt, 1988). The punt was occasionally washed away. Travellers might be stranded, at considerable cost and inconvenience, for days on end (Cornwall Chronicle Saturday 9th May 1835:4).

Calls for a bridge crossing were repeatedly made during the 1830s culminating in a public meeting held at Perth in August 1835. In 1831, John Lee-Archer had surveyed three possible locations for a bridge across the South Esk, and recommended the ideal location, then two miles from the existing main Hobart-Launceston road. It was not until late 1835 that construction work was proposed in earnest, with a proposal forwarded by Lieutenant William Kenworthy to civil engineer and architect John Lee-Archer outlining details of the proposal for a bridge built of rough stone with arches faced with bricks and stonework (Newitt 1988).

In late 1835 work commenced. This involved the considerable task of initially upgrading the existing Chatsworth Convict Station to house the workers stationed there for the duration of the construction period. Plans for the probation station appear to allude to areas in need of repair (such as roofing) and indicate the potential to house up to 200 men (Figure 17). Such redevelopment and preparation for bridge construction likely necessitated quarrying and tooling stone, clearing land and felling trees in the area. Convict stations were designed to be largely self-sufficient, requiring extensive land cultivation and fencing for gardens and some livestock, and ongoing timber supply for cooking and heating, as well as charcoal production for blacksmithing work (Thompson 2007). Given the location of the station on the southern side of the river, it is likely that some land clearance work was undertaken beyond the boundaries of the convict station along the river in this area (including within the study area), although there is no direct evidence of this. The fertile riverbank areas most likely supplied larger timber for building work and cultivation areas in support of the main centre along within Perth itself.



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Convicts were employed at the Perth Bridge site primarily as a construction gang, although convicts were often assigned to other duties. Convict Department Regulations formalized under the convict probation system established around this time state that labour for running stations (i.e., baker, cook, watchmen, hospital orderlies, store labourers and servants) could be sourced (where skill level and sentence allowed) from within the convict ranks (Brand, 1990). Religious and moral discipline was tight, and convict stations were established with chapels, and time set aside for religious instruction (Brand 1990). The Perth Bridge project aimed to employ a gang of 30 convicts, considered an ideal sized team for such work under the supervision of one or two overseers (Nicholas 1988).

Over the two years of bridge construction, the convict station housed up to 150 convict and other bridge workers, as well as a superintendent, and overseer, a number of soldiers and various other workers associated with the operation of the station. Thirty oxen were requested for bridge construction, and forage supplied for feeding them. To give an idea of the scale of operations, Kenworthy requested the following mechanics as an ideal labour force (Newitt, 1988:121-122):

15 stone masons

20 quarrymen

50 useful labourers- 30 of those may be in irons [convicts]

4 wheelwrights

1 blacksmith

3 pairs of sawyers

2 spillers

24 oxen

4 carpenters

6 bricklayers, including 250 bushels Roman cement and 500 gallons linseed oil.

6 moulders, 6 off-bearers, and 6 temperers

In building the bridge, heavier bluestone elements were necessary for the immense foundations for piers and abutments (**Figure 18**), with the bridge bedded upon existing bedrock (Newitt 1988). Stone was likely sourced from a quarry near the site, and a small quarry is marked on Scott's 1858 survey. Bricks appear to have been locally made or may have come from the Morven Convict Station (MCS), a few kilometres to the north east and near where the Launceston Airport is now located. The MCS was a known brick making area for many local projects including the Evandale to Launceston Water Scheme.



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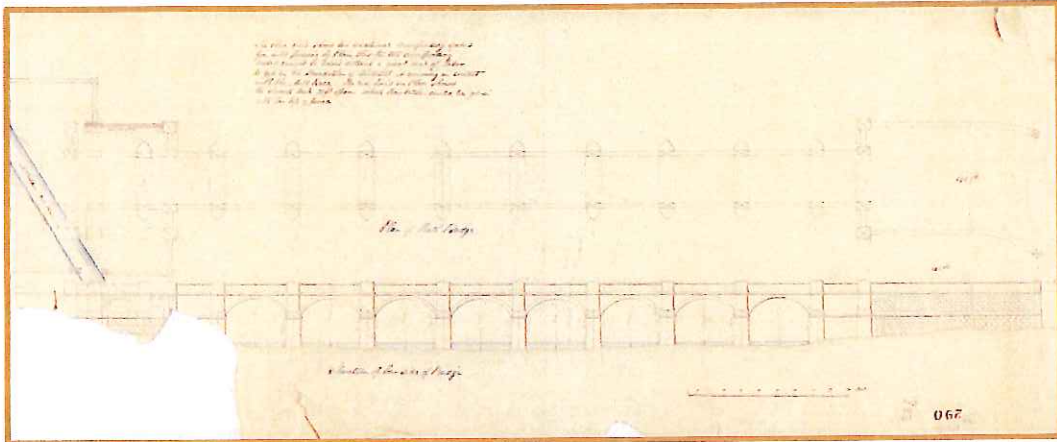


Figure 18: Plan of the earliest Perth Bridge. Source: Newitt 1988.

Work was completed in late 1837 (Newitt 1988). The bridge was criticized for poor construction from the outset. In 1839, one of the abutments was reported as having 'given way twice' and been rebuilt (Cornwall Chronicle, 7th September 1839:1). In 1840 a retaining wall on the southern side abutment collapsed (Colonial Times 8th September 1840). The bridge was damaged again in the 1840s and 1850s. Structural weakness was ultimately exposed with the bridge completely destroyed in the 1929 flood. The convict station was closed by 1844. **Figure 19 to Figure 24** show the original Perth Bridge.



Figure 19: Early depiction of the Perth Bridge and approaches. Source: Haygarth 2013.



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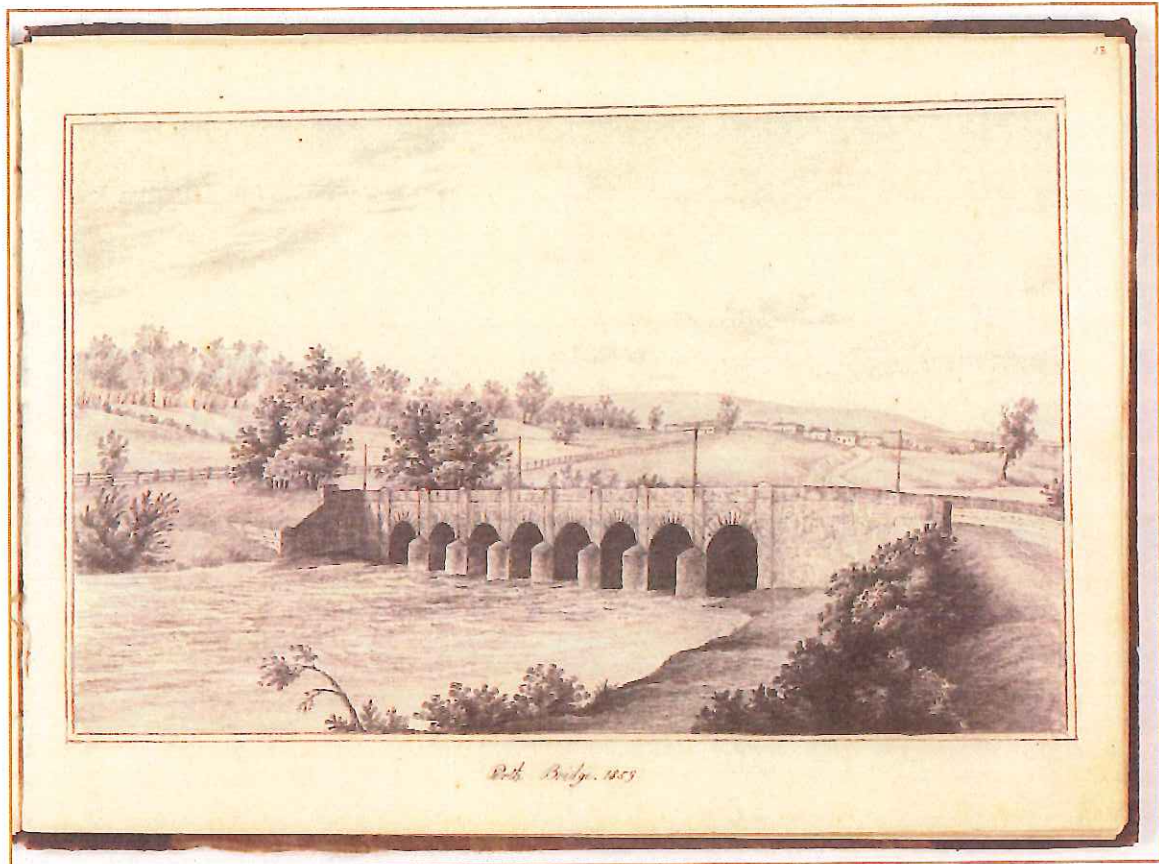


Figure 20: 1859 drawing of the Perth Bridge. Source: Libraries Tasmania 2020.



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Figure 21: Early drawing of the Perth Bridge showing cultivated land near the study area to the left of the photo. Source: Libraries Tasmania 2020.



Figure 22: Early photo of Perth Bridge. Source: Libraries Tasmania 2020.



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Figure 23: Perth Bridge in 1929 flood. Source: Libraries Tasmania 2020.



Figure 24: 1929 flood at Perth. Source: Libraries Tasmania 2020.

The punt and later the bridge were major drivers for the establishment and growth of Perth. The site of the old convict station became the Esk Brewery in the late 1800s. The brewery is



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shown below in **Figure 25**. This photograph is from 1918 and all that remains today are the Commandants house and store and the archaeological remains of the convict station and brewery. Sustainable Forests (Forestry) and Driscoll's Berry Farms have extensively developed and cultivated the area.



Figure 25: The Esk Brewery in 1918. Source: Haygarth 2013.

7.2.5.2 *Agriculture and the Perth Mills*

Agriculture continued to be important in the Perth region with sheep (and cattle) grazing and grain production (especially wheat) very important. Much of this was to supply Launceston and the mainland. Many mills were constructed in the area to process the grain.

The earliest and one of the most significant is the Perth Mill on Mill Road. The Perth mill site is marked on several early land survey maps, indicated as three buildings on the riverbank directly opposite the study area at Native Point on Mill Road, Perth.

The mill was located near (or on) a significant Aboriginal stone quarry site, at the junction of the South Esk River and the aptly named Flinty Creek.

The best plan for the mill can be seen in the undated county survey plan Cornwall 33 (**Figure 26**) showing the mill, another small building on the riverbank, and a cottage and garden (likely the miller's residence) on land owned by Donald McLeod. This plan also shows an access route to the study area from the mill, marked as a ford downstream from the mill.



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Upstream is evidence of a dam wall across the river, and a race to the mill. The ford likely provided a river crossing area for Mr Nowlan, whose house and cultivated land can be seen to the south west of the study area (Figure 26 to Figure 28).

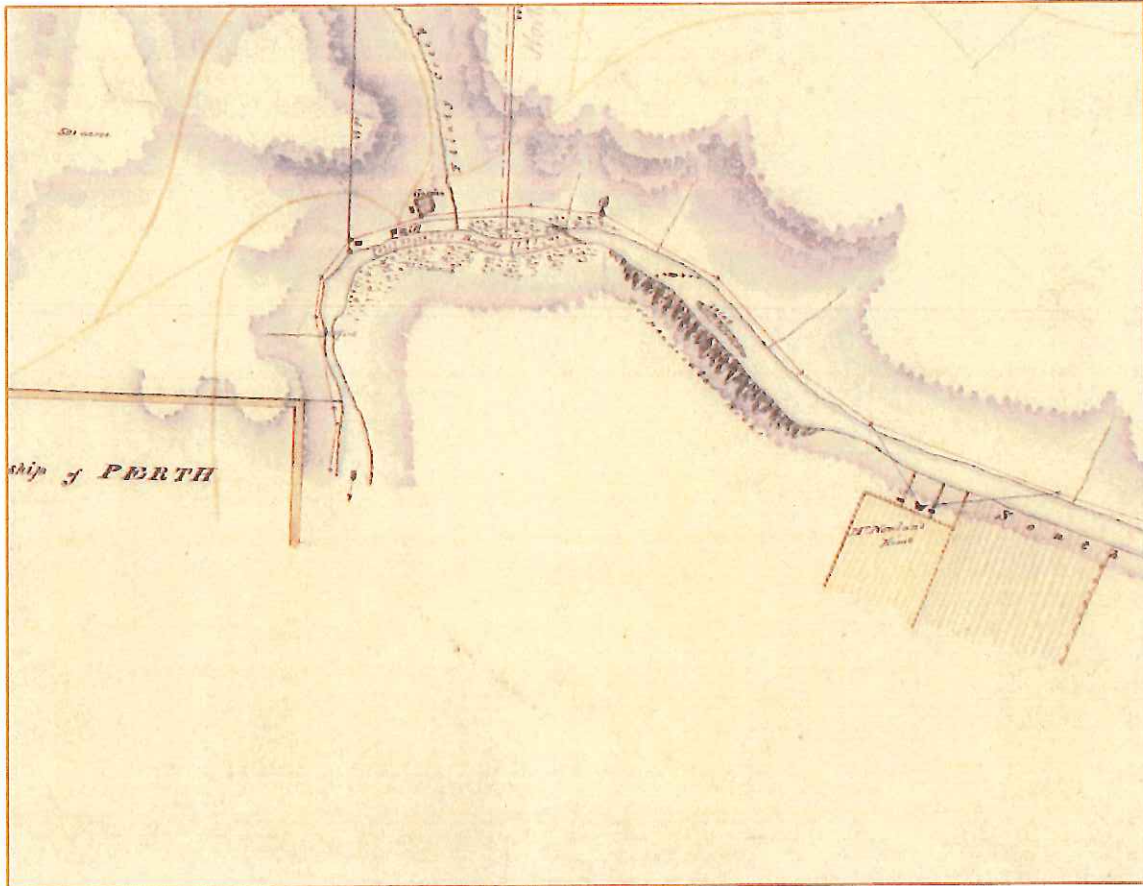


Figure 26: Cornwall Map 33 showing mill and study area. Source: Libraries Tasmania 2020.



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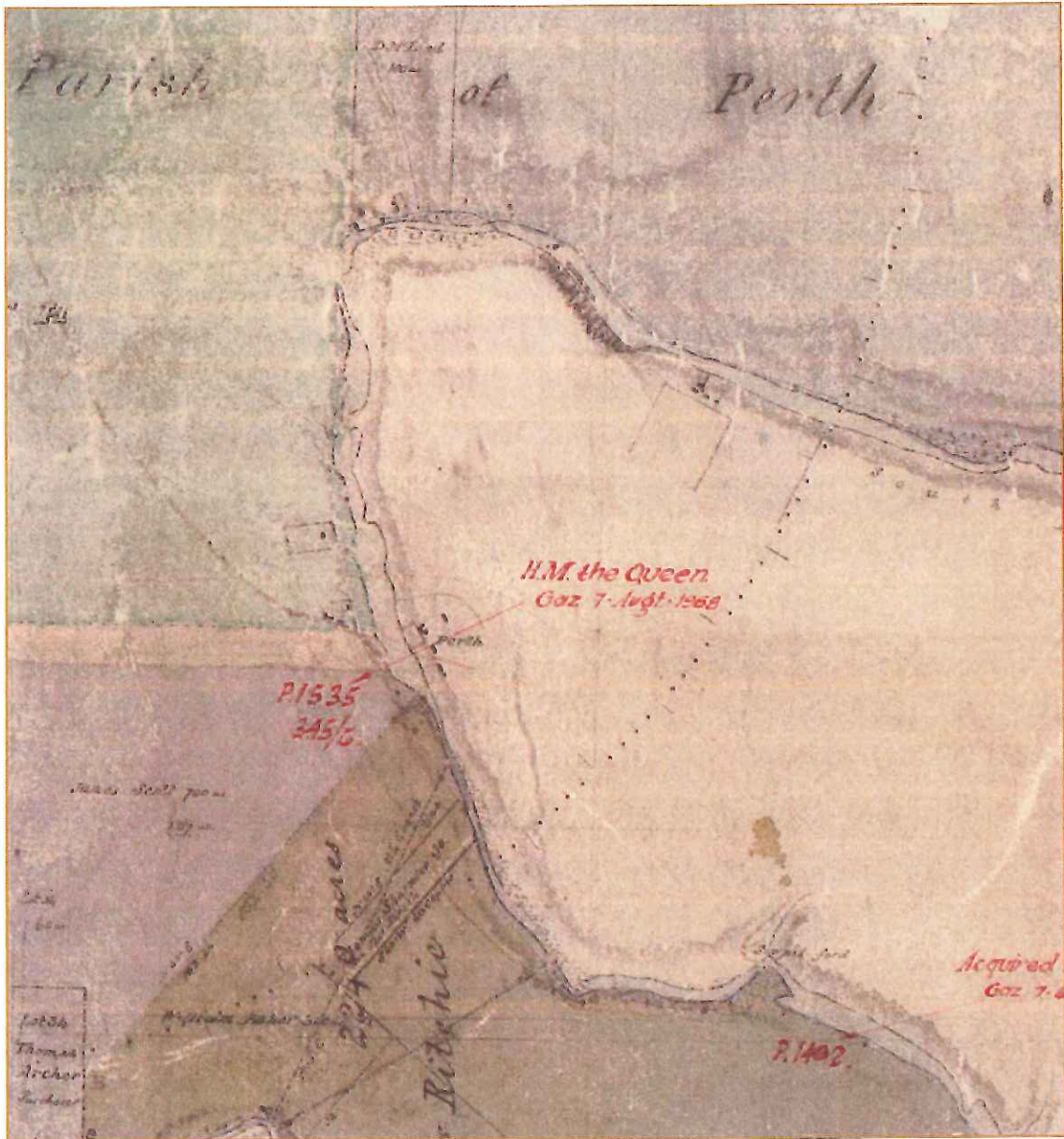


Figure 27: Cornwall Map 4 showing the Donald McLeod's and Nowlan's land at Native Point. Source: LINC Libraries Tasmania 2020.



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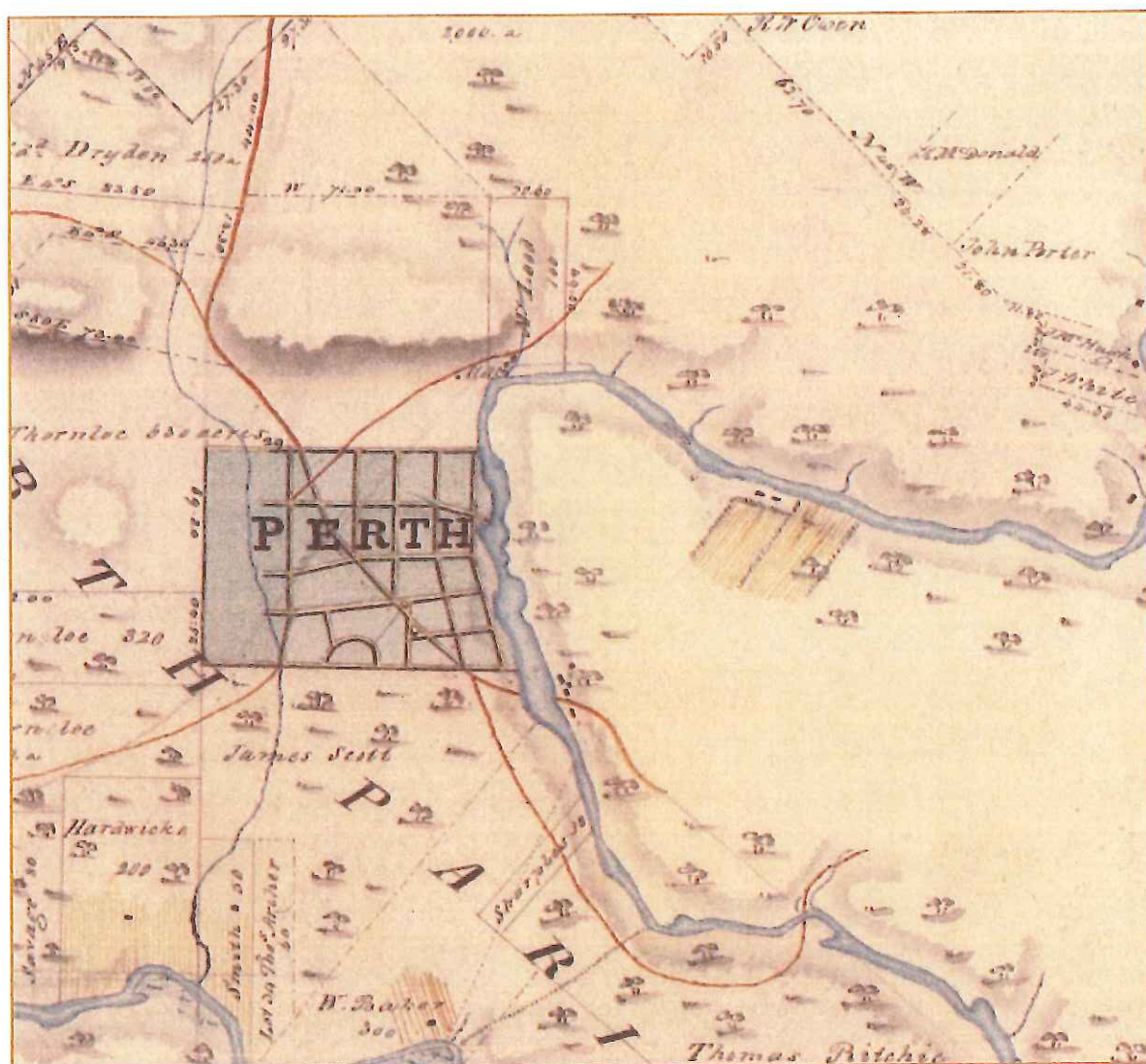


Figure 28: Cornwall Map 51 showing study area. Source: LINC Library.

The mill, and Nowlan's property also appears on an earlier survey map Cornwall 51 (Figure 28), undated but completed prior to 1840 considering the bridge is not present. Figure 29 and Figure 30 are photographs of the mill site from the early 1900s.



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Figure 29: Early postcard showing South Esk River near Perth. Source: Libraries Tasmania 2020.



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Figure 30: View across river from mill site (no date). Source: Libraries Tasmania 2020.

7.2.5.3 Two early settlers - Nowlan and Gibson

Timothy Nowlan's (and Nolan or Nowland) property was one of the earliest cultivated areas in the Perth region (located at Native Point). A substantial house was erected in 1842, on the site of earlier buildings on this property. The homestead lies on the southern side of the South Esk, upstream of the mill site. Survey maps prior to 1840 (Survey maps Cornwall 4, 51 and 33) show one, and later two cultivated fields close to the house, and it is likely (given proximity to the house) that land further afield on Native Point (within Nowlan's title) was cultivated at some point by subsequent landowners. This title had passed to William Gibson by 1858, who owned Scone and later built the Eskleigh homestead to the south west and downstream of Perth along the South Esk River in the 1860s. Gibson was a successful sheep farmer, who used the area extensively for grazing purposes and also built a mill on his property at Scone (Eskleigh).

7.3 Early regional plans and maps – 1820-1850

The following historical plans and maps (generally from around the 1820 to 1850 time period) show the study area and the development of the Perth region. They document the historical chronology of the area and, while they generally show little detail for the study area, assist to contextualise it within the wider 1820 to 1850 landscape.



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Figure 31 is possibly the earliest plan showing the study area. It does not have much detail but shows Perth, a cottage on the southern side of the South Esk River (possibly associated with the punt), Nowlan's farm and the Norfolk Plains Road heading south west from Perth. The plan was done by surveyor Wedge and most likely dates to the 1820s. The study area is undeveloped at this time.

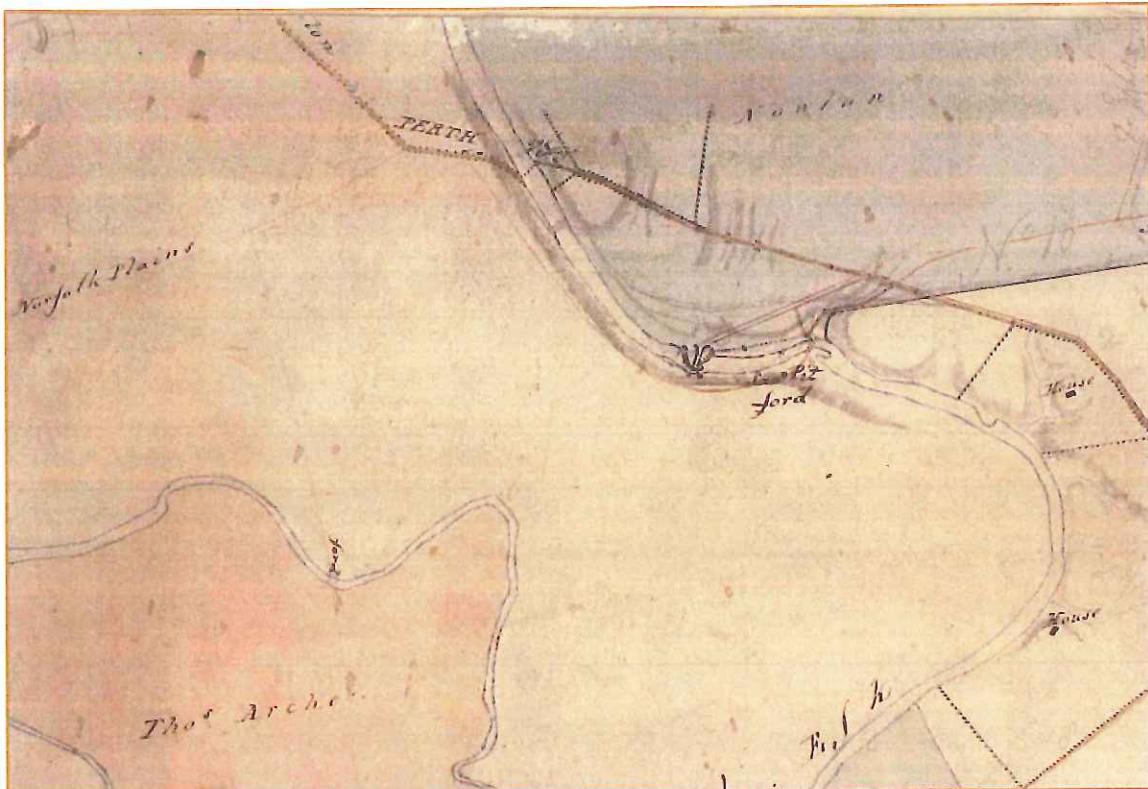


Figure 31: One of the earlier plans of the Perth area (by surveyor Wedge). Source: Libraries Tasmania Ref: Somerset 3 AF398-1-303 2 accessed 2020.

Figure 32 is an early undated plan (probably done in the 1840s) showing the northern suburbs of Perth. There is a lot granted to F J Houghton in Secombe Street. There is no development shown in the study area.



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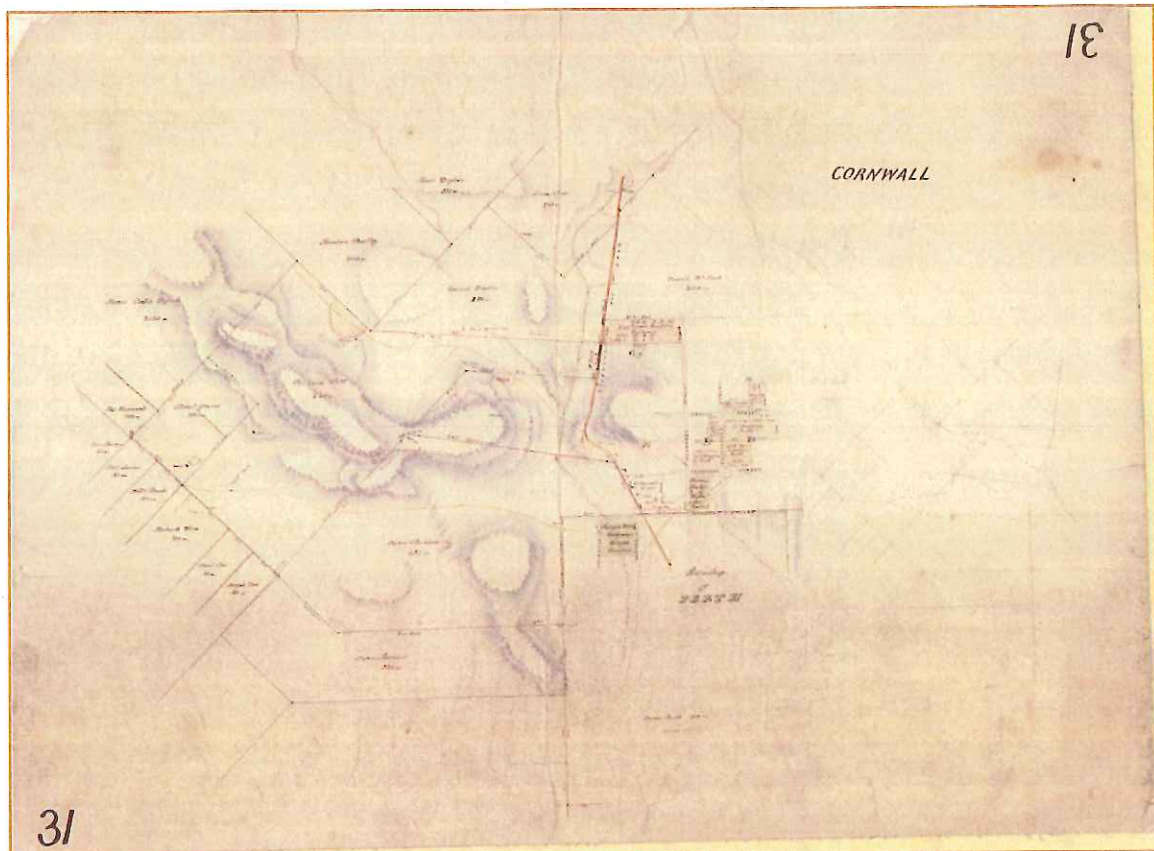


Figure 32: Early plan of the area around Perth. Source: Libraries Tasmania Ref: Cornwall 31 AF396-1-1355 3 accessed 2020.

Figure 33 is a plan of Perth similar to the one above (probably done at the same time) which shows the area to the north east of Perth. It shows Nowlan's land at Native Point and the Mill owned by McLeod. The study area is not featured.



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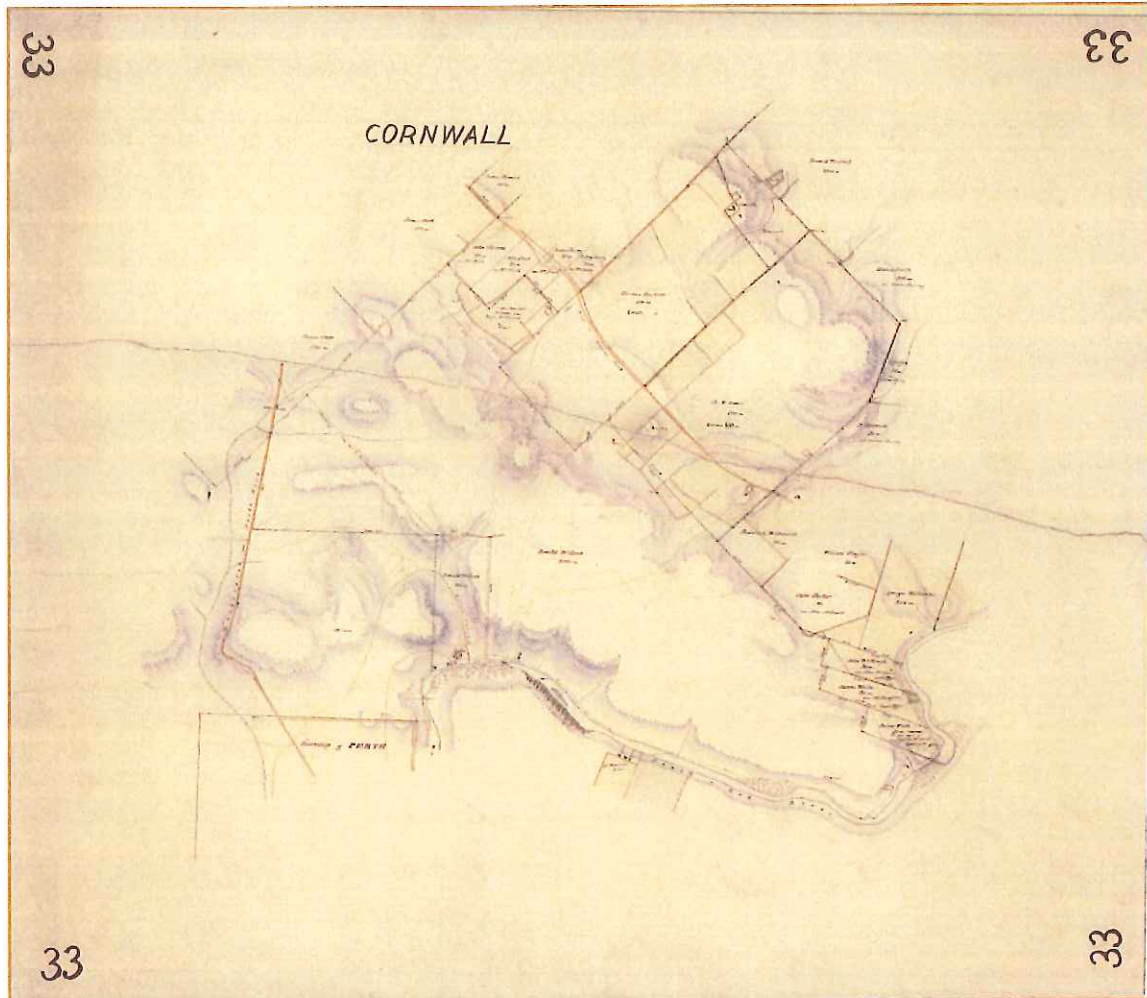


Figure 33: Early plan of area to the north of Perth. Source: Libraries Tasmania Ref: Cornwall 33 AF396-1-1357 2 accessed 2020.

Figure 34 is a lovely plan depicting the wider area around Perth and probably dates to the 1830s. Its main benefit is that it shows some of the many roads that radiate out of Perth including the Norfolk Plains Road (which runs past the study area) that goes to Brumby's Ford, the original road through Pateena (Norfolk Plains) and the road across Long Meadows. These roads no longer exist but were important in the early 1800s. This plan also shows the course of Sheepwash Creek to where it enters the South Esk River.

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Figure 34: Early plan of Perth and surrounds. Source: Libraries Tasmania Ref: Cornwall 51 AF396-1-1375 4 accessed 2020.

The plan in Figure 35 is similar to the above plan but shows a much wider area (to Westbury and beyond). Only the section around Perth is shown here. Like the above plan it probably dates to the 1830s and it shows the grants in the area, as well as the roads that radiate out of Perth. There is little detail for the study area.



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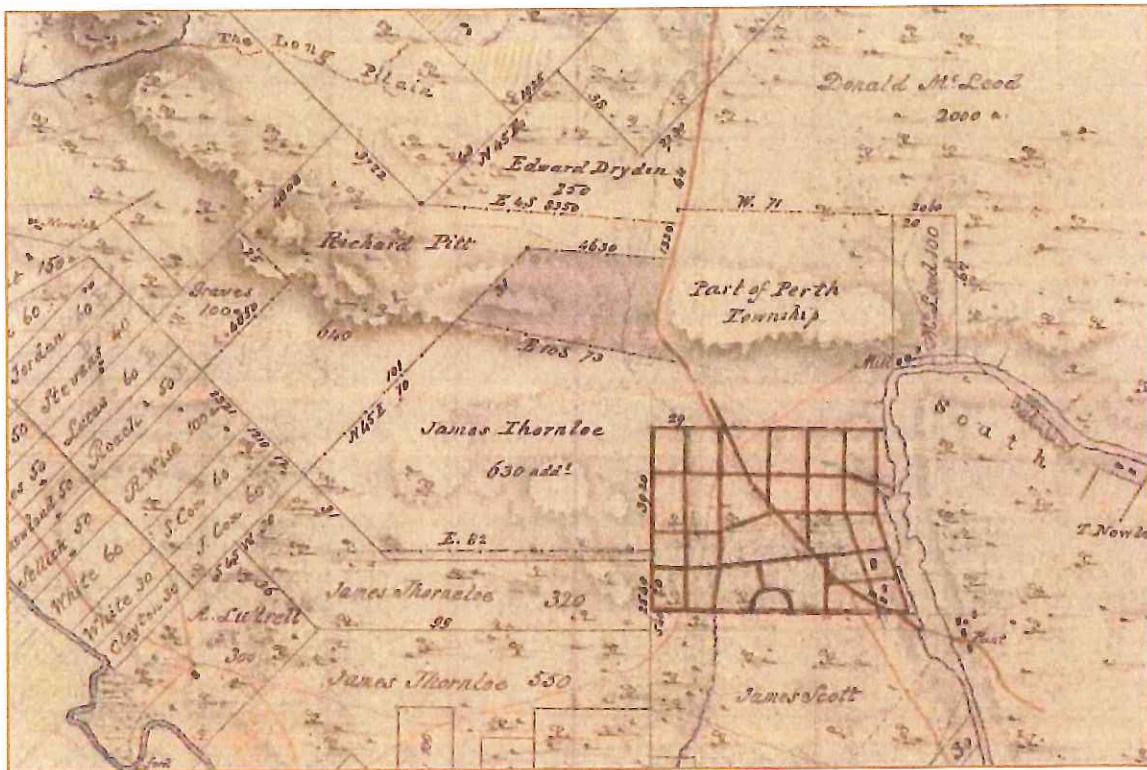


Figure 35: Section of early plan of Perth area. Source: Libraries Tasmania Ref: Cornwall 52 AF396-1-1376 2 accessed 2020.

The plan in **Figure 36** is also undated but is probably from around the 1840s to 1850s and shows the area designated to the township of Perth. There is no detail for the study area but the lagoons in Drummond Street are shown in the small inset on the left side. These disappeared early in Perth's development.



Figure 36: Early plan of area around the township of Perth. Source: Libraries Tasmania Ref: Cornwall 42 AF396-1-1366 2 accessed 2020.

7.4 Township plans, grants and information on Perth

The following plans, grants, photos and documents of the township of Perth document its growth and development from the early 1800s to c. 1890. Included are the particular grants and title transfers for the study area block which document how it developed alongside the growth of the township. Also included are some relevant details about some of the landowners of the study area and the immediate vicinity.

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The earliest plan found for the Perth township was completed by surveyor Scott in the early to mid 1830s (**Figure 37**). It shows the township bounded by Arthur Street in the north, the South Esk River in the east, Drummond Street in the south and Norfolk Street in the west. At this time there is no development in the study area and (as evidenced by previous plans) the town boundary extends beyond this point (shown as a red line on this map) to the larger rural grants to Thornloe in the west and Scott in the south.

Importantly this beautiful plan shows that roads radiate and extend to areas around the Perth township including the Perth Road to the punt over the South Esk River (accessing Launceston to the north and Hobart to the south), the road to the Perth mill (heading to the north east), the Norfolk Road to Brumby's Punt (accessing Longford and Cressy to the south west) and the road to Clayton's Ford on Norfolk Plains (heading to the north west and going through Pateena and Long Meadows). All these roads accessed grants on rich agricultural lands around the Perth region. The study area is located on the Norfolk Road and this was an important road from at least the 1820s. It is notable that the Perth punt is the main access over the South Esk River which continued until 1837 when the bridge was built (at the time of this plan the bridge was proposed north of the punt). It is also notable that the grant to Dolly Dalrymple is listed as Dalrymple Briggs (her father's last name) rather than Dalrymple Johnson (her husband's last name) as it was known on later plans. A brief history of Dolly Dalrymple's life is provided in the text box in **Figure 38**.

The curved Drummond Crescent is interesting and exists to this day. It was possibly originally planned as a bypass around the lagoon which was later filled in and Drummond Street built over it.



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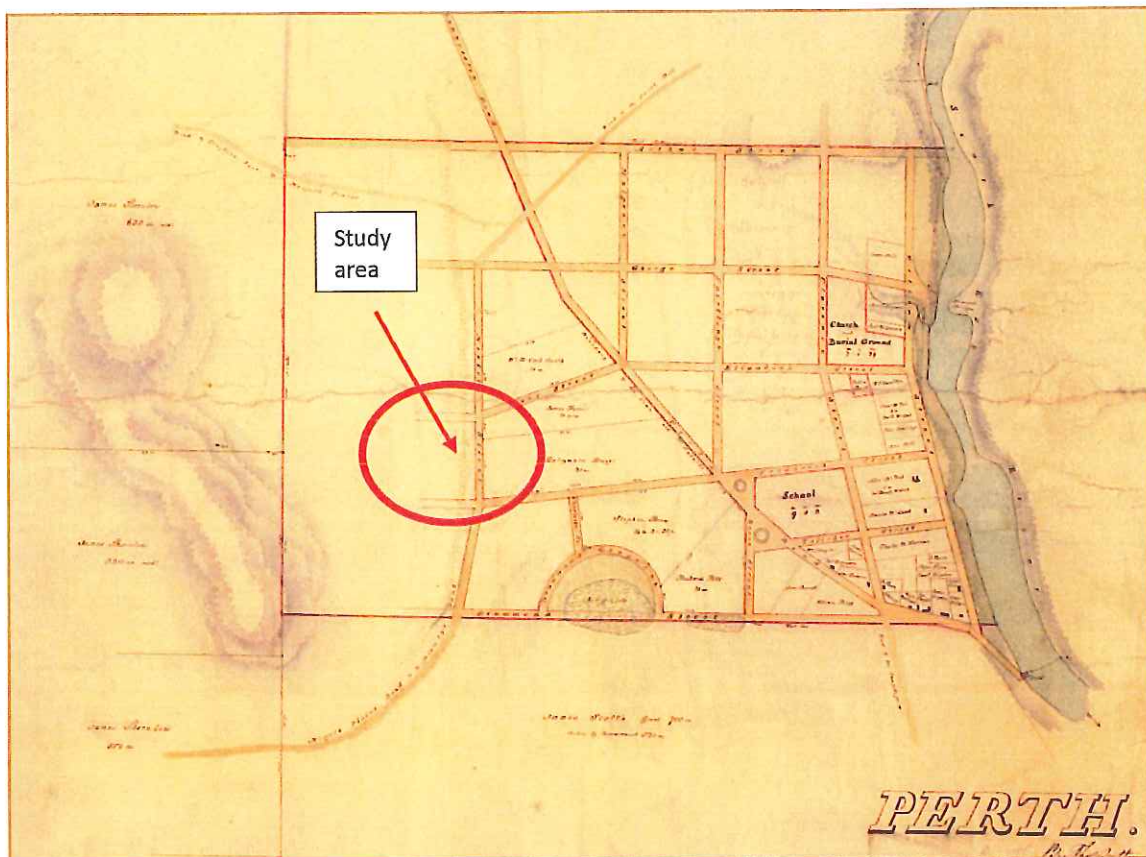


Figure 37: The earliest plan of the township of Perth found to date. Completed by surveyor Scott, probably in the early 1830s. Source: Libraries Tasmania Ref: AF721-1-510 cropped accessed 2020.



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Dolly Dalrymple (1808-1864) and her Perth land grant (1831) – by Barbara Rees and Darren Watton (main reference is Johnson and MacFarlane 2015)

Dolly Dalrymple was born in the Furneaux Islands in Bass Strait, daughter of George Briggs, a sealer from Bedfordshire, England, and Woretmoetevenner (also known as Pung or Margaret), who was the daughter of Mannarlargenna, a chieftain from the North East Nation. Dolly was raised by the surgeon, Jacob Mountgarrett and his wife in Port Dalrymple.

There is an interesting story from this time. In 1825, Mountgarrett was summoned to answer a charge that he had shot a “half caste native girl” of about 12 years, Dolly Briggs in the leg and side. Two Norfolk Plains settlers, William Brumby and James Thornloe, claimed to have seen him shoot the girl and William Brumby reported that when asked why he had done it, Mountgarrett had replied “cannot I correct my black servant without you interfering”. Dolly contradicted the claim and said she had been accidentally shot while Mountgarrett was aiming at a possum in a tree. Having only sustained minor injuries the charges were dismissed.

About 1825, Dolly left the Mountgarrett’s property and went to live with the convict stockman, Thomas Johnson (1801-1867), who worked at Dairy Plains near Deloraine. Johnson was born in Cambridgeshire, England and had been convicted of burglary in December 1822. He was sentenced to death but this was later commuted to transportation for life. He was sent to Van Diemen’s Land.

While Dolly was living in Dairy Plains, a group of Aboriginal people from the Big River Nation mounted an attack on Johnson’s hut where she was alone with her two children, six-year-old Jane and two-year-old Sarah. Armed with a musket, Dolly, successfully held off the attack for six hours until Johnson arrived back. Her Daughter Jane was speared in the leg during the attack. As a reward, the Arthur Government granted her twenty acres (8 Ha) of land at Perth, where Johnson erected a dwelling.

Dolly married Thomas Johnson in 1831. The original grant to Dolly Dalrymple in Perth is initially recorded as Dalrymple Briggs but is changed to Dalrymple Johnson on later maps.

In August 1836, Johnson, only recently pardoned, received a further seven-year prison sentence for receiving stolen wheat. With four children to support, Dolly displayed great resourcefulness and tenacity in holding her family together. In October 1836, she unsuccessfully petitioned Governor Arthur to have her husband assigned to her as a servant.

By 1841, Johnson was out of gaol and conditions began to improve for the family. Dolly then successfully petitioned for her mother, who was at Wybalenna on Flinders Island, to come and live with her and seven grandchildren at Perth. Woretmoetevenner is the only Tasmanian Aboriginal person (apart from a few who went to Port Phillip with Robinson) to have been granted permission to leave Wybalenna. She died in 1847.

The family moved to the Mersey region (near Latrobe) in 1845, and Johnson (pardoned again), took over the tenancy of Frogmore Estate. Prospering in the new district, Dolly and Johnson, purchased 500 acres (202.3ha) south-west of Frogmore, where they built Sherwood Hall. Johnson became the owner of two hotels (the Native Youth Inn at Sherwood and the Dalrymple Inn at Ballahoo), a coalmine (the Alfred Colliery and a timber exporting business. The family became one of the biggest landholders in the district and was well respected.

Dolly is said to have been devoutly religious. She died on the 1st December 1864, aged 56 years, survived by her husband and ten of their thirteen children.

Figure 38: Text box summarising the life of Dolly Dalrymple. Source: Barbara Rees and Darren Watton (see Johnson and MacFarlane 2015).

Figure 39 is a plan also by Scott showing the eastern side of Perth along the South Esk River. It shows the punt, proposed bridge site (north of the punt) and the focus of development



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along the river. It most likely dates from the early to mid 1830s and was probably done around the same time as the above plan as it is identical to the corresponding section. During this period development centred along the South Esk River (William Street and today's Punt Road), the eastern ends of Talisker Street, Frederick Street, Elizabeth Street and George Street, the Launceston Road (today's main Road), Scone Street and Norfolk Street (the study area and the Jolly Farmer Inn are located there).

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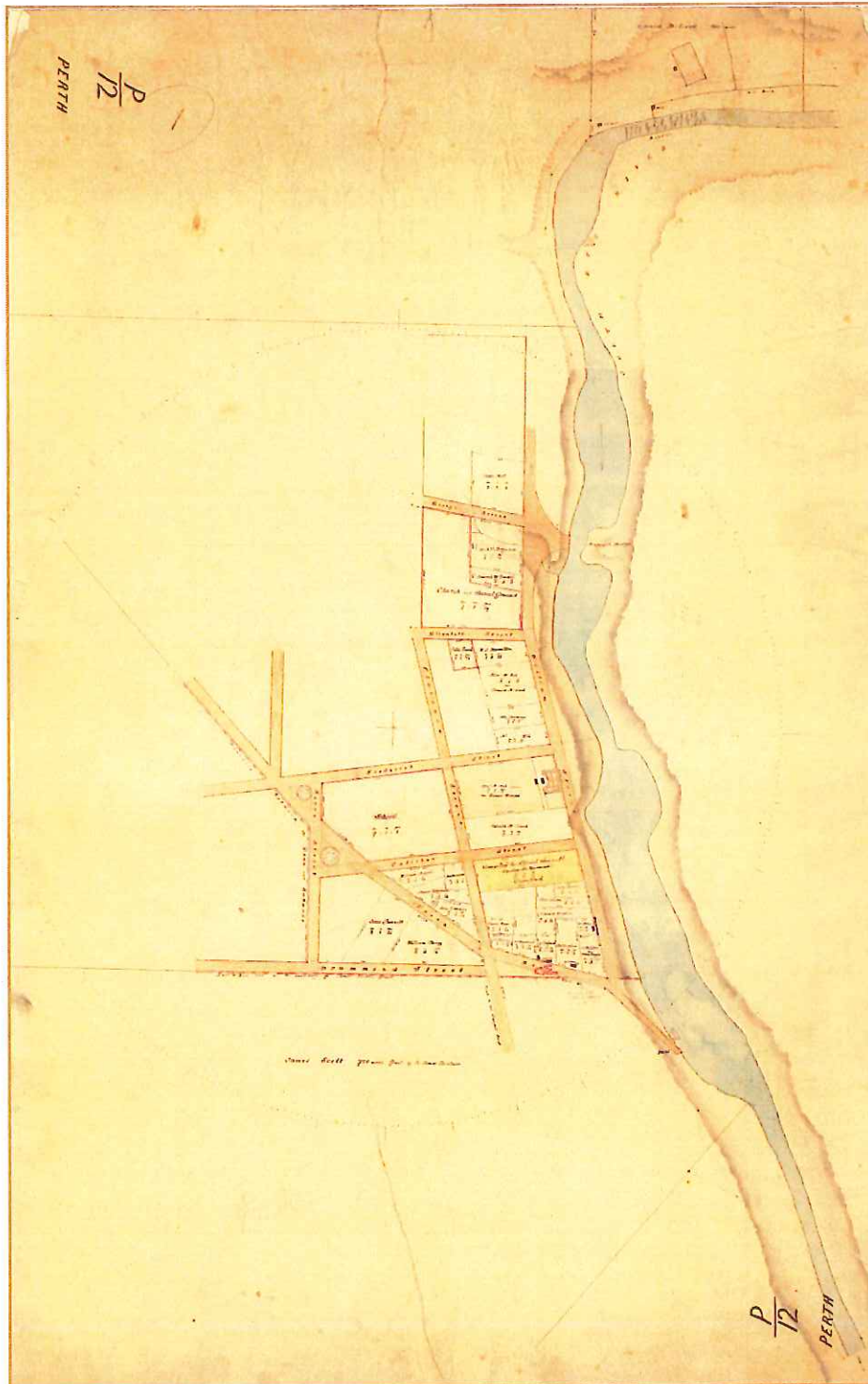


Figure 39: Plan by Scott most likely from the early 1830s showing the eastern side of Perth along the South Esk River. Source: Libraries Tasmania Ref: P/12 AF721-1-507 2 accessed 2020.

The plan in **Figure 40** is slightly later than the two plans above and shows the study area now divided into proposed grant lots. The plan probably dates to the late 1830s (or possibly to the early 1840s). There appears a bridge faintly drawn in at the bottom right of the plan



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where the bridge was built in 1837 (although the proposed bridge from the above plan is still indicated to the north of the punt). The punt is shown, and Norfolk Road is still a major access point to the south west area. Much of the rest of the area remains the same. Tasmania experienced a boom in the 1830s and Perth was no exception (Solomon 1976; Haygrth 2013). During this period churches and schools were built and the general population increased.

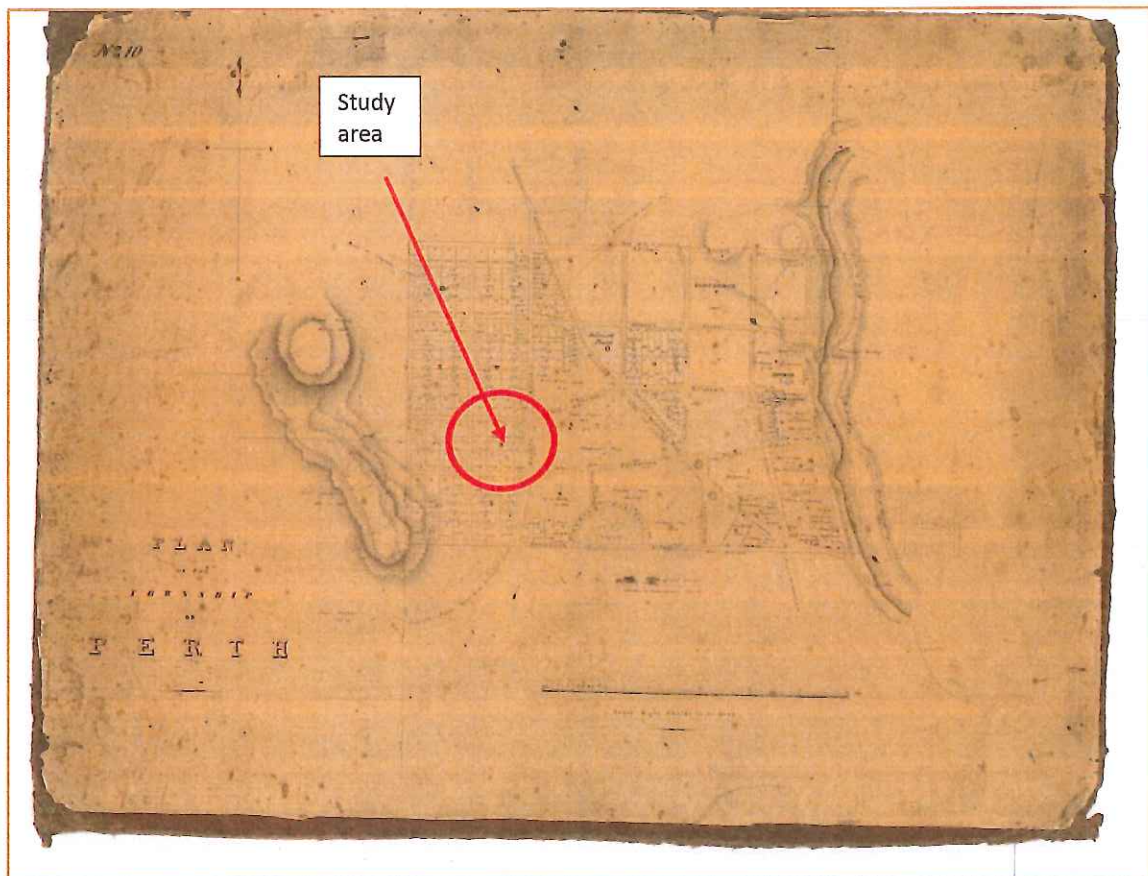


Figure 40: Early plan (c. late 1830s to early 1840s) of Perth showing the proposed subdivision of the area to the west of the township (the study area). Source: Libraries Tasmania Ref: P/10 AF721-2-8 2 accessed 2020.

This boom flowed into the 1840s with much of the land in the western area of Perth (the study area) being granted to various people (Figure 43). In 1843, Antonio Pergalli purchased a grant of land to the west of the study area (one of the earlier grants in this area). Peragalli was a convict sentenced for stealing a handkerchief and transported for life to Van Diemen's land in 1820. He was pardoned in 1841 (Figure 44). Interestingly, he probably came aboard the *Juliana* with the famous bushranger Matthew Brady. Perigalli sold this land to Adye Douglas in 1849 (after the study area was purchased by Douglas and Houghton). The transfer of this land has not been traced further as it is outside the study area but may be interesting because of its association to Adye Douglas.



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The study area was granted to Adye Douglas (bio - **Figure 41**) and Frederick James Houghton (bio - **Figure 42**) in 1848 (**Figure 43 and Figure 45 to Figure 47**). The Dalrymple grant is now titled Dalrymple Johnson (after her second husband).



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Sir Adye Douglas (1815-1906) – by Barbara Rees and Darren Watton (Green and McKay 1972).

Adye Douglas (Lawyer and Politician) was born in Thorpe-next-Norwich, England and was the son of Captain Henry Douglas and Eleanor Douglas (nee Crabtree). Douglas migrated to Van Diemen's Land (Tasmania) aboard the *Louisa Campbell* in 1839 but moved to Port Phillip for a time to farm sheep with his brother Henry near Mount Macedon. Douglas returned to Van Diemen's Land in 1842 and started the law firm, Douglas and Campbell, in Launceston. The practice did well and he acted for many important clients, including some in Victoria.

Douglas was very interested in the development and the welfare of the colony and was a supporter of both the establishment of local responsible government and the name change from Van Diemen's Land to Tasmania. He was also a strong advocate of the anti-transportation league and felt that the transportation of convicts was hindering the progress of Van Diemen's Land.

From 1853 to 1884, Douglas was a Launceston Council Alderman with two terms as Mayor (1865-1866 and 1880-1882). Douglas was defeated at the elections for the first part-elective Legislative Council in 1851 but won a Launceston seat in 1855. In 1856, he produced a Bill for a water supply to Launceston but failed to win support for a Tasmanian railway. In 1857 he resigned and travelled in America, France and England. He became even more impressed by the need for railways. After 1857 he was a strong advocate for the Launceston to Deloraine Railway. In 1865 he successfully carried the Bill for the railway against strong opposition. The railway from Launceston to Deloraine (the first in Tasmania) begun construction at Launceston Swamp (Inveresk) in 1868 and was completed in 1871.

In the House of Assembly, Douglas represented Westbury in 1862-71, Norfolk Plains in 1871-72 and Fingal in 1872-84. He then became premier and chief secretary and was elected for South Esk to the Legislative Council, where in 1885 he carried a bill for the appointment of an agent-general in London. From 1884 to 1886, he was Premier of Tasmania. Douglas represented Launceston in the Legislative Council in 1890-1904 and was its president in 1894-1904.

Douglas was made a Knight Bachelor by the Governor of Tasmania in 1902 and ranked by the Governor as "the first among living Tasmanians".

Douglas had three sons and a daughter in the 1840s. On 10 July 1858 in London as a widower he married a widow Martha Matilda Collins, née Rolls. At Launceston on 18 January 1873 he married Charlotte Richards, by whom he had a daughter Eleanor before she died aged 22 on 23 July 1876. On 6 October 1877 in Adelaide he married Charlotte's sister Ida; they had four sons and four daughters.

Adye Douglas died at his Hobart home (Ryehope) on the 10th April 1906 and was buried at the Cornelian Bay cemetery.



Adye Douglas in 1898.

Figure 41: Text box summarising the life and achievements of Adye Douglas. Source: Barbara Rees 2020.



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James Frederick Houghton (1811-1885) – by Barbara Rees and Darren Watton (Ref: Haygarth 2013)

James Frederick Houghton was born in Kent England and was a local resident of the Perth region in Tasmania. He was a flour miller, Longford councillor and parliamentarian.

Houghton was a member of the House of Assembly at Ringwood from 1859 to 1861 and from 1872 to 1876 (in 1872 the Ringwood electorate was combined with the Norfolk Plains Electorate). He was a protectionist supporting import tariffs and free trade versus protection was the primary parliamentary debate in Tasmania from the late 1850s until it was resolved by the abolition of tariffs in the federation of the Australian colonies in 1901.

Frederick James Houghton died at Perth Tasmania on the 19th of December 1885.



F J Houghton.

Figure 42: Text box summarizing the life of Frederick John Houghton. Source: Barbara Rees, Darren Watton and Haygarth 2013.



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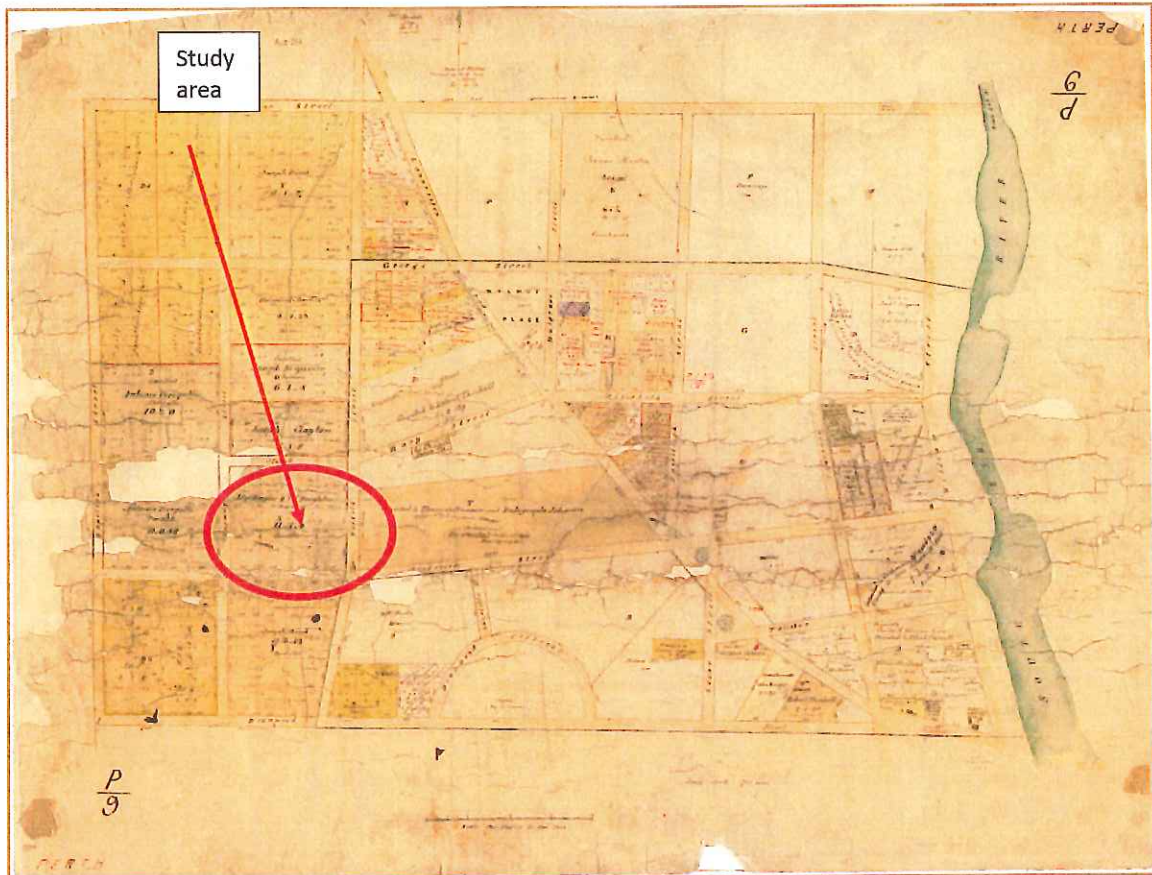


Figure 43: Plan of the township of Perth from after 1848. Source: Libraries Tasmania Ref: P/9 AF721-1-504 2 accessed 2020.



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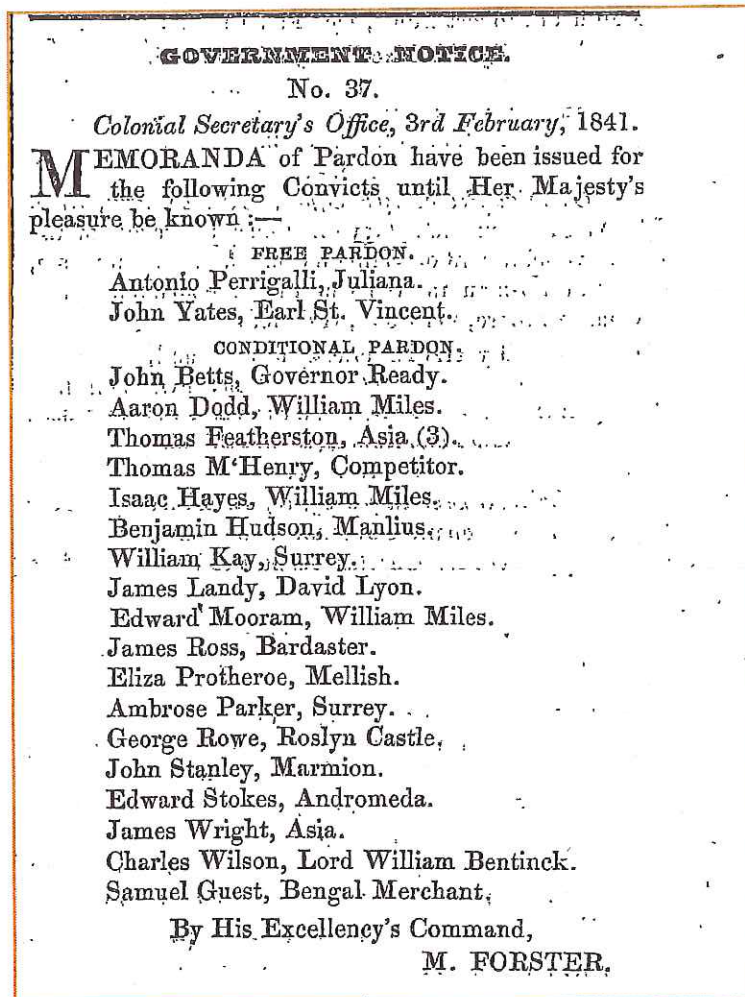


Figure 44: Notice of pardon for Antonio Perrigalli in the Hobart Town Gazette 1841. Source: Libraries Tasmania HTG 1841 accessed 2020.

During this investigation, a descendent of an original landowner, Carol Dennis, was visited and from her we were able to view the original land grant certificate for the study area to Adye Douglas and Frederick John Houghton. The grant is dated 5th December 1848 (Figure 45). Some photographs of this document are included in Figure 45 to Figure 47. Douglas and Houghton most likely bought this land together as a speculative exercise. There are no records of any structures being built on this land by them at this time and obligations requiring structures to be built on grants had ended in the 1830s.

The Dennis's owned the study area from 1885 to c.1987 and Carol grew up at the property. Carol also had original title deeds for all the transactions of the land from this first grant and these were invaluable to the research process and understanding the development of the area. Figure 47 contains a diagram from the grant showing the block and the later addition (in pencil) of the railway through the area.



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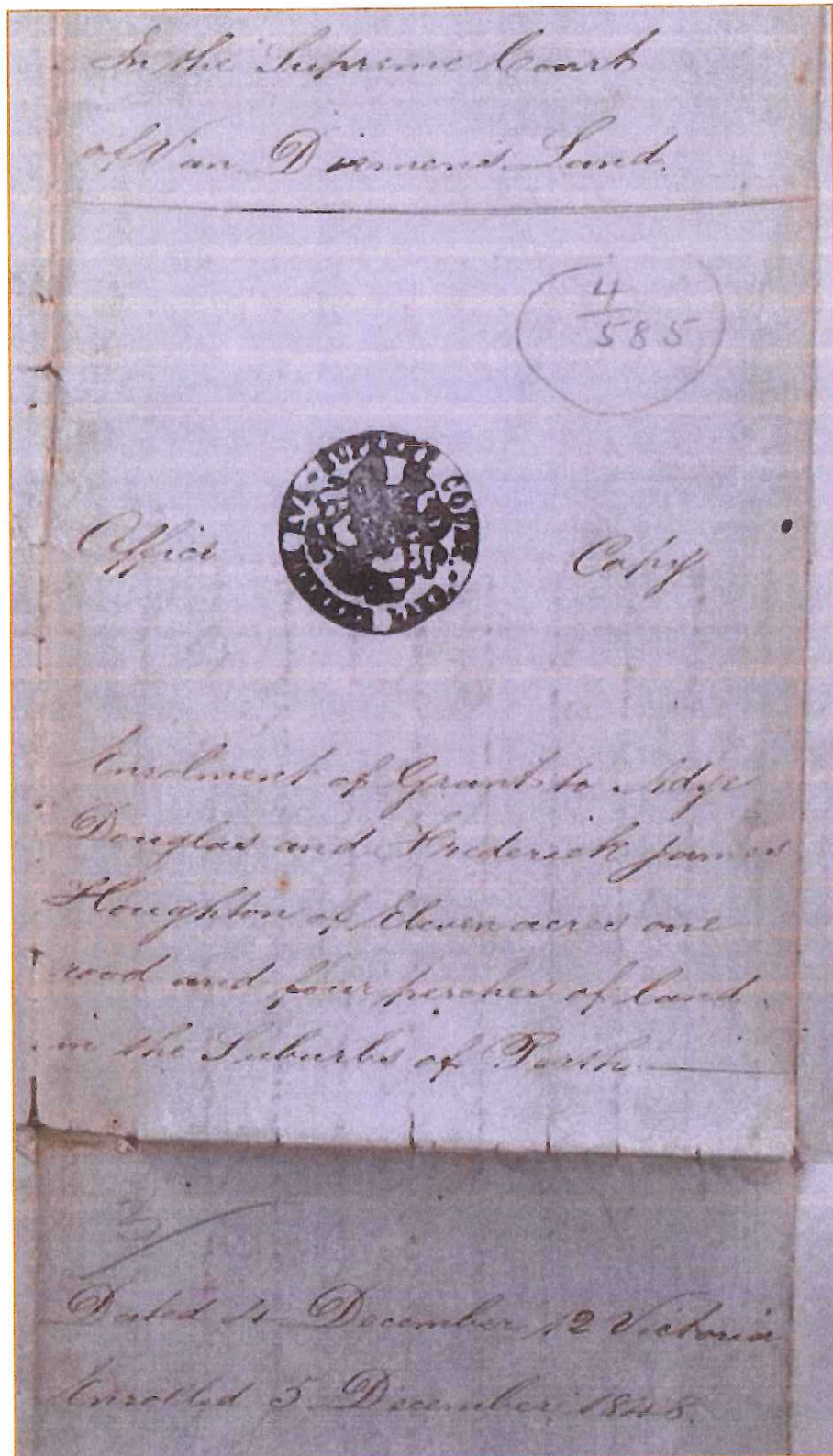


Figure 45: Front page of the grant for the study area land to Adye Douglas and Frederick James Houghton (5th December 1848). Photograph by Darren Watton 2020 and courtesy of Barbara Rees and Carol Dennis.



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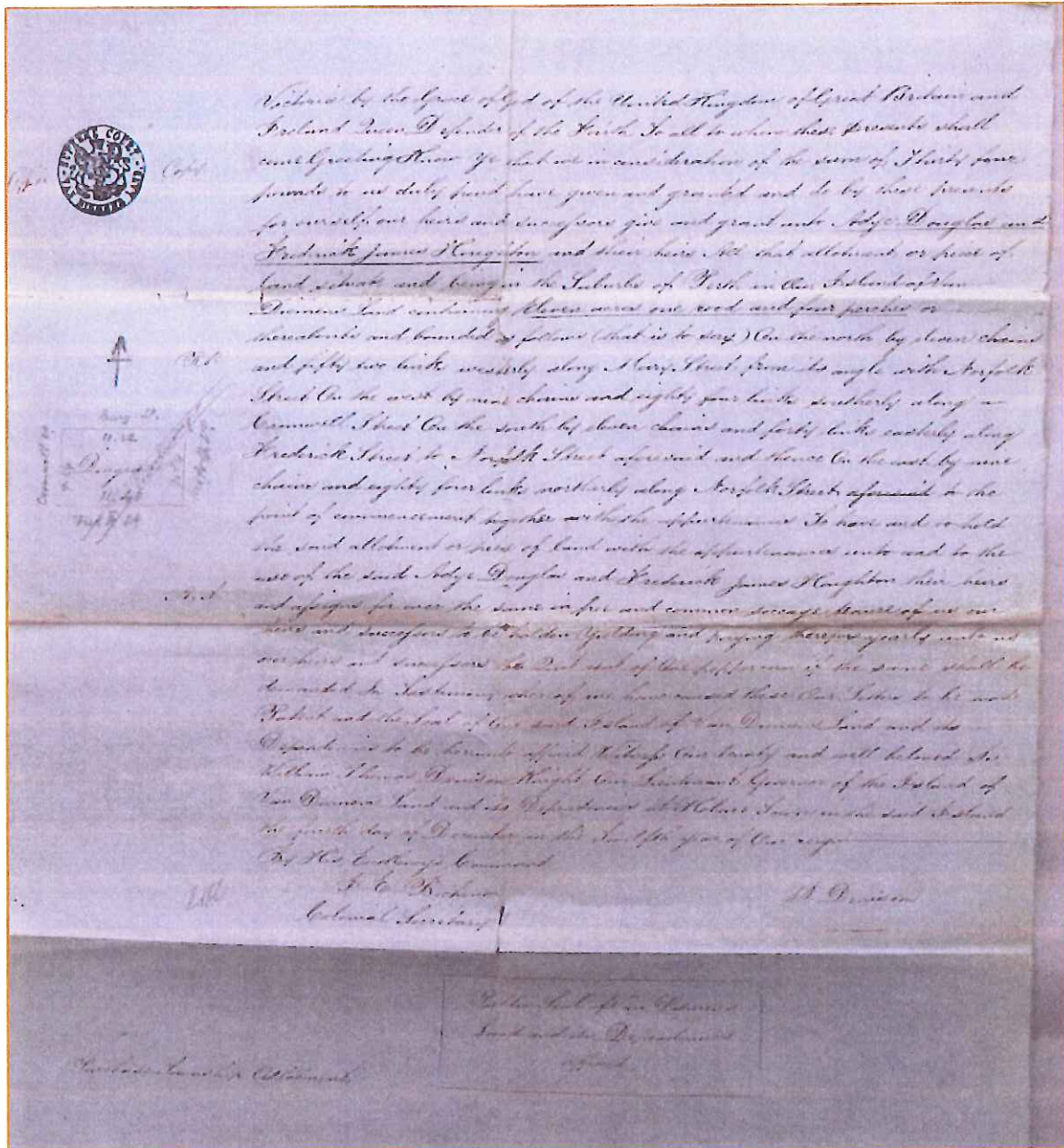


Figure 46: Grant to Adye Douglas and Frederick James Houghton. Photograph by Darren Watton 2020 and courtesy of Barbara Rees and Carol Dennis.



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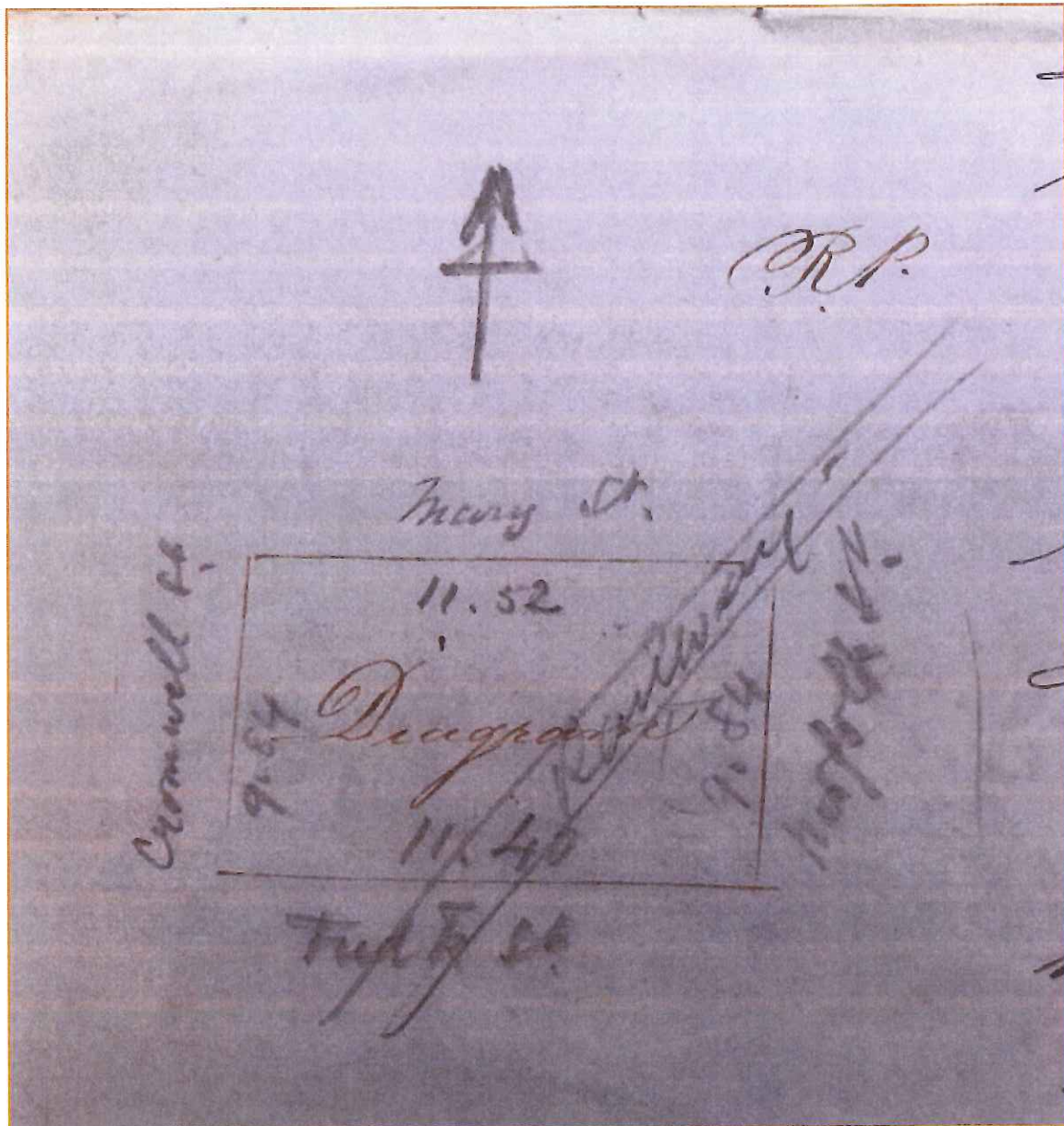


Figure 47: Grant plan diagram from grant to Adye Douglas and Frederick James Houghton. Photograph by Darren Watton 2020 and courtesy of Barbara Rees and Carol Dennis.

Figure 48 is a grant plan from c. 1854. It shows the township of Perth in detail along with additional grants to both the north (Devon Hills) and west of the town (the study area).



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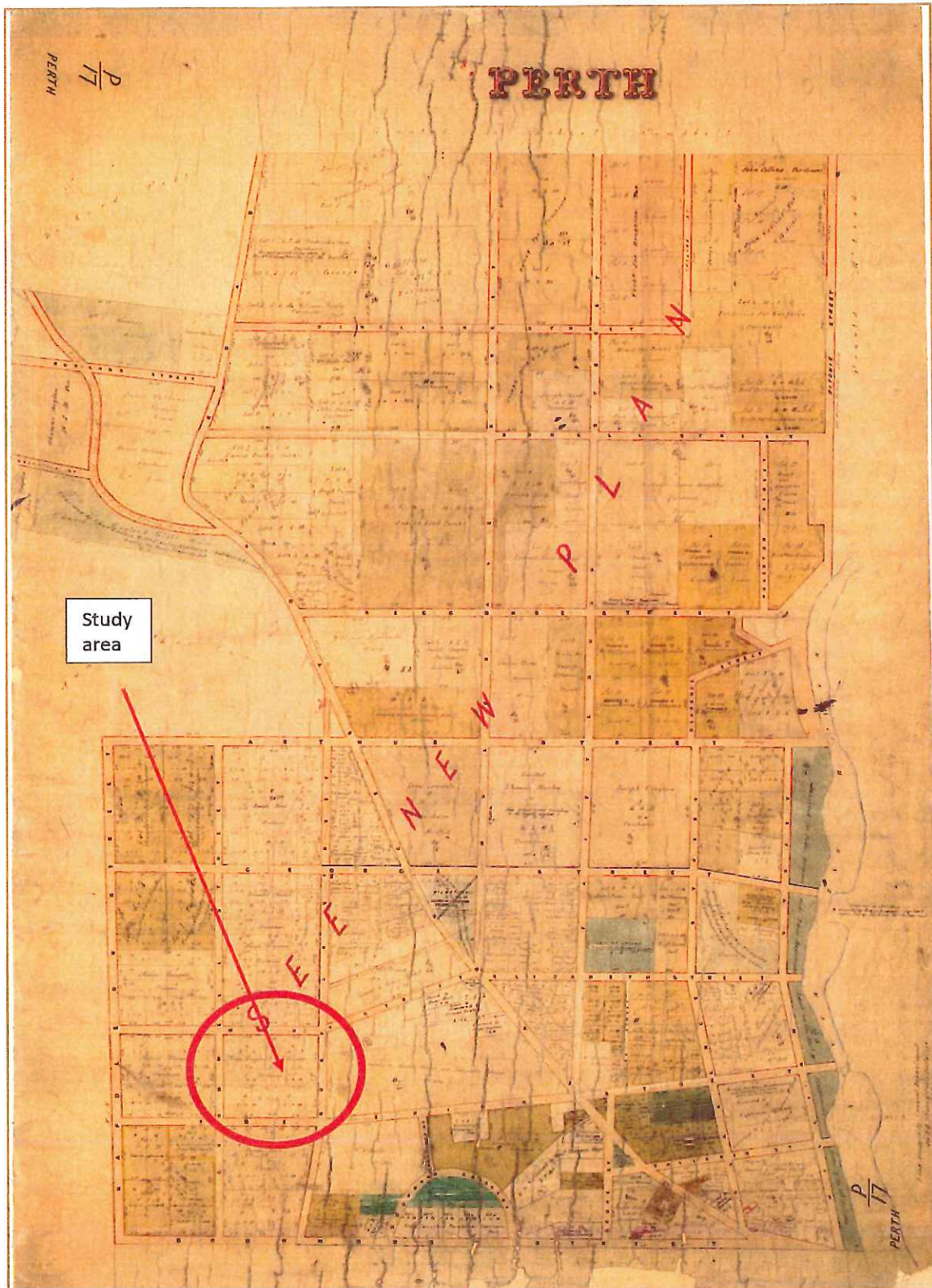


Figure 48: Grant plan for the township of Perth (c. 1854). Source: Libraries Tasmania Ref: P/17 AF721-1-511 2 accessed 2020.



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Douglas and Houghton sold the study area to David Thomas (blacksmith) on 19th April 1855 **Figure 49** is a copy of the title transfer. There are no references found to any structures built on the land.



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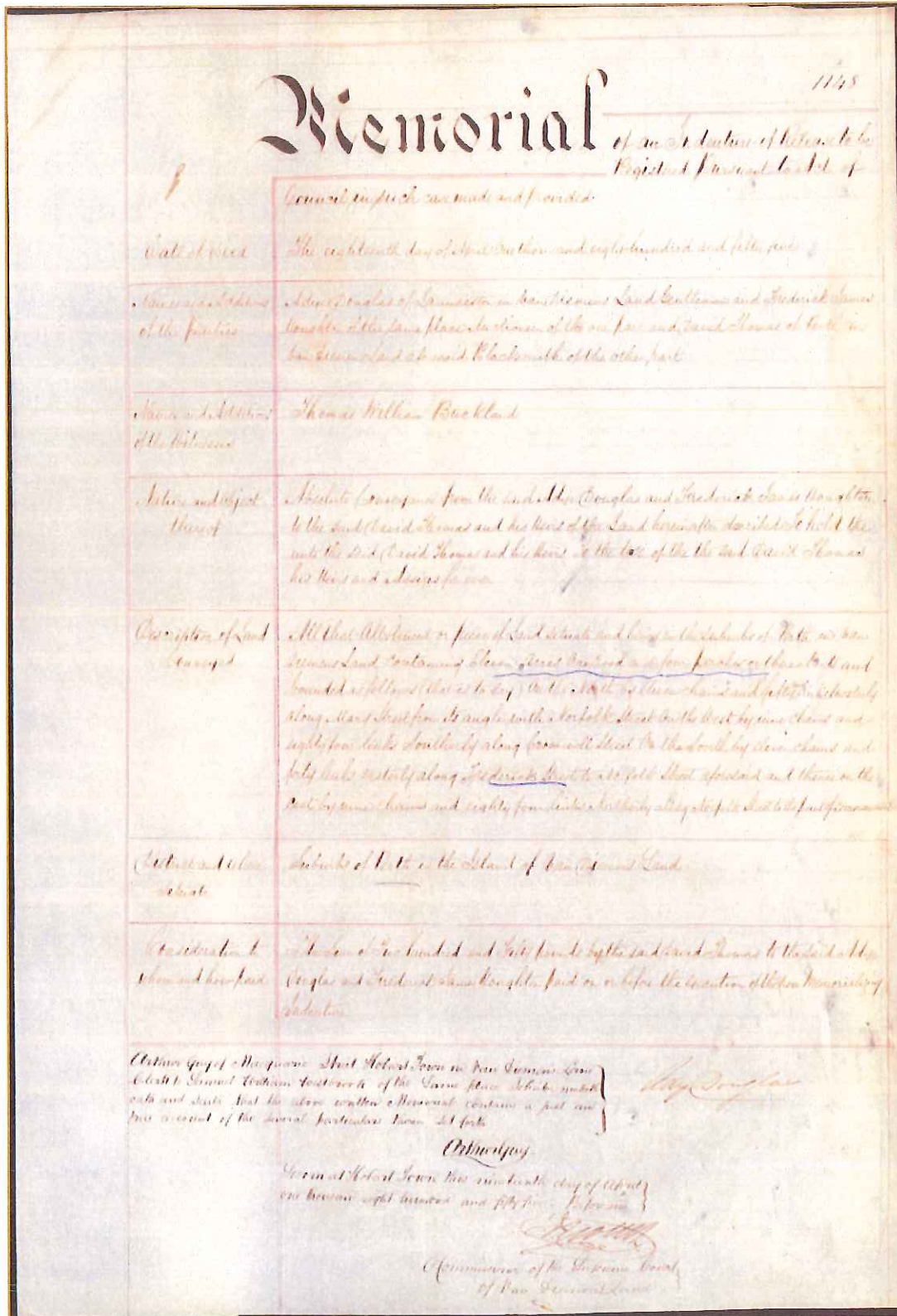


Figure 49: 1855 title transfer from Adye Douglas and Frederick John Houghton to David Thomas. Source: List Title 04/1148 accessed 2020.



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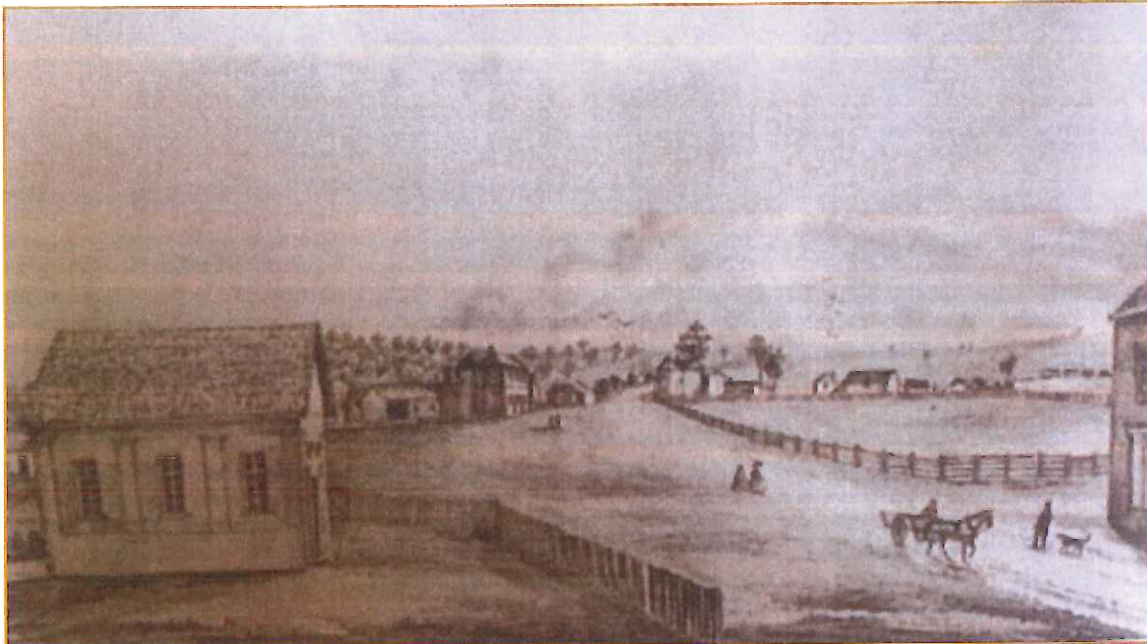


Figure 50: A sketch by Emily Bowring showing Perth in 1855. The building on the left is the Wesleyan Chapel and the Coffee Temperance House can be seen in the centre left (of the road). Source: Haygarth 2013.

On the 4th December 1859, David Thomas mortgaged the study area to John Dryden (Figure 51). John Dryden then bought it from Thomas on 4th April 1868 (Figure 52). Once again it is believed that no structures had been built on the land.



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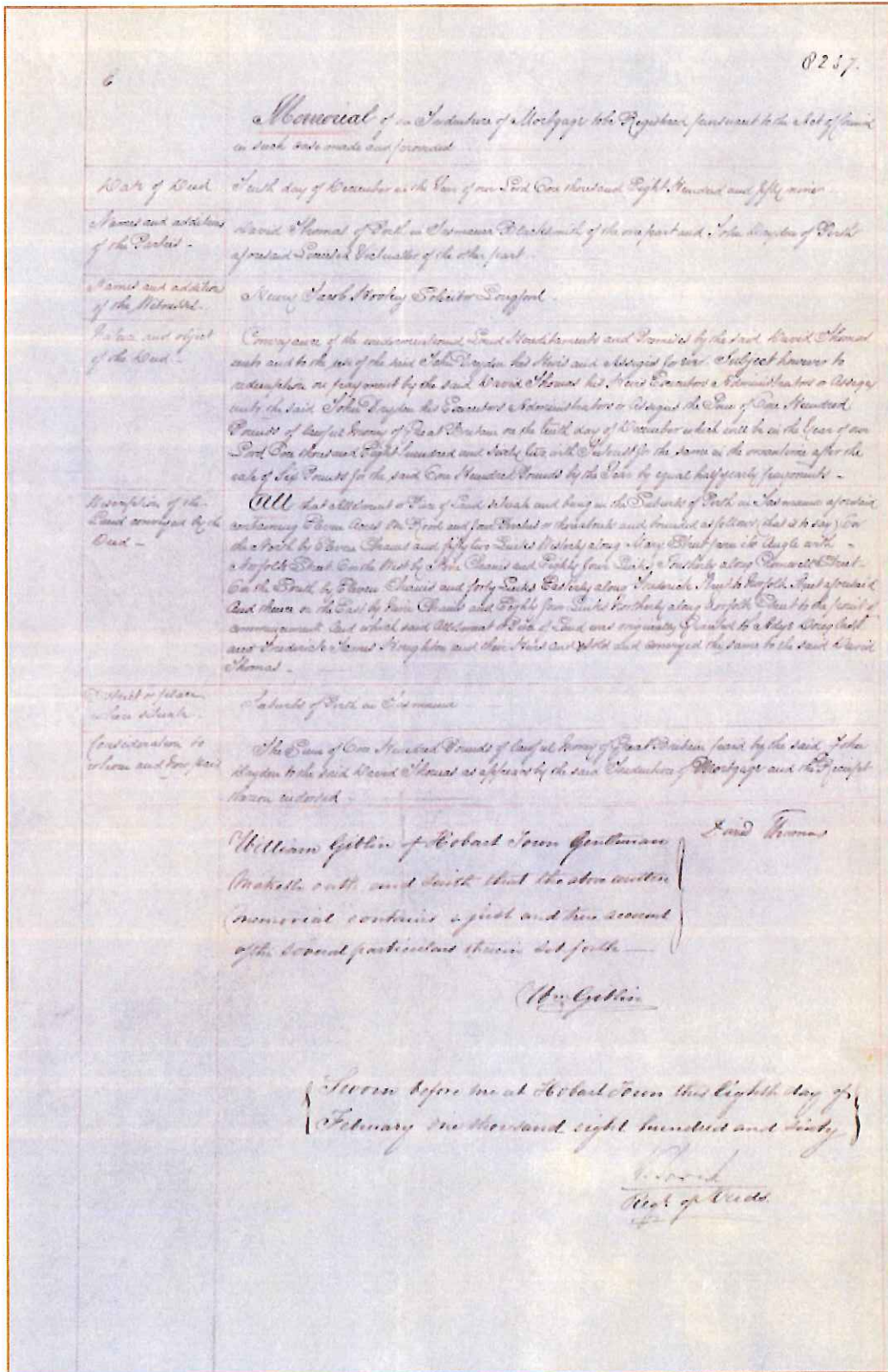


Figure 51: 1859 mortgage deed between David Thomas and John Dryden. Source: List Titles 04/8237 accessed 2020.



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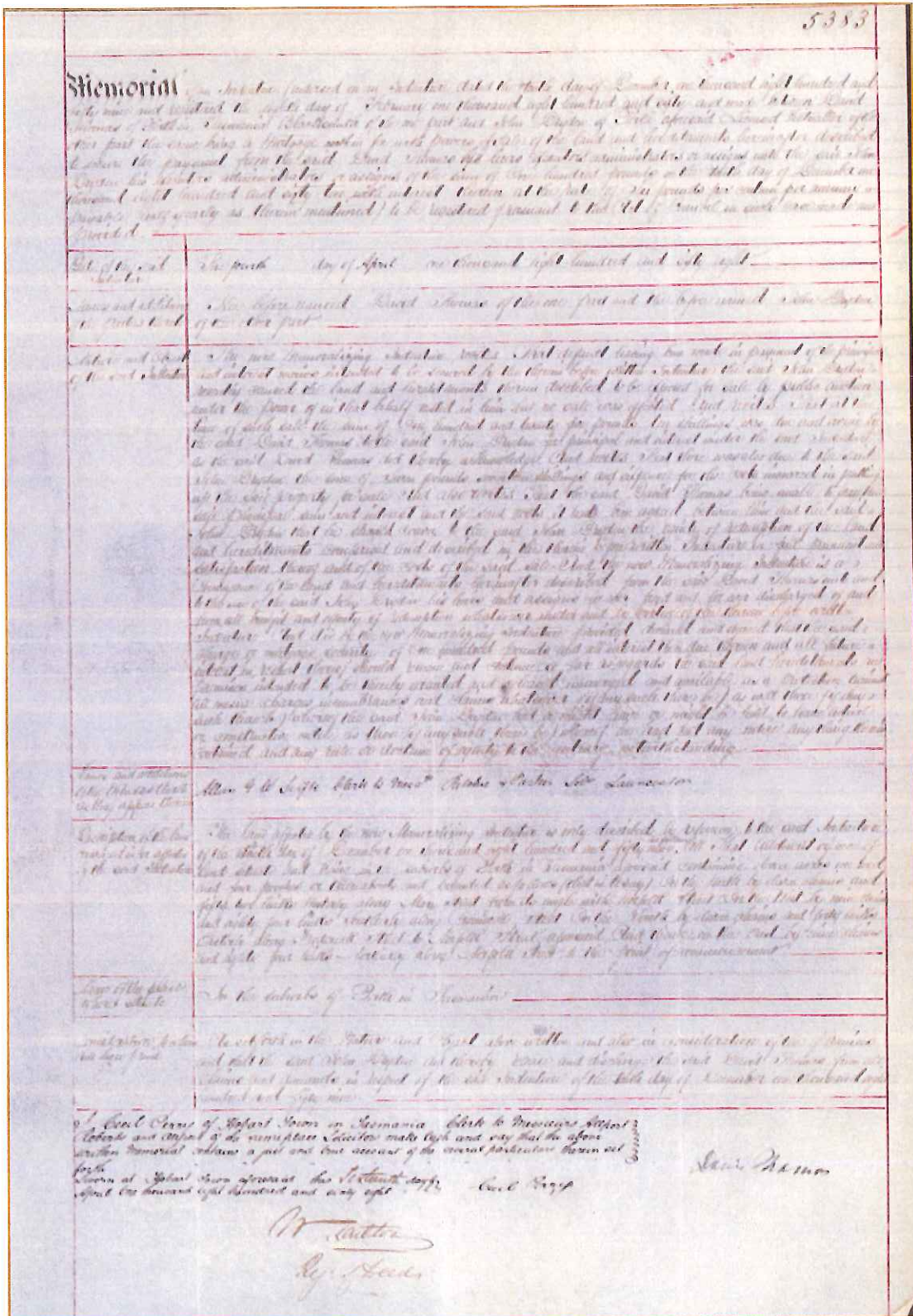


Figure 52: 1868 title deed transfer from David Thomas to John Dryden. Source: List Titles 05/5383 accessed 2020.



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The following grant plan is from 1886 (**Figure 53**). It is similar to the c. 1854 plan above but now includes the railway through the study area. The Launceston to Deloraine section of railway was commenced in 1868 and completed in 1871. This section was probably completed around 1868 to 1869 by the Launceston and Western Railway Company (L&WR Co.). Adye Douglas had been involved in advocating for the railway in Tasmania.

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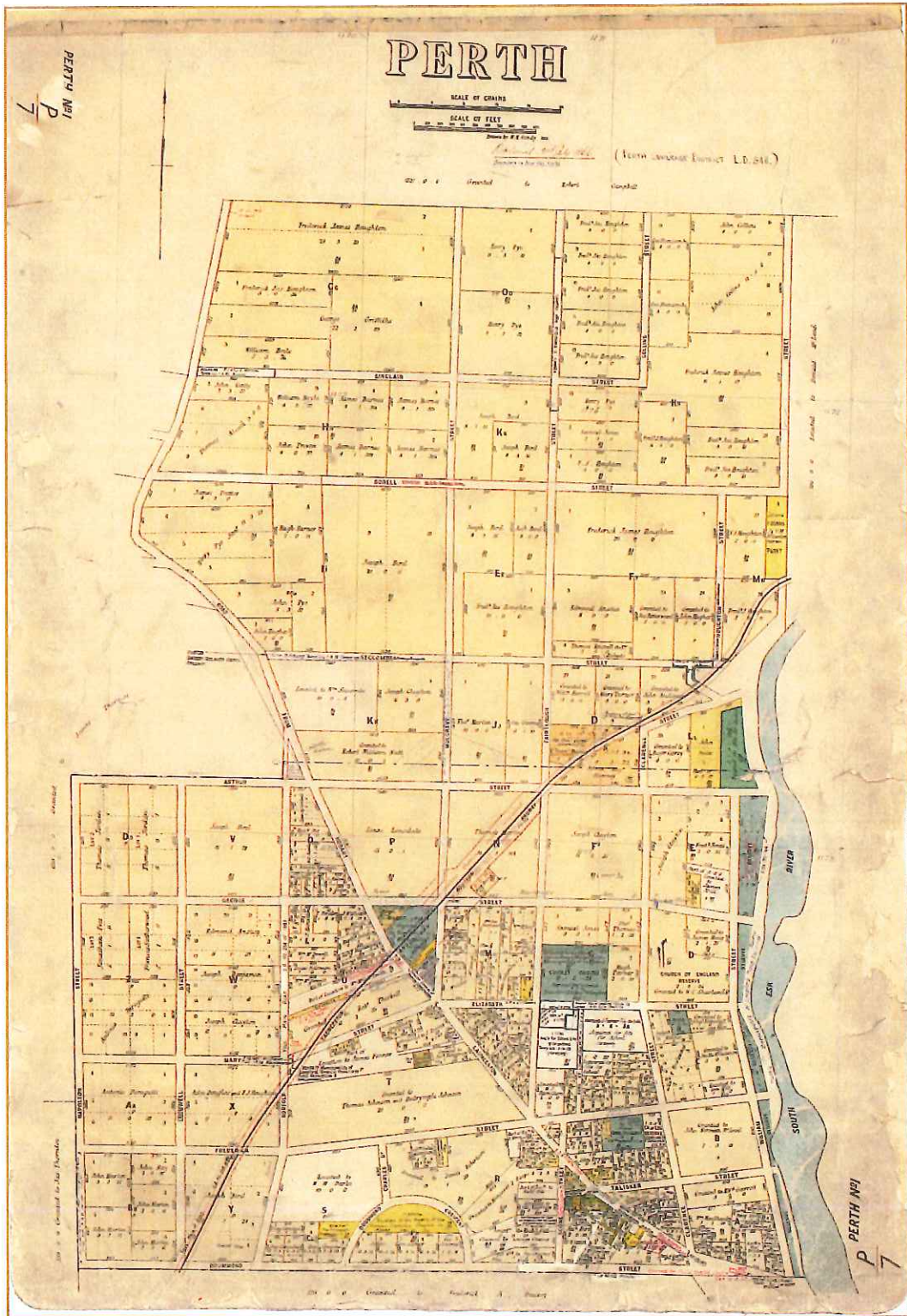


Figure 53: 1886 grant plan and what is probably referred to as the 'New Plan' in the c. 1854 grant plan above. Note the railway (built 1868 now appears on this plan). Source: Libraries Tasmania Ref: P/7 AF819-1-247 2 accessed 2020.



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The study area was transferred from John Dryden to (his daughter) Mary Thompson Dryden on 24th September 1883 (**Figure 54**). That deed also states that the land was granted to A Douglas and FJ Houghton by letters patent and registered on the 8th December 1848.

Margaret Thompson Dryden was born 9th April 1851 to John and Ann (Willson) Dryden. She married Michael Heaps on 20th August 1884 in Longford. She made her will in 1923 and at that time owned "Haggerstone" of 570ac. She left this property to her son John Michael Heaps. She also owned "Esk View" of 8 acres which she left to her daughter Jessie Ann Reid Johnson.

Margaret Thompson Heaps (Dryden) sold the study area to William Dennis the Younger on the 6th March 1885 for 58 pounds (**Figure 55**). By this time some land had been removed for the Railway and no other structures were recorded on the land.

William Dennis the Younger is believed to have built the current house and well on the study area block (Carol Dennis and Jack Hind Pers. Comm. November 2020 – see **Figure 56**). The style of the house and the use of handmade bricks suggests that the house was built soon after Dennis took over ownership i.e., c. 1885 to 1890 (see **Figure 3 and Figure 4** at the beginning of this document). As previously noted, handmade sandstock bricks with thumbprints are not necessarily convict made as suggested by Denman (2019). The only way convict bricks can be positively identified is either by Broad Arrow or similar marking (Government marking – generally 1823-c. 1840) or by direct known association such as at Brickendon or other known convict assigned sites. Thumbprints on handmade bricks are caused by the pushing (with thumbs) of the green brick out of the mould prior to drying. Handmade bricks were made by many different people (both privately and by the Government) particularly before the 1880s when machine manufactured bricks generally took over. It is known, however, that in rural and smaller areas that handmade brick making continued for some time after this, possibly into the early 1900s.

There is no record of any previous structures on this land prior 1885 but it is possible that other structures existed especially given the proximity of the location to Norfolk Street and the Jolly Farmer Inn. This, however, is speculation and only further research or archaeological study could confirm this.



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Memorial of an Indenture to be registered pursuant to the Act of Council in relation made out of record

That The thirtieth day of September one thousand eight hundred and eighty three

Now appearing John Dryden of Perth in Tasmania Gentleman of the one part and Margaret of the parties Thompson Dryden of the same place Spinster of the other part

Now assisting of the witnesses R W Lord JP Railway Manager Perth

Whereas and it is The said memorializing Indenture is a Conveyance by the said John Dryden of the hereditaments and premises therein and hereinafter described unto and to the use of the said Margaret Thompson Dryden Spinster and assigns forever

Description All that allotment or piece of land situate and being in the Suburbs of Perth in Tasmania containing therein acres one rood and four perches or thereabout and bounded as follows (that is to say) On the North by seven chains and fifty two links thence along Mary Street from its origin with length Street on the East by seven chains and eighty five links thence along Cromwell Street on the South by seven chains and forty links thence along Frederick Street to length Street aforesaid and thence on the West by seven chains and eighty five links thence along length Street aforesaid to the point of commencement and which said piece of land was granted by Letters Patent bearing date the first day of December in the twelfth year of the reign of the present Majesty Queen Victoria and enrolled in the Supreme Court of Tasmania the fifth day of December one thousand eight hundred and fifty eight with Sir Douglas and Frederick James Douglas and their heirs together with the appurtenances

Whereas also In the Suburbs of Perth aforesaid

Consideration of seven shillings New pence by the said Margaret Thompson Dryden to the other aforesaid said John Dryden

Witness Subscribed of Hobart in Tasmania }
 Clerk to Messrs Wilson and Mitchell of the }
 same place solicitors make oath and say }
 that the foregoing memorial contains a }
 just and true account of the several parties }
 therein set forth

Witness *James Douglas*

Sworn at Hobart aforesaid this }
 being the *thirtieth* day of September 1883 }
 Before me

James Douglas

Registrar of Deeds

Figure 54: Deed from John Dryden to Margaret Thompson Dryden dated 1883. Source: List Titles 07/1583 accessed 2020.

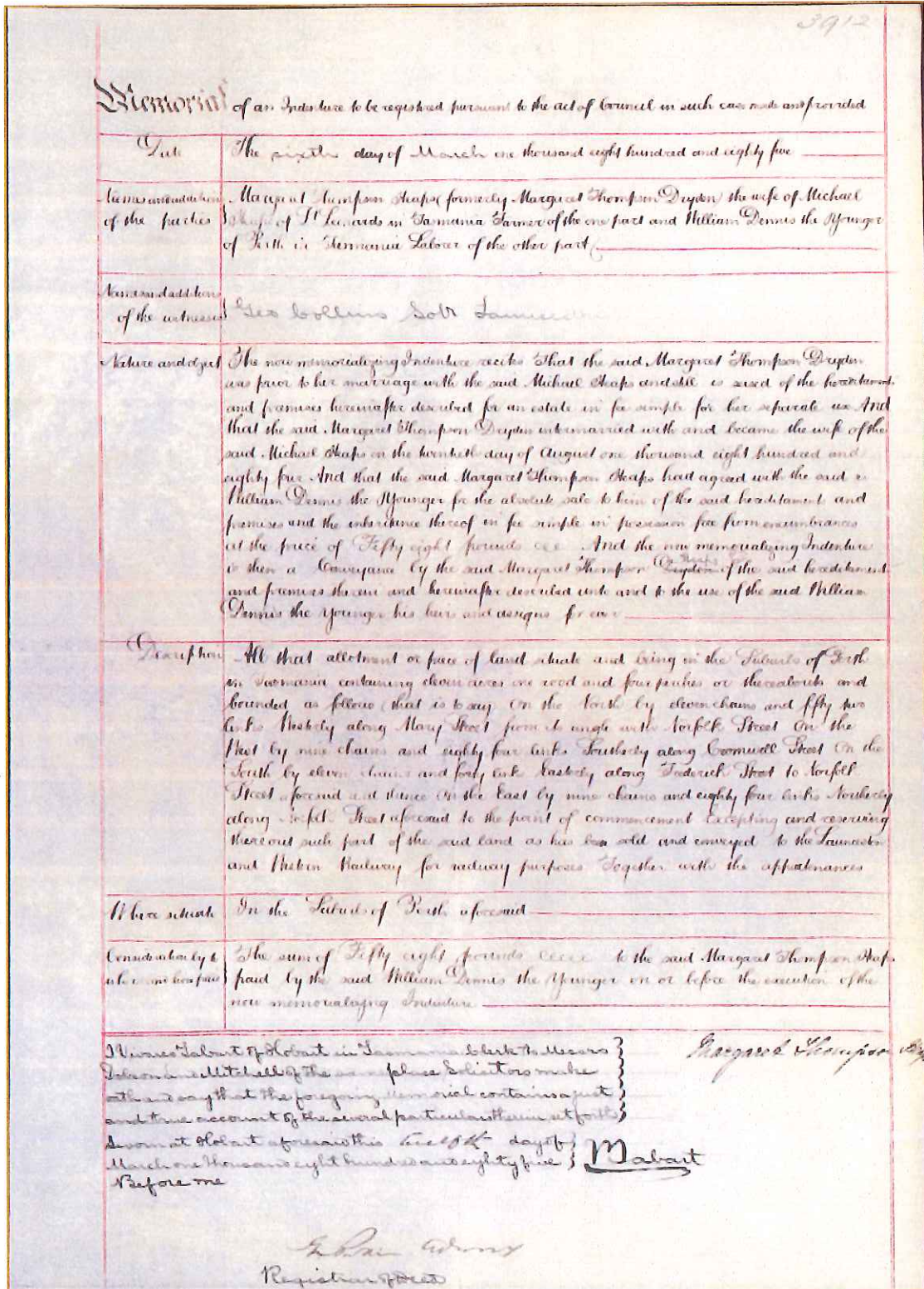


Figure 55: 6th March 1885 Deed for sale of land at study area from Margaret Thompson Heaps (formerly Dryden) to William Dennis the Younger. Source: List Titles 07/3912 accessed 2020.



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William Dennis the Younger died 15th December 1910. His son William Junior took over the study area and died 7th May 1917. He left his land at Perth to his widow Isabella (Grainger) Dennis for her life. The study area remained in the Dennis family till c. 1987. After this time, it has been privately owned until recently when it was purchased by the Northern Midlands Council for subdivision.

Jack Hind, who like Carol Dennis, is a descendent of William Dennis the Younger. Jack has provided the following amazing information by memory in interview with Barbara Rees, about the Dennis family and the 32 Norfolk Street property (the study area) (Figure 56). There are a few interesting notes to be made about the information:

- The Dennis's were originally employed by the well-known Gibson family.
- It is known that William Dennis the Younger bought the property in 1885 from Margaret Thompson Heaps so Dennis was probably 35 (rather than 25-30) when he built the property unless some other arrangement was made.
- William Dennis's wife, Isabella was a well-known and respected nurse in the Perth area.
- The reference to an earthquake damaging the chimney is interesting. A "large swarm" of earthquakes has been identified between 1883 and 1892 in Tasmania (McCue 2015). Many tremors are recorded in local papers at this time and it is likely that this is what Jack is referring to. This also fits with an 1885 to 1890 build for the cottage and well.
- William Dennis the Younger probably died in 1910 rather than 1917 and this possibly confused with William Junior who died in 1917.
- The property is referenced as being cleared but vacant when Dennis bought it suggesting there was no previous development on the block or that it had disappeared by this time.



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The Dennis Family by JACK HIND (aged 86 years) - Great Grandson of William Dennis (Ref: Pers. Comm. 2nd December 2020)

The following information was provided in an interview by Barbara Rees with Jack Hind. It provides details about the Dennis Family who owned the study area block from 1885 to about 1987.

WILLIAM DENNIS (SNR) came over from ENGLAND as a free settler. He arrived with his family in Hobart and travelled up to Native Point. The family was employed by the Gibson's (property of Beau Gibson) at Native Point.

WILLIAM DENNIS the Younger was born in 1850 at Native Point.

WILLIAM DENNIS the Younger built the 32 Norfolk Street Cottage when he was between 25 and 30 years old. This suggests that the cottage was built about 1875 to 1885. It was vacant land at the time but cleared.

WILLIAM DENNIS the Younger was building the chimney on the right looking front on when an earth tremor hit. The crack could still be there from the tremor. He built the well soon after.

His wife, Isabella Dennis, was a local 'bush nurse' and helped deliver many children in the area. They had 11 children in that cottage and many of the descendants are living in and around Perth today.

WILLIAM DENNIS the Younger died in June 1917 from Peritonitis (Appendicitis) aged 67 at the old LGH on the hill in Launceston. Isabella tried to get there in time in a horse and cart but it was too late.

When Isabella died, the Town's shops closed down for her funeral - a big funeral. She was a well-respected person of the community. They are both buried in the Perth Cemetery.

Figure 56: Text box of Jack Hinds interview.

Figure 57 is a section of an aerial from 1947 depicting the study area. The old road extending from the study area to Brumby's ford can be faintly seen. Perth is sparsely populated at this time.



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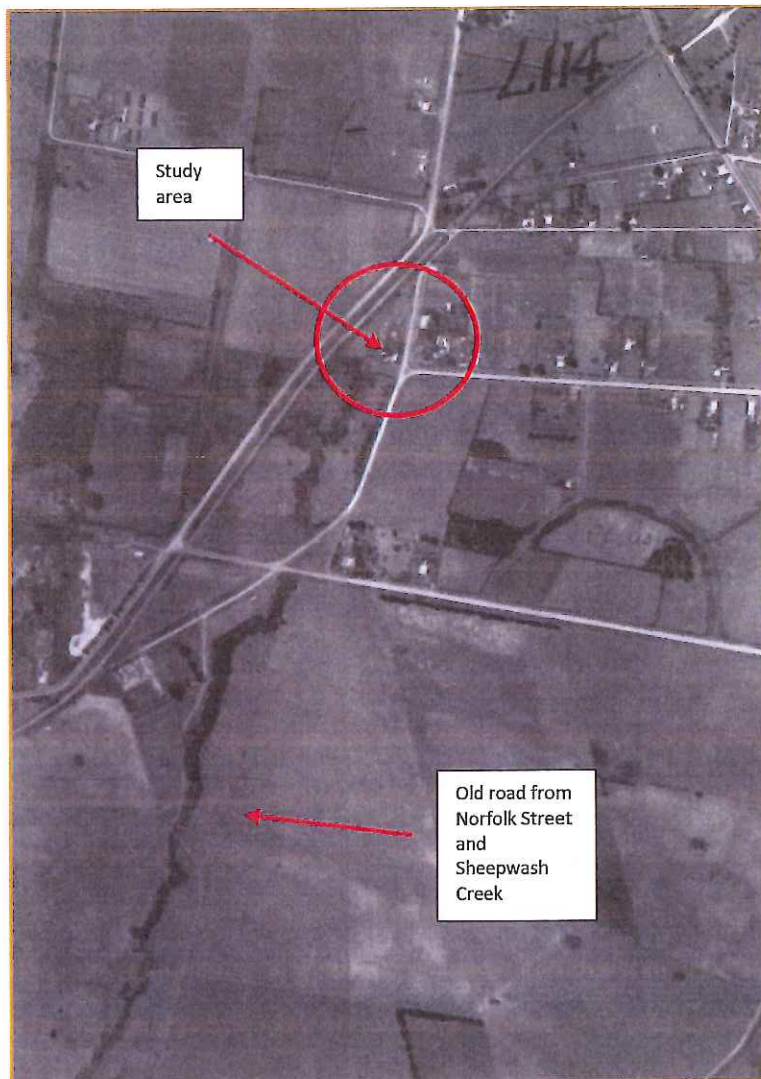


Figure 57: Section of 1947 aerial showing the study area. Source: DPIPWE 2020.

7.5 Summary

The following summarises the study area timeline:

- From the earliest occupation of Perth, the study area was included in the area designated for the township of Perth.
- As early as the late 1830s to early 1840s the western area containing the study area was proposed for grants to private citizens.
- During the 1840s land was granted in this area.
- In 1848, the study area was granted to Adye Douglas and Frederick John Houghton. Both of these individuals are prominent Tasmanian's of the period with Adye Douglas premier of Tasmania in the 1880s.
- In 1855 Douglas and Houghton sold the study area to David Thomas, a blacksmith.



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- Thomas sold the property to John Dryden in 1868, after having mortgaged it to Dryden since 1859.
- In 1868, the Launceston and Western Railway Company acquired a portion of the land for the Launceston to Deloraine railway.
- The study area passed to Margaret Thompson Dryden in 1883 and she sold it to William Dennis the Younger in 1885. Soon after this it is known that Dennis built the house and well on the property. His wife, Isabella was a well-known and respected Perth resident.
- The property remained in the ownership of the Dennis family until c. 1987 when it was sold privately.
- Recently the property was purchased by the Northern Midlands Council for a subdivision development.



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8 Discussion

The chronology of the study area is clear. The study area is located on one of the earliest roads in Perth which linked Perth (and Launceston) to the fertile lands south of the South Esk. The study area is located opposite the Jolly Farmer Inn built in 1826 and land originally granted to Dolly Dalrymple in 1831. It is believed to have been vacant land at this time (cleared at some point) and was not granted until 1848.

It was 'granted' (probably purchased at public auction) to Adye Douglas and Frederick James Houghton in 1848 and sold by them privately in 1855. Douglas and Houghton did not develop the land. There were a few different owners between 1848 and 1885. It was most likely a vacant block cleared of vegetation throughout that time. While possible, there is no record of any structure on the land during this time. In 1868 the railway dissected the area leaving the greater portion of land to the west and a small wedge-shaped section in the east fronting Norfolk Street.

The study area was purchased by William Dennis the Younger in 1885 and remained in the Dennis family until around 1987. William Dennis the Younger and his wife, Isabella (a well-respected local nurse), built the house and well on the east wedge-shaped block (fronting Norfolk Street) around 1885 to 1893 (probably closer to 1885 based upon Dennis descendant's knowledge and records of seismic activity). The house is small and typical of a late Victorian style (Gayle Plunkett's (Conservation Architect) opinion was sought on this). The house is weatherboard and handmade sandstock brick construction which were probably sourced locally.

The well is constructed from handmade sandstock bricks. It is Southern Archaeology's professional opinion that it is not convict built. The use of the term convict bricks in its construction is misleading.

Houses like this are not rare or unusual and are well represented in Tasmania. Wells such as this are a little more unusual or rare. Southern Archaeology is aware of a few examples of early wells such as a beehive well at Rowella, a dry stone well also at Rowella, large brick lined cisterns at Brickendon and at the site of the Kings Meadows Convict Station, a drystone well at Mt Direction, the convict made brick lined shafts at Evandale (associated with the Evandale to Launceston Water Scheme) and others. These are all generally older and more significant at a State level.

Perhaps the most interesting aspect of the construction of this well is that it was completed locally by known local (well respected) people and that it contains handmade sandstock bricks that were made at a time when these were generally being abandoned in favour of machine-made varieties. It also has very good associations to local people. The separation of the well from the house would interrupt the relationship between the two and impact the sites heritage values.



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9 Legislation and approvals

9.1 Introduction

It is not the purpose of this report to provide a detailed analysis of the legislation that may apply to the study area. The following is a brief overview of legislation and is useful for recording the cultural values, heritage criteria and significance of the study area. The property is not listed on any local, state or national registers and as such is not heritage protected at this time.

9.2 The Burra Charter (2013)

9.2.1 Overview

In 1964, an international conference of architects and others interested in the conservation of heritage places drew up a Charter which became known as the Venice Charter. This followed from an earlier document, the Athens Charter 1931, to 'provide guidance on the care of historic monuments' (Burra Charter, 1999:6 and 2013, Byrne et al., 2003:77; Logan, 2004:2-3). In 1977, the Australian ICOMOS (International Council on Monuments and Sites) met in the historic mining town of Burra in South Australia to review the applicability of the Venice Charter in Australia, resulting in the Australian ICOMOS *Guidelines for the Conservation of Places of Cultural Significance* or the Burra Charter (1999:6 and 2013; Byrne et al., 2003:4; Logan, 2004:3-4; Sullivan, 2008:109).

9.2.2 The Concept of Significance

The Burra Charter is the document that underpins heritage management in Australia and all Australian commonwealth and state heritage acts use listing criteria based on the five values identified in the Burra Charter (1999:80 and 2013; Byrne et al., 2003: 87-102). The five values identified in the Burra Charter (1999:80) are based on the concept of cultural significance. Cultural significance is defined within the Burra Charter (1999: 11 and 2013) as meaning 'the aesthetic, historic, scientific, social or spiritual value (the five values) for past, present or future generations' and that cultural significance is 'embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects'. Furthermore, the charter suggests 'places may have a range of values for different individuals or groups' (Burra Charter, 1999:11 and 2013). A key concept in this Charter is that, when managing a heritage place, it is important to understand its cultural significance and to prepare a statement of significance based on the place's aesthetic, historic, scientific, social or spiritual values (Logan, 2004:4).



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9.2.3 Tangible and Intangible Heritage

Tangible heritage are those features or things that are material and visible (touchable) within the landscape. Tangible heritage is usually clear and definable and are readily seen (observed) or discoverable (as is the case with archaeological remains often not directly visible in the landscape).

Intangible heritage is a little more difficult to define. The Burra Charter defines intangible heritage as:

The non-material aspects of culture that are valued. Expressions of intangible heritage include traditions, practices, performance, use, knowledge and language. Place and objects are tangible expressions (Burra Charter 2013).

Cultural significance and heritage values encompass both intangible and tangible heritage, especially through consideration of social and spiritual values. Methods of assessing cultural heritage must go beyond 'purely physical traces (the sites and artefacts), to also incorporate the intangible traces of people's attachments to place' (Burke and Smith, 2004:245).

9.3 The Historical Cultural Heritage (HCH) Act 1995 - Tasmania

The *HCH Act 1995* promotes the identification, assessment, protection and conservation of places having historic cultural heritage and the *HCH Act 1995* defines historic cultural heritage significance as meaning of a place, its significance in terms of registration criteria (Tasmanian Heritage Council 2014). The *HCH Act 1995* requires that the Tasmanian Heritage Council (THC) must give approval (permit) before a project can proceed when a site is registered on the THR. A permit can either be 'in the form of a Certificate of Exemption (if the works do not impact on significance) or discretionary' (THC 2014). The *Practice Note No. 2: Managing Historical Archaeological Significance in the Works Process* specifically outlines guidelines for archaeological work. A SHAP and AMS report will establish the extent of heritage at the subject site to advise whether further archaeological monitoring or excavation is needed in this area prior to development (whether a Certificate of Exemption or a Discretionary Permit is required). The following summarises key aspects of the *HCH Act 1995* (Figure 58):



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Historic Cultural Heritage Act, 1995 ([HCH Act] Tasmania)

State and local Acts are based on Burra Charter principles. The HCH Act in Tasmania is a typical example (Byrne et al., 2003:93-94).

Assessing cultural significance is the key to management and inclusion on the Tasmanian Heritage Register (THR). Alternatively, a place can be listed on a local planning scheme e.g. The Hobart Interim Planning Scheme 2015 or the Sullivan's Cove Planning Scheme (1997). To be registered on the THR, sites must be of state significance (that is significant to the whole of Tasmania) and assessment of this is based on meeting one or more of eight criteria (Tasmanian Heritage Council: 2016). Determining archaeological significance is also based on these criteria. The Criteria are as follows:

- Criteria (a): The place is important to the course or pattern of Tasmania's history.
- Criteria (b): The place possesses uncommon or rare aspects of Tasmania's history.
- Criteria (c): The place has potential to yield information that will contribute to an understanding of Tasmania's history.
- Criteria (d): The place is important in demonstrating the principal characteristics of a class of place in Tasmania's history.
- Criteria (e): The place is important in demonstrating a high degree of creative or technical achievement.
- Criteria (f): It has strong or special association with a particular community or cultural group for social meaning for social or spiritual reasons.
- Criteria (g): the place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history.
- Criteria (h): the place is important in exhibiting particular aesthetic characteristics.

The general process of assessing a place is 1) Identify the historic heritage place 2) Investigate the place 3) assess and determine the level and nature of significance of the place 4) Enter on the THR or a heritage schedule of a local planning scheme to manage the significance of the place. The level of significance (threshold) is generally determined by geographical reach and the criteria identified as having significance.

Archaeological significance (See Practice Note No. 2: Managing Historical Archaeological Significance in the Works Process – Tasmanian Heritage Council [THC] 2014)

"Most commonly, archaeological heritage is valued for its research potential'. (criterion c) but "archaeological heritage may also have historic value (criterion a), community value (criterion f)", rarity thresholds (criterion b), the representative threshold (criterion d) and associative value (criterion g) (THC 2014). These criteria provide the basis for significance in this report.

Figure 58: HCH Act 1995 summary.

This property is not listed on the Heritage Register at this time. This HHAR has been prepared considering the criteria of the HCH Act 1975 for the purposes of establishing significance and whether an application may be recommended for its inclusion on the Heritage Register.



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9.3.1 Practice Note 2 – Managing Archaeological Significance in the Works Process

The Tasmanian Heritage Council (THC 2014) has prepared the *Practice Note No. 2: Managing Historical Archaeological Significance in the Works Process* which sets out the guidelines for archaeological works. The *Practice Note No. 2* 'provides advice on managing significant historic archaeological sites and features' and 'advocates the application of professional standards with the aim of securing information resident in archaeological contexts either through meaningful protection *in situ* or through a logical well-founded process of inquiry and specialized investigation' (THC 2014). This document also recognizes the 'public benefit from archaeological investigations' and 'the high level of public interest in archaeology and the contributions which new-found information can make to the cultural amenity of the Tasmanian community' (THC 2014). The *Practice Note No. 2* document is designed to complement the *Works Guidelines for Historic Places 2015* document (THC 2015). The following Process Chart outlines the process for approval of developments under the *HCH Act 1995* (Figure 59).



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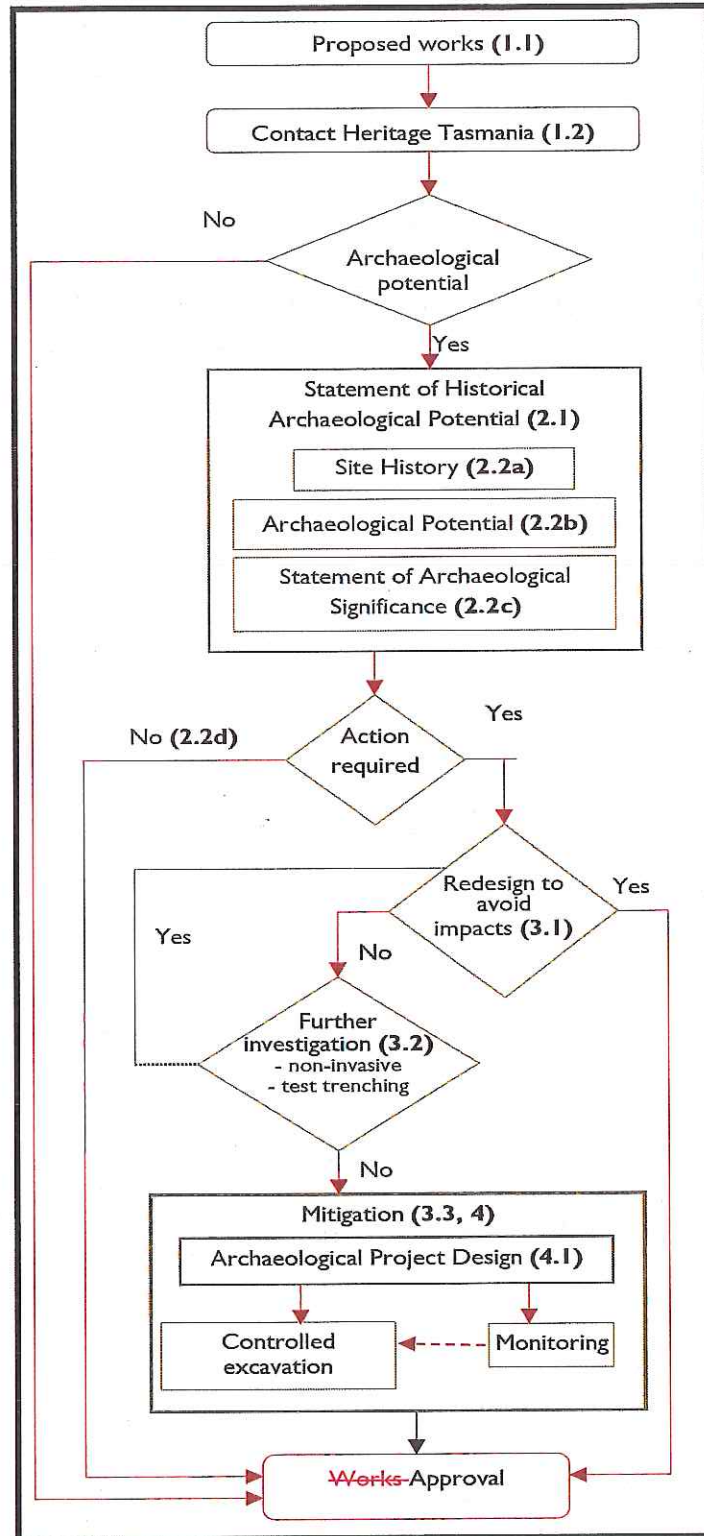


Figure 59: Process for assessing archaeological heritage. Source: Heritage Tasmania 2018.



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9.4 The Coroners Act (1995)

9.4.1 In regard to suspected human burials

The *Coroners Act* 1995 requires that (Part 4: Sub-section 19):

- 1) A person who has reasonable grounds to believe that a reportable death, other than a reportable death referred to in subsection (4) (* see below), has not been reported must report it as soon as possible to a coroner or a police officer.
- 2) The coroner or the police officer must inform the Chief Magistrate or, if the Chief Magistrate has delegated relevant functions or powers to another coroner, that coroner, of the reported death as soon as possible.

Also, (Part 4: Sub-section 20)

- 1) A person who reports a death must give to the coroner investigating the death any information which may help the investigation.

(* Part 1 (subsection 4) - A rule of the common law that, immediately before the commencement of this section [Part 2 – Coroners], conferred a power or imposed a duty on a coroner or a coroner's court ceases to have effect.

9.4.2 In regard to suspected Aboriginal burials

In the case of suspected Aboriginal remains the Coroner has the following additional obligations (Part 5: Sub-section 23):

- 1) The Attorney General may approve an Aboriginal organisation for the purposes of this section.
- 2) If, at any stage after a death is reported under section 19 (1) [see above], a coroner suspects that any human remains relating to that death may be Aboriginal remains, the coroner must refer the matter to an Aboriginal organisation approved by the Attorney General.
- 3) If a coroner refers a matter to an Aboriginal organisation approved by the Attorney General –
 - a) The coroner must not carry out any investigations or perform any duties or functions under this Act in respect of the remains; and
 - b) The Aboriginal organisation must, as soon as practicable after the matter is referred to it, investigate the remains and prepare a report for the coroner.
- 4) If the Aboriginal organisation in its report to the coroner advises that the remains are Aboriginal remains, the jurisdiction of the coroner under this Act in respect of the remains ceases and this Act does not apply to the remains.



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- 5) If the Aboriginal organisation in its report to the coroner advises that the remains are not Aboriginal remains, the coroner may resume the investigation in respect of the remains.

Human burials or remains are possible on this site (See **Section** Error! Reference source not found.) and a copy of the Coroners Act 1995 is available at:

< <https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-073#GS39@EN> >
Accessed 28th October 2019.

9.5 National legislation and registers (Department of Energy and Environment (DEE) website 2018)

9.5.1 Introduction

National legislation and registers are considered to establish if the study area is listed on any of these registers. The study area is not listed on any of the following registers.

In 1997 the Council of Australian Governments agreed that heritage listing, and protection should be the responsibility of the level of government best placed to deliver agreed outcomes (DEE website 2018). It was agreed that the Commonwealth's involvement in environmental matters should focus on matters of national environmental significance, including World Heritage properties and places of national significance. Each state, territory and local government has a similar responsibility for its own heritage.

This led to the creation of two new heritage lists in 2003 – the National Heritage List and the Commonwealth Heritage List (DEE website 2018). Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) the National Heritage List includes places of outstanding heritage value to the nation (both historical and Indigenous), and the Commonwealth Heritage List includes heritage places (both historical and Indigenous) owned or controlled by the Commonwealth.

The protection of heritage places for which the Australian Government is responsible continues under the EPBC Act (DEE website 2018). The EPBC Act not only protects heritage from actions by the Commonwealth, it protects places in the National Heritage List, in the Commonwealth Heritage List, and on Commonwealth land. All proponents, not just the Commonwealth, are required to seek approval for actions that could have a significant impact on the heritage values of these places.

9.5.2 Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act)

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) is the Australian Government's central piece of environmental legislation (DEE website 2018). It provides a legal framework to protect and manage nationally and internationally important



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flora, fauna, ecological communities and heritage places (both historical and Indigenous) — defined in the EPBC Act as matters of national environmental significance.

9.5.3 National Heritage List

The National Heritage List is Australia's list of natural, historic and Indigenous places of outstanding significance to the nation (DEE website 2018). The study area is not included on the National Heritage List.

The study area is not listed on the National Heritage List.

9.5.4 Commonwealth Heritage List

The Commonwealth Heritage List is a list of natural, Indigenous and historic heritage places owned or controlled by the Australian Government (DEE website 2018). These include places connected to defence, communications, customs and other government activities that also reflect Australia's development as a nation.

The study area is not listed on the Commonwealth Heritage List.

9.5.5 World Heritage List

World heritage sites that are nominated for World Heritage listing are inscribed on the list only after they have been carefully assessed as representing the best examples of the world's cultural and natural heritage (DEE website 2018). Australia currently has 19 properties on the World Heritage List. The study area is not listed on the World Heritage List.

The study area is not listed on the World Heritage List.

9.5.6 The Register of the National Estate - archive

The Register of the National Estate was closed in 2007 and is no longer a statutory list (DEE website 2018). All references to the Register of the National Estate were removed from the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 19 February 2012. It serves now as an archive of heritage properties.

The study area is not on the Register of the National Estate – archive.

9.5.7 Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act)

Generally, Australia's state and territory governments are responsible for the protection of Australia's Indigenous heritage places (DEE website 2018). All states and territories have laws that protect various types of Indigenous heritage.

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act) can protect areas and objects that are of particular significance to Aboriginal people. The ATSIHP



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Act allows the Environment Minister, on the application of an Aboriginal person or group of persons, to make a declaration to protect an area, object or class of objects from a threat of injury or desecration.

The ATSHIP Act 1984 does not apply to the study area at this time.

9.5.8 Other Commonwealth Legislation

Other legislation that may be relevant in certain circumstances but not likely to affect this development are (AHT website 2020):

- Aboriginal Land Act 1995
- National Parks and Reserves Management Act 2002
- Crown Lands Act 1976
- Living Marine Resources Management Act 1995
- Museums (Aboriginal Remains) Act 1984

9.6 Local Government

9.6.1 Land Use Planning and Approvals Act 1993 - Section 71 (also known as a Part V agreement)

Section 71 of the *Land Use Planning and Approvals Act 1993* states that:

A Planning authority may enter into agreements:

1. A planning authority may enter into an agreement with an owner of land in the area covered by a planning scheme.
2. A planning authority may enter into the agreement on its own behalf or jointly with any other person.
3. A planning authority may enter into an agreement under subsection (1) with a person in anticipation of that person becoming the owner of the land.
4. The planning authority is not entitled to apply to have the agreement referred to in subsection (3) registered under section 78 until the person becomes the owner of the land, but the agreement is binding on the parties.
5. An agreement is binding on the parties to the agreement on the day on which it is executed.

Places can be protected by local government legislation through Section 71 of the *Land Use Planning and Approvals Act 1993* (Part V agreement). These detail how heritage or archaeological sites should be documented or protected under local government codes. Many planning schemes in Tasmania are currently under review.

Southern Archaeology suggests that this may be appropriate for the study area with provisions that there is to be no building on or between the structures of the house and well. This will preserve the integrity, relationship and local heritage values between the two structures.



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9.7 The Aboriginal Heritage Act 1975 (ARA)

9.7.1 Overview

Aboriginal heritage sites, places or objects, whether on private or public land in Tasmania are governed and protected by the *Aboriginal Heritage Act 1975*. The Tasmanian Department of Primary Industries, Parks, Water and Environment (DPIPWE), through Aboriginal Heritage Tasmania (AHT), administer this Act. This government department is responsible for enforcing the Act and providing liaison between the public, developers, Aboriginal groups, the Government and other parties.

9.7.2 The AHA (1975)

9.7.3 Introduction

The *AHA 1975* was reviewed and amended in August 2017. The following points were the key changes made to the Act (AHT website 2018):

- The Act was previously named the *Aboriginal Relics Act 1975*;
- References to 1876 being a 'cut-off' point for what is considered as Aboriginal heritage have been removed;
- Increased penalties for damage to Aboriginal heritage;
- Introduction of scaled offences, in association with the removal of the ignorance defence;
- Removal of the 6-month time limit for prosecuting offences;
- Establishment of a statutory Aboriginal Heritage Council of Aboriginal people to advise the Minister; and
- Setting a statutory timeline for further review of the Act.

Aboriginal Heritage Tasmania (AHT) requires a permit to proceed with works or activities under s14 (1) of the *AHA (1975)*, if works or activities impact Aboriginal heritage sites or material. It is a requirement under the *AHA (1975)* to obtain a permit if Aboriginal heritage sites or materials (relic, for definition under the *AHA (1975)* see below **Section 9.7.4**) are impacted by a development.

9.7.4 The AHA (1975) requirements

The *Aboriginal Heritage Act (1975)* is the key Tasmanian Act for the preservation of Aboriginal 'relics'. The Act defines a 'relic' as (Section 2 (3)):

(3) For the purposes of this Act, but subject to the following provisions of this section, a relic is –

- (a) Any artefact, painting, carving, engraving, arrangement of stones, midden, or other object, made or created by any of the original inhabitants of Australia or the



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descendants of any such inhabitants, which is of significance to the Aboriginal people of Tasmania; or

(b) Any object, site, or place that bears signs of the activities of any such original inhabitants or their descendants, which is of significance to the Aboriginal people of Tasmania; or

(c) The remains of the body of such an original inhabitant or of a descendant of such an inhabitant that is not interred in—

(i) Any land that is or has been held, set aside, reserved, or used for the purposes of a burial-ground or cemetery pursuant to any Act, deed, or other instrument; or

(ii) A marked grave in any other land.

Section 14 of the AHA 1975 sets out the provisions for the protection of 'relics':

(1) Except as otherwise provided in this Act, no person shall, otherwise than in accordance with the terms of a permit granted by the Minister on the recommendation of the Director –

(a) Destroy, damage, deface, conceal, or otherwise interfere with a relic;

(b) Make a copy or replica of a carving or engraving that is a relic by rubbing, tracing, casting, or other means that involve direct contact with the carving or engraving;

(c) Remove a relic from the place where it is found or abandoned;

(d) Sell or offer or expose for sale, exchange, or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;

(e) Take a relic, or cause or permit a relic to be taken, out of this state; or

(f) Cause an excavation to be made or any other work to be carried out on

Crown land for the purpose of searching for a relic.

9.7.5 AHR search results for the study area

Figure 60 shows the results of the General Aboriginal Heritage Property online search and Aboriginal Heritage Aboriginal Site Register Search completed for the study area.

No sites were identified within the development footprint at the study area.



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Aboriginal Heritage SEARCH RECORD

This search for

NORFOLK COTTAGE 32 NORFOLK ST PERTH TAS 7300 (PID 6745695)

has not identified any registered Aboriginal relics or apparent risk of impacting Aboriginal relics.

This Search Record has been requested for Darren Watton at 2:07PM on 03 December 2020 and delivered to darren@southernarch.com.au.
This Search Record expires on 03 June 2021.
Your personal Search Identification Number is PS0138311.

Please be aware that the absence of records on the [Aboriginal Heritage Register](#) for the nominated area of land does not necessarily mean that the area is devoid of Aboriginal relics. If at any time during works you suspect the existence of Aboriginal relics, cease works immediately and contact Aboriginal Heritage Tasmania for advice.

It is also recommended that you have on hand during any ground disturbance or excavation activities the Unanticipated Discovery Plan, to aid you in meeting requirements under the *Aboriginal Heritage Act 1975* should Aboriginal relics be uncovered. There are requirements that apply under the *Aboriginal Heritage Act 1975*. It is an offence to destroy, damage, deface, conceal or otherwise interfere with relics without a permit granted by the Minister. There is an obligation to report findings of relics as soon as practicable.

This Search Record is confirmation that you have checked the Aboriginal Heritage Property Search website for this property. This Search Record will expire in six months from the search date.

If you have any queries please do not hesitate to contact [Aboriginal Heritage Tasmania](#) on 1300 487 045 or at aboriginal@heritage.tas.gov.au.

Aboriginal Heritage Tasmania
Department of Primary Industries, Parks, Water and Environment



A) Results of the online AHR property search.

Figure 60: AHR searches for 32 Norfolk St Perth completed by Darren Watton 2020. Source: AHT 2020.

While an Aboriginal heritage assessment and survey of the block may be warranted and prudent due to the site's proximity to Sheepwash Creek (a potentially sensitive area containing potable water and other resources) there is no requirement for this at this time. However, Southern Archaeology always recommends that this should occur for mitigation and risk management purposes.

9.8 Summary of archaeological potential, disturbance and significance

The separation of the well from the house would interrupt the relationship between the two and impact the sites heritage values. The two structures (the house and well) should be considered together as it is their combined heritage value and association (relationship) that



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is important. The following points summarise Southern Archaeology's opinion and assessment of archaeological potential, disturbance and significance at the study area:

- Southern Archaeology assesses the study area as having high archaeological and historical potential (intactness) at the study area.
 - Justification –
 - The dwelling and well are in good condition and virtually complete at the site. Both structures appear to be in virtually original condition.
- Southern Archaeology assesses the study area as having Low archaeological and historical significance at a State level.
 - Justification –
 - The house and well are well represented in the historical record. There are many similar structures in Tasmania, and it is not unique or rare.
 - The well and house were not convict built. They were both built between 1885 and 1893 by William Dennis the Younger.
 - While the property is associated with some important local and Tasmanian people (such as Adye Douglas, F J Houghton and potentially Dolly Dalrymple), none of these people were directly associated with the study area (i.e., lived there) or built structures at the study area.
 - The land was vacant when sold to Dennis in 1885.
- Southern Archaeology assesses the study area as having medium to high archaeological and historical significance at a Local level.
 - Justification –
 - The property is associated with important and well-known local people such as Adye Douglas, F J Houghton and the Dennis family (specifically, William the Younger and Isabella Dennis).
 - The property is on a major early road linking Perth to Launceston and Brumby's Ford on the South Esk.
 - The property contains a locally significant handmade sandstock brick well and house built between the 1880s and the 1890s.
 - The property is located close to property owned by Dolly Dalrymple.
 - The property is located opposite the Jolly Farmer Inn built in 1826.
 - The property has significant interest from the local community who would like it protected and for the house and well to remain together as a protected heritage place.
 - The separation of the well from the house would interrupt the relationship between the two and impact the sites heritage values.
- Southern Archaeology has assessed the disturbance in the vicinity of the development to be low. The well and house are intact.



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10 Conclusion

Protection of the site IS warranted at a local level i.e., maintained within the same title which incorporates this important streetscape and maintains the relationship between the house and well. The separation of the well from the house would interrupt the relationship between the two and impact the sites heritage values.

The association of the well to convicts is misleading. The well was most likely not built by convicts.



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11 Recommendations

The relationship between the house and well at 32 Norfolk Street is significant at a local level. The following two recommendations are made for the study area:

3. Recommendation 1:

It is recommended that the house and well at 32 Norfolk Street remain or be returned to a single title and the integrity of the structures be maintained. It is Southern Archaeology's opinion that the separation of the well from the house interrupts the relationship and association between the two structures and impacts the sites local heritage values.

4. Recommendation 2:

It is further recommended that the property be protected from any further development either on or between the house and well at 32 Norfolk Street. This would preserve the relationship and association between the two structures. This could be managed through Section 71 of the *Land Use Planning and Approvals Act 1993* (a Part V agreement) that prohibits building on or between the two structures and preserves the integrity and relationship between the two structures.

Note: An application may be made to place this property on the Heritage register through Heritage Tasmania. However, it is Southern Archaeology's opinion that protection of the property would be best sought through local government means.



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