

# **SUPPORTING INFORMATION**

## **COUNCIL MEETING**

## **OPEN PORTION OF THE MEETING**

## MONDAY, 25 MAY 2020

## 5.00PM

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# Report to Support a Development Application

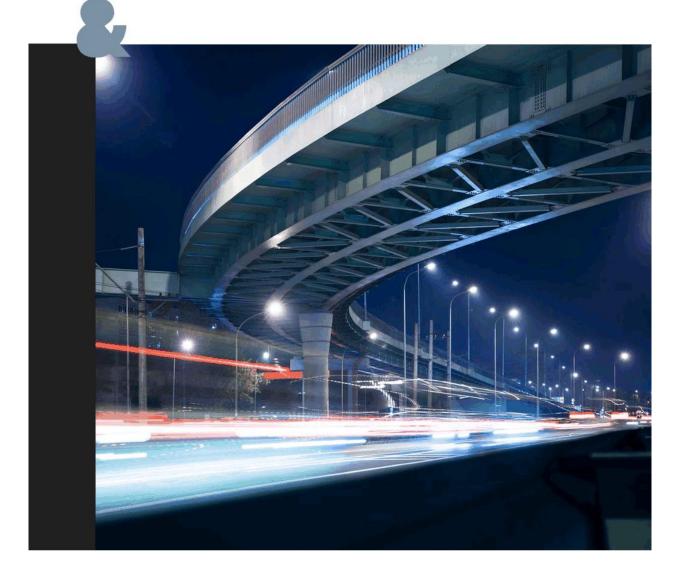
Proposed Development of a Public Road at Macquarie Point

Prepared for Macquarie Point Development Corporation

Client representative Brad Wheeler

Date 09 December 2019

Rev 02



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- Appendix B Title Details
- Appendix C Archaeological Sensitivity Report
- Appendix D Traffic Impact Assessment
- Appendix E Stormwater Management Plan

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#### **Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
00	DA Report	lan Abernethy	Stephen Gillick	Leigh Knight	27/08/2019
01	DA Report	D Fotheringham	Stephen Gillick	Leigh Knight	12/09/2019
02	DA Report response to RFI	D Fotheringham	Stephen Gillick	Leigh Knight	09/12/2019

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## 1. Purpose of this Report

The purpose of this report is to support a planning permit application to develop a public road leading into the Macquarie Point development site and associated ancillary works on State Roads fronting the development. The proponents are Macquarie Point Development Commission (MPDC). The land is within the Hobart City Council (HCC) local government area.

## 2. Proposal

The proposed development incorporates:

- · A new roadway into the Macquarie Point development, known as Stage 1
- A new slip lane on the Tasman Highway south bound lane providing for separated vehicular access into the Macquarie Point development site
- Minor changes to an existing traffic median and signalised pedestrian crossing at the Tasman Highway/Brooker Hwy/Macquarie St/Davey St intersection, including alteration to existing road linemarking and services
- · Alteration to the existing service road layout located adjacent to the aforementioned intersection
- Provision of a new signalised pedestrian crossing running parallel to Davey St and in association with the entrance service road

The vision for Macquarie Point encourages cultural and public spaces to sit alongside land uses which could include a conference centre, hotels, retail and an Antarctic and Science Precinct. Mac Point is an ideal location for scientific research to complement our Antarctic and oceanic research links and support Tasmania's status as Australia's Antarctic gateway. Tourism developments, such as the Antarctic-themed eco-tourism project Eden Hobart, may also form part of the reset.

Under the new plan the area will be developed to include 50 per cent public space, as well as exhibition space, commercial space, cultural space, accommodation, tourism infrastructure and ultimately, genuine waterfront development.<sup>1</sup>

This proposal is for a public road into the Macquarie Point site. In recognition of the high traffic volumes on adjacent major existing state roads, the new entrance road has been designed to integrate with the existing road network.

The proposal is consistent with the requirements of the Macquarie Point Planning Scheme 1997 and with the Macquarie Point Reset Masterplan 2017-2030<sup>2</sup>, refer to Figure 1 below, which shows provision for the new roadway into Macquarie Point from the Tasman Highway – the road is coloured yellow and is in the Utility / Vehicles Area.

Provision has been made for landscaping along the southern edge of the new access road. The actual detail of this landscaping is outside the scope of this application and will be presented in detail during later stages of the development.

<sup>&</sup>lt;sup>1</sup> The Vision for Mac Point – Macquarie Point Development Corporation – <u>www.macquariepoint.com/about-us</u> <sup>2</sup> Planning Scheme Amendment 19-2 introduces the Macquarie Point Reset Masterplan 2017-2030 to the Macquarie Point Planning Scheme.

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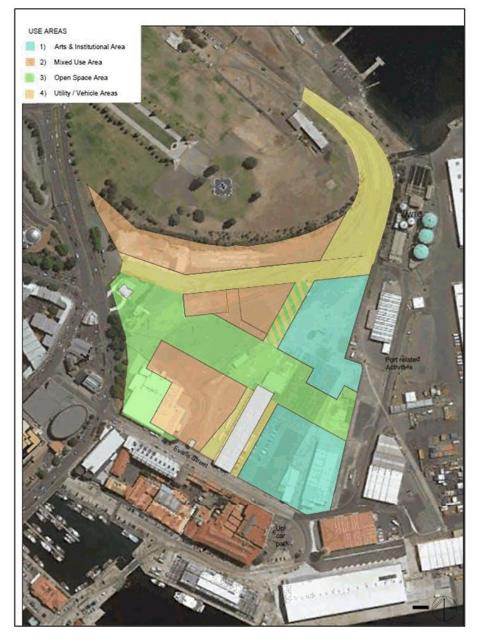


Figure 1 Macquarie Point Reset Masterplan 2017-2030 use area map – source Macquarie Point Development Corporation

The new entrance road and slip lane (which will connect to the area 4 Utility/Vehicle areas) will be formed at the intersection of the Tasman Highway and a historic access point into the site, north of a major intersection with the Brooker Highway – at a signalised intersection.

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The area of the proposed new roadworks is shown in Figure 2 below. The turning circle at the eastern end of the road is temporary until the next stage of the road is constructed. The road will remain in the ownership of MPDC as a private road for the foreseeable future (at least the next 5 years). At some future point it is expected that the road will be transferred to the HCC but that timeline is not yet defined. The method of road dedication will be determined at this future time.



Figure 2: Plan of New roadworks

The proposed new slip lane and alterations to the service road is detailed in Figure 3 below. There are four plane trees near the entrance, which are to remain. Eight gum trees would be removed as part of the road and footpath works. The informal footpath is ultimately going to be replaced with a formal access path from MPDC land to the cenotaph level. A separate set of DA documents is currently being prepared to submit to Council soon. The bike path will be maintained during construction, with a temporary bypass, however it may on occasion need to be closed temporarily whilst heavy machinery is operating in the vicinity. All works, detailed design and signage are subject to approval by the Road Authority.

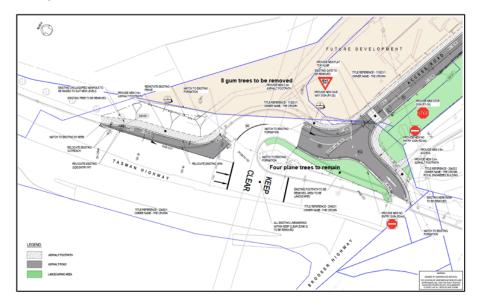


Figure 3: Plan of new slip lane works and changes to the service road

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The proposed alteration to existing, and addition of new, signalised pedestrian on the Tasman Highway/Brooker Hwy/Macquarie St/Davey St intersection is detailed in Figure 4 below. This final design is subject to approval by the Roads Authority.

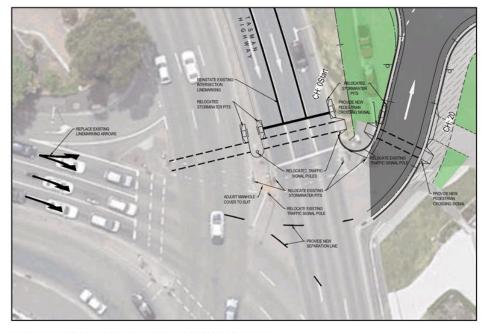


Figure 4 Plan of new slip lane works and changes to the service road

A full copy of the proposed plans are attached at Appendix A.

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## 3. Site and Titles

The following land parcels are impacted by the proposal:

Property Address	Tasman Highway
Property ID	None
Title	20452/1
Authority	Subdivision Road (State Government and Council)
Owner	The Crown

Title Boundaries

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Property Address	Macquarie Point Development Site – 10 Evans St Hobart TAS 7000
Property ID	3335682
Title Reference	176538/1, 176538/2, 176538/3, 176538/4
Authority	State Growth (road)
Owner	The Crown



Title boundaries

Title copies are attached at Appendix B.

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## 4. Use of Site and Surrounding Land

The bulk of the works will be undertaken on a title identified as "subdivision road". There is currently a service road from the Tasman Highway to the Macquarie Point site. To the NE of the subject site is the Hobart Domain and Cenotaph. To the east is the Macquarie Point site. To the SE is the Royal Engineer's Building – a significant heritage feature of the area.

Directly south of the site is retail area including a bottle shop. To the SW is the Woolstore accommodation complex and Wapping residential area. The dominant use to the West of the site is the ABC Hobart complex.

Once inside the Macquarie Point area the works will take place on the title known as 10 Evans St.

## 5. Road Reservation Status

Work to alter the existing proposed service road layout, alter the existing signalised pedestrian crossings, construct the new signalised pedestrian crossing and construct the left turn lane falls within the defined Tasman Highway road reservation as shown in Figure 5 below. The eastern slip lane marked red (part of the development area) is under the jurisdiction of the Hobart City Council. The rest is owned by the State Government.



Figure 5 Tasman Highway Road Reserve - source Hobart City Council

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## 6. Planning Matters

#### 6.1 Planning Scheme

The subject land is within the Hobart City Council Municipal Area but falls under the Sullivan's Cove Planning Scheme 1997 (the Planning Scheme) – which is administered by the Hobart City Council.

#### 6.2 Relevant definitions

Part G of the Planning Scheme contains a series of general definitions which are only pertinent to that Scheme. The most relevant definitions for the proposal are:

#### Civic Works

Works undertaken in roads and other public spaces by public authorities, including the Council and the Tasmanian Ports Corporation Pty Ltd, or by individuals. It does not include buildings in the public space.

#### Major Road Works

Means within the existing road reservation or other public space, all road works required for the construction of additional traffic lanes and vehicle under and overpasses.

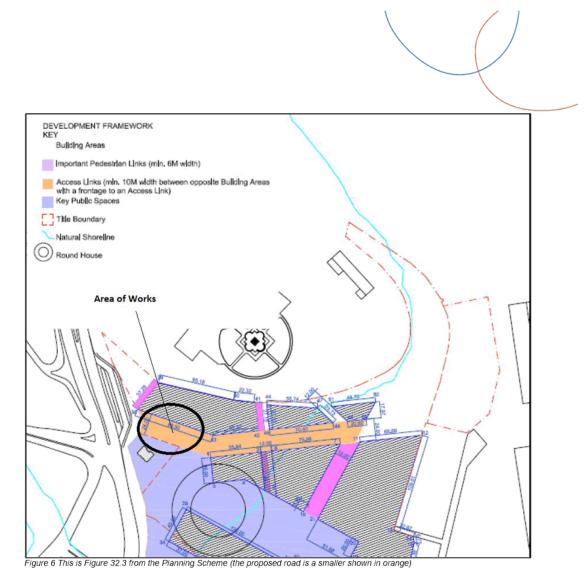
#### Secondary Space

Smaller roads, lanes, alleys and ad hoc courts shown as Important Pedestrian Links shown on Figure 32.3.

#### 6.3 Requirements for a planning permit

The planning definitions that best describes the proposed road are 'Civic Works', and its sub-definition Major Road Works. Under clause 24.42 Requirements for Planning Approval, a Discretionary planning permit is required for 'Major Road Works'.

Another relevant definition for the part of the proposed road located outside the Macquarie Point Site Development Plan (MPSDP) area is 'Secondary Space'. As the road does not fall within the Key Public Space category on Figure 32.3 ( Figure 6 below), it is designated as a 'Secondary Space'. Under clause 32.10.1, a planning permit is required for a civic works concept plan, which must be considered with the Desired Future Character Statements in clause 32.3 and Matters to be Considered in clause 32.4.



#### 6.4 Zoning (activity areas) and Overlays

The site of the proposed works falls into three Activity Areas, as shown in Figure 7 below:

- 2.0 Sullivan's Cove Mixed Use
- 2.1 Domain Open Space
- 3.0 Sullivan's Cove Gateway and Trans.

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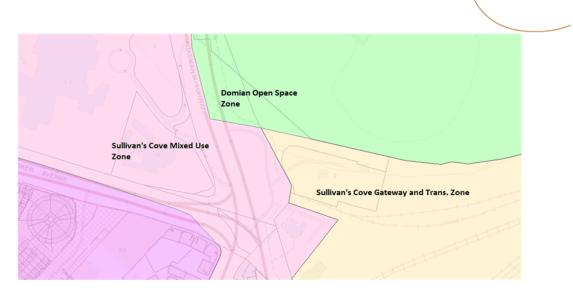


Figure 7 Activity Areas within Planning Scheme

#### 6.5 Assessment against each Activity Area

#### 6.5.1 Sullivan's Cove Mixed Use

It has been established that the proposed use is an undefined use and as such it will treated as a discretionary use.

All development of land must satisfy the relevant provisions contained within the schedules of this Scheme (see Section 6 below). An assessment against Schedules follows.

#### 6.5.2 Domain Open Space

It has been established that the proposed use is an undefined use and as such it will treated as a discretionary use.

All development of land must satisfy:

- The provisions of the Queens Domain Management Plan 1996;
- The relevant provisions contained within the schedules of this Scheme (see section 6 below).

#### 6.5.3 Sullivan's Cove Gateway and Trans.

The objectives for use and development in this Activity Area are represented as Desired Future Character Statements in clause 32.3 of the 'Macquarie Point Site Development Plan' under Part F of the Scheme. The proposal is assessed against this development plan in subsection 6.8 below.

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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#### 6.6 Schedules to the Planning Scheme

6.6.1 Schedule 1 - Conservation of Cultural Heritage Values.

The objectives of this Schedule are:

- To provide the mechanisms to allow the conservation of heritage values.
- To provide an incentive for 'building or works' to be carried out in a manner which is compatible with conservation
  of cultural heritage values.
- To ensure that the recognisable historic character of Sullivans Cove is not compromised by new development which overwhelms the places of cultural significance, or, by new development which reduces the apparent authenticity of the historic places by mimicking historic forms.
- To encourage new development to be recognisable as new, but not individually prominent. Such development
  must reflect a "good neighbour" relationship to places of identified cultural value.

COMMENT – the formation of an access road to a major precinct, which has been identified in the Macquarie Point Reset Masterplan 2017-2030, will not impact on any cultural values in this area, particularly when most of the roadways already exist.

The closest place of Cultural Significance is:

Street No	Street	Other Information	Ref No
2	Davey Street	Royal Engineers Building and Stone Post	26

## COMMENT – The proposed works are to be located in an area identified in the Macquarie Point Reset Masterplan 2017-2030 and should have no significant impacts on the he Royal Engineers Building and Stone Post.

The closest Places of Architectural Sensitivity is:

Street No.	Street or Other Location Description	Existing Archaeological Report	Other Information	Ref. No.
	Wapping/Cenotaph	SCAZP	Hobart Rivulet – Domain Diversion Tunnel	90

COMMENT – Austral Tasmania have been commissioned by the Macquarie Point Development Corporation to carry out an Archaeological Sensitivity Report on the site.

A copy of the Archaeological Sensitivity Report is attached at Appendix C.

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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#### 6.6.2 Schedule 2 - Urban Form

This schedule applies to all new buildings and extension to existing buildings in the Sullivan's Cove Planning Area<sup>3</sup>. As there are no new buildings involved, this Schedule does not apply.

#### 6.6.3 Schedule 3 - Public Urban Space

Under clause 24.3.1 of Schedule 3, all buildings and works within the MPSDP are exempt. This means that most of the proposed road works, which are located within the defined MPSDP area, are not assessed under Schedule 3.4

In accordance with Figure 9 of the Planning Scheme (shown in Figure 8 below), Schedule 3 only applies to the area of road works which would be in the Enclosing Ridge area (marked red in Figure 8 below). Under clause 24.4.2 Requirements for Planning Approval, Major Road Works are Discretionary, and the function of the Public Urban Space Types must be considered in the assessment. The table below provides an assessment of the relevant functional characteristics of Public Urban Space Function 1 - Vehicle Movement, which is the most appropriate function for a proposed public road.

Public Urban Space Function 1 – Vehicle Movement	Applicable Streets/ Other Public Spaces
The primary function of this public urban space type is to facilitate major motor vehicle traffic movement. These spaces generally function as primary and secondary arterial roads and they serve a metropolitan transport movement function. The movement of motor vehicles is assigned priority over pedestrian and other movement in these areas. However, the design and layout of these roads must provide for a safe and comfortable environment for pedestrians and cyclists.	Macquarie Street, Davey Street, Campbell Street, Brooker Avenue, Liverpool
Assessment	

It is considered that the proposed road is consistent with Function 1 Vehicle Movement, as the layout and design of the proposed roadworks provide for a safe and comfortable environment for pedestrians and cyclists.

<sup>3</sup> Sullivans Cove Planning Scheme 23.3 Scope – page 100
 <sup>4</sup> The area of the proposed road located within the MPSDP are assessed in subsection 6.8 of this report.

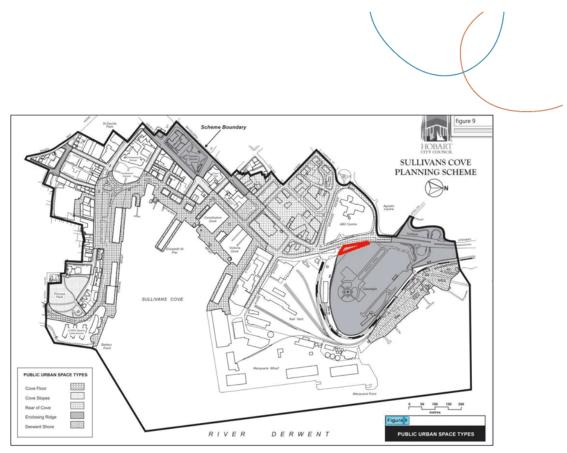


Figure 8 - This is Figure 9 in the Planning Scheme

#### 6.6.4 Schedule 4 - Signs

Not relevant in this instance – the only signs which will be triggered by this proposal are temporary roadworks signs during construction and any advisory/regulatory traffic sings required for the safe use of the slip road. These signs are exempt from planning control.

#### 6.6.5 Schedule 5 - Traffic, Access and Parking

This schedule largely relates to the provision of car parking. Clauses 26.3 and 26.4.1 of Schedule 5 contain the most relevant considerations for this planning permit application.

Clause 26.3 Objectives for Traffic, Access and Parking in Activity Areas, Sullivans Cove 'Gateway' Activity Area 3.0 states: Activity Area 3.0 will balance a prioritisation of pedestrian and cycling access to the Macquarie Point site with the need to provide for efficient private vehicle access and the requirement to maintain heavy vehicle access to the port.<sup>5</sup> As the proposed road will provide for efficient private vehicle access, it is consistent with this objective.

Under clause 26.4.1 Traffic Generation, the proposed road must be able to accommodate vehicles, pedestrians and their movement to the satisfaction of the Planning Authority, having regard to traffic safety or amenity as appropriate. The Traffic Impact Assessment (TIA) located at Appendix D of this report demonstrates that the proposed road will assist the safe dispersal of traffic from the Tasman Highway to the Macquarie Point Site, allowing less of a differential in speed between exiting vehicles and through traffic. Given this, the proposal is consistent with the relevant requirements of clause 26.4.1.

<sup>&</sup>lt;sup>5</sup> Planning Scheme Amendment 19-2 has modified the full-length version of this objective. However, the modified text relates to pedestrian and cycle links, rather than public roads. The modified text has no relevance to the assessment of this permit application.

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A wombat crossing is (proposed referred to as zebra with platform in Austroads tool) it is considered the best possible solution for the following reasons:

- Right of way is clearly identified for all users
- · The raised crossing provides a traffic calming measure reducing speed of vehicles entering and exiting; and
- Pedestrians and cyclists remain at the same level instead of using kerb ramps and gutter crossings, this
  reduces trip and fall hazards as well as elevating them above the road surface aiding in identification for
  vehicles.

A pedestrian crossing at the southern access entrance is provided to provide a crossing point for pedestrians and cyclists wanting to cross the Tasman Highway, as the existing shared path on the island will be removed. The crossing will be signalised with the phasing shown in Figure 25 in the TIA. The pedestrian signals will be synchronised such that pedestrians will be shown a red crossing symbol at the Macquarie Point crossing whilst vehicles on the Brooker Avenue are given a green light (phase B). This is to prevent pedestrians obstructing vehicles exiting the traffic flow from the Brooker Avenue into the access. Pedestrians will be given a green light to cross the Tasman Highway during the next phase. There is no impact on the operation of the intersection due to the introduction of this signalised pedestrian crossing.

If necessary, a planning permit can require submission of detailed design plans, including pedestrian crossing, signage etc prior to the commencement of the development and to the satisfaction of the Roads Authority.

#### 6.6.6 Schedule 6 - Subdivision

The proposal is not for subdivision, so Schedule 6 is not relevant. Where a road crosses a title boundary there is no requirement to consolidate those titles

#### 6.6.7 Schedule 7 – Demolition

No demolition is proposed.

#### 6.6.8 Schedule 8 - Environmental Management

This control applies to the assessment of all permissible 'Level 1' and 'Level 2' activities in the Sullivans Cove Planning Area.

As the proposal involves development, it is deemed a Level 1 under the Environmental Management and Pollution Control Act 1994, the following environmental objectives must be satisfied in determining such an application:

Environmental Objective	Assessment
<b>Air quality</b> : Activities shall demonstrate 'Best Practice Environmental Management' in respect to the minimisation and mitigation of all discharges to the atmosphere.	A permit condition can ensure construction activities employ Best Practice Environmental Management' in respect to the minimisation and mitigation of all discharges to the atmosphere. This includes matters such as dust management during construction.

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<b>Energy Efficiency</b> : Use and development must demonstrate measures undertaken to improve energy efficiency in the design, layout and use of new and existing buildings.	The proposed public road will improve traffic management for visitors and shorten travel times by reducing the need for traffic to take more circuitous routes.
Flora and Fauna: Flora and fauna of significance within the Sullivans Cove Planning Area must be protected. In particular, the habitats of the Derwent Estuary and Sullivans Cove water environment must be protected from the adverse environmental impacts of activities.	The development area is located within established road reserves and adjacent urban areas. The site has been extensively disturbed and offers little in terms of habitat for any species. Implementation of standard erosion and sediment control measure during construction, and the adoption of WSUD principles during design, will minimise the potential for impacts on adjoining waterbodies. Given this, the proposal does not conflict with the Flora and Faun objective.
Hazard and Risk: Land within the Cove must be used and developed in a manner which provides a safe working and living environment. In doing so, best practices must be employed in respect to the handling of dangerous goods and all relevant dangerous goods and environmental laws complied with.	The proposed road will be developed in accordance with the relevant roads' standards and workplace practices. No dangerous goods will be utilised or stored on site as part of the construction activities.
Land Contamination: New activities which are proposed on land with a known history of industrial or other use where potential for contamination exists shall be accompanied by an environmental audit including an assessment of site condition. Contaminated land shall be managed in a manner which is compatible with the intended future use of the area. New activities on known contaminated sites must only be 'permitted' to occur after appropriate clean-up of the site, or where it is clearly demonstrated that the proposed activity will not result in an immediate or likely long-term hazard to human health or the environment.	The Macquarie Point area has a history of land uses known to result in contamination. The area has been assessed and appropriate remediation will be undertaken in accordance with the final outcomes of the Macquarie Point Development Project Audit Area 4 Remediation – Sampling, Analysis and Quality Plan. This plan is being developed by the Macquarie Point Development Corporation.
Land Reclamation: Land forming and reclamation activities, where required, shall be carried out in a manner which minimises adverse environmental consequences.	This objective is not relevant to the proposed road, which does not incorporate land reclamation.
<b>Noise</b> : Buildings shall be sited and designed having regard to current noise levels in the area as well as their intended use. Where activities with the potential to generate significant noise are proposed in proximity to residential accommodation and other 'noise sensitive' activities, appropriate measures to mitigate and minimise noise emissions must be undertaken.	No buildings are proposed, only a public road, which is consistent with strategic plans for the area, including Macquarie Point Master Plan – see Figure 1 above. The proposed route is not immediately adjacent sensitive uses. Therefore, the proposal does not conflict with the noise objective.
	1

New 'noise sensitive' activities such as residential accommodation shall be located and where necessary incorporate acoustic measures to minimise the potentially adverse impacts of existing or likely future activities on nearby land.	
Waste Minimisation: Activities must demonstrate how the practices and process associated with the activity will reduce as much as possible the amount of waste generated or the amount which requires subsequent treatment, storage or disposal. Activities must address waste minimisation from the source (source reduction) and recycling. Where appropriate, applications for new activities must include a waste management plan. Activities within roads and other public spaces must incorporate where relevant suitable waste and litter management facilities.	A permit condition can require submission of a satisfactory a waste management plan, prior to the commencement of development. This will address the need for provision of waste facilities for contractors during construction, as well as the need for permanent public facilities. Any waste materials (e.g. excavated material from construction) will be disposed of to an appropriate facility.
Water Quality: Activities shall demonstrate 'Best Practice Environmental Management' in respect to water use and management. Water use and disposal shall be managed in a manner which seeks to minimise offsite disposal and which seeks to protect and, where possible, improve ambient water quality. The principles of minimising water sewage and waste water generation and the re-use, recycling and pre- treatment of waste water prior to disposal must be encouraged.	A permit condition can ensure construction activities employ Best Practice Environmental Management' in respect to water use and management. Recycled water will be used for dust suppression purposes where appropriate.

6.6.9 Schedule 9 - Telecommunication Infrastructure

No telecommunication infrastructure is proposed.

6.6.10 Schedule 10 - Royal Hobart Hospital Helipad Airspace Protection

The airspace protection requirements are not relevant for the proposed road.

#### 6.7 Key Sites

A 'Key Site' is a site which has the potential to accommodate activities which will further the 'preferred future' and strategic principles contained within the Scheme. Figure 9 below shows the area's key sites.

These are sites which the Planning Authority has identified as having the potential to be used or developed to achieve a range of strategic planning objectives. It is intended this section of the Scheme facilitate the identified preferred future through promotion of appropriate use and development on strategically important and presently under-utilised sites within the Cove.

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Close to the subject site are two Key Sites

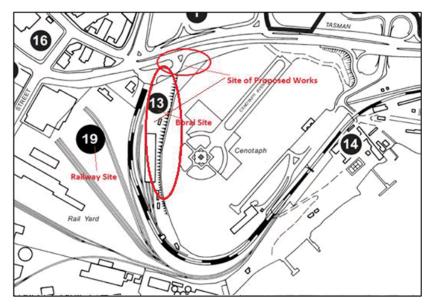


Figure 9 Key Sites within the Planning Scheme

In considering the impact of development on Key Sites the Planning Authority has to have regard to (only those relevant to the proposal):

- · traffic, access and parking provision and impact
- · impact on the working port and transportation links
- The visual contribution to any new access road servicing Activity Area 3 and with the potential to also service Activity Area 4.1 (though application for the road itself is not 'discretionary' under the Scheme and does not require the preparation of a Site Development Plan).
- The visual contribution to the Tasman Highway 'gateway' into the Cove.

Activity Area 3 is the Sullivans Cove Gateway precinct and Activity Area 4.1 is the Macquarie Point Wharf precinct. The proposed public road will have minimal visual impact on the Precincts as, in the main, the carriageway already exists. The roadway will service the two Activity Areas noted above and as such aligns with the principles of the Key Site section of the Planning Scheme.

The proposal will only have positive impacts on traffic flow and access to these precincts.

#### 6.8 Macquarie Point Site Development Plan (MPSDP)

In Part F of the Planning Scheme contains Section 32 contains the MPSDP, which is used to guide land use and development in the area where the proposed road is to be located. The planning assessment below is in accordance with the recent Planning Scheme amendment, which made significant changes the provisions of the MPSDP. The purpose of this plan is to:

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- 1. To implement the Macquarie Point Reset Masterplan 2017-2030; and
- 2. To provide for Macquarie Point's redevelopment:
  - a. as a vibrant and active area, with a mix of uses, that connects with and complements adjacent areas within Hobart;
  - b. to encourage inner city living;
  - c. to deliver sustainable social and economic benefits to Hobart;
  - d. in accordance with sound planning, urban design and environmental principles; and
  - e. to protect the operation of the Port of Hobart for the benefit of the local, regional, state and national economy.

As can be seen in Figure 1 and Figure 6 above and the plans at Appendix A, the proposal is consistent with the Macquarie Point Reset Masterplan 2017-2030, as it enables development of a new roadway into Macquarie Point from the Tasman Highway slipway. As the development and use of the proposed public road will help activate the Macquarie Point area, it is also consistent with the MPSDP's other purposes.

The subject site is part of the MPSDP – it is in the precinct identified as 'Open Space Area'. Under the Clause 32.10.1 the proposed road is a Secondary Space and a planning permit is required for a civic works concept plan (see Appendix A). The concept plan has been prepared having regard to the Desired Future Character Statements in clause 32.3 and Matters to be Considered in clause 32.4 and is assessed below.

Desired Future Character Statements	Assessment
32.3.1 Re-engage with its history by revealing layers of the changing nature of Macquarie Point over time through expression of the topography, natural shoreline, Round House, Goods Shed, Royal Engineers Building and Red Shed.	The proposed road is consistent with Macquarie Point Reset Masterplan 2017-2030 and Figure 32.3 of the Planning Scheme, so does not conflict with statement 32.3.1.
32.3.2 Respects the setting and appreciation of the cultural heritage significance of the Royal Engineers Building.	The proposed road is unlikely to have significant impacts on the cultural heritage significance of the Royal Engineers Building.
32.3.3 Not adversely impact on the cultural heritage and reverential ambience of the Hobart Cenotaph and its surrounds.	The proposed road is unlikely to have significant impacts on the cultural heritage and reverential ambience of the Hobart Cenotaph and its surrounds.
32.3.4 Acknowledge the footprint of the former railway Round House as shown on Figure 32.3 and the associated Table 32.3.	The proposed road does not conflict with the footprint of the former railway Round House or statement 32.3.4.

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<ul> <li>32.3.5 Protect the operation of the Port of Hobart for the benefit of the local, regional, state and national economy by:</li> <li>Providing a buffer of non-sensitive uses in the buildings along the port interface to avoid constraints on the workir port; Separating and treating sensitive uses so as not to be vulnerable to noise, air, vibration and lighting impacts; Incorporating appropriate design responses to avoid conflict between mixed-use, pedestrian and industrial vehicular traffic associated with the Port of Hobart along Evans Street;</li> <li>complying with relevant safety and hazard distances as specified in relevant Australian standards; and</li> <li>Preserving the future connection to the Port of Hobart from the North by the Regatta Grounds.</li> </ul>	
32.3.6 Provide for recreation and associated uses in designated open spaces as shown on Figure 32.3 and the associated Table 32.3.	Not relevant.
32.3.7 Require the bulk, siting and height of buildings to be sympathetic to the natural topography of the headland, amphitheatre, and escarpment surrounding the Cenotaph and to reinforce the natural shoreline with freestanding buildings viewed in the round on the Cove Floor.	No buildings are proposed.
<ul> <li>32.3.8 Not unreasonably impact on important views, including the following shown on Figure 32.2:</li> <li>From the Cenotaph toward the mouth of the Derwent River, including the flat river plane that extends to the horizon;</li> <li>From the Cenotaph to the horizon of the natural amphitheater,</li> <li>including the Wellington Range descending to the Mount Nelson ridge, then to Porter Hill and down to the water plane at Long Point, Lower Sandy Bay;</li> <li>From the Cenotaph to St George's Church;</li> <li>From the Cenotaph to the Parliament House forecourt along</li> <li>Morrison Street;</li> <li>The views across the Cove toward the Cenotaph, including</li> <li>from Macquarie Street, the forecourt of the Princes Wharf No. 1 Shed and the Institute for Marine and Antarctic Studies (IMAS), Runnymede Street and the open space at the eastern end of the IMAS building;</li> <li>The view of the sunrise from the grounds of the Cenotaph on</li> </ul>	f
<ul> <li>Anzac Day;</li> <li>To and from Sullivans Cove and the Derwent River aligning</li> <li>NE/SW;</li> <li>From the Royal Engineers Building to Kangaroo Bay;</li> <li>Along the Key Public Space;</li> </ul>	

<ul> <li>To and from the Key Public Space and Cove Floor to the Cenotaph; and</li> <li>To and from Davey Street and the entry to the Key Public</li> </ul>	
Space.	
32.3.9 Require the design and appearance of roofs to provide interest when viewed from the elevated areas of the Cenotaph and Domain through measures that may include incorporation of, rooftop gardens or articulated roof forms that serve a purpose such as daylighting of internal areas.	Not relevant.
32.3.10 Establish and reinforce a well-defined built edge to Evans Street, set back to highlight the Goods Shed as a public entry point to the site.	Not relevant.
<ul> <li>32.3.11 Include a network of connections through and around the site as shown on Figure 32.3 and the associated Table 32.3, including a series of:</li> <li>Primary shared street spaces extending north from Evans</li> <li>Street and east from Tasman Highway towards the centre</li> </ul>	The proposed road is consistent with Figure 32.3 of the Planning Scheme, so does not conflict with statement 32.3.11.
of the site; and	
<ul> <li>Smaller and more intimate secondary spaces that provide</li> <li>permeability across the site. Their position can be adjusted to</li> </ul>	
• suit the preferred building form, siting and lot size/s.	
32.3.12 Include a direct pedestrian link between the Key Public Space and Cenotaph that traverses the escarpment	Not relevant.
32.3.13 Include a gateway building in area D shown on Figure 32.3 that provides interest and maintains view lines at ground level to the Key Public Space from Davey Street and forms the southern edge of the central Key Public Space; and	Not relevant (there is no area D on Figure 32.3).
32.3.14 Developments for sensitive uses are to be adequately designed and constructed to protect residential amenity and reduce the potential for land use conflict that may compromise the use of Macquarie Point as a major public event space.	The proposed road is not a sensitive use.

The table below provides an assessment of the proposal against the matters to be considered listed under clause 32.4 of the Planning Scheme.

Matters to be considered	Assessment
The Desired Future Character Statements in clause 32.3.	The assessment in the table above demonstrates that the proposal is consistent with the relevant Desired Future Character Statements in clause 32.3
The preferred treatment of robust, self-pigmented external materials and finishes to primary and secondary spaces.	This consideration may not be relevant for the proposed road. If it is, Council can enforce it through a permit condition.

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The suitability of proposed development to achieve satisfactory levels of safety and amenity of occupants including the avoidance of vulnerability to noise, air, vibration and lighting impacts from the Port of Hobart.	As the proposed road is identified on various strategic planning documents and would be constructed and used in ways that meet the relevant roads standards, it should be achieve satisfactory levels of safety and amenity of occupants.
The potential for land use conflict between the proposed use and development and the use of Macquarie Point for major public events. To the extent that there is an inconsistency between these considerations, priority should be given to the Port of Hobart operations	The proposed road is a complementary land use, which has been strategically identified for implementation by the Macquarie Point Reset Masterplan 2017-2030.
The impact on the operation of the Port of Hobart.	The proposed road is unlikely to have an adverse impact on the Port of Hobart.
The height of buildings within Activity Area 3.0, and on adjoining and adjacent lots.	Not relevant.
The bulk and form of existing and proposed buildings.	Not relevant.
The spatial characteristics of the streets and spaces and the quality of the environment.	The proposed road has been strategically identified for implementation by the Macquarie Point Reset Masterplan 2017-2030.
Protection of water quality and water sensitive urban design principles	A Stormwater Management Plan is at <b>Appendix E</b> . WSUD is not planned for this stage of Macquarie Point's redevelopment but will be incorporated in later stages. A stormwater management plan has been developed for the proposed northern vehicular access point at Macquarie Point. The stormwater network has been designed such that it will have capacity to convey the 5% AEP peak discharge once the Macquarie Point masterplan development is implemented. The temporary stormwater connection will give the network a lower, but not insignificant flood immunity in the interim. Water quality and detention infrastructure is not intended to be incorporated on the access road (except for primary litter trap treatment).
Protection of public infrastructure and the environment	The proposed road has been designed and would be constructed and used in ways that meet the relevant roads standards and would not have unacceptable impacts on public infrastructure and the environment.
Impacts from land decontamination works, and the need for uses not to commence until relevant areas of the site have been appropriately remediated	The Macquarie Point area has a history of land uses known to result in contamination. The area has been assessed and appropriate remediation will be undertaken in accordance with the final outcomes of the Macquarie Point Development Project Audit Area 4 Remediation – Sampling, Analysis and Quality Plan. This plan is being developed by the Macquarie Point Development Corporation.
The quality of the architectural design	Not relevant for a public road.
The impact of development on an operational transport corridor connecting to the north of the site	By virtue of forming a planned turn-off proposed road is expected to improve traffic flow for this corridor.
The adequacy and capacity of existing infrastructure and services including roads, footpaths, water,	The proposed road would integrate with the existing infrastructure network.

sewerage and power to cater for the proposed development	
The Strategic Principles in Appendix A of the Macquarie Point Reset Masterplan 2017-2030	The proposed road is clearly identified and planned for within the Macquarie Point Reset Masterplan 2017-2030 (see Figures 1 and 5 of this report) and does not conflict with the Strategic Principals in Appendix A of the masterplan.

## 7. State Policies

An assessment of the proposal against the State Policies is provided below.

State Policy	Assessment
Tasmanian State Coastal Policy 1986	The proposed road is consistent with this policy, as it is not on port land and will not adversely impact on the efficiency and safety of port operations.
State Policy on Water Quality and Management 1997	The proposed road is generally consistent with this policy. A permit condition can ensure construction activities employ Best Practice Environmental Management' in respect to water use and management. Recycled water will be used for dust suppression purposes where appropriate.
State Policy on the Protection of Agricultural Land 2009	This policy does not apply to the proposed development area, which is in an urban setting.
National Environment Protection Measures:	Given the assessment in subsection 6.6.8 of this report,
<ul> <li>National Environment Protection Council (Ambient Air Quality) Measure;</li> </ul>	the proposed public road is unlikely to conflict with the various National Environmental Protection Measures.
<ul> <li>National Environment Protection Council (Assessment of Site Contamination) Measure 1999;</li> </ul>	
<ul> <li>National Environment Protection (Diesel Vehicle Emissions) Measure</li> </ul>	
<ul> <li>National Environment Protection Council (Movement of Controlled Wastes between States and Territories) Measure;</li> </ul>	
<ul> <li>National Environment Protection Council (National Pollutant Inventory) Measure; and</li> </ul>	
National Environment Protection Council (Used Packaging Materials) Measure.	

## 8. Conclusion

As the proposed public road is consistent with the relevant requirements of the Planning Scheme and the Macquarie Point Reset Masterplan 2017-2030, the planning permit application should be approved. An appropriately conditioned planning permit can ensure that the road is constructed in accordance with the plans at Appendix A and to the Planning Authority's current standards.

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# **Title Details**

Appendix B

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## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



#### SEARCH OF TORRENS TITLE

VOLUME	FOLIO
20452	1
EDITION	DATE OF ISSUE
2	05-Aug-1999

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 12.10 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 1 on Plan 20452 Derivation : Whole of 9776m2 Vested in The Australian National Railways Commission and duly surrendered as appears by Transfer No. A913899 Prior CT 4063/54

#### SCHEDULE 1

THE CROWN

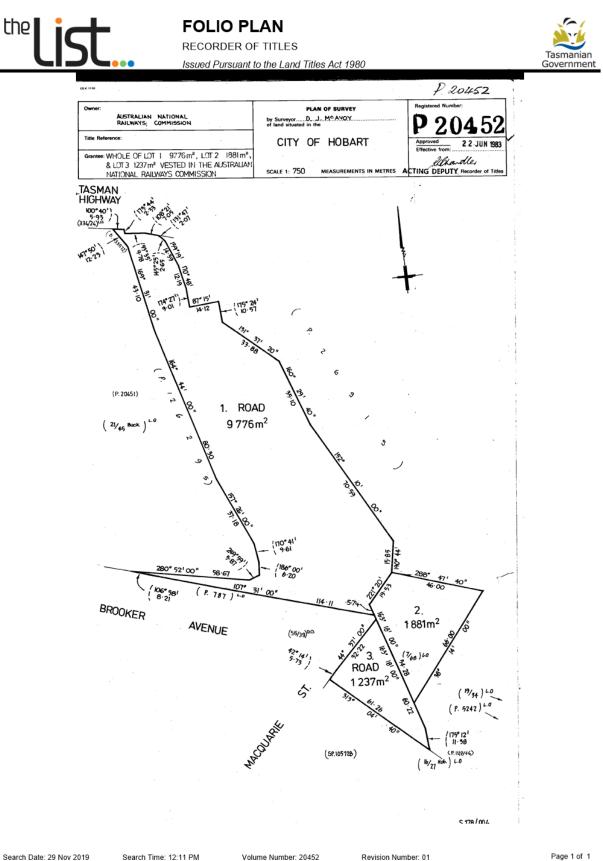
#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment



 Search Date: 29 Nov 2019
 Search Time: 12:11 PM
 Volume Number: 20452
 Revision Number: 01
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## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



#### SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176538	1
EDITION	DATE OF ISSUE
1	12-Sep-2019

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 11.48 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 1 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176538	1
EDITION	DATE OF ISSUE
1	12-Sep-2019

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 11.48 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 1 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



#### SEARCH OF TORRENS TITLE

VOLUME 176538	FOLIO 2
EDITION 1	DATE OF ISSUE 12-Sep-2019

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 11.32 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 2 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 176538	FOLIO
EDITION 1	DATE OF ISSUE 12-Sep-2019

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 12.06 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 3 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176538	4
EDITION	DATE OF ISSUE
1	12-Sep-2019

SEARCH DATE : 29-Nov-2019 SEARCH TIME : 12.06 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 4 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

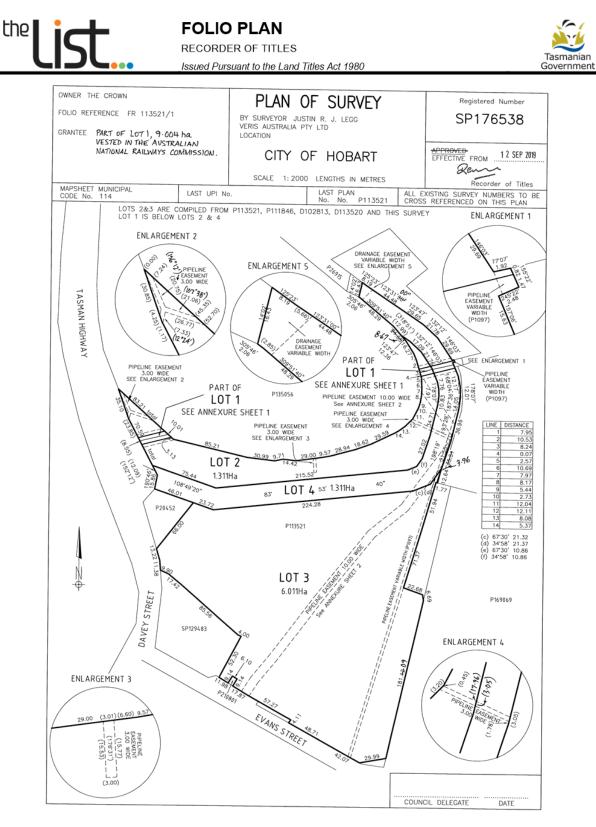
#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

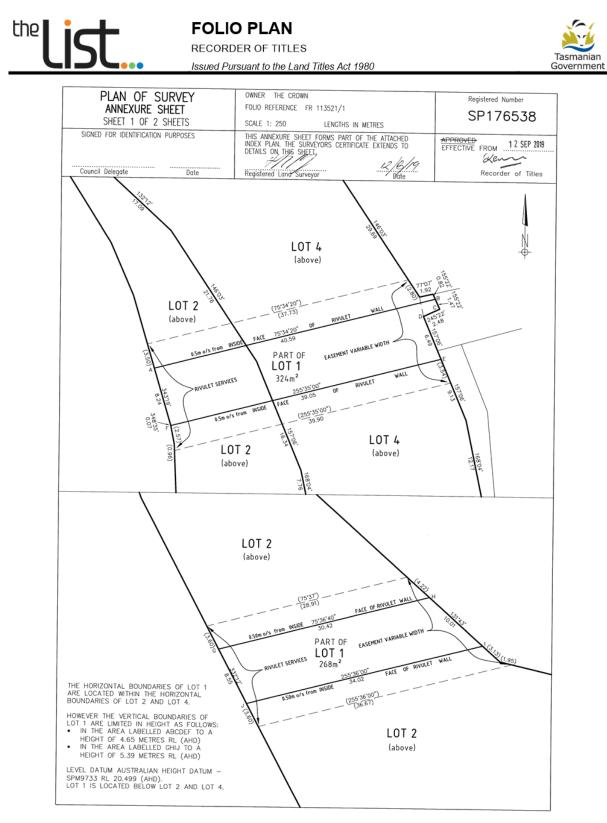
Department of Primary Industries, Parks, Water and Environment



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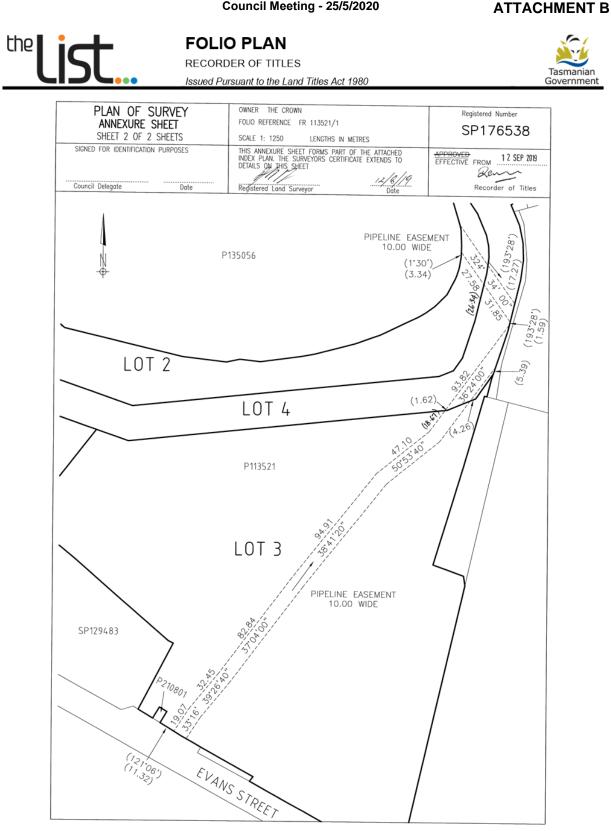
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#### Supporting Information Council Meeting - 25/5/2020



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## Supporting Information Council Meeting - 25/5/2020

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RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



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SP

Registered Number

176538

#### SCHEDULE OF EASEMENTS

NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.

#### EASEMENTS AND PROFITS

Each lot on the plan is together with:-

 such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and

(2) any easements or profits a prendre described hereunder.

Each lot on the plan is subject to:-

 such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
 any easements or profits a prendre described hereunder.

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

LOT 1 on the Plan is together with a Rivulet Services Easement (hereinafter defined) over such parts of Lot 2 and Lot 4 that are shown marked as "Rivulet Services Easement Variable Width" on the Plan.

LOT 2 on the Plan is subject to:

- a Rivulet Services Easement (appurtenant to the land comprised in Lot 1 on the Plan) over such part of Lot 2 that is shown marked as "Rivulet Services Easement Variable Width" on the Plan;
- (b) a Pipeline Easement (hereinafter defined) for the benefit of Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653) over the land marked "Pipeline Easement 10.00 Wide" passing through Lot 2 on the Plan; and
- (c) a Pipeline Easement for the benefit of Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653) over each of the instances of land marked "Pipeline Easement 3.00 Wide" (as the same are shown in Enlargement 2, Enlargement 3 and Enlargement 4 on the Plan) passing through Lot 2 on the Plan.

LOT 3 on the Plan is subject to:

- (a) a Pipeline Easement for the benefit of Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653) over the land marked "Pipeline Easement 10.00 Wide" passing through Lot 3 on the Plan; and
- (b) a Pipeline Oil Easement (hereinafter defined) that is both:
  - (i) appurtenant to the land comprised in folio of the Register Volume 199693 Folio 1 (excepting out the land marked W.X.Y.Z. on Plan No. 199693); and
  - (ii) for the benefit of the Commonwealth of Australia;

through over under along and upon the strip of land marked "Pipeline Easement Variable Width (P1097)" passing through Lot 3 on the Plan.

(USE ANNEXURE P	AGES FOR CONTINUATION	)		
SUBDIVIDER: The Crown, Hobart City Council	PLAN SEALED BY:	/		
FOLIO REF: 113521/1	DATE:			
SOLICITOR & REFERENCE: Office of the Crown Solicitor	REF NO.	Council Delegate		
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.				

 Search Date: 29 Nov 2019
 Search Time: 11:42 AM
 Volume Number: 176538

 Department of Primary Industries, Parks, Water and Environment
 Fearing Search Time: 11:42 AM
 Volume Number: 176538

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RECORDER OF TITLES



Issued Pursuant to the Land Titles Act 1980

#### Registered Number ANNEXURE TO SCHEDULE OF EASEMENTS SP 176538 PAGE 2 OF 8 PAGES

#### SUBDIVIDER: FOLIO REFERENCE:

LOT 4 on the Plan is subject to:

- a Rivulet Services Easement (appurtenant to the land comprised in Lot 1 on the Plan) over such part (a) of Lot 4 that is shown marked as "Rivulet Services Easement Variable Width" on the Plan;
- a Pipeline Easement for the benefit of Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653) over the land marked "Pipeline Easement 10.00 Wide" passing through Lot 4 on the (b) Plan;
- a Pipeline Easement for the benefit of Tasmanian Water and Sewerage Corporation Pty Ltd (ACN (c) 162 220 653) over the land marked "Pipeline Easement 3.00 Wide" passing through Lot 4 on the Plan:
- a Drainage Right Easement (hereinafter defined) for the benefit of the Hobart City Council over the (d) land marked "Drainage Easement, <del>2.00 Wide</del>" passing through Lot 4 on the Plan; and Variable Width

a Pipeline Oil Easement that is both: (e) appurtenant to the land comprised in folio of the Register Volume 199693 Folio 1 (excepting (i) out the land marked W.X.Y.Z. on Plan No. 199693); and for the benefit of the Commonwealth of Australia; (ii) through over under along and upon the strips of land marked "Pipeline Easement Variable Width (P1097)" passing through Lot 4 on the Plan.

#### Interpretation:

"Rivulet Services Easement" means the full right and liberty for Authorised Persons to, in respect of the Easement Land, enter and remain upon the Easement Land with or without machinery, vehicles, plant and equipment for the purpose of inspecting, repairing and/or replacing as reasonably necessary the Hobart Rivulet tunnel (including any infrastructure and equipment) forming part of Lot 1 on the Plan in the case of any collapse or non-trivia damage thereto provided always that:

- in exercising such rights and liberties, Authorised Persons must: (a)
  - (i) act as expeditiously as possible;
  - do as little damage to the Easement Land (including for the avoidance of doubt using all (ii) reasonable endeavours to not enter onto any buildings nor impact or adversely affect any buildings, structures and improvements (including transit infrastructure) on or under the Easement Land) as is reasonably practicable in the relevant circumstances;
  - make good any damage caused to the Easement Land to the extent that it is reasonably (iii) practicable to do so;
  - (iv) give such prior notice as is reasonable in the circumstances before seeking to enter onto the Easement Land or to exercise of the rights conferred by this Rivulet Services Easement; and

J (D)

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Registered Number ANNEXURE TO SCHEDULE OF EASEMENTS 176538 SP PAGE 3 OF 8 PAGES SUBDIVIDER FOLIO REFERENCE if any part of the Easement Land includes any rail infrastructure (within the meaning of the (v) Rail Safety National Law (Tasmania)) and/or any other transit infrastructure, comply with all reasonable notices and directions of the Registered Proprietor of the Easement Land relating to or affecting the rail infrastructure and/or any other transit infrastructure (including so as not to unreasonably interfere with the operation of that infrastructure and so as not to create any danger to health and safety of any person in respect thereof), and the registered proprietors of the Easement Land ("the Owner"): (b) must not (except as provided for in subclause (ii)) construct, install, erect or carry out major (i) alterations to, any building, structure or other improvement on the Easement Land without the written consent of the registered proprietor of Lot 1 first had and obtained and only in compliance with any conditions which form such consent provided however: any building structure or other improvement on the Easement Land prior to the (A) creation of this Rivulet Services Easement may remain in situ and will not be a breach of the requirements of subparagraph (b)(i); (B) the written consent of the registered proprietor of Lot 1 is not to be withheld in respect of any building structure or other improvement being constructed, installed, erected or majorly altered after this Rivulet Services Easement takes effect where the Owner is able to demonstrate to the satisfaction of the registered proprietor of Lot 1 (acting reasonably) that such building or works will not (in a non-trivial manner) damage the Hobart Rivulet tunnel passing through Lot 1 or be reasonably likely to cause any collapse or other non-trivial damage to the Hobart Rivulet tunnel passing through Lot 1 as a result of its subsequent use or operation; (ii) may, in respect of the Lot 4 Area, construct, install, use, maintain, repair and replace land transportation infrastructure (including a roadway, bike track and/or rail line) on such Lot 4 Area without the need for any prior written consent from the registered proprietor of Lot 1 where such works (and their use) will not (in a non-trivial manner) directly damage the Hobart Rivulet tunnel passing through Lot 1 or be reasonably likely to cause any collapse or other non-trivial damage to the Hobart Rivulet tunnel passing through Lot 1 as a result of its subsequent use or operation; and (iii) must not to do anything else (other than that which may be allowed by subclauses (i) and (ii)) on the Easement Land that may (in a non-trivial manner) damage the Hobart Rivulet tunnel passing through Lot 1, and neither the Owner nor the registered proprietor of Lot 1 is required to fence any part of the Easement (c) Land. For the purposes of this definition of Rivulet Service Easement: Authorised Persons means the registered proprietor of Lot 1 on the Plan and where the context permits and requires, the employees, agents and contractors of the registered proprietor of Lot 1 on the Plan. NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

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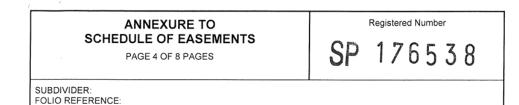
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*Easement Land* means such parts of Lot 2 and Lot 4 on the Plan that are shown marked as "Rivulet Services Easement Variable Width" on the Plan.

Lot 4 Area means all of the Easement Land area existing over Lot 4 on the Plan.

"Pipeline Easement" means the full right and liberty for Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653) ("TasWater") (and its successors) to, at all times in respect of that land over which a Pipeline Easement is expressed to exist (jointly and where the context requires severally, the "Easement Land"):

- enter and remain upon the Easement Land with or without employees, contractors, agents and all other persons duly authorised by it to do those things permitted in subclauses (2) - (5) below, with or without machinery, vehicles, plant and equipment reasonably necessarily in respect of doing those things permitted in subclauses (2) - (6) below;
- (2) investigate, take soil, rock and other samples, survey, open and break up and excavate the Easement Land for any purpose or activity properly associated with the operation and use of the Infrastructure;
- (3) retain, operate, maintain, inspect, cleanse and repair the Infrastructure;
- (4) remove and replace (like for like) the Infrastructure;
- (5) run and pass sewage, water and electricity through and along the Infrastructure;
- (6) if the Easement Land is not directly accessible from a highway, then for the purpose of undertaking any of the preceding activities TasWater may with or without employees, contractors, agents and all other persons authorised by it, and with or without machinery, vehicles, plant and equipment of the type referred to in subclause (1), enter the Lot on the Plan subject to this Pipeline Easement from the highway at any then existing vehicle entry and cross that said Lot to the Easement Land following the most appropriate and reasonable access route (keeping wherever reasonably possible to formed tracks and/or roads) provided TasWater has first sought and obtained approval from the Owner for any such access (which approval must not be unreasonably withheld but may take into account safety matters and the proper operation of the Easement Land and surrounding land with any such approval also being able to be made subject to reasonable conditions (including the matters set out in clause 8)); and
- (7) use the Easement Land as a right of carriageway for the purpose of undertaking any of the preceding purposes on other land where TasWater has similar rights and liberties.

PROVIDED ALWAYS THAT:

(8) In exercising any of the rights and liberties referred to in clauses (1) - (7) above, TasWater must
 (a) act as expeditiously as possible;

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Registered Number ANNEXURE TO SCHEDULE OF EASEMENTS 176538 SP PAGE 5 OF 8 PAGES SUBDIVIDER FOLIO REFERENCE: (b) not do or allow anything to be done whereby any: buildings, structures and improvements already existing on or under the Easement (i) Land or any other rights over the Easement Land are adversely affected; and (ii) unnecessary damage is caused to the Easement Land; make good all damage caused to the Easement Land and any improvements on the Easement (c) Land and leave the Easement Land in a clean and tidy condition (including but not limited to restoring the surface of the Land as nearly as possible to its former condition) after each exercise of such rights and liberties by TasWater; comply with all reasonable notices and directions of the relevant registered proprietor of the (d) Easement Land ("the Owner") concerning safety and any other relevant matter so as not to adversely interfere with the operation of the land surrounding (and including) the Easement Land (including any transportation based infrastructure) or create any danger to health and safety in respect thereof; and (e) should any part of the Easement Land also be subject to another easement, act co-operatively and in good faith with any entity having the benefit of such other easement rights and to use all reasonable endeavours to ensure that neither party is adversely affected by the other exercising their easement rights over such Easement Land; (9)The registered proprietors of the Easement Land ("the Owner") must not, without the written consent of TasWater first had and obtained (which consent is not to be unreasonably withheld) and only in compliance with any conditions which form the consent: (subject to clause 9(b)) alter, excavate, plough, drill or otherwise penetrate the ground level (a) of the Easement Land in a manner that could damage or interfere (in a non-trivial manner) with the condition or other proper operation of the Improvements; (b) install or erect any building or structure on or in the Easement Land provided however such restriction does not extend to surfacing works, roads and pathways works, installation of signage, landscaping works, fencing works and car parking works, and in respect of such part of the servient land that exists on Lot 4, any remediation works and other construction or installation works of a transportation nature, all of which works may be undertaken by the Owner where doing so will not damage or contribute to damage (in a non-trivial manner) to any of the Infrastructure in the Easement Land; (c) remove any thing that supports, protects or covers any Infrastructure on or in the Easement (d) (subject to clause 9(b)) do any thing which will or might damage or contribute to damage (in a non-trivial manner) to any of the Infrastructure in the Easement Land; (e) (subject to all other terms herein) prevent or interfere with the proper exercise and benefit of the Easement Land as allowed for by the terms of this Pipeline Easement by TasWater (or its employees, contractors, agents and all other persons duly authorised by it); or Л (f) permit or allow any action which the Owner must not do or acquiesce in that action NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

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SUBDIVIDER: FOLIO REFERENCE:

# SCHEDULE OF EASEMENTS

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# ANNEXURE TO SCHEDULE OF EASEMENTS

PAGE 6 OF 8 PAGES



it being acknowledged that any building, structure, fence, pit, well, footing, pipeline, paving, tree, shrub or other object on or in the Easement Land prior to the creation of such Pipeline Easement may remain *in situ* and will not be a breach of the requirements of this subclause (9) or allow any action to be taken under of subclause (14).

- (10) Neither the Owner or TasWater is required to fence any part of the Easement Land.
- (11) The Owner may erect a fence across the Easement Land at its boundaries.
- (12) The Owner may erect a gate across any part of the Easement Land subject to these conditions:
  - (a) the Owner must provide TasWater with a key to any lock which would prevent the opening of the gate (with TasWater to close and lock any such gate after use if TasWater has opened and unlocked such gate); and
  - (b) if the Owner does not provide TasWater with that key or the key provided does not fit the lock, TasWater may cut the lock from the gate (provided that TasWater must firstly attempt to notify the Owner of such action and again notify the Owner as soon as possible after cutting the lock).
- (13) If the Owner causes damage to any of the Infrastructure in breach of its obligations herein contained or otherwise as a result of any wrongful (including negligent) act or omission by the Owner, the Owner is liable for the actual cost reasonably incurred by TasWater in the repair of the Infrastructure damaged.
- (14) If the Owner fails to comply with of its obligations under subclause (9), without forfeiting any right of action, damages or otherwise against the Owner, TasWater may:
  - (a) reinstate the ground level of the Easement Land; or
  - (b) remove from the Easement Land any building, structure or other object in place in breach of the requirements of subclause (9); or
  - (c) replace any thing that supported, protected or covered the Infrastructure

as relevant.

#### Interpretation (for the purposes of this definition of "Pipeline Easement"):

"Infrastructure" means such pipes and ancillary equipment and infrastructure owned or for which TasWater is responsible existing in the relevant Easement Land as at 12 April 2019 associated with the passing of water and sewerage and includes but is not limited to:

- (a) any thing reasonably required to support, protect or cover any of the Infrastructure; and
- (b) where the context permits, any part of the Infrastructure.

"Drainage Right Easement" means a right of drainage as defined in Schedule 8 of the Conveyancing and Law of Property Act 1884 (Tas) qualified by it being agreed that:

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ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 7 OF 8 PAGES



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- (a) (for the avoidance of doubt) the owner of the servient land may construct, install, use, maintain, repair and replace land transportation infrastructure (including a roadway, bike track and/or rail line) on such area affected by the Drainage Right Easement without the need for any prior written consent from the Hobart City Council where such works (and their use) will not (in a non-trivial manner) directly damage any existing drainage infrastructure; and
- (b) the Hobart City Council must make good any damage caused to the Easement Land (including any infrastructure thereon of the type referred to in subclause (a)) as a result of exercising any of these easement rights to the extent that it is reasonably practicable to do so.

"Pipeline Oil Easement" means the right to lay use and maintain a line or lines of pipes for conveying oil and to erect a booster pump house through over under along and upon the land marked Pipeline Easement Variable Width (P1097) and together with the right to enter into or upon that said strip of land by workmen servants and others for the purpose of excavating constructing laying erecting cleansing amending or repairing such line or lines of pipes or such booster pumphouse (being the rights created by A.4275).

Executed for and on behalf of the Hobart ) City Council by Nicholas Heath being and ) as the General Manager of the Hobart City ) Council and a duly authorised person in the ) presence of: )

N. Beal

FILLE Signature of witness

FIDMA CLEARY Name of witness (block letters)

50 MACMARIE STREET HOGART Address of witness

PROJECT OFFICER

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ANNEXURE TO SCHEDULE OF EASEMENTS

PAGE 8 OF 8 PAGES

SUBDIVIDER: FOLIO REFERENCE:

The seal of the Macquarie Point Development Corporation was hereunto affixed in accordance with an authorisation given by its Board in the presence of:

Cooper witness (block letters) Name

BA Evans St Hobat Address of witness Public Servart Occupation

Signed by THE HONDURABLE GUY BARNETT being and as THE MINISTER ADMINISTERING THE CROWN LANDS ACT 1976 (TAS) and pursuant to an Instrument of Authorisation dated-

M

in the presence of:

 $\sim$   $\sim$ Signature of witness LEGLEM 10000 Name of witness (block letters) 4 SALAMANCA BART Address of witness DLO Occupation

Signature

Registered Number

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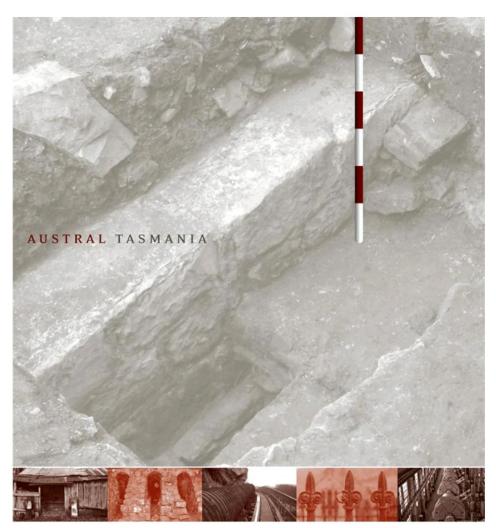
Page 47 ATTACHMENT B

# Archaeological Report

Appendix C

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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# Macquarie Point Access Road Archaeological Sensitivity Report

Final Report prepared for Macquarie Point Development Corporation AT0262 29 May 2019

> Archaeological & Heritage Consultants ABN: 11 133 203 488

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Document Version	Date	Review Reason	Prepared By	Reviewed and Approved By
Draft V1	29.05.19	Quality Assurance	J. Puustinen	J. McCarthy
Final	29.05.19	Client Review	J. Puustinen	W. Wheeler

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488 29 May 2019 i

# **EXECUTIVE SUMMARY**

#### Introduction

The Macquarie Point Development Corporation (MPDC) has proposed the construction of a new access road at Macquarie Point, Hobart. Buildings or works involving excavation are subject to the archaeological provisions of the *Sullivans Cove Planning Scheme 1997*. This report considers the archaeological sensitivity of the area and proposes management recommendations in response to potential impacts.

#### Archaeological Potential and Significance

Generally, the roadworks area has nil to low archaeological potential as a result of the substantial earthworks carried out as part of the construction of the railyards and which cut the ground level down to bedrock.

There are however two discrete areas of nineteenth century development which coincide with, or are very close to the roadworks area - an historic roadway alignment; and a nineteenth century railway turntable well. Both features are assessed as having local level significance and management is recommended as part of the works.

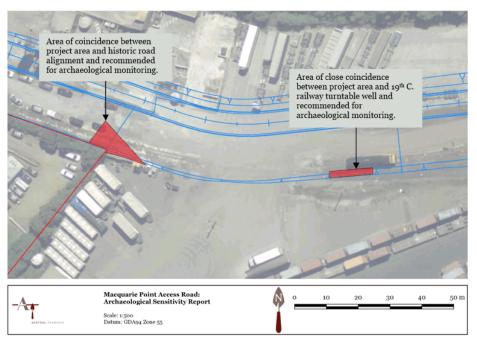
Railway buildings were also constructed below the escarpment from the mid-late twentieth century. It is likely that subsurface evidence of these buildings continues to exist and may be encountered during the road construction works. However, such fabric is unlikely to have any relevance to research questions related to rail uses at the site, nor provide information that could not be readily established through documentary and other sources. No management for such features is recommended as part of the works.

#### **Archaeological Management**

Archaeological monitoring is recommended for ground works occurring in the vicinity of the historic roadway alignment and the nineteenth century railway turntable well, as depicted on the following figure. Detailed information about these recommendations is contained in this report, including the proposed strategy for managing archaeological potential, overarching statutory and operational requirements, and the archaeological methods for monitoring and recording, artefact collection and analysis, and reporting.

Macquarie Point Access Road: Archaeological Sensitivity Report





Archaeological Monitoring Areas (TasMap, © State of Tasmania).

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488 29 May 2019 iii

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## **1.0 INTRODUCTION**

#### 1.1 Client and project details

The Macquarie Point Development Corporation (MPDC) has proposed the construction of a new access road at Macquarie Point, Hobart. It is intended that the road will provide access to the northern end of the site from the Tasman Highway. The roadworks are located within the planning area of the *Sullivans Cove Planning Scheme 1997 (SCPS 1997)* and buildings or works involving excavation are subject to the archaeological provisions of the Scheme.

To assist with this project, Austral Tasmania Pty Ltd has been engaged to prepare this Archaeological Sensitivity Report in support of the Development Application. It consists of two key components:

- 1. An Archaeological Sensitivity Report which investigates documentary evidence of the site's history, archaeological potential and significance; and
- 2. An archaeological methodology which sets out, in practical terms the program and procedures for archaeological management as part of the roadworks.

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

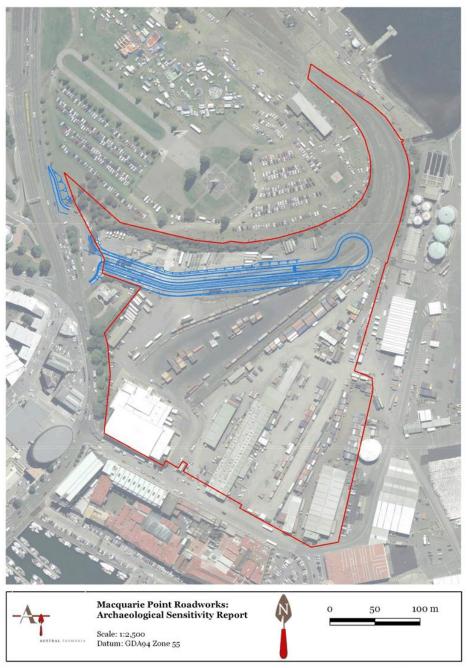


Figure 1: MPDC Development Area (red boundary lines) and roadworks area (blue lines) (TasMap, © State of Tasmania).

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

#### 1.2 Authorship

This report was written by Justin McCarthy and James Puustinen. It was reviewed by Alan Hay.

#### 1.3 Limitations and constraints

This assessment is limited to consideration of historical archaeological values within a scope defined by the *SCPS 1997*. The assessment of Aboriginal archaeological and cultural values, built heritage and social values is beyond the scope of this study.

An Aboriginal heritage assessment has not been undertaken as part of this work, although preliminary enquiries were made to Aboriginal Heritage Tasmania (AHT), DPIPWE and the results incorporated into the recommendations made in this report.<sup>1</sup>

The results and judgements contained in this report are constrained by the limitations inherent in overview type assessments, namely accessibility of historical information within a timely manner. Whilst every effort has been made to gain insight to the historic heritage profile of the subject study area, Austral Tasmania Pty Ltd cannot be held accountable for errors or omissions arising from such constraining factors.

All maps are oriented with North at the top of the page unless otherwise assigned.

#### 1.4 Heritage Review

The development area is not subject to national or State heritage management provisions. It is however subject to the heritage provisions of Schedule 1 of the *SCPS 1997*. The archaeological provisions of the *SCPS 1997* are relevant to this current proposal and apply to 'building or works' which involve the excavation of land within the planning area.<sup>2</sup> Table 2 of Schedule 1 includes a list of places of archaeological sensitivity. For the most part, the footprint of the roadworks occurs outside of places included in Table 2. The exception however is the southern extent of the roadworks which partially encroaches within the boundaries of place number 12: 'Royal Engineers Headquarters and Kings Yard' (Figure 2).

Where proposed works cannot satisfy the permitted categories, an Archaeological Sensitivity Report is required and the works must be assessed as discretionary. This report has been prepared with regard to these requirements.

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

<sup>&</sup>lt;sup>1</sup> Aboriginal Heritage Desktop Review, Proposed Roadworks – Macquarie Point, AHDR2274, 30 April 2019 <sup>2</sup> SCPS 1997, cl.22.6.1

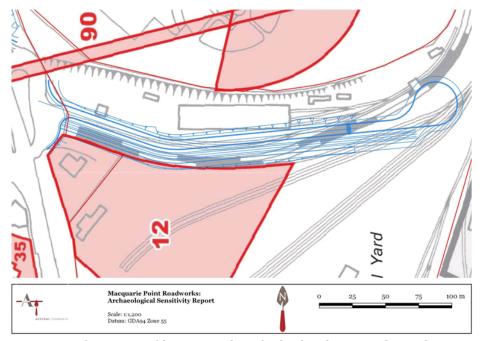


Figure 2: Extract from Figure 5a of the SCPS 1997 'Places of Archaeological Sensitivity' showing Place No. 12 Royal Engineers Headquarters & Kings Yard. The southern alignment of the roadworks partially corresponds with Place No. 12 (Sullivans Cove Planning Scheme 1997).

Preliminary consultation has taken place with Aboriginal Heritage Tasmania (AHT), DPIPWE, to determine if the property contains any previously recorded Aboriginal heritage sites, or if there is any specific Aboriginal heritage constraints that apply to the place. AHT has advised that there are no Aboriginal heritage sites recorded within the place. Based on the results of the 2015 test excavations,<sup>3</sup> AHT is of the opinion that the area has a low probability of Aboriginal heritage being present. On this basis, there were no requirements for an Aboriginal heritage investigation.<sup>4</sup>

AHT also advised that the provisions of the *Aboriginal Heritage Act 1975* will apply should Aboriginal heritage be discovered or suspected during works and an Unanticipated Discovery Plan should be implemented.<sup>5</sup> This Unanticipated Discovery Plan is included at Appendix 1.

#### 1.5 Acknowledgements

The assistance of the following people and organisations is gratefully acknowledged:

- Mr Brad Wheeler, MPDC;
- Mr Stephen Gillick, Pitt & Sherry;
- Mr John Stephenson, Heritage Tasmania, DPIPWE;
- Ms Kate Moody, Aboriginal Heritage Tasmania, DPIPWE; and
- Staff of the Tasmanian Archives and Heritage Office.

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

 <sup>&</sup>lt;sup>3</sup> Austral Tasmania Pty Ltd, Macquarie Point Aboriginal Archaeological Test Excavations, report prepared for the Macquarie Point Development Corporation, AT0174, 18 August 2015
 <sup>4</sup> Aboriginal Heritage Desktop Review, Proposed Roadworks – Macquarie Point, AHDR2274, 30 April 2019
 <sup>5</sup> Ibid

# 2.0 PREVIOUS ARCHAEOLOGICAL WORKS

#### 2.1 Introduction

Archaeological excavations have occurred at Macquarie Point in 2008, 2015 and 2016.<sup>6</sup> Of relevance to the roadworks project are the results of the 2008 and 2015 investigations, where test excavations were carried out within Place No. 12 to refine the understanding of its archaeological potential.

The spatial definition of Place No. 12 in Figure 5a of the *SCPS 1997* has been found to be excessively large in both the 2008 and 2015 reports, which confirmed remnant and discrete areas of archaeological potential, but high levels of past disturbances which have impacted on the archaeological potential of the place.

The 2015 report included a revised spatial definition of the archaeological sensitivity of Place No. 12 (Figure 3). Areas of archaeological potential were defined for Edward Lord's House/Royal Engineers Barracks; a nineteenth century road formation; the Lumber Yard and gardens; and the 1914 railway turntable well. Of relevance to the current project are the findings related to the historic road formation.

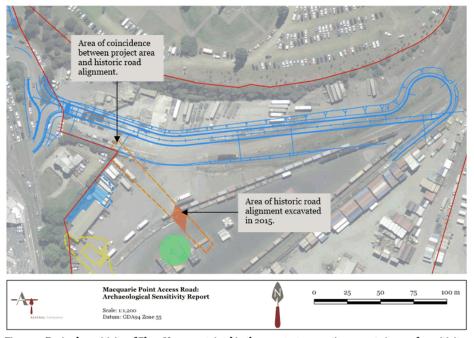


Figure 3: Revised sensitivity of Place No.12 contained in the 2015 test excavation report. Areas of sensitivity are indicated by coloured shaded areas and dotted lines. The following colour scheme has been used: orange denotes the roadway to the north of the Engineers Yard, blue denotes Lord's house/barracks and the store building, yellow denotes the Lumber Yard and gardens, and green denotes the 1914 railway turntable well. The area of coincidence between the historic roadway alignment and the current project is indicated. (TasMap, © State of Tasmania).

The historic road alignment was intersected by Test Trench 3, approximately 30 m to the south of the roadworks area. The road was located between 1.2 - 1.4 m below the existing ground surface. The upper surface of the road was an early asphalt surface, which in turn overlaid a cobble deposit which

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

<sup>&</sup>lt;sup>6</sup> Archaeological Management & Consulting Group Pty Ltd, *Archaeological Test Excavation Report Vol. 2 - New Royal Hobart Hospital, Hobart, Tasmania*, Vols. 1-2, November 2008; Austral Tasmania Pty Ltd, *Macquarie Point Historical Archaeological Test Excavations*, final report prepared for Macquarie Point Development Corporation, ATO174, 29 July 2015; Austral Tasmania Pty Ltd, *Macquarie Point Seaucall & Archaeological Refuse Deposit Investigation*, final report prepared for Macquarie Point Development Corporation, ATO197, 23 May 2016

was loosely packed and overlying the natural clay and dolerite regolith below (Figures 4-5). Based on historic plans, the alignment of the road was projected, and indicated by dashed orange lines in Figure 3 above. The management recommendation for this feature was to carry out archaeological monitoring where works are proposed to occur within its alignment.<sup>7</sup> An area of approximately 70 m<sup>2</sup> coincides between the historic road alignment and the current project area.



Figure 4: South facing view along test trench 3 showing asphalt deposit and cobbles in foreground and bedrock outcrop in background.



Figure 5: North facing view showing the asphalt deposit abutting the dolerite outcrop.

7 Austral Tasmania, July 2015, pp. v, 74

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### **3.0 ILLUSTRATED SITE HISTORY**

#### 3.1 Introduction

An Archaeological Sensitivity Report requires an investigation of the site's history. The history of Macquarie Point has been documented in a number of previous investigations,<sup>8</sup> and those reports should be referred to for a complete historical context. Within regard to the proposed roadworks location, the following are of key relevance:

- The establishment of the historic roadway; and
- The nineteenth century railway turntable and well.

An illustrated chronology of these features is provided below.

#### 3.2 Chronology

- **1814-15** Edward Lord purchased 14 acres of land at Macquarie Point and constructed a large sandstone and brick house within a garden setting.
- 1821 Acquisition of Macquarie Point by the Crown.
- 1826-27 Establishment of the government Lumber Yard at Macquarie Point to the southeast of Lord's House. The Lumber Yard (also variously known as the Kings, Queens or Engineers Yard), was the government's principal works depot in the colony, where a range of industrial processes were carried out. The Lumber Yard consisted of an open square flanked by buildings. A slip was constructed for landing timbers from the Derwent. The orientation of Lord's House and the Lumber Yard determined the future alignment of the roadway along its north eastern side (Figure 6).<sup>9</sup>

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 <sup>&</sup>lt;sup>8</sup> See: Austral Tasmania Pty Ltd, Macquarie Point Development Project Historical Summary, prepared for the Department of Economic Development, Tourism and the Arts, 15 January 2013; Austral Tasmania Pty Ltd, Archaeological Sensitivity Report for Macquarie Point Works, report prepared for the Macquarie Point Development Corporation, AT0174, 8 October 2014
 <sup>9</sup> Austral Tasmania, 15 January 2013, pp.4, 16-17

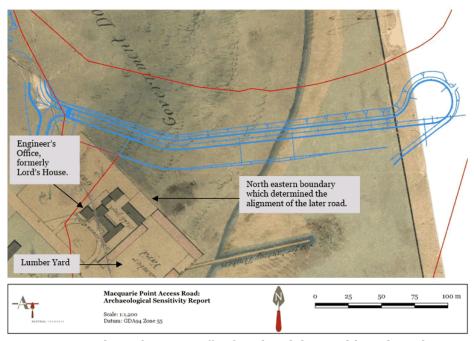


Figure 6: 1829 map showing the Engineers Office (formerly Lord's house) and the Lumber Yard (TAHO, AF394/1/169, Map - Hobart 9 - Chart of Sullivans Cove and part of Hobart Town showing the intended improvements, surveyor John Lee Archer. Reproduced with permission).

**c.1839-1854** Dolerite quarrying was carried out progressively at Macquarie Point, commencing in c.1839 and used in part to provide material for reclamation works within Sullivans Cove. These quarries were behind, and to the north of the Engineers Headquarters. At some stage, the cutting at the base of the quarry was formed into a roadway which provided access to the waterfront. It was recalled during the early twentieth century that armed sailing ships used be landed on beach at Macquarie Point for repairs. The crews would then walk along the 'laneway' behind the yard to reach the city.<sup>10</sup>

The date at which this road alignment was established has not been established with certainty. At the latest, it was in place by 1854 when the Royal Engineers constructed a large stone jetty on the waterfront, with the roadway providing access to the jetty. A photograph from 1857 clearly shows the road alignment, and the extent of cutting behind the Engineers Headquarters and Yard (Figure 7). It is this road alignment which has relevance to the current project.<sup>11</sup>

<sup>10</sup> The Mercury, Monday 2 January 1911, p.2 <sup>11</sup> Austral Tasmania, 15 January 2013, p.5

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Figure 7: 1857 photograph looking south east from the Domain over Macquarie Point, with the rear of the Engineers Headquarters on the right. Note the extent of quarrying and the roadway, extending in depth below the rear yard of the Engineers Headquarters (TAHO, W.L. Crowther Library, SD\_ILS552856, Abbott album - collected and catalogued by Alfred Abbott, No.8 Hobart from the Domain (Panorama). Reproduced with permission)

1858

Establishment of the Hobart Slaughter Yards at Macquarie Point. The complex was located to the south east of the Engineers Yard, and included slaughter houses, stock and sale yards and landing jetties. A substantial amount of land was reclaimed to create space for the facility. The Slaughter Yards were served by their own jetty on the Derwent for the landing of livestock. The existing roadway behind the Engineers Headquarters was used to provide access to the Slaughter Yards and jetty (Figure 8).<sup>12</sup>

The full extent of the road alignment was shown with accuracy in the 1872 plan of the Engineers Headquarters (Figure 9).

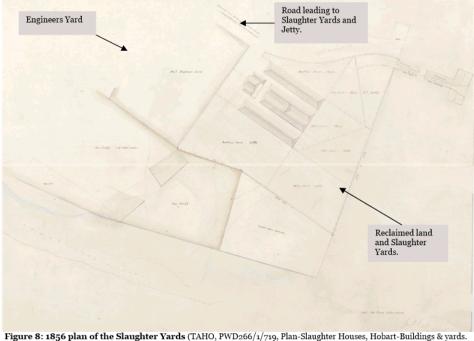


Figure 8: 1856 plan of the Slaughter Yards (TAHO, PWD266/1/719, Plan-Slaughter Houses, Hobart-Buildings & yards. Architect, W.P. Kay, 1856. Reproduced with permission).

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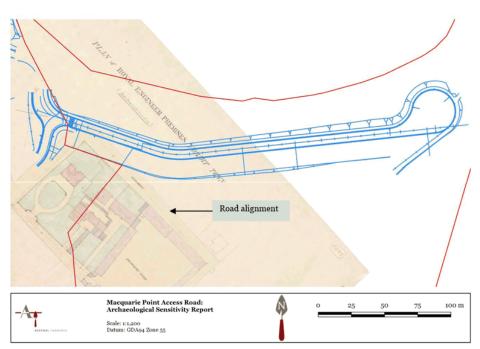


Figure 9: 1872 plan showing the Engineers Headquarters and associated buildings, with the road alignment indicated (TAHO, PWD266/1/714, Plan-Royal Engineers Premises, Hobart. Architect, Royal Engineers, 1872, reproduced with permission).

1872-76

Construction of the Tasmanian Main Line Railway. The railway circled around the base of the Domain, with further cutting into the escarpment at Macquarie Point. These works extended the quarry face further to the north. The depth of cutting was greater at the western end of Macquarie Point, but comparatively shallow at the eastern end, above the Derwent. In both cases however, excavation was carried out to a sufficient depth to carry rail lines. The current rock face that defines the northern boundary of Macquarie Point relates to these phases of works.<sup>13</sup>

At this stage, the station, railyards and most associated infrastructure were located to the west, and outside of Macquarie Point.

One feature, however, that may have proximity to the study area was the railway turntable, used for rotating trains and constructed in 1875. It featured a circular well, within which was the turntable machinery, imported from Great Britain. The surrounding well was constructed from ashlar masonry and concrete. The floor of the well was not described, but presumably required a firm and flat surface for the rotating machinery. It had been completed by June 1875.<sup>44</sup> Contemporary descriptions do not identify the location of this 1875 turntable, and its location is somewhat uncertain. A turntable is shown as being located within Macquarie Point in late nineteenth century plans and photographs, however it is unclear if this was a new turntable constructed in 1890, or alternatively, the original 1875 turntable that was modified in 1890.

¹3 Ibid

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<sup>&</sup>lt;sup>4</sup> The Mercury, Wednesday 30 June 1875, p.2; The Mercury, Wednesday 30 June 1875, p.2; Launceston Examiner, Saturday 21 October 1876, p.3

1890 The Mercury published references to £1,000 being provided for the foundations of a railway turntable.<sup>15</sup> It is unclear if this refers to modifications to the 1875 turntable, or a new structure, located within Macquarie Point.

1891 A detailed and spatially accurate plan was prepared of Macquarie Point. It shows a railway turntable, located to the north east of the Engineers Yard and with a diameter of some 14 metres (Figure 10). The overlay suggests that the turntable is located less than 1 m to the south of the roadworks area. The plan also shows the realignment of the roadway behind the Engineers Headquarters, which had been shifted to the south to accommodate the rail lines to the north. The turntable can partially be made out in a photograph of the period (Figure 11).

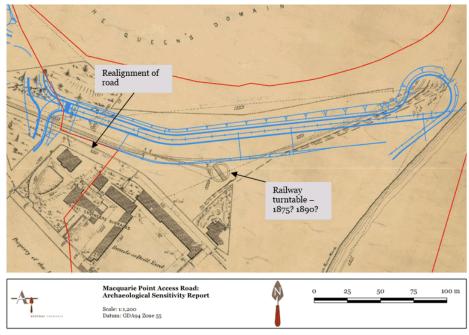


Figure 10: 1891 plan with the turntable and road alignment indicated. Note the realignment of the road behind the Engineers Headquarters (NAA, P1330, 654, 7812383, Tasmanian Government Railways, Hobart Railway Station - plan of propose extension).

<sup>15</sup> The Mercury, Saturday 25 October 1890, p.4

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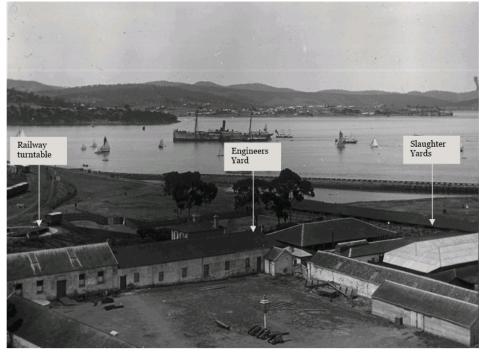


Figure 11: c.1901 photograph showing the former Engineers Yard (centre) and Slaughter Yards (right), with the railway turntable indicated (TMAG,Q2001.15.56.57, the Old Drill Yards).

New and expanded railyards were established at Macquarie Point. A new turntable and round house were constructed as part of these works, on the location of the Engineers Yard.<sup>16</sup> The old turntable well was retained, but may have fallen out of use (Figure 12).

16 Austral Tasmania, 15 January 2013, p.5

1914-15

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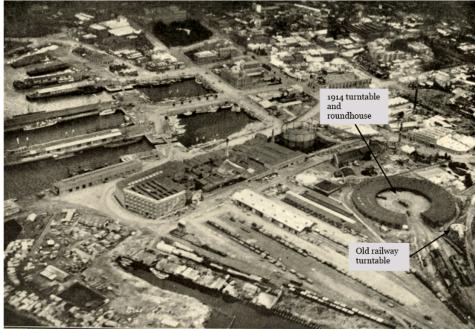


Figure 12: 1924 oblique aerial photograph with key relevant features indicated (TAHO, Illustrated Tasmanian Mail, February 14 1924, p.37. Reproduced with permission)

1940s Construction of new facilities at the base of the escarpment. A number of large and small buildings were erected during this period, including a large wheat shed (later used as workshops), coal gang quarters and signal workshops. Meanwhile, a small square-shaped building had been constructed on the northern side of the nineteenth century turntable well (Figure 13).<sup>17</sup> These buildings remained extant until the late twentieth century, but were subsequently removed.

1980s Although redundant for some 70 years, the southern wall of the nineteenth century turntable well survived as a surface feature until at least the mid-1980s, and can be made out in aerial photographs of that period. The small square building on the northern side of the well had been removed by this time, although its footings remained in place (Figure 14).

The 1914 roundhouse was demolished during the 1980s and the area cleared. Presumably the surface vestiges of the nineteenth century turntable well were also removed at this time (Figure 15).

<sup>17</sup> TAHO, P1330/1/2062, Plan 7812391 (653) Transport Department, Tasmania, Railway Branch - Hobart Station - proposed new station and station yard layout - [Ink and pencil drawing]

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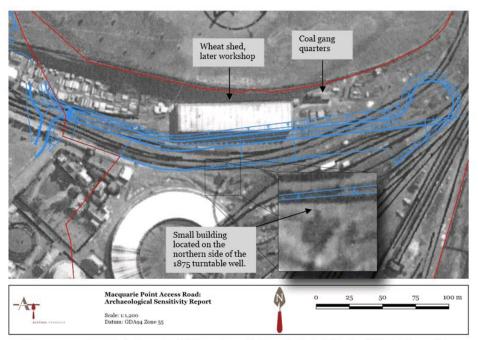


Figure 13: 1946 aerial photograph with key relevant features indicated (TasMap, © State of Tasmania).

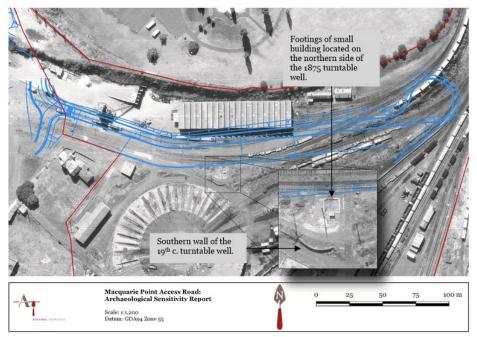


Figure 14: 1984 aerial photograph with key relevant features indicated (TasMap, © State of Tasmania).

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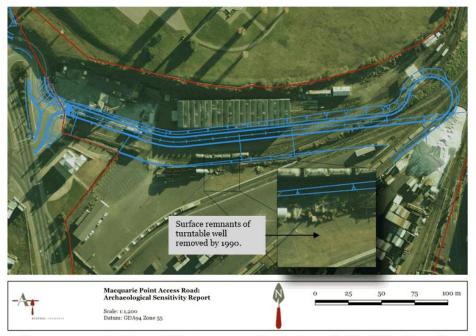


Figure 15: 1990 aerial photograph following removal of the roundhouse (TasMap, © State of Tasmania).

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# 4.0 ARCHAEOLOGICAL MANAGEMENT

#### 4.1 Archaeological Potential and Significance of the two Features

Generally, the roadworks area has nil to low archaeological potential as a result of the substantial earthworks carried out as part of the construction of the railyards which the ground level cut down to bedrock.

There are however two discrete areas of nineteenth century development which coincide with, or are very close to the roadworks area - an historic roadway alignment; and the nineteenth century railway turntable well.

As discussed above, the archaeological potential of a section of the roadway formation was previously confirmed to exist during the 2015 excavations. It currently remains unknown if evidence of this feature survives in proximity to the proposed access road. However, historic photographs which show the roadway behind the Engineers Headquarters suggests that current levels remain similar to those in the nineteenth century in this location, and if anything, has been subject to later filling in this area. The area is therefore assessed as having archaeological potential to contain evidence of the historic road alignment.

No previous investigations have occurred at the site of the nineteenth century railway well. However, ground subsidence in this area may suggest that subsurface evidence of the feature continues to exist.

The significance of these two features is assessed as follows:

- The roadway formation has historical significance at a local level as part of the nineteenth century government development of Macquarie Point for a range of industrial uses, and assists in understanding how the complex functioned and connected with surrounding places including the Derwent River.
- The nineteenth century railway turntable well has historical importance at a local level. It is
  likely to be the oldest item of railway infrastructure to exist at Macquarie Point and is
  associated with the development of the Main Line Railway, one of the most significant
  nineteenth century infrastructure projects in Tasmania.

Buildings were also constructed beneath the escarpment from the mid-late twentieth century. It is likely that subsurface evidence of these buildings continues to exist and may be encountered during the road construction works. However, such fabric is not considered to have archaeological significance. It is unlikely to have any relevance to research questions related to rail uses at the site, nor provide information that could not be readily established through documentary and other sources.

#### 4.2 Design Review of Proposed Works

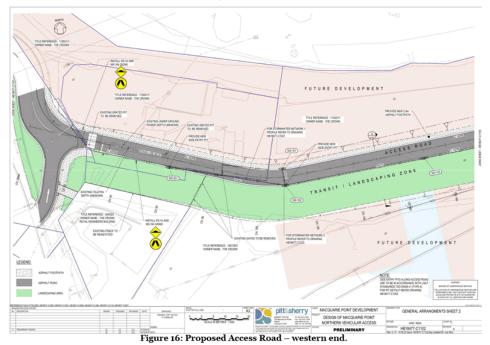
A Design Review is a means of quantifying the extent of possible impacts to areas of archaeological potential. The description of works should be read in conjunction with the following figures. The project area is located below the escarpment separating Macquarie Point from the Cenotaph to the north. The road will cross three properties: a section of the Tasman Highway reserve (no PID, CT 20452/1), 2 Tasman Highway (PID 5666661) and 10 Evans St (PID 3335682). The works area is approximately 320 m long with a two lane road (approximately 7.6 m wide) terminating at a *cul de sac* at the eastern end of the site. The road will fall from west to east. Allowing for construction depths, bulk excavations in the order of 1 m will occur at the western end of the site at chainage 20, increasing to some 3.443 m at chainage 251.984 in the east.

The two areas of archaeological potential occur within an area designated a transit/landscaping zone. This area is approximately 16.4 m wide, and falls gently to the north and the road alignment which will be at the base of the cutting.

The historic road alignment corresponds with +/- chainage 80. Excavations in this area vary from 1 m on the southern side of the transit/landscaping zone, falling to 1.47 m near the proposed road. An area of approximately 70 m<sup>2</sup> of the predicted location of the historic road alignment corresponds with the transit/landscape zone. The 2015 excavations located the historic road feature between 1.2-1.4 m below the existing ground surface. There is some potential for excavations for the transit/landscaping zone to encounter the historic road.

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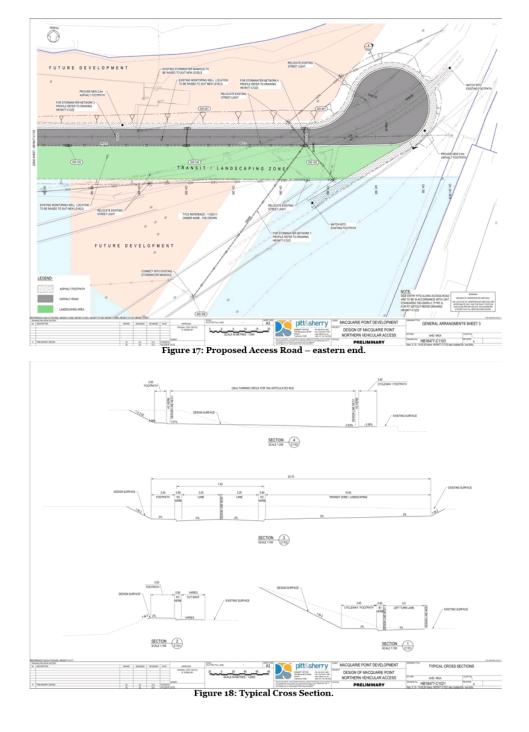
The nineteenth century railway turntable well corresponds with +/- chainage 140. Excavations in this area vary from 1.004 on the southern side of the transit/landscaping zone, falling to 2.326 m near the road alignment. There is potential coincidence between the northern edge of the nineteenth century railway turntable well and the transit/landscape zone, noting that historic mapping suggests that this feature is outside of the roadworks area, but by a distance of less than 1 m.



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Item No. 9.1

# Supporting Information Council Meeting - 25/5/2020



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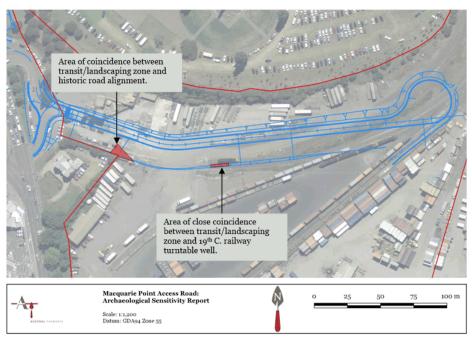


Figure 19: Areas of coincidence between the transit/landscaping zone and areas of archaeological potential.

#### 4.3 Archaeological Strategy for Managing the Two Features

A number of planning documents have previously been prepared for the MPDC which helps guide the management of these two features. Of key relevance is the Heritage Management Plan (HMP).<sup>18</sup> With regard to the historic road alignment, the HMP recommended archaeological monitoring to be undertaken where works are proposed to occur within its nominated boundaries.<sup>19</sup>

The road alignment is likely to share similar characteristics along its length, such as width, construction materials and methods. The full archaeological excavation and recording of the feature is unlikely to be warranted, as it would not provide substantially greater information than what could be obtained through an archaeological sampling exercise. On this basis, where it is located during the access road construction works, recording of the feature is considered a sufficient response to managing the entire road alignment.

The HMP included policies for the management of the two turntable wells which exist on the site. It advocated retention of the features for their interpretive potential, and where that was not possible, archaeological excavation and recording prior to removal.<sup>20</sup> In the present case, the proposed roadworks are located less than 1 m from the mapped location of the nineteenth century railway turntable well. Given the inherent inaccuracies in historic maps and plans, caution is considered warranted during excavation works in this location. Archaeological monitoring is recommended in this area, and if the well is located, progression to salvage excavation and recording of the affected portion of the turntable well.

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<sup>&</sup>lt;sup>10</sup> Austral Tasmania Pty Ltd, Macquarie Point Heritage Management Plan, Final report prepared for the Macquarie Point Development Corporation, AT0193, 28 November 2016 <sup>19</sup> Ibid, p.29 <sup>20</sup> Ibid, p.35

## 4.4 Management Recommendations

## 4.4.1 Statutory compliance

This Archaeological Sensitivity Report should form part of the Development Application to Hobart City Council.

## 4.4.2 Managing potential Aboriginal heritage

The Unanticipated Discovery Plan for managing Aboriginal heritage (Appendix 1) should form part of the project specifications.

## 4.4.3 Managing vibration risks

Vibration risks from construction works to historic structures at the Engineers Headquarters should be considered and managed as part of the project.

## 4.4.4 Limitations and constraints

The following constitute circumstances or conditions that are likely to be beyond the control of the Archaeological Consultant and may affect the acquittal of excavations:

- Bad weather causing extended delays to the program through lost working days that cannot be addressed by re-scheduling or re-deployment of the excavation team members on other project related tasks;
- Contamination (including asbestos and/or hazardous compounds which have infiltrated the archaeological deposits) is encountered which poses a threat to the excavation team or public safety and cannot be economically or safely managed as part of normal archaeological processes;
- 3. Live underground services precluding access to the target sites (or parts thereof);
- 4. Unmanageable volumes of groundwater are encountered;
- 5. The discovery of Aboriginal cultural material and its management, including any permit requirements.

## 4.4.5 Managing Risks from Contamination

The client's environmental consultant should advise on contamination risks associated with the proposed archaeological works and control measures to be put in place during works.

## 4.4.6 WH&S issues and management

The Archaeological Consultant will prepare a Safe Work Method Statement (SWMS) for the archaeological component of the works, inclusive of control measures identified by the environmental consultant. All archaeological and subcontractor staff must attend an induction based on the SWMS and sign a declaration that they have received an induction and read the SWMS.

Excavations may exceed a safe working depth of 1.5 m. Where this occurs, then a protocol for benching will be implemented.

Due care should be taken by the Archaeological Consultant during all works on the discovery of potential contaminants at the site. Notification protocols should be in place to seek the advice of the Client's environmental consultant should contaminated material be identified or suspected during excavation works. The management of contaminated material may be a constraint on archaeological works at the site.

## 4.4.7 Site Establishment

The contractor is to mark out on the ground the two areas recommended for archaeological monitoring prior to commencing works.

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Site preparations should define temporary spoil stockpile areas, cutting of hard surfaces (as required), establishment of facilities, including access to toilet, hand washing, site office and temporary storage facilities. Service location checks will also be carried out during this period.

## 4.4.8 Fencing

The Client is responsible for the fencing and security of the entire works area and will ensure that it surrounds work and storage areas comprehensively. At a minimum, the fence will be a movable panel chain wire design inset to heavy, movable bases, a minimum of 1.8 m in height. The Archaeological Consultant will be responsible for internal barrier fencing for site safety around open trenches.

## 4.4.9 Spoil Management

Spoil will be managed by temporary stockpiling on site. Spoil stockpiles will be monitored to ensure runoff and wind-borne dust hazards are appropriately contained. The removal of stockpiles from site will be in accordance with the contractor's Traffic Management Plan.

## 4.4.10 Site Handover

The excavation director will advise the Client in writing of the conclusion of archaeological investigations. Following such notice, the excavated areas will be made available for construction works.

## 4.5 Archaeological Methods

## 4.5.1 Archaeological Monitoring

Excavation will be archaeologically controlled and monitored in the two areas shown on Figure 20.

Following the marking and cutting (as required) of the monitoring areas, the surface will be carefully removed by machine under archaeological supervision. Excavation will commence using a small machine (5-7 tonnes) equipped with a range of flat-edged or 'mud buckets' (generally 400-1200 mm wide) to remove the majority of consolidated deposits.

Mechanical excavation will be undertaken via a series of shallow scrapes so that the exposed surface in the trench is progressively reduced in a controlled manner.

Where space is constrained or excavation is required around *in situ* features a smaller flat-edged trimming bucket (300 - 450 mm) will be used. Small hand tools such as picks, shovels, pointing trowels, brushes and pans will be used in manual excavation for cleaning up excavated areas or revealing exposed features or deposits. The archaeologist will endeavour to expose and identify all significant historic features and deposits.

The maximum depth of archaeological excavations may exceed 1.5 m. WH&S requirements dictate that pits or trenches deeper than 1.5 m require either shoring or opening out and benching. Benching is recommended as the appropriate response.

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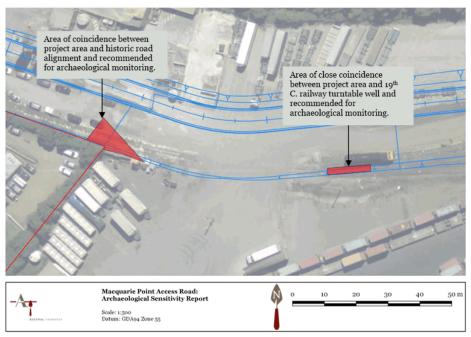


Figure 20: Proposed monitoring areas (TasMap, © State of Tasmania).

## 4.5.2 Progression from monitoring to controlled excavation

The Client will be advised if the archaeological monitoring confirms the existence of significant archaeological material and the need for controlled salvage excavation. Sufficient lead time should be provided for both monitoring and possible salvage excavation so as to avoid critical path complications with the construction program.

## 4.5.3 Recording methods

Basic, best practice, principles of stratigraphic excavation and recording will be adopted. Recording and documentation of archaeological contexts will conform to standard archaeological methods. The archaeological works will be recorded by way of measured drawings, surveys, photographs and written descriptions.

All significant elements will be photographed with a scale bar. Digital media will be used for photographic recording.

In addition to the compilation of thorough field notes, provenance data and descriptions will be recorded on numbered context recording sheets. The Excavation Director or the supervising archaeologist will keep a field journal and a visual diary, creating a written and photographic record of the daily progression of the excavation.

## 4.5.4 Artefact collection and post-excavation analysis

All artefacts recovered from significant or potentially significant *in situ* artefact bearing contexts are to be retrieved and retained for post-processing. Artefacts from imported fill deposits, disturbed contexts (including surface collections), and/or which are non-diagnostic will not be retained unless they are rare, and/or have a high interpretive value or are otherwise of significance. Artefacts will be recorded with all standard information required to identify them. Following analysis and reporting, the artefact assemblage will be handed over to the Client.

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## 4.5.5 Preparation of post-excavation report

An illustrated fully referenced report will be produced on completion of the monitoring and artefact analysis tasks.

## 4.5.6 Public Benefit Recommendation

Where newly found information of public interest is obtained (for example, locating the nineteenth century railway turntable well), the Client should communicate this information to the community according to their communications strategies.

## 4.5.7 Managing Unanticipated Discoveries and Notification Protocol

Construction works occurring outside of the monitoring areas can proceed without additional archaeological oversight.

However, the Project Specifications should include notification protocols whereby archaeological advice is sought if features or deposits of an archaeological nature are uncovered during excavation <u>or</u> where doubt exists concerning the provenance of any strata revealed during excavations. This may include but not be limited to the exposure of any structural material made from bricks, stone, concrete or timber and forming walls or surfaces, or the presence of more than five fragments of artefacts such as ceramic, shell, glass or metal from within an area of no more than  $1 \text{ m}^2$ .

In such instances, excavation should immediately cease pending attendance on site and receipt of advice from the Archaeological Consultant, at which point, depending on the findings, it may also be necessary to involve Hobart City Council in discussions.

*The exception to this protocol* is where works encounter evidence of the previous mid-late twentieth century railway buildings previously located beneath the escarpment (see Figures 13-15). No further action is recommended for such features.

## 4.6 Archaeological Research Questions

Research objectives are typically framed as a series of questions, from basic information about the site, to more complex and meaningful questions that can provide historical or archaeological information related to broader areas of inquiry. Such an approach is recommended by the Tasmanian Heritage Council's *Guidelines for Historical Archaeological Research Projects on Registered Places* which advocates a tiered structure of inquiry.<sup>21</sup>

The two features in question have limited capacity to provide new and important information regarding historic uses at the site that cannot be readily established through documentary means. Of the two, the railway turntable well is considered the more notable, in part for its historical associations and interpretive potential.

The following research questions have been defined in an attempt to supplement documentary information with archaeological evidence for each feature:

## The Historic Road Alignment

- 1. Does evidence of the historic road alignment continue to exist at northern end of the Macquarie Point site?
- 2. Does it share the same characteristics as the section of road excavated in 2015?

## The nineteenth century Railway Turntable Well

- 1. Does evidence of the nineteenth century turntable well continue to exist?
- 2. Does the fabric of the well indicate a new turntable constructed in 1890 article, or alternatively modifications to the 1875 well?
- 3. How does its construction details compare with the 1914 railway turntable well?

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<sup>&</sup>lt;sup>21</sup> Tasmanian Heritage Council, *Guidelines for Historical Archaeological Research Projects on Registered Places*, 2009

## **5.0 REFERENCES**

## 5.1 Secondary Materials

## 5.1.1 Published & Unpublished Sources

- Aboriginal Heritage Desktop Review, Proposed Roadworks Macquarie Point, AHDR2274, 30 April 2019
- Archaeological Management & Consulting Group Pty Ltd, Archaeological Test Excavation Report Vol. 2 - New Royal Hobart Hospital, Hobart, Tasmania, Vols. 1-2, November 2008
- Austral Tasmania Pty Ltd, *Macquarie Point Heritage Management Plan*, Final report prepared for the Macquarie Point Development Corporation, AT0193, 28 November 2016
- Austral Tasmania Pty Ltd, *Macquarie Point Seawall & Archaeological Refuse Deposit Investigation*, final report prepared for Macquarie Point Development Corporation, AT0197, 23 May 2016
- Austral Tasmania Pty Ltd, *Macquarie Point Aboriginal Archaeological Test Excavations*, report prepared for the Macquarie Point Development Corporation, AT0174, 18 August 2015
- Austral Tasmania Pty Ltd, *Macquarie Point Historical Archaeological Test Excavations*, final report prepared for Macquarie Point Development Corporation, AT0174, 29 July 2015
- Austral Tasmania Pty Ltd, Archaeological Sensitivity Report for Macquarie Point Works, report prepared for the Macquarie Point Development Corporation, AT0174, 8 October 2014
- Austral Tasmania Pty Ltd, *Macquarie Point Development Project Historical Summary*, prepared for the Department of Economic Development, Tourism and the Arts, 15 January 2013
- Sullivans Cove Planning Scheme 1997
- Tasmanian Heritage Council, Guidelines for Historical Archaeological Research Projects on Registered Places, 2009

## 5.1.2 Newspapers

Launceston Examiner, Saturday 21 October 1876, p.3

- The Mercury, Wednesday 30 June 1875, p.2
- *The Mercury*, Wednesday 30 June 1875, p.2
- The Mercury, Saturday 25 October 1890, p.4
- The Mercury, Monday 2 January 1911, p.2

## 5.2 Primary Materials

## 5.2.1 Historic Plans, Images etc

- NAA, P1330, 654, 7812383, Tasmanian Government Railways, Hobart Railway Station plan of proposed extension
- TAHO, AF394/1/169, Map Hobart 9 Chart of Sullivans Cove and part of Hobart Town showing the intended improvements, surveyor John Lee Archer
- TAHO, P1330/1/2062, Plan 7812391 (653) Transport Department, Tasmania, Railway Branch -Hobart Station - proposed new station and station yard layout - [Ink and pencil drawing]
- $TAHO, PWD 266/1/719, Plan-Slaughter \,Houses, Hobart-Buildings \,\&\, yards. \,Architect, W.P. \,Kay, 1856$
- TAHO, PWD266/1/714, Plan-Royal Engineers Premises, Hobart. Architect, Royal Engineers, 1872
- TAHO, Illustrated Tasmanian Mail, February 14 1924, p.37
- TAHO, W.L. Crowther Library, SD\_ILS552856, Abbott album collected and catalogued by Alfred Abbott, No.8 Hobart from the Domain (Panorama)

TMAG,Q2001.15.56.57, the Old Drill Yards

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488



# APPENDIX 1: ABORIGINAL HERITAGE UNANTICIPATED DISCOVERY PLAN

# Unanticipated Discovery Plan

Procedure for the management of unanticipated discoveries of Aboriginal relics in Tasmania

For the management of unanticipated discoveries of Aboriginal relics in accordance with the Aboriginal Heritage Act 1975 and the Coroners Act 1995. The Unanticipated Discovery Plan is in two sections.

## Discovery of Aboriginal Relics other than Skeletal Material

### Step I:

Any person who believes they have uncovered Aboriginal relics should notify all employees or contractors working in the immediate area that all earth disturbance works must cease immediately.

## Step 2:

A temporary 'no-go' or buffer zone of at least 10m x 10m should be implemented to protect the suspected Aboriginal relics, where practicable. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected Aboriginal relics have been assessed by a consulting archaeologist, Aboriginal Heritage Officer or Aboriginal Heritage Tasmania staff member:

## Step 3:

Contact Aboriginal Heritage Tasmania on 1300 487 045 as soon as possible and inform them of the discovery. Documentation of the find should be emailed to

aboriginal@heritage.tas.gov.au as soon as possible. Aboriginal Heritage Tasmania will then provide further advice in accordance with the Aboriginal Heritage Act 1975.

## **Discovery of Skeletal Material**

## Step I:

Call the Police immediately. Under no circumstances should the suspected skeletal material be touched or disturbed. The area should be managed as a crime scene. It is a criminal offence to interfere with a crime scene.

## Step 2:

Any person who believes they have uncovered skeletal material should notify all employees or contractors working in the immediate area that all earth disturbance works cease immediately.

## Step 3:

A temporary 'no-go' or buffer zone of at least 50m × 50m should be implemented to protect the suspected skeletal material, where practicable. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected skeletal remains have been assessed by the Police and/or Coroner:

## Step 4:

If it is suspected that the skeletal material is Aboriginal, Aboriginal Heritage Tasmania should be notified.

## Step 5:

Should the skeletal material be determined to be Aboriginal, the Coroner will contact the Aboriginal organisation approved by the Attorney-General, as per the *Coroners Act 1995*.



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

Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488

## Guide to Aboriginal site types

### **Stone Artefact Scatters**

A stone artefact is any stone or rock fractured or modified by Aboriginal people to produce cutting, scraping or grinding implements. Stone artefacts are indicative of past Aboriginal living spaces, trade and movement throughout Tasmania. Aboriginal people used hornfels, chalcedony, spongelite, quartzite, chert and silcrete depending on stone quality and availability. Stone artefacts are typically recorded as being 'isolated' (single stone artefact) or as an 'artefact scatter' (multiple stone artefacts).

## Shell Middens

Middens are distinct concentrations of discarded shell that have accumulated as a result of past Aboriginal camping and food processing activities. These sites are usually found near waterways and coastal areas, and range in size from large mounds to small scatters. Tasmanian Aboriginal middens commonly contain fragments of mature edible shellfish such as abalone, oyster; mussel, warrener and limpet, however they can also contain stone tools, animal bone and charcoal.

## Rockshelters

An occupied rockshelter is a cave or overhang that contains evidence of past Aboriginal use and occupation, such as stone tools, middens and hearths, and in some cases, rock markings. Rockshelters are usually found in geological formations that are naturally prone to weathering, such as limestone, dolerite and sandstone

## Quarries

An Aboriginal quarry is a place where stone or ochre has been extracted from a natural source by Aboriginal people. Quarries can be recognised by evidence of human manipulation such as battering of an outcrop, stone fracturing debris or ochre pits left behind from processing the raw material. Stone and ochre quarries can vary in terms of size, quality and the frequency of use.

## **Rock Marking**

Rock marking is the term used in Tasmania to define markings on rocks which are the result of Aboriginal practices. Rock markings come in two forms; engraving and painting. Engravings are made by removing the surface of a rock through pecking, abrading or grinding, whilst paintings are made by adding pigment or ochre to the surface of a rock.

## Burials

Aboriginal burial sites are highly sensitive and may be found in a variety of places, including sand dunes, shell middens and rock shelters. Despite few records of pre-contact practices, cremation appears to have been more common than burial. Family members carried bones or ashes of recently deceased relatives. The Aboriginal community has fought long campaigns for the return of the remains of ancestral Aboriginal people.

Further information on Aboriginal Heritage is available from:



Macquarie Point Access Road: Archaeological Sensitivity Report Austral Tasmania Pty Ltd ABN: 11 133 203 488





Enquiries to: City Planning Phone: (03) 6238 2715 Email: coh@hobartcity.com.au

16 April 2020

Greg Cooper (Macquarie Point Development Corporation) GPO Box 251 HOBART TAS 7001 mailto: greg@macquariepoint.com

Dear Sir/Madam

## 10 EVANS STREET, HOBART - WORKS IN COUNCIL STORMWATER NOTICE OF LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-20-23

Site Address:

10 Evans Street, Hobart

## **Description of Proposal:**

Proposed new road seeks a DN900 to outfall adjacent to the Hobart Rivulet outfall.

## Applicant Name:

Greg Cooper Macquarie Point Development Corporation

## PLN (if applicable):

PLN-19-746

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.

Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au **f** CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully

91. bead

(N D Heath) GENERAL MANAGER

Relevant documents/plans:

Pitt & Sherry - Macquarie Point Northern Vehicular Access Stormwater Management Plan

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au **f** CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council



Macquarie Point **Development Corporation** 

GPO Box 251 Hobart Tasmania 7001 macquariepoint.com

ABN 92 657 409 841

Mr Ben Ikin Hobart City Council 50 Macquarie street Hobart TAS 7000

Dear Ben,

I refer to the letter from Cameron Sherriff dated 24 December 2019 requesting further information in relation to PLN-19-746. The request sought clarification regarding stormwater.

Following conversation with TasPorts and the advice received from Cameron in the letter, regarding the initial proposed design for stormwater which was submitted as part of the original Development Application (DA), Macquarie Point Development Corporation (Corporation) have re-designed the stormwater plan and have now redirected this to the Derwent via our land and Hobart City Council's land. The Corporation have consulted with Council's stormwater section about the proposed redesign and initial conversations have indicated that this would be an acceptable solution pending review of any final design. Please find attached with this letter the revised plan, stormwater management plan and relevant land title documents.

The Corporation have also consulted with TasWater about the proposed alignment and design and they have indicated that this would be an acceptable solution.

The Corporation notes that this design will impact on some of the existing trees and shrubs in Hobart City Council land title section 163943/1.

Landowner Consent from the General Manager, Hobart City Council was previously obtained for this project, however due to the new stormwater alignment, this letter requests General Manager's consent to proceed based on the revision.

I trust Council now has sufficient information to determine this application, however please contact Catherine Galloway (Project Manager Capital Works) on 0415 783 586 as necessary for further information or clarification.

Sincerely,

Glopen

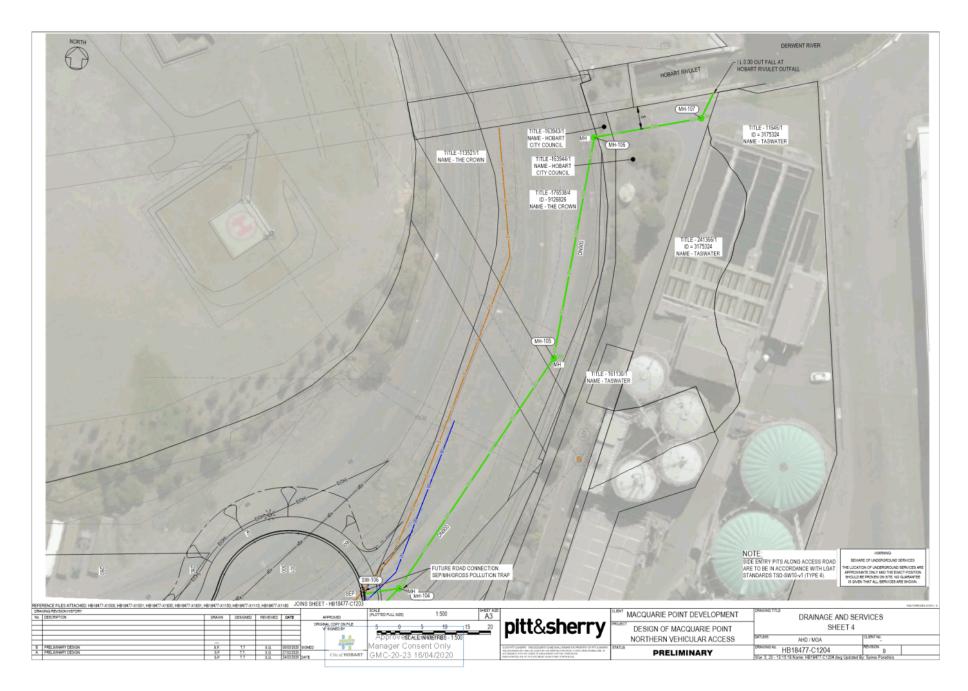
Greg Cooper **Chief Operations Officer** 

5 March 2020



Approved - General Manager Consent Only City of HOBART GMC-20-23 16/04/2020

## Item No. 9.1



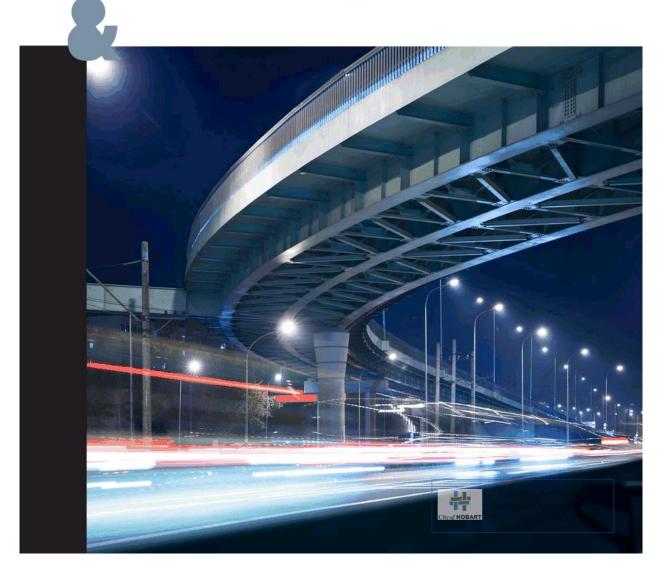
# pitt&sherry

Macquarie Point Northern Vehicular Access Stormwater Management Plan Prepared for Macquarie Point

Client representative Catherine Galloway

Date 06 March 2020

Rev 04



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## Appendices

Prepared by — Hamish Peacock	Hennelund	Date — 06 March 2020
Reviewed by — Stephen Gillick	- 5m fan	Date — 06 March 2020
Authorised by — Rob Casimaty	Robert Casimaty	Date — 06 March 2020

## **Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
00	Stormwater Management Plan	H Peacock	J Coates	S Gillick	27/02/2020
01	Stormwater Management Plan Updated	H Peacock	S Gillick	S Gillick	27/02/2020
02	Stormwater Management Plan Updated 2	H Peacock	S Gillick	S Gillick	27/02/2020
03	Stormwater Management Plan Updated 3	H Peacock	S Gillick	S Gillick	05/03/2020
04	Stormwater Management Plan Updated 4	H Peacock	S Gillick	R Casimaty	06/03/2020

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



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ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj

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# **Executive Summary**

A vehicular access road is proposed within the greater Macquarie Point development area. This road falls within the area in which Hobart City Council requires a stormwater management plan to address the stormwater requirements for the Macquarie Point development. The stormwater management plan addresses the conveyance and treatment of stormwater through the access road, with consideration of, the Macquarie Point Infrastructure Development Strategy report for the entire Macquarie Point site.

This stormwater drainage design for the vehicular access road will consider the fully developed site and its stormwater management strategies by providing a design that allows for flexibility in the connecting stormwater systems.

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



Approved - General City@/HOBART GMC-20-23996/04/2020

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### 1. Introduction

Macquarie Point Development Corporation have established a masterplan for development in the Macquarie Point area between the Cenotaph and the Evans Street (See Figure 1). pitt&sherry has prepared an infrastructure development strategy which considers a holistic view of stormwater management across the extent of the masterplan area. Part of this plan includes an access road from the Tasman Highway into the existing industrial area. The road will include a parallel transit zone and pathway



Figure 1: Approximate Development Area (Yellow), Approximate Access Road Alignment (green)

The development falls within the Hobart City Council area and is subject to the stormwater management code from the Planning Scheme. This stormwater management plan aims to demonstrate the proposed access road meets general requirements with respect to:

The quantity and quality of stormwater; and •

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



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Rationalisation of stormwater infrastructure across the masterplan site

### Stormwater Assessment and Legislative Requirements 2.

The stormwater management plan was developed using information from the following sources

- Survey provided by the client, including existing surface levels, pipe and pit inverts etc.; and
- Bureau of Meteorology 2016 Intensity-Frequency-Duration (IFD) data<sup>1</sup>

The following guidelines and standards were used considered in design of the stormwater network:

- Australian Rainfall and Runoff 2019 (ARR19)<sup>2</sup>
- State Stormwater Strategy<sup>3</sup>
- Urban Drainage Act4; and
- LGAT Standard Drawing set<sup>5</sup>.

The following general design criteria is adopted according to the LGAT standards:

- Maximum gutter flow widths of 0.45m adjacent to pedestrian crossings
- Maximum gutter flow widths of 1m in other areas
- 1830mm lintel side entry pits adopted; and
- Minimum pipe size 300mm.

The following methodology was adopted:

- Determine an appropriate discharge location (considering both the existing adjacent stormwater network and the developed masterplan network)
- Determine proposed sub-catchment areas (including overland and upstream catchments)
- Determine the 5% Annual Exceedance Probability (AEP) design flow (as per Planning Scheme requirements) using a DRAINS® IL-CL model which was compared to a Rational Method calculation
- Assess the 1% AEP major drainage system overland flow paths
- Design a detailed road drainage network; and
- Prepare detailed drawings of the proposed stormwater network.

### 3. Existing Site Stormwater Characteristics

The existing stormwater conveyance path across the proposed access alignment is not clear. Stormwater infrastructure including grated pits and pipes exist near the alignment, but the network appears to deviate from the designated flow path in several locations. The existing surface grade is typically flat and generally grading to the south. Stormwater from

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



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 <sup>&</sup>lt;sup>1</sup> Australian Government Bureau of Meteorology (BOM), 2017, <u>http://www.bom.gov.au/water/designRainfalls/revised-ifd/</u>
 <sup>2</sup> Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2016, *Australian Rainfall and Runoff: A Guide* ballster M, Nahlah R, Weeks W, Weihlmahn E, Retailck M, Testolin I, Editors), 2016, Adstraiah Rainah and Rahon. A Guide to Flood Estimation, Commonwealth of Australia
 https://epa.tas.gov.au/epa/water/stormwater/state-stormwater-strategy
 https://www.legislation.tas.gov.au/webdata/resources/files/LGAT%20Standard%20Drawings%20Release%20Version%20Dec%202013.pdf
 www.watercom.com.au/

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the surface is most likely intercepted by the pits and pipes, and discharges though pipes on adjacent land.

# 4. Stormwater Quantity

The proposed road drainage network has been designed to discharge to a newly aligned 900mm (end of Line) stormwater main discharging at 0.0m AHD at the outlet to the Hobart Rivulet (Figure 2). A nominal 5m offset from the Hobart Rivulet Tunnel has been assumed prior to the proposed punching through the wingwall of the outlet. The existing stormwater infrastructure in the proposed road alignment will be removed or become redundant.

The Macquarie Point infrastructure development strategy intends to discharge a majority of the development site and access road stormwater via this new main. The remainder of the stormwater will be directed to the existing connections on Evans Street.

To drain the maximum area possible the stormwater main trunk drainage is generally at a minimum grade (0.5% longitudinal grade).

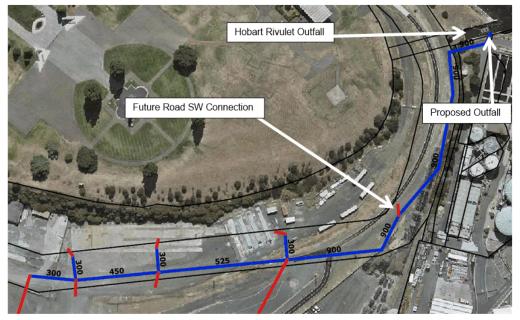


Figure 2: Proposed stormwater mains (blue), ultimate private connections (red)

The proposed access road drainage system is designed to convey the 5% AEP for the fully developed site and catchment. The catchment plan for the road drainage network and other catchments is shown in Figure 3. The adjacent lot catchments have been considered in the design and are assumed to connect into the road network at side entry pits and manhole locations. The total assumed catchment discharging to the new main is approximately 9 hectares. While the road network covers an extent of approximately 0.9ha (100% impervious).

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



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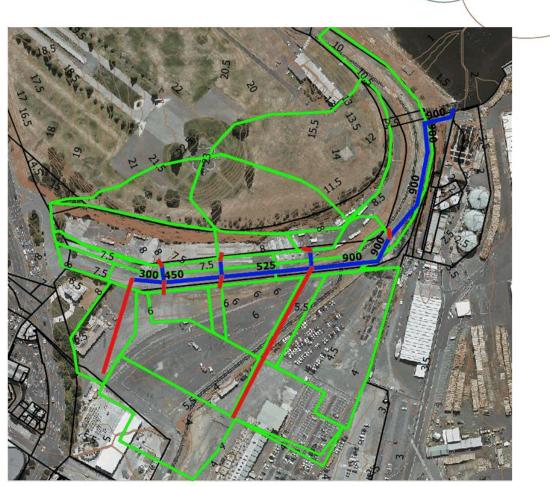


Figure 3: Catchment Plan (catchments in green), 0.5m contour spacing (orange)

The following assumptions were used in the hydraulic model:

- Pipe Manning's n value = 0.013
- Pit loss coefficients were adopted from Australian Rainfall and Runoff 2019 Book 9 and Melbourne Water guidelines<sup>7</sup>
- Pit inlet capacity curves adopted from LGAT standard drawings (TSD-RF03-v1)
- Minimum impervious area concentration times of 5 minutes
- Road drainage network will accept flow from adjacent development area
- · Adjacent lots generally 90% impervious surface assumed; and
- Downstream tidal tailwater levels were assumed to be at 2m AHD (1.17m above 2020 HAT) and consider also the impact of flood water coming from the Hobart Rivulet tunnel.

7 https://www.melbournewater.com.au/planning-and-building/developer-guides-and-resources/standards-and-specifications/losscoefficient

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



Approved - General Manager Consent Only GMC-20-23996/04/2020

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## 4.1 Stormwater conveyance

The hydraulic grade line and peak discharge of 1.3m<sup>3</sup>/s for the 5% AEP event are displayed in the design drawings. To achieve the stipulated 5% AEP drainage requirement a pipe size of 900mm is required by the end of the stormwater line. The minimum pipe grade adopted is 0.5%. All LGAT stormwater inlet pits have capacity for the 5% AEP event and the flow widths are within the LGAT requirements.

Excess stormwater from the road area (overland flow outside the pipe network) in the 1% AEP event will be conveyed within the road formation before ponding around the stormwater pit at the eastern end of the proposed road. The ponding will remain below hazard depth and within the road reserve prior to discharging upon relief of the pipe system.

## 4.2 Stormwater Detention

Stormwater detention is not necessary as a new main is proposed to be constructed all the way to the outfall with the capacity to convey the 5% AEP design event for its entire catchment.

## 5. Stormwater Quality

The proposed access road will provide the trunk stormwater main to convey water from numerous future property connections. As such, any below ground stormwater treatment options for the road would be providing treatment for not only flow emanating from the road surface but from the adjacent property connections.

It is proposed that the water quality treatment occurs along the trunk main alignment just downstream (east) of the access road turning space, with the aim to treat stormwater from the entire catchment. The treatment device pipe invert will be located above the Astronomical Tidal Zone to avoid depositing sediment from tidal actions. The benefit of a single treatment location is that maintenance is simplified to a single location. Meaning it is much more likely to be maintained and provide a more positive environmental outcome for the receiving Derwent River.

An appropriate treatment device to meet the pollutant reduction targets is:

- A Gross-pollutant trap (ROCLA CDS 1512 or Spel EcoCeptor 8000 Series or similar) capable of treating flows up to 250l/s prior to bypass; and
- An appropriate secondary filtration treatment device for adequate nutrient removal. This could be incorporated into the space excavated for the gross-pollutant trap. The details should be determined at the detailed design stage.

# 6. Conclusions

- A stormwater management plan has been developed for the proposed northern vehicular access point at Macquarie Point. The stormwater network has been designed such that it will have capacity to convey the 5% AEP (20 year-ARI) peak discharge for the access road and property connections. An adverse tailwater condition at the outlet has been assumed based on sea-level rise to 2m AHD and with consideration to the flows exiting the Hobart Rivulet Tunnel
- The 1% AEP (100year-ARI) stormwater flows along the access road have been considered and are safely conveyed in the roadway
- Stormwater detention is unnecessary as a new stormwater main discharging to the River Derwent is proposed; and
- Water quality requirements can be met through a whole of site treatment system including a large gross pollutant trap and accompanying secondary filtration device.

ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



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# pitt&sherry

Macquarie Point Northern Vehicular Access Stormwater Management Plan

## Contact

Stephen Gillick 03 6210 1420 sgillick@pittsh.com.au



Phone 1300 748 874 info@pittsh.com.au pittsh.com.au

## Located nationally -

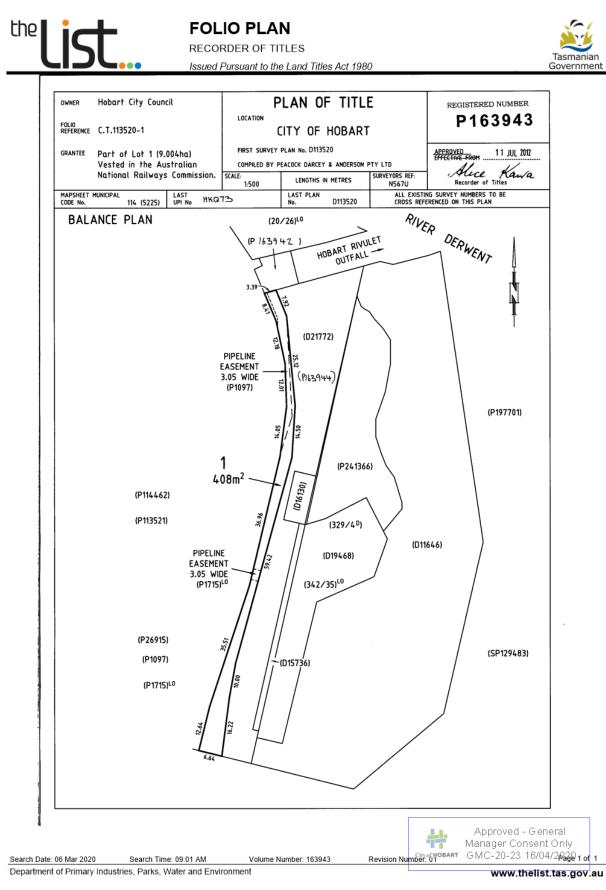
Melbourne Sydney Brisbane Hobart Launceston Newcastle Devonport . Wagga Wagga



ref: HB18477H005 Stormwater Management Rep 31P Rev 04/HP/mj



Approved - General Manager Consent Only City of HOBART GMC-20-23 16/04/2020







## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



## SEARCH OF TORRENS TITLE

VOLUME	FOLIO
163943	1
EDITION	DATE OF ISSUE
1	25-Jul-2012

SEARCH DATE : 06-Mar-2020 SEARCH TIME : 09.01 AM

## DESCRIPTION OF LAND

City of HOBART Lot 1 on Plan 163943 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113520/1

## SCHEDULE 1

B880013 TRANSFER to HOBART CITY COUNCIL Registered 24-Jan-1996 at noon

## SCHEDULE 2

Reservations and conditions in the Crown Grant if any

## UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

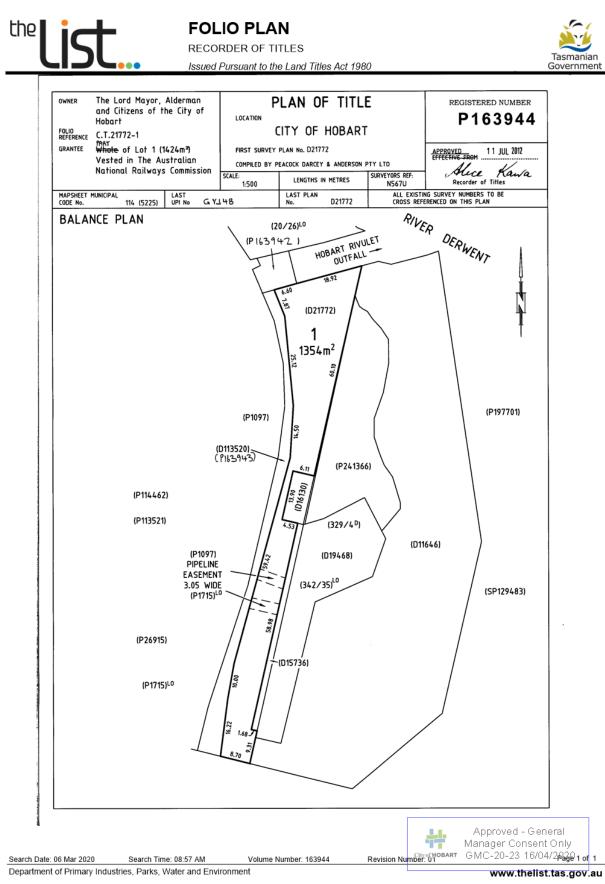


Approved - General Manager Consent Only City (HOBART GMC-20-23 16/04/2020 1 of 1

Department of Primary Industries, Parks, Water and Environment

www.thelist.tas.gov.au









## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



## SEARCH OF TORRENS TITLE

VOLUME	FOLIO
163944	1
EDITION	DATE OF ISSUE
2	01-Jul-2015

SEARCH DATE : 06-Mar-2020 SEARCH TIME : 08.56 AM

## DESCRIPTION OF LAND

City of HOBART Lot 1 on Plan 163944 Derivation : Whole of Lots 1 and 2 (1424m2 and 3.2m2 respectively) Vested in The Australian National Railways Commission Prior CT 21772/1

## SCHEDULE 1

A958989 TRANSFER to HOBART CITY COUNCIL

## SCHEDULE 2

Reservations and conditions in the Crown Grant if any

## UNREGISTERED DEALINGS AND NOTATIONS

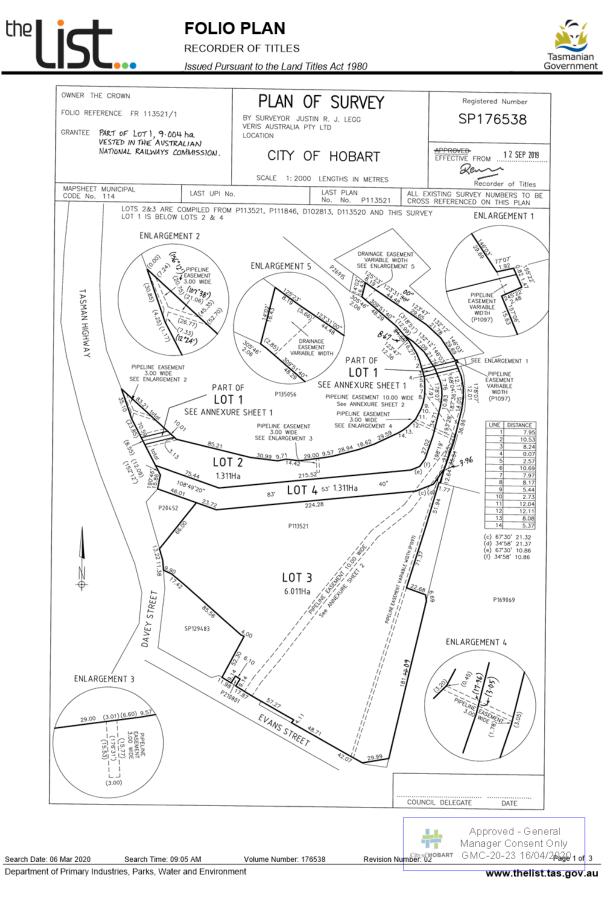
No unregistered dealings or other notations

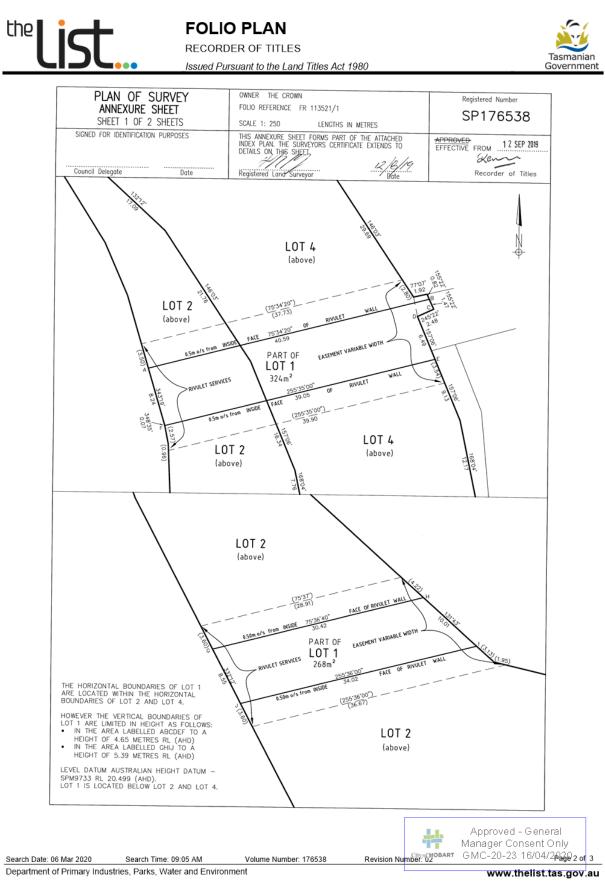


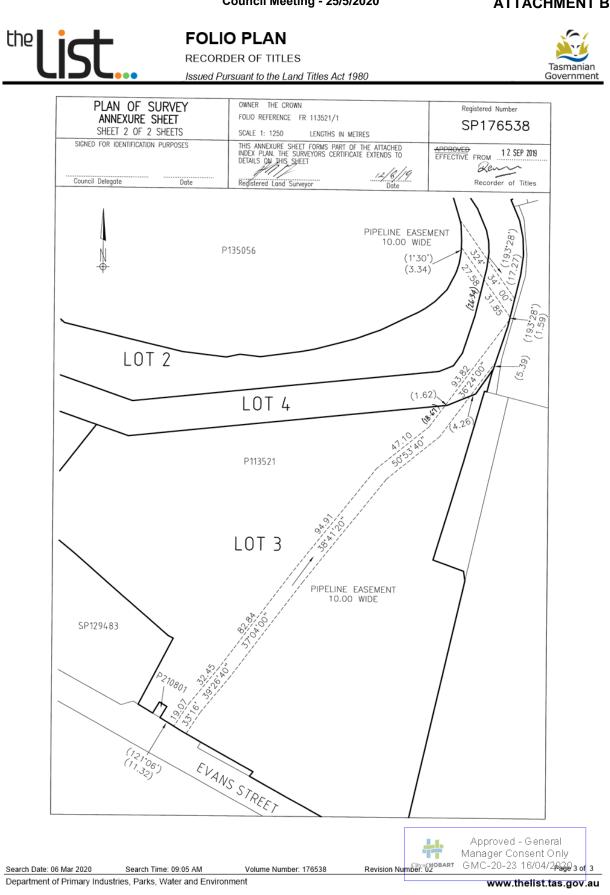
Approved - General Manager Consent Only City of HOBART GMC-20-23 16/04/2020 1 of 1

Department of Primary Industries, Parks, Water and Environment

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## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176538	4
EDITION	DATE OF ISSUE
1	12-Sep-2019

SEARCH DATE : 06-Mar-2020 SEARCH TIME : 09.03 AM

## DESCRIPTION OF LAND

City of HOBART Lot 4 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

## SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

## SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

## UNREGISTERED DEALINGS AND NOTATIONS

E109578 MACQUARIE POINT DEVELOPMENT CORPORATION Lodged by CROWN SOLICITOR on 21-Feb-2020 BP: E109577



Approved - General Manager Consent Only City of HOBART GMC-20-23 16/04/2 Page 1 of 1

Department of Primary Industries, Parks, Water and Environment

www.thelist.tas.gov.au



Macquarie Point **Development Corporation** 

GPO Box 251 Hobart Tasmania 7001 macquariepoint.com

ABN 92 657 409 841

Mr Ben Ikin Hobart City Council 50 Macquarie street Hobart TAS 7000

Dear Ben,

I refer to a phone conversation between Jennifer Flanagan from the Stormwater Division within Hobart City Council and Catherine Galloway from Macquarie Point Development Corporation on 1 April 2020 requesting further information in relation to PLN-19-746. The request sought a minor clarification regarding stormwater in regards to the depth of the pipe at the Rivulet outlet, and this is addressed in the attached plans which are current as at 3 April 2020. Please refer specifically to drawing numbers: HB18477-C1201; C1202; C1203; C1204; C1222; and C1223 in regards to this matter.

I trust Council now has sufficient information to determine this application, however please contact Catherine Galloway (Project Manager Capital Works) on 0415 783 586 as necessary for further information or clarification.

Sincerely,

Greg Cooper **Chief Operations Officer** 

3 April 2020



Approved - General Manager Consent Only Cityor HOBART GMC-20-23 16/04/2020

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# MACQUARIE POINT DEVELOPMENT DESIGN OF MACQUARIE POINT NORTHERN VEHICULAR ACCESS

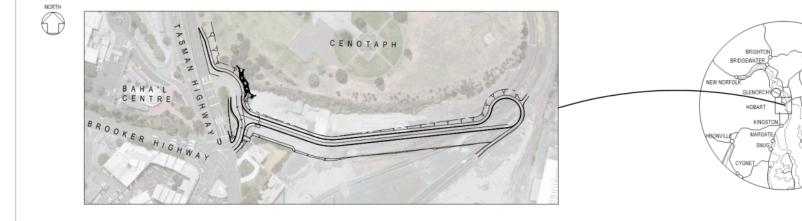


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HB18477-C1002	F	PROJECT LEGEND AND GENERAL NOTES						
HB1B477-C1003	В	PROJECT LEGEND AND GENERAL NOTES						
HB18477-C1011	F	GENERAL ARRANGEMENT - KEY PLAN						
HB18477-C1015	E	ALIGNMENT AND SURVEY CONTROL						
HB18477-C1016	F	TYPICAL TRENCH DETAILS						
HB18477-C1017	D	TYPICAL TRENCH DETAILS						
HB18477-C1021	F	TYPICAL CROSS SECTIONS						
HB18477-C1101	F	GENERAL ARRANGMENTS SHEET 1						
HB18477-C1102	E	GENERAL ARRANGMENTS SHEET 2						

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NUMBER	REV	DESCRIPTION						
HB18477-C1103	E	GENERAL ARRANGMENTS SHEET 3						
HB18477-C1104	С	GENERAL ARRANGMENTS SHEET 4						
HB18477-C1201	I	DRAINAGE AND SERVICES SHEET 1						
HB18477-C1202	- I	DRAINAGE AND SERVICES SHEET 2						
HB18477-C1203	I	DRAINAGE AND SERVICES SHEET 3						
HB18477-C1204	F	DRAINAGE AND SERVICES SHEET 4						
HB18477-C1205	В	DRAINAGE AND SERVICES SHEET 5						
HB18477-C1211	В	DRAINAGE AND SERVICES STAIR'S LIGHTING DETAIL						
HB18477-C1212	в	DRAINAGE AND SERVICES STAIR'S LIGHTING DETAIL						

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NUMBER	REV	DESCRIPTION						
HB18477-C1213	в	DRAINAGE AND SERVICES ACCESS ROAD LIGHTING DETAIL						
HB18477-C1221	н	DRAINAGE PROFILE - NETWORK 1 SHEET 1						
HB18477-C1222	н	DRAINAGE PROFILE - NETWORK 2,3 AND 4 SHEET 2						
HB18477-C1233	в	DRAINAGE AND SERVICES LONGITUDINAL SECTIONS						
HB18477-C1235	С	DRAINAGE AND SERVICES LONGITUDINAL SECTIONS						
HB18477-C1236	С	DRAINAGE AND SERVICES LONGITUDINAL SECTIONS						
HB18477-C1237	С	DRAINAGE AND SERVICES LONGITUDINAL SECTIONS						

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NUMBER	REV	DESCRIPTION					
HB18477-C1301	E	SIGNS AND LINEMARKING					
HB18477-C1302	D	TRAFFIC SIGNALS SHEET 1					
HB18477-C1401	С	GENERAL ARRANGEMENT TEMPORARY FOOTPATH					
HB18477-C1411	С	TEMPORARY WORKS CYCLEWAY LIGHTING LAYOUT					
HB18477-C1701	E	MC00 - ROAD LONGITUDINAL SECTIONS					
HB18477-C1801	E	MC00 - CROSS SECTIONS SHEET 1					
HB18477-C1802	E	MC00 - CROSS SECTIONS SHEET 2					
HB18477-C1803	E	MC00 - CROSS SECTIONS SHEET 3					

AUDERDALE

R	FERENCE FILES ATTACHED: HB18477-X1115; HB18477-X1110												FLS FORM DRG AGREN-8
	RAMING REVISION HISTORY						(PLOTTED FULL SIZE)	1:2500	SHEET 525		CLIENT MACQUARIE POINT DEVELOPMENT	CRAINING TITLE	
		DRA/IN	DESIGNED	REVIEWED	DATE	APPROVED	(PLDTED FOLL SALE)	1.2500	A3		MAGQUARIE POINT DEVELOPMENT	COVER SHEET	
- E	155JE FOR TENDER	5.P.	T.T.	R.C.	03/04/2020	ORIGINAL COPY ON FILE				pitt&sherry	IRO.ECT		
	1 PRELMINARY DESIGN	5.P.	T.T.	R.C.	25/03 2020	"e" SIGNED BY	25 0	25 50	75 100		DESIGN OF MACQUARIE POINT		
	PRELIMINARY DESIGN	5.P.	T.T.	5.G.	19/03/2020								
- E	PRELMINARY DESIGN	5.P.	T.T.	5.G.	18/03/2020		Apployage	AT 0-10-10-00-00-00-00-00-00-00-00-00-00-00			NORTHERN VEHICULAR ACCESS	DATUMS: AHD / MGA CLENT No.	
- F	PRELININARY DESIGN	5.P.	T.T.	5.G.	12/03/2020	No. of Concession, Name		ALE IN METHED - 12000					
- F	155UE FOR TENDER	S.P.	T.T.	5.G.	0312/2019 5	IGNED	Manager Co	onsent Only		IS 301% PTT & SHOREY. THE SCIENTIST IS HER SHILL REAMINTHE PROPERTY OF PTT & SHOREY.		DRAMING No. HB18477-C1000	
	C DETAILED DESIGN	5.P.	T.T.	5.G.	25/11/2019	City of HOBART	LOMO DO DO	48/04/2020		THE OCCUMPENT HAR ONLY BE VIED FOR THE PERFORD FOR AREAS T HAR COMPETITIONED AND IN ACCOMPANY ATTACHED TOWARD OF CHECKLERING FOR THE COMPERATION.			
- E		1.8.	1.8.	5.G.	04122018 0	ATE CITY OF HOBART	GIVIC-20-23	3 16/04/2020		UNUTRATION OF THE COLOREST NUMBER OF THE POST OF THE P	T OIL TENDER	Apr. 3, 20 - 12:25:02 Name: HB18477-C1000.dwg Updated By: Spiros Paradisis	

## Page 104 ATTACHMENT B

E DRAIN (STORMWATER)	0"" ₩ u= 4" ○ <sup>TAP</sup>	(PWFB)         FIRE HYDRANT           (PWHY)         HYDRANT           (NM-)         MAIN           (WZ-)         MAIN - DIGITISED (GIS)           (PWMR)         METER           (PWSV)         STOP VALVE           (PWTP)         TAP           (UP)         UNIDENTIFIED PIPELINE	EROSION CONTROL PLAN FC UNTL THIS PLAN HAS BEEN A OUTSIDE THE LIMIT OF WORKS UNE SI BEFORE ANY WORKS COMMENT 4. ALL WORKS TO BE UNDERTA DEPARTIMENT OF STATE GRA NO CLEARING OF VEGETATIC ANY AREA NOT DIRECTLY RE NOTED ON THE DRAWINGS O AS IN A HAZAROUS CONDIT 6. ALL STRIPPED TOPSOL IS TO REHABILITATION WORKS AND SUFACE REINSTATEMENT & ALL DISTURED AND BARE OS SHALL BE REHABILITATED AS REPLACE TOPSOL WITH THA (5) THICK, RE-SEED ALL DIST BY THE SUPERITIENDENT. 8. 14/7mm TWO COAT SEAL TO I STATE GROWNT STANDARD	VKEN IN ACCORDANCE WITH THE FOLLOWING OWTH SPECIFICATIONS: DNI OR REMOVAL OF TOPSOLI IS PERMITTED IN ELITED TO THE CONSTRUCTION WORKS OR AS JTHER THAN REMOVAL OF TREES IDENTIFIED TON. DE STORED IN AN APPROVED MANNER FOR D VECETATION RESEEDING. & EROSION CONTROL. & EROSION CONTROL.	MSCL AND MSEL PIPE, AS 1479.     PIPE KITRIALS, AS 4130     PIPE FITTINGS, AS 4130     PIPE FITTINGS, AS 4133     GATE VALVES, AS 3533     STARLEN, AS 4133     STARLEN, AS 4134     STARLEN, AS
(CD-)         UNBROKEN           E MISC         (PUSR)         UNIDENTIFIED SERVICE           E RAIL         (PUSR)         TOP OF RAIL           E ROAD         (RA)         TOP OF RAIL           E ROAD         (RC)         EBGE OF PAVEMENT           ENCEPTIES ATTACHED HENT/XX500         BACK OF KERB           MSRENDONHSTORY         (RC)         EDGE OF PAVEMENT	D REVENDO DATE APPROV K.C. (354/330) K.C. (354/330)		DEPARTMENT OF STATE GRC PAVEMENT MARKINGS 11. TRAFFIC MANAGEMENT PLAN BE MAINTAINED DURING COM COMMENCEMENT OF WORK. 2. CONCRETE FOOTPATH TO BE STANDARD DRAWINGS TSD-F	E CONSTRUCTED IN ACCORDANCE WITH LGAT R11-V1. NSTRUCTED IN ACCORDANCE WITH LGAT D-R14-V1.	TROLOT LEGEND AND GENERAL HOTEG

### SERVICES NOTES

- 1. ALL SEWER WORKS IN PUBLIC AREAS ARE TO BE IN ACCORDANCE WITH WSA
- 02-2014-31 MRWA EDITION VERSION 2.0 AND TASWATER'S SUPPLEMENT. 2 ALL SEWER WORKS IN PRIVATE AREAS SHALL BE IN ACCORDANCE WITH AS3500.2
- UNLESS NOTED OTHERWISE ALL SEWER DRAINS SHALL BE PVC SEWER CLASS "SN8"
- TO AS1260
- 4 ALL SEWER MANHOLE LIDS TO BE GATIC, TYPE , HEAVY DUTY FOR TRAFFIC AREAS,
- TYPE B LIGHT DUTY FOR NON TRAFFIC AREAS. 5.WHERE NECESSARY ALL EXISTING MANHOLE & PIT TOPS SHALL BE ADJUSTED TO SUIT
- NEW SURFACE LEVELS. PROVIDE AND INSTALL NEW APPROVED LIDS WHERE NECESSARY
- 6.PROVIDE ALL NECESSARY TESTING & INSPECTION OPENINGS TO PIPE WORK. WHERE RELEVANT PROVIDE ADDITIONAL INSPECTION OPENINGS TO ALLOW IDENTIFICATION OF THE ORIGIN OF BLOCKAGES.
- 7. ALL MAINTENANCE STRUCTURES ARE TO BE IN ACCORDANCE WITH MRWA-S-300
- DRAWING SERIES.

- TASGAS NOTES: 1. TASGAS DN90 PE100 CONDUIT TO BE INSTALLED
- REFER TO TASGAS STANDARD DRAWINGS TGN-699-VC-TY-002 AND TGN-699-CV-TY-003

- WATER SUPPLY 1. WORKS IN GENERAL TO BE CARRIED OUT IN ACCORDANCE WITH: WSA 03-2011-3.1, MRWA VERSION 2.0 -TASWATER'S SUPPLEMENT TO WSAA WATER SUPPLY CODE - PIPE SUPPLIER'S INSTALLATION MANUAL & SPECIFICATIONS
- PN DENOTES THE NOMINAL PRESSURE RATING OF THE WATER SERVICE. ALL POLYETHYLENE PIPES TO BE
- PNI5 UNLESS NOTED OTHERWISE ALL DUCTILE IRON PIPELINES TO BE PN35 UNLESS NOTED OTHERWISE. 3. DN DENOTES THE NOMINAL DIAMETER FOR THE WATER SERVICE OR FITTING FOR POLYETHYLENE PIPES. THIS REFERS TO THE OUTSIDE DIAMETER OF THE PIPE. FOR ALL OTHER PIPES IT REFERS TO THE NOMINAL BORE OF THE PIPE
- 4. ON THE DRAWINGS, PIPE JOINTS ARE SPECIFIED AS FOLLOWS
- FL DENOTES FLANGED JOINTS IN ACCORDANCE WITH AS 4087 WITH PN TO MATCH PIPE MATERIAL. REFER MRWA -W-306B
  - CF DENOTES COMPRESSION FITTING FOR ALL METRIC POLYETHYLENE PIPE MANUFACTURED TO AS4130
  - SP-SOC DENOTES SPIGOT SOCKET JOINTS USING RUBBER RINGS
  - SS. DENOTES SPHERICAL SUP JOINTS WITH 6 MM FILLET WELDS IN ACCORDANCE WITH MRWA-W-400 WC DENOTES PLAIN END WELDED COLLAR JOINT IN ACCORDANCE WITH MRWA-W-400
  - BWJ DENOTES BUTT WELDED JOINT FOR POLYETHYLENE PIPES
- EFC DENOTES ELECTRO FUSION COUPLING FOR POLYETHYLENE PIPES FL DENOTES FLANGED JOINTS IN ACCORDANCE WITH ANSI B16.5 PRESSURE CLASS ANSI 150 AIR RELEASE VALVES: ARE TO BE IN ACCORDANCE WITH AS 4956 AND INSTALLED IN ACCORDANCE WITH THE
- DRAWINGS. TB DENOTES THRUST BLOCK IN ACCORDANCE WITH THE DRAWINGS
- UNLESS NOTED OTHERWISE, ALL THRUST BLOCKS SHALL BE SUITABLE FOR 1,500 KPA PRESSURE AND SOIL SAFE BEARING CAPACITY OF 100 KPA, AND CONSTRUCTED IN ACCORDANCE WITH DRGS MRWA-W-204 AND MRWA -W-205A. TIMBER BLOCKS TO COMPLY WITH DRG MRWA-W206
- FOR CHANGES IN HORIZONTAL AND VERTICAL ALIGNMENT GREATER THAN 1 DEGREE FOR SPIGOT SOCKET JOINTS PROVIDE BENDS OR DISTRIBUTE THE CHANGE IN ALIGNMENT OVER SEVERAL PIPE LENGTHS. REFER DRGS MRWA.W.103 AND MRWA.W.212
- 10. THE CONTRACTOR SHALL PROVIDE TRENCH STOPS FOR PIPES LAID AT GRADES BETWEEN 5% AND 20% AS PER THE REQUIREMENTS OF DRGS MRWA-W-208 AND MRWA-W-209. 11. THE CONTRACTOR SHALL PRESSURE TEST ALL PIPEWORK IN ACCORDANCE WITH CLAUSE 19.4 OF WSAA
- WATER SUPPLY CODE OF AUSTRALIA, PART 2 CONSTRUCTION. ALL HYDRANTS TO BE TESTED IN ACCORDANCE WITH TASWATER SUPPLEMENT TO WSA03 MRWA V2.0
- 12. WHERE MINIMUM COVER CANNOT BE ACHIEVED SUCH AS CROSSINGS OF EXISTING ASSETS SEEK DIRECTION FROM TASWATER
- 13. ALL MATERIALS ARE TO COMPLY WITH CITY WEST WATER APPROVED PRODUCTS PUBLICATION.
- 14. DETECTOR TAPE / DETECTOR WIRE IS TO BE INSTALLED OVER ALL NON-METALIC WATER MAINS
- 15. MARKER POSTS TO BE INSTALLED IN ACCORDANCE WITH TASWATER STANDARDS REFER TW-W 311 AND TW-W-312
- HYDRANTS TO BE INSTALLED AT 60 M INTERVALS ON WATER MAIN. HYDRANTS TO BE IN ACCORDANCE WITH WSA03-MRWA V2.0 AND TASWATER SUPPLEMENT DRAWINGS W-311 AND W-312
- 17. FOLLOWING A SATISFACTORY HYDROSTATIC PRESSURE TEST ALL WATER MAINS TO BE DISINFECTED PRIOR TO COMMISSIONING IN ACCORDANCE WITH MRWA WATER QUALITY COMPLIANCE SPECIFICATION No 04-02-2.1. NOTE TASWATER DOES NOT NECESSARILY REQUIRE MAINS TO BE SWABBED HOWEVER THIS MAY BE REQUIRED TO MEET THE WATER QUALITY TESTING. 18. PROPERTY CONNECTIONS
- PROPERTY WATER CONNECTIONS TO BE IN ACCORDANCE WITH TASWATER STANDARD DRAWINGS TWS-W-0002

#### NBN NOTES

- COMMUNICATIONS CONDUITS, ASSOCIATED 'FITTINGS, CAPS, DRAW WIRES, HAUL ROPES, INSTALLATION, TRENCHING, BEDDING AND BACKFILLING ARE TO BE PROVIDED IN ACCORDANCE WITH A\$3500, A\$2053, AS/ACIF \$0009, COUNCIL CIVIL WORK SPECIFICATION AND RELEVANT MANUFACTURERS RECOMMENDATIONS.
- DISTRIBUTION AND LOCAL NETWORK CONDUITS SHALL BE 100mm NOMINAL DIAMETER. THE CONDUIT SHALL BE WHITE WITH A BLACK LONGITUDINAL STRIPE.
- IN ADDITION TO ASIACIF \$008,2006 LABELING REQUIREMENTS, THE CONDUITS SHALL BE STAMPED "NBN Co". PIT LIDS SHALL RE STAMPED "NRN Co"
- A CORRUGATED PLASTIC GASKET SHALL BE INSTALLED UNDER THE CONCRETE LID
- FLANGED ENTRY CONNECTIONS VINEDEX, BIR OR APPROVED EQUIVALENT WITH ROUNDED SURFACE SHALL BE PROVIDED AT ALL CONDUIT TO PIT CONNECTIONS TO AVOID CABLE DAMAGE FLANGED ENTRY SHALL BE PERPENDICULAR TO AND FLUSH WITH PIT WALL. CAPS ARE TO BE PROVIDED TO ALL EXPOSED PIPE ENDS INCLUDING THE PROPERTY LEAD-INS.
- 23mm (NOMINAL INTERNAL DIAMETER) PROPERTY SERVICE CONDUITS SHALL BE PROVIDED FROM SERVICE PIT IN STREET AND TERMINATE WITH A PIT OR CAPPED END \$00mm INSIDE THE PROPERTY BOUNDARY. PROPERTY SERVICE CONDUITS SHALL BE LOCATED WITH MIN 150mm CLEARANCE TO PROPERTY (HOUSE)
- DRAINAGE CONNECTION LINES OR MIN 150mm CLEARANCE TO PROPERTY WATER AND GAS CONNECTIONS AND/OR 6 0M OFFSET FROM PROPERTY BOUNDARY
- PVC CAPS SHALL BE INSTALLED ON ALL CONDUIT ENDS INCLUDING PROPERTY LEAD-INS.
- PITS SHALL BE MEDIUM DENSITY POLYETHYLENE TELECOMMUNICATION PITS WITH MEDIUM DUTY CONCRETE LIDS. PIT SIZES ARE INDICATED ON THE PLAN AND DETAILED IN THE ATTACHED TABLE. BELOW.
- CONDUIT TO CONDUIT AND FLANGED ENTRY CONNECTIONS TO PITS SHALL BE FREE OF SHARP
- EDGES.GLUED AND SEALED TO PREVENT INGRESS OF WATER, GAS OR SILT.
- 12. EACH CONDUIT SHALL BE PROVIDED WITH A 2mm (14SWG) GALVINISED STEEL DRAW WIRE OR 4mm NYLON HAUL ROPE.
- 13. SAFETY WARNING "COMMUNICATION" TAPE 100 mm MINIMUM WIDE SHALL BE PLACED 300mm FROM FINAL
- 14 MIMIMUM RADIAL CLEARANCE BETWEEN COMMUNICATIONS OFTIC FIRRE CONDUITS AND OTHER UNDERGROUND SERVICES SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING TABLE

TELECOMMUNICATION PVC PITS (TYPICAL SIZES)

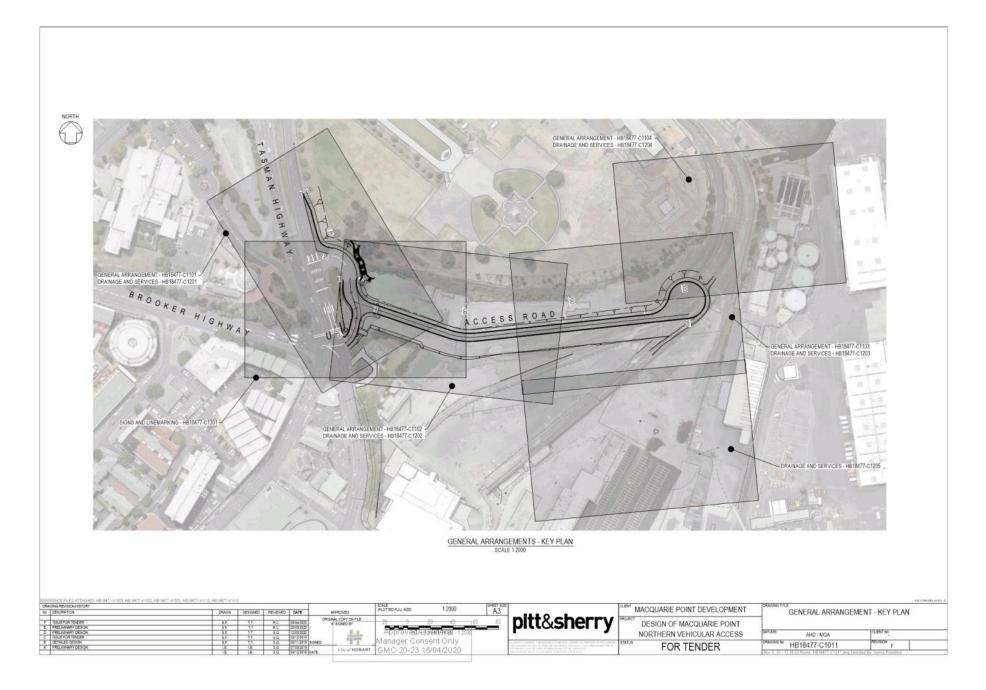
PIT TYPE	LENGTH	WIDTH
2 PIT (SERVICE PLAN ACCESS PIT)	650mm	280mm
5 PIT (LOCAL NETWORK PIT / BOUNDARY PIT)	700mm	450mm
8 PIT (LOCAL NETWORK CONNECTION PIT & DISTRIBUTION PIT	1360mm	555mm
9 PIT (FIBRE DISTRIBUTION PIT)	2000mm	555mm
6 PIT (LOCAL NETWORK PIT & FJL PIT)	1360mm	555mm

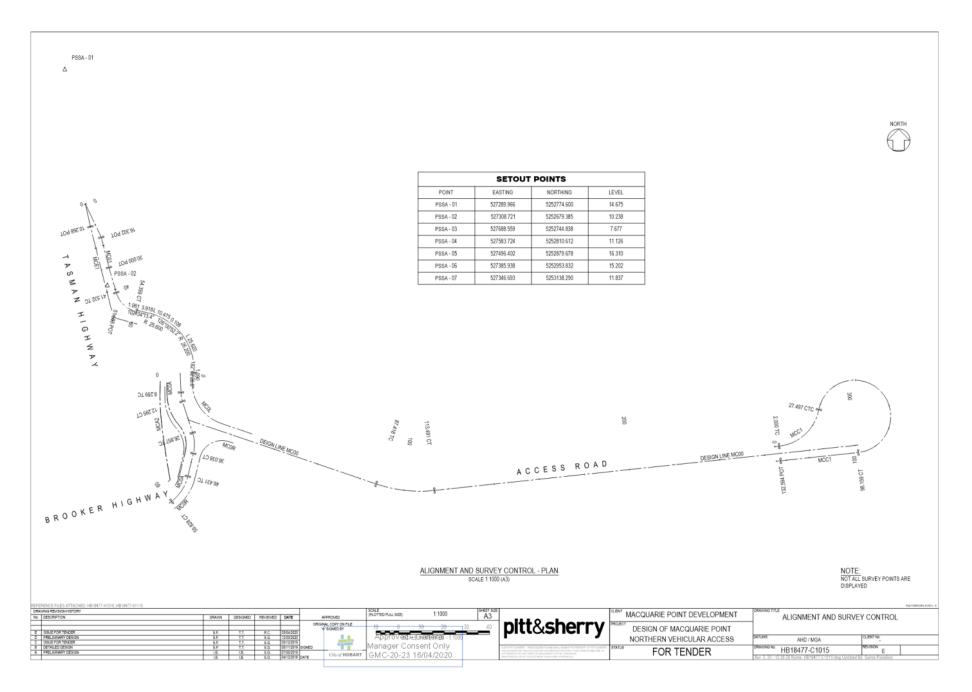
#### PITS AND LIDS SELECTED MUST MEET THE FOLLOWING MINIMUM REQUIREMENTS

- THE PIT CONSTRUCTION MUST ENSURE THAT THE TOP RIM OF THE LID WILL NOT WARP OR BEND WHEN 1) NSTALLED AS PER THE MANUFACTURER'S SPECIFICATIONS.
- THE PIT AND ITS FITTINGS MUST NOT HAVE EXPOSED SHARP EDGES. PIT LIDS MUST WEIGH NO MORE THAN 30KG EACH (WHICH MAY MEAN LARGER PITS HAVE SPLIT-LIDS), WITH
- THE WEIGHT OF THE LID CLEARLY LABELLED ON THE LID PIT LIDS MUST HAVE A PIT LID LIFTING TOOL HOLE AT EACH END OF THE LID (OR AT EACH END OF EACH 4) SPLIT-LID PART) CAPABLE OF BEING USED WITH AN INDUSTRY ACCEPTED LIFTING TOOL
- PIT LD LIFTING HOLES MUST BE DESIGNED TO PREVENT THE INSERTION OF MATERIALS INCLUDING NEEDLE SHARPS (FOR EXAMPLE, FITTING A GASKET) 6)PIT LID TO SURFACE MUST BE DESIGNED TO PREVENT WATER 5) GATHERING/POOLING AND HAVE A SLIP RESISTANCE RATING FOR WET CONDITIONS COMPLIANT WITH AS/NZS 4586 (SLIP RESISTANCE CLASSIFICATION OF MUST BE AVAILABLE AS EVIDENCE.
- PIT LIDS MUST HAVE A LOAD RATING OF AT LEAST CLASS B AS PER AS 3996 (ACCESS COVERS AND GRATES). A CERTIFICATION OF COMPLIANCE FROM AN INDEPENDENT LABORATORY MUST BE AVAILABLE AS EVIDENCE
- 8) THE PIT LIDS SHALL BE LABELLED AS A COMMUNICATION PIT

#### SCALE PLOTTED PULL SIZE: NTS MACQUARIE POINT DEVELOPMENT A3 PROJECT LEGEND AND GENERAL NOTES No. DESCRIPTION APPROVED **bitt&sherry** INAL COPY ON FILE 'SIGNED BY DESIGN OF MACQUARIE POINT Approved - General NORTHERN VEHICULAR ACCESS AHD / MGA Manager Consent Only SSUE FOR TENDER FRELMINARY DESIG HB18477-C1003 FOR TENDER City of HOBART GMC-20-23 16/04/2020

- GENERAL SERVICES NOTES: 1. WATER. SEWER. STORWATER ALL EXCAVATION/TRENCHING. PIPE/PIT/VALVE SUPPLY AND BACKFILL BY CONTRACTOR
- STREET LIGHTING AND LY ELECTRICAL ALL EXCAVATION/TRENCHING, CONDUIT SUPPLY, ELECTRICAL CABLING AND BACKFILL BY CONTRACTOR.
- NBN EXCAVATING/TRENCHING, CONDUIT (PIT AND PIPE) SUPPLY AND BACKFILL ONLY BY CONTRACTOR - NBN Co TO RUN FIBRE.
- 4. TASNETWORKS ELECTRICAL - EXCAVATION/TRENCHING AND BACKFILL ONLY BY CONTRACTOR - TASNETWORKS TO INSTALL CONDUITS/CABLING/PITS TASGAS - EXCAVATION/TRENCHING AND BACKFILL ONLY BY CONTRACTOR TASGAS TO INSTALL PIPE/VALVING





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GAS PIT SETOUT POINTS								
POINT	EASTING	NORTHING						
GM-110	527479.198	5252573.102						
GM-120	527497.340	5252573.778						
GM-130	527547.510	5252579.068						
GM-150	527587.268	5252612.925						
GM-160	527566.705	5252610.756						

ELECTRIC PIT SETOUT POINTS								
POINT	EASTING	NORTHING						
EC-101	527413.429	5252602.793						
EC-110	527485.958	5252576.701						
EC-120	527507.361	5252578.958						
EC-130	527545.143	5252582.930						
EC-140	527575.861	5252607.123						

SEWER MAN HOLE SETOUT POINTS								
POINT	EASTING	NORTHING						
S-101	527440.671	5252593.655						
S-102	527504.826	5252600.449						
S-110	527594.353	5252609.858						
S-111	527595.896	5252595.220						
S-112	527545.326	5252502.973						
S-113	527534.805	5252484.990						
S-114	527540.311	5252481.963						

STORM WATER MAN HOLE POINTS								
POINT	EASTING	NORTHING						
MH-101	527439.500	5252583.502						
MH-102	527586.674	5252598.707						
MH-103	527645.494	5252605.005						
MH-104	527662.602	5252627.454						
MH-105	527691.005	5252680.956						
MH-106	527694.786	5252732.192						
MH-201	527580.378	5252581.148						
MH-201	52/580.378	5252581.148						

EXISTING LIGHT POST SETOUT POINTS CYCLE WAY									
POINT	EASTING	NORTHING							
EP04	527539.364	5252582.632							
EP05	527584.480	5252599.855							
EP05A	527605.884	5252586.586							
EP06	527627.521	5252622.083							
EP07	527656.856	5252655.040							

		SW-104	527586.640
52583.502		SW-105	527639.416
52598.707		SW-106	527654 468
52605.005			
52627 454		SW-201	527453.904
52680 956		SW-301	527502.495
		SW-401	527585.799
52732.192		SW-601	527340.967
52581.148		SW-602	527332 489
	,		
		SW-603	527322.690
		SW-701	527319.423
		SW-801	527337.765
		SW-802	527323.117

POINT

SW-101

SW-102

SW-103

SW-901

STORM WATER SETOUT POINTS

EASTING

527419.478

527454.747

527503.336

527303.392

NORTHING

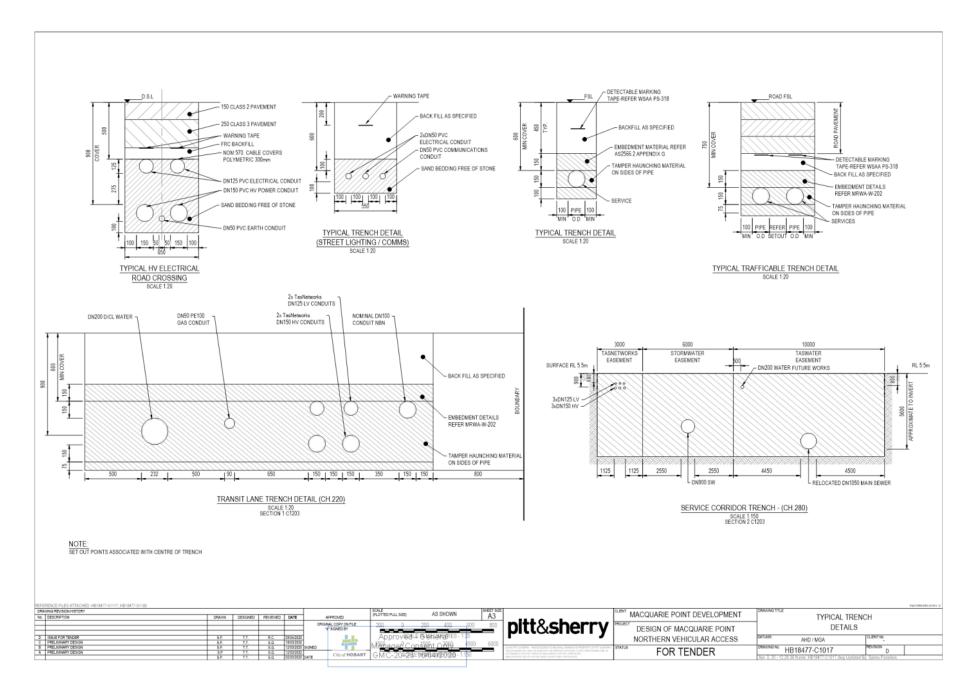
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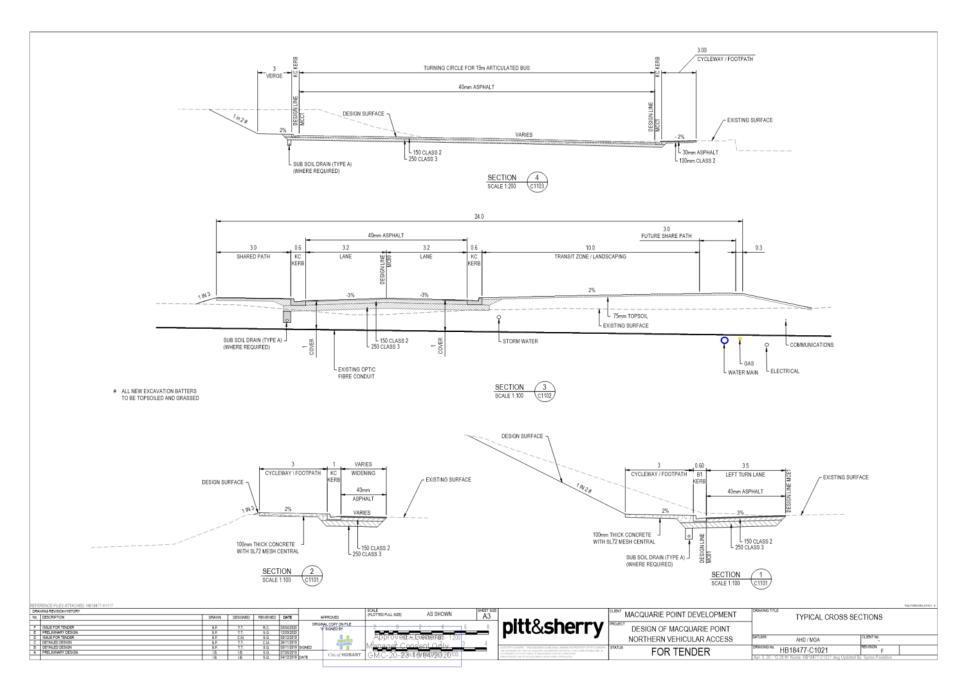
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5252706.534

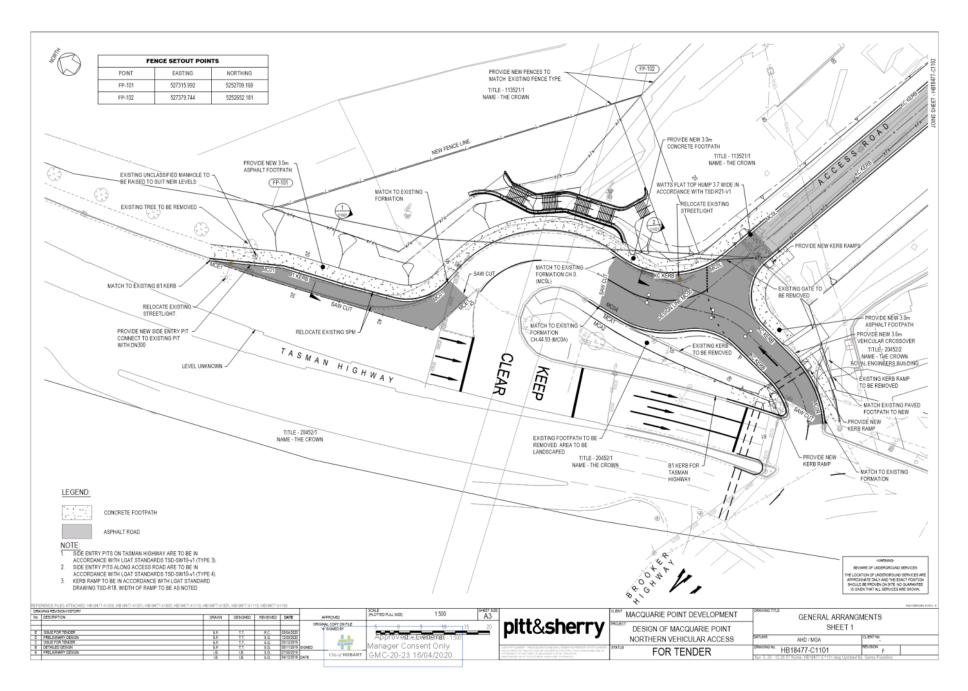
NEW LIGH	T POSTS SETC CYCLE WAY	
POINT	EASTING	NORTHING
LP01	527448.860	5252392.583
LP02	527463.351	5252419.051
LP03	527472.195	5252447.986
LP04	527482.489	5252474.892
LP05	527505.682	5252493.534
LP06	527529.148	5252511.857
LP07	527552.788	5252530.696
LP08	527576.341	5252549.276
LP09	527599.876	5252567.844
LP10	527628.435	5252587.799
LP11	527647.180	5252603.268
LP12	527658.343	5252633.931
LP13	527674.494	5252659.393
LP14	527683.774	5252688.107
LP15	527685.719	5252718.224
LP16	527674.986	5252746.453
LP17	527653.624	5252767.714
LP18	527630.038	5252786.361
LP19	527605.642	5252803.896

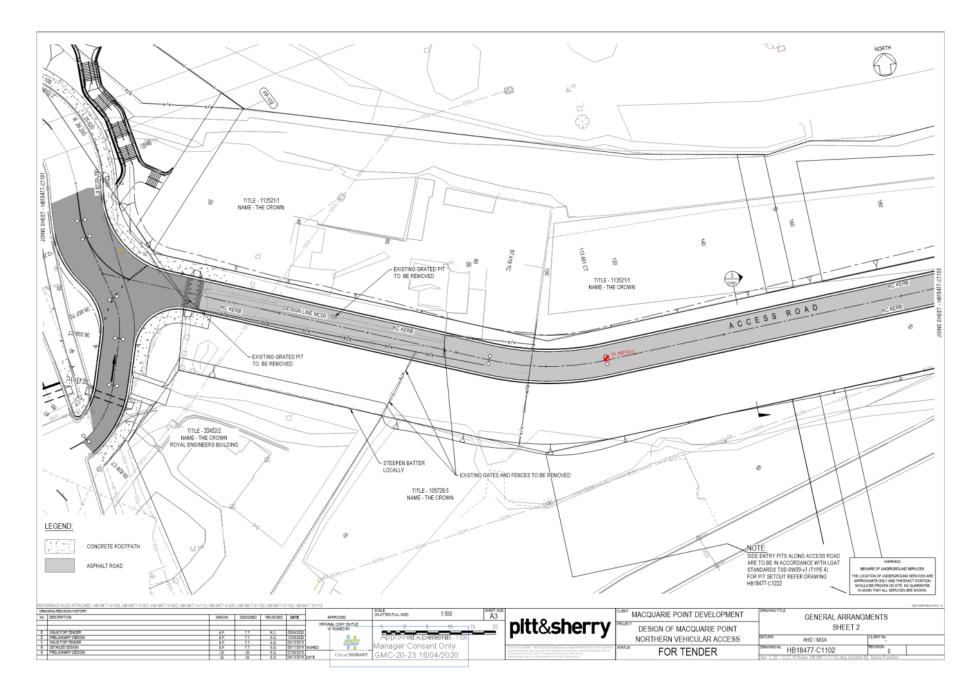
RE	FERENCE FILES ATTACHED: HB19477-X1117; HB18477-X1180															FESTORY DRY DRG AGREV-8
	RAMING REVISION HISTORY						PLOTTED FULL SIZE: 1:20	(mm) 5	HEET 5/2E		CLIENT	MACQUARIE POINT DEVELOPMENT	CRAWING TITL			
N	<ul> <li>DESCRIPTION</li> </ul>	DRA/IN	DESIGNED	REVIEWED	DATE	APPROVED	(PLD11ED POLL SIZE) 1.20	(mm)	A3		1	MACQUARIE POINT DEVELOPMENT	1	TYPICAL TRENO	CH	
						ORIGINAL COPY ON FILE				pitt&sherry	PROJECT	1	1			
	ISSUE FOR TENDER	5.P.	T.T.	R.C.	03/04/2020	"" SIGNED BY	200 0 200	400 600	800	ninasnerry		DESIGN OF MACQUARIE POINT	1	DETAILS		
	PRELININARY DESIGN	5.P.	T.T.	R.C.	25/03/2020		200 0 200	100 000	000		1					
	PRELIMINARY DESIGN	5.P.	T.T.	5.G.	12/03/2020		Apploved E pandis	DEC. 1.10			1	NORTHERN VEHICULAR ACCESS	DATUM5:	AHD / MGA	CLIENT NO.	
	I ISBUE FOR TENDER	5.P.	T.T.	5.G.	0312/2019		JUNE IN MILLINE	TRES - 1.20			1	NORTHERN VEHICOLAR ACCESS	1	AND / MGA	-	
	5 DETAILED DESIGN	5.P.	C.M.	C.M.	26112019 5	GNED	Manager Consent Or	niy		IS 30% PTT & SHORY. THE SCIENTIAL REPORT OF PTT & SHORY.	STATUS		CRAWING No.	HB18477-C1016	REVISION	
	A DETAILED DESIGN	5.P.	T.T.	5.G.	05/11/2019	City of HOBART	CMC 20 22 48/04/20	0.20		THE OCCUMENT HAY DRUY BE VELLE FOR THE PERFECTLING AREASY TO AREASY TO ARE COMPLETENED AND IN ACCOMPANY AND THE THE TOWARD OF DRUGLED AND THE COMPLETENED.	1				F	
		5.P.	T.T.	5.G.	35102019 D	ATE CIS/0 HOBART	GMC-20-23 16/04/20	020		UNATION DU VE DE DESCUERT NAMERON DESCRIPTION		T OIT TENDEIT	Apr. 3, 20 - 1	2:25:34 Name: HB18477-C1016.dwg Updated B	y: Spiros Paradisis	



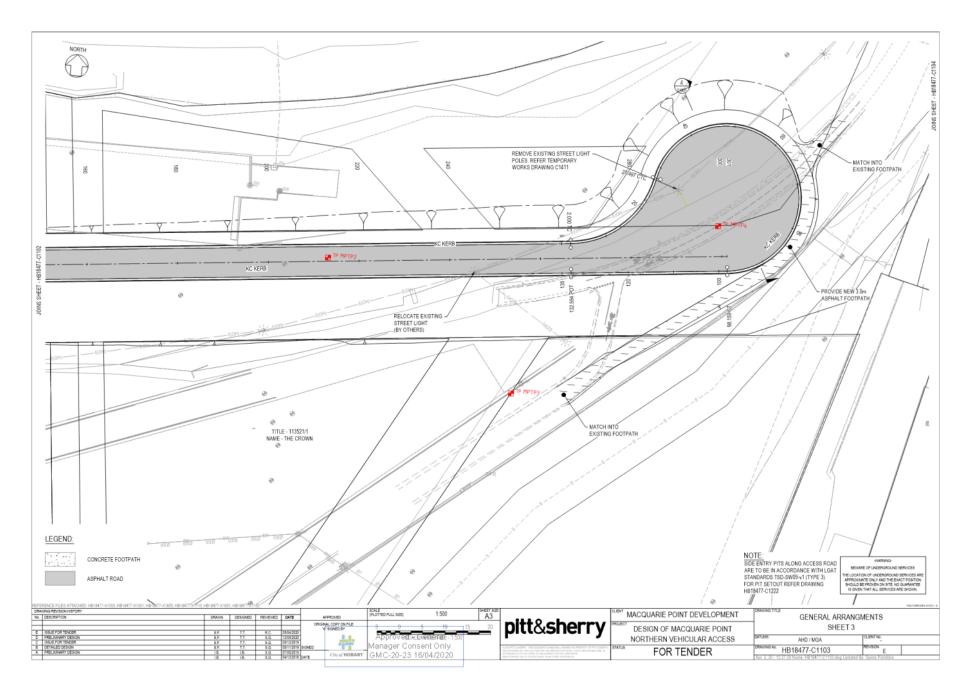


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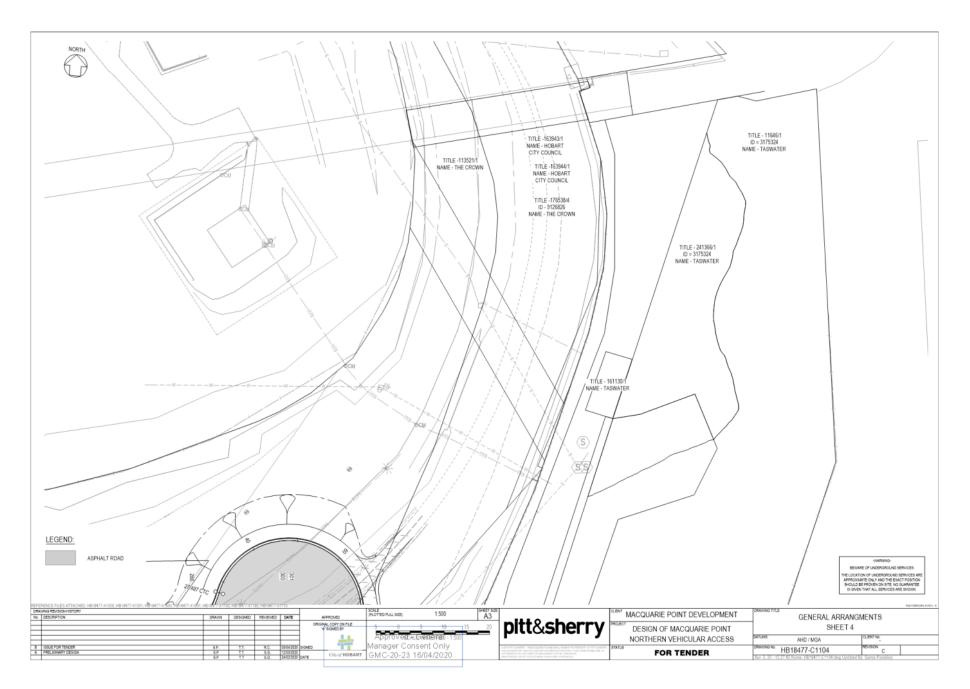




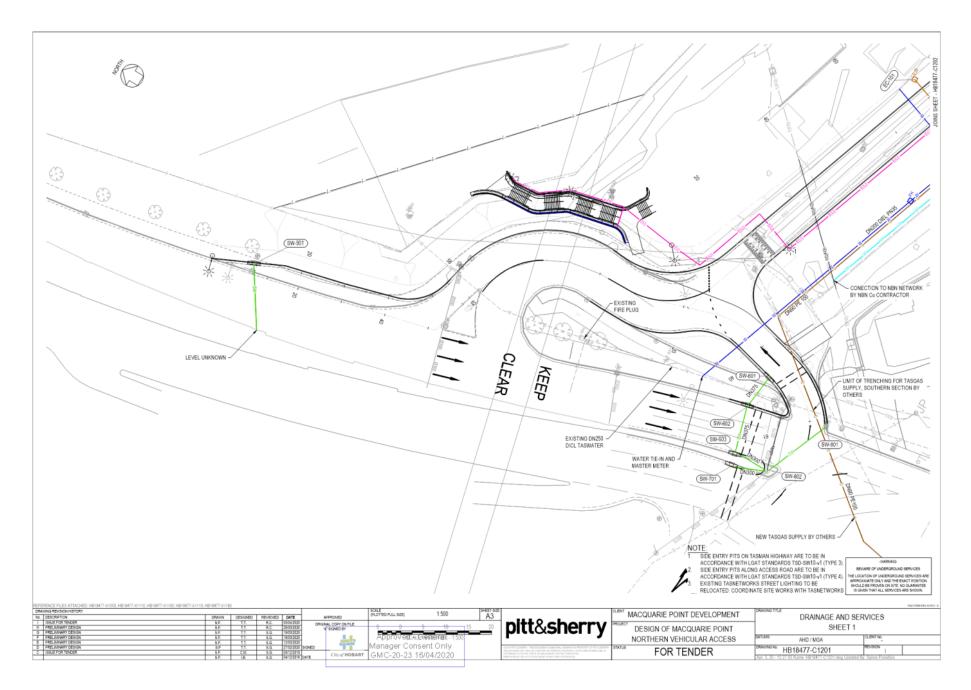
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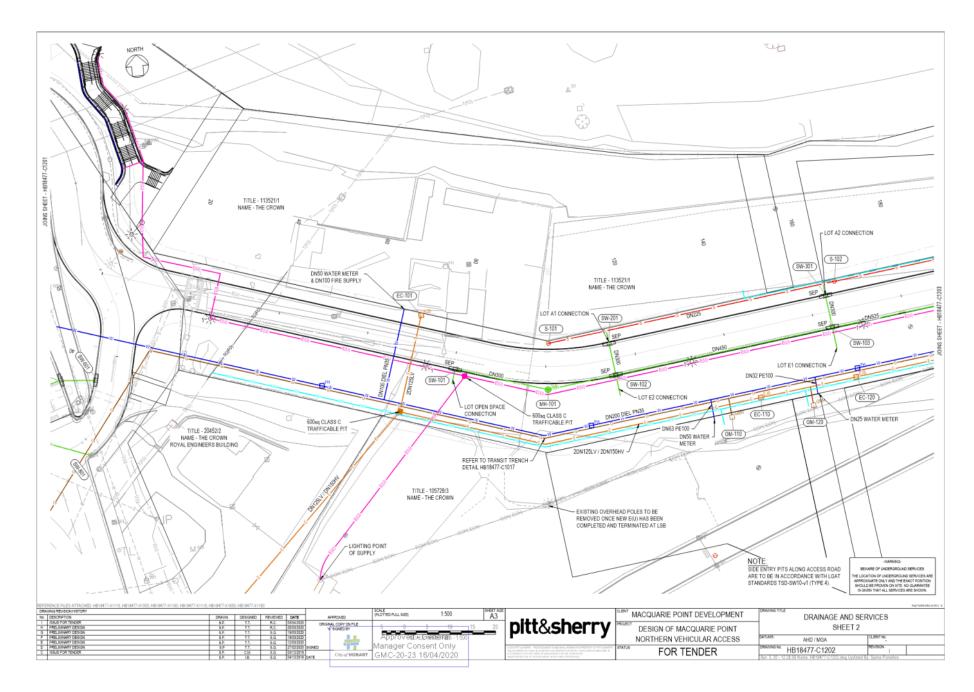
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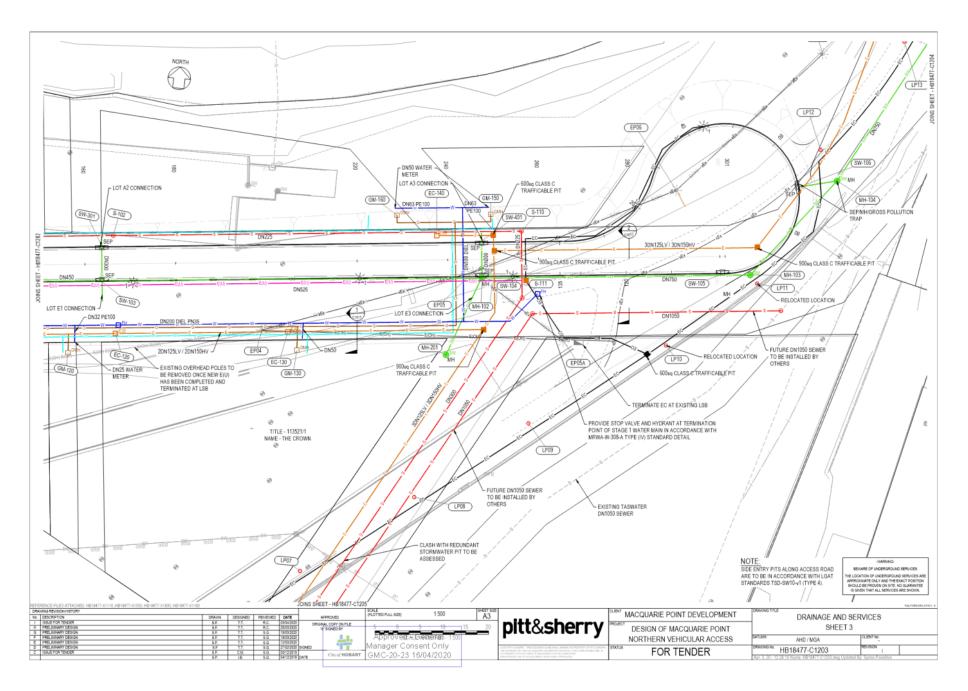
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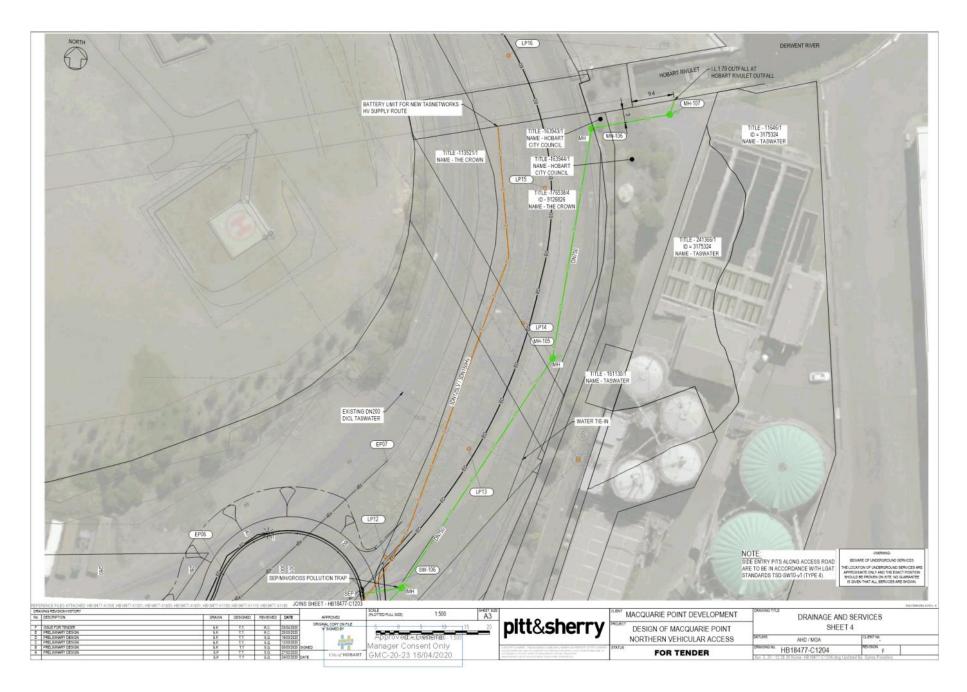
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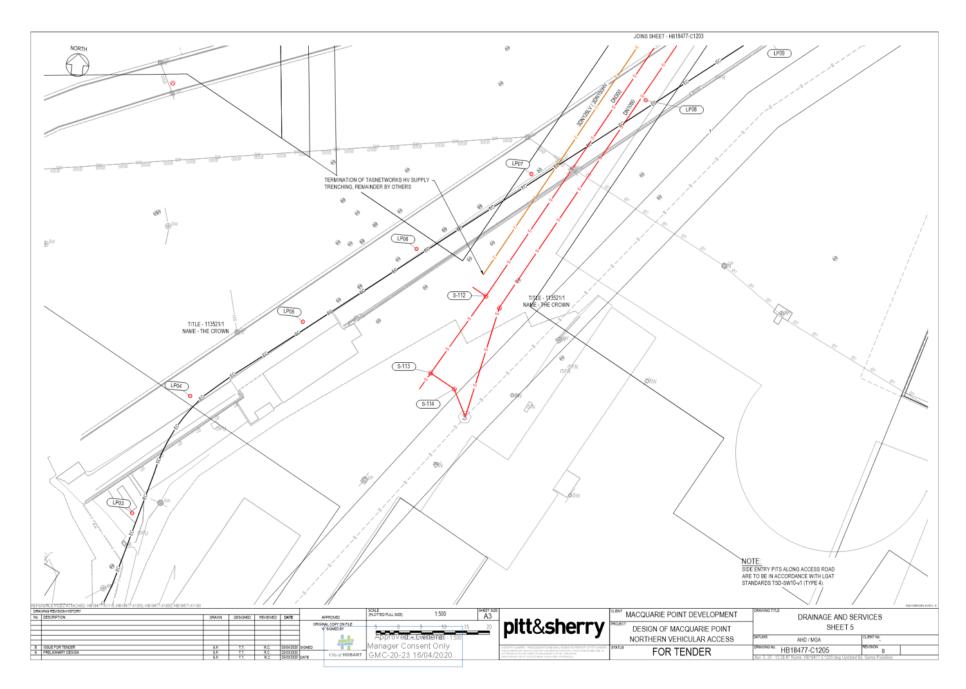
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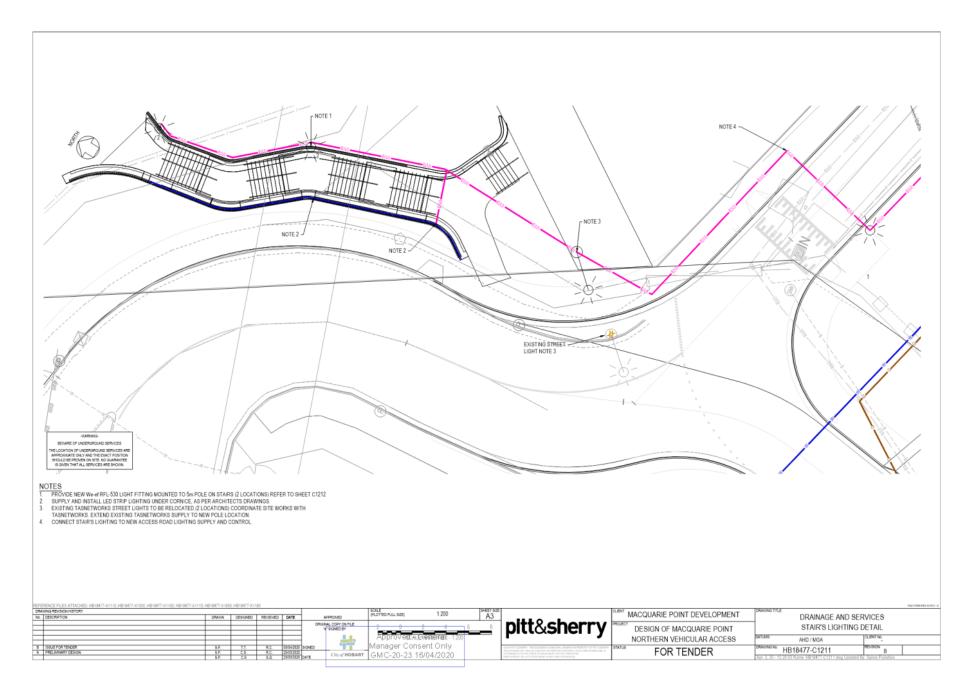


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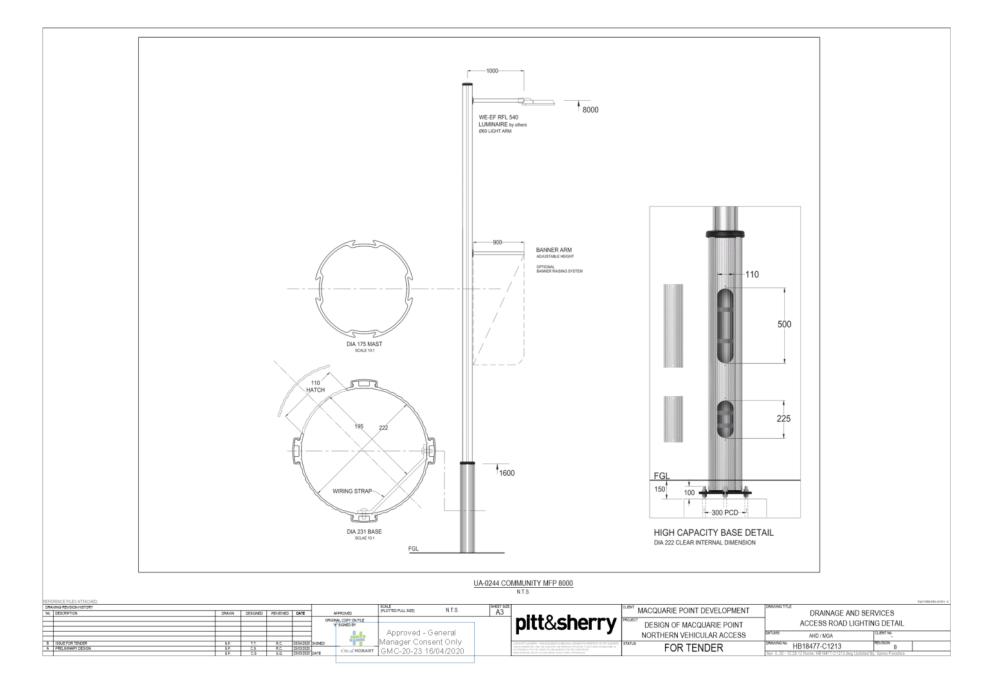
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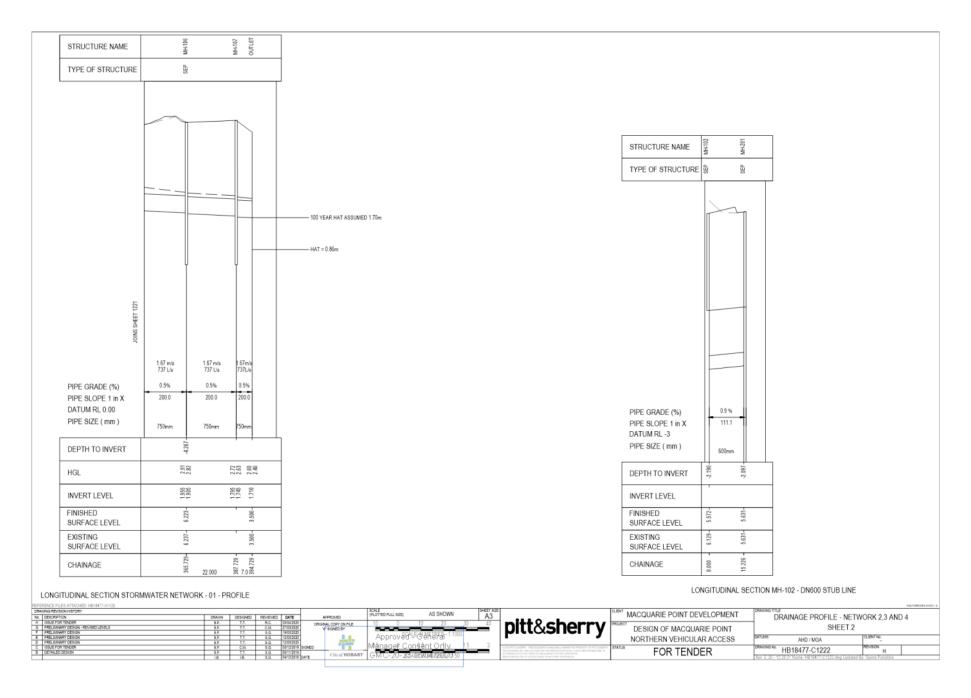


#### **Supporting Information** Council Meeting - 25/5/2020

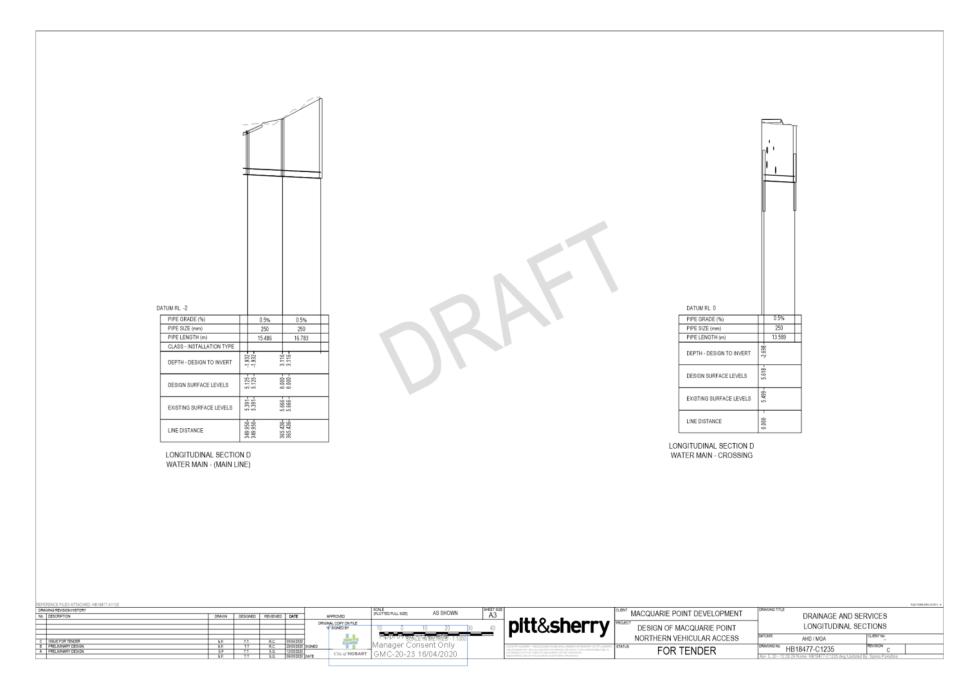
LEGEND WE-EF PART NO: 111-0475, RFL540 960 BEAM 36 LED 36W/350MA 3000K IP66 ALU LEC, RAL 9006 WHITE ALUMINUM" FITTED TO URBAN ALUMINUM, BM BASE POLE, COMMUNITY MFP, CLEAR ANODISED FINISH WITH SINOLE IM OUTFEACH ARM AND 900MM BANNER ARK KIT, PART NO: UAMFP-COM-8-900-10006 + ABAN. COMPLETE WITH 4420300X1800 FOLUY ARBITICATE POLIUNATION CAGE MICLUDION HOLD.	NOTE: THE STRIP LIGHTING IS TO BE PROVIDED ALONG THE FULL LENGTH OF THE STAIRS AND IS NITENCE TO ACCENTUATE THE RIBON EFFECT OF THE STAIR CORNICE. THE STRIP LIGHTING IS TO BE LOCATED IN THE REATE VUNCET THE CORNICE, AS PRE THE ARCHITECTURAL DRAWINGS. THE DRIVERS ARE TO BE WITCH TO CONNECT THE LIGHTING WITH THE LEADS INCREASING IN LENGTH TO CONNECT THE ADDITIONAL SETS OF 4 (OR 8) WETER LENGTHS, AS APPROPRIATE. THE STRIP LIGHTING WITH THE LEADS INCREASING IN LENGTH TO CONNECT THE ADDITIONAL SETS OF 4 (OR 8) WETER LENGTHS, AS APPROPRIATE.
COMPLETE WITH FURIDUAL INDE POLCE PRINCIPLE PEOMONTON CARE INCLUDING HOLD DOWN BOLTS REINFORCING PART NO. FCAR20300x1800 	AUDITIONAL SET OF A DATA IN THE READING, AS AFFECTANCIE     STRUCTURAL NOTES:     ALL CLAIR STEEL TO CONFORM TO ASINZS 1594     ALL PLATE STEEL TO CONFORM TO ASINZS 3578     ALL PLATE STEEL TO CONFORM TO ASINZS 3578     ALL VALUED NOT OCONFORM TO ASINZS 3579     ALL VALUE NOT OCONFORM TO ASINZ 3570
LED STEP LIGHTING - UNIOS, AEON FLEX SIDE (DUAL CABLE ENTRY), PART NO. AES\$4010 PU27 F, 4030MIX X 13MIX X 21MI/ (PER LENGTH), 2700K, 10WIM (24VDC), 330LMIM, BEAM 120-DEG, COMPLETE WITH DRIVER AND CONTROL GEAR.	ACCORDANCE WITH AS/X23 4501 6 GRIND SEAN WELDS ON THE OUTSEOF THE SMALL END OF THE MALE SECTION FOR A LEXENT EQUAL TO THE SUP DIMENSION 7. TAPER LOCK (SUP JOINT LENGTINS SHOWN ARE NORMAL AS ASSEMBLED POLE LENGTINS SHOWN ARE NORMAL AFTER FABRICATION.
A) GENERAL CONDITIONS	ASSEMBLED FOLD LENGTHS SHOWN ARE NOWINAL     Soft REFER     DRAWING GA2     ADDITIONAL FINISHING SOFTERES (IF REQUIRED) WILL COMPLY WITH THE
OCOREINATE THE LOCATION AND INSTALLATION OF THE CONTRACTORS SERVICES WITH OTHER TRADES     ALL WORK IS TO COMPLY WITH RELEVANT BRIEFS AND REQUIREMENTS. THE ELECTRICAL SERVICE SOCUMENTATION SHALL BE READ IN CONJUNCTION WITH ALL OTHER PROJECT AND CONTRACT DOCUMENTATION THE CONTRACTOR WILL BE RESPONSIBLE FOR DETAILED ROUTE SELECTION AND EXISTING UNDERGROUND SERVICE LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILLING AND SUMFACE REINSTATEMENT. ALL BACKFILLING TO BE SUITABLY COMPACTED IN LAYERS PRIOR TO FINAL SUMFACE REINSTATEMENT.	<ul> <li>POLE DOORS SUPPLIED WITH AND WASHES SPECIFIED AS GRADE B&amp; (ORB S), CLASS 4, MID STEEL OR NORMAL HALD COMPLYING WITH ASTITUS, ANTIZ, ANDS, AND OR SPECIFICATION</li> <li>ALL HEARD AND HEAD BOLTS, NUTS AND WASHESS SPECIFIED AS COMMERCIAL, GRADE 45, (GRAS 6, CLASS 5, MID STEEL OR NORMAL SHALL COMPLYING WITH ASSITLIZ (NUTS), AND DOSE SPECIFICATION</li> </ul>
<ul> <li>MI LIGHT POLES ON 800 DIA CIRCULAR PILE FOUNDATIONS, DEFTH = 1800MM, TO URBAN ALUMINUM WANDFACTURERS INSTRUCTIONS</li> <li>MI LIGHT POLES ON 450 DIA CROLLAR PILE FOUNDATIONS, DEFTH = 1000MM, TO GM POLES MANUFACTURERS INSTRUCTIONS.</li> <li>STATAL LIMK</li> <li>SUPPLY AND INSTALL TWO (2) "TYPE 2" (WE-EF RFL530) LUMINAIRES, AS DOCUMENTED.</li> <li>SUPPLY AND INSTALL TWO (2) M, GM PIPE POLES, CW FOUNDATION CAGE AND MCMUMENTED.</li> <li>SUPPLY AND INSTALL LED STIPU LIGHTING ALONG THE FULL LENGTH OF THE STAIRS, IN THE REBATE UNDER THE CORNICE.</li> <li>SUPPLY AND INSTALL 50MM CONDUIT, FROM ACCESS ROAD LIGHT NO.1, AND CONNECT TO LIGHTING SUPPLY AND CONTROL.</li> </ul>	AND FOR WHICH NO SPECIFICATIONS TO ANY STANDARD IS MADE SHALL BE CLARFIED WITH THE DESIGNER. CONCRETE NOTES: 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3500 2. FILLING OT THE PLESS TO TAKE PLACE AS SOON AS POSSIBLE ATTER TRILLING - PLESS ARE NOT TO BE LEFT OVERNIGHT EFORE CONCRETING. 3. ALL CONCRETE IS TO HAVE A 28 DAY CHARACTERISTIC COMPRESSIVE STRENGTH (IC) OF 32MPA (UNLESS OTHERWISE NOTED). THE MAXIMUM AGGREGATE SUZE BANK BEJORD THE CONSTRETES TO THE MAXIMUM AGGREGATE SUZE BANK BEJORD THE CONSTRETES OF THE CONSTRETES OF PROVED THEY DO NOT REDUCE THE SPECIFIED CONCRETE IS OT TO BE ADDED TO THE CONSTRETE OF THE CONSTRETES OF THE C
C) ACCESS ROAD     SUPPLY AND INSTALL SEVEN (7) "TYPE 1" (WE-EF RFL540) LUMINAIRES, AS     DOCUMENTED.     SUPPLY AND INSTALL SEVEN (7) 8M, URBAN ALUMINIUM PIPE POLES, CW     FOUNDATION CAGE AND MOUNTING ACCESSORIES.     SUPPLY AND INSTALL SOMM CONDUITIS FOR LIGHTING SUPPLY, ELECTRICAL     SERVICES AND FUTURE COTV, AS DOCUMENTED.     CONNECT TO EXISTING LIGHTING SWITCHBOARD AND TEST OPERATION. D) CYCLEWAY	STREMOTH. 5 CONCRETE BHAIL BE CUREDFOR A MINIMUM OF 7 DAYS PRIOR TO INSTALLING THE POLE ONTO THE FOUNDATION. 6 ENSURE THAT THE SIDES OF EXCAVATION DO NOT FALL IN DURING PLACEMENT OF CONCRETE. 7. BAR CHARS AND WAGON WHEELS ARE TO BE USED, AS REQUIRED, TO A CHIEVE ADEQUATE COVER. REINFORCING NOTES: 1. COVER SHALL BE NOT LESS THAN 65mm ALL ARQUIND. THIS COVER IS ADEQUATE FOR ALL STUATIONS OF MAD V AS
<ul> <li>RELOCATE TWO (2) EXISTING CYCLEWAY LIGHTS (LP10 AND LP11) TO NEW LOCATION, AS DOCUMENTED</li> <li>SUPPLY AND INSTALL 50MM CONDUIT FROM EXISTING 'LIGHTING SWITCHBOARD' (LSB) TO NEW LOCATIONS AND FOR RECONNECTION OF LP12.</li> <li>RECONNECT LIGHTING, LP10, LP11 AND LP12 (VI) NEW CONDUIT) AND TEST</li> </ul>	DEFINED IN AS 3500 (CLASS UT APPLIES TO MEMBERS EXPOSED TO AGGRESSIVE SOLS AND CLASS C'APPLIES TO MEMBERS EXPOSED TO WATER IN TOAL OR SPLASH ZONES) 2 THE HOLD DOWN BOLT CAGE AND REINFORCING CAGE IS TO BE PLACED
OPERATION PROVIDE NEW UNDERGROUND ELECTRICAL SUPPLY FROM "POINT OF SUPPLY TO NEW LIGHTING SWITCHBOARD LOCATION IVIA NEW ACCESS ROAD CONDUIT) DISCONNECT EXSTING OVERHEAD ELECTRICAL SUPPLY, AREA FLOODLIGHTING AND REMOVE TIMER POWER POLES RELOCATE LIGHTING SWITCHBOARD TO NEW LOCATION ALONG THE EDGE OF THE CYCLEWAY AS SHOWN. INAUL LOCATION TO BE CORDINATED WITH MPCC REPRESENTATIVE. RELOCATION WORKS ARE TO BE STAGED TO ENSURE ELECTRICAL SUPPLY TO THE CYLLEWAY IS MAINTAINED EACH NIGHT FOR PEDESTRIAN USE.	CENTRALLY WITHIN THE PLE AND A MAXMUM OF 150mm ABOVE THE BASE OF THE PLE 3. LIGATURES SHALL BE PROVIDED AROUND THE OUTSIDE OF THE ENTIRE LENGTH OF THE LONGTUDINAL REPORCEMENT AS FOLLOWS: FOR PLE DUMATERS UP TO AND NOLUDING BOOM, AN RS BPRAL LIGATURE AT SUMMETERS UP USED; FOR PLE DIMATERS TSOMM AND ABOVE, AN R10 SPIRAL LIGATURE AT 300mm PTCH SHALL BE TOTHED HANLE BEED: ALL SPRAL LIGATURES SHALL HAVE 2 FULL TURNS AT THE TOP AND BOTTOM 4. ALL STEEL BARS ARE TO BE 500 PLUS REBAR AND ARE TO CONFORM TO THE REQUIREMENTS OF AS AFT STEEL, RENFORCING MATERIALS 5. SPIRAL OF HOOP LIGATURES ARE PERMITTED. 5. SPIRAL OF HOOP LIGATURES ARE PERMITTED.
REFERENCE FILES ATTACHED: DRAMING REVISION HISTORY	
Ne. DESCRIPTION DRWIN DESIGNED RE	
	DITTE STAIR'S LIGHTING DETAIL
B         ISSAE FOR TENDOR         5.P         T.T           A         IPRE_MINIMY OEDIN         5.P         C.S.	Approved - General Approved - General And Approved - General Approv

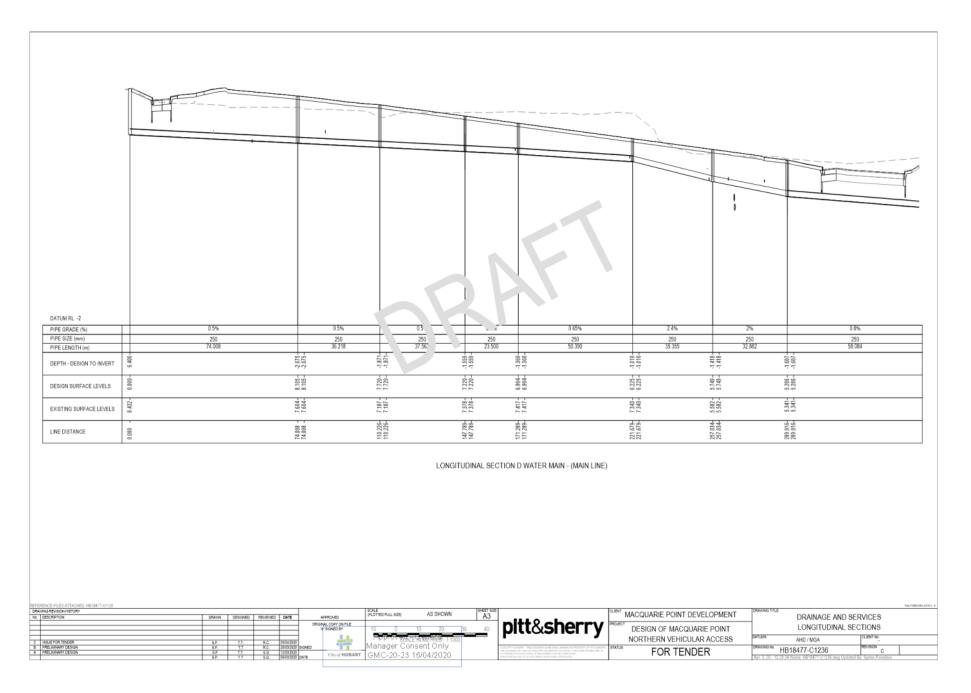


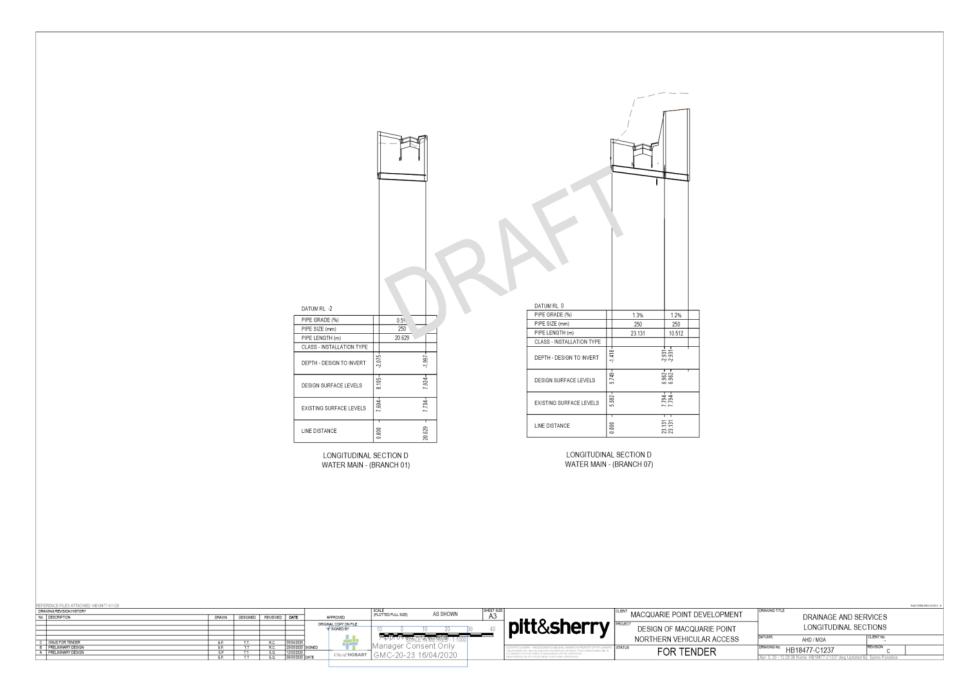
STRUCTURE NAME	SW-101	101 114	MIT-101		9-1-1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	Mi+102	Mi+103	he+10.4	5001-1490	
TYPE OF STRUCTURE	SEP	CED			0	SEP	SEP	SEP	B	1
	F	POSSIBLE POS IN		LOT A1 IN LOT E2 IN ROAD SEP IN	LOT A2 IN LOT E1 IN ROAD SEP IN	LOT E3 IN LOT A3 IN ROAD SEP IN		ROAD SEP IN NORTHERN CAT GPT IINSTALLED	CHMENT IN	
				IL FOR DN300 CONNECTION TO A1 = 5 65m PAD LEVEL 7 52m	- IL FOR DN300 CONNECTION TO A2 = 5 20m PAD LEVEL 7 54m E3 = 4 10m PAD LEVEL 5 57	m IL FOR DN300	CONNECTION TO D LEVEL 7 87m		HOLD	
	_			IL FOR DA100 COANECTION TO LOT E2-4.31m PAD LEVEL 5.90m IL FOR DN300 CONNECTION TO E1 = 4.50m PAD LEVEL 5.87m						
							Ŭ			
		0.34 m/s 24 L/s	0.95 m/s 67L/s	1.83 m/s 291L/s	2.03 m/s 440 L/s	1.5	26 m/s 58 L/s	1.26 m/s 558 L/a	1.67 m/s 736 L/a	1.67 m/s 737 L/s
PIPE GRADE (%)		0.7%	0.8%	0.5%	0.5%		0.5%	0.5%	0.6%	0.5%
PIPE SLOPE 1 in X DATUM RL 0.00		200.0	200.0	200.0	200.0		200.0	200.0	166.7	200.0
PIPE SIZE ( mm )		300mm	300mm	450mm	525mm	7	'50mm	750mm	750mm	750mm
DEPTH TO INVERT	3.204		-3.242-			-1505	-2.153	-2,683-	44 4	- 132
HGL	5.52-	1	5.52- 5.52-	2 22	- १९२४ इ.स.	3.85	3.67	3.54	1	3.13-
INVERT LEVEL	4.410-		4257-	000	3.725	3.085-	2.790-	2.613		2207-
FINISHED SURFACE LEVEL	7.615-	1	- 669/1		6 .491-	5.552 -	4.963 -	5.196-		- 200 -
EXISTING SURFACE LEVEL	7.593-		- 206-1	1 504	- 1989 - L	6.181-	5.404 - 5.399 -	5.133-		T T 0.99 0.99 0.99 0.99 0.99
CHAINAGE	- 000'0		15.292 ×	48.889	। ह देख इ. इ. 83.855	169.537-	218.612- 218.612-	2554.809- 2555.134- 2955.134-	61.095	
FERENCE FILES ATTACHED HB11477 WAINING REVISION HSTORY I DESCRIPTION DESCRIPTION PRELININGY DESCH. REVISED LEV PRELININGY DESCH. I SINLE FOR TROOPE				DRAIN         DESIGNED         REVEWED         DATE           3.9         1.7         K.C.         03462002           5.9         1.7         K.C.         03462002           5.9         1.7         C.G.         242302           5.9         1.7         S.G.         2423202           5.9         1.7         S.G.         2423202           5.9         1.7         S.G.         2423202	АРНОМО ОКЛИВСТВОЛИЦАВЕ И СПЕСТВОЛИЦАВЕ И СПЕСТВОЛИЦАВИ И СПЕСТВОЛИ И ПО И СПЕСТВОЛИ И ПО И СП	pitt&s	herry PROJECT DES	UARIE POINT DEVELOPMENT IGN OF MACQUARIE POINT IHERN VEHICULAR ACCESS	DRAILING TITLE DRAILNAGE PROFI SHEE SATUMS: AHD / MGA	
D ISSUE FOR TENDER C DETALED DESIGN 5 DETALED DESIGN				S.P.         C.M.         S.G.         09122019           S.P.         C.M.         C.M.         26112019         50           S.P.         T.T.         S.G.         69112019         50           I.B.         I.B.         S.G.         544722018         50	Mánaget Consent Orly E CityarHobart GMC-20-28/100/04/28620-50	5 2 военя птт воноти ти во оссидност в лие в на состанот на типе так типе так на поене на постанот на поене поене поене поене поене на постанот на поене поене поене поене поене поене поене поене поене на постанот на поене поене поене поене	NUK I NUK I STATUS STATUS STATUS STATUS STATUS STATUS STATUS	FOR TENDER	AHD / MIGA CRAMING NE. HB18477-C1221 Apr. 3, 20 - 12 29:16 Name: HB18477-C1221 dwg	VENISION H Updated By: Spiros Paradisis

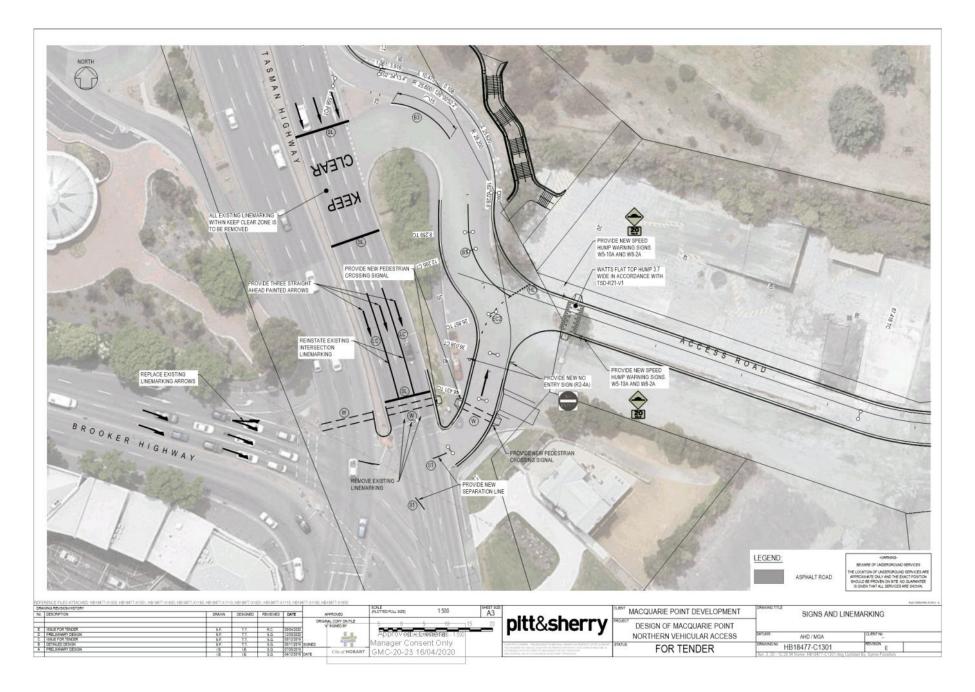


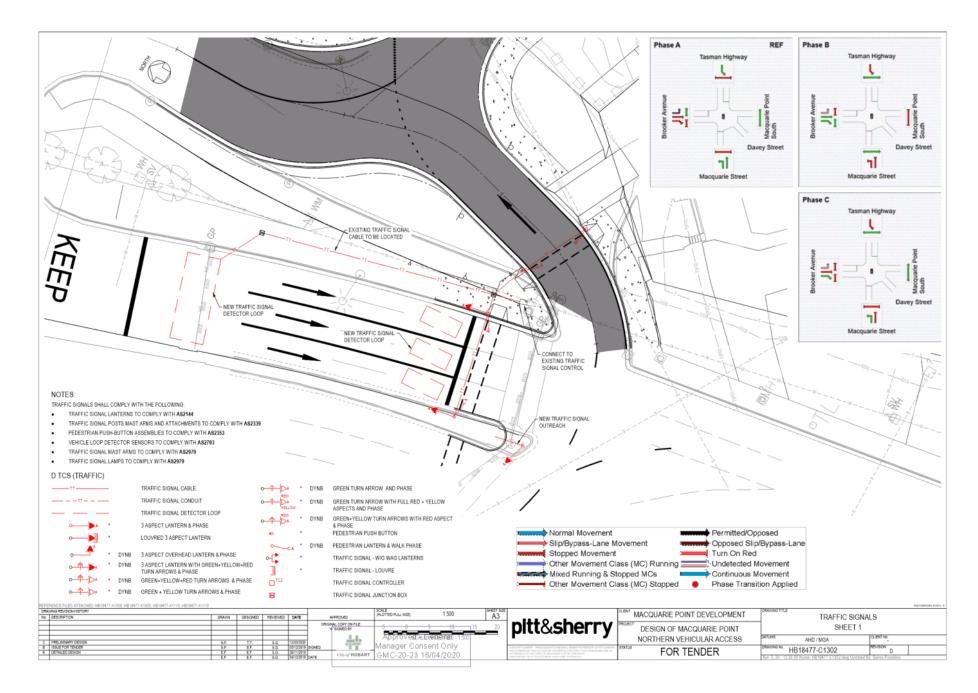
STRUCTURE NAME	S-102		s-110 s-111		S-112	\$-113 \$-114
TYPE OF STRUCTURE	sew		sew sew		SEW	SEW
PIPE GRADE (%)	1.0 %	1.0 %	0.5 %	0.5%	0.5 %	0.5 %
PIPE SLOPE 1 in X DATUM RL 0.00	100.0	100.0	200.0	200.0	200.0	200.0
PIPE SIZE ( mm )	225mm	225mm	225mm	300mm	300mm	300mm
DEPTH TO INVERT	-2.123-		-1.875 - -1.905 - -1.989 - -2.019 -		-1.370-	-1,393-
INVERT LEVEL	4.521- 4.451-		3,690 - 3,660 - 3,487 - 3,487 -		2.911-	2.776-2.746-2.746
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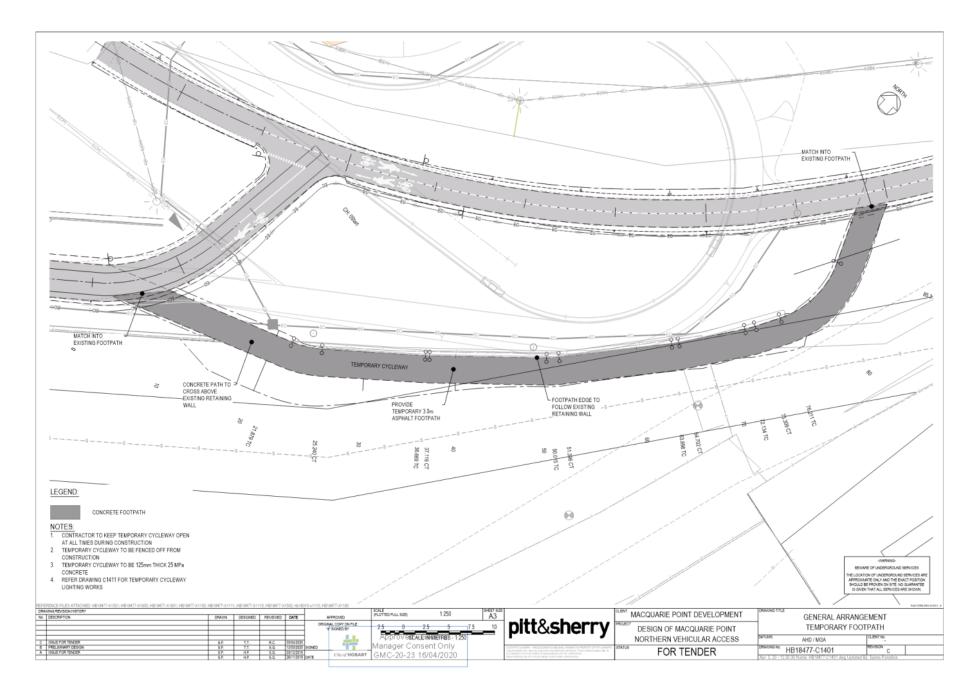


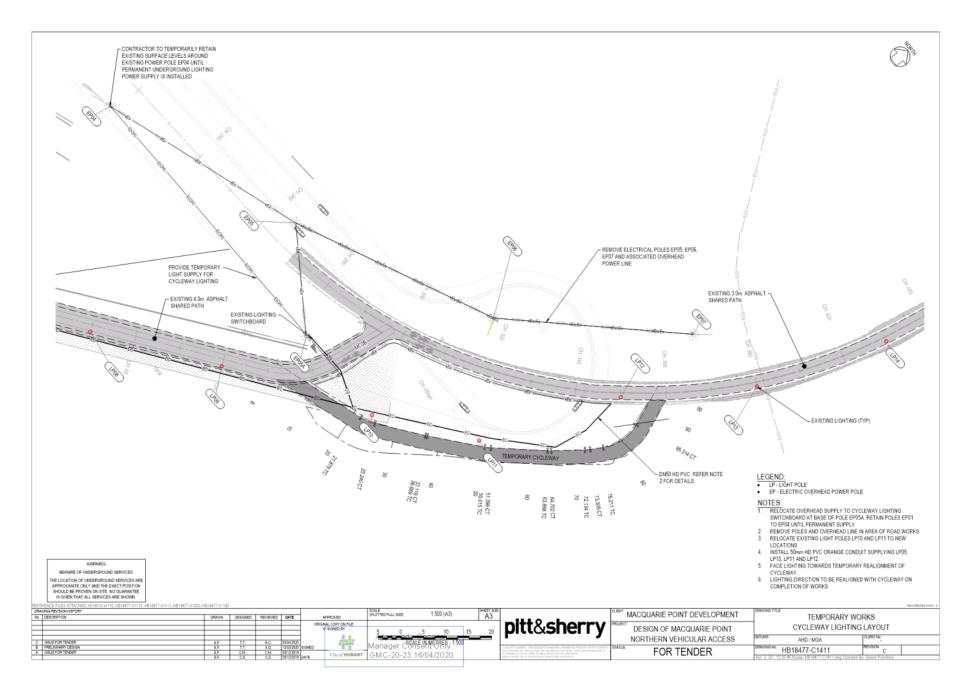


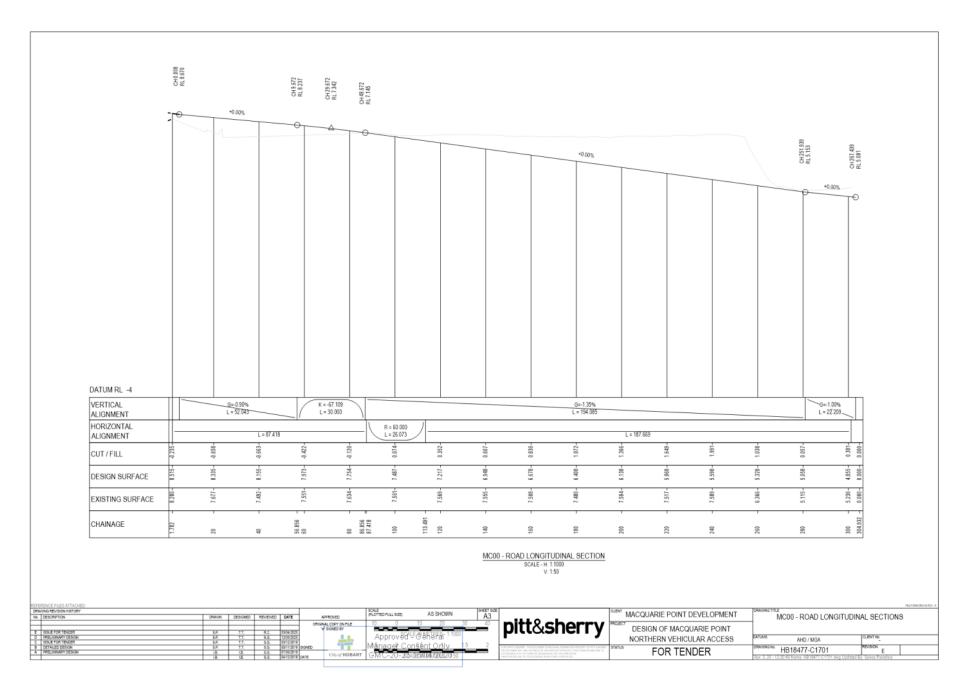








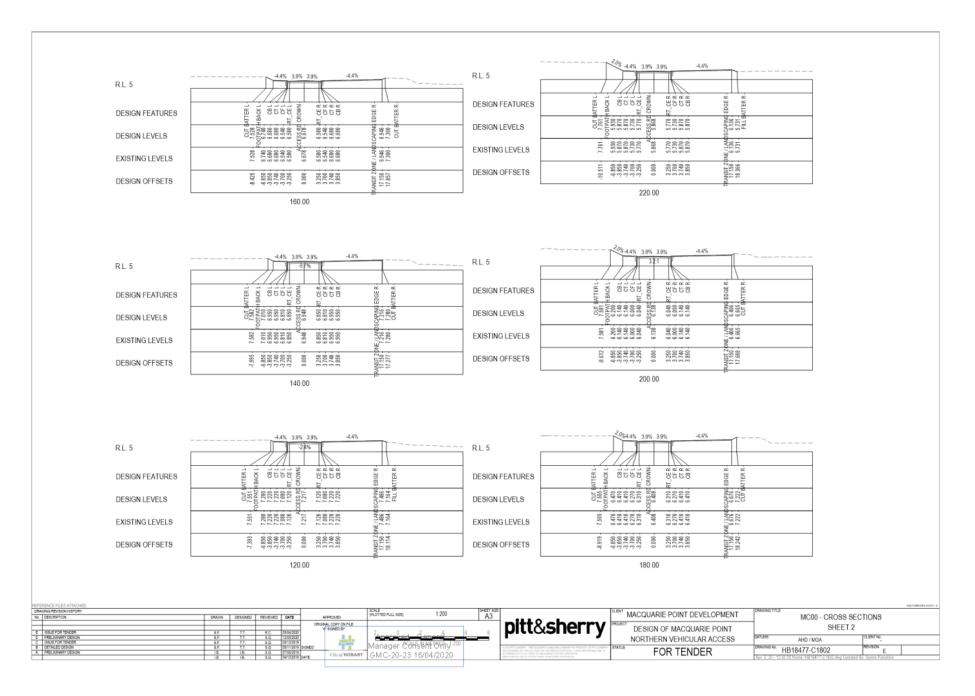




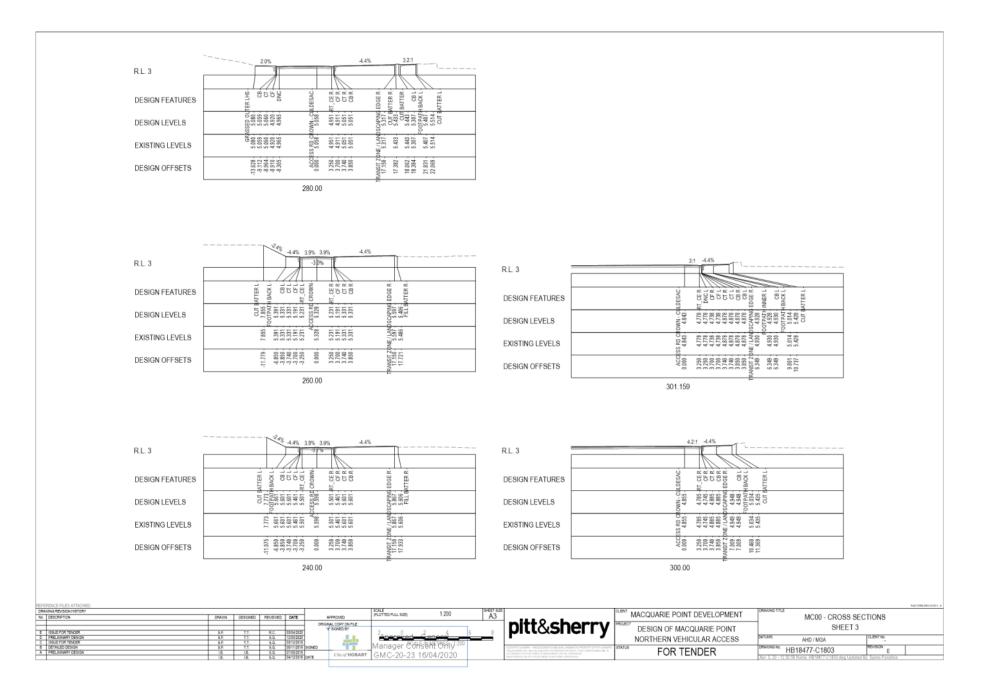
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#### Page 136 ATTACHMENT B



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# Traffic Impact Assessment

Appendix D

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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# pitt&sherry

# **Macquarie Point Development**

Traffic Impact Assessment

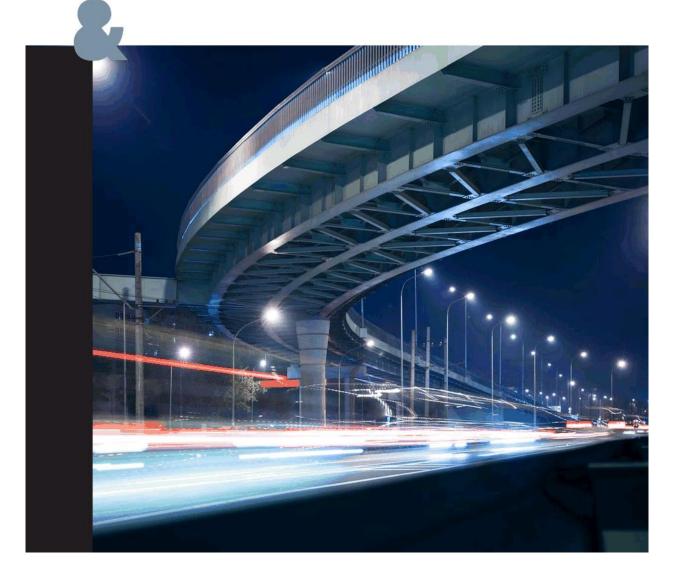
Prepared for Macquarie Point Development Corporation

Client representative Brad Wheeler

Date

23 August 2019

Rev 02



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Swept Paths
Austroads Pedestrian Facility Selection Tool Assessment

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Authorised by — Ross Mannering	RSMannering	Date — 9 December 2019

#### **Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
00	Traffic Impact Assessment	L Ali/ R Ramm	S Gillick	R Casimaty	29/05/2019
01	Traffic Impact Assessment (Amended Building A)	R Ramm	R Mannering	S Gillick	23/08/2019
02	Traffic Impact Assessment Ammended for Council Comments	S Volker	R Mannering	R Mannering	09/12/2019

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# 1. Introduction

## 1.1 Macquarie Point Development

The Macquarie Point Development Corporation (MPDC) is coordinating the development of a 9.3-hectare site at Macquarie Point which is one of the last remaining vacant urban infill locations in any of Australia's Capital Cities. Through an 18-month consultation and stakeholder engagement process, the MPDC developed a 'Shared Vision'' for redevelopment of the site which established that the redevelopment should create value for investors and the people of Tasmania, promote innovative design and sustainability and build a sense of place, not only for residents on the site, but also for those who work there. In achieving these principles, it was agreed that development at the Macquarie Point site should:

- Involve a mix of uses
- Be people focused
- Promote inner city living
- Be well connected to the broader Hobart environment
- Respect the site's history
- Incorporate principles of sustainability
- Not prejudice port activities
- · Complement and not compete with activity in the CBD and areas of greater Hobart; and
- Leverage local competitive advantages to thereby deliver major socio-economic benefits to Hobart and Tasmania.

Vehicle access is to be provided into the site to access multi-storey car parks and other developments within the site. Bus stops will also be located within the site.

## 1.2 Traffic Impact Assessment Scope

MPDC has engaged pitt&sherry to undertake a Traffic Impact Assessment (TIA) for the proposed new road development and initial building stage at the Macquarie Point site.

This report has been prepared with reference to the Department of State Growth's Publication *Traffic Impact* Assessments (*TIA*) Guidelines and the Sullivans Cove Planning Scheme 1997.

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# 2. Existing Conditions

#### 2.1 Traffic Impact Assessment Study Area

The Macquarie Point site is located at 8a Evans Street with the main site frontage on Evans Street and a secondary frontage on the Tasman Highway. The site is located directly to the east of the Hobart CBD. Adjacent land uses are the Hobart Cenotaph and Regatta Grounds to the north, the Hunter Street Precinct and Hobart Waterfront to the south.

Figure 1 shows the location of the site in the local context.

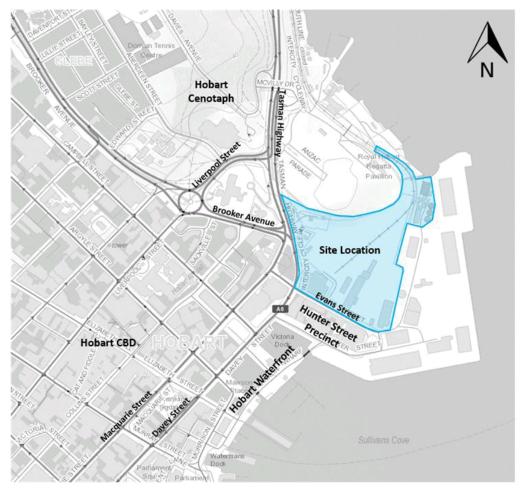


Figure 1: Site Location (Basemap source: https://maps.thelist.tas.gov.au/listmap/app/list/map)

The Macquarie Point site is zoned as 3.0 Sullivans Cove Gateway and Trans under the *Sullivans Cove Planning Scheme* 1997. Surrounding land uses include 2.1 Domain Open Space and 4.2 Regatta Point to the north, 1.0 Inner City Residential (Wapping) to the west and south and 4.1 Macquarie Point Wharf to the east.

Figure 2 shows the zoning adopted in the Sullivans Cove Planning Scheme 1997.



Figure 2: Sullivans Cove Planning Scheme 1997 Zoning (Basemap source: https://maps.thelist.tas.gov.au/listmap/app/list/map)

## 2.2 Surrounding Road Network

#### 2.2.1 Tasman Highway

The Tasman Highway (shown in Figure 3 and Figure 4) is classified as a Category 1 State Road in the Department of State Growth *State Road Hierarchy* and connects Hobart with the east coast of Tasmania. The Tasman Highway is a major commuter route into the Hobart CBD connecting to the eastern shore including Bellerive, Mornington, Cambridge and Sorell. The Tasman Highway also provides the primary connection between the Hobart CBD and Hobart International Airport.

In the vicinity of the site, the Tasman Highway has a speed limit of 50km/h, reducing from 70km/h 80 metres north of the site and carries approximately 58,500<sup>1</sup> vehicles per day.

<sup>&</sup>lt;sup>1</sup> Traffic data obtained from 2017 counts undertaken by Department of State Growth at Station A0113110

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Figure 3: Tasman Highway Southbound Lanes – facing north (Image Source: Google Earth, August 2017)



Figure 4: Tasman Highway Southbound Lanes – facing south (Image Source: Google Earth, August 2017)

#### 2.2.2 Brooker Avenue

Brooker Avenue (shown in Figure 5 and Figure 6) is classified as a Category 1 State Road in the Department of State Growth *State Road Hierarchy*. Brooker Avenue becomes the Brooker Highway at Burnett Street in North Hobart. The Brooker Highway is the major north-south arterial route between Hobart's northern suburbs and the Hobart CBD.

Brooker Avenue, in the vicinity of the site, has a speed limit of 60km/h. Based on Sydney Coordinated Adaptive Traffic System (SCATS) data from 2018, Brooker Avenue carries approximately 64,000 vehicles a day.



Figure 5: Booker Avenue Eastbound Lanes – facing east (Image Source: Google Earth, October 2018)



Figure 6: Brooker Avenue Eastbound Lanes – facing west (Image Source: Google Earth, October 2018)

#### 2.2.3 Macquarie Street

Macquarie Street (shown in Figure 7 and Figure 8) is a Department of State Growth owned road. It is a one-way road which runs in a north-east direction through the Hobart CBD generally with four vehicle lanes.

Macquarie Street connects the Southern Outlet (providing access to Hobart's southern suburbs) to the Tasman Highway to the east and Brooker Highway to the north. Macquarie Street has a speed limit of 50km/h.

Available SCATS data collected in November 2018 indicates that Macquarie Street carries approximately 32,500 vehicles a day.

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Figure 7: Macquarie Street Northbound Lanes – facing north (Image Source: Google Earth, October 2018)



Figure 8: Macquarie Street Northbound Lanes– facing south (Image Source: Google Earth, October 2018)

## 2.2.4 Davey Street

Davey Street (shown in Figure 9 and Figure 10) is a Department of State Growth owned road. It is a one-way road which runs in a south-west direction through the Hobart CBD generally with four vehicle lanes.

Davey Street has the same function as Macquarie Street but in the opposite direction.

Davey Street has a speed limit of 50km/h. Available SCATS data collected in November 2018 indicates that Davey Street carries approximately 33,000 vehicles a day.



Figure 9: Davey Street Southbound Lanes – facing north (Image Source: Google Earth, October 2018)



Figure 10: Davey Street Southbound Lanes – facing south (Image Source: Google Earth, October 2018)

#### 2.2.5 Evans Street

Evans Street (shown in Figure 11 and Figure 12) is a Council owned street that connects Macquarie Street and Hunter Street on the Hobart Waterfront.

Evans Street has a speed limit of 50km/h. Available SCATS data collected in November 2018 indicates that Evans Street carries approximately 3,600 vehicles a day.

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Figure 11: Evans Street – facing east



Figure 12: Evans Street - facing west

## 2.3 Intersections

The following intersections are located close to the site:

- Tasman Highway/ Brooker Avenue/ Macquarie Street/ Davey Street
- Macquarie Street/ Evans Street; and
- Davey Street/ Evans Street.

## 2.4 Site Access

There are currently five vehicle access points to the Macquarie Point site. Two access points are from the Tasman Highway and three are from Evans Street.

Both the access points along the Tasman Highway are located to the north-west side of the site. The northern access point is located approximately 70 metres north of the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection and permits left-in/ left-out movements with a give-way arrangement. A keep clear zone is located on the Tasman Highway at the exit point to assist drivers exiting.

The southern access point along the Tasman Highway is located at the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection. This access point operates as an entry only for vehicles on Brooker Avenue.

The Evans Street access points are located on the north side of Evans Street at the MPDC office, the Goods Shed and a public off-street car park.

#### 2.5 Traffic Volumes

The Department of State Growth provided SCATS data collected on Thursday 8 November 2018, for the following signalised intersections:

- Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street
- Macquarie Street/ Evans Street; and
- Davey Street/ Evans Street.

Based on the SCATS data, it was determined that the AM peak hour for the network of intersections in the vicinity of the site is between 7:45am and 8:45am and the PM peak hour is between 4:00pm and 5:00pm.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

SCATS data provides the total number of traffic movements in a single lane. A number of lanes at the above intersections allow two movements from one lane. The lanes allowing two movements are summarised in Table 1.

Table 1: Intersection Legs with Shared Lanes

Intersection	Leg	Movements	
Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey	Macquarie Street	Shared left and through	
Street	Brooker Avenue	Shared left and through	
Macquarie Street/ Evans Street	Macquarie Street	Shared right and through	
	Davey Street	Shared right and through	
Davey Street/ Evans Street	Evans Street (West)	Shared right and through	
	Evans Street (East)	Shared left and through	

In order to determine the number of vehicles preforming each movement in the shared lanes identified above, turning movement counts were undertaken by pitt&sherry for the shared lanes. The following times were chosen for the counts based on typical peak hour times in previous data sets:

- 7:30am 9:00am; and
- 4:00pm 5:30pm.

A summary of the existing AM and PM peak hour traffic volumes are shown in Figure 13 and Figure 14.

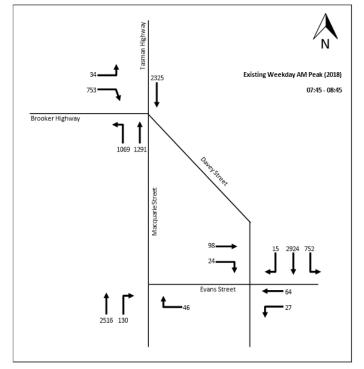


Figure 13: Existing Traffic Volumes - AM Peak Hour

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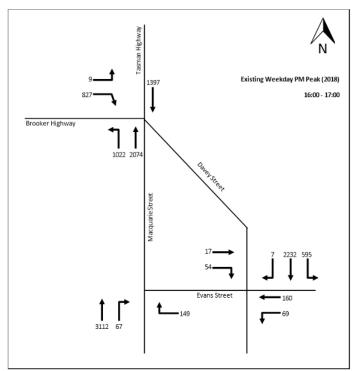


Figure 14: Existing Traffic Volumes - PM Peak Hour

## 2.6 Existing Intersection Performance

#### 2.6.1 Traffic Modelling Software

The operation of the intersections has been modelled using SIDRA Network traffic modelling software. SIDRA Network rates the performance of intersections based on the vehicle delay and the corresponding Level of Service (LOS). It is generally accepted that LOS D or better is an acceptable level of operation. Table 2. shows the criteria that SIDRA adopts in assessing the LOS.

Delay per Vehicle (secs)					
LOS	Signals	Roundabout	Sign Control		
А	10 or less	10 or less	10 or less		
В	10 to 20	10 to 20	10 to 15		
С	20 to 35	20 to 35	15 to 25		
D	35 to 55	35 to 50	25 to 35		
E	55 to 80	50 to 70	35 to 50		
F	Greater than 80	Greater than 70	Greater than 50		

Table 2: SIDRA Level of Service (LOS) Criteria

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#### 2.6.2 Intersection Layouts

The geometry of the intersections used in the SIDRA Network traffic model were developed with reference to aerial photography obtained from LISTmap as well as measurements gathered during the site visits undertaken on Thursday 8 November 2018. The aerial photography and site visit informed the number, width and length of trafficable lanes, speed limits as well as line marking, signal phasing and timings and pedestrian crossing locations.

A snapshot of the aerial photography used for developing the SIDRA Network model is shown in Figure 15.



Figure 15: Aerial Photography Used for Traffic Modelling (Basemap source: https://maps.thelist.tas.gov.au/listmap/app/list/map)

#### 2.6.3 Signal Phasing and Timings

The signal phasing and cycle times were recorded during a typical weekday AM and PM peak and are discussed below.

#### Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street

The Brooker Avenue Tasman Highway/ Macquarie Street/ Davey Street intersection operates with two phases. Phase A is the Tasman Highway/ Davey Street and Macquarie Street through movements and the left turn from Macquarie Street into the Brooker Avenue. The B phase is the Brooker Avenue movements. This is a variable phase, i.e. when the opposing pedestrian signals are not triggered, the left turn from Macquarie Street into the Brooker Avenue also operates; if the pedestrian signal is triggered this movement is stopped for approximately 20 seconds while the pedestrians cross.

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The phase time for the Tasman Highway/ Davey Street and Macquarie Street legs was recorded to be 80 seconds during the AM peak and 75 seconds during the PM peak. The time for the Brooker Avenue phase was recorded to be 35 seconds during the AM peak and 45 seconds during the PM peak.

During all phases, pedestrian actuation was recorded (i.e. the percentage of times the pedestrian signals are triggered). During the green time for Macquarie Street/ Tasman Highway, pedestrians were able to cross Brooker Avenue, while during the green time for Brooker Avenue, pedestrians were able to cross Macquarie Street and Tasman Highway. Pedestrians triggered the signals to cross the Brooker Avenue 3 times over a 45-minute period during the AM peak and 4 times during the PM peak. This approximates to the pedestrian movement being triggered on about 20% of cycles.

The difference in the traffic operation of the intersection with and without pedestrian movements was modelled to determine the difference. The pedestrian movements only have an effect on the left turn movement from Macquarie Street to Brooker Avenue, as this is not a critical movement at the intersection it was determined that pedestrian crossing would be modelled to run on all phases as it does not have a major effect on the overall operation of the intersection.

#### Macquarie Street/ Evans Street and Davey Street/ Evans Street

Both the Macquarie Street/ Evans Street intersection and the Davey Street/ Evans Street intersection operate with two phases. Phase A at the Macquarie Street/ Evans Street intersection is Macquarie Street while Phase A at the Davey Street/ Evans Street intersection is Davey Street. Phase B at both intersections is Evans Street.

A total phase time of 120 seconds was recorded at the intersections. The time for the Phase A at both intersections was recorded to be an average of 100 seconds while the time for Phase B was recorded to be an average of 20 seconds. These phase times were recorded during both the AM and PM peak periods.

During all phases, pedestrian volumes were recorded. Pedestrians were able to cross Evans Street during the green time of Macquarie Street and Davey Street while crossing of Macquarie Street and Davey Street occurred during the green time of Evans Street.

#### 2.6.4 Vehicle Mix

The SIDRA Network model was developed using the total number of vehicles recorded and the percentage of heavy vehicles (Austroads Vehicle class 3, two axle trucks and above). Buses were considered as heavy vehicles and included in the percentage heavy vehicle proportion. Pedestrian volumes were input into the model separately.

The traffic volumes at the intersections were obtained as detailed in Section 2.5. A 5% heavy vehicle proportion was used in the model and was determined based on observations made on site.

Pedestrian volumes used in the model varied between 5 movements per hour and 50 movements per hour depending on the intersection and the approach of the intersection being crossed. This is higher than the existing pedestrian volumes observed on site but has been modelled to allow for variations in volumes.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

2.6.5 Existing Intersection Performance

Table 3 presents a summary of the SIDRA Network results for the existing intersection operation with full results presented in Appendix B.

Table 3: Existing SIDRA Network Modelling Results

Intersection	Peak	Approach	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
		Macquarie Street	0.57	9	97	А
	АМ	Tasman Highway	0.66	17	125	В
Brooker Avenue/	AIVI	Brooker Avenue	0.66	47	68	D
Tasman Highway/		All Movements	0.66	18	125	в
Macquarie Street/ Davey		Macquarie Street	0.70	17	134	В
Street	PM	Tasman Highway	0.46	20	73	В
		Brooker Avenue	0.49	39	62	D
		All Movements	0.70	21	134	с
		Macquarie Street	0.49	5	65	A
	АМ	Evans Street	0.12	18	2	В
Macquarie Street/ Evans		All Vehicles	0.49	5	65	А
Street		Macquarie Street	0.58	6	89	А
	РМ	Evans Street	0.39	10	4	В
		All Vehicles	0.58	6	89	A
		Evans Street (East)	0.22	53	12	D
	АМ	Davey Street	0.73	7	128	А
	AIM	Evans Street (West)	0.53	62	30	E
Davey Street/		All Vehicles	0.73	10	128	А
Evans Street		Evans Street (East)	0.55	56	33	E
	PM	Davey Street	0.55	6	80	А
		Evans Street (West)	0.56	67	17	E
		All Vehicles	0.56	11	80	в

Based on the results presented above, all modelled intersections are shown to operate overall with acceptable delays and level of service.

At the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection, the Brooker Avenue approach operates at a LOS D in the AM and PM peak hours.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

At the Davey Street/ Evans Street intersection, the Evans Street west approach operates at a LOS E in both the AM and PM peak hours. The Evans Street East approach operates at a LOS D in the AM peak hour and LOS E in the PM peak hour.

The long delays are therefore determined to be due to long green times being given to the Davey Street and Macquarie Street movements which carry very high traffic volumes.

It is worth noting that the Degree of Saturation (DoS) is below 1.0 for each intersection approach during the AM and PM peak hours. This shows that all vehicles queued at an approach during the red phase can clear the intersection during the green phase. For intersections with long signal cycle and phase times, the DoS often gives a better indication of intersection performance than the LOS.

#### 2.6.6 Model Calibration

Calibration and validation of the existing traffic model was undertaken for the AM and PM peak periods based on a comparison of the modelled queue lengths to queue lengths observed on site.

Table 4 shows the modelled and observed queue lengths at the three modelled intersections with the results discussed below.

Intersection	Approach	AM Peak		PM Peak		
Intersection	Approach	Modelled (m)	Observed (m)	Modelled (m)	Observed (m)	
Brooker Avenue/	Macquarie Street	178	80	134	80	
Tasman Highway/ Macquarie Street/	Tasman Highway	125	330	73	110	
Davey Street	Brooker Avenue	68	100	62	220	
Macquarie Street/	Macquarie Street	65	40	89	70	
Evans Street	Evans Street	2	5	4	5	
	Evans Street (East)	12	20	33	35	
Davey Street/ Evans Street	Davey Street	128	125	80	90	
	Evans Street (West)	30	40	17	30	

Table 4: Modelled and Observed Queue Lengths

#### Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street

At this intersection, the observed queue length is higher than the modelled queue length for the Tasman Highway and Brooker Avenue in both peak hours while the observed queue length is lower than the modelled queue length for Macquarie Street.

The discrepancy of queue lengths along Tasman Highway and Brooker Avenue are due to queues on Davey Street extending from intersections downstream of Evans Street. The modelled queue lengths on these approaches are the estimated queues resulting from the operation of the signals themselves.

The discrepancy for the queue length along Macquarie Street is likely due to the operation of the pedestrian signals. It was required to model the opposing pedestrian movement to the dual left turn lanes from Macquarie Street into Brooker Avenue in every signal cycle, however these pedestrian signals are not triggered very often. This was in order to model conservatively.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

#### Macquarie Street/ Evans Street and Davey Street/ Evans Street

Observed queue lengths and modelled queue lengths are similar for all approaches of both the Macquarie Street/ Evans Street intersection and Davey Street/ Evans Street intersection.

Based on the above, the base models are considered to adequately represent current conditions at all modelled intersections.

## 2.7 Public Transport

Metro Tasmania provide the main mode of public transport in Hobart. All Metro Tasmania bus routes between the CBD and the eastern shore and a number of bus routes between the CBD and the northern suburbs travel past the site. Buses on these routes operate every 15 minutes.

It is noted that although buses travel past the site regularly, there is currently only one Metro bus stop located along Macquarie Street, 350m from the site. Due to the lack of Metro bus stops in the vicinity of the site, Metro bus services to the site are currently limited.

## 2.8 Pedestrian and Cycling Infrastructure

The site has good pedestrian and cycling infrastructure with the Intercity Cycleway providing a pedestrian and cyclist route from the outskirts of Hobart CBD through Cornelian Bay, New Town, Moonah, Glenorchy and Rosetta to Claremont. From the termination point of the Intercity Cycleway at the Cenotaph, a shared path runs along the Tasman Highway and Davey Street footpath past the site, terminating at Hunter Street.

A shared (pedestrian and bicycle path) has also recently been constructed within the Macquarie Point precinct. The shared path starts at the Macquarie Point boundary near the Regatta grounds and travels south to Evans Street. Hobart City Council is planning to connect the shared path with the Intercity Cycleway to provide connectivity between the Macquarie Point precinct and the northern suburbs of Hobart.

In addition to the above, pedestrian paths are also located on all roads within the vicinity of the site. Pedestrian signals are present at all signalised intersections in the vicinity of the site and a pedestrian refuge island is provided along Evans Street.

## 2.9 Pedestrian and Cyclist Volumes

In order to determine the number of pedestrians travelling past the site, pitt&sherry undertook pedestrian counts at the site access located along the Tasman Highway. The pedestrian counts were undertaken during the AM and PM peak hours identified in Section 2.5.

The AM and PM peak our pedestrian volumes are shown in Table 5.

Table 5: Pedestrian and Cyclist Volumes

Direction of Travel	AM Peak		PM Peak		
Direction of Maver	Pedestrians	Cyclists	Pedestrians	Cyclists	
Northbound	11	11	34	49	
Southbound	32	61	3	8	

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# 3. Macquarie Point Development

## 3.1 Overview

Aligned with the MPDC 'Shared Vision" for the Macquarie Point site, a masterplan proposing a mixed-use development has been prepared. The mixed-use development is expected to include education and conference facilities, retail and office space, a restaurant, a hotel and 2-bedroom residential apartments. The overall development schedule for the Macquarie Point development is shown in Table 6. It is noted that there are 3 potential options for Building A. The location of each building is shown in Figure 16.

Site ID	Description	Unit	Area/ Number
	Option 1: 1 Bedroom Residential Apartments	Dwellings	90
A	Option 2: 2 Bedroom Residential Apartments	Dwellings	60
	Option 3: 1 Bedroom Residential Apartments, and	Dwelling	45
	Option 3: Retail	GFA	4,500
В	Public Open Space	m²	7,450
D	Conference	Visitors	2,050
	Public Open Space	m²	4,601
C	Education	GFA	6,800
С	Laboratories	GFA	3,400
	Office	GFA	6,800
	Public Open Space	m²	7,257
D	Education	GFA	11,970
D	Laboratories	GFA	2,835
	Office	GFA	4,770
	Public Open Space	m²	67
E.1	Restaurant	GFA	723
	Hotel	Rooms	80
	Public Open Space	m²	34
E.2	Restaurant	GFA	947
	Hotel	Rooms	109
E.3	Public Open Space	m²	1,141
E.3	Office	GFA	13,000
F	Public Open Space	m²	500

Table 6: Macquarie Point Development Schedule

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Site ID	Description	Unit	Area/ Number	
	Conference	Visitors	375	
	Retail	GFA	1,500	

It is noted that in the above table, the number of conference visitors has been calculated under the assumption that each visitor occupies a GFA of 4m<sup>2</sup>.

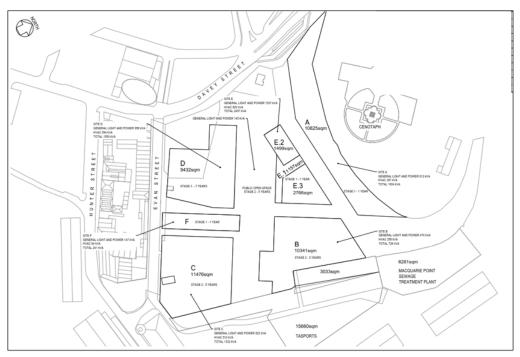


Figure 16: Macquarie Point Building Locations

## 3.2 Vehicle Access

#### 3.2.1 Vehicle Access Points

As part of the development, it is proposed to maintain both the northern and southern access points along the Tasman Highway. Minor modifications will be made to these access points including the addition of an auxiliary left turn lane at the northern access point and a realignment of the southern access point. These access points will primarily be used for ingress to the site from the Tasman Highway and Brooker Avenue.

The access point along Evans Street is proposed to be retained with minor relocation. This access will be used for ingress and egress to the site as shown in Appendix A.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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#### 3.2.2 New Road

As part of the development, it is proposed to build a new road towards the northern end of the site. This road will connect the site to the existing northern and southern access points along the Tasman Highway. The new road will terminate as a cul-de-sec approximately three-quarters of the way through the site. An offset circular turning head is provided at the termination point to allow vehicles to navigate the site and exit in a forward direction.

It is intended to ultimately extend this cul-de-sac to McVilly Drive at the Cenotaph in the future. When extended, the existing proposed two-way traffic flow in the cul-de-sac will then be changed to one way as the new road is changed from a cul-de-sac to a through connection.

The proposed new cul-de-sac road, at the northern and southern access points matches the existing formation. Within the site, the road is 7.4m wide with a single 3.7m wide lane in each direction. A 2.0m wide asphalt footpath is provided along the northern side of the new road which connects to the existing footpath along the Tasman Highway and continues for the entire length of the new road. On the southern side of the new road, a 3.0m wide asphalt footpath is provided. This footpath connects to the existing footpath along the Tasman Highway/ Davey Street and terminates at the site entrance. An at grade pedestrian crossing on a raised flat top speed hump (wombat crossing) has been provided across the new road at the site entrance to connect the southern footpath to the northern footpath.

A signalised pedestrian crossing is provided at the entrance to the service road from the Brooker avenue entrance. These signalised lights will have a red man symbol shown whilst the green phase for Brooker Avenue traffic is in progress to prevent pedestrians impeding vehicles exiting onto the service road.

All vehicles will be able to enter and exit the site through this new road during an initial development period based upon the traffic generated from the staged development until such time that the available capacity remaining at the Tasman Highway is saturated.

The existing exit arrangement at the Tasman Highway is via a left-out road which enters a "keep clear" zone on the Tasman Highway city-bound. The keep clear is designed to allow low traffic volumes, in the order of one vehicle per lane, to join queues back from the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection. This queue clears during each traffic signal cycle. As there are three lanes, this allows for three vehicles to exit the site during each traffic signal cycle.

As discussed in Section 2.6.3, the cycle time for the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection was recorded to be about 120 seconds during the AM and PM peak hours. This results in about 30 traffic cycles in an hour. Based on this, if one vehicle can queue at each lane in the keep clear area and the Tasman Highway has three lanes, then the maximum number of vehicles that could exit the site in a peak hour before the interconnecting road is required is about 90 vehicles an hour. After the point of saturation, it is expected that an interconnecting roadway will be provided via an underground carpark to direct future traffic through to Evans Street. This interconnecting roadway will provide a one-way unimpeded flow of traffic from the cul-de-sac to Evans Street. Figure 17 identifies the proposed interconnecting roadway. Entry to the car park will also be permitted at Evans Street. The interconnecting roadway will be a private road internal to the site running alongside the car park. The interconnecting roadway has not been assessed in this report as it is outside the scope of this TIA.

A provision of the interconnecting roadway is that traffic arrangements will be modified to allow for authorised vehicles only (buses, trucks and Building A visitors) to exit directly onto the Tasman Highway. This traffic arrangement will be retained until the cul-de-sac is ultimately extended to McVilly Drive.

The location of the proposed new road and interconnector road is shown in Figure 17 with plans showing the proposed new road included in Appendix A.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

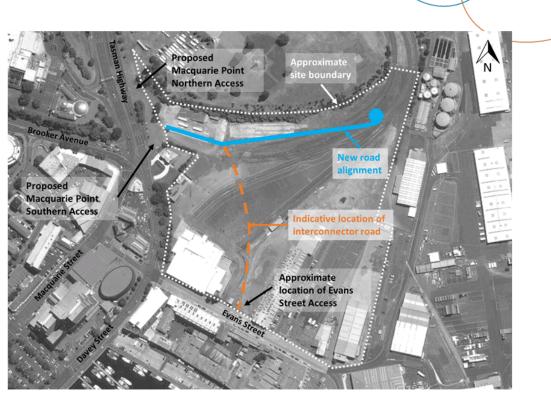


Figure 17: Proposed New Road and Access Location

3.2.3 Development Staging

There are 2 major stages of the development:

- 1. New road in temporary cul-de-sac arrangement and Building A completion in 2020.
- 2. Interconnector road to Evans Street and construction of other buildings completion in 2027.

## 3.3 Parking

While detailed plans for the development have not yet been prepared, it is expected that the development will provide a multi-storey underground car park with approximately 700 parking spaces to service the development. Entry to the car park will be from the new road and from Evans Street. Vehicles will only be able to exit the car park onto Evans Street.

Building A will have car parking located within the building due to its location north of the access road. Vehicles will enter and exit onto the new road. Prior to the new access road reaching the Cenotaph, Building A vehicles will be able to exit onto the Tasman Highway.

## 4. Development Application Scope

This Development Application is for Stage 1 on the development which is the new road in the cul-de-sac arrangement and Building A, to be completed in the year 2020.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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# 5. Transport Impact Assessment

## 5.1 Traffic Impacts

Although this Development Application is only for Stage 1, the traffic impact of the whole development has been considered to assist with future planning for transport movements to, from and through the Macquarie Point site.

#### 5.1.1 Traffic Generation

The traffic generation of the proposed development has been assessed based on the development schedule shown in Table 6. For the purpose of this assessment, it has been considered that the public open space would be an ancillary use and will not generate its own traffic movements.

Traffic Generation rates for the office and the restaurant land uses have been sought from the NSW Roads and Maritime Services *RMS Guide to Traffic Generating Developments 2002* (RMS Guide). The traffic generation rate for the residential dwellings has been sought from the *RMS Technical Direction TDT2013/04a* (RMS Technical Direction) which has updated traffic generation rates for some land uses.

The RMS Guide does not specify rates for laboratories, retail and hotels. As such, the *ITE Trip Generation Manual* from the United States of America has instead been used to determine the traffic generation rates.

While the ITE Guide does provide traffic generation rates for universities, it is understood that the education facility to be provided on site will be part of the University of Tasmania (UTAS) Hobart City Campus. As such, traffic generation rates for the education land use has been calculated from first principles based on available data from UTAS.

Calculations completed by pitt&sherry in 2017 for the proposed UTAS expansion at Inveresk estimated the following traffic generation rates:

- AM Peak
   0.25 vehicle movements per student; and
- PM Peak 0.19 vehicle movements per student.

UTAS undertake a Travel Behavior Survey (TBS) for student and staff every two years. This survey informs UTAS of the transport modes used by staff and students. The most recent survey was completed in 2017 with the report published on the UTAS website. The 2017 TBS shows that 24.2% of Hobart City Campus students drive a car (comprising both single and multi-occupant cars) compared with 42.8% of students at Inversek driving a car.

Based on the low driving rate to the Hobart City Campuses, the traffic generation of the education land use has been reduced proportionately to the following rates:

- AM Peak 0.14 vehicle movements per student; and
- PM Peak 0.11 vehicle movements per student.

As neither the RMS Guide nor the ITE Guide specify rates for conference facilities, traffic generation rates for the conference facility has been calculated based on an estimate of the expected travel patterns. The conference facility is estimated to have a capacity for approximately 2,000 people.

Large conferences are likely to attract people from other cities who are likely to stay in hotels within a walking distance of the conference facility. It is expected that people attending a conference are more likely to attend in a group and that there would be a higher proportion of people choosing to car share.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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As discussed, a shared path has recently been constructed through the site which is expected to contribute to an increased number of cycling trips to the site. The Macquarie Point site is expected to have its own public transport interchange which is expected to result in a high percentage of public transport trips. Based on these assumptions it has been assumed that, for the conference facility, 50% of people would come to the conference facility in a car with an average of 1.5 people per car. This results in a traffic generation rate of 0.33 vehicle movements per person. As a conservative estimate, all movements have been allocated to the AM and PM peak periods for an all-day conference.

Adopted traffic generation rates based on the various sources are shown in Table 7.

#### Table 7: Traffic Generation Rates for Proposed Development

Facility	Source	Unit	AM Peak Generation	PM Peak Generation
Conference	N/A	Per visitor	0.33	0.33
Education	UTAS data	Per student	0.14	0.11
Laboratories	ITE	Per 1000sqft	0.21	0.25
Retail	ITE	Per 1000sqft	0.5	2.06
Office	RMS	Per 100m <sup>2</sup>	0.6	0.8
Restaurant	RMS	Per 100m <sup>2</sup>	N/A	2.5
Residential Apartments	RMS	Per dwelling	0.27	0.6
Hotel	ITE	Per occupied room	0.31	0.37

Estimates of the peak hourly traffic volumes generated by the proposed development are shown in Table 8. It is noted that the amount of traffic shown for each stage is what is generated in that stage only and is not a cumulative total. For Building A, Option 3 has been used as it has the potential to generate the highest traffic volumes.

Table 8: Traffic	Generation	Volumes fo	or Proposed	Development

Facility	Source	2020 (Stage 1)		2027 (Development Completion)	
		AM Peak	PM Peak	AM Peak	PM Peak
Conference	N/A	-	-	800	800
Education	UTAS data	-	-	167	127
Laboratories	ITE	-	-	14	16
Retail	ITE	24	100	8	33
Office	RMS			147	197
Restaurant	RMS	-	-	-	42
Residential Apartments	RMS	9	7	0	0
Hotel	ITE	-	-	59	69

The traffic generation of the conference facility, shown in Table 8, considers that the facility operates at 100% capacity and all traffic generated by the facility arrives or departs during the AM and PM peak hours.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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Although the conference facility may operate at full capacity on occasion, it is unlikely that all traffic generated by the facility arrives or departs during the AM and PM peak hours.

It is therefore necessary to consider what may happen on a typical weekday. It has therefore been assumed that 10% of the conference facility traffic arrives or departs in each of the AM and PM peak hours. This allows for:

- A smaller event (approx. people) where all attendees arrive in the AM and PM peak hours; and
- A larger event where attendees arrive and depart over several hours throughout the day.

Based on the above, it is considered that there are two traffic generation scenarios to be tested:

- A typical weekday; and
- A worst-case scenario weekday (conference facility operates at 100% capacity and all traffic generated by the facility arrives or departs during the AM and PM peak hours).

The expected traffic generation for each of these scenarios is shown in Table 9. It is noted that the values for each stage are cumulative.

Table 9: Traffic Generation of Scenarios

Scenario	2020 (Stage 1)		2027 (Development Completion)		
Scenario	AM Peak	PM Peak	AM Peak	PM Peak	
Typical Weekday	34	107	506	642	
Worst-case	34	107	1,229	1,390	

#### 5.1.2 Removed Traffic Volumes

There is currently a 262-space public car park located toward the eastern end of the Macquarie Point site. As part of the Macquarie Point development, this car park will be removed. It was therefore necessary to remove the traffic generated by this car park from the road network prior to adding the traffic generation to the site. The traffic generated by the car park is summarised as follows:

- AM Peak Hour:
  - o 153 traffic movements generated
  - o 139 (91%) use Davey Street/ Evans Street
  - o 14 (9%) travel Hobart Waterfront
- PM Peak Hour:
  - o 82 traffic movements generated
  - o 74 (90%) use Davey Street/ Evans Street; and
  - o 8 (10%) travel from Hobart Waterfront.

#### 5.1.3 Directional Split of Traffic

The directional split of traffic (i.e. the ratio between inbound and outbound traffic movements) that has been adopted for the Macquarie Point site for the different options tested is as shown in Table 10.

Table 10: Directional Split

Facility	AM Peak		PM Peak	
Facility	In	Out	In	Out
Conference	80%	20%	20%	80%
Education	80%	20%	20%	80%
Laboratories	80%	20%	20%	80%
Retail	80%	20%	20%	80%
Office	80%	20%	20%	80%
Restaurant	N/A	N/A	80%	20%
Residential Apartments	30%	70%	70%	30%
Hotel	30%	70%	70%	30%

#### 5.1.4 Traffic Distribution and Assignment

The distribution of the traffic generated by the development has been estimated based on the location of the major traffic distribution roads around the site and information from the traffic count at the existing car park on the Macquarie Point site. The major roads influencing the direction of the traffic into the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection are the Brooker Highway, Tasman Highway and Southern Outlet. The Southern Outlet connects to the intersection via Macquarie Street and Davey Street.

The approximate volume of traffic on each of these roads on a typical weekday is summarised in Table 11.

Table 11: Traffic Volumes on Major Roads in Hobart

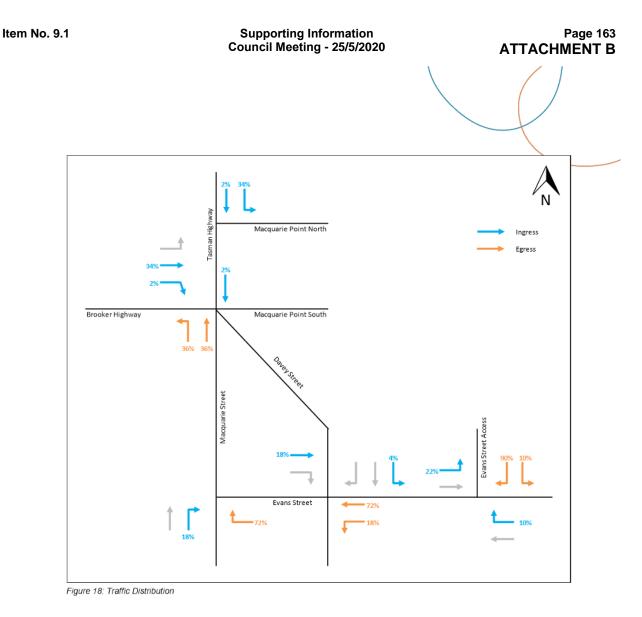
Highway	Approximate Traffic Volume (vehicles per day one way)	Source
Tasman Highway	20,000	2018 SCTAS data
Brooker Avenue	20,000	2018 SCATS data
Southern Outlet	10,000	Hobart Traffic Congestion Analysis Report 2016

Based on the above, it is considered suitable to allocate the following percentage to each access/ egress road:

- 36% use Tasman Highway
- 36% use Brooker Highway
- 18% use Southern Outlet (via Macquarie/ Davey Streets); and
- 10% travel from Hobart Waterfront.

The allocated routes within the traffic model are shown in Figure 18.

ref: HB18477H004 TIA 31P Rev 02/SV/mj



#### 5.1.5 Traffic Impact of Stage 1

In Stage 1 of the development there is no Evans Street access, so all traffic will enter and exit on the Tasman Highway and at the Tasman Highway/ Brooker Avenue/ Macquarie Street/ Davey Street intersection. The traffic generation associated with Stage 1 is low and would not be expected to have any sufficient impact to the operation of the adjacent road network.

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5.1.6 Traffic Impact of Full Development

#### Assumptions

As the design is to be assessed for up to 8 years into the future, the following assumptions have been made for the future traffic volumes:

- A growth rate of 1.5% compounding growth per year has been assumed for the study area based on available Department of State Growth traffic growth data for the Tasman Highway and Brooker Highway
- Apart from generated traffic increasing with the growth of the Macquarie Point Precinct, no additional growth has been assumed for Macquarie Point traffic volumes
- A 5% heavy vehicle proportion has been assumed for all movements based on observations of the existing traffic at the intersections; and
- Existing traffic signal timings have been used, with the exception of 10 seconds green time allocated to the Evans Street phase at the Davey Street/ Evans Street intersection during the PM peak hour and 10 seconds green time removed from the Davey Street phase. Existing observations showed that for cycles with higher queuing on Evans Street, there was extra green time allocated to Evans Street with minor impact to the Davey Street approach due to lower inbound volumes in the PM peak. It is expected the signals will have more phases operating with this timing after development of Macquarie Point.

#### Scenario 1 - Typical Weekday

The impact of the Macquarie Point development (2027) on each of the study intersections on a typical weekday has been assessed using SIDRA network modelling software. The anticipated operation of the study intersection after full development is summarised in Table 12. Detailed results of the SIDRA Network analysis including the network layout is included in Appendix C.

Intersection	Peak	Approach	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
		Macquarie Street	0.74	15	152	В
		Tasman Highway	0.88	25	245	С
	АМ					-
Brooker Avenue/ Tasman		Brooker Avenue	0.91	66	116	E
Highway/		All Movements	0.91	27	245	с
Macquarie Street/ Davey		Macquarie Street	0.85	22	219	С
Street	PM	Tasman Highway	0.53	20	89	С
		Brooker Avenue	0.82	50	127	D
		All Movements	0.85	26	220	с
	АМ	Macquarie Street	0.55	6	80	A
		Evans Street	0.41	13	6	А
Macquarie Street/ Evans		All Vehicles	0.55	6	80	Α
Street	PM	Macquarie Street	0.73	12	154	В
		Evans Street	0.61	21	28	С
		All Vehicles	0.73	13	154	в
	АМ	Evans Street (East)	0.55	56	33	Е
		Davey Street	0.89	12	246	В
		Evans Street (West)	0.82	66	42	E
Davey Street/		All Vehicles	0.89	17	246	в
Evans Street	РМ	Evans Street (East)	0.92	71	89	Е
		Davey Street	0.72	12	135	В
		Evans Street (West)	0.82	64	21	E
		All Vehicles	0.92	21	135	с

Table 12: Typical Weekday SIDRA Network Modelling Results – After Full Development

Based on the results presented above, all modelled intersections are expected to operate with acceptable delays levels of service overall.

At the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street intersection, the Brooker Avenue approach is expected to operate at a LOS E in the AM peak hour and LOS D in the PM peak hour on a typical weekday.

At the Davey Street/ Evans Street intersection, the Evans Street approaches are expected to operate at LOS E in both the AM and PM peak hours.

The long delays are therefore determined to be due to long green times being given to the Davey Street and Macquarie Street movements which carry very high traffic volumes.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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The Degree of Saturation (DoS) is below 1.0 for each intersection approach during the AM and PM peak hours. As such, the intersections modelled are expected to operate at an acceptable level on a typical weekday in 2027 after development of Stage 3 of Macquarie Point.

#### Scenario 2 – Worst-Case Weekday

The impact of the Macquarie Point development (2027) on each of the study intersections on a worst-case weekday has been assessed using SIDRA network modelling software. The anticipated operation of the study intersection after full development is summarised in Table 13. Detailed results of the SIDRA Network analysis including the network layout is included in Appendix D.

Intersection	Peak	Approach	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
	АМ	Macquarie Street	0.83	19	190	В
		Tasman Highway	0.93	46	329	D
Brooker Avenue/		Brooker Avenue	0.94	70	149	E
Tasman Highway/		All Movements	0.94	38	329	D
Macquarie Street/ Davey		Macquarie Street	0.89	28	267	С
Street	РМ	Tasman Highway	0.53	20	89	С
		Brooker Avenue	0.92	64	169	E
		All Movements	0.92	32	267	с
	АМ	Macquarie Street	0.62	6	98	А
		Evans Street	0.76	37	35	D
Macquarie Street/ Evans		All Vehicles	0.76	9	98	А
Street	PM	Macquarie Street	0.78	13	175	В
		Evans Street	0.37	22	14	С
		All Vehicles	0.78	13	175	в
	АМ	Evans Street (East)	1.05	131	104	F
		Davey Street	0.89	13	253	В
		Evans Street (West)	1.35	40	60	F
Davey Street/ Evans Street		All Vehicles	1.35	40	253	D
		Evans Street (East)	1.65	632	502	F
	РМ	Davey Street	0.69	11	123	В
		Evans Street (West)	1.35	198	60	F
		All Vehicles	1.65	151	502	F

Table 13: Worst-case Weekday SIDRA Network Modelling Results – After Full Development

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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Based on the results presented above, the Brooker Avenue/ Tasman Highway/ Macquarie Street/ Davey Street and Macquarie Street/ Evans Street intersections are expected to operate with acceptable delays levels of service overall.

The Davey Street/ Evans Street intersection is expected to operate at an unsatisfactory LOS overall with a DoS of more than 1.0 for the Evans Street approaches. This is due to there not being enough green time for the additional traffic movements expected to enter and exit if a capacity conference generates all its traffic during the AM and PM peak hours.

This type of event is unlikely to happen often. Should a large event such as this occur on the site, alternative transport options should be provided to ensure minimal impact to the road network.

## 5.2 Vehicle Access Suitability

As discussed, minor modifications are proposed at the northern and southern access points along the Tasman Highway. Modifications along the northern access point consists of the addition of an Auxiliary Left turn (AUL) lane into the site from the Tasman Highway while modifications at the southern access point includes a realignment of the road.

At the northern access point, the provision of the AUL lane has been assessed against the requirements set out in the *Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections.* The Austroads guide specifies that an urban AUL lane should have a minimum lane width of 3.0m and a deceleration length of 40m. As the proposed AUL lane has a width of 3.5m and a deceleration length greater than 40m, it meets the Austroads requirements.

At the southern access point, the realignment of the road matches the existing access width. The realignment of the road is primarily to provide visual cues to drivers regarding road priority and the road operating under give-way controls.

Swept paths undertaken on the design vehicle – a 19m articulated bus show that there needs to be some localised widening of the road undertaken across the wombat crossing (refer Figure 19) to reduce the area where a potential conflict between passing vehicles will occur. This will result in the widening of the wombat crossing.

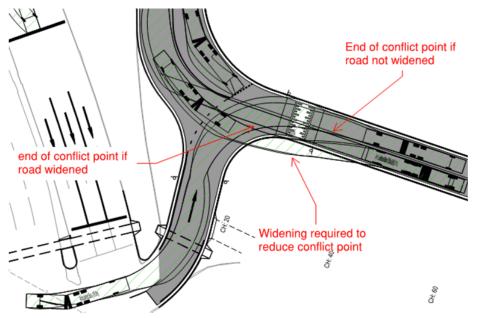


Figure 19: Widening required at exit of access road

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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## 5.3 New Road Layout

#### 5.3.1 Road Layout and Vehicle Access

The proposed new road to the site is required to comply with the *Local Government Association (LGAT) Standard Drawings*. The minimum LGAT road and reservation width requirements for a cul-de-sac in a commercial area is shown in Table 14.

Table 14: LGAT Road Requirements

Number of	Minimum Road	Minimum Reservation	Minimum Footpath Requirements
Tenements	Width	Width	
Lot size > 10,000m <sup>2</sup>	10.0m	18.0m	Footpath provision to suit commercial/ industrial development

Based on the above, the proposed road width of 7.4m does not meet the requirements shown in the LGAT drawings. The provision of the 2.0m wide footpath along the northern side of the road and the 3.0m wide footpath along the southern side of the road do however meet the requirements shown in the LGAT drawings.

It is noted that the 10.0m road width requirement specified in the LGAT drawings considers the provision of on-street parking along both sides of the road. For roads that do not provide parking on both sides of the road, the LGAT drawings show a minimum road width requirement of 6.9m.

As the proposed new road does not provide on-street parking along the road, it is considered to meet LGAT requirements for roads with no on-street parking.

The proposed road width of 7.4m has also been assessed against the requirements set out in the *Austroads Guide to Road Design Part 3: Geometric Design.* The Austroads guide specifies that a minimum traffic lane width of 3.5m is desirable in urban areas. As the proposed new road provides lane widths of 3.7m, it satisfies the Austroads requirement.

#### 5.3.2 Turning Head

The LGAT Standard Drawings provide the minimum layout and dimensions for an offset circular turning head as shown in Figure 20. The minimum requirements are for an 18m turning circle sufficient for an 8.8m rubbish truck

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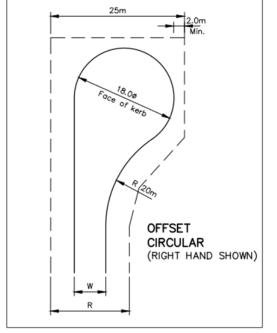


Figure 20: LGAT Layout and Dimensions for Circular and Offset Circular Turning Head

The turning head in the development is to be used by larger vehicles (up to a 19m articulated bus) and as such, the turning circle proposed for the development is a 32m turning circle. The 32m turning circle meets the requirements shown in the LGAT Drawings.

#### 5.3.3 Turning Path Assessment

As discussed, the proposed turning head in the development is to be used by vehicles up to a 19m articulated bus. A swept path assessment, shown in Appendix E, has been completed and shows that a 19m articulated bus can turn within the proposed turning head.

#### 5.3.4 Pedestrian Wombat Crossing

The wombat crossing has been reviewed against the requirements set out in the Australian Standard manual of Uniform Traffic Control Devices (AS1742.10-2009), the Austroads Guide to Traffic Management Part 8: Local Area Traffic Management and the VicRoads Supplement to Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings. The assessment undertaken is discussed in more detail below.

#### VicRoads Warrants

The VicRoads Supplement to Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings states that a zebra (or wombat) crossing may be appropriate under the following circumstances:

- Pedestrian volumes of 20 or more per hour
- Vehicle volumes of 200 or more per hour for the same hour; and
- Speed limit of 50km/h or less.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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Although the pedestrian volumes already meet the VicRoads warrants, the vehicle volume during typical weekday operation of the development does not meet the warrants.

It is noted that on a worst-case weekday where a full conference is operating, both the pedestrian volume and the vehicle volume warrants are met.

#### Austroads Pedestrian Crossing Facility Selection Tool

Both the Austroads Guide and the VicRoads Supplement recommend assessing a pedestrian crossing facility option for a given location using the Austroads online Pedestrian Crossing Facility Selection Tool. The tool provides a list of the appropriate type of pedestrian crossing based on walkability, safety and economic outcomes.

An assessment of the proposed crossing location has been undertaken using the Austroads Pedestrian Crossing Facility Selection Tool. Detailed results obtained from the tool are attached in Appendix F, while a summary of the crossing facilities identified as feasible facilities are provided below:

- Platform
- Kerb extensions
- Median refuge
- Kerb extensions with median refuge
- Wombat crossing (referred to as zebra with platform in Austroads tool)
- Wombat crossing with kerb extensions (referred to as zebra with platform and kerb extensions in Austroads tool)
- Pedestrian signals; and
- Pedestrian signals with kerb extensions.

The following reasons are provided why these alternative crossing facilities were not considered appropriate

- Platform Priority is to be given to pedestrians and cyclists on the shared path, a platform does not provide this
  and has potential right of way confusion associated as it looks like a wombat crossing
- Kerb extensions, median refuges or a combination thereof there is insufficient road width for two-way traffic and these items. They also do not provide priority for pedestrians/cyclists as per the design intent; and
- Pedestrian signals vehicle volumes at this location are low considering the relatively low pedestrian and vehicle volumes, pedestrian signals would be an expensive and inefficient way of providing a crossing.

A wombat crossing is considered the best possible solution for the following reasons:

- Right of way is clearly identified for all users
- The raised crossing provides a traffic calming measure reducing speed of vehicles entering and exiting; and
- Pedestrians and cyclists remain at the same level instead of using kerb ramps and gutter crossings, this reduces trip and fall hazards as well as elevating them above the road surface aiding in identification for vehicles.

With reference to the above, the proposed wombat crossing is considered a suitable pedestrian crossing for the given location.

An assessment of sight distance for the wombat crossing was undertaken by pitt&sherry on 5 December 2019. The diagram in Figure 21 shows the measured sight distance of 80m and 33m to the northern and southern access point. Images of the sight distance at these locations are shown in Figure 22 and Figure 23.

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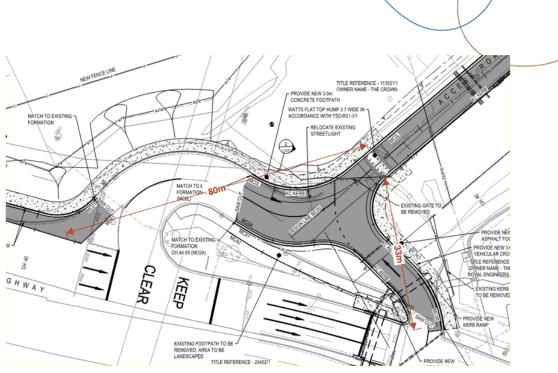


Figure 21: Diagram showing observed sight distances to wombat crossing





Figure 22: Sight distance to northern access. note fence will be removed

Figure 23: Sight distance to southern access. can see across intersection

Austroads state that vehicles approaching an intersection on the minor approach (or they are giving way to pedestrians) must be provided a minimum approach sight distance of 55m for a 50km/h road with a 2.0 second reaction time. This is considered conservative as vehicles would likely be travelling less than 50km/h due to the geometry of the approach to the wombat crossing. It is considered that the Austroads requirements for pedestrian sight distances are not applicable in this situation as the pedestrian has right of way.

It is noted that the approach from the southern Brooker Avenue approach was observed to be 33m to the intersection of the Brooker Avenue and the access road. In reality, vehicles can see the intersection from the stop line at the Tasman Highway / Brooker Avenue, this could not be measured safely on site so is assumed to be approximately 62m measured from an aerial image on the List as shown in Figure 24.

ref: HB18477H004 TIA 31P Rev 02/SV/mj

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It is considered that the sight distances to the wombat crossing comply with Austroads approach sight distance requirements.

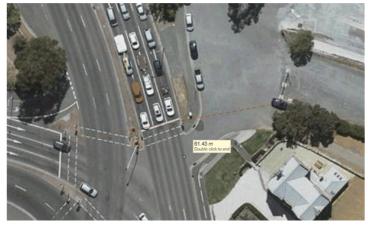


Figure 24: Approximate sight distance to wombat crossing from Brooker Avenue

#### 5.3.5 Signalised Pedestrian Crossing

The pedestrian crossing at the southern access entrance is provided to provide a crossing point for pedestrians and cyclists wanting to cross the Tasman Highway, as the existing shared path on the island will be removed. The crossing will be signalised with the phasing shown in Figure 25. The pedestrian signals will be synchronised such that pedestrians will be shown a red crossing symbol at the Macquarie Point crossing whilst vehicles on the Brooker Avenue are given a green light (phase B). This is to prevent pedestrians obstructing vehicles exiting the traffic flow from the Brooker Avenue into the access.

Pedestrians will be given a green light to cross the access during phase A where there is no opposing traffic. The pedestrians will then be required to wait at the island to cross the Tasman Highway during the next phase.

There is no impact on the operation of the intersection due to the introduction of this signalised pedestrian crossing.

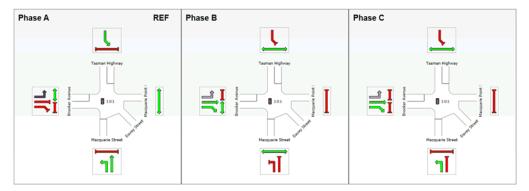


Figure 25: Pedestrian signals phasing at Macquarie point entrance

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## 5.4 Parking Provision Suitability

The *Sullivans Cove Planning Scheme* 1997 specifies minimum parking requirements developments. Parking requirements for a 1-bedroom residential dwelling is specified at a minimum of 1.1 spaces while parking requirements for non-residential uses are specified at a minimum of 3 spaces per 100m<sup>2</sup>.

As discussed in Section 3.3, Building A will have its own car park. Based on the development schedule for the development shown in Table 6 for the highest parking generating Option 3, Building A has 45 1-bedroom units and a non-residential floor area of 4,500 m<sup>2</sup>.

The remainder of the buildings have non-residential land uses units and a total traffic generating floor area of 81,345m<sup>2</sup>.

The minimum parking requirements for the proposed development under the *Sullivans Cove Planning Scheme* 1997 are shown in Table 15.

Use	Floor Area	Car Parking Rate	Parking Requirement
Building A			
Residential Apartments	45 units	1.1 spaces per unit	50
Retail	4,500m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	135
		Total	180
Remainder of Buildings			
Conference	9,700m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	146
Education	18,770m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	563
Laboratories	6,235m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	187
Retail	1,500m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	45
Office	24,570m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	737
Restaurant	1,670m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	50
Hotel	18,900m <sup>2</sup>	3 spaces per 100m <sup>2</sup>	567
		Total	2,441

Table 15: Parking Requirements

The car parking requirement of 2,731 parking spaces is considered high for this development based on the following:

- The parking requirement for the hotel use has been calculated to be 729 spaces or 4 spaces per room. This is significantly higher than the requirement specified in the *RMS Guide to Traffic Generating Developments (2002)* which specifies an indicative parking rate of 1 space per 4 bedrooms for a 3 or 4-star hotel
- Some of the uses would operate ancillary to each other, i.e. hotel patrons would visit the restaurant, retail use and conference centre
- People attending a conference are more likely to attend in a group and therefore there would be a higher
  proportion of people choosing to car share
- The restaurant use has a higher parking demand during the evening as specified in the RMS Guide to Traffic Generating Developments (2002). At evening times, there is a lower parking demand for other uses such as education, laboratories, retail and office

## Page 174 ATTACHMENT B

- The education facility on site will be part of the UTAS Hobart City Campus. The UTAS Travel Behavior Survey (TBS) completed in 2017 shows that only 24.2% of Hobart City Campus students drive a car
- The development is located approximately 300 metres from the Hobart Central Business zone which is exempt from minimum parking requirements
- The site is located within a close distance to regular bus services. Taxis are also readily available in the area due to the sites proximity to major hotels such as Hotel Grand Chancellor and the Henry Jones Art Hotel
- The development is expected to have its own public transport interchange resulting in a higher usage of public transport
- There is good pedestrian infrastructure in place on all streets surrounding the site as well as within the site; and
- The site is located within walking distance to many major attractions in Hobart including Salamanca, the waterfront and the Hobart CBD.

Based on the above, the following assumptions have been made:

- 50% of the conference centre users and retail visitors would be expected to be staying at the hotel on site or within walking distance, resulting in half the parking requirement
- 50% of the restaurant users would be expected to be using the facility during the evening when demand from
  other uses are lower allowing the sharing of parking spaces. It is also expected that a percentage of the
  restaurant users would be staying at the hotel on site or within walking distance This results in 50% of the parking
  requirement
- The education and laboratory facilities on site will be part of the UTAS Hobart City Campus and would require
  parking as identified in the UTAS TBS, resulting in 25% of the parking requirement
- Office workers will be encouraged to ride share or use other modes of transport, resulting in 20% of the parking
  requirement. This is in line with other offices within the Hobart Central Business zone which provide minimal or
  no parking; and
- Parking requirement for the hotel is as per the RMS Guide parking rate of 1 space per 4 bedrooms.

This results in the car parking requirements as shown in Table 16.

Table 16: Revised Parking Requirement

Use	Floor Area	Reduction	Parking Requirement			
Building A						
Residential Apartments	45 units	-	50			
Retail	4,500m <sup>2</sup>	50%	68			
		Total	118			
Remainder of Building						
Conference	9,700m <sup>2</sup>	50%	146			
Education	18,7700m <sup>2</sup>	75%	108			
Laboratories	6,235m <sup>2</sup>	75%	97			
Retail	1,500m <sup>2</sup>	50%	23			
Office	24,570m <sup>2</sup>	90%	140			
Restaurant	1,670m <sup>2</sup>	50%	25			

Use	Floor Area	Reduction	Parking Requirement	
Hotel	18,900m <sup>2</sup>	1 space per 4 rooms	47	-
	· ·	Total	584	-

Based on the above, a parking supply of 700 spaces is expected to be adequate for the development.

## 6. Conclusion

An assessment of the traffic impacts associated with the proposed new road has been undertaken in accordance with the Department of State Growth's *Framework for Undertaking Traffic Impact Assessments*. The analysis and discussions presented in this report can be summarised as follows:

- The traffic generation associated with Stage 1 is low and would not be expected to have any sufficient impact to the operation of the adjacent road network
- On a typical weekday in 2027 after the full development of Macquarie Point, the surrounding intersections are
  expected to operate at an acceptable level of service
- On a worst-case scenario weekday in 2027 where the conference centre is operating at the highest level and all traffic generated is during the AM and PM peak hours, there will be some detrimental impacts to the surrounding intersections and alternative traffic management arrangements may be required
- The existing exit at the "keep clear" to the Tasman Highway is considered suitable to accommodate 90 exiting vehicles per hour
- · The proposed auxiliary left turn lane into the site from the Tasman Highway meets Austroads requirements
- The proposed new road to access the site from the Tasman Highway complies with the Local Government Association (LGAT) Standard Drawing requirements for roads with no on-street parking
- · The lane widths proposed for the new road meets the Austroads lane width requirements for urban roads
- The proposed offset circular cul-de-sac turning head meets LGAT requirements and can be used by vehicles up to a 19m articulated bus
- The swept paths for a 19m articulated bus at the intersection of the new road and the existing access indicate
  that the road needs to be widened across the wombat crossing to allow two vehicles to safely pass each other
- The proposed pedestrian (wombat) crossing is identified as a suitable crossing by the Austroads Pedestrian
   Crossing Facility Selection Tool
- The proposed additional signalised pedestrian crossing will have no impact on the operation of the intersection; and
- The expected provision of 700 car parking spaces is below the *Sullivans Cove Planning Scheme* 1997
  requirements but is expected to be adequate for the development.

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# Appendix B

Existing SIDRA Network Traffic Modelling Results

# pitt&sherry

## LANE LEVEL OF SERVICE

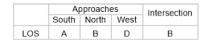
Lane Level of Service

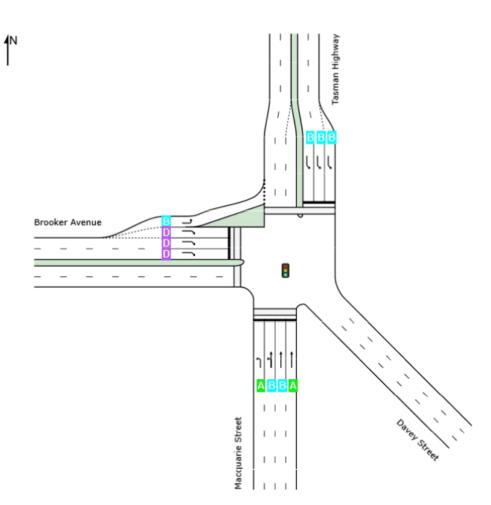
Site: 101 [Macquarie Street/ Brooker Avenue - Existing AM Peak]

♦♦ Network: N101 [Macquarie/ Davey/ Evans - Existing AM Peak]

07:45-08:45 Site Category: (None)

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)





Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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## LANE LEVEL OF SERVICE

Lane Level of Service

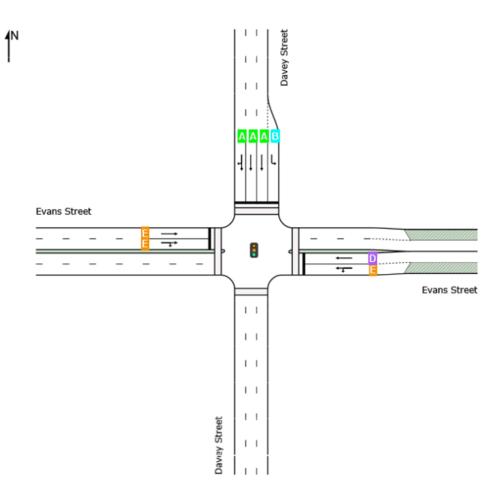
Site: 101 [Davey Street/ Evans Street - Existing AM Peak]

+ Network: N101 [Macquarie/ Davey/ Evans - Existing AM Peak]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Approaches			Intersection
	East	North	West	Intersection
LOS	D	Α	E	А



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Project: J:\HOB\2018\451-500\HB18477\14P - Calculations\Traffic Modelling\SIDRA\HB18477 Existing.sip8

Lane Level of Service

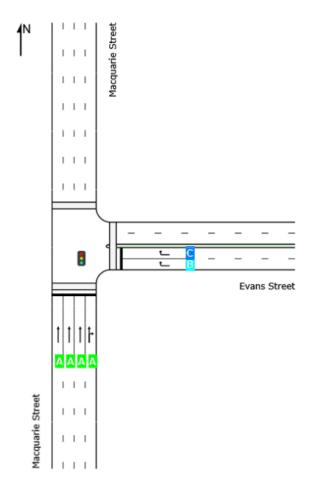
Site: 101 [Macquarie Street/ Evans Street - Existing AM Peak]

++ Network: N101 [Macquarie/ Davey/ Evans - Existing AM Peak]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection
	South	East	Intersection
LOS	A	В	А



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Site: 101	[Macquarie Street/ Brooker Avenue - Existing AM	💠 Network: N101 [Macquarie/
Peak1		Davey/ Evans - Existing AM
		Peak]

07:45-08:45 Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Move	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand Total veh/h	ΗV	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Qu	3ack of eue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Averag e Speed km/t
South	: Maco	quarie Stre	_											
1	L2	1125	5.0	1125	5.0	0.573	8.1	LOS A	12.9	94.5	0.32	0.62	0.32	47.8
2	T1	1359	5.0	1359	5.0	0.573	10.5	LOS B	13.3	97.4	0.55	0.52	0.55	43.5
Appro	bach	2484	5.0	2484	5.0	0.573	9.4	LOS A	13.3	97.4	0.44	0.57	0.44	45.3
North	: Tasm	an Highwa	ay											
7a	L1	2447	5.0	2447	5.0	0.662	16.7	LOS B	17.2	125.3	0.65	0.78	0.65	34.4
Appro	bach	2447	5.0	2447	5.0	0.662	16.7	LOS B	17.2	125.3	0.65	0.78	0.65	34.4
West	Brook	ker Avenue												
10	L2	36	5.0	36	5.0	0.052	10.2	LOS B	0.4	2.6	0.33	0.63	0.33	47.5
12a	R1	793	5.0	793	5.0	0.656	49.0	LOS D	9.3	67.7	0.95	0.82	0.95	23.5
Appro	bach	828	5.0	828	5.0	0.656	47.3	LOS D	9.3	67.7	0.92	0.82	0.92	24.5
All Ve	hicles	5760	5.0	5760	5.0	0.662	18.0	LOS B	17.2	125.3	0.60	0.69	0.60	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov	Description	Demand	Average		Average Back		Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	53	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Macquarie Street/ Evans Street - Existing AM Peak]

++ Network: N101 [Macquarie/ Davey/ Evans - Existing AM Peak]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	Turn	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	Aver. B	ack of	Prop.	Effective	Aver. A	Averag
ID						Satn	Delay	Service	Que		Queued	Stop	No.	ĕ
		Total	ΗV	Total	ΗV				Vehicles	Distance		Rate	Cycles S	Speed
		veh/h		veh/h		v/c	sec		veh					km/h
Sout	h: Maco	quarie Stre	eet											
2	T1	2648	10.0	2648	10.0	0.487	4.8	LOS A	8.6	65.2	0.38	0.36	0.38	44.1
3	R2	137	10.0	137	10.0	0.487	9.5	LOS A	8.5	64.4	0.38	0.42	0.38	43.3
Appr	oach	2785	10.0	2785	10.0	0.487	5.0	LOS A	8.6	65.2	0.38	0.37	0.38	44.1
East	Evans	Street												
6	R2	48	10.0	48	10.0	0.120	18.3	LOS B	0.3	2.1	0.27	0.59	0.27	11.0
Appr	oach	48	10.0	48	10.0	0.120	18.3	LOS B	0.3	2.1	0.27	0.59	0.27	11.0
AII V	ehicles	2834	10.0	2834	10.0	0.487	5.3	LOS A	8.6	65.2	0.38	0.37	0.38	43.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	strians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	32	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Davey Street/ Evans Street - Existing AM Peak]

+ Network: N101 [Macquarie/ Davey/ Evans - Existing AM Peak]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform												
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	28	10.0	28	10.0	0.216	56.8	LOS E	1.5	11.6	0.94	0.73	0.94	28.3
5	T1	67	10.0	67	10.0	0.216	52.0	LOS D	1.6	12.4	0.94	0.71	0.94	20.7
Appro	bach	96	10.0	96	10.0	0.216	53.4	LOS D	1.6	12.4	0.94	0.72	0.94	23.6
North	: Dave	y Street												
7	L2	792	10.0	792	10.0	0.596	10.2	LOS B	10.8	82.2	0.42	0.69	0.42	43.4
8	T1	3078	10.0	3078	10.0	0.733	5.8	LOS A	16.9	128.4	0.49	0.46	0.49	46.3
9	R2	16	10.0	16	10.0	0.733	10.5	LOS B	16.9	128.1	0.50	0.47	0.50	43.1
Appro	bach	3885	10.0	3885	10.0	0.733	6.7	LOS A	16.9	128.4	0.47	0.51	0.47	45.7
West	Evans	s Street												
11	T1	103	10.0	103	10.0	0.525	60.5	LOS E	3.8	29.2	1.00	0.78	1.00	20.2
12	R2	25	10.0	25	10.0	0.525	65.9	LOS E	3.8	29.2	1.00	0.79	1.00	19.6
Appro	bach	128	10.0	128	10.0	0.525	61.6	LOS E	3.8	29.2	1.00	0.78	1.00	20.1
All Ve	ehicles	4109	10.0	4109	10.0	0.733	9.5	LOS A	16.9	128.4	0.50	0.52	0.50	44.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	74	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Lane Level of Service

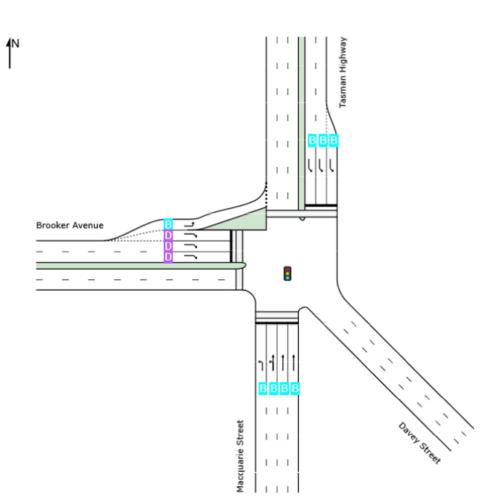
Site: 101 [Macquarie Street/ Brooker Avenue - Existing PM Peak]

中中 Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	A	proach	es	Intersection
	South	North	West	intersection
LOS	В	В	D	С



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane. Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Lane Level of Service

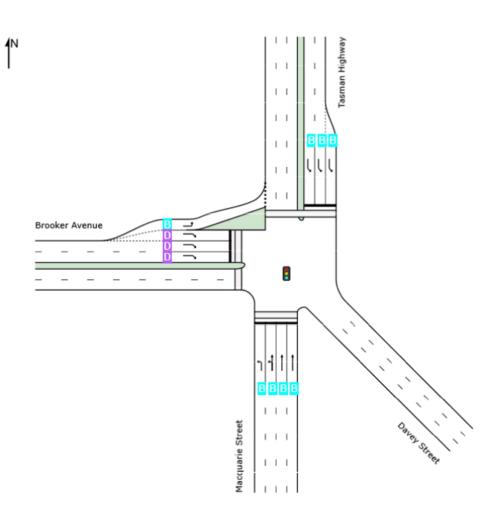
Site: 101 [Macquarie Street/ Brooker Avenue - Existing PM Peak]

+ Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	A	proach	Intersection	
	South	North	West	intersection
LOS	В	В	D	С



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane. Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Lane Level of Service

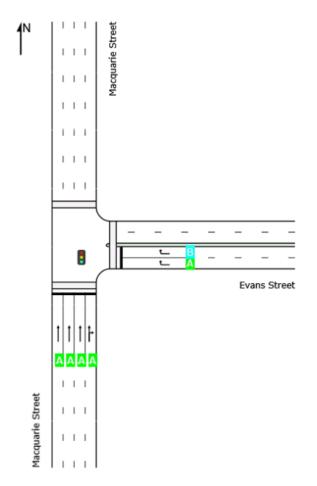
Site: 101 [Macquarie Street/ Evans Street - Existing PM Peak]

+ Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection
	South	East	Intersection
LOS	A	В	А



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Lane Level of Service

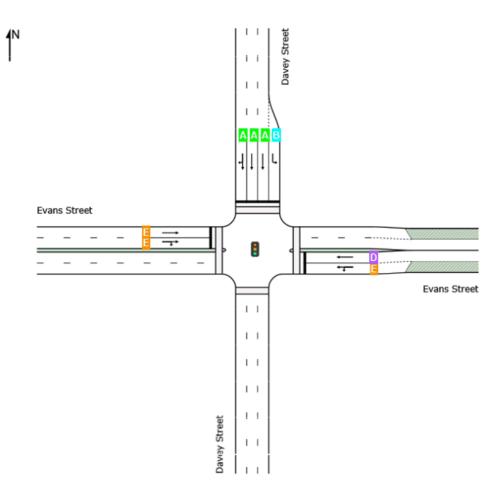
Site: 101 [Davey Street/ Evans Street - Existing PM Peak]

++ Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	A	oproache	es	Intersection
	East	North	West	Intersection
LOS	Е	Α	E	В



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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#### Supporting Information Council Meeting - 25/5/2020

# **MOVEMENT SUMMARY**

Site: 101 [Macquarie Street/ Brooker Avenue - Existing PM Peak]

Peak]

Peak]

Peak]

16:00-17:00

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand I				Deg. Satn	Average Delay	Level of Service	Qu	Back of eue	Prop. Queued	Effective Stop	No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		venicies	Distance m		Rate	Cycles	speed km/h
South	n: Maco	quarie Stre	et											
1	L2	1076	5.0	1076	5.0	0.700	12.2	LOS B	18.3	133.9	0.54	0.74	0.54	45.2
2	T1	2183	5.0	2183	5.0	0.700	19.0	LOS B	18.3	133.9	0.74	0.68	0.74	39.7
Appro	bach	3259	5.0	3259	5.0	0.700	16.8	LOS B	18.3	133.9	0.67	0.70	0.67	41.3
North	: Tasm	an Highwa	iy 🛛											
7a	L1	1471	5.0	1471	5.0	0.461	19.7	LOS B	10.0	73.1	0.62	0.75	0.62	32.5
Appro	bach	1471	5.0	1471	5.0	0.461	19.7	LOS B	10.0	73.1	0.62	0.75	0.62	32.5
West	Brook	ker Avenue												
10	L2	9	5.0	9	5.0	0.013	12.8	LOS B	0.1	0.8	0.39	0.62	0.39	46.0
12a	R1	871	5.0	871	5.0	0.494	39.1	LOS D	8.5	62.3	0.85	0.79	0.85	26.8
Appro	bach	880	5.0	880	5.0	0.494	38.8	LOS D	8.5	62.3	0.85	0.79	0.85	27.0
All Ve	hicles	5609	5.0	5609	5.0	0.700	21.0	LOS C	18.3	133.9	0.69	0.73	0.69	37.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov	Description	Demand	Average		Average Back		Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	53	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

#### Supporting Information Council Meeting - 25/5/2020

# **MOVEMENT SUMMARY**

Site: 101 [Macquarie Street/ Brooker Avenue - Existing PM Peak] Peak] Peak] Peak] Peak]

16:00-17:00

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand				Deg. Satn	Average Delay	Level of Service	Qu	Back of eue	Prop. Queued	Effective Stop	No.	Averag e
		Total veh/h		Total veh/h	HV %		sec		venicies	Distance m		Rate	Cycles	speed km/h
South	n: Maco	quarie Stre	et											
1	L2	1076	5.0	1076	5.0	0.700	12.2	LOS B	18.3	133.9	0.54	0.74	0.54	45.2
2	T1	2183	5.0	2183	5.0	0.700	19.0	LOS B	18.3	133.9	0.74	0.68	0.74	39.7
Appro	bach	3259	5.0	3259	5.0	0.700	16.8	LOS B	18.3	133.9	0.67	0.70	0.67	41.3
North	: Tasm	an Highwa	iy 🛛											
7a	L1	1471	5.0	1471	5.0	0.461	19.7	LOS B	10.0	73.1	0.62	0.75	0.62	32.5
Appro	bach	1471	5.0	1471	5.0	0.461	19.7	LOS B	10.0	73.1	0.62	0.75	0.62	32.5
West	Brook	ker Avenue												
10	L2	9	5.0	9	5.0	0.013	12.8	LOS B	0.1	0.8	0.39	0.62	0.39	46.0
12a	R1	871	5.0	871	5.0	0.494	39.1	LOS D	8.5	62.3	0.85	0.79	0.85	26.8
Appro	bach	880	5.0	880	5.0	0.494	38.8	LOS D	8.5	62.3	0.85	0.79	0.85	27.0
All Ve	hicles	5609	5.0	5609	5.0	0.700	21.0	LOS C	18.3	133.9	0.69	0.73	0.69	37.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov	Description	Demand	Average		Average Back		Prop.	Effective
ID	Description	Flow ped/h	Delay sec	Service	Pedestrian ped	Distance m	Queued	Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	53	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Macquarie Street/ Evans Street - Existing PM Peak]

++ Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Моу	Turn	Demand	Flows	Arrival	Flows	Deg.	Average	Level of	Aver. E	Back of	Prop.	Effective	Aver.	Averag
ID						Satn	Delay	Service	Que	eue	Queued	Stop	No.	e
		Total	ΗV	Total	ΗV				Vehicles	Distance		Rate	Cycles S	Speed
		veh/h		veh/h		v/c	sec		veh					km/h
South	n: Maco	quarie Stre	eet											
2	T1	3276	10.0	3276	10.0	0.584	5.5	LOS A	11.7	89.3	0.43	0.41	0.43	43.5
3	R2	71	10.0	71	10.0	0.584	10.1	LOS B	11.7	88.8	0.43	0.43	0.43	43.2
Appro	bach	3346	10.0	3346	10.0	0.584	5.6	LOS A	11.7	89.3	0.43	0.41	0.43	43.5
East:	Evans	Street												
6	R2	157	10.0	157	10.0	0.388	10.4	LOS B	0.5	3.7	0.16	0.58	0.16	16.6
Appro	bach	157	10.0	157	10.0	0.388	10.4	LOS B	0.5	3.7	0.16	0.58	0.16	16.6
All Ve	ehicles	3503	10.0	3503	10.0	0.584	5.8	LOS A	11.7	89.3	0.42	0.42	0.42	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	strians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	32	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Davey Street/ Evans Street - Existing PM Peak]

+ Network: N101 [Macquarie/ Davey/ Evans - Existing PM Peak]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform												
Mov ID	Turn	Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service	Aver. B Que		Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles I veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	73	10.0	73	10.0	0.545	59.6	LOS E	4.1	30.8	0.99	0.79	0.99	27.7
5	T1	168	10.0	168	10.0	0.545	54.8	LOS D	4.3	33.0	0.99	0.79	0.99	20.0
Appro	bach	241	10.0	241	10.0	0.545	56.2	LOS E	4.3	33.0	0.99	0.79	0.99	23.0
North	: Dave	y Street												
7	L2	626	10.0	626	10.0	0.471	10.5	LOS B	9.2	69.7	0.45	0.70	0.45	43.2
8	T1	2349	10.0	2349	10.0	0.548	5.2	LOS A	10.5	79.6	0.41	0.38	0.41	46.7
9	R2	7	10.0	7	10.0	0.548	9.9	LOS A	10.5	79.5	0.41	0.38	0.41	43.8
Appro	bach	2983	10.0	2983	10.0	0.548	6.3	LOS A	10.5	79.6	0.42	0.45	0.42	45.9
West	Evans	s Street												
11	T1	18	10.0	18	10.0	0.078	56.5	LOS E	0.6	4.8	1.00	0.71	1.00	21.2
12	R2	57	10.0	57	10.0	0.564	70.4	LOS E	2.2	16.5	1.00	0.77	1.02	18.2
Appro	bach	75	10.0	75	10.0	0.564	67.1	LOS E	2.2	16.5	1.00	0.75	1.02	18.8
All Ve	ehicles	3299	10.0	3299	10.0	0.564	11.4	LOS B	10.5	79.6	0.48	0.48	0.48	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	74	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

#### Supporting Information Council Meeting - 25/5/2020

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# Appendix C

Post Development SIDRA Network Traffic Modelling Results - Typical Weekday

# pitt&sherry

Lane Level of Service

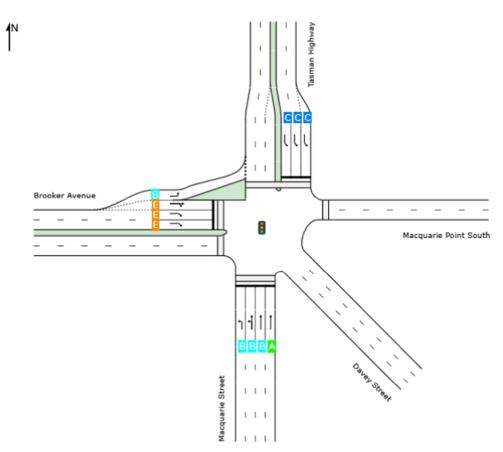
Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) AM Peak - Typical Day]

Petropy Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Typical Day]

07:45-08:45 Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)





Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3	申 Network: N101 [Macquarie/
(2027) AM Peak - Typical Day]	Davey/ Evans - Post Stage 3
()	(2027) AM Peak - Typical Day]

07:45-08:45

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %		sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
South	n: Maco	quarie Stre	et											
1	L2	1344	5.0	1344	5.0	0.742	17.9	LOS B	20.8	152.0	0.70	0.78	0.70	42.4
2	T1	1612	5.0	1612	5.0	0.742	12.6	LOS B	20.8	152.0	0.64	0.61	0.64	42.4
Appro	bach	2956	5.0	2956	5.0	0.742	15.0	LOS B	20.8	152.0	0.67	0.69	0.67	42.4
North	: Tasm	an Highwa	ay											
7a	L1	2753	5.0	2753	5.0	0.879	25.4	LOS C	33.6	245.2	0.73	0.85	0.81	29.6
Appro	bach	2753	5.0	2753	5.0	0.879	25.4	LOS C	33.6	245.2	0.73	0.85	0.81	29.6
West	Brook	er Avenue												
10	L2	41	5.0	41	5.0	0.071	14.9	LOS B	0.6	4.3	0.46	0.66	0.46	44.8
11	T1	127	5.0	127	5.0	0.910	64.6	LOS E	11.8	86.4	0.98	1.06	1.35	28.7
12a	R1	860	5.0	860	5.0	0.910	68.9	LOS E	15.9	115.8	0.99	1.05	1.33	18.9
Appro	bach	1028	5.0	1028	5.0	0.910	66.2	LOS E	15.9	115.8	0.97	1.04	1.30	21.2
All Ve	hicles	6737	5.0	6737	5.0	0.910	27.1	LOS C	33.6	245.2	0.74	0.81	0.82	34.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ment Performance - Ped	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	105	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Davey Street/ Evans Street - Post Stage 3 AM Peak - Typical Day]

+ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Typical Day]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform												
Mov ID	Turn	Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %		sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	61	5.0	61	5.0	0.549	59.5	LOS E	4.3	31.3	0.99	0.79	0.99	27.9
5	T1	192	5.0	192	5.0	0.549	54.8	LOS D	4.5	32.9	0.99	0.79	0.99	20.1
Appr	oach	253	5.0	253	5.0	0.549	55.9	LOS E	4.5	32.9	0.99	0.79	0.99	22.5
North	i: Dave	y Street												
7	L2	814	5.0	814	5.0	0.592	10.9	LOS B	12.2	89.2	0.46	0.71	0.46	43.1
8	T1	3519	5.0	3519	5.0	0.885	12.6	LOS B	33.7	246.1	0.68	0.67	0.72	42.7
9	R2	18	5.0	18	5.0	0.885	15.5	LOS B	32.9	240.3	0.75	0.73	0.77	38.6
Appr	oach	4351	5.0	4351	5.0	0.885	12.3	LOS B	33.7	246.1	0.64	0.68	0.67	42.7
West	Evans	s Street												
11	T1	159	5.0	159	5.0	0.824	65.1	LOS E	5.7	41.7	1.00	0.85	1.11	19.3
12	R2	28	5.0	28	5.0	0.824	71.9	LOS E	5.7	41.7	1.00	0.89	1.14	18.6
Appr	oach	187	5.0	187	5.0	0.824	66.2	LOS E	5.7	41.7	1.00	0.86	1.11	19.2
All Ve	ehicles	4791	5.0	4791	5.0	0.885	16.7	LOS B	33.7	246.1	0.67	0.69	0.70	40.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	74	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

#### **Supporting Information** Council Meeting - 25/5/2020

# LANE LEVEL OF SERVICE

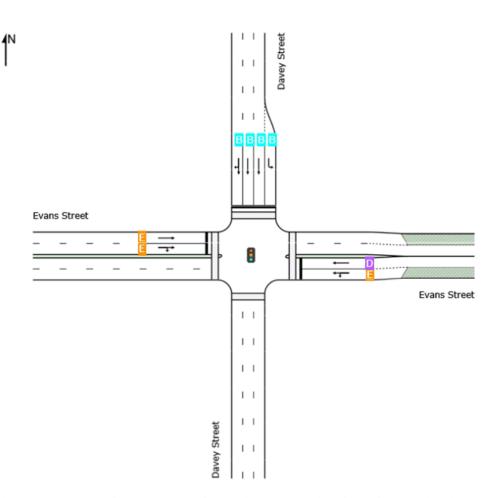
Lane Level of Service

Site: 101 [Davey Street/ Evans Street - Post Stage 3 AM Peak - Typical Day] 08:00-09:00

中中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Typical Day]

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

ĺ		A	oproache	es	Intersection	
		East	North	West	Intersection	
	LOS	Е	В	E	В	



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Organisation: PITT & SHERRY CONSULTING ENGINEERS | Processed: Friday, 10 May 2019 9:44:44 AM Project: J:\HOB\2018\451-500\HB18477\14P - Calculations\Traffic Modelling\SIDRA\Modelling Report 2\HB18477 Post Stage 3 - Typical Day.sip8

#### Supporting Information Council Meeting - 25/5/2020

#### MOVEMENT SUMMARY

Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 AM 💠 Network: N101 [Macquarie/ Peak - Typical Day] Davey/ Evans - Post Stage 3 (2027) AM Peak - Typical Day]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	Turn	Demand I	Flows	Arrival	Flows	Deq.	Average	Level of	Aver. Ba	ack of	Prop.	Effective	Aver. /	Averag
ID						Satn	Delay	Service	Que	ue	Queued	Stop	No.	e
		Total	ΗV	Total	ΗV				Vehicles [	Distance		Rate	Cycles S	speed
		veh/h		veh/h					veh					ˈkm/h
Sout	h: Maco	quarie Stre	et											
2	T1	3028	5.0	3028	5.0	0.554	5.2	LOS A	11.0	80.3	0.42	0.40	0.42	43.6
3	R2	197	5.0	197	5.0	0.554	9.9	LOS A	10.3	75.3	0.42	0.47	0.42	42.6
Appr	oach	3225	5.0	3225	5.0	0.554	5.5	LOS A	11.0	80.3	0.42	0.40	0.42	43.5
East	Evans	Street												
6	R2	171	5.0	171	5.0	0.408	12.9	LOS B	0.8	6.0	0.22	0.60	0.22	14.3
Appr	oach	171	5.0	171	5.0	0.408	12.9	LOS B	0.8	6.0	0.22	0.60	0.22	14.3
AII V	ehicles	3396	5.0	3396	5.0	0.554	5.9	LOS A	11.0	80.3	0.41	0.41	0.41	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	strians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	32	54.2	LOS E			0.95	0.95

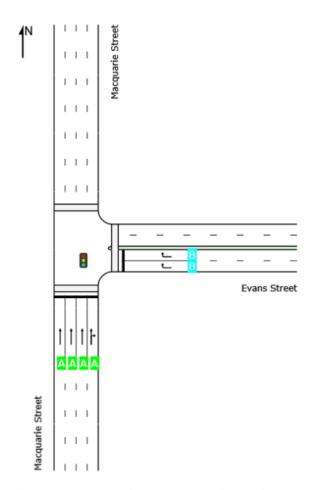
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Lane Level of Service

++ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 AM (2027) AM Peak - Typical Day] Peak - Typical Day] 08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection
	South	East	Intersection
LOS	A	В	A



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Organisation: PITT & SHERRY CONSULTING ENGINEERS | Processed: Friday, 10 May 2019 9:44:44 AM Project: J:\HOB\2018\451-500\HB18477\14P - Calculations\Traffic Modelling\SIDRA\Modelling Report 2\HB18477 Post Stage 3 - Typical Day.sip8

Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3	💠 Network: N101 [Macquarie/
(2027) PM Peak - Typical Day]	Davey/ Evans - Post Stage 3
()	(2027) PM Peak - Typical Day]

16:00-17:00

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %				Vehicles veh	Distance m		Rate	Cycles	Speed km/t
South	n: Maco	quarie Stre	eet											
1	L2	1348	5.0	1348	5.0	0.852	16.6	LOS B	30.1	219.8	0.79	0.86	0.80	42.9
2	T1	2615	5.0	2615	5.0	0.852	25.1	LOS C	28.1	204.9	0.88	0.85	0.91	37.2
Appro	bach	3963	5.0	3963	5.0	0.852	22.2	LOS C	30.1	219.8	0.85	0.85	0.88	39.0
North	: Tasm	an Highwa	ay											
7a	L1	1685	5.0	1685	5.0	0.529	20.1	LOS C	12.1	88.5	0.66	0.75	0.66	32.4
Appro	bach	1685	5.0	1685	5.0	0.529	20.1	LOS C	12.1	88.5	0.66	0.75	0.66	32.4
West	Brook	er Avenue	e											
10	L2	11	5.0	11	5.0	0.016	19.7	LOS B	0.2	1.3	0.52	0.64	0.52	42.4
11	T1	92	5.0	92	5.0	0.821	59.6	LOS E	7.9	57.4	1.00	0.95	1.21	29.9
12a	R1	999	5.0	999	5.0	0.821	49.9	LOS D	17.4	126.8	0.96	0.92	1.07	23.3
Appro	bach	1101	5.0	1101	5.0	0.821	50.4	LOS D	17.4	126.8	0.96	0.92	1.08	24.2
All Ve	hicles	6749	5.0	6749	5.0	0.852	26.3	LOS C	30.1	219.8	0.82	0.84	0.85	35.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay. Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	105	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [Davey Street/ Evans Street - Post Stage 3 PM Peak - Typical Day]

+ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Typical Day]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform						Louisland	A	2		<b>-</b> <i>Mh</i> i		
Mov ID	Turn	Demand				Deg. Satn	Average Delay	Level of Service	Qu	Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h	HV %	Total veh/h	HV %		sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	142	5.0	142	5.0	0.923	74.3	LOS E	12.0	87.7	1.00	1.11	1.41	25.1
5	T1	429	5.0	429	5.0	0.923	69.3	LOS E	12.2	89.0	1.00	1.13	1.41	17.3
Appr	bach	572	5.0	572	5.0	0.923	70.5	LOS E	12.2	89.0	1.00	1.12	1.41	19.7
North	: Dave	y Street												
7	L2	723	5.0	723	5.0	0.590	14.5	LOS B	12.8	93.5	0.55	0.74	0.55	41.4
8	T1	2686	5.0	2686	5.0	0.715	10.7	LOS B	18.5	135.3	0.58	0.54	0.58	43.6
9	R2	8	5.0	8	5.0	0.715	16.0	LOS B	18.5	135.3	0.61	0.57	0.61	38.2
Appr	bach	3418	5.0	3418	5.0	0.715	11.5	LOS B	18.5	135.3	0.58	0.58	0.58	43.1
West	Evans	s Street												
11	T1	68	5.0	68	5.0	0.824	53.8	LOS D	2.8	20.7	1.00	0.78	1.02	21.7
12	R2	65	5.0	65	5.0	0.824	75.3	LOS E	2.8	20.7	1.00	0.87	1.23	17.5
Appr	bach	134	5.0	134	5.0	0.824	64.3	LOS E	2.8	20.7	1.00	0.82	1.12	19.4
All Ve	ehicles	4123	5.0	4123	5.0	0.923	21.4	LOS C	18.5	135.3	0.65	0.67	0.71	38.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	74	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

#### **Supporting Information** Council Meeting - 25/5/2020

# LANE LEVEL OF SERVICE

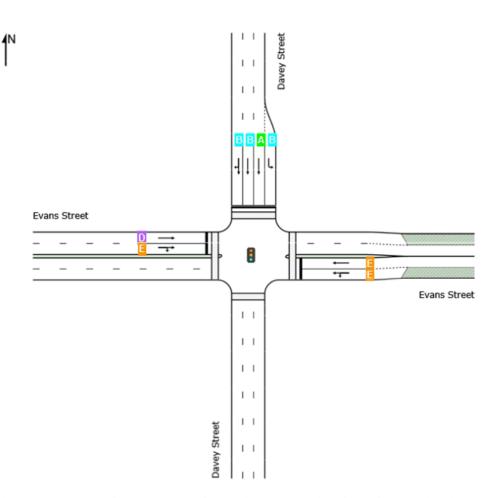
Lane Level of Service

Site: 101 [Davey Street/ Evans Street - Post Stage 3 PM Peak - Typical Day] 16:00-17:00

¢¢ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Typical Day]

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	A	pproache	es	Intersection	
	East	North	West	Intersection	
LOS	Е	В	E	С	



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Organisation: PITT & SHERRY CONSULTING ENGINEERS | Processed: Friday, 10 May 2019 9:44:51 AM Project: J:\HOB\2018\451-500\HB18477\14P - Calculations\Traffic Modelling\SIDRA\Modelling Report 2\HB18477 Post Stage 3 - Typical Day.sip8

Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 PM 💠 Network: N101 [Macquarie/ Peak - Typical Day] Davey/ Evans - Post Stage 3 (2027) PM Peak - Typical Day]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov		Demand	Flows	Arrival	Flows	Deg.	Average	Level of	Aver. I	Back of	Prop.	Effective	Aver.	Averag
ID						Satn	Delay	Service		eue	Queued	Stop	No.	
		Total	ΗV	Total	ΗV				Vehicles	Distance		Rate	Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South	h: Maco	quarie Stre	et											
2	T1	3745	5.0	3745	5.0	0.734	11.7	LOS B	21.1	153.9	0.67	0.63	0.67	37.9
3	R2	128	5.0	128	5.0	0.734	16.3	LOS B	20.9	152.7	0.67	0.65	0.67	37.5
Appro	oach	3874	5.0	3874	5.0	0.734	11.9	LOS B	21.1	153.9	0.67	0.63	0.67	37.9
East:	Evans	Street												
6	R2	416	5.0	416	5.0	0.605	21.2	LOS C	3.8	28.0	0.53	0.70	0.53	9.8
Appro	oach	416	5.0	416	5.0	0.605	21.2	LOS C	3.8	28.0	0.53	0.70	0.53	9.8
All Ve	ehicles	4289	5.0	4289	5.0	0.734	12.8	LOS B	21.1	153.9	0.66	0.64	0.66	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians											
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate			
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95			
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95			
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95			
All Pedestrians		32	54.2	LOS E			0.95	0.95			

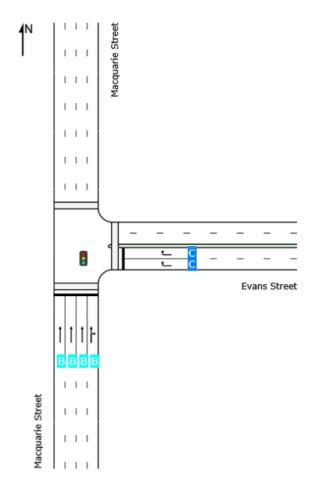
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Lane Level of Service

中中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 PM (2027) PM Peak - Typical Day] Peak - Typical Day] 16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection		
	South	East			
LOS	В	С	В		



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Lane Level of Service

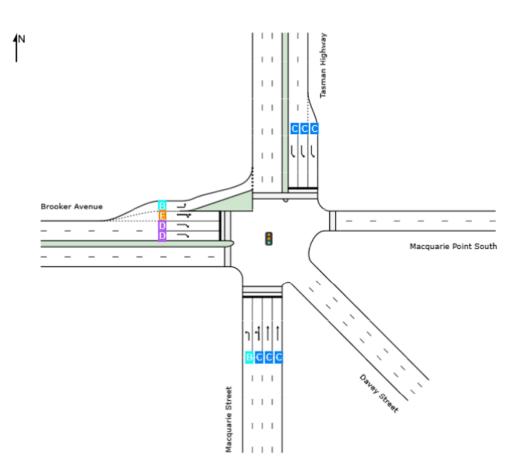
Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) PM Peak - Typical Day]

Physical Structure (Macquarie) Davey/ Evans - Post Stage 3 (2027) PM Peak - Typical Day]

16:00-17:00 Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)





Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

#### Supporting Information Council Meeting - 25/5/2020

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# Appendix D

Post Development SIDRA Network Traffic Modelling Results – Worst-Case Weekday

# pitt&sherry

Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) AM Peak - Worst-case] \$\$\vee\$ Ntotal [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Worst-case]

07:45-08:45

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID		Demand I	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Avera
		Total veh/h		Total veh/h	HV %				Vehicles veh	Distance m		Rate	Cycles	Speed km/l
South: Macquarie Street														
1	L2	1426	5.0	1418	5.0	0.830	22.5	LOS C	26.0	189.9	0.84	0.85	0.84	40.3
2	T1	1694	5.0	1684	5.0	0.830	15.8	LOS B	26.0	189.9	0.74	0.70	0.74	40.9
Appro	bach	3120	5.0	<mark>3103</mark> <sup>№</sup>	<sup>1</sup> 5.0	0.830	18.9	LOS B	26.0	189.9	0.78	0.77	0.78	40.6
North	: Tasm	an Highwa	y											
7a	L1	2762	5.0	2762	5.0	0.939	46.1	LOS D	45.1	329.2	0.83	0.97	1.05	22.2
Appro	bach	2762	5.0	2762	5.0	0.939	46.1	LOS D	45.1	329.2	0.83	0.97	1.05	22.2
West	Brook	er Avenue												
10	L2	41	5.0	41	5.0	0.067	18.8	LOS B	0.7	5.2	0.53	0.68	0.53	42.8
11	T1	309	5.0	309	5.0	0.936	68.7	LOS E	15.4	112.7	0.97	1.11	1.38	28.2
12a	R1	869	5.0	869	5.0	0.936	72.9	LOS E	20.4	149.2	0.99	1.08	1.36	18.1
Appro	bach	1220	5.0	1220	5.0	0.936	70.0	LOS E	20.4	149.2	0.97	1.08	1.34	21.8
All Ve	hicles	7102	5.0	<mark>7085</mark> N	<sup>1</sup> 5.0	0.939	38.3	LOS D	45.1	329.2	0.83	0.90	0.98	30.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements. SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians										
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate		
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95		
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95		
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95		
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95		
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95		
All Pedestrians		105	54.2	LOS E			0.95	0.95		

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

### LANE LEVEL OF SERVICE

Lane Level of Service

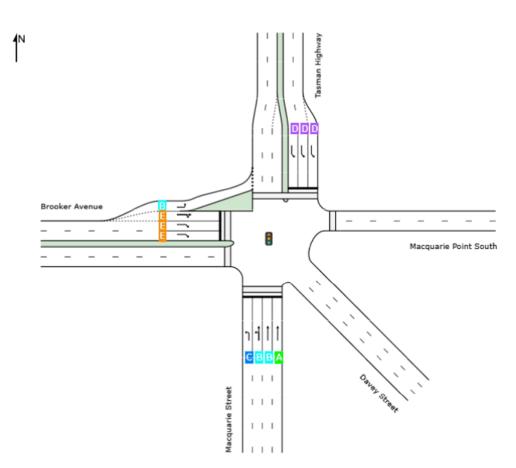
Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) AM Peak - Worst-case]

中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Worst-case]

07:45-08:45 Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

	A	oproache	es	Intersection		
	South	North	West	intersection		
LOS	В	D	E	D		



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: PITT & SHERRY CONSULTING ENGINEERS | Processed: Friday, 10 May 2019 10:22:33 AM Project: J:\HOB\2018\451-500\HB18477\14P - Calculations\Traffic Modelling\SIDRA\Modelling Report 2\HB18477 Post Stage 3 - Capacity Conference.sip8

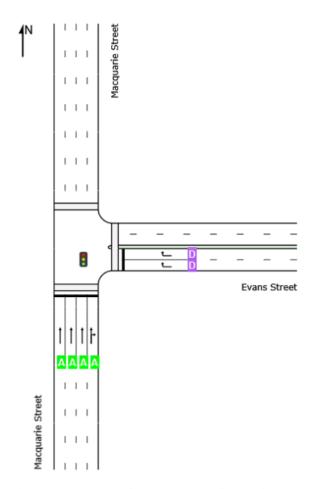
### LANE LEVEL OF SERVICE

Lane Level of Service

中中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 AM (2027) AM Peak - Worst-case] Peak - Worst-case] 08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection
	South	East	Intersection
LOS	Α	D	А



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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### MOVEMENT SUMMARY

Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 AM 💠 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Peak - Worst-case] (2027) AM Peak - Worst-case]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov		Demand I	Flows	Arrival	Flows	Deg.	Average	Level of	Aver. B	ack of	Prop.	Effective	Aver. A	Averag
ID						Satn	Delay	Service	Que		Queued	Stop		
		Total	ΗV	Total	ΗV				Vehicles	Distance		Rate	Cycles S	Speed
		veh/h	%	veh/h	%	V/C	sec		veh	m				km/t
Sout	h: Maco	quarie Stre	et											
2	T1	3028	5.0	3028	5.0	0.615	5.7	LOS A	13.4	97.5	0.46	0.44	0.46	43.1
3	R2	293	5.0	293	5.0	0.615	10.4	LOS B	8.8	64.0	0.45	0.57	0.45	41.1
Appr	oach	3321	5.0	3321	5.0	0.615	6.1	LOS A	13.4	97.5	0.46	0.45	0.46	42.9
East:	Evans	Street												
6	R2	334	5.0	316	5.0	0.755	36.9	LOS D	4.8	35.0	0.84	0.78	0.88	6.1
Appr	oach	334	5.0	<mark>316</mark> <sup>N1</sup>	5.0	0.755	36.9	LOS D	4.8	35.0	0.84	0.78	0.88	6.1
All Ve	ehicles	3655	5.0	3637 <sup>N1</sup>	5.0	0.755	8.8	LOS A	13.4	97.5	0.49	0.48	0.49	39.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement. Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	32	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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### MOVEMENT SUMMARY

Site: 101 [Davey Street/ Evans Street - Post Stage 3 AM Peak - Worst-case]

+ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Worst-case]

08:00-09:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform												
Mov ID	Turn	Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h	HV %	Total veh/h	HV %		sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	102	5.0	102	5.0	1.051	134.8	LOS F	13.9	101.6	1.00	1.43	1.94	17.5
5	T1	377	5.0	377	5.0	1.051	129.9	LOS F	14.2	103.5	1.00	1.43	1.94	10.9
Appro	bach	479	5.0	479	5.0	1.051	131.0	LOS F	14.2	103.5	1.00	1.43	1.94	12.5
North	: Dave	y Street												
7	L2	833	5.0	833	5.0	0.606	11.0	LOS B	12.8	93.1	0.47	0.72	0.47	43.0
8	T1	3519	5.0	3519	5.0	0.888	13.5	LOS B	34.6	252.5	0.70	0.69	0.73	42.2
9	R2	18	5.0	18	5.0	0.888	16.8	LOS B	34.6	252.4	0.78	0.76	0.80	37.6
Appro	bach	4369	5.0	4369	5.0	0.888	13.1	LOS B	34.6	252.5	0.65	0.70	0.69	42.3
West	Evans	s Street												
11	T1	255	5.0	255	5.0	1.347	289.8	LOS F	8.2	60.0	1.00	1.67	2.56	6.0
12	R2	28	5.0	28	5.0	1.347	372.4	LOS F	8.2	60.0	1.00	1.98	3.09	4.8
Appro	bach	283	5.0	283	5.0	1.347	298.1	LOS F	8.2	60.0	1.00	1.70	2.61	5.9
All Ve	ehicles	5132	5.0	5132	5.0	1.347	39.8	LOS D	34.6	252.5	0.71	0.82	0.91	31.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	lovement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate		
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95		
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95		
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95		
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95		
All Pe	destrians	74	54.2	LOS E			0.95	0.95		

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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### LANE LEVEL OF SERVICE

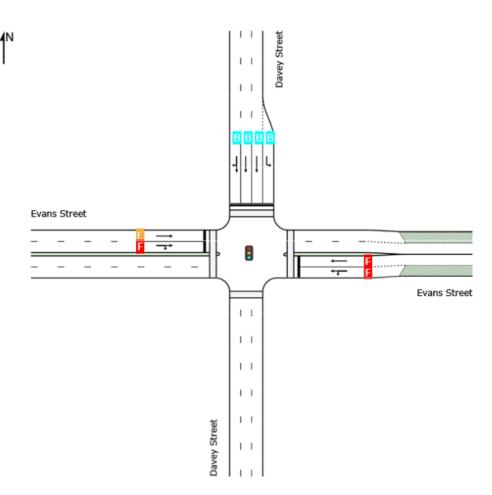
Lane Level of Service

Site: 101 [Davey Street/ Evans Street - Post Stage 3 AM Peak - Worst-case] 08:00-09:00 中年 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) AM Peak - Worst-case]

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Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	A	oproache	es	Intersection
	East	North	West	Intersection
LOS	F	В	F	D



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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### **MOVEMENT SUMMARY**

Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) PM Peak - Worst-case] \$\$ vert work: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Worst-case]

16:00-17:00

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID		Demand				Deg. Satn	Average Delay	Level of Service	Qu	Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %				Vehicles veh	Distance m		Rate	Cycles	Speed km/h
South	n: Maco	quarie Stre	eet											
1	L2	1513	5.0	1454	5.0	0.887	22.3	LOS C	36.5	266.6	0.86	0.91	0.90	40.3
2	T1	2778	5.0	2671	5.0	0.887	31.1	LOS C	33.3	243.4	0.94	0.94	1.02	35.1
Appro	bach	4291	5.0	<mark>4125</mark> <sup>№</sup>	5.0	0.887	28.0	LOS C	36.5	266.6	0.91	0.92	0.98	36.7
North	: Tasm	an Highwa	ay											
7a	L1	1691	5.0	1691	5.0	0.531	20.1	LOS C	12.2	88.9	0.66	0.75	0.66	32.4
Appro	bach	1691	5.0	1691	5.0	0.531	20.1	LOS C	12.2	88.9	0.66	0.75	0.66	32.4
West	Brook	ker Avenue	•											
10	L2	11	5.0	11	5.0	0.016	22.9	LOS C	0.2	1.5	0.57	0.64	0.57	40.8
11	T1	196	5.0	196	5.0	0.916	72.0	LOS E	8.7	63.6	1.00	1.07	1.44	27.6
12a	R1	1004	5.0	1004	5.0	0.916	63.2	LOS E	23.1	168.5	0.98	1.03	1.26	20.0
Appro	bach	1211	5.0	1211	5.0	0.916	64.2	LOS E	23.1	168.5	0.98	1.03	1.28	21.7
All Ve	hicles	7192	5.0	<mark>7026</mark> <sup>N</sup>	<sup>1</sup> 5.1	0.916	32.3	LOS C	36.5	266.6	0.86	0.90	0.95	33.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	5	54.2	LOS E	0.0	0.0	0.95	0.95
P41	West Stage 1	21	54.2	LOS E	0.1	0.1	0.95	0.95
P42	West Stage 2	21	54.2	LOS E	0.1	0.1	0.95	0.95
All Pe	destrians	105	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Macquarie Point South

### LANE LEVEL OF SERVICE

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Lane Level of Service

Site: 101 [Macquarie Street/ Brooker Avenue - Post Stage 3 (2027) PM Peak - Worst-case]

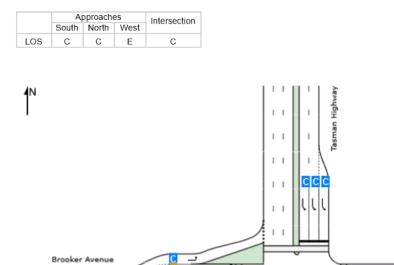
中中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Worst-case]

- - - -

Davey Street

16:00-17:00 Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Macquarie Street

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Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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### MOVEMENT SUMMARY

Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 PM 💠 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Peak - Worst-case] (2027) PM Peak - Worst-case]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Mov		Demand I	Flows	Arrival	Flows	Deg.	Average	Level of	Aver. I	Back of	Prop.	Effective	Aver. /	Averag
ID						Satn	Delay	Service	Qu	eue	Queued	Stop		e
		Total	ΗV	Total	ΗV				Vehicles	Distance		Rate	Cycles S	Speed
		veh/h		veh/h		V/C	sec		veh					km/h
South	h: Maco	quarie Stre	et											
2	T1	3745	5.0	3745	5.0	0.780	12.6	LOS B	24.0	175.3	0.72	0.68	0.72	37.2
3	R2	183	5.0	183	5.0	0.780	17.3	LOS B	19.5	142.6	0.72	0.71	0.72	36.6
Appro	oach	3928	5.0	3928	5.0	0.780	12.8	LOS B	24.0	175.3	0.72	0.68	0.72	37.2
East:	Evans	Street												
6	R2	416	5.0	251	5.0	0.365	21.6	LOS C	1.9	13.8	0.43	0.66	0.43	9.6
Appro	oach	416	5.0	251 <sup>N1</sup>	5.0	0.365	21.6	LOS C	1.9	13.8	0.43	0.66	0.43	9.6
All Ve	ehicles	4344	5.0	4179 <sup>N1</sup>	5.2	0.780	13.3	LOS B	24.0	175.3	0.70	0.68	0.70	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement. Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes

Move	ement Performance - Pede	estrians						
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P2	East Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95
All Pe	destrians	32	54.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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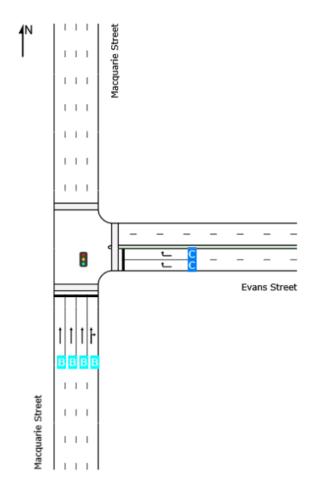
### LANE LEVEL OF SERVICE

Lane Level of Service

中中 Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 Site: 101 [Macquarie Street/ Evans Street - Post Stage 3 PM (2027) PM Peak - Worst-case] Peak - Worst-case] 16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

	Appro	aches	Intersection
	South	East	Intersection
LOS	В	С	В



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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### MOVEMENT SUMMARY

Site: 101 [Davey Street/ Evans Street - Post Stage 3 PM Peak - Worst-case]

+ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Worst-case]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		Perform												
Mov ID	Turn	Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service		Back of eue	Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %		sec		Vehicles veh	Distance m		Rate	Cycles	Speed km/h
East:	Evans	Street												
4	L2	224	5.0	224	5.0	1.645	635.9	LOS F	67.5	492.6	1.00	2.89	4.11	5.0
5	T1	757	5.0	757	5.0	1.645	631.2	LOS F	68.8	502.2	1.00	3.03	4.11	2.7
Appr	oach	981	5.0	981	5.0	1.645	632.2	LOS F	68.8	502.2	1.00	3.00	4.11	3.3
North	: Dave	y Street												
7	L2	735	5.0	735	5.0	0.600	14.6	LOS B	12.0	87.4	0.50	0.72	0.50	41.3
8	T1	2686	5.0	2686	5.0	0.690	10.5	LOS B	16.8	122.8	0.56	0.52	0.56	43.7
9	R2	8	5.0	8	5.0	0.690	15.4	LOS B	16.8	122.8	0.57	0.53	0.57	38.7
Appr	oach	3429	5.0	3429	5.0	0.690	11.4	LOS B	16.8	122.8	0.54	0.56	0.54	43.2
West	Evans	s Street												
11	T1	123	5.0	123	5.0	1.347	105.0	LOS F	8.2	60.0	1.00	0.92	1.36	13.8
12	R2	65	5.0	65	5.0	1.347	372.4	LOS F	8.2	60.0	1.00	1.58	3.22	4.8
Appr	oach	188	5.0	188	5.0	1.347	197.6	LOS F	8.2	60.0	1.00	1.15	2.01	8.4
All Ve	ehicles	4599	5.0	4599	5.0	1.645	151.4	LOS F	68.8	502.2	0.66	1.11	1.37	14.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Move	Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec		Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	21	54.2	LOS E	0.1	0.1	0.95	0.95	
P2	East Full Crossing	32	54.2	LOS E	0.1	0.1	0.95	0.95	
P3	North Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95	
P4	West Full Crossing	11	54.2	LOS E	0.0	0.0	0.95	0.95	
All Pe	destrians	74	54.2	LOS E			0.95	0.95	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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### LANE LEVEL OF SERVICE

Lane Level of Service

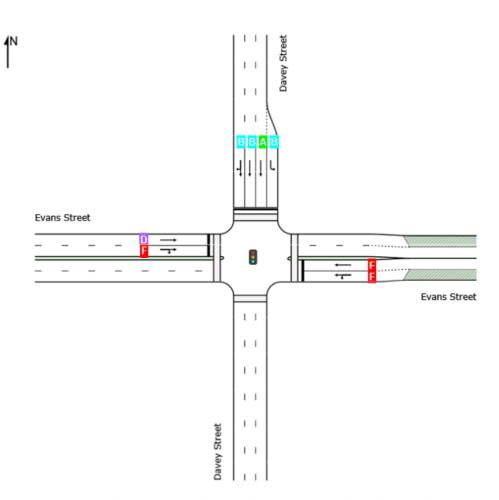
Site: 101 [Davey Street/ Evans Street - Post Stage 3 PM Peak - Worst-case]

¢¢ Network: N101 [Macquarie/ Davey/ Evans - Post Stage 3 (2027) PM Peak - Worst-case]

16:00-17:00

Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

		A	oproache	Intersection		
		East	North	West	Intersection	
L	os	F	В	F	F	



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

Intersection and Approach LOS values are based on average delay for all lanes.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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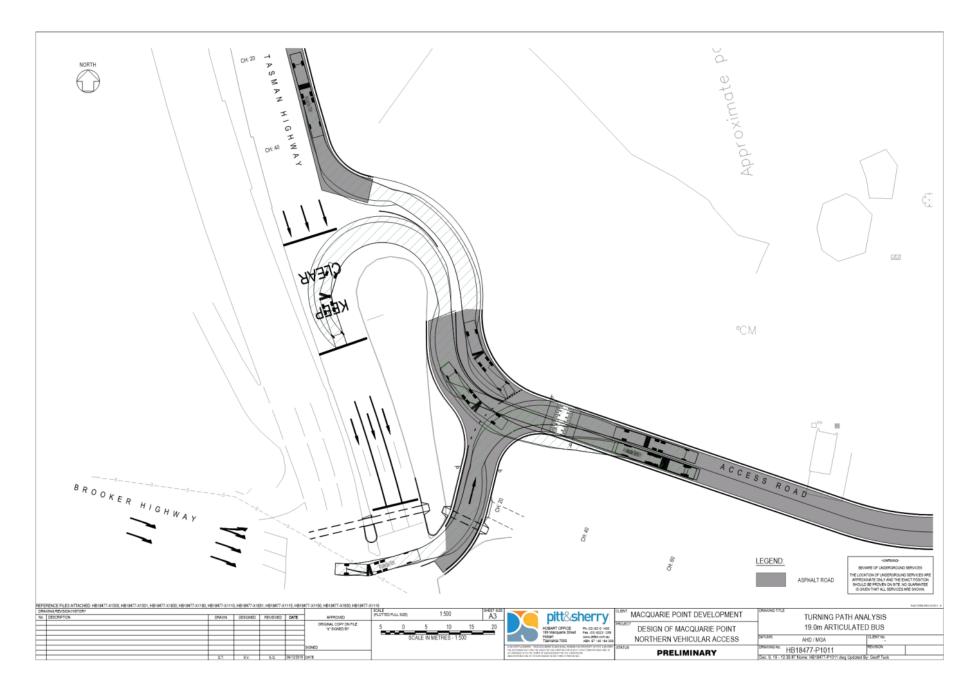
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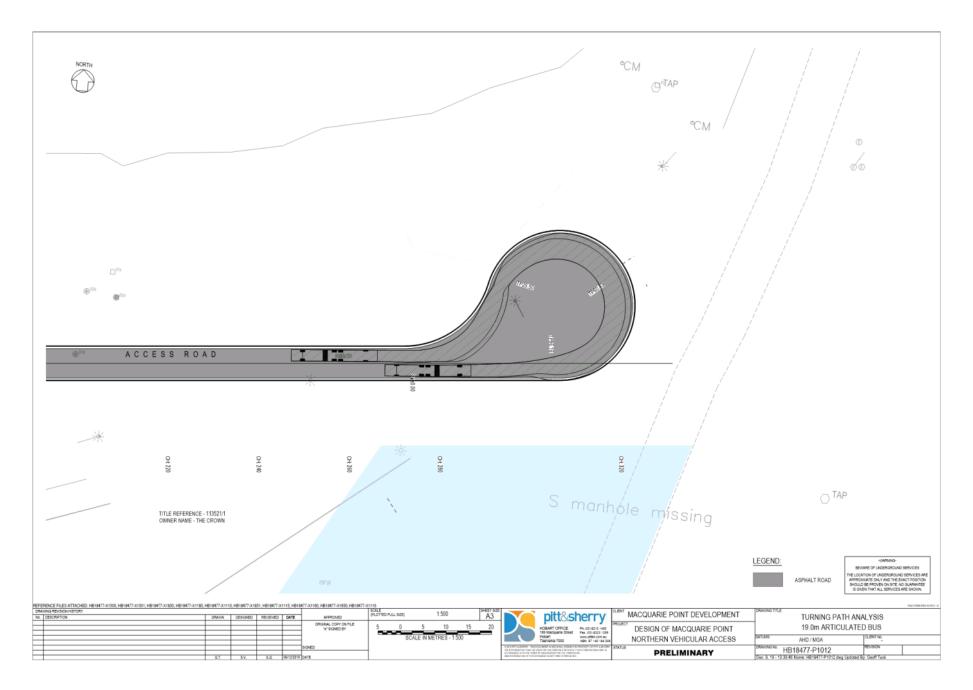
Page 232 ATTACHMENT B

# Appendix E

Swept Paths

## pitt&sherry





Page 235 ATTACHMENT B

# Appendix F

Austroads Pedestrian Facility Selection Tool Assessment

## pitt&sherry

Australasian Pedestrian Crossing Facility Selection Tool

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5/15/2019

**\*** ÷ ? Australasian Pedestrian Crossing Facility Selection Tool [V2.1.2] HELP PRINT Austroads OR fill in the form below Choose File No file chosen 1 Load a CSV File Project details Site information Crash information Use crash model or crash Project name: Macquarie Point Development Jurisdiction: Tasmania ₹ Model v 🕜 history? Project location Macquarie Point - Normal Opera Midblock Ŧ Midblock or intersection? 0 Option/assessment number: No facility ▼ Existing facility Date of assessment: 15-05-2019 0 Wombat crossings The tool can be used to assess Wombat crossings. A Wombat crossing is functionally similar to a "Zebra with platform" or "Zebra with platform and kerb extensions" (if the crossing includes kerb extensions). To assess a Wombat crossing please select the appropriate crossing type in the Feasible facilities table and continue with the assessment as normal. Physical/environmental/Operational variables Direction 1 Layout diagram Flow: Left to Right v 🔞 Number of traffic directions: Two v 😯 Flow type: Interrupted Centre treatment: No treatment v Peak vehicle volume veh/hr 😮 121 Parking/shoulder: No v 😯 Traffic lanes: v 😯 Pedestrian visibility: 80 metres 🔞 Crossing distance: 3.7 metres 🕜 Posted speed limit: 50 km/h Approach speed (85th 50 km/h . Direction 2 percentile): Flow: Right to Left v 🕜 Traffic volume (AADT): veh/day 🕜 2940 Peak sensitive pedestrian

#### austpedtool.com/index.html

Item No. 9.1

### Supporting Information Council Meeting - 25/5/2020

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#### 5/15/2019 Australasian Pedestrian Crossing Facility Selection Tool . ...... Site characteristics Flow type ped/hr 😯 • 🔞 volume 12 Interrupted Exposed crossing distance: 3.7 + 3.7 = 7.4 metres Peak non-sensitive 103 ped/hr 😮 Peak vehicle volume: 6 veh/hr 😯 Est. pedestrian crossing time (exposed): 6.3 seconds pedestrian volume: 121 + 6 = 127 veh/hr Total peak hourly vehicle flow: Estimated daily pedestrian 1000 ped/day 😯 Traffic lanes: v 😧 volume: Average vehicle occupancy: pers/veh 🕜 Crossing distance: 3.7 metres 🕜 1.3 Model parameters Show/Hide Economic update factors ? Economic assessment parameters Walk speed of average sensitive pedestrians: 1 m/s Update factor to Evaluation days per annum: 250 Base date current date Walk speed of average non-sensitive pedestrians: 1.2 m/s Project lifetime: 30 years Travel time costs/savings June 2010 1 Average cost of pedestrian crashes: \$ 226566 Discount rate: 7 % Vehicle operating costs/savings June 2010 1 Value of delay: 29.77 /hr 😯 S Crash costs/savings June 2010 1 Pedestrian conversion factor: 0.6 0 Vehicle conversion factor: 0.4 0 Expected crash reduction factors ? Zebra with Kerb Zebra with Signals with Zebra with Zebra with kerb Median Grade Kerb extensions Zebra only Zebra with platform and Platform Signals kerb kerb median extensions extensions refuge with median 0 platform kerb separation extensions refuge and median extensions refuge extensions refuge 47 35 56 56 0 63 35 63 56 56 45 45 86 % % % % % % % %

Calculate feasibility

View the facility feasibility process (PDF) here

Automatically calculate when inputs are updated? ??

5/15/2019

### Australasian Pedestrian Crossing Facility Selection Tool

Feasible facilities

	Suitable for site?	Built parameters	Construction cost	Annual maintenance cost	Show in final output? Select all/none/feasible
No facility 🗱	N/a	No parameters	\$	\$ 0	
Platform	⊘ Yes	Vehicle negotiation speed: Please select 🔻	\$	\$ 0	V
Kerb extensions	♥ Yes	Total crossing distance: metres	\$	\$ 0	V
Median refuge	⊘ Yes	Direction 1 crossing distance:       metres         Median refuge width:       metres         Direction 2 crossing distance:       metres	5	\$ 0	
Kerb extensions with median refuge	⊘ Yes	Direction 1 crossing distance:       metres         Median refuge width:       metres         Direction 2 crossing distance:       metres	5	\$ 0	
Zebra only	• No Selected jurisdiction requires that Zebra must be installed on a Platform	No parameters	\$	\$	V
Zebra with platform 🛿	⊘ Yes	Applies vehicle negotiation speed from <b>Platform</b> above	\$	\$ 0	
Zebra with kerb extensions ONo		Applies total crossing distance from Kerb extensions above	\$	\$	V

5/15/2019

#### Australasian Pedestrian Crossing Facility Selection Tool

	Selected jurisdiction requires that Zebra must be installed on a Platform					
Zebra with platform and kerb extensions 🕜	♥ Yes	Applies vehicle negotiation speed from <b>Platform</b> and total crossing distance from <b>Kerb extensions</b> above	\$	\$ 0		
Zebra with median refuge	No Selected jurisdiction requires that Zebra must be installed on a Platform	Applies distances and refuge width from <b>Median refuge</b> above	\$	\$	<b>✓</b>	
Zebra with kerb extensions and median refuge	No Selected jurisdiction requires that Zebra must be installed on a Platform	Applies distances and refuge width from Kerb extensions with median refuge above	\$	\$	V	
Signals	⊘ Yes	Signals activated by pedestrian call       Please selec • •         button?       Cycle time:         Seconds       seconds         Percent of time in green pedestrian phase:       %	\$	\$ 0		
Signals with kerb extensions	⊘ Yes	Applies parameters from <b>Signals</b> above, plus: Total crossing distance: metres	\$	\$ 0	V	
Grade separation	• Maybe Max. of approach/posted speed < 75km/h	No parameters	\$	\$ 0	V	
Calculate assessment			~	·		
	C Reset all Fields	Development - Crossing Assi .csv 🖺 Export CSV File		Back to top		
Di	Disclaimer					

5/15/2019

Australasian Pedestrian Crossing Facility Selection Tool

The Australasian Pedestrian Crossing Facility Selection Web Tool ("the tool") is freely provided by <u>Austroads</u> and is intended to help practitioners select an appropriate pedestrian crossing facility for a particular location. The tool is based on literature, and analytical and behavioural research coupled with a number of mathematical models. Its development is detailed in the Austroads report <u>Development of the Pedestrian Facility Selection Tool (PDF)</u>.

As with all mathematical models care must be taken to understand input limitations and background assumptions when interpreting the outputs. The tool does not replace professional engineering or planning advice and Austroads does not accept any responsibility regarding the tool. While we have endeavoured to ensure the information output by the tool is appropriate, we make no representations or warranties of any kind about the completeness, accuracy, reliability, suitability or availability with respect to the outputs. Any reliance you place on such information is strictly at your own risk and it is your responsibility to check all information output by the tool.

The tool should not be used to inform decision making in isolation when considering the form and location of pedestrian crossing facilities. Engineering judgement is required to consider the economic and other outputs produced by the tool alongside safety, mobility, social and environmental factors that are considered appropriate by the practitioner.

Version: 2.1.2

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## pitt&sherry

Macquarie Point Development - Traffic Impact Assessment

### Contact

Sam Volker (03) 6210 1417 svolker@pittsh.com.au



Pitt & Sherry (Operations) Pty Ltd ABN 67 140 184 309

Phone 1300 748 874 info@pittsh.com.au pittsh.com.au

#### Located nationally —

Melbourne Sydney Brisbane Hobart Launceston Newcastle Devonport . Wagga Wagga



ref: HB18477H004 TIA 31P Rev 02/SV/mj

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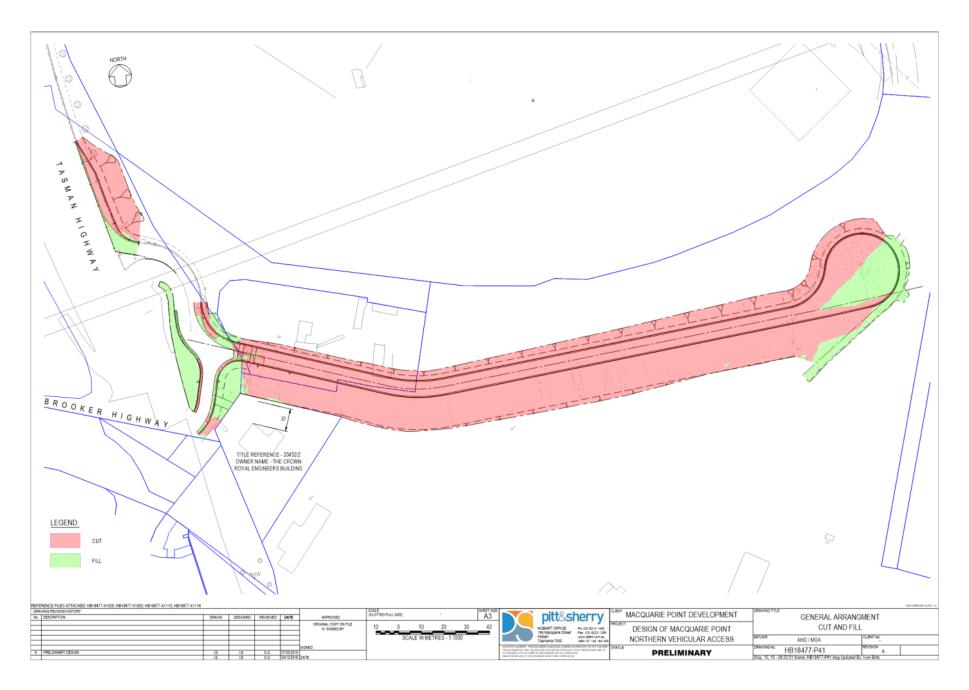
## Cut & Fill Plan

Appendix E

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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## Cut & Fill Plan

Appendix E

ref: HB18477L001 Rep 31P Rev 022/IA/rb

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## pitt&sherry

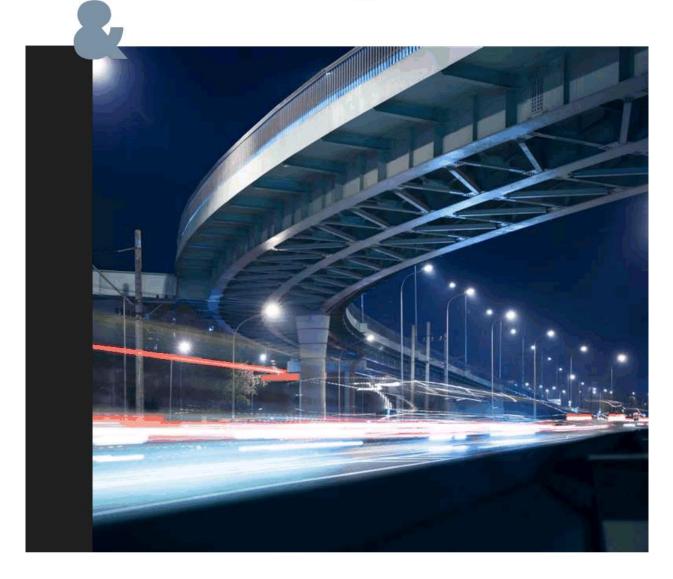
Macquarie Point Northern Vehicular Access Stormwater Management Plan Prepared for Macquarie Point

Client representative Brad Wheeler

Date

6 December 2019

Rev 00



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### Appendices

Appendix A — Macquarie Point Infrastructure Development Strategy

Prepared by — Hamish Peacock	Hemplement	Date — 06/12/2019
Reviewed by — Joshua Coates	Veeter	Date — 06/12/2019
Authorised by — Stephen Gillick	- Em fro	Date — 06/12/2019

### **Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
00	Stormwater Management Plan	H Peacock	J Coates	S Gillick	06/12/2019

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ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

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## **Executive Summary**

A vehicular access road is proposed within the greater Macquarie Point development area. This road falls within the areas considered under a stormwater management plan developed to address the stormwater requirements for the Macquarie Point development in accordance with the Sullivans Cove Planning Scheme. The stormwater management plan addresses the conveyance, detention and treatment of stormwater through the access road, with consideration of, and reference to, the existing Infrastructure Development Strategy report for the entire Macquarie Point site.

This stormwater drainage design for the vehicular access road will consider the fully developed site and its stormwater management strategies by providing a design that allows for flexibility in the final downstream stormwater design.

ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

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### 1. Introduction

Macquarie Point Development Corporation have established a masterplan for development in the Macquarie Point area between the Cenotaph and the Evans Street (See Figure 1). **pitt&sherry** have previously prepared an infrastructure development strategy (*HB18121H001 Rep 31P Rev02* (Appendix A) which considers a holistic view of stormwater management across the extent of the masterplan area. Part of this plan includes an access road from the Tasman Highway into the existing industrial area. The road will include a parallel transit zone and pathway.



Figure 1 Approximate Development Area (blue), road alignment (red)

The development falls within the Hobart City Council area and is subject to the Sullivans Cove Planning Scheme<sup>1</sup> (Planning Scheme). The stormwater management plan aims to demonstrate the proposed access road meets general requirements with respect to:

- The quantity and quality of stormwater; and
- Rationalisation of stormwater infrastructure across the masterplan site.

<sup>1</sup> <u>https://www.hobartcity.com.au/Development/Planning/Planning-schemes/Hobart-and-Sullivans-Cove-Planning-Schemes</u>

ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

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### 2. Stormwater Assessment and Legislative Requirements

The stormwater management plan was developed using information from the following sources:

- Survey provided by the client, including existing surface levels, pipe and pit inverts etc.
- Bureau of Meteorology 2016 Intensity-Frequency-Duration (IFD) data<sup>2</sup>.

The following guidelines and standards were used and/or considered in design of the stormwater network:

- Australian Rainfall and Runoff 2019 (ARR19)<sup>3</sup>
- Sullivans Cove Planning Scheme
- State Stormwater Strategy<sup>4</sup>
- Urban Drainage Act⁵
- LGAT Standard Drawing set<sup>6</sup>.

The following general design criteria is adopted according to the LGAT standards:

- Maximum gutter flow widths of 0.45m adjacent to pedestrian crossings
- Maximum gutter flow widths of 1m in other areas
- 1830mm lintel side entry pits adopted
- Minimum pipe size 300mm

The following methodology was adopted:

- Determine appropriate discharge location (considering both the existing adjacent stormwater network and the developed masterplan network);
- Determine proposed sub-catchment areas (including overland and upstream catchments);
- Determine the 5% Annual Exceedance Probability (AEP) design flow (as per Planning Scheme requirements) using a DRAINS<sup>7</sup> IL-CL model which was compared to a Rational Method calculation;
- Assess the 1% AEP major drainage system overland flow paths;
- Design a detailed road drainage network; and
- · Prepare detailed drawings of the proposed stormwater network.

## 3. Existing Site Stormwater Characteristics

The existing stormwater conveyance path across the proposed access alignment is not clear. Stormwater infrastructure including grated pits and pipes exist near the alignment, but the network appears to deviate from the designated flow path in several locations. The existing surface grade is typically flat and generally grading to the south. Stormwater from the surface is most likely intercepted by the pits and pipes, and discharges at pit A as shown in Figure 2.

ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

<sup>&</sup>lt;sup>2</sup> Australian Government Bureau of Meteorology (BOM), 2017,

http://www.bom.gov.au/water/designRainfalls/revised-ifd/

<sup>&</sup>lt;sup>3</sup> Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2016, *Australian Rainfall and Runoff: A Guide to Flood Estimation*, Commonwealth of Australia

<sup>&</sup>lt;sup>4</sup> <u>https://epa.tas.gov.au/epa/water/stormwater/state-stormwater-strategy</u>

<sup>&</sup>lt;sup>5</sup> https://www.legislation.tas.gov.au/view/html/inforce/current/act-2013-071

https://www.lgat.tas.gov.au/webdata/resources/files/LGAT%20Standard%20Drawings%20Release%20Version%20Dec%202013.pdf

<sup>7</sup> www.watercom.com.au/

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### 4. Stormwater Quantity

The proposed road drainage network has been designed to discharge into the existing 450mm diameter pipe south of the proposed access road. This is intended to be a temporary connection and is indicated in Figure 2. The Macquarie point infrastructure development strategy intends to discharge the access road stormwater to both; the south at Evans street into the existing Hobart City Council stormwater network and into the 450mm diameter network line. This 450mm network line is the existing discharge point form the Macquarie Point Site and passes through the TasPorts land before discharging to the River Derwent.

Part of the design intent is to ensure the pipe invert levels are positioned as high as practically possible to allow flexibility in the downstream pipe network design. The drainage infrastructure includes kerb and gutter, stormwater pipes and stormwater pits.

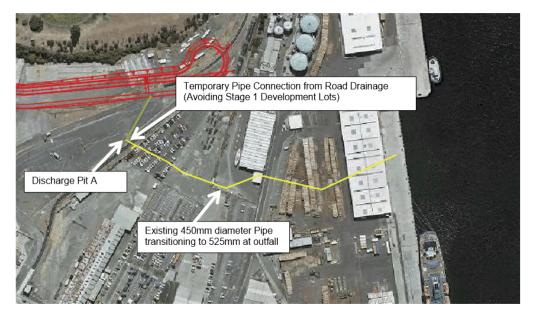


Figure 2 Proposed Stormwater Connections

The proposed access road drainage system temporarily connects to the existing 450mm pipe. The temporary pipe system will not be able to convey the 5% AEP as it is constrained by the downstream surface and pipe network levels. However, it does have capacity to convey a 10% AEP event. The road stormwater network will have capacity to convey the 5% AEP event when it is connected to the final masterplan stormwater network which incorporates detention storage and new pipe networks.

The catchment plan for the road drainage network and the upstream catchments is shown in Figure 3. The upstream catchments have been considered in the design and are assumed to connect into the road network at side entry pit locations. Upstream catchments total approximately 2ha (30% impervious), while the road network covers an extent of approximately 0.9ha (100% impervious).

ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

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Figure 3 Catchment Plan (catchments in green), 0.2m contour spacing (orange)

The following assumptions were used in the hydraulic model:

- Pipe Manning's n value = 0.013;
- Pit loss coefficients were adopted from Melbourne Water guidelines<sup>8</sup>;
- Pit inlet capacity curves adopted from LGAT standard drawings (TSD-RF03-v1);
- Road drainage network will accept flow from upstream development area; and
- Downstream tailwater levels were assumed to be at the highest astronomical tide level.

### 4.1 Stormwater conveyance

The hydraulic grade line and peak discharge of 320 l/s for the 5% AEP event are displayed in the detailed design drawings. Overflow in the 5% AEP event is conveyed down the road to the low point at approximately chainage 270m. Water will pond to a depth of approximately 250mm on the road and transit zone (without spilling elsewhere), before receding as the pipe network clears excess stormwater. No ponding will occur in the 5% AEP event once the road stormwater network is connected to the masterplan stormwater network.

Excess stormwater (outside the pipe network) in the 1% AEP event will be conveyed within the road formation before spilling at the low point towards the south-east. This water is expected to be relatively slow moving and spread out and due to the flat nature of the surrounding terrain.

### 4.2 Stormwater Detention

It is not intended to provide stormwater detention at the access road. The road is at the top end of the development catchment and is not the preferred location for stormwater detention. The preferred stormwater detention location is downstream of the access road as indicated in the infrastructure development strategy report. Stormwater detention will be necessary during the design of the downstream stormwater network infrastructure.

ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

<sup>&</sup>lt;sup>8</sup> <u>https://www.melbournewater.com.au/planning-and-building/developer-guides-and-resources/standards-and-specifications/loss-coefficient</u>

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### 5. Stormwater Quality

It is only intended to provide primary treatment of stormwater at each side entry pit. Litter trap baskets are proposed to be in each pit. These could be like Hudson Civils' "pit trap" or similar product to the preference of the Hobart City Council. Secondary and/or tertiary treatment (such as Gross Pollutant Traps) of stormwater has not been incorporated in the access road design.

Stormwater emanating from the access road will be treated downstream at the masterplan stormwater outlets once constructed. This is a rational approach to the treatment of stormwater across the masterplan area as it ensures:

- All stormwater receives water quality treatment,
- Duplication of expensive stormwater treatment pits is avoided; and
- Potentially lower overall maintenance requirements for the final stormwater asset owner.

Water quality is discussed further in the infrastructure development strategy.

### 6. Conclusions

- A stormwater management plan has been developed for the proposed northern vehicular access point at Macquarie Point. The stormwater network has been designed such that it will have capacity to convey the 5% AEP peak discharge once the Macquarie Point masterplan development is implemented. The temporary stormwater connection will give the network a lower, but not insignificant flood immunity in the interim.
- Water quality and detention infrastructure is not intended to be incorporated on the access road (except for
  primary litter trap treatment) and has been discussed with reference to the Infrastructure Development Strategy
  report previously prepared by pitt&sherry being referred to

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# pitt&sherry

# **Macquarie Point Northern Vehicular Access**

Stormwater Management Plan

### Contact

Stephen Gillick 03 6210 1420 sgillick@pittsh.com.au



(Operations) Pty Ltd ABN 67 140 184 309

Phone 1300 748 874 info@pittsh.com.au pittsh.com.au

#### Located nationally —

Melbourne Sydney Brisbane Hobart Launceston Newcastle Devonport Wagga Wagga



ref: HB18477H005 Stormwater Management Rep 31P Rev 00/HP/cy

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# pitt&sherry

# **Report to Support a Development Application**

#### Macquarie Point Development

Northern Vehicular Access

### Contact

Doug Fotheringham (03) 6323 1943 dfotheringham@pittsh.com.au



#### Pitt & Sherry (Operations) Pty Ltd ABN 67 140 184 309

Phone 1300 748 874 info@pittsh.com.au pittsh.com.au

#### Located nationally — Melbourne

Melbourne Sydney Brisbane Hobart Launceston Newcastle Devonport Wagga Wagga



ref: HB18477L001 Rep 31P Rev 022/IA/rb



Enquiries to: City Planning Phone: (03) 6238 2715 Email: coh@hobartcity.com.au

10 December 2019

Kate Harris (Macquarie Point Development Corporation) mailto: kate@macquariepoint.com GPO Box 251 HOBART TAS 7001

Dear Sir/Madam

# 10 EVANS STREET, HOBART - WORKS IN ROAD RESERVE NOTICE OF LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-19-31

#### Site Address:

10 Evans Street, Hobart

#### **Description of Proposal:**

New Road

#### Applicant Name:

Kate Harris Macquarie Point Development Corporation

PLN (if applicable):

PLN-19-746

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.

Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au **f** CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully

n. bad

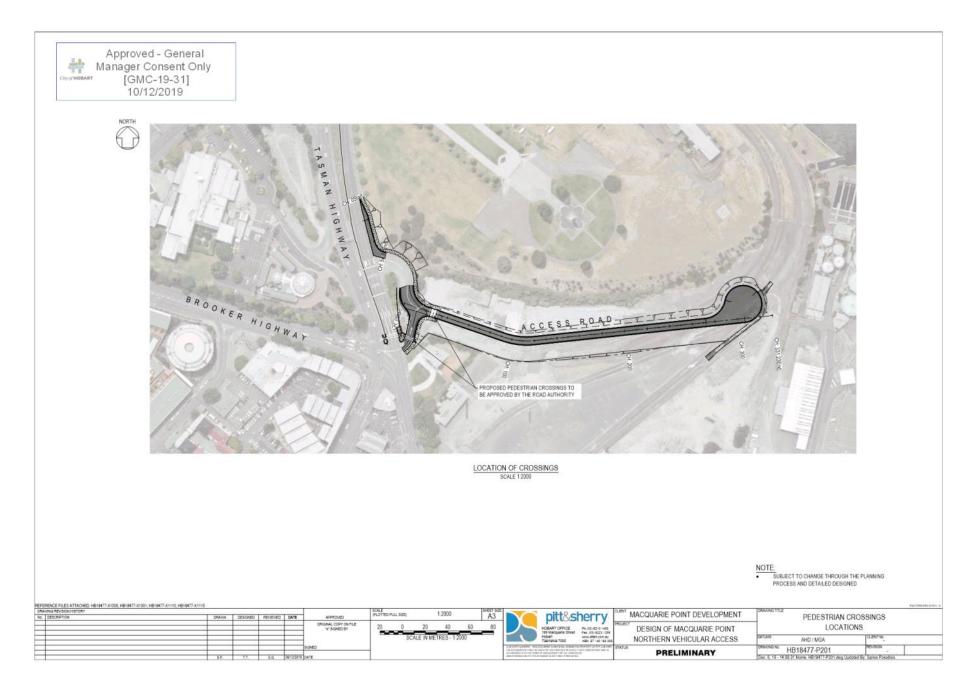
(N D Heath) GENERAL MANAGER

Relevant documents/plans:

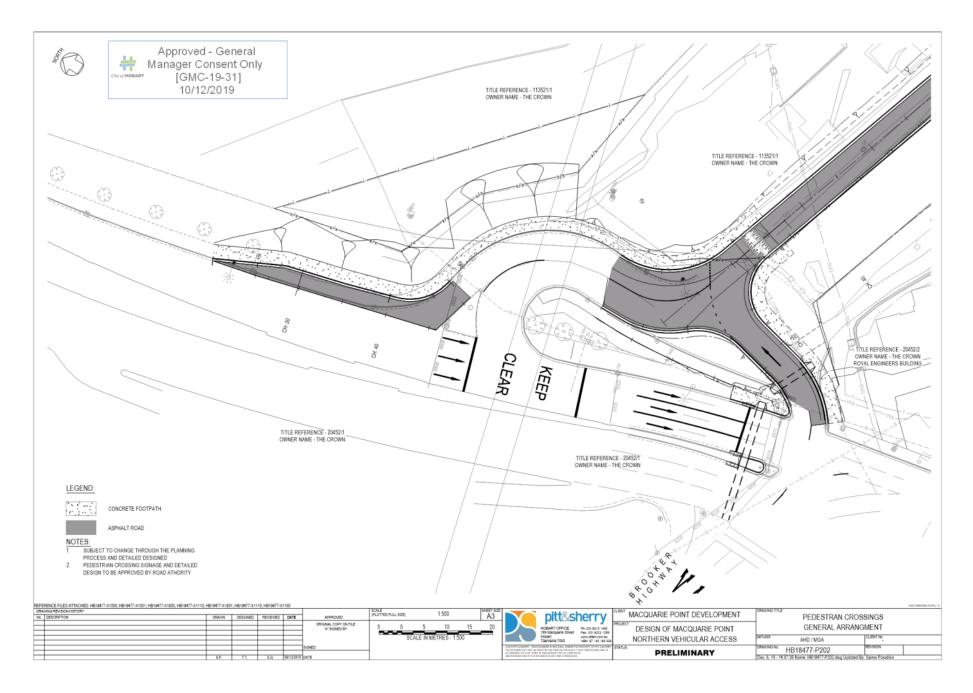
Plans by Pitt and Sherry

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au **f** CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council



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Macquarie Point Development Corporation

GPO Box 251 Hobart Tasmania 7001 macquariepoint.com

ABN 92 657 409 841

Mr Cameron Sherriff Hobart City Council 50 Macquarie street Hobart TAS 7000

Dear Cameron,

I refer to your letter dated 12/11/2019 requesting further information in relation to PLN-19-19-746. The request sought clarification regarding:

- Protection or replacement of trees;
- Maintenance or reinstatement of an informal pathway; and
- Maintenance of the bike path.

Works will not impact upon the plane trees on the western side of the entry. The adjacent gum trees are impacted by the required realignment by Council and the Department of State Growth for the road entrance and as such will need to be removed. Future landscaping works will provide an opportunity to replace these trees. The landscaping will be installed in a future stage as part of the proposed light rail transit corridor development. For clarity, trees in the following photograph are to be removed as part of these works.



The informal path is seen by the Corporation as a WH&S risk for people proposing to access the Cenotaph. The Corporation is currently developing plans, in conjunction with Council, for the provision of a permanent access path that will provide a safe access from the Tasman Highway to the Cenotaph.

The tender set of drawings are intending to reflect the temporary bypass of the bike path to ensure that it is available at all times, with the exception of any temporary closures that may be required for WH&S reasons, should heavy construction activities impact the surrounding areas. At this stage this is not expected to occur, but will require final input from the construction company during construction.

I trust Council now has sufficient information to determine this application, however please contact Kate Harris (Planning Officer) on 61 664 000 as necessary for further information or clarification.

Sincerely,

Glopen

Greg Cooper Chief Operations Officer

20/11/2019



Macquarie Point Development Corporation

GPO Box 251 Hobart Tasmania 7001 macquariepoint.com

ABN 92 657 409 841

Mr Cameron Sherriff Hobart City Council 50 Macquarie street Hobart TAS 7000

Dear Cameron,

Further to our letter 20/11/2019 regarding impacts on the plane trees and eucalypts (as requested in councils further information request for PLN-19-19-746), we wish to note impacts to the trees located on the embankment (photographed below).

The proposed design provides for a batter from the footpath which is far less steep than the existing embankment. The batter slope is standard set by the Department of State Growth which impacts on the existing slope and involves removal of all the trees in the image below.

Our consultants have advised that we are bound to comply with the standard, however it is their opinion that the batters are well grassed and stable. It is therefore their preference to retain the existing embankment generally as is and retain the existing trees wherever possible. In this regard, it has been suggested by our consultants that this could be conditioned in the development approval. With the general retention of the embankment, several trees are still likely to need removal because of the additional left turn lane.



Please contact Kate Harris (Planning Officer) on 61 664 000 as necessary for further information or clarification.

Sincerely,

Glopen

Greg Cooper Chief Operations Officer

26/11/2019

# Responses to information request for PLN19-746 dated 30 October 2019

Query	Response				
Stormwater					
Sw 1 Plans demonstrating how stormwater from the proposed development will be disposed of via gravity to public stormwater infrastructure with sufficient receiving capacity. Clearly show the ownership of all pipes Council, State, TasPorts, shared, etc. The existing manhole SW106 is not public infrastructure show how the drainage will connect to the River Derwent.	The temporary stormwater infrastructure utilises MPDC / Tasports existing SW lines to discharge to the River Derwent. Planned future development of key SW infrastructure will add additional SW discharge to the HCC owned SW infrastructure of Evans St.				
SW 2					
Please clarify the proposed future ownership of the road. If the road will be a public road, granted to Council, the drainage must be public stormwater infrastructure, and to public standards. Should the applicant wish Council to consider taking over existing private pipe, submit plans showing the pipe's location, any structures within zone of influence of the main, indicative long section including HGL vs design flow for the critical 5% AEP event, and CCTV. Alternatively include indicative long section, calcs and path of new pipework. If the road will be privately owned, demonstrate the private drainage system to the point of discharge to the River Derwent has adequate capacity for the critical 5% AEP event, and any easements required to allow this. Please note if the development relies on third party land, it must form part of the application.	The road will initially be an MPDC asset and intended to be passed over to Council in 5 to 10 years. We request that detailed information be sought as a permit condition. The Temporary stormwater design is adequate for a 10% AEP event within existing site infrastructure as noted in the Stormwater Management Plan and discharges into the River Derwent				
Sw 5 (there is no 2 and 4) A report prepared by a suitable qualified person, demonstrating a) that the stormwater system for the new development incorporates best practice water sensitive urban principle for the treatment and disposal of stormwater during its use.	Stormwater Management Plan outlining water sensitive urban principles is included in the Rev 02 planning report prepared by Pitt & Sherry. WSUD is not planned for this stage of Macquarie Point's redevelopment but will be incorporated in later stages. It is intended to provide primary treatment of stormwater at each side entry pit. Stormwater emanating from the access road will be treated				

outlets once constructed. This is a rational approach to the treatment of stormwater across the masterplan area as it ensures:         • All stormwater receives water quality treatment,         • Duplication of expensive stormwater treatment pits is avoided; and         • Potentially lower overall maintenance requirements for the final stormwater asset owner.         Schedule 8 - Environmental management         EM1         Plans and specifications showing proposed water sensitive urban design features for the new road.         Schedule 8 - Environmental management         EM1         Plans and specifications showing proposed water sensitive urban principles is included in the Rev 02 planning report prepared by Pitt & Sherry.         As above, WSUD is not planned for this stage of Macquarie Point's redevelopment but will be incorporated in later stages.         To ensure protection of Council's public infrastructure, please provide:         1. A scaled and labelled site plan showing the location of new and proposed public infrastructure, please provide:         1. A scaled and labelled site plan showing the location of new and proposed public infrastructure, please provide:         2. Detail how the new and old road and footways will connect, including memory inconsistencies and could be a single lane on completion of State Growth.         2. Detail how the new and old road and footways will connect, including the wring shared path arrangement       Pitt & Sherry drawing HB18477-C1101 – general arrangements sheet 1 documents the interface of the new road and pedestrina paths with the exist	Query	Response					
<ul> <li>across the masterplan area as it ensures:         <ul> <li>All stormwater receives water quality treatment,</li> <li>Duplication of expensive stormwater treatment,</li> <li>Duplication of expensive stormwater treatment, its is avoided; and</li> <li>Potentially lower overall maintenance requirements for the final stormwater asset owner.</li> </ul> </li> <li>Schedule 8 – Environmental management</li> <li>EM1</li> <li>Stormwater Management Plan outlining water sensitive urban design features for the new road.</li> <li>As above, WSUD is not planned for this stage of Macquarie Point's redevelopment but will be incorporated in later stages.</li> <li>Roads New public infrastructure ENG Fi 3</li> <li>To ensure protection of Council's public infrastructure, please provide:         <ol> <li>A scaled and labelled site plan showing the location of new and proposed public infrastructure and boundaries in accordance with TSDR06V1 noting the minimum width of 10 metres. The plan must clearly show the extent of land to be transferred to Council.</li> <li>Detail how the new and old road and footways will connect, including removal of redundant vehicle crossings and kerb ramps</li> <li>Detail how the new and old road and footways will connect, including</li> <li>Include provision for bicycles and continuity with the existing shared path arrangement</li> <li>A. Clearly show the proposed pedestrian crossing is not shown in all plans nor clearly discussed within the Traffic Impact Assessment or supporting documentation, clarify the impact of this</li> </ol></li></ul>							
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documentation, clarify the impact of this	the Traffic Impact Assessment or supporting						
	documentation, clarify the impact of this						
	crossing on the intersection operation.						

Query	Response
The "wombat" crossing must be provided with line marking in accordance with AS 1742.102009. Sign R31 must be provided in the immediate vicinity of the crossing. Use of a STOP sign and associated holding line at the same location as the pedestrian crossing is not supported.	Any additional requirements of this nature from Council in regards to the Wombat Crossing to be conditioned by Council.
1. Show available sight distance at all proposed accesses and intersections	Pitt & Sherry Traffic Impact Assessment report Ver 2.0 responds to these queries.
2. Swept paths for a 19 m articulated bus must be shown at all intersections and curves.	Pitt & Sherry Traffic Impact Assessment report Ver 2.0 responds to these queries.
3. Clarify the proposed ownership and use of the Transit/Landscaping Zone.	Ownership of the transit / landscaping zone currently remains as being in the ownership of MPDC. The land is set aside to support the Governments future planned Light Rail transit planning.
Survey The turning head of the proposed road is not contained within the boundaries of CT 176538/4 with a substantial portion crossing into CT 176538/2. Clarification is required if this intended to only be a temporary turning head only. If not, a further subdivision of CT 176538/2 may be required.	This is only a temporary configuration until a future stage 2 road is completed by Department of State Growth.
The status of the proposed road requires clarification; will it be a State Road under the Department of State Growth's jurisdiction with the intention to transfer the Road to Council in the future?	The road will initially be an MPDC asset and is intended to be passed over to Council in 5 to 10 years.
How will this proposed road be dedicated as a highway?	This will be determined as part of Stage 2 with the Department of State Growth.
City Amenity	
Please clarify what is to happen to the row of four plane trees that form part of the entrance, and the eight blue gum trees to the east of them. Please specify how these trees will either be protected from damage, or replaced after the works.	This item was addressed as part of our first information request submission.
Please clarify how the informal path from the Cenotaph down to the Tasman Highway footpath will be maintained or reinstated.	This item was addressed as part of our first information request submission.

Query	Response
Please indicate on the plans that the bike path through the site will be maintained as a thoroughfare.	This item was addressed as part of our first information request submission.
Traffic	
The TIA should be updated to reflect the Muncipal Map (Section 208 LGAct1993).	Pitt & Sherry traffic impact assessment report ver 2.0 responds to these queries.
The plans show two pedestrian/cyclist routes crossing the new access road. Pedestrian and cyclists are inclined to use the most direct route which is on the existing shared path. Indicate why there are two separate routes and if the use of the path within the site (across the wombat crossing) is intended to be the main shared path demonstrate how pedestrians and cyclists would be directed to this route.	The main route using the wombat crossing is to continue the shared path on the eastern side of the Tasman highway. The pedestrian crossing is provided to give pedestrians the opportunity to cross to the island between the access road and the Tasman Highway and then cross the Tasman highway. The existing shared path on the "island" is to be removed and the existing kerb ramps allowing access to this island will also be removed. This is stated on the drawings.
Plan (HB18477C1111) shows a pedestrian crossing signal on the new road at the Evans Street access from Davey Street that joins onto the existing shared path. Provide information on the impact of these signals on the operation of the nearby intersections. Are queues likely to extend onto the Brooker Avenue Department of State Growth might have had concerns with this.	Pitt & Sherry Traffic Impact Assessment report ver 2.0 provides a response to this query
Pedestrian / cyclist crossing signals are shown near the entrance to the roadway (at the southern access), however there is no crossing facilities shown at the northern access off the new roadway. Provide information on how cyclists and pedestrians are required to cross this access.	This is no longer a crossing point and will be removed, refer to drawings which state that existing kerb ramps and path on the island will be removed and replaced with landscaping to prevent pedestrians and cyclists from crossing here. There is no crossing facilities at the northern access of the new roadway because this is the slip road entrance, traffic is going too fast.
The TIA indicates that a wombat crossing does not meet VICRoads warrants for a typical weekday operation. Has other crossing facilities been looked at such as kerb extensions with median refuge? Explain why a wombat crossing was chosen for this site. Provide information on the impacts of the wombat crossing on the traffic entering the site during peak periods. What is the likely queueing as result of the crossing?	Pitt & Sherry Traffic Impact Assessment report ver 2.0 provides a detailed response to this query. In summary there is a requirement to give pedestrians and cyclists on the shared path a right of way with the wombat crossing being identified as the best and safest option to achieve this. The likely queuing impact at the wombat crossing is minimal as the wombat crossing is located a significant distance from the intersection of the Brooker Avenue and the

Query	Response				
	Tasman Highway and pedestrian and vehicle				
	volumes are not considered high enough to				
	cause an issue.				
Show turn paths for the maximum size vehicle	Pitt & Sherry Traffic Impact Assessment report				
in and out of the site in accordance with	ver 2.0 provides a response to this query				
relevant Austroads requirements					
Provide information on the sight distance at the	Pitt & Sherry Traffic Impact Assessment report				
wombat crossing including approach sight	ver 2.0 provides a response to this query				
distance for vehicles entering the site.					





# **RESULT OF SEARCH**

RECORDER OF TITLES
Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 176538	FOLIO
EDITION	DATE OF ISSUE 12-Sep-2019

SEARCH DATE : 26-Sep-2019 SEARCH TIME : 11.13 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 2 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





# **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 176538	FOLIO 3
EDITION 1	DATE OF ISSUE 12-Sep-2019

SEARCH DATE : 26-Sep-2019 SEARCH TIME : 11.13 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 3 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment





# **RESULT OF SEARCH**

RECORDER OF TITLES
<u>Issued Pursuant to the Land Titles Act 1980</u>



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
176538	4
EDITION	DATE OF ISSUE
1	12-Sep-2019

SEARCH DATE : 26-Sep-2019 SEARCH TIME : 11.13 AM

#### DESCRIPTION OF LAND

City of HOBART Lot 4 on Sealed Plan 176538 Derivation : Part of Lot 1, 9.004ha vested in Australian National Railways Commission. Prior CT 113521/1

#### SCHEDULE 1

C139362 TRANSFER to THE CROWN Registered 16-Oct-1998 at noon

#### SCHEDULE 2

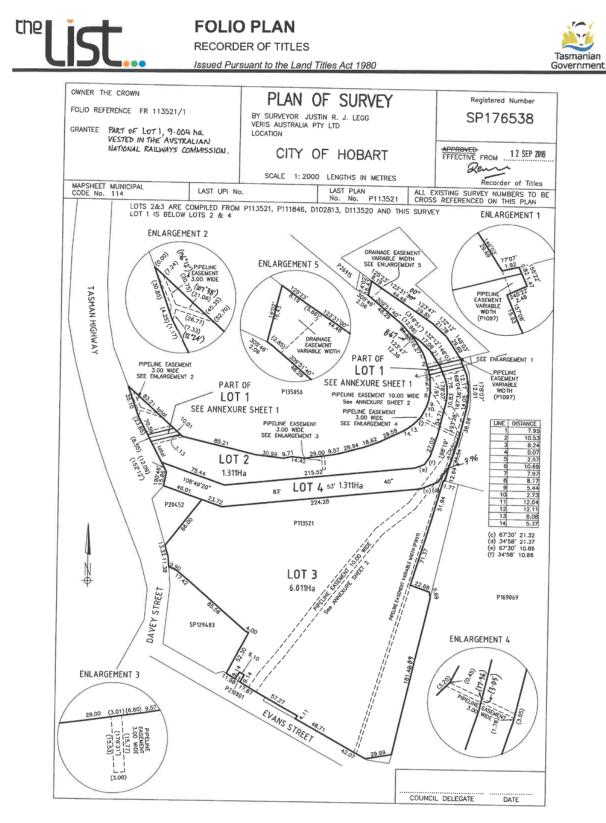
Reservations and conditions in the Crown Grant if any SP176538 EASEMENTS in Schedule of Easements SP176538 WATER SUPPLY RESTRICTION SP176538 SEWERAGE AND/OR DRAINAGE RESTRICTION

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

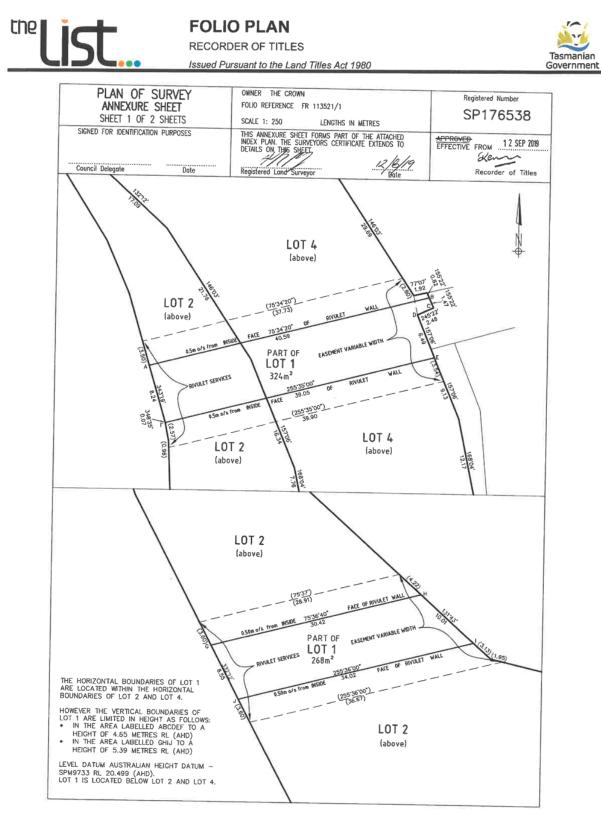
Department of Primary Industries, Parks, Water and Environment





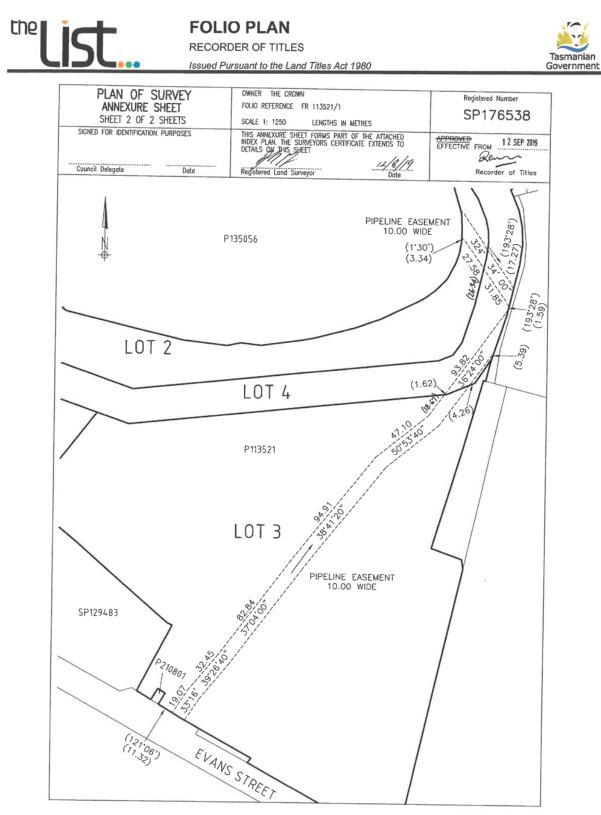
 Search Date: 26 Sep 2019
 Search Time: 11:13 AM
 Volume Number: 176538
 Revision Number: 01
 Page 1 of 3

 Department of Primary Industries, Parks, Water and Environment
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 Search Date: 26 Sep 2019
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# **COUNCIL CERTIFICATE**

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



	Registered Number
COUNCIL APPROVAL	SP176538
(Insert any qualification to the permit under section 83(5), section 109 or section 111 of the Local Government (Building & Miscellaneous Provisions) Act 1993) The subdivision shown in this plan is approved	
THIS PLAN DOES NOT REQUIRE APPROVAL BY THE COUNCIL BY VIRTUE OF S.121 OF THE LO (BUILDING AND MISCELLANEOUS PROVISIONS) ACT 1993.	DCAL GOVERNMENT
PURSUANT TO S.83(5)(a)(ii) OF THE LOCAL GOVERNMENT (BUILDING AND MISCELLANEOUS F THE HOBART CITY COUNCIL CANNOT OR WILL NOT PROVIDE A MEANS OF DRAINAGE FROM	PROVISIONS) ACT 1993, THE LOTS ON THE PLAN.
PURSUANT TO S.83(7)(a) AND (b) OF THE LOCAL GOVERNMENT (BUILDING AND MISCELLANE 1993, TAS WATER CANNOT OR WILL NOT PROVIDE A SUPPLY OF WATER OR MEANS OF SEW ON THE PLAN.	OUS PROVISIONS) ACT ERAGE TO THE LOTS
LOTS 1 AND 4 ARE EXEMPT FROM THE OPERATION OF PART 3 OF THE LOCAL GOVERNMENT MISCELLANEOUS PROVISIONS) ACT 1993, PURSUANT TO S.115(1)(b).	(BUILDING AND
In witness whereof the common seal of	
has been affixed, pursuant to a resolution of the Council of the said municipality	
passed the day of 20 , in the presence of us	
Member	
Member	
Council Delegate Council Reference	
NOMINATIONS For the purpose of section 88 of the Local Government (Building & Miscellaneous Provisions) Act 1993 the owner has nominated	
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 Search Date: 26 Sep 2019
 Search Time: 11:13 AM
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 Page 1 of 1

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# **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



# SEARCH OF TORRENS TITLE

VOLUME	FOLIO
163944	1
EDITION	DATE OF ISSUE
2	01-Jul-2015

SEARCH DATE : 16-Apr-2020 SEARCH TIME : 04.40 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 1 on Plan 163944 Derivation : Whole of Lots 1 and 2 (1424m2 and 3.2m2 respectively) Vested in The Australian National Railways Commission Prior CT 21772/1

#### SCHEDULE 1

A958989 TRANSFER to HOBART CITY COUNCIL

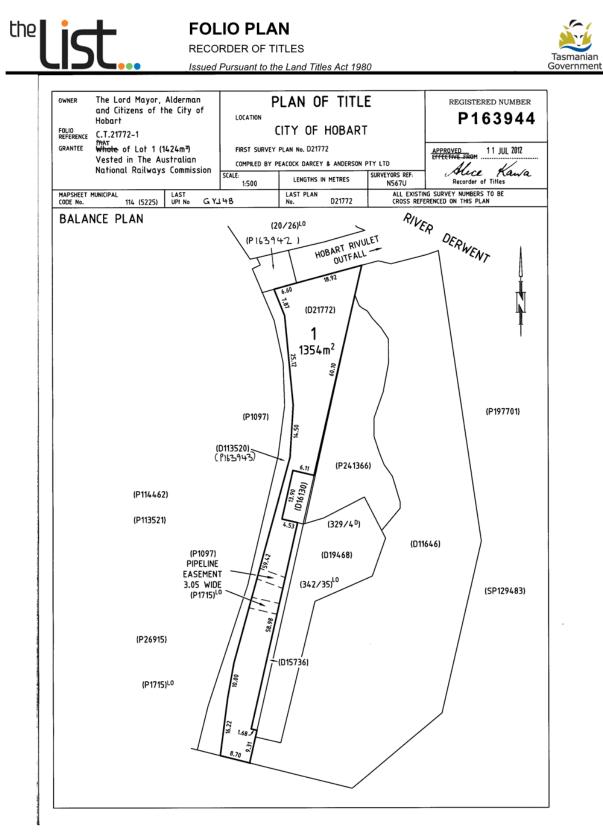
#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment



 Search Date: 16 Apr 2020
 Search Time: 04:40 PM
 Volume Number: 163944
 Revision Number: 01
 Page 1 of 1

 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au

# Application Referral Cultural Heritage - Response

From:	Sarah Waight
Recommendation:	
Date Completed:	
Address:	10 EVANS STREET, HOBART ADJACENT ROAD RESERVE ADJOINING COUNCIL LAND (CT 163943/1 and CT 163944/1)
Proposal:	New Road and Associated Works
Application No:	PLN-19-746
Assessment Officer:	Tristan Widdowson,

# **Referral Officer comments:**

This application is for a new road into the Macquarie Point site, a new slip lane, minor changes to the median crossing, pedestrian crossing, alterations to the existing service road layout, footpaths and new stormwater connections. This work is all below the escarpment with the Royal Engineers Building to the south and the Cenotaph above. The works are over and connect into a known Place of Archaeological Sensitivity (Site 90 Domain Diversion Tunnel for Hobart Rivulet) and adjacent to places of Cultural Significance as listed in table 1 and shown in figure 5, the Royal Engineers Building (site 26) and sites on top of the escarpment associated with the Cenotaph (sites 18, 19 and 121), as defined in Schedule 1 - Conservation of Cultural Heritage Values of the *Sullivans Cove Planning Scheme* 1997.

Clause 32.9 of the Macquarie Point Site Development Plan states that "The heritage provisions of the Schedule 1 of the Scheme apply"

The assessment of this proposal is under Schedule 1 with submission requirements assessed under clause 22.6.3. The proposal is supported by the following report by Austral Tasmania titled "Archaeological Sensitivity Report" dated 29 May 2019.

It should be noted that this report or the broader application does not address the following works - new footpath (see Drawing General Arrangement Sheet 1, drawing HB18477-C1101, Revision F, dated 3 April 2020) or the stormwater works as denoted on drawing (Drainage and Service Sheet 4, drawing HB18477-C1204, Revision B, dated 5 March 2020) where they intersect or are directly over the archaeological site 90 Domain Diversion Tunnel . It is recommended that a condition of permit is included to ensure that these works are carried out in a manner that is in accordance with the Objectives of Schedule 1. A previous application for the staircase linking Macquarie Point to the Cenotaph, which is also shown in the submitted drawings, concluded that with the works associated with the staircase there was a very low to negligible risk of impacts to, or destruction of the tunnel arising from these works based on the fact that the height difference between the top of the Diversion Tunnel roof and the stair infrastructure will vary in depth from 8.62 m to 4.12 metres. For this current proposal, the height difference would be similar and therefore it is considered that the same advice as outlined below would be applicable in this instance.

"Contractors should be made aware of the location of the tunnel during works and take due care to avoid impacts to the infrastructure. For precautionary purposes and in the project specifications it would be prudent to put in place notification protocols whereby archaeological advice is sought in the unlikely event that features or deposits of an archaeological nature are uncovered during excavation or where doubt exists concerning the provenance of any strata revealed during excavations. In such instances, excavation should immediately cease pending attendance on site and receipt of advice from a qualified archaeologist, at which point, depending on the findings, it may also be necessary to involve the Hobart City Council in discussions." This condition would also apply in this instance.

The Austral report submitted as part of this application does conclude however, that an archaeological strategy is required for managing two identified features. As such, the proposed works are not permitted as defined under clause 22.6.4 and must be assessed against 22.6.5 as discretionary.

This reports also states that the roadworks will have nil to low impact on archaeological potential with the exception of these two discrete areas of nineteenth century development. Therefore, given the Austral report makes relevant management recommendations it is appropriate that a condition pertaining to those recommendations are included in any permit issued.

In an assessment of the proposal against the provisions, based on the report submitted, it is considered that the works are unlikely to result in the removal or destruction of an item of archaeological significance and that no reconnaissance or site sampling work is required. Contractor briefing and site awareness is a recommendation as is the necessity for work to stop should unexpected finds are uncovered. These two matter can be dealt with as a condition of permit.

The proposal is also adjacent to places of cultural significant: (site 26-Royal Engineers Building and Stone Post, 18-Martins Hot Shot Oven, 19-Queens Battery and 121-Cenotaph and Cenotaph Avenue). Sites 18, 19 and 121 are on Council land and site 26 is on Macquarie Point land.

The proposal must be assessed against clause 22.5.4 which states:

'Building or works' on other land within the planning area is 'permitted' in respect to this Schedule where it can be demonstrated that the following 'deemed to comply' standards can be met:

For 'building or works' on sites adjacent (as defined in clause 22.3) to a place of cultural significance:

• The height of 'building or works' adjacent to places of cultural significance must not exceed that of any building on the place, at a distance of less than 10 (horizontal) metres from the building; and

• The area of the facade of any new 'building or works' must not exceed that of the facade of an adjacent place of cultural significance by a factor of 2."

In this case, site 26 place of cultural significance is immediately adjacent to the proposed road works, while the other sites 18, 19 and 121 are over 40 metres away. Therefore, it can be concluded that the proposed height of the works, as road and road infrastructure does not exceed that of any listed place. Dot point 2 is not considered to apply. Therefore, the proposal can be considered to satisfy clause 22.5.4.

Sarah Waight Acting Senior Cultural Heritage Officer 23 April 2020

Background report

The area which we now refer to as Macquarie Point is part of timtumili minanya – the River Derwent. Refer to https://en.wikipedia.org/wiki/River\_Derwent\_(Tasmania).

Commentary on the significance of land and water to indigenous people is beyond the scope of this report. It is very important to acknowledge, however that this locale is a point of early contact/invasion. I suggest it would be prudent to seek the views of those in the Tasmanian Aboriginal community with regard to any potential significance at this site.

Following colonisation, which occurred from 1803 onwards, Macquarie Point was progressively reclaimed in order to provide suitable infrastructure for a 19th and 20th century port.

The reclaimed land was used for slaughterhouses in the 19th century and as railyards in the 20th century. Curvilinear train tracks and a circular storage structure can be seen in historical photographs of this area. These items have since been demolished. Much of the site is now simply vacant land with very little historical fabric in evidence. The area is used for car parking, occasional events and a cycle path.

The Royal Engineers Building and the Cenotaph trigger this cultural heritage referral. Neither of these sites are directly within in the area upon which the proposed road will be built.

The impact on cultural heritage (as identified in the Sullivan Cove Planning Scheme) is considered acceptable.

#### Megan Baynes CHO 8 11 2019

AND DESCRIPTION OF THE OWNER

ARCHITECTS

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# Supporting Information Council Meeting - 25/5/2020

### Page 280 ATTACHMENT B

#### GENERAL NOTES:

20

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	Sheet Name		Sheet Name		Sheet Na	ine			Sheet Nam	e
DA 000	Cover Sheet & Drawing List	DA 107	Urban Contextural Views 3	DA 204	Block A Level 3		DA 300	North Elevat	tion (Sandy Bay Road)	& South Elevation
DA 100	Existing Site Survey		Urban Contextural Views 4	DA 205	Block A - Level 4		DA 301		est Elevations	r oouar Elevation
DA 101	Location & Demolition Plan	2		DA 206	Block A Level 5					
DA 102	Demolition Elevation & Diagram	DA 109	Urban Contextural Views 5	DA 207	Block A Level 6		DA 302	Sandy Bay F	Road Elevation Height S	tudy
		DA 200	Block A Lower Basement				DA 303	HeathfileId a	and Wilmot Sections	
DA 103	Shadow Diagram Study			DA 208	Block A Level 7					
DA 404	Designed October 11 Office Disc	DA 201	Block A - Upper Basement	D.4.000	Diack All avail 0		DA 400	Sections		
DA 104	Proposed Overall Site Plan	DA 202	Diask A Lavel 4	DA 209	Block A Level 8					
DA 105	Urban Contextual Views 1	DA 202	Block A Level 1	DA 240	Block A Level 9					
DA 103	orban contextual views i	DA 203	Block A Level 2	DA 210	DIOCK A LEVELS					
DA 106	Urban Contextual Views 2	071200	arout resolution	DA 211	Typical Floor Sun Study					
			No Date Description	CLIENT		TITLE	PROJECT		Job No.	1718 Drawing No.
SC	Sudo 79 King Street PERTH WA 600 Email general@scanina.com.a Web www.scanina.com.a Phone +618 8921 016 Facsmie +618 8921 016	u u 6	Expense 200 - Doolognert Application		CE TAS HOBART (SANDY BAY) Ply	Cover Sheet & Drawing List	5-7 SANDY BAY	ROAD.		1718 1/2019 AT DA 000

Job No.	1718	Drawing No.
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HOBART TASMANIA

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# Page 281 ATTACHMENT B

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01. DISTANT N.E. VIEW FROM ST DAVIDS PARK



02. CLOSER N.E. VIEW FROM ST DAVIDS PARK



3. CORNER VIEW OF THE CONSERVATORIUM OF MUSIC

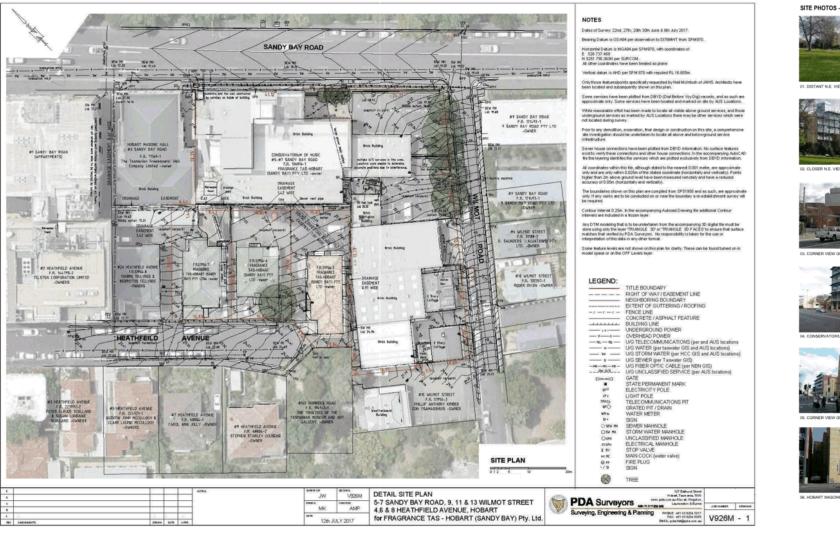




6. CORNER VIEW OF MANTRA ONE HOT



06. HOBART MASONIC HALL STREET VIEW



TITLE PROJECT Date tamber Development Application Description CLIENT Job No 1718 Drawing No 79 King Street PERTH WA 6000 Date 5-7 SANDY BAY ROAD. 06/08/19 Email Web Phone general@scanlan.com.au www.scanlan.com.au FRAGRANCE TAS HOBART Existing Site Survey Scale 1:300 (SANDY BAY) Pty Ltd HOBART TASMANIA DA 100 +61 8 9321 0166 +61 8 9485 0435 Drawn Facsimile ARCHITECTS Checked by AA Issue

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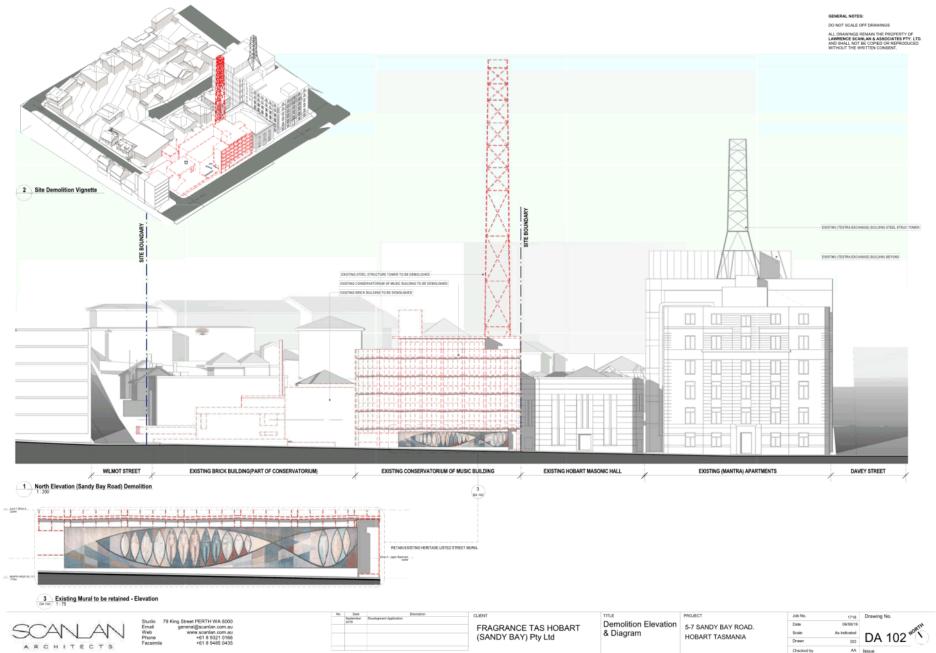
# Supporting Information Council Meeting - 25/5/2020

# Page 282 ATTACHMENT B



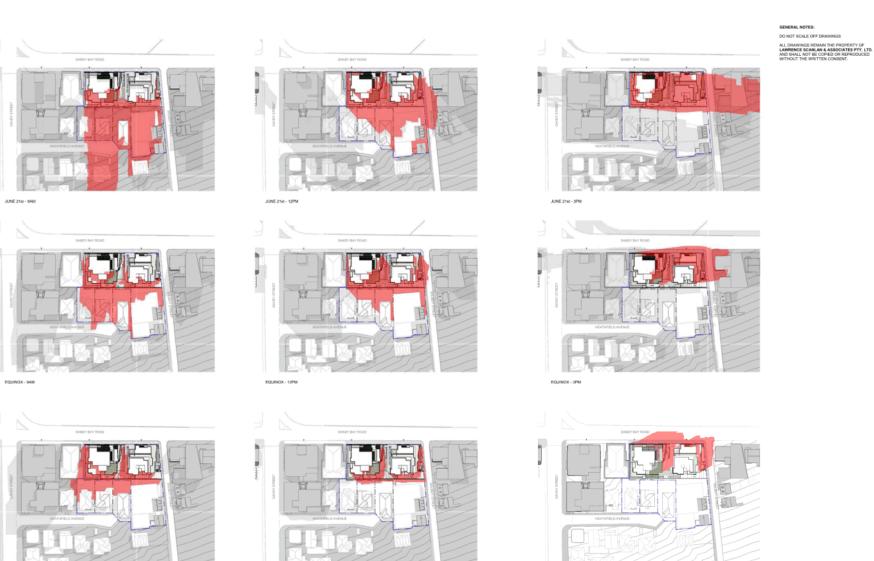
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DECEMBER 21st - 9AM

Date Description
September Development Application
2019 CLIENT TITLE PROJECT 1718 Drawing No. Job No. Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au Web www.scanlan.com.au Phone +61 8 9321 0166 Facsimile +61 8 9485 0435 Shadow Diagram Date 06/08/19 FRAGRANCE TAS HOBART 5-7 SANDY BAY ROAD. 5 Study Scale Drawn DA 103 (SANDY BAY) Pty Ltd HOBART TASMANIA ARCHITECTS Checked by AA Issue © THE COPYRIGHT OF THIS DRAWING AND THE INTELLECTUAL PROPERT Pict Date 7/01/2820 3:23:48 PM File Path C:Us 716-Sandy Bay Road Hobert Block A Single CENTRAL\_BinChute\_alice@scanlan.com.au.n/ RESERVED. ACN 008 948 525

DECEMBER 21st - 3PM

DECEMBER 21st - 12PM



Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au Web www.scanlan.com.au Phone 481.8 Apple Date Development Application CLIENT TITLE PROJECT 1718 Drawing No. No Job No. Proposed Overall Date 06/08/19 general@scanlan.com.au www.scanlan.com.au +61 8 9321 0166 +61 8 9485 0435 2020 Development Application- Response to RFTs FRAGRANCE TAS HOBART 5-7 SANDY BAY ROAD. 5 As indicated DA 104 Site Plan Scale Drawn (SANDY BAY) Pty Ltd HOBART TASMANIA Facsimile ARCHITECTS Checked by AA Issue Plot Date 31/0/ (CITHE COR

# Page 285 ATTACHMENT B

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1 MACQUARIE STREET VIEW FROM ST JOSEPH'S CHURCH





2 DAVEY ST VIEW FROM THE ENTRANCE OF DAVIS PARK



3 VIEW FROM THE END OF WILMOT ST

ral@scanlan.co vw.scanlan.co

+61 8 9321 +61 8 9485



	No	Date	
6000		September 2018	Development Applica
im.au			
m.au 0166 0435			





aurt Block A Single CENTRAL\_BinChule\_stice@r

Urban Contextual Views 1 PROJECT 5-7 SANDY BAY HOBART TASMA

	Job No.	1718	Drawing No.
ROAD.	Date	06/08/19	
ANIA	Scale	1 : 2000	DA 105
ANIA	Drawn	AT	DA 105
	Checked by	AA	Issue





(4) NEARER VIEW FROM WILMOT ST TOWARDS SANDY BAY RD





5 PERSPECTIVE VIEW FROM DAVIS PARK





6 PERSPECTIVE VIEW FROM GLADSTONE ST

Piet Date: 10128203:24:17 PM



Studio	79 King Street PERTH WA 6000
Email	general@scanlan.com.au
Web	www.scanlan.com.au
Phone	+61 8 9321 0166
Facsimile	+61 8 9485 0435

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No Date	Description	CLIENT
Suptomber	Development Application	COUNT
		FRAGRANCE TAS HOBART
-		
		(SANDY BAY) Pty Ltd
_		100001755025225524225024352355

to 1716-Sandy Bay Road Hotert Bluck & Single CENTRA,\_BirdDode\_stick@scantan.com.au.n/



Urban Contextual 5-7 SANDY BAY ROAD. Date 060819	Views 2	HOBART TASMANIA	Scale Drawn	1 2000 AT	DA 106
	views z				DA 106
Urban Contextual	Views 2			1 2000	DA 400 HORT
	Urban Contextual	E 7 CANDY DAY DOAD	Date	06/08/19	1

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7 MORRISON ST VIEW FROM COSTUMS HOUSE HOTEL





8 VIEW FROM PARLIAMENT HOUSE LAWN





9 LOCATION VIEW FROM CASTRAY ESPLANADE

TECTS, ALL RIGHTS RESERVED. ACN 004 948 525

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Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au Web www.scanlan.com.au Phone +61 8 9321 0166 Facsimile +61 8 9485 0435

No	Date Suptomber	Description Development Application	CLIENT
			FRAGRANCE TAS HOBART (SANDY BAY) Pty Ltd

n 1716-Savdy Bay Road Hobert Block A Single CENTRAL\_BirdDiste\_alice@scantes.com.au rd



TITLE	PROJECT 5-7 SANDY BAY ROAD.	Job No.	1718	Drawing No.
Urban Contextural		Date	06/08/19	atth
Views 3	HOBART TASMANIA	Scale	1:2000	DA 107 ***
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10 HUNTER ST VIEW FROM UNIVERSITY OF TASMANIA





11 HEATHFIELD AVE VIEW FROM NEARMAP.COM



12 HEATHFIELD AVE VIEW FROM NEARMAP.COM





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Email	general@scanlan.com.au
Web	www.scanlan.com.au
Phone	+61 8 9321 0166
Facsimile	+61 8 9485 0435

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- No	Date	Description	CLIENT	TITLE
	September 2018	Development Application	uberri	
P2 :	7101-2820	Development Application: Response to RFTs	FRAGRANCE TAS HOBART	Urba View
			(SANDY BAY) Pty Ltd	

th 1716-Bandy Sky Road Hotert Block A Single CENTRAL\_EinChole\_elox@econten.com.au ml

Plot Date 3/01/2820 3:24:33 PM File Path C/Users

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	PROJECT
n Contextural	5-7 SANDY BAY ROAD.
s 4	HOBART TASMANIA

Job No.	1718	Drawing No.
Date	06/05/19	TH
Scale	As indicated	DA 108 "
Drawn	ZW	DA 108
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HEATHFIELD AVENUE VIEW 01\_24mm LENS From a point on the kerb adjacent No.5 Heathfield Avenue looking towards the proposed development in the context of Nos. 2a to 6 Heathfield Avenue.





HEATHFIELD AVENUE VIEW 02\_50mm LENS From a point on the kerb adjacent No.5 Heathfield Avenue looking towards the proposed development in the context of Nos. 2a to 6 Heathfield Avenue.





SANDY BAY ROAD VIEW 03\_24mm LENS From a point on the kerb of Sandy Bay Road adjacent to the junction with Davey Street and to the entrance of St David's Park showing the context of the mural as existing and proposed.



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	Paulia 70	King Street PERTH WA 6000		72	0.ete 2101.0820	Description Development Application Response to RFTs	CLIENT	T
	Studio 79 Email Web Phone Facsimile	King Street PERTH WA 6000 general@scanlan.com.au www.scanlan.com.au +61 8 9321 0166 +61 8 9485 0435					FRAGRANCE TAS HOBART (SANDY BAY) Pty Ltd	V
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NOTE: All photomontages had been captured at a height of 1.5m above the footpath level both with 24mm and 50mm lens.

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SANDY BAY ROAD VIEW 04\_50mm LENS From a point on the kerb of Sandy Bay Road adjacent to the junction with Davey Street and to the entrance of St David's Park howing the context of the murai as existing and proposed.

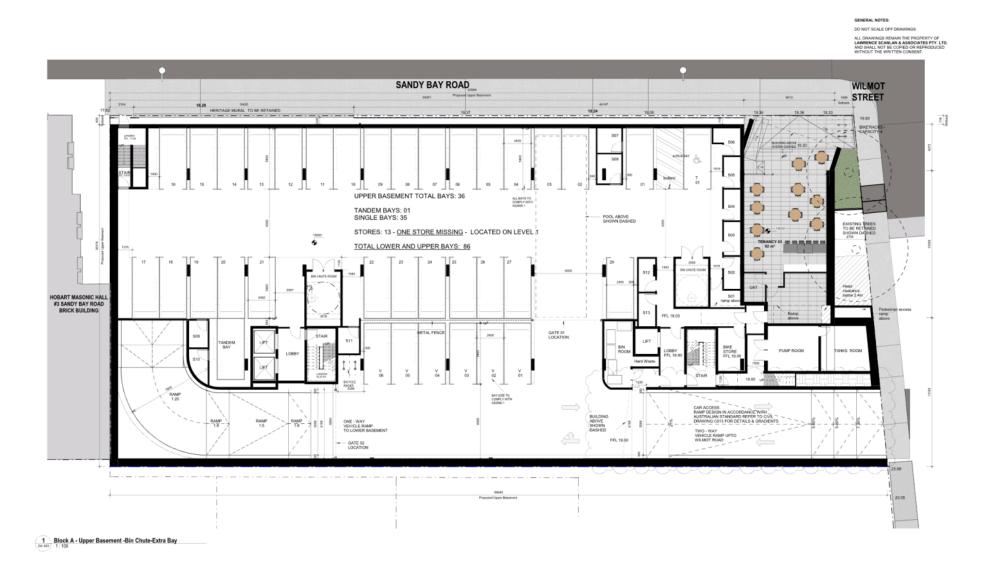
	TITLE	PROJECT	Job No.	1718	Drawing	No.
	Urban Contextural Views 5	5-7 SANDY BAY ROAD.	Date Scale	01/07/20	-	109 HORTH
		HOBART TASMANIA	Drawn	AA	DA	109
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# Page 291 ATTACHMENT B



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ARCHITECTS								Checked by	RS	Issue	P2

# Page 292 ATTACHMENT B



	No Date Description September Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au	P2 7/01/2820 Development Application: Response to RFTs	FRAGRANCE TAS HOBART (SANDY BAY) Pty		5-7 SANDY BAY ROAD.	Date	11/01/2019
SCAN AN Email generaligiscanian.com.au Web www.scanian.com.au Phone +618 9321 0166		Ltd	Block A - Upper		Scale	DA 201
ARCHITECTS Facsimile +618 9485 0435			Basement		Drawn	" DA 201
ARCHITECTS				HOBART TASMANIA	Checked by	RS Issue P2
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# Page 293 ATTACHMENT B



Level 1 Block A

	No	Date September	Description Development Application	CUENT	TITLE	PROJECT	Job No.	1718	Drawing No.
Studio 79 King Street PERTH WA 6000	P2	2018 73012820	Development Application- Response to RFTs	FRAGRANCE TAS HOBART	Block A Level 1	5-7 SANDY BAY ROAD.	Date	06/08/19	ath
Web www.scanlan.com.au				(SANDY BAY) Pty Ltd	BIOCK A Level 1	HOBART TASMANIA	Scale	1:100	DA 202 ***
Phone +61 8 9321 0166 Facsimile +61 8 9485 0435				(SANDT BAT) Fly Llu		HOBART TASMANIA	Drawn	AA	DA 202
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# Page 294 ATTACHMENT B

GENERAL NOTES:





1 Level 2 Block A

	Readle To Man Report Line 2000	No	Date September	Description Development Application	CLIENT	TITLE	PROJECT	Job No.	1718	Drawing No.	
COANI ANI	Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au	P2	2018 7301(2820	Development Application: Response to RFTs	FRAGRANCE TAS HOBART Block A Level 2 5-7	5-7 SANDY BAY ROAD.	Date	06/08/19	a1	4	
SCAN AN	Email general@scanian.com.au Web www.scanian.com.au Phone +61.8.9321.0166				(SANDY BAY) Pty Ltd	BIOCK A Level 2	HOBART TASMANIA	Scale	1:100	DA 203 *	0
ARCHITECTS	Facsimile +61 8 9485 0435				(SANDI BAT) FIG EIG		HODART HASIMANA	Drawn	AA	DA 203	9
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# Page 295 ATTACHMENT B





1 Level 3 Block A

BLOCK A FFL 28.20

	No Date Description September Development Application	CLIENT	TITLE	PROJECT	Job No. 171	B Drawing No.
Studio 79 King Street PERTH WA 6000 Email general@scanian.com.au Web www.scanian.com.au	22/18	FRAGRANCE TAS HOBART	Block A Level 3	5-7 SANDY BAY ROAD.	Date 06/08/	9 ATH
Web www.scanlan.com.au Phone +61.8 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A LEVEL O	HOBART TASMANIA	Scale 1:10	DA 204 *
ARCHITECTS Facsimile +618 9485 0435		(SANDI BAT) I G Eld			Drawn A	DA 204
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Studio 79 King Street PERTH WA 6000	No Date Description Reptember Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
CONTINUE AND Email general@scanlan.com.au	2018	FRAGRANCE TAS HOBART	Block A - Level 4	5-7 SANDY BAY ROAD.	Date	09/12/19
Web www.scanlan.com.au +61 8 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A - Level 4	HOBART TASMANIA	Scale	DA 205
A R C H I T E C T S Facsimile +618 9485 0435		(OARDT BAT)T IJ EIG			Drawn	" DA 205
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# Page 297 ATTACHMENT B





1 Level 5 Block A

BLOCK A FFL 34.20

Studio 79 King Street PERTH WA 6000	No Date Description Suptomber Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
COANI ANI Email general@scanlan.com.au	2019	FRAGRANCE TAS HOBART	Block A Level 5	5-7 SANDY BAY ROAD.	Date 0	6/08/19
Web www.scanlan.com.au Phone +61.8 9321 0166		(SANDY BAY) Pty Ltd	21001171201010	HOBART TASMANIA	Scale	DA 206 🏠
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1 Level 6 Block A

	No Date Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
Studio 79 King Street PERTH WA 6000 Email general@scanan.com.au Web www.seanan.com.au	2018	FRAGRANCE TAS HOBART	Block A Level 6	5-7 SANDY BAY ROAD.	Date 06	08/19
SCAN AN Emai general@scanlan.com.au Web www.scanlan.com.au Phone +618 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A Level 0	HOBART TASMANIA	Scale 1	📆 DA 207 🏷
Eastimile +61.8.9485.0435		(SANDT BAT) FIY LIU		HOBART TASMANIA	Drawn	" DA 207
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BLOCK A FFL 40.20

Reads To May Over DEPAILURE 2000	No Date Description September Development Application	CLIENT	TITLE	PROJECT	Job No. 1	718 Drawing No.
Studio 79 King Street PERTH WA 6000 Email general@scanian.com.au Web www.scanian.com.au	2018	FRAGRANCE TAS HOBART	Block A Level 7	5-7 SANDY BAY ROAD.	Date 06/0	a) '
SAAAA Web www.scanlan.com.au Phone +61.8 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A Level 7	HOBART TASMANIA	Scale 1:	🚆 DA 208 🎷
A R C H I T E C T S Facsimile +61 8 9485 0435		(SANDT BAT) FIL		Hobart Hosmania	Drawn	M DA 200
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	No Date Description September Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
Studio 79 King Street PERTH WA 6000	2018	FRAGRANCE TAS HOBART	Block A Level 8	5-7 SANDY BAY ROAD.	Date	16/08/19
SCANLAN Email general@scanlan.com.au Web e +618 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A Level o	HOBART TASMANIA	Scale	1:100 DA 209 V
ARCHITECTS Facsmile +618 9485 0435		(SANDI BAT) Hy Eld		Hobart Hosmania	Drawn	" DA 209
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#### 1 Level 9 Block A

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BLOCK A FFL 46.20

	Studio 79 King Street PERTH WA 6000	No Date Development Application	CLIENT	TITLE	PROJECT	Job No.	1718 Drawing No.
SCANI ANI	Email general@scanlan.com.au	27/0	FRAGRANCE TAS HOBART	Block A Level 9	5-7 SANDY BAY ROAD.		06/08/19
SALAI	Web www.scanlan.com.au Phone +61 8 9321 0166 Facsimile +61 8 9485 0435		(SANDY BAY) Pty Ltd		HOBART TASMANIA	Scale Drawn	<sup>1:100</sup> DA 210 <sup>10</sup>
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#### GENERAL NOTES:

FACADE TYPES

FACE BRICK - Woodbridge- midlandbrick or similar

DULUX - DURALLOY BLACK (CB NIGHT SKY) SATIN

ALUMINIUM BALUSTRADE - DULUX DURALLOY - CLASSIC PEARL WHITE

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5-Sendy Bay Road Hobart Block A Single CENTRAL\_BinChute\_alice@

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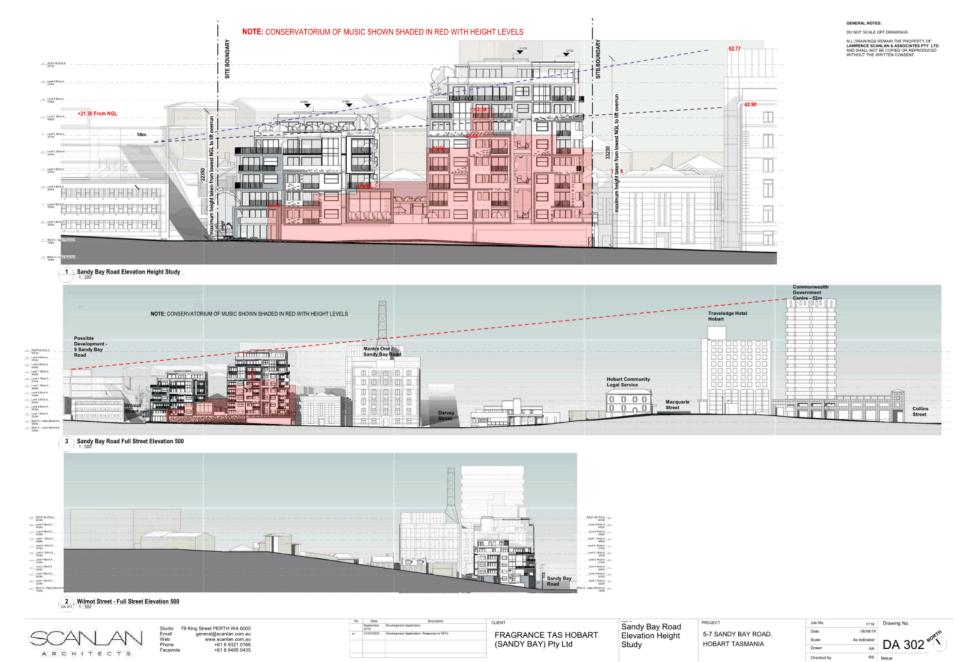


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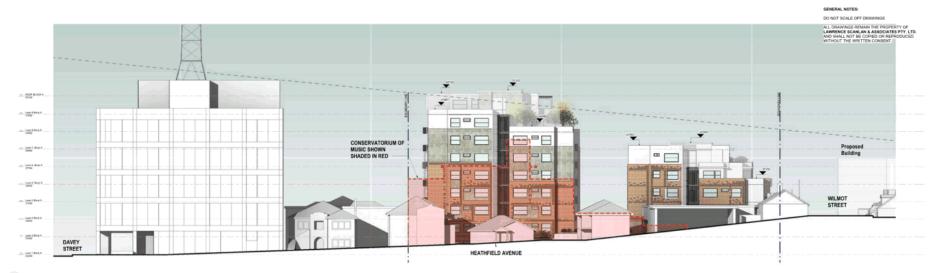
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1 Section - Heathfield Avenue



Wilmot street Section View

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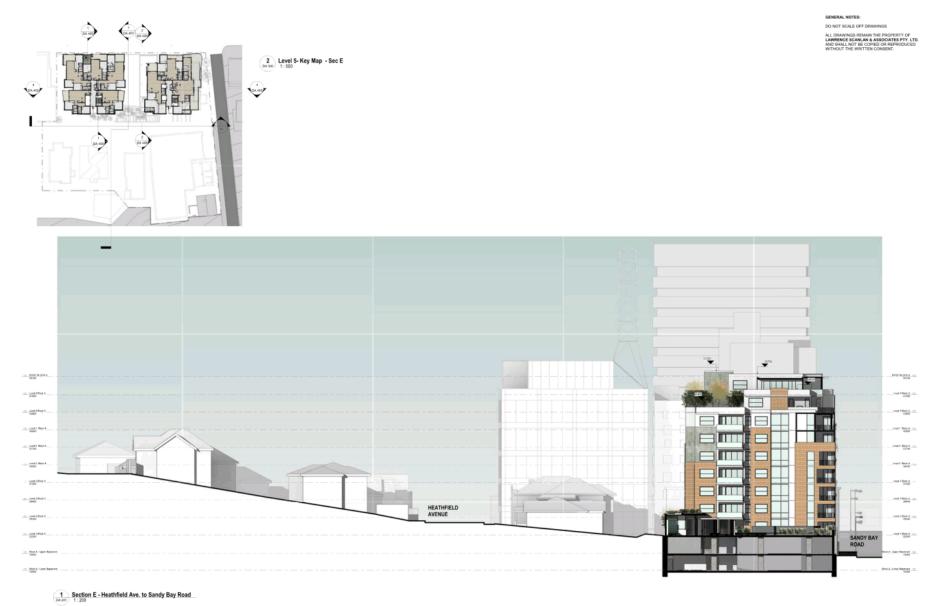
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#### Supporting Information Council Meeting - 25/5/2020

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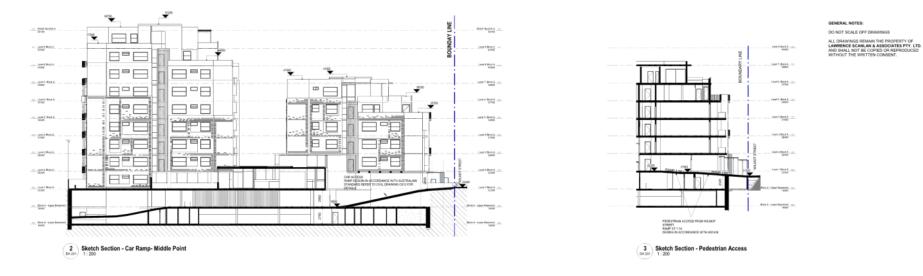


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Web www.scanlan.com.au Phone +61.8 9321 0166		-		(SANDY BAY) Pty Ltd	Section - Ramps	HOBART TASMANIA	Scale	1:200	DA 402 **
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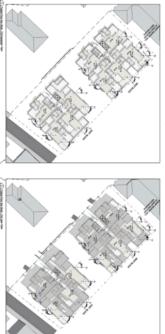
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Pict Date 27/







Extract from: DA-211- P3 – Typical Floor – Sun Study

As can be seen from the extract above - *DA 211 Typical Floor – Sun Study*, 80% of the apartments will benefit from North exposure of habitable rooms (other than a bedroom), and in most cases including bedrooms & studies. The 20% of the remaining apartments are mostly facing South. In a lo d tacade 5 nize the rully ben The balco fit from sunlight without any al light exposure, we ir ip p ies are free from the br te the light pa obstruction. R Id controlled openings Clear glass has been also ea op ngs and

The extract below shows a typical case of a South oriented apartment, located in both East and West blocks. The south east orientation of the living area guarantees a full exposure to morning light whilst the generous opening will optimize light exposure during the rest of the day.



Extract fro

DA-211- P3 – Typical Floor

Sun Study



ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

August 2019

<u>i</u> L L L



lite View from Sandy Bay Road

#### INTRODUCTION 01

1.1 Project Overview

#### SITE CONTEXT 02

- 2.1 Site Location 2.2 Site Information
- 2.3 Site Characteristics
- 2.4 History and Heritage
- 2.5 George Davis Mural
- 03

04

#### SITE ANALYSIS

- 3.1 Local Amenities
- 3.2 Public Transport and Infrastructure 3.3 Public Street Art
- 3.4 Urban Context and Built Form

#### PROPOSED DESIGN

- 4.1 Project Aim
- 4.2 Residential Project
- 4.3 Materials
- 4.4 Façades Treatment
- 4.5 The Mural- preservation and new approach
- 4.6 Archeological Impact
- 4.7 Landscape

#### 1.1 Project Overview

This proposed residential development features boutique apartments tailored for Hobart's growing market and expectation. Communal facilities for the residents have been located on the premises and two levels of secure car parking provided for both residents and visitors.

The ground level corner between Wilmot Street and Sandy Bay Road opens to a small commercial tenancy (cafe, bar or bistro) to improve and activate the relationship between the proposed building and the community. This locally owned commercial activity could be highly beneficial not only for the residents, but for all community members coming from nearby areas.

The preservation of the heritage listed George Davis Mural was given serious consideration during the design stage. It is proposed to use this project as an opportunity to engage local artists in a small competition to work with the proposed architecture to create a new piece of artwork, complimentary to and enhancing the existing Mural and to be embedded within the common areas, to be appreciated from outside the boundaries by both the local community and visitors to the City of Hobart's.

ARCHITECTURAL STATEMENT



#### 2.1 Site Location

(Also refer to Planning Statement prepared by IreneInc Drawings for further detail)

The proposed development is located at 5-7 Sandy Bay Road, on the corner of Wilmot Street, and close to the intersection of Davey Street, both major thoroughfares through the City of Hobart. Directly adjacent stands the Masonic Temple designed by Lauriston Crisp in 1938, and opposite is St David's Park.

The site is well connected with public transport and in walking distance to major city attractions and facilities.

Sandy Bay Road is an important four lane arterial road which connects the south of Hobart central business district with the suburb of Battery Point. It also bears testimony to the city growth and urbanization from the first Colonial days until now.

The precinct where the site is located presents a variety of mixed-use developments, from commercial, to educational and small residential buildings and has been successful in providing an integration of residential, community services, retail and commercial activities.

The buildings heights vary from East to West following a recognizable pattern facing Sandy Bay Road, trending from the highest point towards the city centre and decreasing in height approaching Hampden Road.

The site is located opposite to the charming St. Davisd's Park which is not only a reminder of the town's Colonial past but also provides important evidence of how time changes and transforms presentation, function and use.

ARCHITECTURAL STATEMENT

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<u>Site Plan</u>		
Size Area	extension shown	in faded blue

Drawing not to scale

Address	5-7 Sandy Bay Road
Local Council	City of Hobart
Site Area	2081.98 m²
Project Gross Floor Area	7290 m²
Zone/Code	15 / Urban Mixed Use
Access & Service	Sandy Bay Road and Wilmot Street
Heritage Register	The ABC Mural- THR (ref #7481)
Developer	Fragrance Tas Hobart (Sandy Bay) Pty. Ltd.
Architect	Scanlan Architects (Lawrence J. Scanlan & Associates Pty. Ltd.)

2.2 Site Information

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#### 2.3 Site Characteristics

The site topography shows quite a dramatic change of levels from North to South and a gentler gradient from East to West. Currently the landscape is limited to four trees on the Wilmot Street corner and four smaller trees facing Sandy Bay Road.



05. Masonic Temple boundary condition



06. Wilmot Street - approx site boundary



04. View from Wilmot Street



07. View from Wilmot Street 5-7 Sandy Bay Road, Hobart, Tasmania

ARCHITECTURAL STATEMENT



01. View from Sandy Bay Road



03 Rear of the site

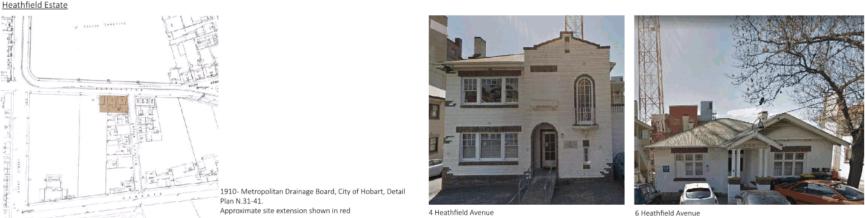


02. Sandy Bay Looking to Wilmot Street August 2019

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#### 2.4 Site History & Heritage

(Also refer to Heritage Impact Statement prepared by Praxis and Architectural Drawings for further detail)



The former ABC building and surrounding properties are located on a part of what was once the Heathfield Estate, which was granted to Assistant Commissary General Affleck Moodie during the 1820s. The estate originally ran from Davey Street almost up to Wilmot Street, and from Hampden Road down to what was then Harrington Street (now Sandy Bay Road). Andrew Bell built Heathfield for Moodie between 1827 and 1829. It was a fine regency villa and the first of that category of dwelling in Hobart.

The Heathfield Estate was purchased in 1920 by Cecil Walker, a Hobart solicitor, who transferred it to his sister Elinor Wayne Walker. In 1925, the first allotment subdivided from the Heathfield Estate was the corner of Harrington (now Sandy Bay Road) and Davey Streets. Acquired by the Commonwealth Government, it is the current site for the Telstra Exchange building, constructed in the 1950s. Over the following years, a number of parcels of land were subdivided from the Heathfield Estate, including the land where the former ABC Building was located. It is reported there were a few modest Georgian cottages located where the current forecourt and car park area of the building are. The area where the ABC offices and studios were built in the later 1950s, was reportedly a vacant block of land.

Currently, the precinct offers a variety of architectural styles, from the late nineteenth century up to current times. These range from Colonial/Victorian, Georgian/Regency, Federation / Queen Anne and Inner War with an emphasis on the Spanish mission and bungalow styling, and all can be found throughout the precinct. More recent intrusions within the area are the extensive use of front yards for car parking, and some large-scale medium rise developments such as the Mantra Hotel (corner of Davey St and Sandy Bay Rd) and the Tesla Tower Block (corner of Davey St and Heathfield Ave). The area bears testimony to a growing and emerging city witnessing a thriving urban growth from the colonial age until the present. St Davisd's Park located opposite the site rates a special mention. Dating from the beginning of European Settlement in 1804, even though its original use was a burial ground, it was considered a place of "seclusion and rare beauty". Despite its change of use in 1973, its consequential adaptation as a leisure/ornamental garden still preserves the English walled park characteristic and is reflective of its past.

Adjacent to the development is the Masonic Temple, built in 1938, with its symmetrical brick facade and Art Deco characteristics preserving the elegance and beauty of its time.



Massonic Temple- Sandy Bay Road



Mantra Hotel- Sandy Bay Road ARCHITECTURAL STATEMENT



9-11 Wilmot Street 5-7 Sandy Bay Road, Hobart, Tasmania



13 Wilmot Street September 2019



Site Context 1 ROAD BAY SANDY I Т SCANLAN ARCHITECTS

Plan of ABC Site - Sandy Bay Road July 1981

#### ABC Formal Building- ABT2 Tasmania

The 1954 Royal Commission into Television, under the Menzies Government, recommended television services be introduced gradually across the country. The first ABC television station, ABN2 Sydney, commenced transmission on November 2, followed by Melbourne and the so called "BAPH" cities – Brisbane, Adelaide, Perth and Hobart. ABT2 Hobart was the last of these to go to air when it launched on 4 June 1960. Thousands of viewers on a cold Hobart night watched as Postmaster-General Mr C W Davidson officially opened ABT2 shortly after the test pattern faded at 7.00pm.

Mr Davidson also personally acknowledged the special efforts of the State Government, Hobart's City Council and the Hydro Electric Commission for their co-operation in assisting and getting the necessary infrastructure in place in very challenging conditions - in particular the extreme weather conditions of wind, ice, snow and rain- at the transmitter site on top of Mount Wellington.

The ABC building was designed by Oscar AT Gimsey & Associates, Sandringham VIC, Architects and Engineer for the ABC during the late 1950s. The first stage of the ABC building consisted of three floors and was designed to accommodate two additional floors and a radio tower, which were added later. The original street elevation included a panel of white mosaic tiles which the ABC felt should be filled with a suitably designed glass mosaic mural.

The building also included a studio space for ancillary activities and offices. The contract was let in November 1959 and the building completed in the first half of 1960. Within two years, the ABC had completed the extension of two floors to the television studio and office building. By 1981, various properties adjoining the main TV building had been purchased with a view to expansion and consolidation of ABC facilities in Hobart comprising:

- 5-7 Sandy Bay Road (office tower) •
- 1-7 Wilmot Street (car park and warehouse)
- 9-13 Wilmot Street (two cottages)
- 15 Wilmot Street (cottage) ٠
- 2A Heathfield Avenue (two storey building)
- 4 Heathfield Avenue (two storey building) •
- 6 Heathfield Avenue (residence)
- 8 Heathfield Avenue (residence)

Due to increased expansion of the network and space requirements, after 25 years of television broadcasting in Tasmania the ABC was facing multiple logistic issues. By 1981, 386 staff members were dispersed over 14 buildings on six separate sites reducing operational efficiency. Several feasibility studies were carried out concerning the development of the Sandy Bay Road site with the last study prepared in 1974 by the Department of Housing and Construction. It was determined that the television building (5-7 Sandy Bay Road) was no longer satisfactory to the anticipated production outcomes. The ABC's plans for the redevelopment of the TV site were further constrained by heritage classification by the National Trust of three of the cottages in Wilmot Street. Consequently, the site had limited potential for expansion by the ABC.

#### University of Tasmania - Conservatorium of Music

Established as the Tasmanian School of Music in 1964 it officially became the Tasmanian Conservatorium of Music in 1965. In 1973 an arrangement was agreed with the University of Tasmania which included these studies as a bachelor's degree (Bachelor of Arts). During this period the Conservatorium was housed on the following sites:

- 1964 Hobart Matriculation Collage
- 1972 Mt Nelson site
- 1984 Hunter Street

During the '80s a number of attempts were made to move the Conservatoriums to a more permanent location. But it was not until 1991, when the University approached the Government to purchase and renovate the vacant ABC building, that the move was finalized. In May 1993 the University unveiled the \$4 million refurbishment project and the Tasmanian Conservatorium of Music was formally opened by Tasmanian Premier Ray Groom.

The most current timeline indicates the Conservatoriums will move into the new arts hub in 2019, leaving the site empty once again.

ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

#### 2.5 George Davis and the Mural

ANDY BAY RO

Lot 1

Tite 106916/1



This mural is located external to the ground floor of the former Australian Broadcasting Commission (ABC) Building. The mosaic mural measures 2.7 metres high and 19.2 metres long, covering a total area of 56 square metres, with a total of 150,000 Italian glass mosaic tiles. The glass tiles range in colour and tone, dominated by shades of blue and green.

The composition of the mural design is based on the mathematical infinity symbol, which may be further read as the ancient symbol of a fish or the ABC symbol. Within this form are fifteen stylized figures with pointed ellipses in silhouette and graduated within an outline of the infinity shape. The pattern is also representative of the emission of sound waves. The first twelve figures comprise the nine Muses (Clio, Euterpe, Thalia, Melpomene, Terpsichore, Erato, Polyhymnia, Calliope and Urania) and the three Graces (Euphrosyne, Aglaia and Thalia); and the second group of three is a man, woman and child. The Muses are draped figures, holding symbols of their spheres and following the orthodox Greek character. White mosaic tiles wrap around the ends of the mural and appear internally on the other side of the mural.

In June 1960 the ABC invited a number of artists and designers to submit a design for the mosaic mural. The selected artists were, John Coburn, Andor Masza-ros, John Santry, Leonard Hessing and Stan de Teliga (a Tasmanian artist who was, however, unable to submit a design). The Commission was intent on including at least one Tasmanian artist so De Tilga recommended George Davis, who was already known as an excellent painter and past winner of the Tasmanian Traveling Scholarship.

The design of the mural was to be based on the following criteria:

Intention to depict the function of general broadcasting in the community or some aspect of this general subject, also: (i) A subject indicating the contribution made by national sound broadcasting and TV to community life ; (ii) A subject indicating the contribution made by sound broadcasting and TV to the development of the arts ; (iii) A subject indicating the contribution made by sound broadcasting and TV to the life and development of Tasmania ; (iv) A subject indicating the value of broadcasting and TV as educational media, in the broad sense, eg as means of disseminating information on current events etc, and providing specialized services for the man on the land, for school children and so on.'

#### (RAIA Nomination No 48)

The designs were submitted to an independent Assessors Committee before being considered by the Commission in Hobart. The Committee reported that 'the designs suffered from the weakness that the submissions failed to relate sufficiently the shapes and colours of their designs to the general mass and details of the building itself'.

The competition came down to two designs; one by Tasmanian artist George Davis and one by Sydney-based designer TJ Santry. The two qualifying entrants were asked to re-submit, with the suggestion from the judging panel that the vertical tie with the projecting blue tiled columns, be more apparent. The Commission accepted Davis' design on 17 July 1961, with an estimated contract price of £1500 and materials supplied by the ABC. Davis described his design as follow:

'The general pattern is static and architectural, yet embodies movement through time, and the infinity sign within the classical figures links the past with the present and the future .. The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character.

Due to the glass mosaic tiles composition, the whole is 'simplified and controlled in tonal pattern, so as not to destroy the basic composition. In this way it is both striking and beautiful'. The mural, made up of 150,000 Italian glass tiles, was fabricated entirely off-site in a studio space located in Hobart. Davis designed a table with two panelled sections that could slide apart on rollers, allowing access to the horizontal centreline.

A rolling bench-frame was constructed so that Davis could work from above. The construction involved glass tiles mounted on specially selected paper and entirely pre-fabricated off site. The length and breadth of the mural was divided up into a complex grid on which to lay out the pattern. Each 18-inch section was taken to the site in custom made timber boxes individually coded and packed. The project took over two years to make and erect on site. Davis required the assistance of one artist to help with the mosaic layout and an expert tiler, with one assistant, to lay the tiles on site.

Source

And Designation of Street, or other

Tasmanian Heritage register Datasheet - ABC Mural & The Mercury: article from 11th March 2017

ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

Site Context ROAD Central Plan Registry entry for the ABC Mural, Tasmanian Heritage Register BAY SANDY Т SCANLAN ARCHITECTS George Davis- Preliminary Mural Sketch

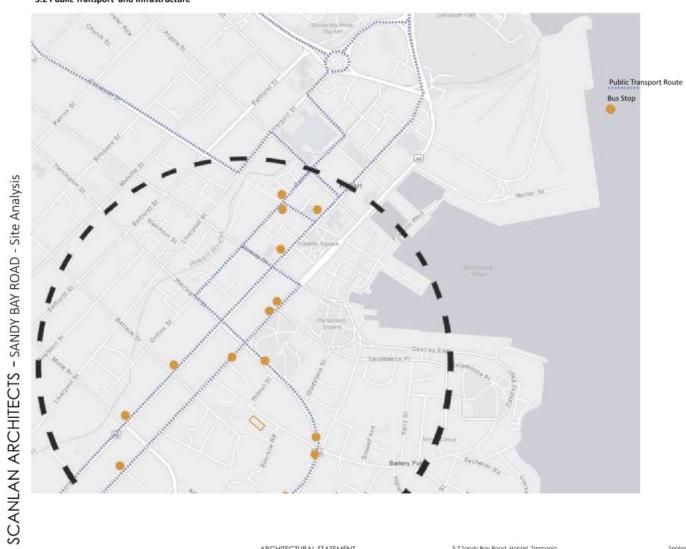
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#### 3.1 Local Amenities



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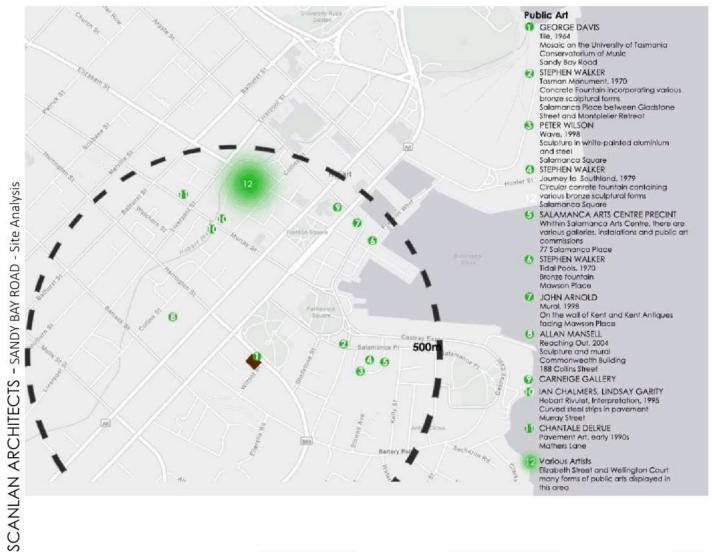
3.2 Public Transport and Infrastructure

ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

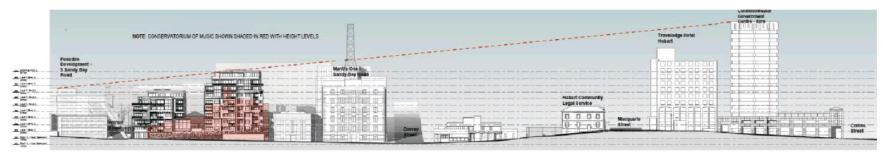
September 2019

3.3 Public Street Art

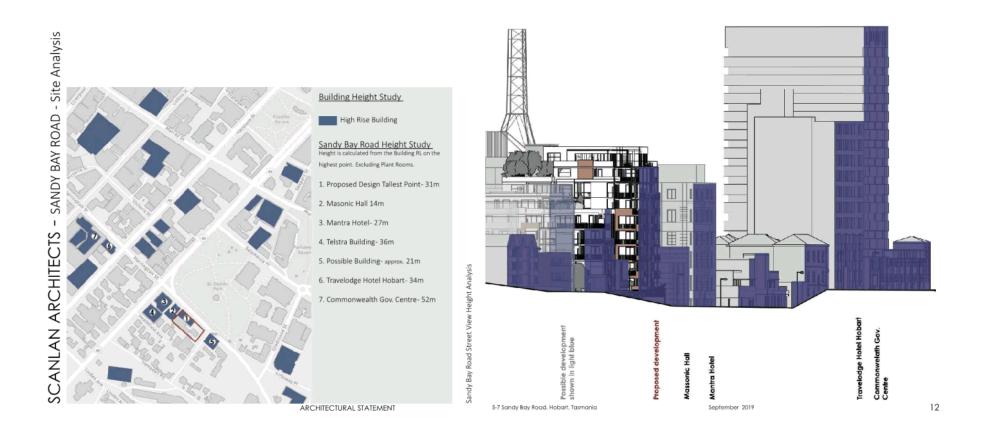


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#### 3.4 Urban Context and Built form



Sandy Bay Road- Street Elevation



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#### 4.1 Project Aim

The project proposes a development that will infuse new life into the site, with a mix of residential apartments and a commercial use, orientated towards Sandy Bay Road. The tenancy located on the corner of Sandy Bay Road and Wilmot Street interacts with the street and helps activate this corner creating a desirable meeting point for all who coexist in this captivating precinct.

The scale, materiality and complexity of the massing of the project will complement the existing street scape and other proposed developments within the Sandy Bay Road precinct creating a continuum in the facades, proportion and alignment. The continuity of the street scape will also be assisted by the choice of materials and architectural style.

We believe the proposed development sits appropriately within the city scape and future urban developments. The built form provides for different layers of materials and setbacks which will harmonize into the urban fabric infusing a contemporary and fresh approach to multi-residential living.

#### 4.2 Residential Project

The proposed development consists of 55 apartments divided into two blocks, sitting over a podium incorporating a two level basement parking garage together with common facilities such as enclosed pool, gym, BBQ areas and a meeting room. The basement will accommodate all major services together with both residential and visitor car bays. Pedestrian and vehicular access to the site will be via Wilmot Street, with an additional pedestrian exit from the basement located on Sandy Bay Road, near the Mural. As a result of extensive input from Hobart based real estate agents, the apartments have been designed to cater for the specific needs and requirements of the local residential market of incorporating generously sized two bed/ two bath and three bed/two bath apartment types. These configurations will attract a variety of possible buyers, including downsizing owners, young families and professionals working in Hobart, who want to be close to the heart of the city and within walking distance to the many amenities in the immediate area. The interior layouts of the apartments offer a large range of configurations to cater to a variety of individual needs in an attempt to provide bespoke "homes" for the future buyers.





1910 - Metropolitan Drainage Board, City of Hobart, Detail Plan N.31-41. Residence shown in blue.



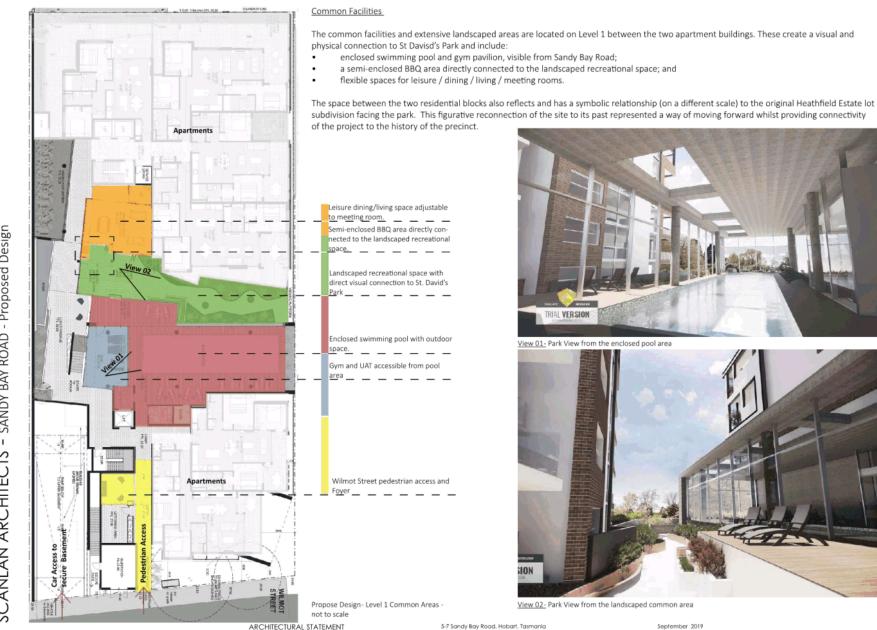
South Elevation (portion)- View from Heathfield Avenue toward St Davids park

ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

# **Supporting Information** Council Meeting - 25/5/2020

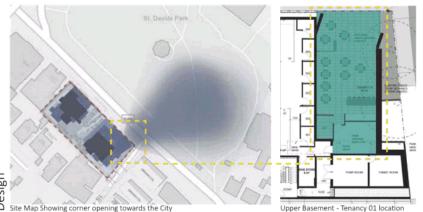
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SANDY BAY ROAD - Proposed Design ı. SCANLAN ARCHITECTS

# Supporting Information Council Meeting - 25/5/2020

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Site Map Showing corner opening towards the City



#### Wilmot Street and Sandy Bay Road Corner- Commercial Activity

The proposed corner tenancy located on the ground floor between Wilmot St and Sandy Bay Rd incorporates a double volume spatial outcome and a framed tiled archway that reflects and complements the existing mosaic artwork. The design intention was to create an attractive and inviting point of interest for both residents and the general community, who will be able to enjoy the café / restaurant nestled within.

The 97m2 tenancy will be equipped with a kitchen and a UAT for use by both staff and customers. Direct access to the buildings main bin stores and parking space is gained via the back of house areas. The tenancy has been allocated one parking space with access through the main vehicular access off Wilmot Street.

Bin store capacity and collection strategies as well as parking space requirements have been checked and designed in consultation with the relative consultants. Please refer to:

- Waste Management Plan Lid consultants
- Traffic Report Midson Traffic Engineers



ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

-

August 2019

Design

Proposed

ROAD

BAY I

SANDY

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AN

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ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania





# of the precinct. The main palette of materials used for the facades are face brick, mosaic tile and different shades of rendered walls. Brick:

4.3 Materials

Bricks have been one of the most popular building materials in the Australian history. Not only appreciated for their versatility in building typology and use but also for their capacity to be satisfactorily reproduced in most states and developing towns. The rich history of the use of bricks as a façade treatment has throughout time, had its ups and downs. However, in more recent years, we see their use flourishing again in multiple architectural applications. The use of bricks as a facade treatment for this proposed development seemed the most appropriate choice for not only its versatility and beauty but to also pay homage to the site's surroundings and Hobart's brick making history.

The choice of materials for the facade treatments has been influenced by the research and understanding of Hobart's Architectural History within the immediate surroundings and the willingness to harmonize the proposed development with the rich and diverse history

The first reference of bricks been unloaded to Tasmania (Van Diemen's Land) is recorded as being off a New South Wales ship in 1803. It is then reported that two male convicts brickmakers arrived in Hobart in 1804 to start work on a number of primary structures such as shelters, chimneys, heating and cooking facilities.

The first official report of brick making was registered on the 1st of October 1804 by Rev. Robert Knowood. The process of making bricks was time and labor intensive with each brick individually hand moulded using a manually made clay mixture. It is believed that at this early stage, due to the high cost and difficulties of transportation, bricks were made and fired where they were to be used.

The first indication of modernisation came in 1834 with the delivery of a mill pug and later (in 1841) of a brick making press. These systems allowed 3 to 4 men to produce 10- 12,000 bricks per day, revolutionizing Hobart's brick industry.

To better understand the extent of the value of bricks in Hobart during those days it is noted that theft of bricks was not uncommon and some major incidents have been recorded over the years.

A turning point for the mechanization of the brickmaking industry arrived with new bricklaying equipment released at the 1850 London Great Exhibition. Following this, various types of machinery arrived in Hobart from 1851 onwards, including the Clayton's brickmaking machine, capable of making an average of 20,000 to 25,000 bricks a day, which arrived on the Hobart wharf in 1854. It was said: "Clayton's Improved Patent Clay-preparing Solid and Hollow Brickmaking Machine, Pug Mill, Rollers; together with a selection of the most useful Dies for making bricks; draining, flooring and corrugated roofing tiles; spouting, flues and piping, A portable 3- Page 8 of 16 horse Steam Engine, with gearing complete, to work this machinery, is also ordered." (The Courier 1854)

With the colony flourishing, the Hobart brick industry kept expanding. So much so, that by the mid-1880s four large brickyards were in operation. Over the next few decades two companies increased their productivity and capacity enabling them to survive during WWI. However, by 1965 only one company, K&D, survived and it too had to close its doors in 2012 unable to keep pro-duction competitive and not adjusting to upcoming energy efficiency and requirements.

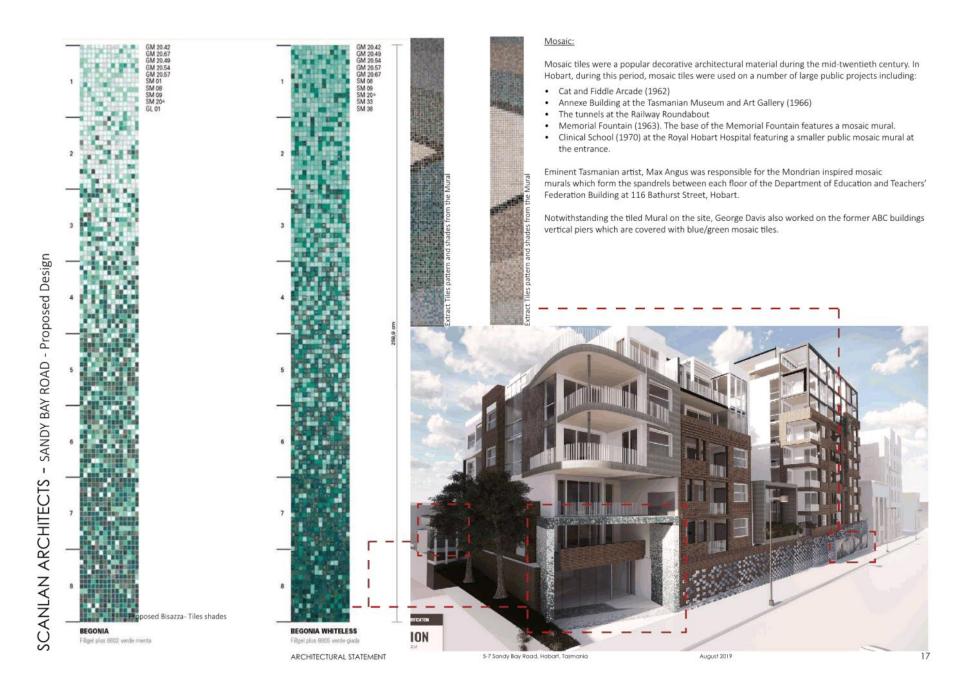
Source: Hobart Brick Heritage, Sarah Waight, Fabric - The Threads of Conservation, Nov 2015





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# Page 329 ATTACHMENT B



Facade Detail: Face brick, concrete panel and Mosaic Tiles

# 4.4 Façades Treatment

Being acutely aware of the historic surroundings of the site and the textural nature of the city fabric, this has been used as a focal point during the design development of the project. The current site layout, especially facing Sandy Bay Road, lacked consistency with the street proportions and the architectural language. The former ABC building built form maintained a balanced outcome relating to the overall streetscape, but the car park adjacent to it detracts from the scale and proportions, negatively impacting on an interesting corner of the city and the overall streetscape.

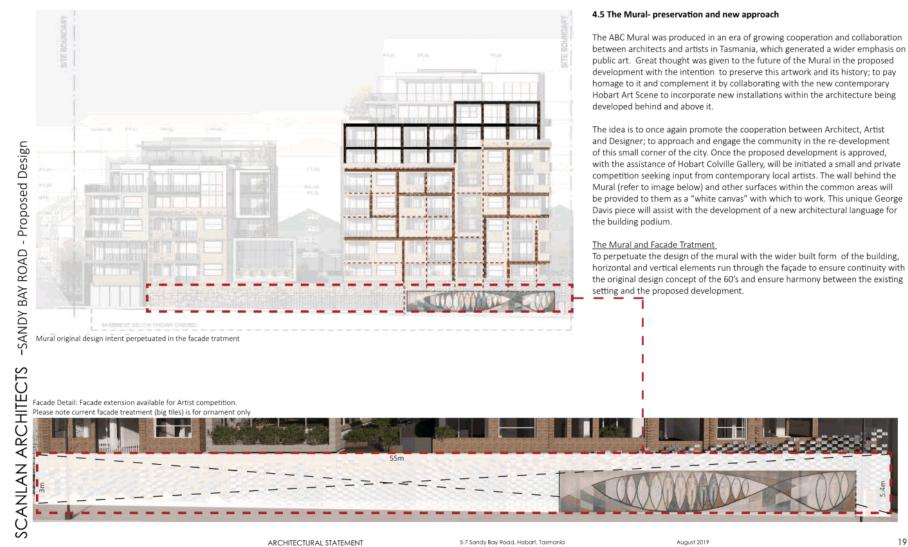
The proposed solid podium, which opens on to the corner with Wilmot Street, is based around a desire to ground the project with the overall landscape and create a raised communal platform. This allows the two buildings to present as smaller components which in turn provide an opportunity for a more articulated outcome that address and complement each other and present a far more interesting rhythm to the street. The façade is fragmented with different layers of materials and architectural language to break-up the mass and create a sense of contemporary urban residential proportions long lost in this precinct.

Varying setbacks, with horizontal and vertical layers of materials, create both private and protected areas together with open and transparent lanai. All of these elements combine to produce very textural surfaces to complement the surrounding buildings.

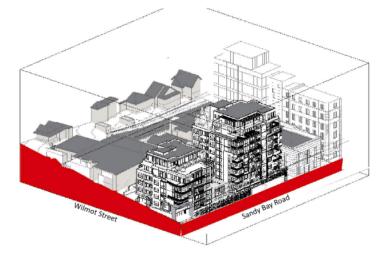


Facade Detail: Face brick, aluminum white balustrade

TRIAL VERSIO



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Aerial view of the project and its surrounding - Site topography highlighted in red

### 4.6 Archaeological Impact (Please refer to Praxis Environment - Heritage Impact Statement)

As Hobart is rapidly growing, we believe the relationship between the City's history and its promising future has been integral to the design of the project. It is essential to ensure and emphasise harmony between the existing precinct and the proposed development, in accordance with the latest planning scheme and Council requirements. The necessity to accommodate a considerable number of services including parking bays became clear at an early stage of the design and was led by, but not limited to, the following key factors:

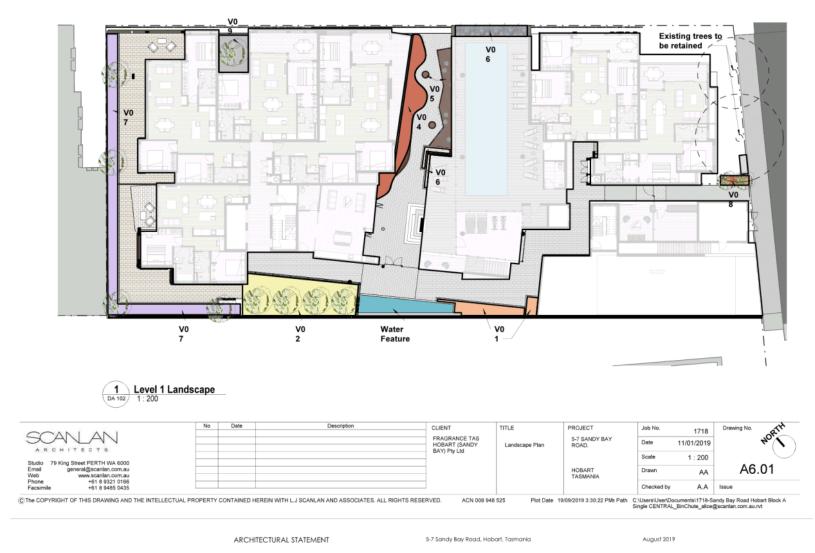
- Site characteristic: major difference in levels between front and back of the site.
- Avoiding visually unattractive and obstructive above ground parking solution. Furthermore improving site
  activation and neighbourhood security
- Location of key building services, potential noise and restrictive outlook
- Appealing and pleasing project sightline from all sides of the site and surrounding areas.
- Site activation: Wilmot St. and Sandy Bay Road corner to be open and approachable from street level with out the introduction of steps or architectural barrier.
- Residential entrance to be approachable from street level, without the introduction of steps or architectural barrier
- Secure access to car bays, bike store and bin area

The willingness and importance to gently incorporate the project in the surrounding built form and preserve the urban scale led to the incorporation of two levels basements, in accordance with Council and planning requirements.

September 2019

4.7 Landscape





 SANDY BAY ROAD - Proposed Design SCANLAN ARCHITECTS

VO1

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# LANDSCAPING - SPECIES AND MATERIALS



cycas revoluta.jpg



philodendron xanadu.jpg

fisuc pumilia.jpg



Mulch.jpg

VO2

ficus microcarpa hillii flash cropped.jpg



liriope evergreen giant.jpg



SCANLAN ARCHITECTS - SANDY BAY ROAD - Proposed Design

VO5



trachelospermum jasminoides.jpg



liriope gigantea 2.jpg



Mulch.jpg



euonymus japonicus var microphyllus 2.jpg



liriope evergreen giant.jpg

ARCHITECTURAL STATEMENT



Pebbles .jpg

5-7 Sandy Bay Road, Hobart, Tasmania

September 2019

LANDSCAPING - SPECIES AND MATERIALS



casuarina cousin it.jpg

V06



lagerstroemia indica fauriei zuni.gif



fisuc pumilia.jpg

VO8

VO9



magnolia grandiflora little gem.jpg



Mulch.jpg





Mulch.jpg

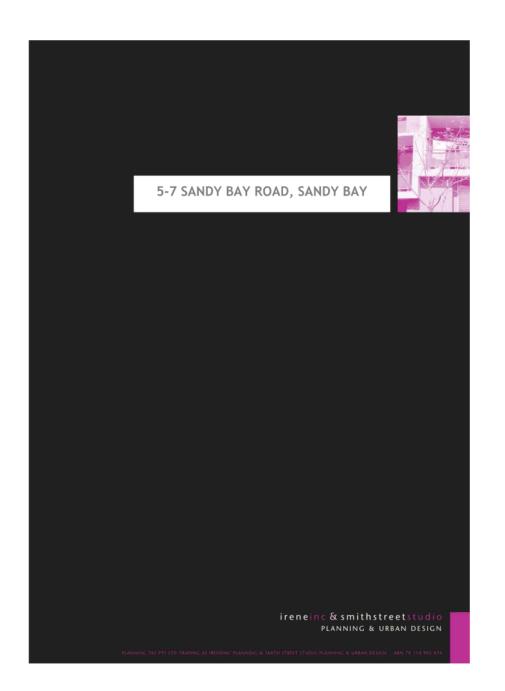
ARCHITECTURAL STATEMENT



ARCHITECTURAL STATEMENT

5-7 Sandy Bay Road, Hobart, Tasmania

September 2019



# 5-7 SANDY BAY ROAD, SANDY BAY

Development Application to Hobart City Council

Last Updated - (revised - February 2020) Author - Phil Gartrell & Keith Brown Reviewed - Irene Duckett

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Ireneinc PLANNING & URBAN DESIGN

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5-7 Sandy Bay Road

# 1. INTRODUCTION

Ireneinc Planning & Urban Design has been engaged by Fragrance TAS (Sandy Bay) Pty Ltd, to prepare a planning report to accompany a development application for the site at 5-7 Sandy Bay Road.

1.1 THE SITE

The subject site is comprised of 4 titles, all of which are known as 5-7 Sandy Bay Road. This application only involves works within one of the 4 individual titles, identified in bold below. The titles which make up the site are:

- CT 106816/1;
- CT 51956/6;
- -----
- CT 51956/7; and
- CT 51956/5

The following figure describes the location of the site.



Figure 1: Site Locality with cadastre, street names & aerial image from www.theLIST.tas.gov.au  ${\tt O}$  the State of Tasmania

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The site has primary frontage to Sandy Bay Road and vehicle access is provided via Wilmot Street. The existing cottages along the southern portion of the site have frontage to Heathfield Avenue. The front portion of the site, as shown in the figure below, is the only portion of the 4 titles that is to be developed as part of this application.



Figure 2: Portion of the site to be redeveloped with cadastre, street names & aerial image from www.theLIST.tas.gov.au  ${\tt G}$  the State of Tasmania

The area of the site to be developed is approximately  $2,095 \mathrm{m}^2,$  and currently forms part of the UTAS Conservatorium of Music.

1.2 SITE SURROUNDS

The site is located opposite St David's Park and adjoins the Hobart Masonic Hall to the northwest and Mantra Building, on the corner of Sandy Bay Road and Davey Street. Otherwise, the site is adjoined by predominately residential properties.

A large portion of the block bounded by Hampden Road, Davey Street, Sandy Bay Road and Wilmot Street is located within the H2 Heritage Precinct, as is the block to the east on the south-eastern side of Wilmot Street.

These blocks are characterised by generally narrow streets and access ways, with buildings generally built close to side and/or front boundaries which is a relatively consistent theme among most of Hobart's Heritage Precincts.

1.3 URBAN DESIGN ANALYSIS

A summary of the accompanying urban analysis is provided as follows, extracted from the accompanying Urban Form Supporting Statement.

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#### Existing built form and context:

Buildings on the site contribute to the streetscape both on Sandy Bay Road and Wilmot Street, and the broader townscape of St David's Park, as a built edge defining the space.

The topography surrounding the area presents an amphitheatre with buildings on the Macquarie Street ridge and upper Davey Street forming part of the visual context of the site.

The primary arterial role of Sandy Bay Road is characterised by larger building forms of a more commercial scale, whilst the radiating side streets and parallel streets demonstrate a domestic scale of dwellings either retained for visitor accommodation, residential, or adapted to other uses.

Taking the urban blocks that surround St David's Park as an example of direct relevance (given the application site location on Sandy Bay Road, with frontage to the park), it is clear that each urban block, with buildings that front onto streets surrounding the park, contains a great variety of building form within relatively short sections of street and block. Whils there is generally consistency with building 'frontages' addressing the street and overlooking the park there is variety in building form, building height, building appearance, architectural style and aesthetic. Building setbacks are predominantly consistent, with the majority of buildings built up to the pavement edge of the street (i.e. zero or very shallow setbacks).

#### Proposed built form and context:

The proposed built form has been designed to work within the local context including reference to the changing topography, with Wilmot Street rising to the south of the site, and Sandy Bay Road rising towards the north-west. It is notable that the proposed building height, scale and massing is different when viewed from different angles and street elevations. For instance the changing topography helps reduce the height impact (particularly of the lower 'East Block') as Wilmot Street rises from Sandy Bay Road.

The Sandy Bay Road frontage of the proposed building presents the tallest building heights, albeit this scale and massing should be considered in relative to the context of the setting, notably with the adjacent public open space of street and St David's Park as stated and illustrated in the Urban Form Supporting Statement.

The 'building' adjoining Wilmot Street and Sandy Bay Road ('East Block' as titled in the Architectural Drawings) is 7 storeys/levels (above street/ground level on Sandy Bay Road), with a height of approximately 22.2m at the highest point above natural ground level. The other 'building' adjoining the Hobart Masonic Hall is proposed to be 10 levels (above street/ground level on Sandy Bay Road), with a maximum height of approximately 32.8m. Both buildings also have an addition basement level (for car parking) under the 'upper basement' level.

The proposed variation in form and appearance is fitting in the context of the surrounding buildings in the locality that also demonstrate characteristics of variety in scale, massing, height and appearance as detailed in the previous section. The proposed built form steps back at upper levels of the new buildings, softening the effect of the collective building height as the tallest elements recede from the street edge reducing the visual prominence from the street and surrounding spaces (including St David's Park).

The built form of the proposal demonstrates a consistency in other design elements including the construction of the building to the footpath edge on Sandy Bay Road, with the exception of a corner indentation forming part of the entrance feature for the proposed ground floor café which will provide a strong active frontage to the corner of Sandy Bay Road and Wilmot Street.

2. PROPOSAL

The application proposes demolition of the existing 6 storey 'Conservatory of Music' building (with the retention of the mosaic mural) which fronts Sandy Bay Road and construction of a multi-level residential apartment complex, adopting an architectural form designed as 2 buildings on a shared podium.

The building adjoining Wilmot Street and Sandy Bay Road is 7 storeys/levels above street/ground level (on Sandy Bay Road), with a height of approximately 22.2m at the highest point above natural ground level. The other building adjoining the Hobart Masonic Hall is proposed at 10 levels, with a maximum height of approximately 32.8m. Both buildings also have an additional basement level (for car parking).

A café will occupy the single tenancy on the upper basement level, located on the corner of Sandy Bay Road and Wilmot Street, with access provided from both Sandy Bay Road and from within the building.

According to the architectural statement:

The project proposes a development which will infuse new life into the site with a mix of residential apartments and a commercial use oriented towards Sandy Bay Road. The tenancy located on the corner of Sandy Bay and Wilmot Street interacts with the street and helps activate this corner creating a desired point in this precinct.

The proposal also includes two levels of basement car parking to serve the 55 apartments, generally varying between 2-3 bedrooms along with a penthouse on level 9, as detailed in the table below:

Upper &	The basemen	nt levels will p	rovide a total of 86 car parking space	s, including tandem			
Lower	bays storages areas, bin & bicycle stores and plant/equipment areas.						
Basement	The café wit	hin the tenanc	y will occupy an approximate area of	97m².			
Levels							
	2 Bedroom	3 Bedroom	Other	Total Apartments			
Level 1	3	3	Common area, communal pool and	6			
			gym, along with communal open				
			space and entry foyer area				
Level 2	5	3		8			
Level 3	4	5		9			
Level 4	4	5		9			
Level 5	3	5		8			
Level 6	3	3		6			
Level 7	3	2	Roof of the lower 'building'	5			
Level 8	1	2	Communal outdoor area	3			
Level 9			4 bedroom penthouse	1			
Total	25	27	1	55			

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Primary vehicle and pedestrian access to the site will be from Wilmot Street, whilst pedestrian access will also be provided from Sandy Bay Road, on the corner of Wilmot Street.

The proposed café on the Sandy Bay Road street level will activate the frontage and is considered to significantly improve streetscape activation from the current use of car park. The podium wall along the remainder of the Sandy Bay Road frontage is designed to incorporate the existing wall mural.



Figure 3: Render of the proposal from Sandy Bay Road (source: Scanlan Architects)

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# 3. PLANNING SCHEME PROVISIONS

The area is within the *Hobart Interim Planning Scheme 2015*, and the following provisions are relevant to the site and proposed use and development.

3.1 URBAN MIXED USE ZONE

The subject land is zoned Urban Mixed Use (grey) as is the immediately surrounding area.



Figure 4: Zone plan with cadastre, zone and aerial (source: www.theLIST.tas.gov.au  ${\ensuremath{\mathbb O}}$  the State of Tasmania)

3.1.1 ZONE PURPOSE

The Purpose Statements for the zone are:

15.1.1 Zone Purpose Statements

15.1.1.1 - To provide for integration of residential, retail, community services and commercial activities in urban locations.

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The proposal adds to existing residential development in close proximity to the site, particularly to the south and south-east.

15.1.1.2 - To encourage use and development at street level that generates activity and pedestrian movement through the area.

The proposed commercial tenancy at street level will provide activation of the streetscape on the corner of Sandy Bay Road and Wilmot Street.

15.1.1.3 - To provide for design that maximises the amenity at street level including considerations of microclimate, lighting, safety, and pedestrian connectivity.

The design of the building form provides openings at both ground level and above including significant communal and private open space across level 1, with the proposed café opening onto Sandy Bay Road resulting in a further activation of the streetscape.

15.1.1.4 - To ensure that commercial use are consistent with the activity centre hierarchy.

The proposal is for a primarily residential development with one commercial tenancy at street level and is therefore appropriate to its location at the edge of the CBD area.

15.1.1.5 - To ensure development is accessible by public transport, walking and cycling.

The site is within close proximity to the CBD and key cultural areas such as Sullivan's Cove and Battery Point. Sandy Bay Road is a primary public transport corridor and the close proximity of the site to key areas within the CBD ensures that walking and cycling are viable alternatives to vehicle transport.

15.1.1.6 - To provide for a diversity of uses at densities responsive to the character of streetscapes, historic areas and buildings and which do not compromise the amenity of surrounding residential areas.

The building forms ensure that the development scale suitably responds to the variable density evident in surrounding properties, by allowing a contrast in scale and built form at street level.

15.1.1.7 - To encourage the retention of existing residential uses and the greater use of underutilised sites as well as the reuse and adaptation of existing buildings for uses with a scale appropriate to the site and area.

Redevelopment of the site for residential purposes is considered to be a suitable outcome by encouraging expansion of inner city residential opportunities.

15.1.1.8 - To ensure that the proportions, materials, openings and decoration of building facades contribute positively to the streetscape and reinforce the built environment of the area in which the site is situated.

The built form of the proposal will provide alternate layers of materials and setbacks which will ensure a degree of harmony with the existing urban fabric, whilst also presenting as a new, contemporary building. As detailed in the architectural statement, the choice of materials has been influenced by the research undertaken with respect to the history of the site and surrounding area. The development proposed will reinforce the corner of the site at the junction of Sandy Bay Road and Wilmot Street, replacing an existing car park and provide a built response to consolidate the street corner.

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5-7 Sandy Bay Road, Sandy Bay

15.1.1.9 - To maintain an appropriate level of amenity for residential uses without unreasonable restriction or constraint on the nature and hours of commercial activities.

### The proposed development does not result in any restrictions on existing commercial activities in surrounding buildings, predominately to the south-west along Hampden Road.

15.1.1.10 - To ensure that retail shopping strips do not develop along major arterial roads within the zone.

The application does not create or contribute to development of a retail shopping strip.

There are no Local Area Objectives or Desired Future Character Statements for the Zone.

3.1.2 USE STATUS

The definitions of Use Classes include the following relevant to the proposal.

#### **Residential - Permitted**

use of land for self contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.

The proposal is for residential apartments and is consistent with the above definition.

The proposed street level tenancy would be considered as food services, which is defined as follows:

#### Food Services - Permitted

use of land for preparing or selling food or drink for consumption on or off the premises. Examples include a cafe, restaurant and take-away food premises.

The tenancy will operate as a café which is anticipated to improve local amenities and promote additional pedestrian activity at street level along Sandy Bay Road and adjoining streets.

# 3.1.3 USE STANDARDS

The use standards in the zone apply to non-residential use and are therefore relevant to the cafe tenancy, the following use standards will apply.

# 15.3.1 Non-Residential Use

<b>Objective:</b> To ensure that non-residential u amenity.	ise does not unreasonably impact residential
SCHEME REQUIREMENTS	RESPONSE
A1 Hours of operation must be within:	The proposed cafe will operate within the hours specified under A1.
(a) 7.00am to 9.00pm Mondays to Fridays inclusive;	
(b) 8.00am to 6.00pm Saturdays;	
(c) 9.00am to 5.00pm Sundays and Public Holidays;	
except for office and administrative tasks or visitor accommodation.	

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#### ... A2 The use as a café is not likely to produce noise Noise emissions measured at the boundary of that is audible from outside the tenancy. the site must not exceed the following: The café will operate within the hours (a) 55 dB(A) (LAeq) between the hours of 8.00 specified under A1. am to 6.00 pm; On this basis, it is considered unlikely that the (b) 5dB(A) above the background (LA90) level noise generated by the café would exceed the or 40dB(A) (LAeq), whichever is the lower, noise levels specified under A2, particularly given the background noise levels that are between the hours of 6.00 pm to 8.00 am; likely to be generated from existing traffic (c) 65dB(A) (LAmax) at any time. movements along Sandy Bay Road. Any noise Measurement of noise levels must be in generated is therefore considered to not be of accordance with the methods in the Tasmanian a level to cause environmental harm. Noise Measurement Procedures Manual, issued by the Director of Environmental Management, including adjustment of noise levels for tonality and impulsiveness. Noise levels are to be averaged over a 15 minute time interval. P2 Noise emissions measured at the boundary of the site must not cause environmental harm. A3 Given the proposed operating hours of the café External lighting must comply with all of the lighting will meet A3. following: (a) be turned off between 10:00pm and 6:00 am, except for security lighting; (b) security lighting must be baffled to ensure they do not cause emission of light into adjoining private land. A4 Commercial movements associated with the Commercial vehicle movements, (including tenancy may include intermittent deliveries of loading and unloading and garbage removal) to produce. or from a site must be limited to within the Given that the proposed café will operate hours of: within the hours specified under A1, these (a) 7.00am to 5.00pm Mondays to Fridays deliveries (if required) are anticipated to occur within the hours specified under A4. As inclusive; detailed in the TIA, there is a loading zone (b) 8.00am to 5.00pm Saturdays; within 50m of the site that can be used for (c) 9.00am to 12 noon Sundays and Public deliveries. Holidays. With regard to waste removal, according to the accompanying waste management plan, removal of rubbish from the site will be undertaken in accordance with hours specified by A4.

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5-7 Sandy Bay Road, Sandy Bay

#### 3.1.4 DEVELOPMENT STANDARDS

15.4.1 Building Height
Objective: To ensure that building height contributes positively to the streetscape and does
not result in unreasonable impact on residential amenity of land in the General Residential
Zone or Inner Residential Zone.
SCHEME REQUIREMENTS

A1

Building height must be no more than:

10m.

P1

Building height must satisfy all of the following:

(a) be consistent with any Desired Future Character Statements provided for the area;

- (b) be compatible with the scale of nearby buildings;
- (c) not unreasonably overshadow adjacent public space;

(d) allow for a transition in height between adjoining buildings, where appropriate;

PROPOSAL RESPONSE

The proposal complies with P1 as follows:

(a) there are no desired character statements under the zone.

#### Sandy Bay Road

(b) & (d) The proposal provides two separated building forms above a shared podium, these two 'buildings' have heights of 22.2m and 32.8m. This stepped height between the two forms allows a visual transition from adjoining buildings to the south along Sandy Bay Road. The smaller of the two 'buildings' will sit at a similar height to the proposed development at 9 Sandy Bay Road, whilst the larger podium form will sit at a similar height to the Mantra Hotel (approximately 2m higher than the Mantra), which sits on the corner of Davey Street and Sandy Bay Road. These elevations are illustration in figures below.

The following buildings have been considered in the design development as described:

• Existing Conservatorium building

The conservatorium currently sits at a maximum height of around 22m from natural ground level along Sandy Bay Road. There is also an existing steel tower on the roof of the building which extends a further 48m from the roof of the conservatorium, which will be removed and is anticipated to result in a substantial improvement to the local streetscape, particularly when viewed from adjoining streets including along Davey Street and Sandy Bay Road.

Mantra Building

The Mantra sits on the corner of Davey Street and Sandy Bay Road and has a height of approximately 29m (if taking into account the raised signage section). The building directly behind the Mantra is the Telstra Exchange Building which also has a roof-top tower structure.

Hobart Masonic Hall

The Masonic Hall sits directly between the existing Mantra building and conservatorium and has a height of approximately 13m from natural ground level along Sandy Bay Road. The existing conservatorium building sits approximately 7m higher than the Masonic Hall.

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5-7 Sandy Bay Road, Sandy Bay

As specified in this report, the block is characterised by larger built forms (i.e. Telstra and Mantra buildings). This is particularly evident where the topography begins to rise into Macquarie Street. The height of the building largely responds to the transition of buildings along Sandy Bay Road, with the Masonic Hall representing a lower built form. This form should not be considered in isolation, particularly given that the existing Mantra building already sits at almost double the height of the Masonic Hall. If the proposed building were to respond to the height of the Masonic Hall. If the proposed building were to respond to the height of the Masonic Hall. If the proposed building were to respond to the height of the existing Mantra building already sits at almost double the existing Mantra building which would restrict larger built form to the corner of Sandy Bay Road and Davey Street which would also represent an inconsistency in height transition.

In addition, the site adjoins properties along Wilmot Street and Heathfield Avenue. In order to 'appropriately' transition from all of these buildings across each elevation would substantially reduce the available residential yield of the site to a point that would not be financially viable and would result in a substantial underutilisation of the site.

The performance criteria refer to compatibility with 'nearby buildings', meaning that consideration of just one building between two existing larger built forms should not be the sole factor in determining height compatibility and transition.

The following figure from the Urban Form Supporting Statement illustrates the varying building heights within 400m of the site:



Figure 5: Taller buildings within circa 400m vicinity of the application site (source: Extracted from Ireneinc Urban Form Supporting Statement).

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5-7 Sandy Bay Road, Sandy Bay

Many of these taller buildings form part of city blocks which support substantial variations in scale, bulk and height and in some instances directly adjoin buildings which are substantially smaller without imposing on the transition of buildings through the streetscape.

The accompanying Urban Form Supporting Statement provides a detailed analysis of existing built form within a local context. The document specifies that the urban form surrounding the site accommodates a great degree of variety particularly with regard to building height. The Tribunal decision 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors [2017] TASRMPAT

To be compatible is to be consistent or congruous with that which comparison is required

to be made. The Tribunal holds that to be "compatible" requires that the building height be capable of co-existing with the scale of nearby buildings.'

The decision also states:

The Tribunal defined the term 'compatible' in two recent decision: Henry Design & Consulting v Clarence City Council12 and Flood v George Town Council13. In Henry Design, the Tribunal held at [50] that 'compatible' meant "not necessarily the same... but at least similar to, or in harmony or broad correspondence with the surrounding area".<sup>2</sup>

Although the term has been defined by the Tribunal, the definition is still subjective. The terms 'similar to, or in harmony or broad correspondence with the surrounding area' implies that when considering whether a building is 'compatible', the decision should not be solely based on the relationship between one specific building, (i.e. the Masonic Hall), but rather take into account the wider built form in making a sound determination.

In considering the wider built form of the block a number of existing buildings sit well outside the permitted height in the zone and these buildings (Mantra, Telstra building) provide a substantial indication as to the built form that can be reasonably accommodated within the block.

NOTE: CONSERVATORIUM OF MUSIC SHOWN SHADED IN RED WITHHEIGHT LEVEL				Travelodge Hotel Hobert
30a	B			-
Appendit	Marris Deck.			
	0.01110.0			
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		-	0.0.00 Manp	

Figure 6: Sandy Bay Road streetscape, illustrating the varied height transition already evident within the streetscape (red outline denotes existing conservatorium) (source: Scanlan Architects - modified by Ireneinc)

<sup>1</sup> 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors [2017] TASRMPAT 19, paragraph 52, p 11.
<sup>2</sup> 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors [2017] TASRMPAT 19, paragraph 52, p 11.

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5-7 Sandy Bay Road, Sandy Bay

An analysis of these heights is also provided within the Architectural Design Statement.

When considered within the wider townscape, the proposal provides a transition in scale from the taller buildings on the Macquarie Ridge to the stepping down in built from along Harrington Street toward Davey Street. The proposed buildings are lower than the buildings along the Macquarie ridge and respond to the increased building form which adjoins Sandy Bay Road and Davey Street.

The local context of scale compatibility also presents in terms of height transitions between buildings of 6m or more between existing buildings. Along Sandy Bay Road the streetscape is not defined by uniform building heights.

The split building form will also reduce the overall visual bulk of the building when viewed along Sandy Bay Road, demonstrating a level of contrast between the flat façades of existing buildings in the streetscape.

The removal of the existing steel tower structure will also significantly improve the local townscape. The façade is fragmented with different layers of materials and architectural language to break-up the mass and create a sense of contemporary urban residential portions, as further described in the Architects statement.

# Heathfield Avenue

The building backs onto three existing properties along Heathfield Avenue, previously identified as 6, 8 & 10 Heathfield Avenue. These properties formed part of the existing Conservatorium of Music and now form part of the Fragrance site (identified now as 5-7 Sandy Bay Road).

The architect has advised that these properties are currently used as offices and are built to heights of approximately 8.8m, 4.9m and 6.9m, as shown on the accompanying section drawing. The setback of the cottages from the rear boundary varies from a minimum of approximately 8.4m to a maximum of 10.4m, as shown in the figures below.

These setbacks have a substantial effect on reducing the overall visual impact of both the existing conservatorium building and the proposed building, particularly when viewed from street level along Heathfield Avenue, as shown in the accompanying photo renders.

From street level along Heathfield Avenue, the existing conservatorium building sits at a maximum height of approximately 18.2m. From the rear boundary of these properties (which slopes downward to Sandy Bay Road), the existing conservatorium building sits at a maximum height of approximately 20m, with no rear setback.

To improve the height transition, the proposed building will be setback from the southern boundary by 3.9m from level 2 through to level 8, where it will then be setback a further 3.3m (approx.). Once the proposed setback of the development and the setback of the existing cottages is taken into account, the total separation between the proposed building and the cottages on Heathfield Avenue will be;

- 11.4m from 6 Heathfield Avenue (formerly);
- 13.3m from 8 Heathfield Avenue (formerly); and
- 14.3m from 10 Heathfield Avenue (formerly).

These setbacks substantially aid, in addition to the sloping topography, in reducing the perceived height difference between the proposed building and the existing cottages, particularly when viewed from Heathfield Avenue.

In terms of overall height from street level, the existing conservatorium building sits approximately 9.5m higher than 6 Heathfield Avenue, 13.4m higher than 8 Heathfield Avenue and 10m higher than 10 Heathfield Avenue. The proposed building will sit approximately 5.1m higher than the existing conservatorium, where it will then be further setback approximately 3.3m before extending an additional 3.3m to maximum height (level 9), when viewed from

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The separation of the overall mass of the proposal into two separate forms is considered to significantly reduce the visual bulk and apparent mass and allows permeability between the two buildings on Sandy Bay Road and the existing buildings on the higher ground in Wilmot Street and Hampden Road.

street level along Heathfield Avenue. The entire façade will be setback a minimum of 3.9m from the boundary in addition to the existing setback of the cottages, as shown in the figures below.

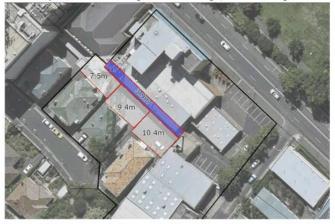


Figure 7: Existing rear setback with proposed additional 3.9m setback across level 2-8 (source: www.thelist.tas.gov.au © State of Tasmania).

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······	20 Julian				110
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				Manage Street	12
			L		ROAD

Figure 8: Red line depicts existing conservatorium height (max) measured from NGL at the rear of the cottages. Yellow line depicts additional height proposed over existing before being setback approximately 3.3m. The blue line indicates the height of the existing conservatorium when measured from street level along Heathfield Avenue (source: Scanlan Architects & Ireneinc).

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5-7 Sandy Bay Road, Sandy Bay



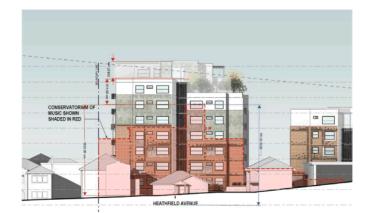


Figure 9: Development from Heathfield Avenue - red lines indicate height of existing conservatorium from street level and additional height proposed. The blue line indicates height of existing conservatorium when measured from rear boundary of the cottages, due to topographical change (source: Scanlan Architects & Ireneinc)

The proposed building will have a greater setback from the cottages which is considered to reasonably offset the overall height increase of the building when compared to adjoining buildings.

The form of the proposed building is of a scale that is not unreasonable when compared to existing built form and the existing cottages that form part of the site along Heathfield Avenue are not located within a residential zone and are not used for residential purposes.

#### Wilmot Street

With regard to the appearance and compatibility of the building along the Wilmot Street frontage, the topography of the street rises toward Hampden Road creating a natural transition in height, with lower buildings further up Wilmot Street elevated, allowing larger buildings to be located along the Sandy Bay Road frontage without overly dominating existing buildings located above the site.

As shown in figure 6 below, there is a significant setback of approximately 20m between the proposed building and the heritage cottage to the south (which is located on the same site). In addition to this setback, the lower of the two proposed building forms will be setback a further 6m at level 1 from the southern boundary. At level 2, this setback reduces to approximately 3.8m.

In total there will be a minimum setback distance of approximately 23.8m from the adjoining heritage building to the south, which is currently surrounded by a brick garage/warehouse structure.

This setback distance coupled with the rising topography of Wilmot Street reduces the apparent scale of the proposal when viewed along Wilmot Street.

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The difference in height between the proposed building and the existing cottage is approximately 8.4m, as illustrated in the figures below.

When viewed within the wider streetscape along Wilmot Street, the lower form of the proposed building is lower than height of the building located at the top of Wilmot Street (identified as 145 Hampden Road), which provides a more subtle height transition than existing Sandy Bay Road, including the existing Telstra Exchange building located on Davey Street and the corner of Heathfield Avenue, or the Mantra Building. Furthermore, the proposed building closest to Wilmot Street, and most present in that streetscape, is only one storey higher than the existing Conservatorium building.

The section of the proposed building fronting Wilmot Street presents a varied façade, broken up by windows and balconies, which is considered to add additional streetscape elements without presenting as a flat façade.

The architectural treatment of the façade, primarily the brick elements, have been derived from the history of the site and the treatment of the existing conservatorium building providing greater consistency with the surrounding buildings whilst also presenting as new contemporary building within the streetscape.

The accompanying Heritage Impact Assessment also states that due in part to the distance between the proposed building and adjoining heritage cottages (previously identified as 9-13 Wilmot Street), the proposed building could not be seen to have a detrimental impact by way of siting, scale, bulk and design.

(c) the adjacent public space within St David's Park is separated by Sandy Bay Road and the accompanying shadow diagrams provided indicate that this space will not be overshadowed at any point during the day.

There will be some overshadowing of Sandy Bay Road, Heathfield Avenue and Wilmot Street. The rear of Heathfield Avenue will be overshadowed during the morning from 9am until 11/11:30am, whilst a portion of Wilmot Street will be overshadowed during the early to late afternoon.

The shadow diagrams indicate that the overshadowing caused by the development is similar to the overshadowing generated by existing buildings, particularly the Mantra building in the morning and afternoon.

The Urban Form Supporting Statement provides further consideration of building heights. In conclusion this document states:

With consideration of the above listed features the proposed built form has been designed in a way that is considered to be compatible within the setting of both Sandy Bay Road and Wilmot Street.

The proposed building heights are compatible with the existing pattern of urban form presented by existing buildings to streets and urban blocks in the local urban context of the site, as illustrated in the figures, below, that show the proposed built from in the context of existing buildings and street elevations.

It is considered that the proposal complies with P1.

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The cottage to the south sits at a height of approximately 6.5m from NGL, whilst the lower of the two proposed building forms will sit at a height of approximately 17.5m when measured from the southern boundary (due to the slope of Wilmot Street).



Figure 10: Streetscape elevation (Wilmot Street) (source: Scanlan Architects)

#### A2 Building height within 10m of a residential zone must be no more than 8.5m. P2 Building height within 10 m of a residential zone must be compatible with the building beight of

must be compatible with the building height of existing buildings on adjoining lots in the residential zone.

The nearest residential zoned land is approximately 230m to the south-east, therefore it is considered that A2 is not applicable.

# 15.4.2 Setback

Objective: To ensure that building setback contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone. SCHEME REQUIREMENTS

### A1

Building setback from frontage must be parallel to the frontage and must be no more than: 1m from the median street setback of all existing buildings on the same side of the street within 100m of the site.

#### P1

Building setback from frontage must satisfy all of the following:

- (a) be consistent with any Desired Future Character Statements provided for the area;
- (b) be compatible with the setback of adjoining buildings, generally maintaining a continuous building line if evident in the streetscape;
- (c) enhance the characteristics of the site, adjoining lots and the streetscape;
- (d) provide for small variations in building alignment only where appropriate to break up long building facades, provided that no potential concealment or entrapment opportunity is created;
- (e) provide for large variations in building alignment only where appropriate to provide for a forecourt for space for public use, such as outdoor dining or landscaping, provided the

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that no potential concealment or entrapment opportunity is created and the forecourt is afforded very good passive surveillance.

#### PROPOSAL RESPONSE

The figure below demonstrates the current variable setback of buildings along Wilmot Street and Sandy Bay Road, the blue area indicates the setback of the proposed building. Sandy Bay Road

Sandy Day Road

The setback of buildings along Sandy Bay Road varies from around 1m to a maximum of 4m.

- 1 Sandy Bay Road (Mantra) 0m setback
- 3 Sandy bay Road (Hobart Masonic Hall) 0m setback
- 9 Sandy Bay Road (existing building) 3.1m setback
- 12 Wilmot Street (section fronting Sandy Bay Road) 3.4m setback
- The median value is therefore calculated as 1.55m.

The building proposed will have a 0m setback from the frontage to Sandy Bay Road at the street level and level 1 with the brick façade which will connect to rear of the ABC Mural Wall.

# Wilmot Street

The setback of buildings along the northwest side of Wilmot Street varies from 0m to approximately 16.7m (with the remaining 5 buildings along Wilmot Street being setback 3.7m, 1.1m, 0.9m, 16.6m and 0m). The median value is therefore calculated to be 1.1m.

The proposed setback to Wilmot street is 0m at the closest point, the setback increases to approximately 3m maximum.

The application meets the Performance criteria in relation to the frontage setbacks as follows: (a) there are no Desired Future Character Statements for the area.

(b) the proposed setback to both frontages is compatible with the setback of adjoining buildings being within the range of existing setbacks along the road frontages and will create a greater conformity between the buildings on the site and other elements in the street scape.

(c) The greater setback conformity, combined with additional civic benefits such as the café will ensure a higher degree of street level activation, whilst also improving the appearance of the site in terms of façade design and materials.

(d) As specified above, the setback to Wilmot Street will vary, allowing a variation in alignment which will serve to break up the facade of the building and allow for the retention of existing and proposed landscaping which will also improve the streetscape. The building does not create any entrapment spaces.

(e) The proposal is for residential use and communal open areas have been provided across level 1. The café will be open to the public and the proposal does not require large variations in the building alignment. As specified above, existing and proposed landscaping will be provided along the Wilmot Street frontage to improve pedestrian amenity and the streetscape.

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Figure 11: Evidence of variable setbacks along Wilmot Street & Sandy Bay Road (red) along with extent of proposed setback (blue) (source: www.thelist.tas.gov.au © The State Government of Tasmania)

# A2

Building setback from a residential zone must be no less than: (a) 3m; (b) half the height of the wall,

As detailed above, the site is not located in proximity to a residential zone. Therefore, it is considered that A2 does not apply.

# 15.4.3 Design

whichever is the greater.

**Objective:** To ensure that building design contributes positively to the streetscape, the amenity and safety of the public and adjoining land in a residential zone.

# SCHEME REQUIREMENTS A1 P1 Building design must comply with all of the following: Building design must enhance the streetscape by satisfying all of the following: (a) provide the main pedestrian entrance to the building so that it is clearly visible from the road or publicly accessible areas on the site; (a) provide the main access to the building in a way that addresses the street or other public space boundary;

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- existing facade provide windows and door openings at ground floor level in the front facade no less than 40% of the surface area of the ground floor level facade ;
- (c) for new building or alterations to an existing facade ensure any single expanse of blank wall in the ground level front façade and facades facing other public spaces is not greater than 30% of the length of the facade;
- (d) screen mechanical plant and miscellaneous equipment such as heat pumps, air conditioning units, switchboards, hot water units or similar from view from the street and other public spaces:
- (e) incorporate roof-top service infrastructure, including service plants and lift structures, within the design of the roof;
- (f) provide awnings over the public footpath if existing on the site or on adjoining lots;
- (g) not include security shutters over windows or doors with a frontage to a (g) only provide shutters where essential for street or public place.

- (b) for new building or alterations to an (b) provide windows in the front façade in a way that enhances the streetscape and provides for passive surveillance of public spaces;
  - (c) treat large expanses of blank wall in the front façade and facing other public space boundaries with architectural detail or public art so as to contribute positively to the streetscape and public space:
  - (d) ensure the visual impact of mechanical plant and miscellaneous equipment, such as heat pumps, air conditioning units, switchboards, hot water units or similar, is insignificant when viewed from the street;
  - ensure roof-top service infrastructure, (e) including service plants and lift structures, is screened so as to have insignificant visual impact;
  - (f) not provide awnings over the public footpath only if there is no benefit to the streetscape or pedestrian amenity or if not possible due to physical constraints;
  - the security of the premises and other alternatives for ensuring security are not feasible;

(h) be consistent with any Desired Future Character Statements provided for the area.

#### PROPOSAL RESPONSE

Given that the proposal has two frontages with entrances provided on both, each frontage will be assessed separately, as follows:

# Wilmot Street

A1

(a) The main pedestrian entrance for the residential apartments is located on Wilmot Street and will be clearly visible.

(b) Window and door openings along the Wilmot Street frontage occupy more than 40% of the ground level facade and are considered to comply.

(c) the extent of blank wall along Wilmot Street is significantly less than 30%, as can be seen in on sheet 301 of the accompanying architectural documentation.

(d) & (e) mechanical plant equipment will be contained within the proposed plant room on Level 1 and lift structures have been contained within the design of the roof.

(f) no awnings are proposed.

(g) no security shutters are proposed.

It is considered that the Wilmot Street frontage complies with A1.

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# Sandy Bay Road

Due to the heritage wall that exists along Sandy Bay Road, windows and door openings along that frontage have not been provided at ground level, except for the entrance to the cafe, and therefore do not comply with A1(b).

Consideration of P1 is therefore required.

P1

(a) the primary residential access to the building is via Wilmot Street and pedestrian access to the café is provided from Sandy Bay Road.

(b) due to the topography of the site, the upper basement level will occupy 'ground floor' level along Sandy Bay Road, as shown in sheet 300 of the accompanying architectural documentation. Windows and doors have been provided on the south-eastern corner of the building to provide ground level access to the café and will ensure that the streetscape is enhanced and will allow for further activation.

In addition, future public artwork is set to feature on the brick façade along Sandy Bay Road, which is anticipated to further improve the streetscape.

(c) the brick wall/façade facing Sandy Bay Road at ground level will be subject to a public art competition which will result in the façade becoming a 'blank canvas' to further promote public art and significantly improve the overall streetscape, whilst also demonstrating and retaining the connection to the ABC Mural.

(d) & (e) no mechanical equipment or roof-top service infrastructure will be visible from Sandy Bay Road.

(f) No awnings are proposed.

(g) No security shutters are proposed.

(h) there are no desired character statements for the zone.

To summarise, the Wilmot Street frontage complies with A1, whilst the Sandy Bay Road frontage is considered to comply with P1.

A2 Walls of a building facing the General the south of the site that are used for Residential Zone or Inner Residential Zone residential purposes, the nearest land zoned must be coloured using colours with a light residential is located over 230m away to the reflectance value not greater than 40 percent.

Although there are a number of properties to east.

Therefore, it is considered that A2 does not apply.

# 15.4.4 Passive Surveillance

A1

Objective: To ensure that building design for non-residential uses provides for the safety of the public.

#### SCHEME REQUIREMENT RESPONSE As detailed in the response to Clause 15.4.3.

Building design for non-residential uses must the Wilmot Street frontage complies with A1. comply with all of the following: (a) provide the main pedestrian entrance to sandy Bay Road frontage does not comply with the building so that it is clearly visible A1 to Clause 15.4.3 and therefore does not

However, due to the design of the building the

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from the road or publicly accessible areas comply with A1 to this Clause. A response to on the site:

- (b) for new buildings or alterations to an Sandy Bay Road existing facade provide windows and door openings at ground floor level in the front façade which amount to no less than 40 % of the surface area of the ground floor level facade:
- (c) for new buildings or alterations to an existing facade provide windows and door openings at ground floor level in the façade of any wall which faces a public space or a car park which amount to no less than 30 % of the surface area of the ground floor level facade;
- (d) avoid creating entrapment spaces around the building site, such as concealed alcoves near public spaces;
- (e) provide external lighting to illuminate car parking areas and pathways;
- (f) provide well-lit public access at the ground floor level from any external car park.
- P1

Building design must provide for passive surveillance of public spaces by satisfying all larger built form, it is not considered to impact of the following:

(a) provide the main entrance or entrances to a building so that they are clearly visible from pedestrian activity as a result of the café is nearby buildings and public spaces;

(b) locate windows to adequately overlook the street and adjoining public spaces;

(c) incorporate shop front windows and doors for ground floor shops and offices, so that pedestrians can see into the building and vice versa;

(d) locate external lighting to illuminate any entrapment spaces around the building site;

(e) provide external lighting to illuminate car parking areas and pathways;

(f) design and locate public access to provide high visibility for users and provide clear sight lines between the entrance and adjacent properties and public spaces;

(g) provide for sight lines to other buildings and public spaces.

P1 has been provided below.

P1(a) the only non-residential component of the application is the café tenancy, access to the cafe will be clearly visible from both within the building and from Sandy Bay Road.

(b) windows have been provided at Level 1 for the apartments along the Sandy Bay Road elevation which provide ample overlooking of the street and adjoining St. David's Park.

(c) windows and door openings have been provided along the north-eastern façade at ground level to signify the entrance to the café.

(e) no external lighting is required along the Sandy Bay Road frontage, and light spill from the level 1 apartments will aid in improving pedestrian safety and amenity. The proposal does not create any entrapment spaces.

(f) the primary public access to the building will be via the café fronting Sandy Bay Road. The entrance is clearly visible from public spaces and will active the streetscape.

(g) although the building will present as a on pedestrian sight lines along Sandy Bay Road or Wilmot Street. As stated above, increased anticipated to improve pedestrian amenity along Sandy Bay Road and the design of the building is not anticipate to impact on pedestrian sightlines at street level.

The Sandy Bay Road frontage is considered to comply with P1.

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## 15.4.5 Landscaping

15.4.5 Landscaping	
Objective: To ensure that a safe and att appearance of the site and if relevant provides	, 5
SCHEME REQUIREMENT	RESPONSE
A1	As the building extends across the width of th
<ul> <li>A1</li> <li>Landscaping along the frontage of a site is not required if all of the following apply:</li> <li>(a) the building extends across the width of the frontage, (except for vehicular access ways);</li> <li>(b) the building has a setback from the frontage of no more than 1m.</li> <li>P1</li> <li>Landscaping must be provided to satisfy all of the following:</li> <li>(a) enhance the appearance of the development;</li> <li>(b) provide a range of plant height and forms to create diversity, interest and amenity;</li> <li>(c) not create concealed entrapment spaces;</li> <li>(d) be consistent with any Desired Future Character Statements provided for the area.</li> </ul>	As the building extends across the width of th Sandy Bay Road frontage and is setback withi 1m, no landscaping is required along the frontage. However, small areas of landscaping ar proposed along the north-eastern edge of th site adjacent to the entry to the café t improve pedestrian amenity and th streetscape. With regard to Wilmot Street, due to th variable setback between 0m an approximately 3m, it is proposed to retai some of the existing landscaping as well a including new landscaping along this frontag the frontage. The application meets the performance criteria as follow: (a) & (b) The proposed landscaping is conjunction with the existing trees located oo the western side of the site will aid it enhancing the overall built appearance of th building and contribute to creating an invitin entry way from both Wilmot Street and Sand Bay Road. (c) The landscaping will not create an entrapment spaces and there are no desire future character statements for the zone.
A2 Along a boundary with the General Residential Zone or Inner Residential Zone landscaping must be provided for a depth no less than: 2m. P2 Along a boundary with the General Residential Zone or Inner Residential Zone landscaping or a building design solution must be provided to avoid unreasonable adverse impact on the visual amenity of adjoining land in the General Residential Zone or Inner Residential Zone, having regard to the characteristics of the site	A number of properties in proximity to the sit are utilised for residential and visito accommodation purposes. However, the site does not directly adjoin residential zone and the nearest mapper residential area is over 250m to the east. Therefore, A2 does not apply.

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and the characteristics of the adjoining residentially-zoned land.

#### 15.4.6 Outdoor Storage Areas

No outdoor storage areas are proposed.

## 15.4.7 Fencing

 Objective: To ensure that fencing does not detract from the appearance of the site or the locality and provides for passive surveillance.

 SCHEME REQUIREMENT
 RESPONSE

 A1
 No fences are proposed in the application.

 Fencing must comply with all of the following:
 (a) fences, walls and gates of greater height

- than 1.5m must not be erected within 4.5m of the frontage;
- (b) fences along a frontage must be at least 50% transparent above a height of 1.2m;
- (c) ...
- . .

#### 15.4.8 Residential Amenity

**Objective:** To ensure that buildings for residential use provide reasonable levels of residential amenity and safety.

#### SCHEME REQUIREMENTS

A1 - A dwelling must have at least one habitable room window (other than a bedroom) facing between 30 degrees west of north and 30 degrees east of north.

P1 - A dwelling must be sited and designed to optimise sunlight to at least one habitable room (other than a bedroom).

#### PROPOSAL RESPONSE

Due to the orientation of the lot and street frontages, the windows to habitable rooms (other than bedrooms) along the northern, eastern and western elevations do not face 30 degrees east or west of north.

Therefore, a response to the performance criteria is required.

Access to sunlight and orientation of windows is constrained by the orientation of the lot, orientation of streets and requirement for the building to be built to the frontage along Sandy Bay Road.

The balconies provided along the northern and eastern elevations directly adjoin living areas and serve as extensions to these areas. The balconies are oriented as far as possible east and west of north to optimise sunlight into these areas. Although the windows themselves do not comply with A1, the balconies will receive sunlight.

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Several balconies along the south-western elevation do not face between 30 degrees east or west of north, however they have also been oriented to optimise access to sunlight as far as practicable.

All balconies across the northern, western and eastern elevations will receive direct sunlight during the equinox and on December 21st, ensuring substantial access to sunlight throughout the summer months.

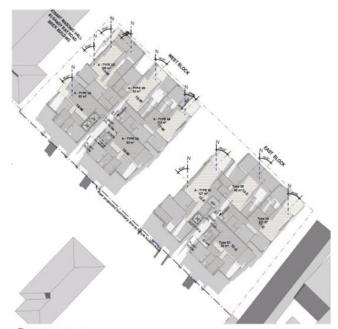
Therefore, the siting and design of the building is sufficient to optimise sunlight to habitable rooms (other than bedrooms) via balconies which serve as extensions to these living areas.



Figure 12: Window orientation and sun study for December 21st (source: Scanlan Architects)

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2 Typical Floor-Sun Study - June

### Figure 13: Window orientation and sun study for June (source: Scanlan Architects)

A2 - The potential for direct overlooking from windows of habitable rooms with a finished surface or floor level more than 1m above natural ground level on one lot to the windows of habitable rooms, balconies, decks and roof gardens on adjacent lots must be avoided or minimised by complying with any of the following:

(a) have a side boundary setback no less than 3 m;

(b) be offset no less than 1.5 m from the windows of habitable rooms on adjacent lots where on the same horizontal lane;

(c) have a window seal height no less than 1.5 m.

PROPOSAL RESPONSE

The standard refers to overlooking from one lot onto another lot. The only elevation which has windows to habitable rooms that overlook an adjacent lot is the western elevation of the lower building form. The windows to habitable rooms along this elevation are setback over 3m from the side boundary of the site across all levels, complying with A2(a).

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(a) be no less than 10 m2;

(b) have a width no less than 2 m.

P3 - Outdoor living space must be provided for a dwelling with dimensions sufficient for the projected requirements of the occupants.

PROPOSAL RESPONSE

The outdoor living space (balconies) for each apartment vary from a minimum of  $12m^2$  to a maximum of approximately  $106m^2$  for the penthouses. All balconies have a minimum depth of approximately 2.4m, thereby complying with A3.

A4 - Habitable rooms of dwellings adjacent to streets carrying more than 6000 vehicle per day must be designed to achieve internal noise levels no more than 45 dBa in accordance with relevant Australian Standards for acoustics control, (including AS3671 - Road Traffic, and AS2107 - Habitable Rooms).

P4 - Habitable rooms of dwellings adjacent to streets carrying more than 6000 vehicle per day must be designed, through site layout and building design, to provide internal noise levels that accord a reasonable level of residential amenity for the occupants. RESPONSE

All windows and doors to apartments across both building forms will be double glazed, which is now standard practice and legal requirement for any new development. Double glazing incorporates two panes of glass within which is a void filled with gas to regulate heat loss and absorption. These design elements substantially reduce noise emissions and are considered sufficient to achieve internal noise levels of no more than 45dBa.

The design of windows and doors to both habitable and non-habitable rooms are in accordance with the relevant Australian Standards.

The proposal complies with A4.

#### 3.2 POTENTIALLY CONTAMINATED LAND CODE

Site investigations have confirmed that there is an existing fuel tank present on the site. Investigations are ongoing to determine whether there is any evidence of contamination along with a plan to remove the tank.

A report will be prepared and submitted to Council for consideration, along with a response to the relevant provisions of the Code once that information becomes available.

<sup>3.2.1</sup> USE STANDARDS

E2.5 Use Standards	
Objective: To ensure that potenti	ially contaminated land is suitable for the intended use.
SCHEME REQUIREMENTS	RESPONSE

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 $<sup>{\</sup>bf A3}$  - Outdoor living space must be provided for a dwelling that complies with all of the following:

#### A1

The Director, or a person approved by the prepared, along with recommendations Director for the purpose of this Code:

(a) certifies that the land is suitable for the This report, along with a response to P1 will be intended use; or (b) approves a plan to manage contamination complete.

and associated risk to human health or the environment that will ensure the land is suitable for the intended use.

P1

Land is suitable for the intended use, having regard to:

(a) an environmental site assessment that demonstrates there is no evidence the land is contaminated; or

(b) an environmental site assessment that demonstrates that the level of contamination does not present a risk to human health or the environment; or

(c) a plan to manage contamination and associated risk to human health or the environment that includes:

(i) an environmental site assessment;

(ii) any specific remediation and protection measures required to be implemented before any use commences; and

(iii) a statement that the land is suitable for the intended use.

#### 3.2.2 DEVELOPMENT STANDARDS

#### E2.6.2 - Excavation

Objective: To ensure that works involving excavation of potentially contaminated land does not adversely impact on human health or the environment.

SCHEME REQUIREMENTS	RESPONSE
A1 No acceptable solution. P1 Excavation does not adversely impact on health and the environment, having regard to: (a) an environmental site assessment that demonstrates there is no evidence the land is contaminated; or	A site contamination report is currently being prepared, along with recommendations regarding the removal of the fuel tank. This report, along with a response to P1 will be provided as additional information once complete.

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A site contamination report is currently being

provided as additional information once

regarding the removal of the fuel tank.

(b) a plan to manage contamination and associated risk to human health and the environment that includes:
(i) an environmental site assessment;
(ii) any specific remediation and protection measures required to be implemented before excavation commences; and
(iii) a statement that the excavation does not adversely impact on human health or the environment.

## 3.3 ROAD AND RAILWAY ASSETS CODE

## 3.3.1 USE STANDARDS

## E5.5.1 Existing road accesses and junctions

**Objective**: To ensure that the safety and efficiency of roads is not reduced by increased use of existing accesses and junctions.

SCHEME REQUIREMENTS	RESPONSE
<ul> <li>P3</li> <li>Any increase in vehicle traffic at an existing access or junction in an area subject to a speed limit of 60km/h or less, must be safe and not unreasonably impact on the efficiency of the road, having regard to: <ul> <li>(a) the increase in traffic caused by the use;</li> <li>(b) the nature of the traffic generated by the use;</li> <li>(c) the nature and efficiency of the access or the junction;</li> <li>(d) the speed limit and traffic flow of the road;</li> <li>(e) the speed limit and traffic flow of the road;</li> <li>(f) any alternative access to a road;</li> <li>(g) the need for the use;</li> <li>(h) any traffic impact assessment; and</li> <li>(i) any written advice received from the road authority.</li> </ul> </li> </ul>	The AADT of vehicle movements will increase over existing, given that the existing parking area only provides for approximately 19 space on the north-eastern and south eastern side: of the site. The proposed lower and upper basement levels will provide a total of 86 car parking spaces. The application meets the Performance Criteria as follows: (a) As detailed by the accompanying TIA the trip generation under RMS Guidelines, will be approximately 283 trips per day for the café, totalling around 341 vehicles per day. The TIA suggests that actual generation is anticipated to be lower given that the café is ancillary to the residential component and the proximity of the site to nearby offices and businesses will result in a higher level of pedestrian activity. (b) the traffic generated by the development will be primarily residential. (c) As detailed in the accompanying TIA, the access conditions at Wilmot Street are

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the speed environment and sight distance provision.

(d) & (e) Wilmot Street is a one-way road that provides a connection between Hampden Road and Sandy Bay Road. The Street supports a mix of residential and commercial vehicles. The speed limit along Wilmot Street is 50km/hr, however, as specified in the TIA, given the nature of the road it is unlikely that vehicles would exceed 40km/hr.

(f) The other frontage to the site is Sandy Bay Road where access would be less suitable due to traffic conditions.

(g) Residential use within close proximity to the city is appropriate where future residents will be in close proximity to services and employment opportunities.

(h) the accompanying TIA states that vehicle movements generated by the proposal are not considered to have any adverse impacts on the safety or efficiency of Wilmot Street given the one-way nature of the Street.

It is not anticipated that there will be any impacts on Sandy Bay Road, given that the left lane operates as a clearway during the evening peak period, whilst the west bound left lane is a clearway during the morning peak period.

Further detailed information is contained within the accompanying TIA. (i) n/a

#### 3.3.2 DEVELOPMENT STANDARDS

### E5.6.2 Road accesses and junctions

Objective: To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and junctions.

SCHEME STANDARDS RESPONSE AZ No more than one access providing both entry crossovers, one on the southern side and one and exit, or two accesses providing separate on the northern side, which provide access to entry and exit, to roads in an area subject to two existing parking areas. a speed limit of 60km/h or less.

Access to the site is currently provided via two

The proposed development seeks to remove the northern crossover and reinstate the kerb and gutter, whilst replacing the existing southern crossover.

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This will result in the proposal utilising one access to the site which will provide both entry and exit. The proposal complies with A2.

<b>Objective:</b> To ensure that accesses, junction distance between vehicles and between vehicles	• • • • •
SCHEME REQUIREMENTS	RESPONSE
A1 Sight distances at: (a) an access or junction must comply with the Safe Intersection Sight Distance	Wilmot Street is a one-way street running from Hampden Road to Sandy Bay Road. Therefore sight distance would only require measurement to the south toward Hampder Road.
shown in Table E5.1;	Given the site is located on the northern end of Wilmot Street, the distance between the site entrance and the junction between Wilmot Street and Hampden Road would be over 80m.
	The speed limit along Wilmot Street i 50km/hr, however given the narrow nature o the street it is likely that vehicle speeds would be considerable lower.
	The site distance is considered more tha sufficient to comply with Table E5.1 and the conclusion is supported in the TIA.
	The proposal complies with A1.

3.4 PARKING AND ACCESS CODE

## 3.4.1 USE STANDARDS

Objective: To ensure that:	
	meet the reasonable needs of all users of a use unt the level of parking available on or outside of the ther modes of transport.
(b) a use or development does not de	tract from the amenity of users or the locality by:
(i) preventing regular parking ov	verspill:
., , , , , , , ,	parking on heritage and local character.
(ii) minimising the impact of car	
., , , , , , , ,	parking on heritage and local character.

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(a) no less than the number specified in Table The scheme requires provision of 2 spaces per E6.1;

except if:

P1

- 2-3 bedroom dwelling plus 1 visitor space per 4 dwellings, which would generate a requirement for 124 parking spaces. (i) the site is subject to a parking plan The café would also generate a requirement for the area adopted by Council, in
  - for 16 spaces. The total parking requirement is 140 spaces, resulting in a shortfall of 54 car parking
  - spaces. The application meets the performance

(a) As detailed in the accompanying TIA, the residential parking demand of the development is considered to be less than what the development generates under the scheme given its proximity to the city centre, services and employment.

In addition many of the café customers would likely to be residents of the apartments on site or those living or working in the area.

It is therefore considered that the parking provided is sufficient to meet the demand of the development.

(b) on-street parking is limited in the vicinity of the site, generally to time restricted and metered parking along Sandy Bay Road, Davey Street and Hampden Road. These streets are within close walking distance of the site, however as mentioned above, it is considered that the parking provided for the development is sufficient to meet the anticipated demand.

(c) & (d) The site is well within 400m of a number of key public transport corridors where ample public transport is available.

The site is also well within walking distance of key sites such as the CBD and Sullivan's Cove. (e), (f), (g), (h), (i), (j) & (k) n/a

(l) the site is subject to the code, however the parking is within the basement levels and will not result in any impact on the heritage precinct or place.

(m) n/a.

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#### or cash-in-lieu) must be in accordance with that plan;

The number of on-site car parking spaces must criteria as follows: be sufficient to meet the reasonable needs of users, having regard to all of the following:

which case parking provision (spaces

(a) car parking demand;

- (b) the availability of on-street and public car parking in the locality;
- (c) the availability and frequency of public transport within a 400m walking distance of the site;
- (d) the availability and likely use of other modes of transport;
- (e) the availability and suitability of alternative arrangements for car parking provision;
- (f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;
- (g) any car parking deficiency or surplus associated with the existing use of the land;
- (h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;
- (i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

- (j) any verified prior payment of a financial contribution in lieu of parking for the land:
- (k) any relevant parking plan for the area adopted by Council;
- (l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;
- (m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code.

E6.6.2 Number of Accessible Car Parking Spaces for People with a Disab	ility
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Objective: To ensure that a use or development provides sufficient accessible car parking for people with a disability.

SCH	IEME REQUIREMENTS	RESPONSE
A1		The residential component does not generate
	parking spaces provided for people with a bility must:	a requirement for accessible parking. However, 1 accessible space has been
(a)	satisfy the relevant provisions of the Building Code of Australia;	provided on the upper basement level in close proximity to the lifts and internal entrance to the café tenancy.
(b)	be incorporated into the overall car park design;	The space has been designed to satisfy the relevant provisions of the Building Code, is
(c)	be located as close as practicable to the building entrance.	incorporated into the design of the parking areas and is located as close a practicable to the lifts and entry ways.

The proposal complies with A1.

## E6.6.3 Number of Motorcycle Parking Spaces

Objective: To ensure enough motorcycle parking is provided to meet the needs of likely users of a use or development.

SCHEME REQUIREMENTS	RESPONSE
P1 The number of on-site motorcycle parking spaces must be sufficient to meet the needs of likely users having regard to all of the following, as appropriate:	The proposal generates a requirement for 4 motorcycle parking spaces. However, no motorcycle spaces have been provided. The application responds to the performance criteria as follows:
<ul> <li>(a) motorcycle parking demand;</li> <li>(b) the availability of on-street and public motorcycle parking in the locality;</li> <li>(c) the availability and likely use of other modes of transport;</li> </ul>	(a) Given the location of the site in close proximity to existing public transport corridors and within walking distance of the CBD the development provides alternative transport alternatives. Residents will also have the

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parking provision.

(d) the availability and suitability of ability to utilise car parking spaces for their alternative arrangements for motorcycle own motorbikes or scooters if they use those transport forms.

(b) & (c) It is common for motorcycles to utilise existing car parking spaces. (d) n/a

Given the proximity of the site to the CBD and other key sites and public transport corridors it is considered that provision of 4 motorcycle

## spaces is not necessary.

### E6.6.4 Number of Bicycle Parking Spaces

Objective: To ensure enough bicycle parking is provided to meet the needs of likely users and by so doing to encourage cycling as a healthy and environmentally friendly mode of transport for commuter, shopping and recreational trips.

SCHEME REQUIREMENTS	RESPONSE
A1 The number of on-site bicycle parking spaces provided must be no less than the number specified in Table E6.2.	Although residential use does not generate a requirement for bicycle parking a bicycle storage space has been provided for residents to promote alternative forms of transportation.
	The proposed café will generate a minimum requirement for 2 bicycle spaces for patrons. These spaces have been provided outside the café entrance in accordance with class 3 bicycle parking. The proposal complies with A1.

3.4.2 DEVELOPMENT STANDARDS

### E6.7.1 Number of Vehicular Accesses

Objective: To ensure that:

- (a) safe and efficient access is provided to all road network users, including, but not limited to: drivers, passengers, pedestrians, and cyclists, by minimising:
  - (i) the number of vehicle access points; and
  - (ii) loss of on-street car parking spaces;

(b) vehicle access points do not unreasonably detract from the amenity of adjoining land uses; (c) vehicle access points do not have a dominating impact on local streetscape and character.

SCHEME REQUIREMENTS	RESPONSE
A1	There are two existing access points to the site
The number of vehicle access points provided for each road frontage must be no more than 1 or the existing number of vehicle	from Wilmot Street. These access points will be removed and replaced with one access point which will provide both entry and exit.
access points, whichever is the greater.	The proposal complies with A1.

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## E6.7.2 Design of Vehicular Accesses

**Objective:** To ensure safe and efficient access for all users, including drivers, passengers, pedestrians and cyclists by locating, designing and constructing vehicle access points safely relative to the road network.

SCHEME REQUIREMENTS	RESPONSE
<ul> <li>A1</li> <li>Design of vehicle access points must comply with all of the following:</li> <li>(a) in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 - "Access Facilities to Off-street Parking Areas and Queuing Areas" of AS/NZS 2890.1:2004 Parking Facilities</li> </ul>	The accompanying TIA specifies that the design of the vehicle access has been designed in accordance with the relevant Australian Standards for non-commercial access. The proposal complies with A1(a).
Part 1: Off-street car parking;	
(b)	
E6.7.3 Vehicular Passing Areas Along an Acces	5
Objective: To ensure that:	
(a) the design and location of access and par	· , , ,
by minimising the potential for conflicts involving	ng vehicles, pedestrians and cyclists;
by minimising the potential for conflicts involvin (b) use or development does not adverse	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of
by minimising the potential for conflicts involvi (b) use or development does not adverse the road network as a result of delayed turning	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site.
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE
by minimising the potential for conflicts involvi (b) use or development does not adverse the road network as a result of delayed turning	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS A1	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS A1 Vehicular passing areas must: (a) be provided if any of the following applies	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS A1 Vehicular passing areas must: (a) be provided if any of the following applies to an access: (i) it serves more than 5 car parking	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS A1 Vehicular passing areas must: (a) be provided if any of the following applies to an access: (i) it serves more than 5 car parking spaces;	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS A1 Vehicular passing areas must: (a) be provided if any of the following applies to an access: (i) it serves more than 5 car parking spaces; (ii) is more than 30m long; (iii) it meets a road serving more than	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
<ul> <li>by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHEME REQUIREMENTS</li> <li>A1</li> <li>Vehicular passing areas must: <ul> <li>(a) be provided if any of the following applies to an access:</li> <li>(i) it serves more than 5 car parking spaces;</li> <li>(ii) is more than 30m long;</li> <li>(iii) it meets a road serving more than 6000 vehicles per day;</li> </ul> </li> <li>(b) be 6m long, 5.5m wide, and taper to the</li> </ul>	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been
by minimising the potential for conflicts involvin (b) use or development does not adverse the road network as a result of delayed turning SCHER REQUIREMENTS A1 Vehicular passing areas must: (a) be provided if any of the following applies to an access: (i) it serves more than 5 car parking spaces; (ii) is more than 30m long; (iii) it meets a road serving more than 6000 vehicles per day; (b) be 6m long, 5.5m wide, and taper to the width of the driveway; (c) have the first passing area constructed at	ng vehicles, pedestrians and cyclists; ly impact on the safety or efficiency of movements into a site. RESPONSE Given the internal access ways have been

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#### E6.7.4 On-Site Turning

Objective: To ensure safe, efficient and convenient access for all users, including drivers, passengers, pedestrians and cyclists, by generally requiring vehicles to enter and exit in a forward direction.

SCHEME REQUIREMENTS	RESPONSE	
A1	The propos	
On-site turning must be provided to enable vehicles to exit a site in a forward direction, except where the access complies with any of	basement a vehicles ca the site if a	
the following:	The proposa	

proposed vehicle circulation within the ement and ground floor car parks ensures nicles can turn on-site and enter and exit site if a forward direction.

The proposal is capable of complying with A1.

(a) it serves no more than two dwelling units; (b) it meets a road carrying less than 6000

vehicles per day.

### E6.7.5 Layout of Parking Areas

Objective: To ensure that parking areas for cars (including assessable parking spaces), motorcycles and bicycles are located, designed and constructed to enable safe, easy and efficient use.

SCHEME REQUIREMENTS RESPONSE A1 The layout of car parking spaces, access aisles, spaces, access aisles and ramps have been circulation roadways and ramps must be designed and constructed to comply with Australian Standard and comply with A1. section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Offstreet car parking and must have sufficient

As per the accompanying TIA, the car parking

#### E6.7.6 Surface Treatment of Parking Areas

headroom to comply with clause 5.3 "Headroom" of the same Standard.

Objective: To ensure that parking spaces and vehicle circulation roadways do not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

RESPONSE

#### SCHEME REQUIREMENTS

The parking areas will be paved with durable A1 Parking spaces and vehicle circulation all-weather pavement in compliance with A1. roadways must be in accordance with all of the following; (a) paved or treated with a durable allweather pavement where within 75m of a property boundary or a sealed roadway;

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(b) drained to an approved stormwater system, unless the road from which access is provided

to the property is unsealed.

## E6.7.7 Lighting of Parking Areas

Objective: To ensure parking and vehicle circulation roadways and pedestrian paths used outside daylight hours are provided with lighting to a standard which:

- (a) enables easy and efficient use;
- (b) promotes the safety of users;
- (c) minimises opportunities for crime or anti-social behaviour; and
- (d) prevents unreasonable light overspill impacts.

#### SCHEME REQUIREMENT RESPONSE

Serie in Content in the Content in t				
A1 Parking and vehicle circulation roadways and pedestrian paths serving 5 or more car parking spaces, used outside daylight hours, must be	The internal car parking areas will be provided with lighting to comply with Australian Standards.			
, , , , , ,				
Parks" in AS/NZS 1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting.				

#### E6.7.8 Landscaping of Parking Areas

Objective: To ensure that large parking and circulation areas are landscaped to:

(a) relieve the visual impact on the streetscape of large expanses of hard surfaces; (b) screen the boundary of car parking areas to soften the amenity impact on neighbouring

- properties;
- (c) contribute to the creation of vibrant and liveable places;

(d) reduce opportunities for crime of	or anti-social behaviour by maintaining clear sightlines.	
SCHEME REQUIREMENTS	RESPONSE	

streetscape.

A1 The application meets the performance Landscaping of parking and circulation areas criteria as follows: must be provided where more than 5 car (a) due to the car parking being located within parking spaces are proposed. This landscaping the basement levels, there will be no large must be no less than 5 percent of the area of expanses of hard surfaces visible from the the car park, except in the Central Business road. Zone where no landscaping is required. (b) as per above, the parking areas will not be P1 visible from the streetscape and existing and

Landscaping of parking and circulation areas proposed landscaping along the Wilmot Street accommodating more than 5 cars must satisfy frontage will significantly improve the all of the following:

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(a) streetscape of large expanses of hard surfaces; residents and guests and will not be accessible (b) soften the boundary of car parking areas to reduce the amenity impact on neighbouring properties and the streetscape; by the public. The parking areas are not considered to result in any opportunities for crime or anti-social behaviour. (c) reduce opportunities for crime or anti-social behaviour by maintaining passive surveillance opportunities from nearby public spaces and buildings.

relieve the visual impact on the (c) the parking areas are provided for

## E6.7.10 Design of Bicycle Parking Facilities

Objective: To encourage cycling as a healthy and environmentally friendly mode of transport for commuter, shopping and recreational trips by providing secure, accessible and convenient bicycle parking spaces.

SCHEME REQUIREMENTS	RESPONSE	
<ul> <li>A1</li> <li>The design of bicycle parking facilities must comply with all the following;</li> <li>(a) be provided in accordance with the requirements of Table E6.2;</li> <li>(b) be located within 30 m of the main entrance to the building.</li> </ul>	Although the proposal does not generate a requirement for bicycle parking for residents, a bicycle store has been provided on the upper basement level for residents if required and is located within 30m of the main entrances to the building. The proposal also generates a requirement for a minimum of 2 bicycle spaces for visitors/patrons to the café. These spaces have been provided outside the café entrance in accordance with Class 3 bicycle parking.	
A2 The design of bicycle parking spaces must be to the class specified in table 1.1 of AS2890.3- 1993 Parking facilities Part 3: Bicycle parking facilities in compliance with section 2 "Design of Parking Facilities" and clauses 3.1 "Security" and 3.3 "Ease of Use" of the same Standard. <sup>81</sup>	A bicycle storage area has been provided for residents if required. It is considered that the storage area would be consistent with Class 2 facilities, in that the storage area is lockable and only accessible by residents. The two spaces required for the café have been provided as Class 3 bicycle spaces, located outside the café.	
P2 The design of bicycle parking spaces must be sufficient to conveniently, efficiently and safely serve users without conflicting with vehicular or pedestrian movements or the safety of building occupants.	The accompanying TIA specifies that the proximity of the site to the CBD, Sullivan's Cove and nearby businesses would suggest a high level of walkability by patrons to the café. It is considered that the bicycle parking facilities provided are in accordance with Australian Standards, and therefore comply	

with A2.

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## E6.7.11 Bicycle End of Trip Facilities

 Objective: To ensure that cyclists are provided with adequate end of trip facilities.

 SCHEME REQUIREMENTS
 RESPONSE

A1 The uses proposed only require 2 spaces and therefore this standard is not applicable. the provision of more than 5 bicycle parking spaces for employees under Table E6.2, 1 shower and change room facility must be provided, plus 1 additional shower for each 10 additional employee bicycle spaces thereafter.

#### E6.7.12 Siting of Car Parking

 Objective:
 To ensure that the streetscape, amenity and character of urban areas is not adversely affected by siting of vehicle parking and access facilities.

 SCHEME REQUIREMENTS
 RESPONSE

E6.7.13 Facilities for Commercial Vehicles

**Objective:** To ensure that facilities for commercial vehicles are provided on site, as appropriate.

#### RESPONSE

 A1
 The proposal is not reliant on the outward

 Commercial vehicle facilities for loading, unloading or manoeuvring must be provided on-site in accordance with Australian Standard for Off-street Parking, Part 2 :
 As per the TIA, there is a loading zone within Commercial. Vehicle Facilities AS 2890.2:2002, 50 metres of the site and it is considered that this is sufficient to demonstrate compliance

 (a) the delivery of all inward bound goods is with A1(b).
 by a single person from a vehicle parked in a dedicated loading zone within 50 m of the site;

- (b) the use is not primarily dependent on
- outward delivery of goods from the site.

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SCHEME REQUIREMENTS

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### P1

Commercial vehicle arrangements for loading, unloading or manoeuvring must not compromise the safety and convenience of vehicular traffic, cyclists, pedestrians and other road users.

<b>Objective:</b> To ensure that access to the road network is provided appropriately.	
SCHEME REQUIREMENTS	RESPONSE
A1 Access to a road must be in accordance with the requirements of the road authority.	The site currently possesses two vehicle access points from Wilmot Street. One of the existing crossovers will be
	removed, whilst the remaining crossover will be relocated.
	A request for Council consent forms part of this application.

### 3.5 STORMWATER MANAGEMENT CODE

#### 3.5.1 DEVELOPMENT STANDARDS

Objective: To ensure that stormwater quality and quantity is managed appropriately.				
SCHEME REQUIREMENTS	RESPONSE			
A1 Stormwater from new impervious surfaces must be disposed of by gravity to public	The proposed stormwater system includes a detention tank and Ocean Protect treatmen system.			
stormwater infrastructure.	Stormwater will be stored within the detention tank and released to the public system to reduce overall outflow.			
	The proposal complies with A1.			
A2 A stormwater system for a new development must incorporate water sensitive urban design principles <sup>R1</sup> for the treatment and disposal of stormwater if any of the following apply: (a) the size of new impervious area is more than 600 m2;	The site is already covered with impervious surfaces and the application therefore does not increase these in excess of 600m2. Previous advice from Council's engineers ha indicated that WSUD principals are no required for underground/undercover parking areas, given that they are not generally subject to direct rainfall and runoff.			
<ul> <li>(b) new car parking is provided for more than 6 cars;</li> <li>(c) a subdivision is for more than 5 lots.</li> </ul>	No subdivision is proposed. Although this standard is not considered applicable, the proposed development will			

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system which includes on-site detention. This system will ensure that stormwater flow to the public system is reduced to a level that can be accommodated by existing infrastructure and to ensure that state stormwater strategy guidelines are met.

If applicable the proposal complies with A2. The proposed stormwater drainage system has been designed to accommodate a storm with an ARI of 20 years.

(a) be able to accommodate a storm with Although stormwater runoff will be greater than pre-existing runoff, the proposed stormwater system will ensure that the increase can be accommodated by existing when the land serviced by the system is public stormwater infrastructure, therefore no upgrades are required.

(b) stormwater runoff will be no greater than The proposal complies with A3.

#### infrastructure. 3.6 HISTORIC HERITAGE CODE

upgraded

fully developed;

A minor stormwater drainage system must be

designed to comply with all of the following:

an ARI of 20 years in the case of non-

industrial zoned land and an ARI of 50

years in the case of industrial zoned land,

pre-existing runoff or any increase can be accommodated within existing or public

A3

Part of the site falls within the H2 Heritage Precinct - Hampden Road, as do the adjoining cottages which front Heathfield Avenue. This heritage precinct is significant for the following reasons:

stormwater

- 1. It contains a broad range of residential types; from intact examples of Colonial, Victorian and Inter War architecture exemplifying economic boom periods and great individual prosperity alongside smaller cottages and a collection of residential flats built at the height of the Great Depression for a new middle class market.
- 2. This precinct contains a large number of individual buildings and features that are of historic merit demonstrating the early settlements of Hobart.
- Places within this precinct of architectural merit with original external detailing, finishes and 3. materials demonstrating a high degree of integrity with a distinctive historic character Features of significance include high boundary walls as well as sections of continuous built form creating distinctive and strong visual characteristics.
- The original and/or significant external detailing, finishes and materials demonstrating a high 4. degree of importance.

There are also a number of heritage places listed within the site, as follows:

#### Hobart City Council Register:

Ref. No.	Name	Street No.	Street/Location	с.т.	General Description
2777	No name provided	5-7	Sandy Bay Road	51956/7	Flats (Previously known as 4 Heathfield Avenue)

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#### Tasmanian Heritage Register:

Ref. No.	Name	Street No.	Street/Location
2604	Conjoined Cottages	5-7	Sandy Bay Road
6756	Cottage	5-7	Sandy Bay Road
7481	ABC Mural	5-7	Sandy Bay Road



Figure 14: Extent of H2 Heritage Precinct and heritage listings (source: www.thelist.tas.gov.au © State Government of Tasmania)

The site is heritage listed due to the ABC Wall Mural and two heritage listed cottages on the southern portion of the site. The ABC Wall Mural fronts Sandy Bay Road, whilst the two cottages front Wilmot Street, therefore the following provisions will require assessment.

3.6.1 DEVELOPMENT STANDARDS FOR HERITAGE PLACES

E13.7.1 - Demolition

 Objective: To ensure that demolition in whole or part of a heritage place does not result in the loss of historic cultural heritage values unless there are exceptional circumstances.

 SCHEME REQUIREMENTS
 RESPONSE

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5-7 Sandy Bay Road, Sandy Bay

### P1

demolition.

significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the ABC Mural Wall. place unless all of the following are satisfied; The heritage and archaeological report (a) there are, environmental, social, economic recommend that a construction management or safety reasons of greater value to the plan be prepared to detail measures to ensure community than the historic cultural heritage that the Mural Wall is protected and conserved values of the place;

(b) there are no prudent and feasible alternatives;

(c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;

As detailed in the accompanying heritage and Demolition must not result in the loss of archaeological report, the proposed development will not involve demolition of any significant heritage fabric including the

> during the removal of the existing building and excavation process.

Given that the proposed development does not require the demolition or removal of any heritage places and the Mural will be retained and carefully incorporated into the building, it is considered that the proposal complies with (d) significant fabric is documented before P1.

### E13.7.2 Buildings and Works other than Demolition

**Objective:** To ensure that development at a heritage place is:

(a) undertaken in a sympathetic manner which does not cause loss of historic cultural heritage significance; and

(b) designed to be subservient to the historic cultural heritage values of the place and responsive to its dominant characteristics.

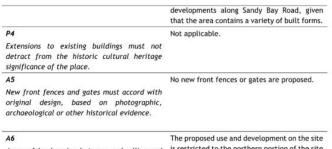
SCHEME REQUIREMENTS	RESPONSE
SCHEME REQUIREMENTS A1 No acceptable solution. P1 Development must not result in any of the following: (a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes; (b) substantial diminution of the historic cultural heritage significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.	RESPONSE A response to the performance criteria has been provided. No development is proposed within the traditional allotments that contain the Wilmot Street cottages, despite them forming part of the wider site. The heritage and archaeological report states that there is a substantial gap between the existing cottages on Wilmot Street and the proposed development and the development is not considered to result in any detriment to the historic cultural heritage significance of the cottages by virtue of siting, scale, bulk or design. With regard to the ABC Mural Wall, the accompanying heritage and archaeological report has specified a conservation policy to

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	The heritage report specifies that; 'The evolution of the building and site to incorporate the mural and the intent to supplement this with further thoughtful and meaningful public art will add another layer to the history of the mural and how it has acted to shape the appreciation of its surrounds.'
	The proposal complies with P1.
<ul> <li>P2</li> <li>Development must be designed to be subservient and complementary to the place through characteristics including:</li> <li>(a) scale and bulk, materials, built form and fenestration;</li> <li>(b) setback from frontage;</li> <li>(c) siting with respect to buildings, structures and listed elements;</li> <li>(d) using less dominant materials and colours.</li> </ul>	As specified above, the heritage report indicates that separation distance from the proposed building location and the existing heritage cottages on Wilmot Street ensures that the building will not impact on the heritage significance of those sites with regard to bulk, materials, built form and fenestration. The setback of the proposed building is considered to be consistent with the setback of the adjoining heritage cottages and there will be no works or development on those sites. With regard to the ABC Mural Wall, the artwork will be retained in place and incorporated into the overall design of the building and will form part of the premise for future public art on the site. According to the heritage report and architectural statement, the retention of the Mural and incorporation into the proposed building; "is intended to perpetuate the memory of the original art competition which conceived the mural with a modern competition in conjunction with a local gallery to provide supplementary public art to complement the
	mural and the sites place in the public art history of Hobart." It is considered that the proposal complies
	with P2.
P3 Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily identifiable as such.	The heritage report states that the new development is separated from the existing cottages on Wilmot Street by approximately 20m which provides a spatial buffer between the finer-grained cottages and the larger

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Areas of landscaping between a dwelling and the street must be retained.

The proposed use and development on the site is restricted to the northern portion of the site and no changes are proposed to the existing cottages.



Figure 15: Extent of H2 Heritage Precinct (purple) and area of the site subject to demolition and redevelopment (red) (source: www.thelist.tas.gov.au  $\oplus$  State Government of Tasmania)

3.6.2 DEVELOPMENT STANDARDS FOR HERITAGE PRECINCTS

As discussed in the accompanying Heritage Report, although three titles in Heathfield Avenue and the southern section of the primary title (all of which are identified as 5-7 Sandy Bay Road) fall within the heritage precinct, no buildings, works or demolition are to occur within the confines of the H2 Heritage Precinct.

Therefore, development standards for the Heritage Precinct do not apply.

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3.6.3 DEVELOPMENT STANDARDS FOR PLACES OF ARCHAEOLOGICAL POTENTIAL

According to the Code, the site is within an area identified as having archaeological potential. Therefore, the following provisions will apply.

## E13.10.1 - Building, Works and Demolition

<b>Objective:</b> To ensure that building, works and demolition at a place of archaeological potential is planned and implemented in a manner that seeks to understand, retain, protect, preserve and otherwise appropriately manage significant archaeological evidence.		
SCHEME REQUIREMENTS	RESPONSE	

SCHEME REQUIREMENTS	
P1	The application meets the performance
Buildings, works and demolition must not unnecessarily impact on archaeological resources at places of archaeological potential, having regard to: (a) the nature of the archaeological evidence, either known or predicted; (b) measures proposed to investigate the archaeological evidence to confirm predictive statements of potential; (c) strategies to avoid, minimise and/or control impacts arising from building, works and demolition; (d) where it is demonstrated there is no prudent and feasible alternative to impacts arising from building, works and demolition, measures proposed to realise both the research potential in the archaeological evidence and a meaningful public benefit from any archaeological investigation; (e) measures proposed to preserve significant archaeological evidence 'in situ'.	criteria as follows: <ul> <li>(a) The site history provided in the accompanying heritage and archaeological report details the development sequence of the site since the first documented establishment of buildings on the site between 1840s through to the 1960s.</li> <li>(b) the archaeological method statement provided in the accompanying report specifies the process for investigating the archaeological potential of the site.</li> <li>(c) &amp; (d) the accompanying report states that the removal of archaeological remains is not inappropriate, provided that any remains found through a reconnaissance program be properly interpreted, catalogued and made available for research. This is a suitable objective, given that the report indicates the provision of basement level parking, thus reducing the overall building height, is considered an acceptable outcome given the recommended offset of ensuring any remains are madiable for interpretation.</li> </ul> The report states that: <ul> <li>'It is considered in this instance that yielding the archaeological potential provides a more widespread benefit than retention - which would compromise the viability, visual qualities and townscape fit of the proposed development if the only other option for parking were above ground.'</li> </ul>

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archaeological remains is not considered to be particularly high. Therefore, the retention of the remains on-site is not considered necessary, provided any remains are catalogued and provided for research purposes (and possibly public interpretation).

### E13.10.2 - Subdivision

The indicative subdivision area shown on the plans will form part of separate application at a later date. Therefore, the subdivision principals are not considered applicable to this proposal.

3.7 SIGNS CODE

No signage is currently proposed. Therefore, the provisions of the code are not applicable.

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4. SUMMARY

The proposal is for the construction of an apartment building on the site at 5-7 Sandy Bay Road. The development will replace the existing Conservatorium of Music building, whilst ensuring the retention of the heritage listed ABC Mural Wall.

The site is subject to the Historic Heritage Code and is also partially contained within the H2 Heritage Precinct. As discussed in the accompanying heritage assessment, no works are proposed within the Heritage Precinct and no modifications to the existing cottages on the south-eastern portion of the site are proposed.

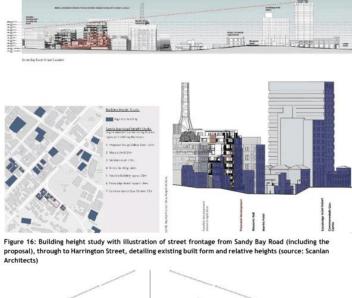
The proposal will incorporate on-site parking for 88 vehicles across the sub-basement and basement level. Although discretion is triggered in relation to the number of parking spaces, the accompanying traffic impact assessment has determined that the parking provided is sufficient to meet the needs of the projected residents. The proximity of the site to the existing CBD is considered to significantly reduce the overall demand for parking.

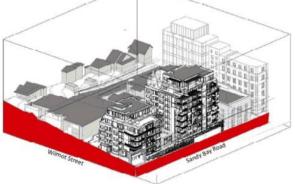
Although the building exceeds the permitted building height in the zone, the design of the building into two separated structural elements above a shared podium allows for a clearly identifiable transition in height between adjoining buildings to the east along Sandy Bay Road and larger buildings to the west where the site then adjoins the Central Business Zone. The proposal is considered to be suitable to the local setting of urban form, as detailed in the Urban Form supporting statement. This statement outlines the built form considerations including:

- Existing built form considerations including building form (height, scale, massing) and
  pattern of built form (including for example, building set-backs) within the immediate and
  local context of the site.
- The compatibility of the proposed development within the context of the above listed existing conditions.

With consideration of the above listed features the proposed built form has been designed in a way that is considered to be compatible within the setting of both Sandy Bay Road and Wilmot Street. The proposed building heights are compatible with the existing pattern of urban form presented by existing buildings to streets and urban blocks in the local urban context of the site, as illustrated in the following illustrations (from the Architectural Statement) in figures 10 and 11, that show the proposed built from in the context of existing buildings and street elevations (also see the Architectural Statement for further illustration and detail).

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Aerial view of the project and its surrounding - Site topography highlighted in red

Figure 17: Perspective view of the axis between Sandy Bay Road and Wilmot Street, demonstrating building form to the west and south (source: Scanlan Architects)

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**APPENDIX - TITLES** 

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# URBAN FORM SUPPORTING STATEMENT

5-7 Sandy Bay Road, Hobart

Last Updated - 10 October 2019 Author - Phil Gartrell/Keith Brown Reviewed - Irene Duckett

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## 1. DESIGN ANALYSIS

1.1.1 The design analysis provides a concise study of built form considerations, to be assessed under the planning scheme including:

Existing built form considerations including building form (height, scale, massing) and
pattern of built form (including for example, building set-backs) within the immediate and
local context of the site.

 The compatibility of the proposed development within the context of the above listed existing conditions.

These factors will be considered in detail in the below sections.

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## 2. EXISTING BUILT FORM

- 2.1 LOCATION
- 2.1.1 The location of the site is on the periphery of the CBD, directly opposite the prominent city park, St David's Park. It is notable that the application site has street frontage elevations addressing two city streets, Sandy Bay Road and Wilmot Street.

The following figure describes the location of the site.



Figure 1: Site Locality with cadastre, street names & aerial image from www.theLIST.tas.gov.au  $\ensuremath{\mathbb S}$  tate of Tasmania

Within this context, the buildings on the site contribute to the streetscape on both Sandy Bay Road and Wilmot Street, and the broader townscape of St David's Park, as a built edge defining the space.

The topography surrounding the area presents an amphitheatre with buildings on the Macquarie Street ridge and upper Davey Street forming part of the visual context of the site.

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- 2.2 PATTERN OF BUILT FORM IN LOCAL, URBAN CONTEXT
- 2.2.1 The application site is centrally located in the south eastern periphery of the CBD, as illustrated in Figure 2, below.



Figure 2: Aerial Photograph of site within urban context (source: Google Earth). 2.2.2 Notable built form considerations within the existing local, urban context include:

- Block structure: strong pattern of urban blocks, in traditional 'perimeter block' form, with buildings filling blocks of broadly rectilinear form, building frontages addressing the streets.
- Urban grain: the urban grain is notable for the relatively dense pattern of urban blocks set in
  a connected network of streets that are broadly arranged in grid iron pattern in the Hobart
  city centre / CBD, with some arterial routes such as Sandy Bay Road tapering off to link to
  areas beyond the city centre. Within this a finer lot pattern is evident in the built form, even
  where lots have been amalgamated.
- Building form: a wide variety of building forms are present in the local urban context in and
  around the application site. Variety of built form is related to the great mixture of land uses,
  and the evolution of buildings within the city structure (of blocks, streets and spaces) over a
  long period of time, with a great variety of building ages and architectural styles. This pattern
  of variety is a common feature of cities of Hobart's age and creates the diversity of individual
  building forms and appearance cumulatively contribute to the richness in character of the city.

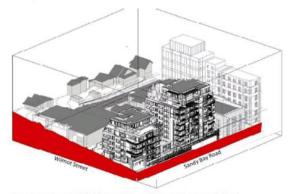
The primary arterial role of Sandy Bay Road is characterised by larger building forms of a more commercial scale, whilst the radiating side streets and parallel streets demonstrate a domestic scale of dwellings either retained for visitor accommodation or adapted to other uses.

The subject site sits at the axis of these two forms, as illustrated in figures below.

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Figure 3: The proposal viewed from the axis between Sandy Bay Road and Wilmot Street (source: Scanlan Architects)



Aerial view of the project and its surrounding - Site topography highlighted in red

Figure 4: Aerial view of the axis, demonstrating building form to the west and south (source: Scanlan Architects)

Figures 3 provides some context of the proposed building at 9 Sandy Bay Road, demonstrating the similarities in terms of building height along Sandy Bay Road, whilst figure 4 demonstrates the urban grain and block structure, detailing the larger built forms at the corner of Sandy Bay Road and Davey Street.

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- 2.3 PATTERN OF BUILT FORM IN LOCAL, URBAN CONTEXT
- 2.3.1 It is notable that a great variety of building scale and massing is evident within a relatively small area around the application site, as illustrated in the oblique area photograph presented in the figure below. Taking the urban blocks that surround St David's Park as an example of direct relevance (given the application site location on Sandy Bay Road, with frontage to the park), it is clear that each urban block, with buildings that front onto streets surrounding the park, contains a great variety of building form within relatively short sections of street and block.
- 2.3.2 Streets on three sides of the park (Davey Street, Salamanca Place and Sandy Bay Road) share some common characteristics including:
  - Consistency of building frontages addressing the street and overlooking the park;
  - Variety of building form;
  - Variety of building height;
  - Variety of building appearance, architectural style and aesthetic;

Predominantly consistent building setbacks, with the majority of buildings built up to the pavement edge of the street (i.e. zero or very shallow setbacks).



Figure 5: Oblique aerial photograph, showing application site in local urban context (source of aerial photograph: Bing Maps: www.bing.com/maps).

The following figure from the accompanying architectural documentation illustrates the existing streetscape conditions, whilst also including the proposed development at 9 Sandy Bay Road for context.

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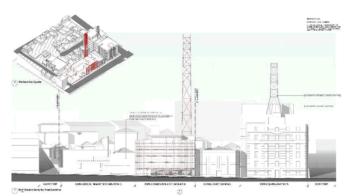


Figure 6: Sandy Bay Road elevation (source: Scanlan Architects)

- 2.4 EXISTING BUILT FORM: VARIATION AND RHYTHM OF SCALE, MASSING AND HEIGHT
- 2.4.1 The most notable features of the existing urban form in the local context around the subject site is the divergence of building form within the urban blocks in this part of the city.
- 2.4.2 Figure 5 illustrates the variation and rhythm of scale, massing and height for built form on all block frontages that address streets around St David's Park.
- 2.4.3 By highlighting the building line of directly addressing streets, it is evident that the urban blocks accommodate a great degree of variety including:
  - Building height: heights range from single two storey (for instance residential) to approximately nine storeys (for instance the recent Tasmanian State Government building at 2, Salamanca Place).
  - Building form and massing: is greatly varied, ranging from tall thin buildings such as the tall
    office buildings a short distance away (one block back) on Macquarie Street (144 and 152) to
    buildings with long elevations and heights limited to two-three storeys as per the heritage
    building on the corner of Salamanca Place and Davey Street. Many building forms fall within
    these two extremes including the mid-rise building form of the Mantra building on the corner
    of Sandy Bay Road and Davey Street.
  - Building heritage: the age of buildings varies greatly, including some of the oldest heritage buildings in Hobart (and Tasmania), through to some of the most recent additions to the city (including 2 Salamanca Place and the Travelodge on Macquarie Street).
  - Building design: in common with the variation in building, function and use there is great
    range in architecture styles and appearance, from more traditional forms of building using
    local materials including stone and timber, through to more contemporary constructions in
    glass and steel, with many other variants and a great diversity of building materials.

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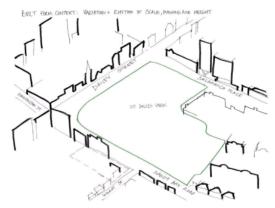


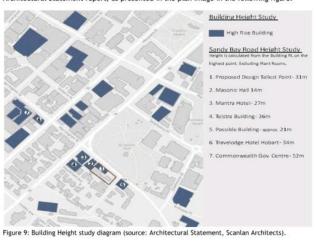
Figure 7: Built Form Context: Diagram illustrating variation and rhythm of building scale, massing and height in the local urban context. (source of aerial photograph: Bing Maps: www.bing.com/maps).

- 2.5 EXISTING BUILDING HEIGHT, IN LOCAL URBAN CONTEXT
- 2.5.1 A key consideration of the character of the area is the number of taller buildings within a short distance of the application site.
- 2.5.2 Figure 5 illustrates a range of building heights in close proximity to the application site, within a distance of circa 400m from the site.
- 2.5.3 The variety of building heights is considerable, ranging from:
  - Single storey buildings (for instance residential buildings within heritage zones immediately south and east of the application site);
  - Some of Hobart's tallest buildings, including offices from 9 to 15 storeys in height on Macquarie Street and Collins Street, and the Executive Building (c. 12 storeys) on Davey Street;
  - In close proximity to the application site are a number of buildings around 5-6 storeys in height.

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Figure 8: Taller buildings within circa 400m vicinity of application site (source of aerial photograph: Google Earth).



2.5.4 Further illustration of the pattern of building heights in the local area is presented in the Architectural Statement report, as presented in the plan image in the following figure.

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# 3. PROPOSAL CONSIDERED IN LOCAL, URBAN CONTEXT

3.1 BUILT FORM CONSIDERATIONS

3.1.1

- The proposed development is considered as follows within four settings:
  - Proposed building scale and massing relative to local urban context;
  - Proposed building scale and massing relative to adjacent public realm;
  - Proposal within Sandy Bay Street frontage; and
  - Proposal within Wilmot Street frontage.
- 3.2 PROPOSED BUILDING SCALE AND MASSING RELATIVE TO LOCAL URBAN CONTEXT
- 3.2.1 The proposed built form has been designed to work within the local context including reference to the changing topography, with Wilmot Street rising to the south of the site, and Sandy Bay Road rising towards the north-west. It is notable that the proposed building height, scale and massing is different when viewed from different angles and street elevations. For instance the changing topography helps reduce the height impact (particularly of the lower 'East Block') as Wilmot Street rises from Sandy Bay Road.
- 3.2.2 The proposed development, with its two separate core building units has a scale and massing that is similar to nearby buildings, including notably the Mantra One building (corner of Sandy Bay Road & Davey Street), see illustration in Figure 11. The scale and massing of the proposed individual buildings within the development is smaller than other recently developed buildings in the nearby locality including the Travelodge Hotel on Harrington Street/Macquarie Street (see street elevation drawings in Figure 14 and 15) and the recent state government office building (4 Salamanca Place) on the opposite side of St David's Park.
- 3.2.3 The Sandy Bay Road frontage of the proposed building presents the tallest building heights, albeit this scale and massing should be considered in relative to the context of the setting, notably with the adjacent public open space of street and St David's Park as stated in this report).
- 3.2.4 The 'building' adjoining Wilmot Street and Sandy Bay Road is 7 storeys/levels above street/ground level (on Sandy Bay Road), with a height of approximately 22.2m, at the highest point above natural ground level. The other 'building' adjoining the Hobart Masonic Hall is proposed to be 10 levels, with a maximum height of approximately 32.8m. Both buildings also have an addition basement level (for car parking) under the 'upper basement' level.
- 3.2.5 The range of building heights between 7 to 10 storeys is comparable to the range of building heights within the local context as illustrated in previous figures and accompanying commentary.

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### 3.2.6 The building height of the proposals (Sandy Bay Road frontage) are as follows: Lower building/tower ('East Block'):

- 7 storeys plus rooftop plant/parapet, with the storeys/levels comprising:
- the initial storey/level with the café and upper basement parking (which is above ground on the Sandy Bay Road frontage) and will house the mural;
- plus 6 storeys/levels of residential accommodation; and
- plus roof plant/parapet.
- Taller building/tower ('West Block'),
  - 10 storeys plus rooftop plant/parapet for the, with the storeys/levels comprising:
  - the initial storey/level of upper basement parking (which is above ground on the Sandy Bay Road frontage) and will house the mural;
  - + 9 storeys/levels of residential accommodation; and
- + roof plant/parapet.
- 3.2.7 The built form of the proposal demonstrates variety within application site including:
  - a varied pattern of height and massing in the proposed building form, with taller building unit adjacent to the Masonic Hall and a lower unit adjacent to Wilmot Street;
  - variety of building materials, including use of brick, render, metal and painted facades;
  - variety of colour palettes reflective of different materials including white, shades of brown/reds and greys, with opportunity for some striking use of different colour to accentuate a corner detail at Sandy Bay Road and Wilmot street, articulating the proposed café.
- 3.2.8 This proposed variation in form and appearance is fitting in the context of the surrounding buildings in the locality that also demonstrate characteristics of variety in scale, massing, height and appearance as detailed in the previous section.
- 3.2.9 The built form of the proposal demonstrates a consistency in other design elements including the predominantly consistent building set-back with the building built to the back edge of the footpath on Sandy Bay Road with the exception of a corner indentation which forms part of the entrance feature for the proposed ground floor café.
- 3.2.10 The proposed built form steps back at upper levels of the new buildings, softening the effect of the collective building height as the tallest elements are stepped back reducing the visual prominence from the street and surrounding spaces (including St David's Park).

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Figure 10: Before and after render of the proposal from just behind the intersection between Sandy Bay Road and Davey Street (source: Scanlan Architects & Google Earth)

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- 3.3 PROPOSED BUILDING SCALE AND MASSING RELATIVE TO ADJACENT PUBLIC REALM
- 3.3.1 It is important to consider the scale of proposed buildings not only in relation to existing buildings but also in relation to the immediately adjacent public realm of streets and spaces.
- 3.3.2 A defining characteristic feature of the application site is the location and position opposite St. David's Park, and between the site and the park is the street of Sandy Bay Road. The combination of the park and the street creates a wide area of public realm as immediate setting for the proposed development. See figure below for an indicative illustration of the proposed built form (in red) set in the context of existing buildings, streets and public open space (St David's Park).

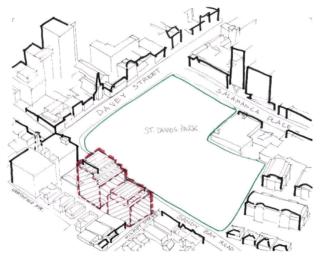


Figure 11: Built Form Context including indicative illustration of proposed built form massing (in red). Diagram illustrating variation and rhythm of building scale, massing and height in the local urban context. (source of aerial photograph base for illustration: Bing Maps: www.bing.com/maps).

3.3.3 Considering these public realm features in turn:

- Streets: Sandy Bay Road is notable for its scale, with a wide street width of between circa
  16-18m on the stretch of road close to the application site. This street consists of public
  footpaths on both sides of the vehicular carriage way. The appearance of the street is
  enhanced by a variety of built form on the south/western side of the street (including the
  application site) and the rich landscape setting of St David's Park on the north/eastern
  side the street.
- Spaces: St David's Park is one of Hobart's most important public open spaces, a rich landscape setting and heritage asset for the city. The scale of the park is significant, larger than many of the individual urban blocks that surround it. The park has an approximate area of 1.8 hectares, measuring up to approximately 140m width between Sandy Bay Road

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and Salamanca Place, and up to approximately 150m width between Davey Street and the Salamanca Mews residential apartments.

- Cumulatively, the public realm of Sandy Bay Road and St David's Park provides an public realm setting of approximately 160-170m in width from the edge of the application site to the opposite boundary edge of St David's Park. Salamanca Place is an equally wide street on the opposite side of the park, measuring approximately 18m in street width.
- 3.3.4 The public realm setting of Sandy Bay Road and St David's Park provides a wide, open, setting immediately in front of the application site. This open space setting is important to note in relation to plot ratio considerations, notably the wider public open space in front of a plot the greater the capacity for the site to accommodate taller built form. Indeed, the proposed height of the application buildings will contribute to the public realm setting providing new buildings of appropriate scale and mass to address the public space of Sandy Bay Road and St David's Park.
- 3.4 PROPOSAL WITHIN SANDY BAY STREET FRONTAGE
- 3.4.1 When considered in the context of the Sandy Bay street elevation the proposed development is compatible with the existing built from
  - Building heights: the proposed building heights are taller than neighbouring buildings but
    as demonstrated in previous figures there is a great degree of variety in building height,
    scale and massing in the local urban context. The Mantra building occupying the plot on
    the corner of Sandy Bay Road and Davey Street has a building height of 5-6 storeys and the
    proposed building form closed to this in the application site has a broadly similar height
    (approximately 2m higher than Mantra when measured from the top of the Mantra sign).
    The proposed built form is taller than the immediately neighbouring Hobart Masonic Hall
    but the pattern of taller and shorter buildings is common on surrounding street frontages
    as illustrated in previous figures.

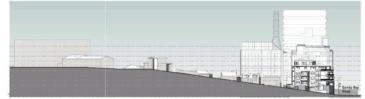


Figure 12: Sandy Bay Road elevation detailing existing and proposed building forms, including the proposed building at 9 Sandy Bay Road for context (source: Scanlan Architects)

ireneinc planning & URBAN DESIGN

### 3.5 PROPOSAL WITHIN WILMOT STREET

- 3.5.1 Wilmot Street has a different character, scale and appearance to that of Sandy Bay Road that it runs perpendicular to. The proposed building form adapts in relation to these changing characteristics and the proposed built form is compatible to the Wilmot Street setting with regards to the following considerations:
  - Building heights: building heights are reduced towards the Wilmot Street frontage, 6 storeys at their highest but the form is stepped back with the upper level indented and set back, reducing visual prominence further.
  - Separation: there is separation between the proposed building and the residential
    properties that address Wilmot Street. Separation is provided by both a retained
    garage/utility building that immediately neighbours a 1.5 storey residential building plot
    and also an area of open space between the garage and the proposed building. This
    separate is important, creating an offset between the existing and proposed residential
    properties.
  - Topography: a notable site feature is the sloping topography along Wilmot Street, with
    the levels falling from the south/west end of Wilmot street to the lower level of Sandy Bay
    Road. This change in topography lessens the visual prominence of the proposed built form
    as it is positioned at a lower level than the existing residential properties. This is well
    illustrated in the architectural street elevation drawings, as presented in Figure 6 of the
    Planning Report.
  - Heritage: it is notable that the predominantly 1-2 story residential properties to the south, west and east of the application site are located within a heritage zone. The above listed design features of the proposed development help to mitigate any impact upon the heritage setting.



2 Wilmot Street - Full Street Elevation 500

Figure 13: Wilmot Street elevation, detailing existing built form to the west and south (the larger building in the background is 188 Collins Street as it would appear from this elevation) (source: Scanlan Architects)

The figure above demonstrates the change in topography along Wilmot Street and how this change supports higher built forms both existing and proposed, along Sandy Bay Road and on the corner of Sandy Bay Road and Davey Street behind. The figure also illustrates the significant separation distance between the proposed building and the nearest heritage listed cottage on Wilmot Street (which also forms part of the site at 5-7 Sandy Bay Road).

The figure also demonstrates the overall height transition between the proposed building, the Travel Lodge building at 167-169 Macquarie Street and the larger building identified as 188 Collins

**ireneinc** PLANNING & URBAN DESIGN

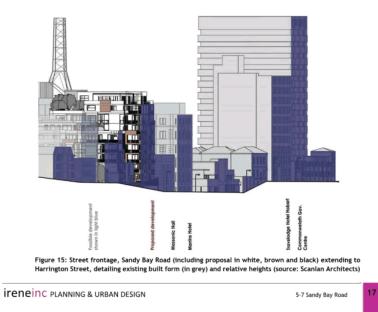
Street. The proposed development at 9 Sandy Bay Road will sit at a similar height to the immediately adjoining building proposed at 5-7 Sandy Bay Road.

3.6.1 With consideration of the above listed features the proposed built form has been designed in a way that is considered to be compatible within the setting of both Sandy Bay Road and Wilmot Street.

The proposed building heights are compatible with the existing pattern of urban form presented by existing buildings to streets and urban blocks in the local urban context of the site, as illustrated in the figures, below, that show the proposed built from in the context of existing buildings and street elevations.

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Figure 14: Street frontage elevation from Sandy Bay Road (including proposal), to Harrington Street, detailing existing built form and relative heights (source: Scanlan Architects)



<sup>3.6</sup> SUMMARY

## Supporting Information Council Meeting - 25/5/2020

# ireneinc & smithstreetstudio PLANNING & URBAN DESIGN

06 March 2020

Tristian Widdowson Hobart City Council GPO Box 503 HOBART TAS 7001

Dear Tristian

FURTHER INFORMATION - 5-7 SANDY BAY ROAD

I am writing in response to your letter of the 25/02/20 requesting further information in response to the proposed development at 5-7 Sandy Bay Road, Sandy Bay (PLN-19-706).

The following is in response to your enquiries:

Tasmanian Heritage Council - THC 1

1. Please provide sufficient information to demonstrate that it will be possible to either retain the ABC Mural in situ during the demolition works or remove the mural without damage for future reinstatement.

Please refer to the accompanying structural advice prepared by Pitt & Sherry regarding the options available to retain the mural in situ or remove the mural for reinstatement.

### Planning

15.4.8 Residential Amenity

1. Confirm whether the proposed dwellings have at least one habitable room window (other than a bedroom) facing between 30 degrees west of north and 30 degrees east of north. For dwellings that do not meet this requirement demonstrate how they're sited and are designed to optimise sunlight to at least one habitable room (other than a bedroom).

The submitted additional information does not demonstrate the level of sunlight to enter a habitable room (other than a bedroom) of each of the dwellings and how the design seeks to optimise this.

As demonstrated in the revised planning report, architectural detail and RFI response, the orientation of the lot and requirement to build up to street frontages means that windows cannot be oriented in accordance with the acceptable solution.

Substantial information has been provided to demonstrate that the building has been designed to optimise sunlight to the windows and balconies along each elevation. Notwithstanding this, a revised floor sun study and response from the architects has been provided to further illustrate the above.

In order to optimise sunlight, glazing across each elevation was substantially increased, particularly where north exposure was not possible. As shown in the attached information, 80% of the apartments will benefit from north exposure of habitable rooms. The remaining 20% of apartments are mostly facing South. In these

### smithstreetstudio ireneinc

49 Tasma St, North Hobart, TAS 7000 Tel (03) 6234 9281 Fax (03) 6231 4727 Mob 0418 346 283 Email planning@reneinc.com.au

PLANNING TAS PTY LTD TRADING AS IRENEINC PLANNING & SMITH STREET STUDIO PLANNING & URBAN DESIGN ABN 78 114 905 074

cases, openings to living areas were increased and changes to the façade were made to optimise the exposure to natural light.

The south east orientation of the living areas guarantees a full exposure to morning light whilst the generous opening will optimize light exposure during the rest of the day.

The changes to the façade included no bricks skin and controlled openings, ensuring that these balconies are able to fully benefit from sunlight without obstruction. In addition, clear glass was chosen for the balustrades to further promote light passage into living areas.

If you have any further queries in relation to any of the above, please contact me on 6234 9281. Yours sincerely,

J. Corroll

Phil Gartrell Planner IRENEINC PLANNING & URBAN DESIGN

ireneinc planning & urban design

5-7 Sandy Bay Road, Sandy Bay



RESULT OF SEARCH DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



VOLUME FOLIO

106816	1
EDITION	DATE OF ISSUE
3	03-Jul-2017

SEARCH DATE : 15-Aug-2019 SEARCH TIME : 08.35 AM

DESCRIPTION OF LAND

City of HOBART Lot 1 on Diagram 106816 Derivation : Part of 3a-Or-6ps,gtd. to Afleck Moodie & Part of 2a-Or-Ops,gtd. to William Murray, Part of 3A-OR-6Ps. Gtd. to A. Moodie and Part of 2 Acres Gtd. to W. Murray Prior CTs 51956/1, 51956/2 and 4823/77

SCHEDULE 1

E51535 TRANSFER to FRAGRANCE TAS-HOBART (SANDY BAY) PTY LTD Registered 03-Jul-2017 at noon

SCHEDULE 2

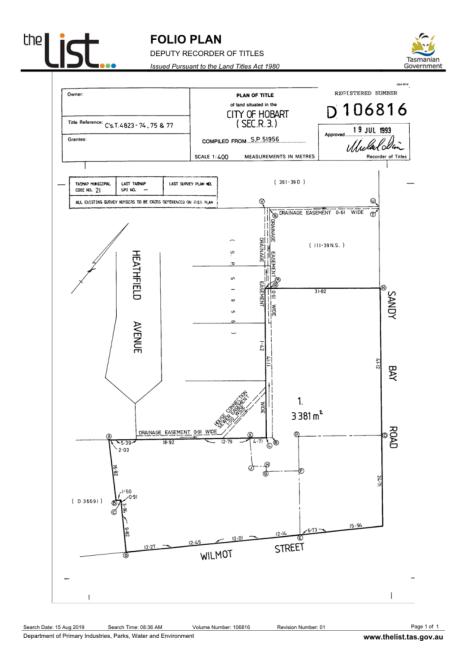
Reservations and conditions in the Crown Grant if any Benefiting easement; right of carriageway over Heathfield
Avenue on D.106816.
Benefiting easement; (appt.to the land marked ABCDEFGHJK on D.
106816) over the land marked "Drainage Easement 0.91
Wide" and over the land marked "House Connection
Sewer Easement 1.00 Wide" on D.106816.
Benefiting easement; right of drainage (appt.to the land
marked ABCDEFGHJK on D.106816) over the drainage
easement marked LMQR on D.106816.
Burdening easement; right of drainage (appt.to the land marked
ABCDEFGHJK on D.106816) over the drainage easement
marked LMQR on D.106816.
Benefiting easement; right of drainage over the drainage
easement marked MQSTUV on D.106816.
B607966 ADHESION ORDER under Section 477A of the Local
Government Act 1962 Registered 26-Nov-1993 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

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RESULT OF SEARCH DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



VOLUME FOLIO 51956 5

EDITION	DATE OF ISSUE
2	03-Jul-2017

SEARCH DATE : 15-Aug-2019 SEARCH TIME : 08.36 AM

DESCRIPTION OF LAND

City of HOBART Lot 5 on Sealed Plan 51956 Derivation : Part of 3A-OR-6Ps Gtd to A Moodie and Part of 2 Acres Gtd to W Murray Prior CT 4823/78

SCHEDULE 1

E51535 TRANSFER to FRAGRANCE TAS-HOBART (SANDY BAY) PTY LTD Registered 03-Jul-2017 at noon

### SCHEDULE 2

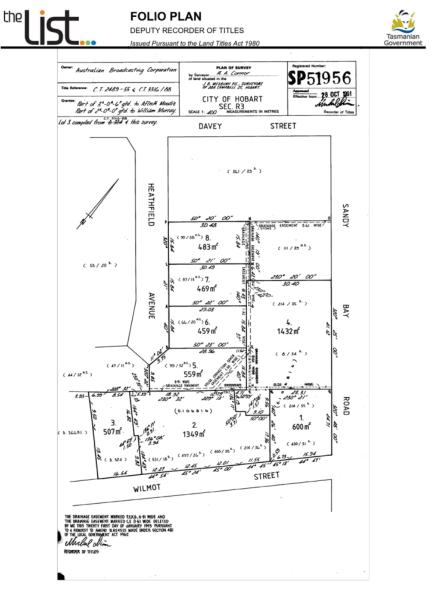
Reservations and conditions in the Crown Grant if any SP 51956 EASEMENTS in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

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 Search Date: 15 Aug 2019
 Search Time: 08:36 AM
 Volume Number: 51956
 Revision Number: 02
 Page 1 of 1

 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au

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st.	SCHEDULE OF EASEMENT DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980	Tasmania
(1) such as all as (2) any Each lot on the (1) such (1) such (1) such (2) any (2) any (2) any (2) any (2) any (2) any (1) such (2) any (2) an	Issued Pursuant to the Land Titles Act 1980 SCHEDULE OF EASEMENTS Norms.—The Town Clerk or Council Clerk must sign the entificate on the back page for the purpose of attesting of the land affected. Signatures should be attested. Statements 3, 4, 5, 6, 7, 8, 8, 9 vert 1 added by me pursuant, to a request to ame property Section 481 of the Lorit-Coverner PROFITS Section 481 of the Lorit-Coverner PROFITS rights of drainage over the drainage easements shown to a many be necessary to drain the stormwater and other sur- str, and easements or profits à prendre described hereunder. In rights of drainage over the drainage casements shown of passing through such lot as may be necessary to drain the plan is subject to:— In rights of drainage over the drainage casements shown of a passing through such lot as may be necessary to drain ther surplus water from any other lot on the plan; and easements or profits à prendre described hereunder. of the flow of water through the drainage casements is s. Lot 5 is subject to rights of drainage for H Prances Imily carbinage (appurtenant to a reforestific die marked C.E. hereon to together util a - right of drainage (appurtenant to storessific the marked 2.foret with same of 1 and with Even the land 3 feet wide marked Hore. a right of drainage (appurtenant to the refore. a right of drainage (appurtenant to the reformant) a right of drainage (appurtenant to the reformant) b right of drainage (appurtenant to the reformant) b right of drainage (a	Covernme Covern
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Search Date: 15 Aug 2019 Search Time: 08:36 AM Volume Number: 51956 Revision Number: 02
Department of Primary Industries, Parks, Water and Environment

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### SCHEDULE OF EASEMENTS



DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980

person or persons entering to make good all damage to the surface occasioned thereby.

TOGETHER WITH (appurtenant to the land marked L.M.N.P. hereon) a full and free right of drainage for the owner and occupier of the said land marked L.M.N.P. in common with Elinor Wayne Lake and all other persons having the like right as owners or occupiers of the balance of the land comprised in Certificate of Title Volume 338 Folio 136 in and over the strip of land 2 feet wide marked N.O. hereon and from time to time on giving previous reasonable notice in that behalf to enter upon the said strip of land with servants workmen and others by his and their permission for the purpose of laying making repairing cleansing and maintaining any drains or pipes but making good all damage thereby done to the surface of the ground. Lot 8 SUBJECT To the like right for the owner and occupier of the land described in

of 8 Lot 7 SUBJECT TO the like right the owner and occupier of the land described in Gertificate of Title Volume 390 Potio 142 in and over the strip of land 2 feet wide marked M.N. hereon.

Lot 2 is together with a right of sewerage over the land marked House Connection Sewer Easement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or severs now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or severs in substitution for the existing sever or severs and to inspect maintain and amend any such existing or substituted sever or severs making good any damage done to the said strip of land.

Lot 5 is subject to a right of sewerage appurtenant to Lot 2 over the land marked House Connection Sewer Tage appurtenant to Lot 2 over the land marked House Connection Sewer Tagement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or sewers now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or sewers in substitution for the existing sewer or sewers and to inspect maintain and amend any such existing or substituted sewer or sewers making good any damage done to the said strip of land.

Diagrams 214/35, 214/36, 90/38NS, 66/20NS, 99/32NS, 400/30, 497/26, 531/18, and 400/31

IN WITNESS WHEREOF this Schedule has been executed on the 2 Nd Ortologic 1991. day of October

SEAL OF THE AUSTRALIAN BROADCASTING) CORPORATION was hereunto affixed by) authority of its Board of Directors) in the presence of: )



Manyon Company Company And Manager Legal PADDy Company And Manager Legal PADDy Company

Elaine D. Carle A permanent officer of the Corporation

Search Date: 15 Aug 2019 Search Time: 08:36 AM Volume Number: 51956 Revision Number: 02 Department of Primary Industries, Parks, Water and Environment Page 2 of 3

www.thelist.tas.gov.au

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	Issued Pursuant to the Land Titles Act 1980	Governmer
	This is the schedule of casements attached to the plan of .AUSTRALIAN.BROADCASTING (Invert Subdivider's Full Name)	
	CORPORATION affecting land in	
	VOLUME 2489 FOLIO 55 VOLUME 3316 FOLIO 88 (Insert Tille Reference)	
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	Sealed by HOBART CITY COUNCIL On 14 CCCADU 1931	
	Solicitor's Reference	
	60105	

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 Search Time: 08:36 AM
 Volume Number: 51956
 Revision Number: 02
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 www.thelist.tas.gov.au



RESULT OF SEARCH DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



VOLUME FOLIO 51956 6

EDITION	DATE OF ISSUE
2	03-Jul-2017

SEARCH DATE : 15-Aug-2019 SEARCH TIME : 08.36 AM

DESCRIPTION OF LAND

City of HOBART Lot 6 on Sealed Plan 51956 Derivation : Part of 3A-OR-6Ps. Gtd. to A. Moodie and Part of 2 Acres Gtd. to W. Murray Prior CT 4823/79

SCHEDULE 1

E51535 TRANSFER to FRAGRANCE TAS-HOBART (SANDY BAY) PTY LTD Registered 03-Jul-2017 at noon

### SCHEDULE 2

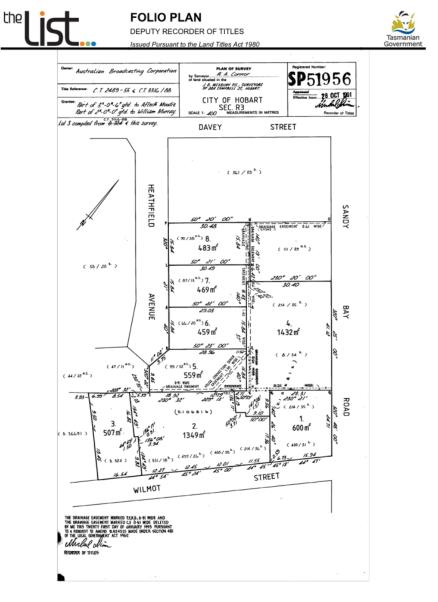
Reservations and conditions in the Crown Grant if any SP 51956 EASEMENTS in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

Page 1 of 1 www.thelist.tas.gov.au



 Search Date: 15 Aug 2019
 Search Time: 08:42 AM
 Volume Number: 51956
 Revision Number: 02
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 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au

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st.	SCHEDULE OF EASEMENT DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980	Tasmania
(1) such as all as (2) any Each lot on the (1) such (1) such (1) such (2) any (2) any (2) any (2) any (2) any (2) any (1) such (2) any (2) an	Issued Pursuant to the Land Titles Act 1980 SCHEDULE OF EASEMENTS Norms.—The Town Clerk or Council Clerk must sign the entificate on the back page for the purpose of attesting of the land affected. Signatures should be attested. Statements 3, 4, 5, 6, 7, 8, 8, 9 vert 1 added by me pursuant, to a request to ame property Section 481 of the Lorit-Coverner PROFITS Section 481 of the Lorit-Coverner PROFITS rights of drainage over the drainage easements shown to a many be necessary to drain the stormwater and other sur- str, and easements or profits à prendre described hereunder. In rights of drainage over the drainage casements shown of passing through such lot as may be necessary to drain the plan is subject to:— In rights of drainage over the drainage casements shown of a passing through such lot as may be necessary to drain ther surplus water from any other lot on the plan; and easements or profits à prendre described hereunder. of the flow of water through the drainage casements is s. Lot 5 is subject to rights of drainage for H Prances Imily carbinage (appurtenant to a reforestific die marked C.E. hereon to together util a - right of drainage (appurtenant to storessific the marked 2.foret with same of 1 and with Even the land 3 feet wide marked Hore. a right of drainage (appurtenant to the refore. a right of drainage (appurtenant to the reformant) a right of drainage (appurtenant to the reformant) b right of drainage (appurtenant to the reformant) b right of drainage (a	Covernme Covern
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Search Date: 15 Aug 2019 Search Time: 08:42 AM Volume Number: 51956 Revision Number: 02
Department of Primary Industries, Parks, Water and Environment

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### SCHEDULE OF EASEMENTS



DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980

person or persons entering to make good all damage to the surface occasioned thereby.

TOGETHER WITH (appurtenant to the land marked L.M.N.P. hereon) a full and free right of drainage for the owner and occupier of the said land marked L.M.N.P. in common with Elinor Wayne Lake and all other persons having the like right as owners or occupiers of the balance of the land comprised in Certificate of Title Volume 338 Folio 136 in and over the strip of land 2 feet wide marked N.O. hereon and from time to time on giving previous reasonable notice in that behalf to enter upon the said strip of land with servants workmen and others by his and their permission for the purpose of laying making repairing cleansing and maintaining any drains or pipes but making good all damage thereby done to the surface of the ground. Lot 7 SUBJECT To the like right for the owner and occupier of the land described in

of 8 Lot 7 SUBJECT TO the like right for the owner and occupier of the land described in Gertificate of Title folume 390 Folio 142 in and over the strip of land 2 feet wide marked M.N. hereon.

Lot 2 is together with a right of sewerage over the land marked House Connection Sewer Easement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or sewers now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or sewers in substitution for the existing sewer or sewers and to inspect maintain and amend any such existing or substituted sewer or sewers making good any damage done to the said strip of land.

Lot 5 is subject to a right of sewerage appurtenant to Lot 2 over the land marked House Connection Sewer Tage appurtenant to Lot 2 over the land marked House Connection Sewer Tagement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or sewers now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or sewers in substitution for the existing sewer or sewers and to inspect maintain and amend any such existing or substituted sewer or sewers making good any damage done to the said strip of land.

Diagrams 214/35, 214/36, 90/38NS, 66/20NS, 99/32NS, 400/30, 497/26, 531/18, and

IN WITNESS WHEREOF this Schedule has been executed on the 2 vd day of Cotober 1991.

SEAL OF THE AUSTRALIAN BROADCASTING) CORPORATION was hereunto affixed by) authority of its Board of Directors) in the presence of: )



Maryon General Hanger Leger PADBY COMADY Administrative Services ACTING M.D.

A permanent officer of the Corporation

Search Date: 15 Aug 2019 Search Time: 08:42 AM Volume Number: 51956 Revision Number: 02 Page 2 of 3
Department of Primary Industries, Parks, Water and Environment www.thelist.tas.gov.au

SCHEDULE OF EASEMEN DEPUTY RECORDER OF TITLES	Tasmanian
Issued Pursuant to the Land Titles Act 1980	Governmer
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CORFORMENT	affecting land in
VOLUME 2489 FOLIO 55 VOLUME 3316 FOLIO 88 (Insert Title Reference)	
40	October 1991
Sealed by	
Solicitor's Reference	Town Clerk
	DEPUTY RECORDER OF TITLES         Issued Pursuant to the Land Titles Act 1980         Image: State of the schedule of casements attached to the plan ofAUSTRALIAN_ED

 Search Date: 15 Aug 2019
 Search Time: 08:42 AM
 Volume Number: 51956
 Revision Number: 02
 Page 3 of 3

 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au



RESULT OF SEARCH DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



VOLUME FOLIO 51956 7

01000	
EDITION	DATE OF ISSUE
2	03-Jul-2017

SEARCH DATE : 15-Aug-2019 SEARCH TIME : 08.42 AM

DESCRIPTION OF LAND

City of HOBART Lot 7 on Sealed Plan 51956 Derivation : Part of 3A-OR-6Ps. Gtd. to A. Moodie and Part of 2 Acres Gtd. to W. Murray Prior CT 4823/80

SCHEDULE 1

E51535 TRANSFER to FRAGRANCE TAS-HOBART (SANDY BAY) PTY LTD Registered 03-Jul-2017 at noon

### SCHEDULE 2

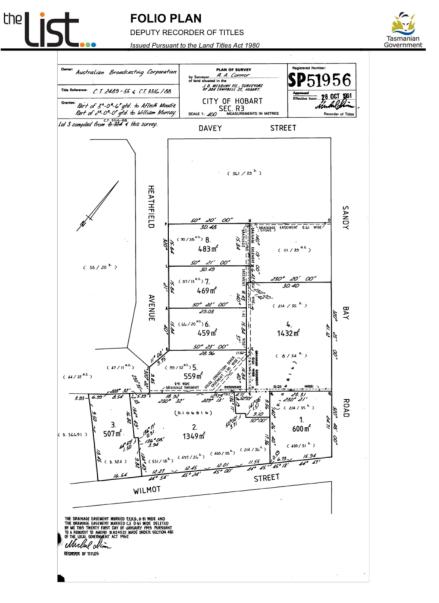
Reservations and conditions in the Crown Grant if any SP 51956 EASEMENTS in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

Page 1 of 1 www.thelist.tas.gov.au



 Search Date: 15 Aug 2019
 Search Time: 08:43 AM
 Volume Number: 51956
 Revision Number: 02
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 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au

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st	SCHEDULE OF EASEMENTS DEPUTY RECORDER OF TITLES	Tasmanian
	Issued Pursuant to the Land Titles Act 1980	Government
	SCHEDULE OF EASEMENTS PLAN NO. NOTE:—The Town Clerk or Connell Clerk must sign the certificate on the back page for the purpose of identification. The Schedule must be signed by the owners and	
EASEMENTS ANI	21-1-1993	
	Recorder of Titles	
as	n rights of drainage over the drainage casements shewn on the plan (if any) s may be necessary to drain the stormwater and other surplus water from such ot; and	
(2) any	easements or profits à prendre described hercunder.	
Each lot on th	he plan is subject to:	
a1	h rights of drainage over the drainage easements shewn on the plan (if any) s passing through such lot as may be necessary to drain the stormwater and ther surplus water from any other lot on the plan; and	
(2) any	easements or profits à prendre described hereunder.	
indicated by arrows William Baldwin and IF heseon and the Ho TOGETHER WITH	of the flow of water through the drainage easements shewn on the plan is s. Lot 5 is subject to rights of drainage for Hilda Harriet Maning, Cecil Frances Emily Ruth Baldwin over the Drainage Easement 0.91 wide marked ouse Connection Sever Easement 1.00 wide marked Hercon." a right of carriage way ( <del>spurtenant to the land marked</del> A.B.C.D. athfield Avenue delineated hercon.	
land 2 feet w	a right of drainage (appurtenant as aforesaid) over the strip of ide marked C.E. hereon tog <u>ether with a right to</u> Connect any drain constructed over the Said Strip of land with any drain which may <b>Sover the land 2 feet wide marked F.G. hereon</b> .	
SUBJECT TO a Certificates o Folio 12) over	a right of drainage (appurtenant to the land <u>s comprised in</u> of Titl <u>e Volume 335 Eolio →3, <del>Volume 33</del>8 Folio 133</u> and Volume 416 <del>M The land 3 feet wide marked E.G. hereo</del> n.	
bereon) over t	tend werked a CHATU. to the food marked B.C.N.T.U. the land 3 feet wide marked H.K. hereon. ↓ Set 5	
	-Fight of dealnage (appurtenant to the land marked B.C.H.I.J.) the land 3 feet wide marked H.K. hereon.	
a <del>nd Frances E</del> <del>Lot 4 ±0</del> <del>SUBJECT TO a</del> 1	i <del>ghts of drainage for Hilda Harriet Maning, Cecil Hilliam Daldrin</del> mily Ruth Baldrin over the land 3 feet wide marked I.H. hereon. right of drainage (appurtenant to the land marked A.O.C.D. hereon) 2 feet wide marked C.F. hereon.	
Lot 4 is SUBJECT TO th drain which any with any drai hereon such ri	<pre>- recet when marked view nervors he right of Frederick Lord his heirs and assigns to connect any my be constructed over the land 2 feet wide marked C.C. hereon n which may be constructed over the land 3 feet wide marked I.K. ight to be appurtement to the Pand marked A.B.C.D. hereon.<sup>-</sup>A.B.</pre>	
right of drai in common wi balance of th or over the s time on givin	(appurtenant to the land marked A.D.H.L. hereon) a full and free inage for the owner and occupier of the said land marked A.D.H.L. th Elinor Wayne Lake and the owner for the time being of the land comprised in Certificate of Title Volume 338 Folio 136 in strip of land 2 feet wide marked M.N.O. hereon with power at any g previous reasonable notice to enter upon the said strip of land ind to make lay repair cleanse and maintain any pipes or drains the	
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Search Date: 15 Aug 2019 Search Time: 08:43 AM Volume Number: 51956 Revision Number: 02
Department of Primary Industries, Parks, Water and Environment

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### SCHEDULE OF EASEMENTS



DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980

person or persons entering to make good all damage to the surface occasioned thereby.

TOGETHER WITH (appurtenant to the land marked L.M.N.P. hereon) a full and free right of drainage for the owner and occupier of the said land marked L.M.N.P. in common with Elinor Wayne Lake and all other persons having the like right as owners or occupiers of the balance of the land comprised in Certificate of Title Volume 338 Folio 136 in and over the strip of land 2 feet wide marked N.O. hereon and from time to time on giving previous reasonable notice in that behalf to enter upon the said strip of land with servants workmen and others by his and their permission for the purpose of laying making repairing cleansing and maintaining any drains or pipes but making good all damage thereby done to the surface of the ground. Lot 8 SUBJECT To the like right for the owner and occupier of the land described in

of 8 Lot 7 SUBJECT TO the like right the owner and occupier of the land described in Gertificate of Title Volume 390 Potio 142 in and over the strip of land 2 feet wide marked M.N. hereon.

Lot 2 is together with a right of sewerage over the land marked House Connection Sewer Easement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or severs now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or severs in substitution for the existing sever or severs and to inspect maintain and amend any such existing or substituted sever or severs making good any damage done to the said strip of land.

Lot 5 is subject to a right of sewerage appurtenant to Lot 2 over the land marked House Connection Sewer Tage appurtenant to Lot 2 over the land marked House Connection Sewer Tagement 1.00 Wide for the owner or owners for the time being to discharge sewerage and sullage therefrom through any sewer or sewers now existing or to be constructed in the strip of land over which such right is expressed to be granted and the right for the owner or owners and surveyors and workmen from time to time and at all times hereafter if he or they shall think fit to enter upon the said strip of land and to construct therein a new sewer or sewers in substitution for the existing sewer or sewers and to inspect maintain and amend any such existing or substituted sewer or sewers making good any damage done to the said strip of land.

Diagrams 214/35, 214/36, 90/38NS, 66/20NS, 99/32NS, 400/30, 497/26, 531/18, and 400/31

IN WITNESS WHEREOF this Schedule has been executed on the 2 Nd Ortologic 1991. day of October

SEAL OF THE AUSTRALIAN BROADCASTING) CORPORATION was hereunto affixed by) authority of its Board of Directors) in the presence of: )



Manyon Company Company And Manager Legal PADDy Company And Manager Legal PADDy Company

Elaine D. Carle A permanent officer of the Corporation

Search Date: 15 Aug 2019 Search Time: 08:43 AM Volume Number: 51956 Revision Number: 02 Department of Primary Industries, Parks, Water and Environment Page 2 of 3

www.thelist.tas.gov.au

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 Revision Number: 02
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 Department of Primary Industries, Parks, Water and Environment
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# pitt&sherry

Specialist Knowledge. Practical Solutions.

5 March 2020

Fragrance TAS-Hobart (Sandy Bay) Pty Ltd c/- Mick Connolly Quantity Surveying Services Tasmania Pty Ltd 5 - 7 Sandy Bay Road Hobart TAS 7005

Dear Mick

### Re: Structural Advice for Protection of Existing Mural

Fragrance TAS-Hobart (Sandy Bay) has engaged pitt&sherry to provide structural input into protection of an existing tile mural fixed to the building at 5 – 7 Sandy Bay Road, Hobart. This building is proposed to be demolished to make way for a new development and the information provided by pitt&sherry is to form part of a Development Application to the Hobart City Council under the Land Use Planning Approvals Act 1993.

The site was visited by Robert Casimaty, a Senior Principal Engineer, from pitt&sherry on 2 March 2020. Only the outside of the building was observed during this site visit.

No original design or as-constructed drawings for the building or mural could be obtained as part of this assessment.

The mural in question is 2.70 m high by 20.0 m long and appears to be fixed to a cast in situ or precast concrete wall element that is integral with the existing building.



Figure 1 – Photo of mural taken from eastern side of Sandy Bay Road

ref: HB20102H001 Let 31P Rev 00/RC/cy

Page 1 of 4

Pitt & Sherry (Operations) Pty Ltd ABN 67 140 184 309

Phone 1300 748 874 info@pittsh.com.au pittsh.com.au

Located nationally — Melbourne

Melbourne Sydney Brisbane Hobart Launceston Newcastle Devonport Wagga Wagga

action can be determined acce the exploratory and soft demolities works have been

The optimum method of protection can be determined once the exploratory and soft demolition works have been completed. There are two options available to protect the mural:

- Remove the mural as part of the demolition works and then return it to site at a later stage
- Protect the mural during the demolition and subsequent construction works

These two options are outlined separately below:

### Removal of the Mural

It is estimated that the mural weighs approximately 25 Tonnes.

The removal works would involve:

- · Partial demolition of the adjacent structure
- Fixing of a lifting frame to the mural
- · Complete separation of the mural from the remainder of the building
- Temporary closing of Sandy Bay Road
- · Use of a mobile crane to lift the Mural onto a transport for storage off site.

This is described in the following sketch.

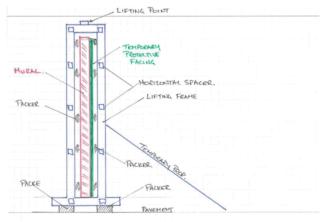


Figure 2 - sketch of proposed method of support mural while being lifted out of position

ref: HB20102H001 Let 31P Rev 00/RC/cy

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### Protection of the Mural

The adjacent footpath is 2.90 m wide and it has been assumed that medium to long term closure of any of the lanes on the adjacent Sandy Bay Road will not be acceptable.

Protection of the mural would involve:

- Installation of traffic protection barriers along the northern edge of Sandy Bay Road
- Construction of a temporary protection gantry within the footpath to protect the and support the mural. It is
   envisaged that this would reduce the footpath width of 1.0 m clear width
- Install monitoring points to measure and identify any movement
  - Undertake building demolition works and construct new building to a point where the mural is self-
- supporting again

•

Remove the protection gantry and traffic barriers to enable clearer access to the footpath.

This is described in the following sketch.

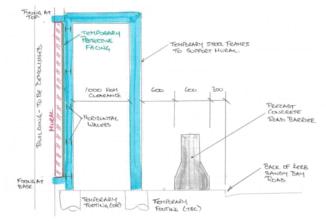


Figure 3 - sketch of proposed method to support mural insitu during demolition and excavation works

Prior to selecting the preferred option, the following exploratory works are recommended:

- Undertake a dial-before-you-dig request for the area of Sandy Bay Road fronting the proposed
  - development and then accurately locate all services on site
- Removal of internal cladding and non-structural elements adjacent to the mural to determine
  - If the concrete backing is cast in situ
  - o Identify the means of fixing of the mural to the building structure

ref: HB20102H001 Let 31P Rev 00/RC/cy

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- o Identification of any joints within the concrete backing
- Confirmation of the thickness (and hence the weight) of the mural and concrete backing
- undertaken geotechnical investigations to confirm the type and size of any footings and the extent of any additional support during basement excavations

A detailed removal works methodology would then need to be developed for the preferred solution using input from a civil engineer and demolition contractor that are both accredited under the Tasmanian *Building Act* 2016. The plan will also need to include full consideration of Tasmanian *Work Health and Safety Act* 2012.

We trust that this clarifies the planning requirements relating to this matter.

Yours Sincerely

Kolert asimaly

Robert Casimaty Senior Principal Engineer

ref: HB20102H001 Let 31P Rev 00/RC/cy

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Heritage Impact Assessment Fragrance Development

> 5-7 Sandy Bay Road HOBART TASMANIA

For Fragrance Tas-Hobart (Sandy Bay) Pty. Ltd.

July 2019

# praxisenvironment

heritage

planning

archaeology

po box 338 north hobart tasmania 7002

0418 303 184 info@prax.com.au

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This document was written by Brad Williams (BA.Hons Archaeology, G.Dip Maritime Archaeology, MA Cultural Heritage Management) Historical Archaeologist, Heritage Consultant and Director of Praxis Environment. Supplementary historical research was provided by Alan Townsend, sub-consultant historian, Praxis Environment.

Unless otherwise stated, all photographs were taken by Brad Williams, June-July 2019.

Unless otherwise stated, the north point (or approximate) of maps and plans is to the top of the page.

Cadastral information depicted in this document must not be relied upon without verification by a Surveyor.

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# 1. Introduction

This report has been commissioned by 9 Sandy Bay Road Pty. Ltd., in order to accompany an application to the Hobart City Council for the redevelopment of a portion of 5-7 Sandy Bay Road, Hobart.

The overall property at 5-7 Sandy Bay Road, Hobart (PID 7713417) is comprised of four titles:



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C/T 106816/1, which includes:	The conservatorium building (including the mural) - formerly the ABC building
	A number of later c20th brick buildings built for the ABC/conservatorium
	A modern workshop building fronting Wilmot Street
	A pair of nineteenth-century conjoined brick cottages fronting Wilmot Street
	A nineteenth-century brick house fronting Wilmot Street
C/T 51956/5, which includes:	A 1950s two-storey brick house
C/T 51956/6, which includes:	A 1920s single storey brick house
C/T 51956/7, which includes:	A 1920s two storey brick house

Note that the current subject site involves a portion of C/T 106816/1 – No works are proposed on the other three titles.

Also, no works are proposed on the portion of that large title which includes the nineteenth-century buildings fronting Wilmot Street (formerly known as 9-11 and 13 Wilmot Street).

2

Figures 1.2-1.4 depict the subject site:

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Figure 1.3 - 2008 Aerial image of the immediate environs of the subject site – (depicted in red). Adapted from www.thelist.tas.gov.au

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Figure 1.4 – Cadastral parcels comprising and surrounding the subject site (depicted in red) and surrounds (<u>www.thelist.tas.gov.au</u>).

The site is subject to the following statutory heritage requirements:

- A portion of the site The 'ABC Mural' is included on the Tasmanian Heritage Register (THR ref# 7841).
- The site is included on Table E.13.4 (Places of Archaeological Potential) of the Hobart Interim Planning Scheme 2015.
- There is a question as to the status of the subject site in relation to the adjacent listed Wilmot Street cottages, which are outside the proposed development footprint, but requires clarification.

1

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Accordingly, the brief for this project was:

- To clearly identify all statutory heritage requirements for any proposed development of the place.
- To undertake a heritage impact assessment on the ABC Mural in the context of the proposed development.
- To develop a statement of archaeological potential as the basis for archaeological planning.
- If necessary, to undertake an archaeological impact assessment for the proposed development as informed by the statement of archaeological potential.
- If necessary, refine the statement of potential and formulate mitigation strategies for any identified impact.

## 2. Statutory heritage requirements

This report has been commissioned to consider the statutory heritage requirements arising from the proposed development. The following requirements are to be met in any development of the subject site:

2.1. Hobart Interim Planning Scheme 2015

E13.0 – Historic Heritage Code

## Heritage Place (Table E.13.1)

The properties formerly known as 4-6 Heathfield Avenue (now part of 5-7 Sandy Bay Road, but on separate titles to the current subject site) are included on Table E.13.1 of the scheme (refs 2777 and 2778 respectively), with the title references cited in the Table and a note that these are now part of 5-7 Sandy Bay Road. The current subject site does not include these titles.

Whilst the cottages at (formerly) 9-13 Wilmot Street are also included on that Table (ref 3254), that listing cites the title 106816/1 which also includes the subject site. The listing notes that these addresses are 'now part of 5-7 Sandy Bay Road'.

By way of background to the listing of 9-13 Wilmot Street, the City of Hobart Planning Scheme 1982 included the following entry (relevant section highlighted) which clearly excludes any part of the wider 5-7 Sandy Bay Road which was not traditionally part of 9-13 Wilmot Street – i.e. clearly states that the intent of the listing are those properties and their traditional title area:

3

	8	RUPERT AVENUE	Beaulieu
	RUS	SELL CRESCENT	
	4 - 4A	RUSSELL CRESCENT	(Previously known as 4 Russell Crescent)
	SAL	VATOR ROAD	
5A - 37		SALVATOR ROAD	Grounds and trees (Previously known as 37-39 Salvator Road
41		SALVATOR ROAD	Bartonvale
	SAN	DY BAY ROAD	
5 - 7		SANDY BAY ROAD	(That part of the address previously known as 9-13 Wilmot Street only)
11		SANDY BAY ROAD	Stone retaining wall (Now part of 12 Wilmot Street)
		SANDY BAY ROAD	Stone retaining wall (refer also 121-123, 135 and 137 Hampden Road)
29		SANDY BAY ROAD	20084
51 - 53		SANDY BAY ROAD	Gattonside (Previously known as 53 Sandy Bay Road)
19		SANDY BAY ROAD	Ellershe House
47		SANDY BAY ROAD	Bourna Breena
31		SANDY BAY ROAD	
55		SANDY BAY ROAD	
71		SANDY BAY ROAD	Brick wall adjacent to Police Station
79 - 281		SANDY BAY ROAD	
83		SANDY BAY ROAD	
85		SANDY BAY ROAD	Former St Peter's Rectory
87		SANDY BAY ROAD	
89		SANDY BAY ROAD	
61 - 365		SANDY BAY ROAD	(Previously known as 361 Sandy Bay Road)
	394	SANDY BAY ROAD	Travellers Rest Hotel
61		SANDY BAY ROAD	Manresa

137

Table E.13.1 of the Hobart Interim Planning Scheme 2015 includes the following entry:

	Rate	Street Ba.	Shreet/Langement	6.6.	Seneral Beacription	Apochic School	Exclusions	Eastigh Development	
14		1.12	NUMBER STREET	10000.0	(free parts of 2 17 lands; Say York)				
ble E13.1 Wai	mea to Yardley								
Ref. No.	mea to Yardley		Street No.	Street/Loca	ation	c.t.	6	eneral Description	Sp
			Street No.	Street/Loca	stion	C.T.	6	eneral Description	Sp

The translation from the 1982 scheme to the 2015 interim scheme has not carried forward the qualifier that the listing affects only that part of the address previously known as 9-13 Wilmot Street and has apparently extended the listed area to the whole of title – i.e. the 'Specific Extent' of 'Exclusions' column has not been populated to reflect the intent of the earlier listing that was intended to affect only the traditional area of 9-13 Wilmot Street.

Legal advice on this matter has been sought from Hobart City Council, who conclude:

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As discussed the issue is that the Scheme has purported to list the entire site by reference to the title reference 106816/1. The listing provides no specific extent, and the listed description is of no assistance in narrowing the matter.

It is Council's view that an application for works within the boundaries of the title will accordingly trigger the relevant discretions, however it is accepted that works on certain buildings within the boundaries of the title may not be relevant in the exercise of that discretion.<sup>1</sup>

The interpretation of the above accepted here is that the entire title is included on Table E.13.1, therefore any proposed development on that title would trigger Clause E.13.7 of the scheme (Development Standards for Heritage Places) however the planning authority ought only consider the possibility of impact upon the buildings/place traditionally known as 9-13 Wilmot Street – taken here to be the cottages and their traditional curtilage.

The title history of 9-13 Wilmot Street is a relevant consideration here, in terms of what area the *intent* of that listing should cover.

<sup>1</sup> Email from Tom Rolfe, Legal Officer, Development Compliance, Hobart City Council, to Brad Williams, praxis Environment, 30/7/19.

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Figure 2.1 – Boundaries of 9-13 Wilmot Street (green outline) as per the 1908 Metropolitan Drainage Board plan – these are considered to be the 'traditional boundaries' of the places. The subject site outline in red. Adapted from www.thelist.tas.gov.au, 1908 boundaries drawn from State Library of Tasmania TLMAP 881.11 GBBD (Map Hobart 41).

The effect of the 1982 listing was the titles of 9-13 Wilmot Street at that time, which are depicted on C/T 4823/75 which was the current title at that time as depicted by Figure 2.2:

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Figure 2.2 - 1991 title arrangement, from SP 51956 which is likely to represent the title configuration at the time of inclusion oi the 1982 City of Hobart Planning Scheme heritage schedule.

Accordingly, the following provisions are applicable to the site, only insofar as heritage impact may be considered on 9-11 Wilmot Street:

7

	Acceptable Solution		Performance Criteria		
E.13.7.1 - Demolition	A1. No Solution.	Acceptable	<ul> <li>Demolition must not result in the loss of significant fabric, form, items, outbuildings or landscape elements that contribute to the historic cultural heritage significance of the place unless all of the following are satisfied;</li> <li>(a) there are, environmental, social, economic or safety reasons of greater value to the community than the historic cultural heritage values of the place;</li> <li>(b) there are no prudent and feasible alternatives;</li> <li>(c) important structural or façade elements that can feasibly be retained and reused in a new structure, are to be retained;</li> <li>(d) significant fabric is documented before demolition.</li> </ul>		
other than Demolition	A1. No Solution.	Acceptable	<ul> <li>P1. Development must not result in any of the following: <ul> <li>(a) loss of historic cultural heritage significance to the place through incompatible design, including in height, scale, bulk, form, fenestration, siting, materials, colours and finishes;</li> <li>(b) substantial diminution of the historic cultural heritage significance of the place through loss of significant streetscape elements including plants, trees, fences, walls, paths, outbuildings and other items that contribute to the significance of the place.</li> </ul> </li> </ul>		
E.13.7.2 – Building and Works other than Demolition	A2. No Solution.	Acceptable	<ul> <li>P2. Development must be designed to be subservient and complementary to the place through characteristics including: <ul> <li>(a) scale and bulk, materials, built form and fenestration;</li> <li>(b) setback from frontage;</li> <li>(c) siting with respect to buildings, structures and listed elements;</li> <li>(d) using less dominant materials and colours.</li> </ul> </li> </ul>		
	A3. No Solution.	Acceptable	P3. Materials, built form and fenestration must respond to the dominant heritage characteristics of the place, but any new fabric should be readily		

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	-	
		identifiable as such.
	A4. No Acceptable	P4. Extensions to existing buildings must not detract from the historic cultural
	Solution.	heritage significance of the place
	A5. New front fences and	P5. New front fences and gates must be sympathetic in design, (including
	gates must accord with	height, form, scale and materials), to the style, period and characteristics of the
	original design, based on	building to which they belong.
	photographic,	
	archaeological or other	
	historical evidence.	
	A6. Areas of landscaping	P6. The removal of areas of landscaping between a dwelling and the street
	between a dwelling and	must not result in the loss of elements of landscaping that contribute to the
	the street must be	historic cultural significance of the place.
	retained.	
	A3. No Acceptable	P1. A proposed plan of subdivision must show that historic cultural heritage
	Solution.	significance is adequately protected by complying with all of the following:
		(a) ensuring that sufficient curtilage and contributory heritage items (such
5		as outbuildings or significant plantings) are retained as part of any
visio		title containing heritage values;
ipqn		
E.13.7.3 - Subdivision		(b) ensuring a sympathetic pattern of subdivision;
3.7.3		(c) providing a lot size, pattern and configuration with building areas or
E.1		other development controls that will prevent unsympathetic
		development on lots adjoining any titles containing heritage values, if
		required.
		requires.

### Heritage Precinct (Table E.13.2)

The rear portion of 5-7 Sandy Bay Road is within Heritage Precinct H2 (Hampden Road), which includes the three houses on Heathfield Avenue, and the house, cottages and workshop on Wilmot Street. The current subject site is wholly outside of that precinct.

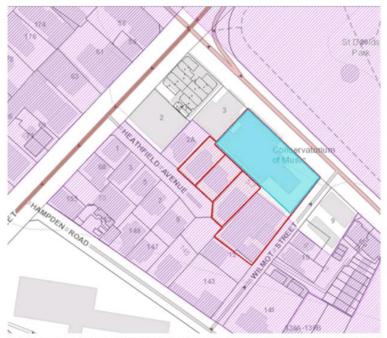


Figure 2.3 - Extent of the Hampden Road (H2) Heritage Precinct (purple hatching in and surrounding the subject site), as per Table E.13.2, Hobart Interim Planning Scheme 2015, the outline of 5-7 Sandy Bay Road in red and the subject site shaded in light blue. Adapted from www.thelist.tas.gov.au)

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### Place of Archaeological Potential (Table E.13.4)

The subject site is within the area defined in Figure E13.4.1 of the scheme as a *Place of Archaeological Potential*, therefore the provisions of Part E13.10 are applicable.

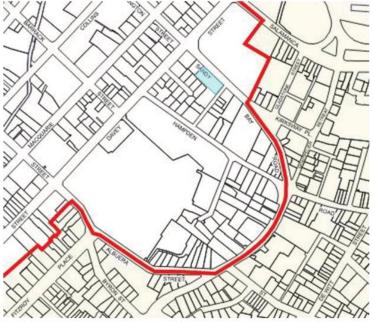


Figure 2.4 - Excerpt from Figure E.13.4 of the Hobart Interim Planning Scheme 2015, the white area within the red outline being the place of archaeological potential, the subject site shaded blue.

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Part E13.10 of the scheme details the Development Standards for Places of Archaeological Potential, with the following Objectives :

13.10.1: Building, Works and Demolition: To ensure that building, works and demolition at a place of archaeological potential is planned and implemented in a manner that seeks to understand, retain, protect, preserve and otherwise appropriately manage significant archaeological evidence.

13.10.2: Subdivision: To ensure that subdivision does not increase the likelihood of adverse impact on a place of archaeological potential.

The scheme prescribes *Performance Criteria* for each of these *Objectives* and pursuant to Part E.13.5 of the scheme, the Planning Authority may require the following to accompany any application for development of a place of archaeological potential in order to assess the proposal against the performance criteria:

- (f) a statement of archaeological potential;
- (g) an archaeological impact assessment;
- (h) an archaeological method statement;
  - Under the definitions of the scheme:

(f) means:

a report prepared by a suitably qualified person that includes all of the following: a. a written and illustrated site history:

- overlay plans depicting the main historical phases of site development and land use on a modern base layer;
- c. a disturbance history.
- a written statement of archaeological significance and potential accompanied by an archaeological sensitivity overlay plan depicting the likely surviving extent of important archaeological evidence (taking into consideration key significant phases of site development and land use, and the impacts of disturbance).

(g) means:

a report prepared by a suitably qualified person that includes a design review and describes the impact of proposed works upon archaeological sensitivity (as defined in a statement of archaeological potential).

(h) means:

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a report prepared by a suitably qualified person that includes the following where relevant to the matter under consideration:

- a. strategies to identify, protect and/or mitigate impacts to known and/or potential archaeological values (typically as described in a Statement of Archaeological Potential);
- b. collections management specifications including proposed storage and curatorial arrangements;
- c. identification of measures aimed at achieving a public benefit;
- d. details of methods and procedures to be followed in implementing and achieving (a), (b) and (c) above
- e. expertise to be employed in achieving (d) above;
- f. reporting standards including format/s and content, instructions for dissemination and archiving protocols.

The current document aims to fulfil those points in a consolidated manner in the assessment of the proposed development to assist the planning authority to make an informed assessment against the relevant performance criteria of the scheme (i.e. Clause E.13.10):

	Acceptable Solution	Performance Criteria			
	A1. Building and works do not involve	P1. Buildings, works and demolition must not unnecessarily			
	excavation or ground disturbance.	impact on archaeological resources at places of archaeological			
		potential, having regard to:			
E.13.10.1 – Building and Works other than Demolition		<ul> <li>a) the nature of the archaeological evidence, either known or predicted;</li> <li>b) measures proposed to investigate the archaeological evidence to confirm predictive statements of potential;</li> <li>c) strategies to avoid, minimise and/or control impacts arising from building, works and demolition;</li> <li>d) where it is demonstrated there is no prudent and feasible alternative to impacts arising from building, works and demolition, measures proposed to realise both the research potential in the archaeological evidence and a meaningful public benefit from any archaeological investigation;</li> <li>(a) measures proposed to preserve significant archaeological evidence 'in situ'.</li> </ul>			
	A1. Subdivision provides for building	P1. Subdivision must not impact on archaeological resources at			
ision	restriction envelopes on titles over land	Places of Archaeological Potential through demonstrating either			
bdivi	defined as the Place of Archaeological	of the following:			
- Sul	Potential in Table E13.4.				
10.2		(a) that no archaeological evidence exists on the land;			
E.13.10.2 – Subdivision		(b) that there is no significant impact upon archaeological			
4		potential.			

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### 2.2. Tasmanian Heritage Register

Within 5-7 Sandy Bay Road, the ABC Mural is listed on the THR (ref #7481). The conjoined cottages (formerly 9-11 Wilmot Street) and cottage (formerly 13 Wilmot Street) are also included on the register (ref #2604 and 6576 respectively).

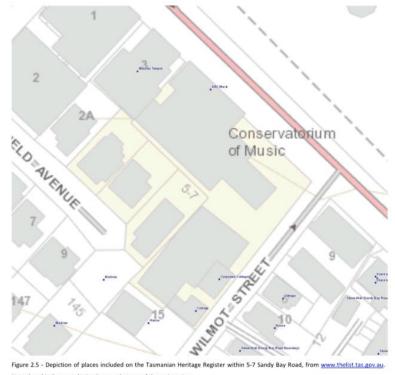


Figure 2.5 - Depiction of places included on the Tasmanian Heritage Register within 5-7 Sandy Bay Road, from www.thelist.tas.gov.au. Note that this does not depict the actual extent of the registration.

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The registration datasheet for the mural is detailed, and clearly articulates the values of the mural. The Central Plan Registry (CPR) plan for the registration of the mural shows the registered footprint and states that the registration only includes the ground floor portion of the mural to a height of 2.7 metres, and no other part of the former ABC building.

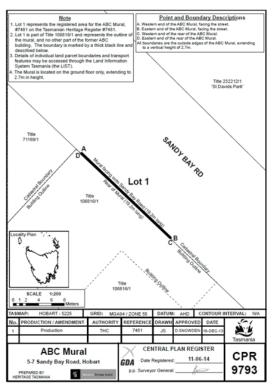


Figure 2.6 - Central Plan Registry entry for the ABC Mural, Tasmanian Heritage Register.

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No Central Plan Registry (CPR) plan exists for the Wilmot Street entries on the THR. Each of these two datasheets (i.e. one for the conjoined cottages, one for the house) cites the title reference 106816/1 (i.e. the large conservatorium title). Technically, this means that the whole title is included on the THR, yet the datasheets for the Wilmot Street buildings clearly intend those listings to be for the cottages/house, not the wider site and other buildings.

Advice from Heritage Tasmania has been received on this matter, which concludes:

The Heritage Council understands the boundary of the THR#6756 and THR#2604 registrations to be the cancelled title 51956/2 which has been replaced by the larger title 106816/1. The Heritage Council will move ahead in the near future to confirm this understanding by lodging a plan in the Central Plan Register that replicates the cancelled title and notifying Fragrance Tas-Habart Pty Ltd as the site owner.

Works within the registered boundary which do not impact the heritage values of the place may be eligible for a Certificate of Exemption.<sup>2</sup>

The above is take to mean that proposal on the wider 106816/1 title would require consideration by the Tasmanian Heritage Council and it is expected that the THC's consideration would be limited to any direct works to the titles which were affected by the original listing (i.e. the 'legacy' title(s)) and which were the original *intent* of the listing – i.e. any direct impact upon 9-13 Wilmot Street. Anything else may qualify for a Certificate of Exemption (noting that the mural is clearly and definitively defined via a separate Tasmanian Heritage Register entry).

Part 6 of the HCHA (Heritage Works) sets the process by which approvals for works may be gained from the Tasmanian Heritage Council (THC):

### 35. Heritage works require heritage approval

(1) A person must not carry out any heritage works unless those heritage works have heritage approval.

(2) For the purposes of subsection (1), heritage works are taken to have heritage approval if, and only if –

 (a) in a case where a certificate of exemption has been issued, the heritage works are carried out in accordance with –

(i) that certificate of exemption; and

<sup>2</sup> Email from Annita Waghorn, Registration Manager, Heritage Tasmania, to Brad Williams, Praxis Environment 18/7/19.

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(ii) if a discretionary permit or other permit is required for the heritage works under the Planning Act, that discretionary permit or other permit; or

(b) in a case where a certificate of exemption has not been issued, the heritage works are carried out in accordance with a discretionary permit.

(3) It is a defence in proceedings for an offence under subsection (1) if the defendant establishes that -

(a) the heritage works were carried out in response to an emergency; and

(b) the heritage works were, both as to nature and extent, reasonably necessary for the purposes of respondina to the emeraency; and

(c) in the circumstances, it was not practicable to seek a certificate of exemption; and

(d) the defendant, before, while or as soon as practicable after carrying out the heritage works,

notified the Heritage Council, in writing, of the emergency and the details of the heritage works.

Sections 36-41 set the process for the lodgment and assessment of applications for a heritage works permit, via a Discretionary Development Application under the Land Use Planning and Approvals Act 1993 (see below).

Section 42 describes the process whereby certain works may be exempt from the requirement of s.35:

## 42. Certificates of exemption for heritage works

(1) A person may apply to the Heritage Council for a certificate of exemption for heritage works.

(2) The exemption certificate application -

(a) is to be in a form provided or approved by the Heritage Council; and
 (b) is to be supported by such information as the Heritage Council requires, either at the time of lodgment or subsequently.

(3) The Heritage Council may –

(a) approve the exemption certificate application; or(b) refuse the exemption certificate application.

(4) Without limiting its discretion, the Heritage Council must approve the exemption certificate application if it is reasonably satisfied that the heritage works –

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(a) are identified in the works guidelines as works that will have no impact or only negligible impact on the historic cultural heritage significance of the relevant registered place or heritage area; and
 (b) are capable of being carried out in accordance with the works guidelines.

Whilst the HCHA provides no specific detail as to how particular proposals are considered, nor does it provide any indicative thresholds of what may be considered to have *no or negligible* heritage impact, the THC/Tasmanian Government publication *Works Guidelines for Historic Heritage Places* (November 2015)<sup>3</sup> provides further detail on the application process, guiding principles and the basis for decisions made by the THC. In addition, the THC has a series of practice notes and technical guides, available via <u>www.heritage.tas.gov.au</u> which provide useful guiding principles for how the THC are expected to assess and determine applications for heritage works.

### 2.3. Other statutory heritage registers/lists

The place is not listed on any of the following statutory registers:

- The National Heritage List
- The Commonwealth Heritage List
- The World Heritage List

Nor is it included in any buffer zones arising from those lists, therefore is not subject to the historic heritage provisions of the respective Acts, which enable statutory input into development of places on those lists.

### 2.4. Aboriginal Heritage Act 1975

An assessment of any possible Aboriginal heritage values is not part of the brief for this report; nonetheless the provisions of the Aboriginal Heritage Act 1975 are applicable to the place. A search of the Tasmanian Aboriginal Heritage sites register (Job # 16346753) did not identify any registered Aboriginal relics or apparent risk of impacting Aboriginal relics (search valid until 24/11/19). The Tasmanian Government Unanticipated Discovery Plan – Procedure for the management of unanticipated discoveries of Aboriginal relics in Tasmania must be adhered to in the event that any Aboriginal heritage items are discovered during the course of any works.

<sup>3</sup> http://heritage.tas.gov.au/Documents/Works\_Guidelines\_FINAL\_Nov2015.pdf

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## 3. Statement of Historical Archaeological Potential

### 3.1. Archaeological methodology

This statement of archaeological potential is derived from a process which identifies the potential of the site to yield archaeological remains, the significance of any remains, and their potential to yield meaningful information about the site, and which might contribute to relevant key archaeological and historical themes. The following briefly outlines the methodology followed:

Determining general archaeological potential: Through a desktop analysis of historical data and secondary sources, as well as non-invasive site observations, an understanding of the evolution of the site has been gained which has allowed an assessment of the archaeological potential (however significant) of any part of the site resulting in substantiated predictions of the likelihood of finding something upon any particular part of the site.

This has been done by analysing primary source material, summarizing the developmental history of the site and developing a chronological narrative detailing an overview of the history of all known features to have ever existed on the site. Where possible, developmental overlays have been developed from historic maps, plans, photographs and other visual documentation. This overlay has been supported by other observations providing supplementary information, and also includes processes such as demolition and disturbance which may have removed or destroyed potential remains – and may have diminished the archaeological potential.

Assessing the significance and potential of any likely archaeological resources to yield meaningful information: Upon understanding the archaeological potential through desktop and site analysis, the next step was to understand its relationship to any aspect of the identified significance of the place – e.g. do the remains have the potential to demonstrate an aspect of the significance of the site or related key historic theme? The potential for any of the archaeological remains to demonstrate important aspects of the history of the site, whether in a state, regional or thematic context, is to be considered.

<u>Understanding possible impact of development and formulation of management strategies</u>: Based on any identified archaeological potential and significance of the site, consideration will be given as to whether the proposed development will impact upon any likely archaeological remains and if necessary broad management strategies will be proposed to manage any impact.

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The table below demonstrates the steps of this assessment:

Methodology for formulation of the statement of archaeological potential				
	lf 'no'	If 'yes'		
<ol> <li>Archaeological potential. Are you likely to find something if you dig here? (i.e. a <u>Statement of</u> <u>Archaeological Potential</u>).</li> </ol>	Further action may not be required, although a contingency plan may be required for unexpected finds.	The significance of the archaeological potential should be investigated.		
2. Significance. Could anything you find here greatly contribute to our understanding of the site or related significant theme?	Further action may not be required.	The likely integrity of the archaeological remains should be investigated.		
3. Integrity. Are any archaeological remains likely to be intact?	Further action may not be required, although a contingency plan is required for unexpected integrity.	The likelihood of significant archaeological remains is confirmed.		
<ol> <li>Impact</li> <li>Will proposed works impact upon the significant archaeological remains? i.e. an <u>Archaeological Impact Assessment.</u></li> </ol>	Further action may not be required, although a contingency plan may be required for unexpected impacts.	An <u>Archaeological Method</u> <u>Statement</u> will be required to detail how impact will be managed/mitigated.		

### 3.2. Source material

For this assessment of archaeological potential, the depiction of the physical history of the site will be the main consideration – with other aspects of site history (i.e. social histories, economic history, associations *et. al.*) likely to be more useful in any post-investigation analysis of findings (i.e. artifact assessment), therefore beyond the scope of the current document. Similarly, the history of other townscape developments is beyond the scope of the current document however may be useful in further detailed analysis of future archaeological findings.

The following overview of the known physical development history of the site aims to aid in the prediction of the likely archaeological remains. This does not represent a comprehensive site history and has been limited to a history of the physical development of the site as relevant to the archaeological resource.

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### Primary sources

Broadly, the primary sources consulted in the development of the statement of archaeological potential include:

- Lands Services Department (LSD) series (Tasmanian Archive and Heritage Office).
- Department of Primary Industry, Parks, Water and Environment (DPIPWE) aerial photo collection (Service Tasmania).
- DPIPWE Land Data Branch, historic map collection (basement)
- DPIPWE Land Data Branch, titles.
- Historic newspapers, via the National Library of Australia's Newspapers Online portal.
- Hobart City Council building files (AE471 series, Tasmanian Archive and Heritage Office).
- Valuation rolls, as published in the Hobart Town Gazette.

### Secondary sources

No relevant secondary sources addressing the specific archaeological potential of the site were found in the research towards this document.

Wider secondary source material, namely archaeological reports, were utilised in the archaeological research design comparative assessment and method statement (Section 3.4), as cited in that section.

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### 3.3. Historical development of the subject site

In order to gain an overview of what once existed on the site, as the basis for predicting archaeological remains, the following is a brief overview of the historical development of the site based on primary source documents (the subject site depicted in red). Note that this is a brief historical overview, concentrating solely on physical development, sufficient only for basic archaeological planning. As per above, further historical research is required in order to refine a detailed archaeological research design, which is provided here in Section 3.4. Such detail is also required to supplement the interpretation of archaeological findings – requiring an iterative process of the assessment of findings against further historical and comparative research from both primary and secondary sources, which is provided fore here in the archaeological method statement (Section 5).

### Pre-development of the subject site

The land was the home of the Mouheneener people for tens of thousands of years, prior to displacement by European settlers following 1804.

Subsequent to the settlement of Sullivan's Cove in 1804, following the disbandment of the initial European settlement of Ridson Cove, the settlement of Hobart Town began to grow in a somewhat organic matter. Following Governor Macquarie's inspection of 1811, Surveyor James Meehan was engaged to rationalise the layout of the settlement and install a grid-pattern of streets, as seen on his 1811 survey plan (DPIPWE Hobart 131). At this time, Macquarie Street was formalised, however settlement was concentrated further eastward around the Sullivan's Cove area.

Several 1820s survey plans of Hobart (Figures 3.1-3.3) show the subject site as undeveloped and unallotted land, between the barracks and the waterfront.

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Figure 3.1 – A C1820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as unalloted and undeveloped land between the Barrads and the waterfront. DPIPME Hobart 12.

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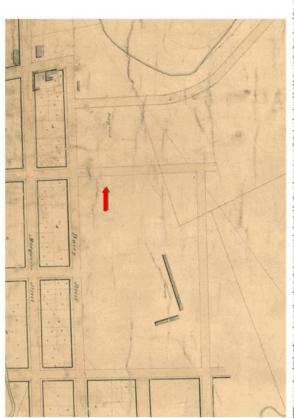


Figure 3.2 – A CI820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as unalicited undeveloped land between the Barradis and the waterfront. DPIPWE Hobart 13.



Figure 3.3 – A c1820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as undeveloped land between the Barracks and the waterfront. DPIPWE Hobart 4.

0



Figure 3.4 – Excerpt from a c1830s map of Hobart and surrounds, the subject site denoted in red. DPIPWE Map Hobart 5

By the early 1830s, the unallotted land between the barracks and the waterfront had been subdivided, and the Heathfield estate had been established just north of the subject site (see Figure 3.4). The subject site was still undeveloped at that time. By 1839 Wivenhoe (137 Hampden Road) and Devoren Cottage (139 Hampden Road) had been established to the south of the subject site, and Frankland's 1839 survey of Hobart Town shows the area containing the subject site as what appears to be a formal landscaped garden (see Figure 3.5) although appearing to be on a separate allotment to the large

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estates to the south and north. The 1841 census map (largely based on Frankland's 1839 survey) still shows the subject site as undeveloped (see Figure 3.6).



Figure 3.5 - Excerpt from Frankland's 1839 map of Hobart and surrounds. State Library of Tasmania, Allport Stack 912,94661MAP.

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Figure 3.6 - Excerpt from the 1841 census map of Hobart and surrounds. Tasmanian Archive and Heritage Office, CSO8-17-578.

The subject site comprises portions of two colonial era grants, which commenced a divergent pattern of development from the early 1840s onwards; for the sake of simplicity, this component of the research will follow the two grants (Moodie and Murray) separately.

3

Development of the Moodie grant (formerly 30 Harrington Street)



Figure 3.7 – Portion of the subject site which was part of the Moodie grant as discussed below.

Acting Commissary General Affleck Moodie was granted c1828 the 3 acres 6 perch allotment shown in Figure 3.4. Moodie built 'Heathfield' c1829, and the portion of subject area included in this grant appears to have been part of the gardens. Moodie's grant was confirmed in October 1836<sup>4</sup>, two years later, he died at Heathfield aged 73<sup>5</sup>. Following Moodie's death, the property remained in his estate until 1920, eventually passing to his grandson's wife, Jane Moodie<sup>6</sup>.

<sup>4</sup> DPIPWE The LIST CT 101/64 <sup>5</sup> TAHO RGD 36/1/1 Number 14 <sup>6</sup> The Argus 23 May 1888 p12

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In January 1920, Jane Moodie instructed Websters to put up for auction the 3 acre 6 perch Heathfield estate. The listing for this sale includes mention of "the nursery gardens of Mr Latham"<sup>7</sup>. Valuation rolls from 1880 and 1890 suggest that these nursery gardens included the portion of the grant formerly known as 30 Harrington Street and it is likely that the site only included ephemeral sheds associated with nursery operations during that time (see Figure 3.16).

The Heathfield estate sold to Cecil Walker for £8,000 in April 1920<sup>8</sup>. This block was then transferred in 1922 to Elinor Wayne Walker prior to her marriage to Alan Propsting in August 1922<sup>9</sup>. Between 1922 and 1947, Elinor Propsting (later Lake) slowly sold subdivided the estate as shown in Survey Diagram Hobart 8/34.

In January 1947, the Australian Broadcasting Commission purchased 1 rood 9.5 perches along Harrington Street, which included the former 30 Harrington Street, for £4,400. The survey diagram from this date (1947) lists the area as vacant land<sup>10</sup>. This purchase was part of a series of purchases planned by the ABC to acquire the site for construction of the Conservatorium of Music building. That included the three cottages described below to form a consolidated parcel of land as depicted on Figure 3.8:

5

<sup>7</sup> The Mercury 17 January 1920 p12
 <sup>8</sup> DPIPWE The LIST CT247/126
 <sup>9</sup> DPIPWE The LIST CT275/74
 <sup>10</sup> DPIPWE The LIST CT338/136



Figure 3.8 - Excerpt from Certificate of Title 670/35 which shows the consolidated title arising from the 1947 Australian Broadcasting Corporation acquisition of the various properties.

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Development of the Murray grant (formerly 26 & 28 Harrington Street)



Figure 3.9 - Portion of the subject site which was part of the Moodie grant as discussed below.

The south eastern portion of the subject area (formerly comprising 26 and 28 Harrington Street) was part of a two-acre town allotment originally granted to William Murray in May 1839<sup>11</sup>. This grant resulted from Murray's request to the Supreme Court that his title to the land be recognised by means of a grant. The record of Murray's application has not survived, however, contemporary newspapers reported that his claim was based on purchase from the locatee, David Burns<sup>12</sup>.

<sup>11</sup> DPIPWE The LIST Mem 5/9154 <sup>12</sup> Hobart Town Courier 1 March 1839

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As with the adjoining Heathfield estate, this part of the subject area is depicted on Frankland's 1839 survey and the 1841 census map (see above) as vacant land. In April 1845, Murray put the land to public auction, divided into 31 lots divided by the newly devised Wilmot Street<sup>13</sup>:

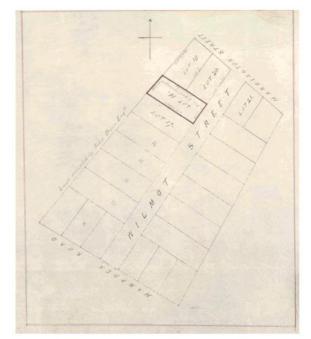


Figure 3.10 - Excerpt from Mem 3/883 showing the subdivision of Murray's grant and creation of Wilmot Street. Lots 19 and 20 are part of the current subject site.

8

13 Colonial Times, 19 April 1845 p.2; for plan of lots see DPIPWE Mem 3/883

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## Lot 20

As per Figure 3.10, Lots 18, 19 and 20 form part of the subject area. Lot 20 sold at the 1845 auction to William Barclay, a statuary mason, who immediately erected a *messuage or tenement house* on the property. This can be seen on Sprent's c1845 survey of Hobart (Figure 3.10). Barclay then sold the land and house to William Barnes in April 1846 for £125<sup>14</sup>.

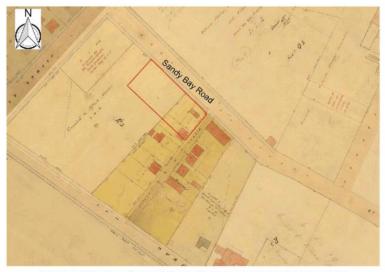


Figure 3.11 - Excerpt from Sprent's 1845 map of Hobart and surrounds, the subject site denoted in red. (www.theiist.tas.gov.au).

William Barnes died in 1882, leaving the Harrington Street property to his wife Eliza Barnes, with a codicil directing the property thereafter to Charlotte Jordan. Through this means, the property (i.e., Lots 19 and 20 referred to above) came to Alice Eliza Jorden following her mother's death in 1909. Alice Eliza married Dennis McInerney in December 1924, and in

14 DPIPWE The LIST Mem 3/1816

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October 1947, Alice McInerney sold the property to the Australian Broadcasting Commission<sup>15</sup>, who by this stage had acquired a number of the adjoining properties (see below).

#### Lot 19

Lot 19 sold at the 1845 auction to William Johnson, an innkeeper, for £75<sup>16</sup>; the following year, Johnson sold the land undeveloped to William White, a builder, for the same price<sup>17</sup>. In January 1849, White sold the property to William Barnes for £180, a price which would indicate that a house was then standing on it. The sale included a drainage right of way for the owner of Lot 18, which mentions "brick and mortar barrel drains" with a nine-inch internal diameter, crossing from Lot 18, over Lot 19 to Harrington Street<sup>18</sup>. This transaction put William Barnes in possession of both lots; they would remain in his family for the rest of the 19<sup>th</sup> century and remained with his heirs until 1947.

## Lot 18

A second codicil in Barnes' will directed that 'the upper or south western half' of Lot 18 should be given in trust to his sister in law, Martha Thompson (see below and Figure 3.12). In March 1900, this property (i.e the top half of Lot 18) was sold to Martha's daughter Florence May Thompson for £200<sup>39</sup>. This property remained in the possession of Florence May Thompson until June 1947, when she sold it to the ABC for £1,000<sup>30</sup>

<sup>15</sup> DPIPWE The LIST Mem 23/6003 <sup>16</sup> DPIPWE The LIST Mem 3/955 Note Samuel Crisp is the mortgagee in this transaction <sup>17</sup> DPIPWE The LIST Mem 3/4371 <sup>18</sup> DPIPWE The LIST Mem 3/4171 <sup>20</sup> DPIPWE The LIST Mem 3/4171 <sup>21</sup> DPIPWE The LIST Mem 3/4519

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Figure 3.12 - Detail from DPIPWE Hobart 8/34, sion of Lot 18 into two halves. ing the i

The following mid-late-c19th imagery shows three modest cottages on what was Lots 18, 19 and 20 through the ownership of the Barnes and Thomson families:

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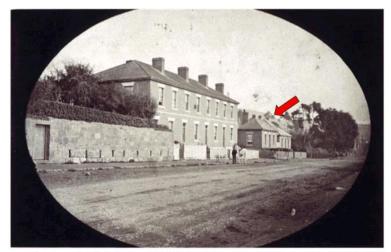


Figure 3.13 – The Barnes cottages (denoted by red arrow), Alfred Winter 1870. State Library of Tasmania, W.L. Crowther Collection, AUTAS001125298679.

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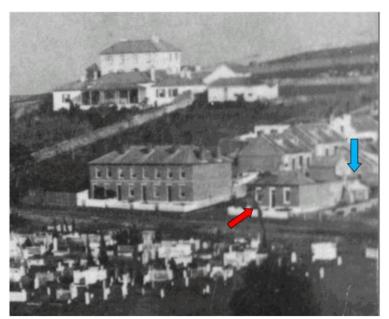


Figure 3.14 - The cottage at 26 Harrington Street (denoted by red arrow), and the rear of 1 Wilmot Street (note the outbuilding) denoted by blue arrow). Colin Dennison collection.

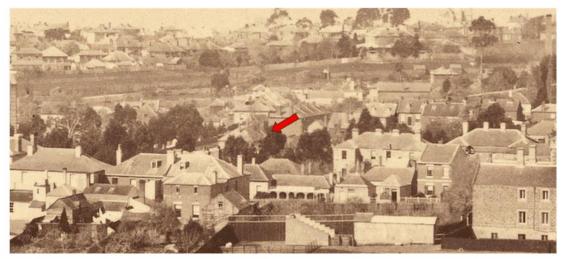


Figure 3.15 – Excerpt from Alfred Abbott's 1878 panorama of Hobart, showing the rear of the cottages facing Sandy Bay Road (denoted by red arrow). Tasmanian Archive and Heritage Office AUTAS001136156486

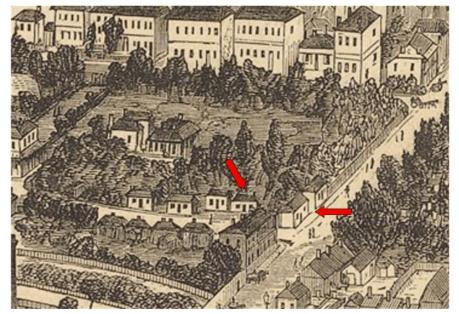


Figure 3.16 – 'Balloons eye view of Hobart' showing the cottages. Australasian Sketcher 10 May 1879

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Figure 3.17 - Excerpt from a c1890 panorama of Hobart, showing the rear of the cottages (denoted by red arrow). Tasmanian Archive and Heritage Office NS 1013-1-494.

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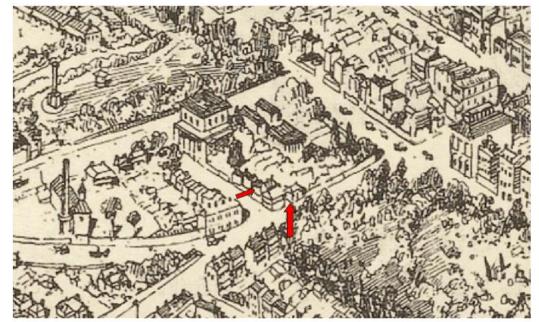


Figure 3.18 – 'Birds Eye View of Hobart' showing the two cottages facing Sandy Bay Road. The Town and Country Journal 17/11/1894:26-27.



Figure 3.19 - Excerpt from the 1907 Metropolitan Drainage Board plan of the Hobart CBD, the subject site denoted by red lines. This is the only known depiction of what is likely to be Latham's nursery building or yard on the Moodie land. State Library of Tasmania TL-MAP 881.11 GBBD (Map Hobart 41).

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Figure 3.20 - A c1930s photograph across St Davids Park showing the cottages fronting Sandy Bay Road. Authors collection



Figure 3.21 – A c1940 photograph across the Hobart waterfront, the approximate boundaries of the subject site outlined in red. Tasmanian Archive an Heritage Office AA116-145.



Figure 3.22 - Excerpt from the 1946 aerial run of Hobart, the subject site denoted by red lines (Hobart 1946 Run 1, 10892).



Figure 3.22a - Detail excerpt from the 1946 aerial run of Hobart, the subject site denoted by red lines (Hobart 1946 Run 1, 10892).

As described in section 3.3.2, following the 1930s subdivision of the Heathfield estate, the Australian Broadcasting Corporation purchased what was 30 Harrington Street in 1947 as vacant land. Soonafter the ABC purchased 28 and 28 Harrington Street and 1 Wilmot Street. The ABC building (including the mural described below) was constructed in 1960 as a three storey building, upon which an addition two storeys were added later in the 1960s to form the current body of the building. IN 1967 the ABS purchased additional properties in Heathfield Avenue and Wilmot Street to increase their holding and workshops were built facing Wilmot Street.

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Figure 3.23 – Excerpt from the 1958 aerial run of Hobart, the subject site denoted by red lines (Hobart 1958 Run 5, T332-12).



Figure 3.24 - Excerpt from the 1968 aerial run of Hobart, the subject site denoted by red lines (Hobart Metro Run 6, 153 - February 1968).



Figure 3.25 - The cottages at 26-28 Harrington Street and the ABC building prior to upper-floors being added. National Archives of Australia P2813 Album 2, p116.



Figure 3.26 - The cottages at 26-28 Harrington Street and the corner of Wilmot Street. National Archives of Australia P2813 Album 2, p118.



Figure 3.27 - The Australian Broadcasting Corporation building, c1965. National Archives of Australia P2813 Album 2, p114.



Figure 3.28 - The ABC building on the former 30 Harrington Street, 1970. National Archives of Australia, P2813, Envelope 5.

The Australian Broadcasting Corporation operated from the site until 1987 when it moved to its current premises in the former Hobart Railway Station and the site was sold to the University of Tasmania and repurposed as the Conservatorium of Music.

In 2017 the site was sold to the Fragrance group ahead of the imminent move of the conservatorium to the Hedburg complex in Campbell Street.

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#### Summary of developmental sequence

The above historical summary shows that the subject site has had a very simple developmental history, namely:

- An early association with larger estates as garden area (e.g. Heathfield as part of the Moodie grant).
- The first phase of development being c1845, with a cottage being built near the corner of Wilmot Street/Sandy Bay Road and one cottage facing Wilmot Street. A second cottage was built facing Sandy Bay Road by 1849 – both on parts of the Murray grant. These were to be known as 26 and 28 Harrington Street and 1 Wilmot Street.
- 26-28 Harrington Street remained in the Barnes family until their sale and subsequent demolition.
- Various infill buildings, extensions and outbuildings were added to these buildings/sites during the latter c19th and first half of the c20th.
- The only pre-mid-c20th development on the portion of Moodie land was the late-c19th Latham's Nursery, which is likely to have only included ephemeral fencing and sheds.
- The north-western end of the site was not developed prior to the c1960 construction of the ABC (later UTas Conservatorium of Music) building.
- The early cottage facing Wilmot Street was demolished around 1968 for the construction of the adjacent ABC workshops.
- The early cottages facing Sandy Bay Road were demolished post-1968.

The following figures show overlay plans of known historic development in relation to the current layout of the site:

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Figure 3.29 - Features as per the c1846 Sprent survey in relation to the subject site. These represent the two earliest cottages. Adapted from www.thelist.tas.gov.au



Figure 3.30 – Features as per the 1908 Metropolitan Drainage Board survey in relation to the subject site. These represent the three cottages and outbuildings and what is likely to be Latham's Nursery (it is unclear whether this depicts yard areas or buildings). Adapted from www.thelist.tas.gov.au



Figure 3.31 – Features as per the 1946 aerial photo in relation to the subject site. These represent the three cottages and outbuildings. Adapted from www.thelist.tas.gov.au

# 3.4. The likely significance and research potential of any archaeological remains

As depicted above, the subject site has a very simple development history, with the three c1840s development sites (i.e. the three cottages houses) – all of which are the only layer of development prior to their demolition in the 1960s. The portion of the subject site which was subject to that c19th development was wholly residential and appears to have remained as such until the time of demolition.

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Given the demolition of the buildings and formation of a carpark over any remains in the 1950s, any such remains would be limited to low-level structure (i.e. foundations, possible lower courses of the buildings) and any subsurface features such as basements, wells, cesspits etc. – although no such structures have been determined through historical research (i.e. no such structures are described in early accounts of the buildings, or from living memory), although are considered possible (note that a substantial brick drain is described in one early title associated with this place).

There is also the possibility of artefactual remains relating to the habitation and use of the buildings as per the thematic discussion below.

The site may also yield information on site formation processes which have acted upon the site, both pre and during construction (e.g. alteration of the natural landform, construction rubble), use (e.g. occupation deposits), demolition (e.g. demolition rubble) and post-demolition use (e.g. fill and disturbance).

Although not considered to be particularly rare (i.e. there are numerous 1840s houses still standing in Hobart and wider Tasmania) and these residences are not known to have any significant or rare associations (e.g. with prominent persons), the remains associated with the residences, particularly those dating back to the 1840s, and their domestic occupation are considered to be of high archaeological potential due to their earliness and have the potential to demonstrate 19<sup>th</sup> century domestic life in the area (and wider Tasmania for that matter) in an archaeological context. These represent a small contiguous section of a Hobart waterfront-fringe community from the 1840s onwards. Such investigations include those undertaken as part of the Menzies Centre (Liverpool/Campbell Streets) excavations, which investigated several prominent 1820s-onwards inner-city residences, including Crowther's (Godden Mackay Logan/Arctas). Similarly, investigations at Peter Degraves house in Collins Street (Hadleys Hotel development, Godden Mackay Logan) and preliminary investigations at the original Hobart Port Officer's residence at 100 Salamance Place (Praxis Environment) have investigated early inner-city residential sites. Forthcoming reports on excavations on other Hobart domestic sites such as Kemp's house (36 Argyle Street), Judge Pedder's house (173 Macquarie Street), Crowther's house/surgery (177 Macquarie Street) will also act to build upon knowledge and provide comparative datasets of early and substantial Hobart residences.

There have been few examples of archaeological investigations into wider communities around the Hobart CBD, i.e. investigations which cover a wide number of adjacent sites representing different functions (such

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as the Whale Fishery Inn and adjacent housing). Notable examples however are the range of Wapping investigations (e.g. Austral Archaeology 1996, 1998, 2002, 2009) and the forthcoming report on the Montpelier Retreat excavations undertaken by Austral Tasmania in 2015.

From a wider regional perspective, archaeological data and remains yielded from the subject site, whether coupled with other Hobart/Tasmanian data, has the potential to strengthen a comparative dataset for research into intra-colonial society through comparison with mainland (and indeed inter-colonial society on an international level). For example early inner-city working-class communities such as Broadway, Cumberland/Gloucester Streets and the Rocks (Sydney) and Little Lonsdale Street (Melbourne) and portside working-class areas such as Port Adelaide, all of which have had substantial archaeological works undertaken which include hotel sites and early inner-city housing and would provide useful datasets for the inter-colonial analysis of any Tasmanian data which would in-turn add to the depth and scope of the analysis of those collections on the range of themes as outlined above (and others).

From a temporal perspective, any remains from the investigation of such colonial communities represent a formative period of the settlement of Hobart and are likely to be of significance when considering their research potential.

Consistent with the 'Tiered research question' approach outlined in the Tasmanian Heritage Council's *Guidelines for Historical Archaeological Research on Registered Places*<sup>21</sup>, the following questions could be investigated in the archaeological remains expected to be present within the subject site:

Tier 1 Questions: These questions outline the essential knowledge base needed for any site research or significance evaluations. Such questions are often empirical in nature, and straightforward answers can be sought and often identified – generally limited to a physical knowledge of that particular place. Questions relevant to the subject site may include:

- How closely did the buildings and site features conform to the historic plans?
- What construction methods were used in the buildings and other infrastructure?

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<sup>&</sup>lt;sup>21</sup> http://www.heritage.tas.gov.au/media/pdf/Archae%20ResGlines%20%20FINAL%20-%20June%202009.pdf

- What evidence of alteration of the natural landscape and cultural interventions to the site is archaeologically determinable (e.g. filling of the site, demolition events, site formation processes etc.).
- Are the distinct use/development phases of the buildings distinguishable?
- Can the layout and function of the buildings, and indeed individual rooms or yard spaces be ascertained?
- How thoroughly were the buildings demolished?

Answers to these questions provide a foundation of information about the structure, type, use and duration of site occupation which enables the researcher to consider a second tier of questions.

Tier 2 Questions: Conclusions that can be drawn about a site that connect the material remains found on a site to specific behavior. For instance, do artifacts relate to the lifeways of the households that lived and/or worked on the site? For instance, do any artifacts represent class, gender, taste and health/hygiene of those living/working on the site? Particularly if artifacts can be specifically dated, and with supplementary historical research, artifact assemblages from this site may contribute knowledge and provide tangible connectedness to known residents, etc. and how they lived.

Tier 3 Questions: These questions represent the highest level of inquiry. Such questions associate the activities and behavior at individual sites with broad social, technological and cultural developments – which can be of interest on local, national or global lines of enquiry. Whilst these questions posed for a single site may not reach conclusions in the short term (as Tier 1 and 2 questions might) – the collection of data can contribute to future research by the provision of a comparable dataset. The goal of such research is to develop increasingly refined and tested understandings of human cultures within broader theoretical or comparative contexts. Lines of wider enquiry that findings from within the subject site may contribute to are:

 Do any activities archaeologically apparent on the site (e.g. drinking, food, hygiene, entertainment) provide meaningful comparisons on aspects of those themes with other contemporary residential Hobart enclaves or wider Hobart/Tasmania or for that matter Australian or international 1840s+ residential sites?

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- Do the conclusions on gender, class, economic and social status of the inhabitants of the residences and associated buildings conform to the 'normal' early-mid Victorian households?
- Are there class or status differences evident in the material culture of the inhabitants of this area (subject to further historical research) when compared to, say, other early residential enclaves or sites in contemporary rural areas and/or other cities?
- Did any changes in material culture through time in the residences coincide with wider Tasmanian or local events or technology (e.g. urbanisation/development of Hobart, railway/port upgrades, start of rubbish collection etc.)?

## 3.5. Likely prior disturbance events

As per the methodology in Section 3.1, despite knowing that there was historical activity on a particular site, it is necessary to understand the possible impacts that later development or actions may have had on that site and how this may have acted to disturb or destroy any remains from that earlier activity and occupation. The following has been considered here:

## Demolition of the 1840s buildings

The 1950-60s aerial photographs show that the rear yards of the buildings were cleared to a certain degree, probably for access and parking for the ABC building – but with the dwellings themselves still standing. It is not known how thoroughly these buildings were demolished – no documentation of their demolition has been found. However, it is expected that demolition might not have been thorough, with the end desire apparently being the formation of a carpark, there would be no need to necessarily remove deep structure and deposits (e.gg. foundations) for the formation of such. In fact, the retention of material as fill to ensure effective drainage of the carpark is a likely consideration that would suggest non-thorough demolition.

#### Subsequent development

There has been no subsequent development on this part of the site – the only phases of development being the cottages followed by the current carpark.

#### Service trenches

A search of public underground asset registers via the 1100.com.au system reveals only two underground assets running through the carpark (a NBN line from the corner of Wilmot Street and Sandy Bay Road and an

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electrical line from Sandy Bay Road to the substation at the rear of the site.<sup>22</sup> Note that this does not necessarily indicate any privately-owned underground assets nor any redundant services which may have caused some localised/linear impact. However, it does appear that the site has not been subject to any extensive/major disturbance from such trenches. Figure 3.28 depicts these trenches – their depth unknown and also the nature of trenching undertaken for their installation – this is however indicative of some localised linear disturbance within at least one of the cottage sites.



Figure 3.32 – Approximate line of known major service trenches across the carpark site.

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<sup>&</sup>lt;sup>22</sup> Note that this search is indicative only and must not be relied upon for the location of services in any construction/excavation process. Professional service locators must be engaged to inform any future excavations.

# 3.6. Site observations

The area of the former cottages at 26-28 Harrington Street is now an asphalt carparking area for the conservatorium building. No indication of the presence of archaeological remains is evident from non-invasive observation, however the slop of the land downwards towards Sandy Bay Road suggests that the site has not been subject to substantial leveling or benching and the land resembles what is expected to be a similar form to historic ground level.

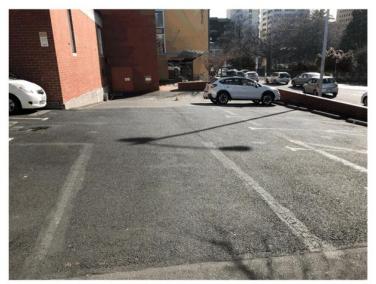


Figure 3.33 - Overview of the carpark area from Wilmot Street.

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Figure 3.34 - Overview of the carpark from the conservatorium building

# 3.7. Archaeological zoning plan and policies

As per the methodology outlined in Section 3.1, this section has built a chronology of site development which has detailed the physical evolution of the site and events/processes which would have acted to build the archaeological record. Section 3.4 has discussed the likely significance of those archaeological remains and what they may yield in terms of research potential alongside key historic, regional, thematic and temporal lines of enquiry. Section 3.5 has provided an assessment of the events which are likely to have impacted upon the integrity of those archaeological remains.

From the above, it is therefore plausible to propose that due to the site being the location of early development, which has probably not been subject to substantial disturbance, it may yield archaeological remains which have the potential to contribute to a knowledge of important Tasmanian heritage themes as per the research framework in Section 3.4.

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The site may yield physical remains of those buildings, as well as artifacts relating to the occupation and use of those buildings, which may yield information which is not readily available (or available at all) from historical sources.

Note that the overlay plans of known early building footprints as depicted in Figures 3.25-3.27 do not cover the entire subject site (i.e. are concentrated towards the southern end) it is feasible to propose that parts of the subject site have different abilities to yield building remains and remains of concentrated habitation. This is not to imply that archaeological remains are only found within building footprints, but the concentration of such remains is likely to be less the further away from building footprints (noting that there may still be remains of ancillary features and other occupational debris outside building footprints).

Based on the known and likely early building footprints, the following archaeological zoning plan is proposed for the subject site. This is based upon the following assumptions:

- Early building footprints and immediate environs have the potential to yield information on those buildings through structural remains and the deposits associated with use/activity.
- Backyard spaces may have some ability to add to a knowledge of ancillary structures and other deposits which may assist in fulfilling research agendas.
- That there appears to have been no major or widespread disturbance of the site.

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Figure 3.35 – Archaeological zoning plan (refer to table below).

Area	Likely archaeological remains	Likely integrity
Red	Remains of the three 1840s cottages, most likely including foundations, possible basements and underfloor deposits of use/habitation. Possible evidence of evolution of those buildings.	Likely to be largely intact, with the exception of the possible impact from the diagonal NBN trench from the corner of Wilmot Street/Sandy Bay Road which may have had some localised impact.
Green	Possible ancillary remains of domestic habitation, such as outbuildings, drains, cesspits, wells and backyard artifact deposits, rubbish pits etc.	

# Accordingly, the following archaeological management policies are recommended:

- Any excavation proposed in areas of high archaeological potential (i.e. red on Figure 3.31) must be
  preceded by an archaeological impact assessment, and if necessary an archaeological method
  statement, which details measures to be taken to avoid or mitigate impact upon the archaeological
  resource. That method statement must be in accordance with industry standard (e.g. the Tasmanian
  Heritage Council's Practice Note 2 Managing Historical Archaeological Significance in the Works
  Application Process) and implemented in the works process.
- 2. No archaeological input is required for excavation in areas of low archaeological potential (i.e. green on Figure 3.1), however any unexpected finds must be reported to a qualified historical archaeologist who is to assess their significance and deal with any significant finds as per (1) above. Works crew, site supervisors etc. are to be briefed upon this requirement and a protocol put in place ahead of the commencement of works.
- 3. No archaeological briefing or input is considered necessary on the remainder of the site.
- 4. Interpretation of the archaeological values of the site, as part of the overall interpretation of the heritage values of the site is recommended. All archaeological data and findings arising from any works on the site must be made freely available for any future comparative research.

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## 4. The ABC Mural

As per the statutory heritage listings detailed in Section 2, the artwork commonly known as the 'ABC Mural' on the front of the former ABC building at 5-7 Sandy Bay Road is listed on the Tasmanian Heritage Register (THR). The Central Plan Registry (CPR) plan for the affected area of that registration clearly articulates that the THR entry is limited to the mural itself (as defined on the CPR plan).

Accordingly, the formulation of recommendations/conservation policies for the mural is limited to the mural itself and includes no recommendations or considerations that relate to the building itself.

The ABC Mural has been the subject of substantial work by the Royal Australian Institute of Architects, via a nomination for the mural to the Register of the National Estate as part of the work *Twentieth Century Buildings for the National Estate Register Tasmania – May 1997.* This is considered a sound body of work which has been used to inform this assessment and is included here as APPENDIX A. That work has also been largely relied upon for the Tasmanian Heritage Register Datasheet for the mural, also provided here in APPENDIX A. These documents provide a detailed and comprehensive assessment of the background history and significance of the mural and further work has not been done here, as the author of this report concurs with the findings of those documents.

## 4.1. Description of the mural

[This description has been drawn from the Tasmanian Heritage Register datasheet #7481. For further description, please refer to the Royal Australian Institute of Architects Register of the National Estate nomination at APPENDIX A].

The ABC Mural is located on exterior of the building that originally housed the Australian Broadcasting Commission's (ABC) offices and studios, built in 1960. The building sits at the entry to Sandy Bay Road, close to the junction with Davey Street, both main thoroughfares through the city of Hobart. Directly adjacent stands the Masonic Temple (THR7490) designed by Lauriston Crisp in 1938, and opposite is St David's Park (THR2288).

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The mural sits on the exterior of the ground floor of the former Australian Broadcasting Commission (ABC) staff offices and studios, a five-storey building built in the Post-War International style, with curtain wall elevation to Sandy Bay Road. The mosaic mural extends over five bays of the building and measures 2.7 metres high and 19.2 metres long, covering a total area of 56 square metres, with a total of 150 000 Italian glass mosaic tiles. The glass tiles range in colour and tone, dominated by shades of blue and green, creating a patchwork like effect.

The composition of the mural design is based on the mathematical infinity sign, which may be further read as the ancient symbol of a fish or the ABC symbol. Within this form are fifteen stylised figures of pointed ellipses in silhouette and graduated within an outline of the infinity shape. The pattern is also representative of the emission of sound waves (see images).

The first twelve figures comprise the nine Muses (Figures 1. Clio, 2. Euterpe, 3. Thalia, 4. Melpomene, 8. Terpsichore, 9. Erato, 10. Polyhymnia, 11. Calliope, 12. Urania) and three Graces (Figures 5. Euphrosyne, 6. Aglaia, 7. Thalia), and the second group of three are a man, woman and child. The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character. White mosaic tiles wrap around the ends of the mural and appear internally on the other side of the mural. The vertical piers are covered with blue/green mosaic tiles (Savio Colour No.250).

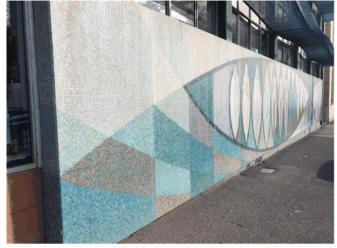


Figure 4.1 – The mural from the Sandy Bay end.



Figure 4.2 – The mural from the city end.



Figure 4.3 – The mural in relation of the façade of the former ABC/conservatorium building.

## 4.2. History of the mural

[This history is largely taken from Royal Australian Institute of Architects (Tasmanian Chapter), 'Twentieth Century Buildings for the National Estate Register', Unpublished Report, 1997. Vol 2. Place 48]. See APPENDIX A.

Designed by Tasmanian artist George Davis (b1930) in 1960, the mosaic mural covers an extensive section of the lower part of the street elevation of the former studio and staff offices of the Australian Broadcasting Commission (ABC) television service, designed by Hungarian immigrant architect Oscar AT Gimsey during the late 1950s.

Co-operation between artists and architects

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During the post-war period there was a resurgence of mural works on the international scene, particularly in the United States, Mexico and South America. The co-operation of artist and architect in building design was promoted. Colour was 'in', along with a rise in combining building materials of varying textural qualities. With overseas publications readily available, the outstanding use of murals in the countries mentioned above stimulated interest in the collaboration of artists, designers and architects in Australia.

The Spring 1957 issue of local publication Tasmanian Architect ran an article by Tasmanian artist Max Angus (Giles 2005:18) entitled 'What Price Murals?'. It promoted the co-operation of disciplines, stating 'The scope today for architect, engineer or artist to work together is practically unlimited, in solving problems of space control by orchestration of colour in relation to form whether in straight colour, abstract design, or pictorial mural.' (p15).

During this period a number of architects and artists collaborated on projects in Tasmania, including architect Dirk Bolt and artist/designer Ronald Sinclair (see THR7480, THR7500). In 1958 an exhibition staged by the Tasmanian Chapter of the Royal Australian Institute of Architects and housed in a temporary pavilion designed by Dirk Bolt and constructed in Franklin Square, addressed the issue of 'Design in Architecture and Industry'. The exhibition promoted cooperation between architects, artists, designers and craftsmen in Tasmania, with the hope that design would play a major role in the cultural and economic future of the state (Tasmanian Architect August 1960 p10-11).

#### Heathfield Estate

The ABC building, and surrounding properties, are located on part of what was the former Heathfield estate, granted to Assistant Commissary General Affleck Moodie during the 1820s (THR 2289). The estate originally ran from Davey Street almost to Wilmot Street, and from Hampden Road down to what was then Harrinaton

Street (now Sandy Bay Road). Andrew Bell built Heathfield for Moodie between 1827 and 1829, a fine Regency villa and the first of that category of dwelling in Hobart.

The Heathfield estate was purchased in 1920 by Cecil Walker, a Hobart solicitor, who transferred it to his sister Elinor Wayne Walker. In 1925 the first allotment subdivided from

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the Heathfield estate was the corner of Harrington (now Sandy Bay Road) and Davey Streets. Acquired by the Commonwealth Government, it is the current site for the Telstra Exchange building, constructed c1950s (Oakman 2000:20). Over the following years a number of parcels of land were subdivided from the Heathfield estate, including the land where the former ABC Building is located. An image of the construction of the Rotunda in St David's Park (c1926) shows that there were a number of modest Georgian cottages located where the current forecourt and car park area of the building are located. Later oblique aerials of the area close to the Anglesea Barracks and Repatriation hospital, dating from the 1950s, show that the area where the ABC offices and studio was built was a vacant block of land (see im).

#### The Australian Broadcasting Commission

The ABC building was designed by Oscar AT Gimsey & Associates, Sandringham VIC, Architects and Engineer for the ABC during the late 1950s. Gimsey emigrated to Australia from Hungary. However, the ABC felt that the panel of white mosaic tiles to the street elevation, as designed by Gimsey, should be filled with a suitably designed glass mosaic mural. The first stage of the ABC building consisted of three floors and was designed to accommodate two additional floors and a radio tower, which were added at a later date. During the 1960s the ABC also owned the nearby Sunray Flats (THR 3441) on the corner of Heathfield Avenue and Davey Street (pers comm.. G Williams Nov 2012). The bachelor flats were designed by Colin Philp, of Philp & Wilson, and were most likely used as accommodation for ABC employees.

#### George Davis and the Mural

In June 1960 the ABC invited a number of artists and designers to submit a design for the mosaic mural. The selected artists were, John Coburn, an entrant for the Perth ABC studio and offices mural competition held in 1959, Andor Maszaros of Victoria, who had designed a plaque for the ABC, John Santry, a Sydney-based artist in the design section of the Television service, Leonard Hessing and Stan de Teliga of the Tasmanian Museum and Art Gallery who had taken up a position as Manager of Blaxland Galleries , Sydney, but was not able to submit a design.

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The Commission was intent on including at least one Tasmanian artist. In a letter to Mr TS Duckmanton, the Assistant General Manager (Administration) of the ABC, Sydney in April 1960 de Teliga recommended George Davis. Davis was 'an excellent painter and winner of the Tasmanian Travelling Scholarship' (de Teliga 1960 in RAIA Nomination No 48).

George Davis was born in Hobart in 1930, studying fine arts and teaching at the Hobart Technical College and Art School between 1949 and 1951, he was a student of Jack Carrington Smith and Dorothy Stoner. Davis was awarded a Tasmanian Travelling Scholarship which allowed him to attend the Royal Academy in London between 1952 and 1954. Davis' teaching career began upon his return to Tasmania in 1955, and spanned fourteen years. His first position was at the Hobart Technical College Art School, however, Davis also taught at Adult Education and privately. Davis' work is held in public collections across Australia, including the Art Gallery of NSW, the Tasmanian Museum and Art Gallery, Hobart, the Queen Victoria Museum and Art Gallery, Launceston, SH Erwin Gallery, Sydney and private collections in Australia and internationally. Davis has exhibited extensively, and was responsible for the portraits of ten composers in the restored dome of the Theatre Royal (THR2191), Hobart in 1984 (Kohlenberg 2005:98, RAIA Nomination No 48). Davis is the father of actress Essie Davis (Mercury 16 April 2009).

The design of the mural was to be made on the basis of: 'Intention to depict the function of general broadcasting in the community or some aspect of this general subject, also: (i) A subject indicating the contribution made by national sound broadcasting and TV to community life; (ii) A subject indicating the contribution made by sound broadcasting and TV to the development of the arts; (iii) A subject indicating the contribution made by sound broadcasting and TV to the life and development of Tasmania; (iv) A subject indicating the value of broadcasting and TV as educational media, in the broad sense, e.g. as means of disseminating information on current events etc, and providing specialised services for the man on the land, for school children and so on.' (RAIA Nomination No 48).

The designs were submitted to an independent Assessors Committee before being considered by the Commission in Hobart. The Committee reported that 'the designs suffered from the

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weakness that the submissions failed to relate sufficiently the shapes and colours of their designs to the general mass and details of the building itself' (correspondence from Assessors to Duckmanton May 1960 in RAIA Nomination No 48).

In the end the competition came down to two designs: one by Tasmanian artist George Davis and one by Sydney-based designer TJ Santry (b1910) (see Kerr and Mendelssohn). The two qualifying entrants were asked to re-submit, with the suggestion from the judging panel that the vertical tie with the projecting blue tiled columns, be more apparent.

The Commission accepted Davis' design on 17 July 1961, with an estimated contract price of £1500 and materials supplied by the ABC. The success of Davis' design was in heeding the recommendation that the vertical tie-in to the building be more apparent, for reasons of symmetry and readability. Davis stated of his design, 'The general pattern is static and architectural, yet embodies movement through time, and the infinity sign within the classical figures links the past with the present and the future ... The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character. 'Due to the medium of glass mosaic tiles, the whole is 'simplified and controlled in tonal pattern, so as not to destroy the basic composition. In this way it is both striking and beautiful' (Davis, 1960 in RAIA Nomination No 48).

The mural, made up of 150,000 Italian made glass tiles was fabricated entirely off-site in a studio space located in Hobart. Davis' designed a table with two panelled sections that could slide apart on rollers, allowing access to the horizontal centreline. A rolling bench-frame was constructed so that Davis could work from above. The construction involved glass tiles mounted on specially selected paper and entirely pre-fabricated off site. The length and breadth of the mural was divided up into a complex grid on which to lay out the pattern. Each 18 inch section was taken to the site in custom made timber boxes individually coded and packed (Davis 1966 in RAIA Nomination No 48, see Related Documents for more information on the process).

Davis described the project as being one of the most complex and intensive, yet most rewarding of his career. The project took over two years to make and erect on site. Davis

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required the assistance of one artist to help with the mosaic layout, and an expert tiler, with one assistant, to lay the tiles on site. The jointing is staggered like that of brickwork. The placement of each section on the prepared wall taking five days in all. It is the largest mosaic mural in Tasmania (Davis 1966 in AIA Nomination No 48, see document for more information on the process).

Mosaic tiles were a popular decorative material during the mid-twentieth century. In Hobart, during this period, mosaic tiles were used on a number of large public projects indicative of the 1960s, including the Cat and Fiddle Arcade (1962), the 1966 Annexe Building at the Tasmanian Museum and Art Gallery, and the tunnels at the Railway Roundabout and Memorial Fountain (1963). The base of the Memorial Fountain features a mosaic mural. A smaller public mosaic mural was also placed at the entrance to the Clinical School (1970) at the Royal Hobart Hospital (THR 2409). Eminent Tasmanian artist, Max Angus was responsible for the Mondrian inspired mosaic murals which form the spandrels between each floor of the Department of Education and Teachers' Federation Building (THR10057) at 116 Bathurst Street, Hobart.

#### The ABC relocates

In 1983, after approximately twenty years in the building, the ABC started planning for a move to new premises, and the future of the mural was placed under threat. A number of concerned citizens and prominent Tasmanian figures, including Max Angus and John White, Member for Denison, were involved in efforts to retain the ABC mural. However, during the late 1980s the University of Tasmania put in a submission to the Minister for Arts and Education for Government assistance to purchase the ABC studio and offices as premises for the Conservatorium of Music and gave assurances that the mural would be retained.

It has been suggested that the mural was the beginning of the ABC's symbol that it has used for many years, the infinity symbol (J White, 1988 in RAIA Nomination No 48).

The ABC relocated to its current location on Liverpool, close to the Railway Roundabout, during the early 1990s. Extensions and refurbishment of the former ABC studios and offices to

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the Conservatorium of Music were carried out by architects Forward, Viney Woolan in 1994. The mural remains intact.

The ABC Mural is considered a major piece of public artwork in Hobart and the only one of its kind in Tasmania (RAIA Nomination No 48).

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#### 4.3. Significance of the mural

[This statement of significance is drawn from the Tasmanian Heritage Register datasheet 7481 and is further articulated in the Royal Australian Institute of Architects Register of the National Estate nomination at APPENDIX B].

#### Non-statutory summary of significance

The ABC Mural is of cultural heritage significance because it was produced in an era of growing cooperation and collaboration between architects and artists in Tasmania, and a growing emphasis on public art. The ABC Mural is a major and prominent piece of public art, and the only one of its kind in Tasmania. The design and method of installation of the ABC Mural displays a high degree of creative and technical achievement. The large scale of the mural, unity in colour control and precision necessary for laying small mosaic tiles meant

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that the artist George Davis adopted innovative and original methods to layout and execute his design. The ABC Mural has a special association with significant Tasmanian artist, George Davis, who has works represented in collections throughout Australia. The Mural was commissioned by the Australian Broadcasting Commission (ABC), Australia's national public broadcaster.

#### Significance against the criteria of the Historic Cultural Heritage Act 1995

#### a) The place is important to the course or pattern of Tasmania's history.

The ABC Mural was produced in an era of growing cooperation and collaboration between architects and artists in Tasmania, and a growing emphasis on public art. Designed by Tasmanian artist George Davis (b1930) in 1960 for the Australian Broadcasting Commission's (Australia's national public broadcaster) new staff offices and studios designed by Hungarian immigrant architect Oscar Gimsey. The ABC Mural is a major and prominent piece of public art, and the only one of its kind in Tasmania.

## e) The place is important in demonstrating a high degree of creative or technical achievement.

The design and method of installation of the ABC Mural displays a high degree of creative and technical achievement. The large scale of the mural, unity in colour control and precision necessary for laying small mosaic tiles meant that Davis adopted innovative and original methods to layout and execute his design.

### f) The place has a strong or special association with a particular community or cultural group for social or spiritual reasons.

The ABC Mural is a well-known and appreciated piece of public art that is prominently located adjacent to a main thoroughfare through the city of Hobart.

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. Cue

The ABC Mural has a special association with significant Tasmanian artist, George Davis, who has works represented in collections throughout Australia. The Mural was commissioned by the Australian Broadcasting Commission (ABC), Australia's national public broadcaster.

## 4.4. Conservation policy for the ABC Mural

Given the above history of the mural and the undisputed high level of significance as articulated in the statements of significance, the following conservation policies are proposed for the management of those heritage values going forward in any development of the site in proximity to the mural:

Policy		Reason for policy
1	The mural must be retained in its current location	To retain the mural as an important piece of public artwork.
	and a cyclical maintenance program put in place to ensure its preservation.	artwork.
2	In any major redevelopment of the former	To acknowledge that the building itself if not subject to
	ABC/conservatorium building, the mural must be	any statutory heritage listings, therefore it may feasibly
	retained and re-incorporated into any new building	be redeveloped in the future, however in any case the
	design in a manner which retains its prominence.	mural must be retained in a respectful and meaningful
		manner.
3	Should the site be redeveloped, or in the event	To ensure that the mural is not damaged during the
	that any major works are undertaken within close	course of any demolition or construction works.
	proximity to the mural, a detailed	
	demolition/construction management plan must	
	be formulated and implemented which assures the	
	protection of the mural during works.	
4	The design of any new building must take design	Given that the horizontality of the mural and the tie
	cues from the mural to seek to perpetuate the	with the vertical elements of the associated building
	original wider design intent of the harmony of the	were a key part of the design concept, any new
	mural with the wider built form.	building which incorporates the mural should take cue
		from the original design concepts as a means of

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5	The mural must always remain a prominent piece of public art, and in any major redevelopment of the site the opportunity for incorporating other public art in association with the mural should be explored.	continuity of the wider design and harmony of the existing situation. To celebrate the mural as a public artwork that may be supplemented by other works.
6	Interpretation of the heritage, aesthetic, associative and artistic values of the mural should form a part of any redevelopment (and any ongoing use of the existing building) of the site.	The further convey the meaning of the mural.

### 5. The proposed development

A redevelopment of the site has been proposed by the owner (Fragrance Tas-Hobart (Sandy Bay) Pty. Ltd.) which is detailed on the following documentation which has been used to inform this heritage impact assessment:

- Architectural Statement, 5-7 Sandy Bay Road, Hobart, Tasmania. Scanlan Architects, August2019.
- Drawing set for Project 1718, Drawings DA000, DA100-108, DA200-210, DA300-302, DA400 (dated 6/8/19) (including associated plans, elevations, photomontages etc.).

The archaeological heritage impact assessment in Sections 6 and 7 are to be read in conjunction with these documents.

Briefly, the proposal involves:

- Demolition of the former ABC building and associated brick workshop buildings.
- Retention of the ABC Mural for integration into the new development.
- Two levels of subterranean basement parking
- Two multi-level residential apartment buildings, separated by a central pool deck area. One block is
  proposed to be nine storeys, the other six.
- All works are proposed on C/T 106816/1, which includes the Wilmot Street cottages, however no
  works to the cottages, or within close proximity to them are proposed.
- Subdivision of the current larger title is proposed to excise the Wilmot Street cottages from the larger title.

The critical considerations in formulating the heritage impact assessment in Section 6 and 7 will be pursuant to the specific statutory heritage listings as detailed in Section 2, namely a consideration of:

- Archaeological impact
- Impact upon the ABC Mural
- Impact upon the Wilmot Street cottages.

#### 6. Archaeological impact assessment and method statement

#### 6.1. Archaeological impact

The proposed development requires extensive excavation across the entire footprint to facilitate the construction of two levels of basement parking and storage for residents, which will require the removal of any/all archaeological remains across the site. This arrangement is supported by the architectural statement. The pertinent points drawn from that statement in the rationale for bulk excavation of the site are:

As Hobart is fast growing the relation between the City history and its promising future has been crucial for the design of the project. It is essential ensure and emphasise harmony between the existing precinct and the proposed development in accordance with the latest planning scheme and Council requirements. The necessity to accommodate a considerable number of services and parking bays in the project became clear at an early stage of the design. This knowledge lead to below key factors:

- Site characteristic: major difference in levels between front and back of the site.
- Visually unpleasant and obstructive above ground parking solution
- Location of key building services, that could cause noise and unpleasant outlook
- Appealing and pleasant project outlook from all side of the site and surrounding.
- Site activation: Wilmot St. and Sandy bay Road corner to be open and approachable from street level without use of steps or architectural barrier.
- Residential entrance to be approachable from street level, without use of steps or architectural barrier
- Car bays, bike store and bin area security

The amount of excavations is due to the ground morphology. In the aim to maintain the project at an urban scale and comply with Council and planning requirements was immediately clear the necessity to provide two stories basements to accommodate car bays and services. Existing site levels and the desire to gently incorporate the project in the surrounding built form and site morphology lead to the proposed levels and the conclusion the below ground basements were necessary. The upper basements, for example, approach Sandy Bay Road at natural ground level (street level). In doing so Tenancy 01, within the upper basement perimeter, is reachable directly from street level, creating an approachable and open corner of the site and promoting the activation of the site

As per the likely significance of archaeological remains in Section 3.4, although the site does have archaeological potential in its ability to demonstrate early domestic life in Hobart, as per the research framework in that section, it is not considered necessary to retain those remains in-situ, and in this instance it is considered to provide an appropriate offset benefit that any development that the archaeological research potential of the site be yielded ahead of the development and that interpretation of those values be included in that development. It is noted that although these remains represent 1840s residential development in Hobart, there are numerous still-standing examples of such and the archaeological remains, although able to yield archaeological information, do not represent any fabric that should essentially be retained as a remarkable example. It is considered in this instance that yielding the archaeological potential provides a more widespread benefit than retention – which would compromise the viability, visual qualities and townscape fit of the proposed development if the only other option for parking were above ground.

#### 6.1 Distinct areas, broad methodology and sequencing.

Given the archaeological impacts likely to arise from the proposed development as described above this section will propose a mitigation strategy in accordance with the Tasmanian Heritage Council's *Practice Note* 2 – Managing Historical Archaeological Significance in the Works Application Process as required by the conditions of approval detailed in Section 1 and the undertakings of the development application.

Based on the likely impacts, the construction plan, desire to 'test' and ground-truth archaeological theories, as well as a range of logistics, the approach to archaeology is proposed to follow the sequence in the table below, as per the areas of archaeological zoning plan on Figure 6.1:

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Figure 6.1 – Areas proposed for archaeological investigations, to be read in conjunction with the table below

Area	Location	Types of remains and archaeological Rationale	Proposed archaeological methodology
Red	Corner of Wilmot Street	Foundations, use/occupation debris associated with 120 years of	It is proposed that the archaeological investigation of the 1840s
	and Sandy Bay Road.	domestic habitation of these buildings.	building sites (i.e. the red zones) be undertaken ahead of the works
	Rear portion of		program and/or during the early works program, so as to allow the full
	development site		and detailed implementation of the archaeological program without
	fronting Wilmot Street.		the risk of disrupting the critical timepaths of the works program. The
			methodology will be as per the 'approach to works' below.
Green	Central portion of	Whilst the remainder of the site has not been the location of any	No archaeological monitoring is proposed for this area, however it is to
	Wilmot Street end of the	known major development there may be archaeological remains	be managed with call-in provisions during the works program for any
	site.	of significance/interest across the site that were ancillary to	unexpected finds as per the methodology below.
		other uses (e.g. drains, cesspits etc.). Whilst these are unlikely	
		to be individually significant, the basic investigation and	
re		recording of such structures, or salvage of artifacts may assist in	
		a wider site understanding and/or have interpretive potential.	
Remainder of the site		No archaeological, input required.	1

## 6.3. Approach to works

#### Demolition and removal of non-significant overburden

Demolition of site features and the mechanical excavation of any non-significant and clearly modern overburden/structure (e.g. carpark paving) may be undertaken without archaeological supervision.

Following demolition, the archaeological crew will direct their own excavator operator in areas of high potential (i.e. red areas) to clear any overburden which is not readily apparent as modern until such time as in-situ structure and/or in-situ artifact yielding deposits are encountered then mechanical excavation will cease until an understanding of the nature of the remains is ascertained and the provisions for significant remains (below) can be implemented.

If no significant archaeological remains are encountered (to a depth of sterile ground level) then the provisions of 'cessation of archaeological input' (below) will be implemented.

#### Where significant archaeological remains are encountered in high sensitivity areas (red)

In areas where significant archaeological remains are encountered, those areas will be gridded to the expected horizontal extent of the remains (generally as a liner grid for strip footings), and excavation will continue by hand (as per methodology below), to expose the remains in order to gain further understanding of their nature, and to thoroughly record them (as per methodology below). Mechanical excavation in those areas will only continue if the archaeologist is satisfied that this can occur without detriment, that required outcomes can be achieved and that excavation by hand is not necessary.

The general approach to excavation will be by gridding the area in units which are responsive to the nature of the remains (e.g. in horizontal control units no greater than 1000x1000mm, or the width of the linear trench, in areas where remains appear to be complex or concentrated, or in larger control units where remains are not as complex or concentrated) and removal of each contextual unit or spit (in depths as deemed appropriate by the archaeologist, according to the nature of the strata and/or remains). Apart from non-significant overburden, all spoil will be sieved through mesh of a gauge no greater than 12mm and any significant artifacts managed as per below.

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It is expected that in areas of high archaeological potential the stratigraphic sequence will be relatively simple, that of post demolition (possibly including some disturbance), demolition, occupation (which may include several distinct phases including habitation and construction and that of pre-construction. Excavation of remains within the defined contexts in reverse order of deposition will occur and each unit/context thoroughly recorded (as per below) prior to removal to facilitate the development

It is proposed that all depositional strata be removed initially, as per above, with the aim of exposing and retaining any/all structural remains in-situ for holistic recording, prior to their removal ahead of the works excavation program. Any salvageable building materials will be retained for use elsewhere at the discretion of the site owner (possibly in interpretive installations or contemporary recycled features).

It is possible that the any basements of the buildings might be encountered and if present there is a high likelihood that these may contain demolition rubble or fill in a secondary context. Depending on the nature of the fill and whether any significant depositional arrangement is evident, this will be removed by a means deemed pragmatic by the archaeologist in order to expose significant remains and yield as much information as is considered necessary from that fill.

#### Call-in provisions – areas of low archaeological potential (green areas)

The green areas on Figure 6.1 are areas where there is considered to be a low (or no) likelihood of significant archaeological remains present – generally areas of no major development, usually yard spaces, circulation areas etc. Note that this does not necessarily preclude archaeological remains such as occupational debris, unknown minor buildings, ancillary features such as paths, drains etc. It is also possible that more complex/significant features may be found, such as cesspits, wells, etc. – in which case these will be re-designated as areas of high archaeological potential and dealt with as per the provisions above.

Whilst archaeological monitoring of these areas is not considered necessary, the possibility of unforeseen archaeological remains in these areas requires a stringent call-in protocol to be put into

place, which will require site excavation crews to immediately call-in an archaeologist should any substantial structure or dense artifact deposits be encountered. **This will require a thorough briefing of the works crew by an archaeologist at the outset of works** – which will include an overview of the site history, discussion on the possibility of the above described possible remains, as well as the process for stop-work and call-in. An archaeologist is to be engaged to periodically 'audit' the site during excavations in areas of low archaeological potential in order to ensure that those protocols will be implemented.

#### Cessation of archaeological input

Archaeological input will cease only when the archaeologist is satisfied that all significant remains have been investigated and thoroughly recorded, as per this method statement and any conditions of statutory approvals, or if sterile ground is encountered, and that adequate consultation has been undertaken with Hobart City Council's Heritage Officer to verify that all on-site archaeological requirements have been met (and archaeological conditions satisfied).

#### Recording

Any structure or significant cultural deposit encountered in the 'red' areas will be thoroughly recorded (both photographically (from ground level and via drone) and sketched at a scale of no smaller than 1:20 and plotted on the site plan at a scale of a scale no smaller than 1:200). Any structure encountered in the 'green' areas will be recorded photographically (from ground level and via drone).

#### Artifacts

Any significant artifacts found during excavations will be retained and have the required in-field conservation treatments and packaging undertaken. Artifacts will be bagged and tagged with spatial identification and removed from the site (to a secure location) daily. Trench-notes will further detail the context and initial interpretation of artifacts.

Basic post-field curation of artifacts will be undertaken. Glass and ceramic items will be washed, whilst any organics or metals will be dry-brushed. Artifacts will be packaged in acid-free archive bags, tagged

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with appropriate tags, and boxed in archival quality boxes (with appropriate padding if required). Should any urgent conservation treatment be required, a professional Conservator will be consulted at the earliest possible instance. A detailed catalogue of artifacts will be included in the final report on works.

After any required analysis, these will be archived (with a copy of relevant reports) on-site of the new development (upon completion) – however at the owner's discretion and with the approval of Hobart City Council's Heritage Officer, alternative arrangements for storage and longer-term curation/display may be made with an appropriate repository.

#### **Reporting requirements**

Excavations and monitoring must be recorded to appropriate professional standards (for example Section 4.2 of the Tasmanian Heritage Council's Practice Note 2). A final report must include (at a minimum):

- An executive summary of findings
- Details of the methodology employed
- Detailed interpretations of findings
- Relevant annotated photographs (including drone photographs)
- Site plans at a scale of no less than 1:200
- Trench plans at a scale of no less than 1:50
- Feature plans/sketches at a scale of no less than 1:20
- Overlay plans of structure encountered in relation to historical sources
- Photograph log

A copy of the final report, and project archive, will be deposited with Hobart City Council (and other repositories as listed below) within 6 months of completion of the excavations.

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#### Public benefit

Subject to the exact nature and findings of the archaeological program, the following public benefit program will be considered by the proponents of the development:

- An interpretation plan which would consider options for the interpretation of the heritage values of the site in the new development (e.g. static/multimedia installations, curated objects, recycling of materials in contemporary installations etc.).
- A public viewing area with temporary interpretation will be established from Wilmot Street during the works (subject to safety requirements).
- The project report will be made publicly available, through appropriate repositories such as Hobart City Council, Heritage Tasmania, the State Library of Tasmania and the National Library of Australia (Trove).
- If archaeological results warrant, an academic publication may be produced (not at the proponent's expense). In any case, archaeological results will be made freely available for future archaeological research.

It is not considered feasible to have any on-site public benefit events during the works program – given that this will be a private works site.

#### Aboriginal heritage

This document deals primarily with the management of historic cultural heritage and has only briefly considered in-situ Aboriginal cultural heritage insofar as a search of Aboriginal Heritage Tasmania's register was undertaken, which has confirmed that no known Aboriginal heritage remains are within the subject site and that there is a low risk of such. There is the possibility of encountering Aboriginal heritage in a secondary context (e.g. fill). Archaeological monitoring should be mindful of this possibility, and follow the Tasmanian Government's *Unanticipated Discovery Plan – Procedure for the management of unanticipated discoveries of Aboriginal relics in Tasmania* 

#### Site contamination

It is the responsibility of the proponent of the development to investigate the possibility of site contaminants, and to either verify that no site contaminants are present, or to take required measures to deal with any known or likely contaminants during excavation works (noting that any necessary decontamination works may require archaeological input).

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## 7. Heritage impact assessment & compliance with statutory heritage provisions

## 7.1. Archaeological impact - pursuant to HIPS15 Clause E.13.10:

	Performance Criteria	Commentary
	P1. Buildings, works and demolition must not unnecessarily impact on archaeolo	gical resources at places of archaeological potential, having regard to:
- Building and Works other than Demolition	a) the nature of the archaeological evidence, either known or predicted;	The current document provides an overview site history which has firmly established the development sequence on the site, which has been found to be relatively simple, with a single layer of domestic occupation from the 1840s to the 1960s, prior to the establishment of the current carpark. This predictive model has ascertained with near certainty the location of those buildings and has proposed the likely archaeological signatures associated with such, together with a consideration of possible disturbance events to provide a sound desktop assessment of the likely nature of archaeological evidence and consequent potential contribution to various research frameworks.
E.13.10.1	<ul> <li>b) measures proposed to investigate the archaeological evidence to confirm predictive statements of potential;</li> </ul>	The archaeological method statement in this document proposes a means of investigating the desktop predictions in pursuit of yielding the predicted archaeological research potential of the site.

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c)	strategies to avoid, minimise and/or control impacts arising from	It is not considered inappropriate that the development removes all
	building, works and demolition;	archaeological remains following a thorough reconnaissance program to
		thoroughly yield all archaeological potential. Whilst the site does represent
		early (i.e. 1840s) domestic habitation which has the potential to yield
d)	where it is demonstrated there is no prudent and feasible alternative	archaeological information, on-balance it is considered that the developer-
	to impacts arising from building, works and demolition, measures	funded yielding of such information is a sufficient offset to the removal of
	proposed to realise both the research potential in the archaeological	these remains provided that certain initiatives (e.g. publication,
	evidence and a meaningful public benefit from any archaeological	interpretation and making data available for research) are undertaken as an
	investigation;	offset benefit. Particularly given that the archaeological remains are not
		considered rare, nor do they have any 'beyond the ordinary' associations,
		in-situ retention is not considered necessary.
		Given that removal of the archaeological remains to facilitate basement
		parking assists in an overall reduction of height in the building, which has
		other townscape and community benefits, removal of archaeological
		remains to facilitate such (together with yielding research potential) is
		considered an acceptable outcome.

	e) measures proposed to preserve significant archaeological evidence 'in	As per above, the significance of these archaeological remains is not
	e) measures proposed to preserve significant archaeological evidence in	As per above, the significance of these archaeological remains is not
	situ'.	considered to be particularly high and that the yielding of their research
		potential, supplemented by a public benefit program (interpretation and
		publication of results) is considered to be a suitable offset benefit instead
		of their retention in-situ.
5	P1. Subdivision must not impact on archaeological resources at Places of	The proposed subdivision will have no impact upon any significant
Subdivision	Archaeological Potential through demonstrating either of the following:	archaeological remains.
2-	(a) that no archaeological evidence exists on the land;	
E.13.10.	(b) that there is no significant impact upon archaeological potential.	
E.13		

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#### 7.2. Heritage Impact Assessment – Wilmot Street Cottages - pursuant to HIPS Clause E.13.7:

Note that this assessment is limited to the possibility of impact from the proposed development upon the Wilmot Street cottages (9-13 Wilmot Street) which are approximately 20 metres away from the proposed development footprint. The proposal intends that these cottages with a <u>wider curtilage</u> than originally existed be subdivided from the development site <u>and no works are proposed to the cottages</u> or within their immediate vicinity.

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	Performance Criteria	
	Demolition must not result in the loss of significant fabric, form, items,	The proposal does not involve any demolition within the traditional
	outbuildings or landscape elements that contribute to the historic cultural	titles of the Wilmot Street cottages.
	heritage significance of the place unless all of the following are satisfied;	
5	(a) there are, environmental, social, economic or safety reasons of	
litio	greater value to the community than the historic cultural heritage	
emo	values of the place;	
E.13.7.1 - Demolition	(b) there are no prudent and feasible alternatives;	
E.13	(c) important structural or façade elements that can feasibly be	
	retained and reused in a new structure, are to be retained;	
	(d) significant fabric is documented before demolition.	
	P1. Development must not result in any of the following:	No development is proposed on what was the traditional allotments
pue	(a) loss of historic cultural heritage significance to the place through	of the Wilmot Street cottages and there is a substantial gap in the
ing ( thai	incompatible design, including in height, scale, bulk, form,	streetscape between the cottages and the proposed building,
uild ther slitio	fenestration, siting, materials, colours and finishes;	therefore the proposed development could not be seen to have any
E.13.7.2 – Building and Works other than Demolition	(b) substantial diminution of the historic cultural heritage significance	detrimental impact by way of siting, scale, bulk, design etc.
13. Wc	of the place through loss of significant streetscape elements	
Li I	including plants, trees, fences, walls, paths, outbuildings and other	

items that contribute to the significance of the place.	
P2. Development must be designed to be subservient and complementary to	
the place through characteristics including:	
(a) scale and bulk, materials, built form and fenestration;	
(b) setback from frontage;	
(c) siting with respect to buildings, structures and listed elements;	
(d) using less dominant materials and colours.	
P3. Materials, built form and fenestration must respond to the dominant	The proposed new development is approximately 20 metres from the
heritage characteristics of the place, but any new fabric should be readily	Wilmot Street cottages with that space between forming a buffer
identifiable as such.	between the finer-grained residential area and the Sandy Bay Road
	fronting larger development sites which are the predominant urban
	form component of those distinctly different areas.
P4. Extensions to existing buildings must not detract from the historic cultural	No extensions are proposed to the Wilmot Street cottages.
heritage significance of the place	
P5. New front fences and gates must be sympathetic in design, (including	No new front fences or gates are proposed in association with the
height, form, scale and materials), to the style, period and characteristics of	Wilmot Street Cottages.
the building to which they belong.	
P6. The removal of areas of landscaping between a dwelling and the street	No landscaping is to be removed from the front of the Wilmot Street
	1

	must not result in the loss of elements of landscaping that contribute to the	cottages.
	historic cultural significance of the place.	
	P1. A proposed plan of subdivision must show that historic cultural heritage	The proposed subdivision will restore part of the more traditional
	significance is adequately protected by complying with all of the following:	cadastral layout of the area in separating the Wilmot Street cottages
	(a) ensuring that sufficient curtilage and contributory heritage items	from the larger development site, in-line with the boundary of the
ion	(such as outbuildings or significant plantings) are retained as part of	heritage precinct – which is considered advantageous in reinstating
Subdivision	any title containing heritage values;	the domestic title form of the area.
1	(b) ensuring a sympathetic pattern of subdivision;	
E.13.7.3	(c) providing a lot size, pattern and configuration with building areas or	
ц.	other development controls that will prevent unsympathetic	
	development on lots adjoining any titles containing heritage values,	
	if required.	

#### 7.3 Heritage Impact – ABC Mural – pursuant to the Historic Cultural Heritage Act 1995.

Note that as per the architectural statement, a key driver of the proposal is to retain and enhance the mural. The following points are to be noted:

- The mural will be retained.
- It is expected that a requirement of any development will be a detailed demolition and construction management plan for the development, which must detail the means by which the mural will be conserved and protected during works and the precise technical detail for incorporation of the mural into the new building must be better resolved in the building permit application documentation.
- It is intended that the history of the mural will be celebrated through a design competition for the precise detail of proposed public artwork to
  accompany the existing mural.
- The design of the overall building has taken geometric and design detail cues from the mural, to perpetuate associated themes and so as to 'link' the mural with its new surrounds (i.e. so as to not 'isolate' the mural) – see pp.17-19 of the architectural statement.

#### Assessment against the identified significance on the mural as per the Tasmanian Heritage Register datasheet

Criterion	Significance	Commentary
A	The ABC Mural was produced in an era of growing cooperation	The preservation of the mural and its thoughtful incorporation into a new
	and collaboration between architects and artists in Tasmania,	development will ensure that it remains as an artefact of 1960s public art in
	and a growing emphasis on public art. Designed by Tasmanian	Tasmania. The evolution of the building and site to incorporate the mural and the
	artist George Davis (b1930) in 1960 for the Australian	intent to supplement this with further thoughtful and meaningful public art will add
	Broadcasting Commission's (Australia's national public	another layer to the history of the mural and how it has acted to shape the
	broadcaster) new staff offices and studios designed by	appreciation of its surrounds.
	Hungarian immigrant architect Oscar Gimsey. The ABC Mural is	

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		-
	a major and prominent piece of public art, and the only one of	
	its kind in Tasmania.	
E	The design and method of installation of the ABC Mural	The technical attributes of the mural will be preserved in the proposed
	displays a high degree of creative and technical achievement.	development so the ability to demonstrate such will be preserved and remain
	The large scale of the mural, unity in colour control and	legible. This method may also form part of the design parameters for the
	precision necessary for laying small mosaic tiles meant that	forthcoming art competition for supplementary public art associated with this
	Davis adopted innovative and original methods to layout and	development.
	execute his design.	
F	The ABC Mural is a well-known and appreciated piece of public	The mural will remain as a prominent piece of public art visible from this main
	art that is prominently located adjacent to a main thoroughfare	thoroughfare and its presence will be enhanced by complimentary art initiatives.
	through the city of Hobart.	
G	The ABC Mural has a special association with significant	The association of the mural with George Davis will remain and the interpretation
	Tasmanian artist, George Davis, who has works represented in	and recognition of Davis' work will form part of the premise of the forthcoming art
	collections throughout Australia. The Mural was commissioned	competition to provide additional public art on the site.
	by the Australian Broadcasting Commission (ABC), Australia's	
	national public broadcaster.	

#### Assessment of heritage impact against the conservation policies for the mural as proposed in the current document

Policy		Commentary	
1	The mural must be retained in its current location and a	The proposal retains the ABC Mural and has used it as an integral part of the proposed	
	cyclical maintenance program put in place to ensure its	design in a prominent focal point of the proposed building. This will be further enhanced	
	preservation.	by the incorporation of additional public art with a meaningful connection to the	
		site/mural.	
2	In any major redevelopment of the former		
	ABC/conservatorium building, the mural must be retained		
	and re-incorporated into any new building design in a manner		
	which retains its prominence.		
3	Should the site be redeveloped, or in the event that any	The technical directives of the project architect are to be incorporated into a detailed	
	major works are undertaken within close proximity to the	construction management plan as well as the more detailed and refined building permit	
	mural, a detailed demolition/construction management plan	application documentation in order to ensure the protection and conservation of the	
	must be formulated and implemented which assures the	mural during the nearby demolition and development process. It is anticipated that	
	protection of the mural during works.	conditions of any approval may be used to firm-up this undertaking and provide a further	
		check and balance to ensure preservation of the mural.	
4	The design of any new building must take design cues from	The proposed building seeks to extend the mural in an interpretive manner further along	
	the mural to seek to perpetuate the original wider design	the front of the proposed building as a means of providing cohesion and a transition of	
	intent of the harmony of the mural with the wider built form.	the story of the mural into the new development as a storytelling tool of the mural's	
	1	1	

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		place in the evolution of the site. The concept of glass mosaic tiles will be used interpretively in a subtle manner across the façade of the proposed building so as to perpetuate the elements of the existing building peripheral to the mural.
5	The mural must always remain a prominent piece of public art, and in any major redevelopment of the site the opportunity for incorporating other public art in association with the mural should be explored.	The proposal will retain the mural as a prominent piece of public art which will remain visible and legible from the public domain. As per the design statement, it is intended to perpetuate the memory of the original rt competition which conceived the mural with a modern competition in conjunction with a local gallery to provide supplementary public art to complement the mural and the sites place in the public art history of Hobart.
6	Interpretation of the heritage, aesthetic, associative and artistic values of the mural should form a part of any redevelopment (and any ongoing use of the existing building) of the site.	

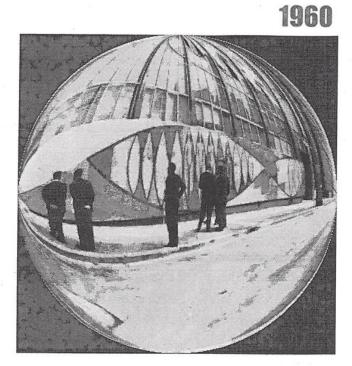
APPENDIX A – Documentation relating to the ABC Mural

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# **ABC Glass Mosaic Mural**

Hobart

## **GEORGE DAVIS**

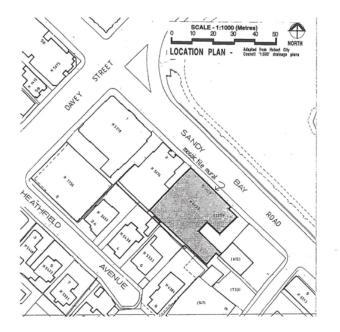


Source: Collection of George Davis, editing deformation Cathrine Baker.

5-7 Harrington Street, Hobart

## Location and boundaries of place

The mural is located at Harrington Street. It is part of the building facade of the Conservtorium of Music, University of Tamania, although originally designed for the Australian Broadcasting Commission (ABC). The mural occupies five bays of the ground floor facade and occurs at the street edge. To the west stands the Masonic Temple and opposite is St David's Park.



5 -7 Harrington Street, Hobart

## Description of place

The mosaic mural covers an extensive section of the lower part of the street elevation of a building designed to accommodate studios and staff offices for the Australian Broadcasting Commision's (ABC) television service. The building's Architect was Oscar A T Gimesy.<sup>1</sup> The Commission felt that the panel of white mosaic tiles to the street elevation as designed by Gimesy should be filled with a suitably designed glass mosaic mural. The panel extends over five bays of the building and measures 9 feet (2.7 metres) in height from the footpath, and 63 feet (19.2 metres) in length along the frontage. The total area of 600 sq ft (56 m<sup>2</sup>) is covered with a total of 150,000 mosaic pieces.

The first stage of the ABC building consisted of three floors, and was designed to accommodate two further floors and a radio tower.

The building facade is a combination of glass mosaic covered columns, Savio Colour No.250, green coloured spandrel glass and Pan-o-glass, Shade "U" - a subtle shade of brown. The bottom border of the mural is black terrazzo.

The Mural was designed and executed by George Davis, a professional artist. Davis was invited on June 4, 1960 to submit a design, along with four others. The competition came down to two designs: one by the artist, Davis, one by designer, Santry. The qualifying entrants were asked to re-submit, with the suggestion from the judging panel that the vertical tie with the projecting blue tiled columns, be more apparent. Final submissions required the supply of scaled drawings in colour on a rectangular strip of paper which could be viewed against a coloured elevation drawing of the front of the building itself. The Commission required this information in order "to see the shape and design in relation to the general mass and colouring of the building", (correspondence November 30, 1960).

George Davis supplied a 1 inch to 1 foot scaled carboon, and a half-size detailed section of an individual figure. The Commission accepted his design on 17/7/1961. The estimated contract price was £1500, with materials supplied by the ABC.

The mural, made up of 150,000 Italian Glass Mosaic tiles, was entirely prefabricated off-site. The success of the Davis design was in heeding the recommendation that the vertical tie-in to the building be more apparent, for reasons of symmetry and readability.

The composition of the mural design is based on the mathematical Infinity sign, which may be further read as the ancient symbol of a fish. Within this form are fifteen stylised figures of pointed elipses in silhouette and graduated within an outline of the infinity shape. The pattern is also representative of the emission of sound waves.

The subject of the Davis' design "is the capacity of wireless and television to embrace all the arts as a cultural medium and suggest the infinite possibilities of radio. The general pattern is static and architectural, yet embodies movement through time,

Oscar A T Gimesey, B.E., M.Arch., ARAIA, ARIBA, FRSA, Architect & Engineer for the Australian Broadcasting Commission, St Kilda Road, Melbourne.

## 5-7 Harrington Street, Hobart

and the infinity sign with the classical figures links the past with the present, and the future.  $^{\rm 2}$ 

The first twelve figures comprise the nine Muses and the three Graces, and the second group of three are a man, woman and child. The arrangement is as follows:

Figures 1, 2, 3, 4	are the Muses:	Clio Euterpe	(History) (Music)
		Thalia	(Festivals)
Figures 5, 6, 7	are the Graces:	Melpomene Euphrosyne Aglaia Thalia	(Tragedy)
Figures 8, 9, 10, 11, 12	2 are the Muses:	Terpsichore Erato Polyhymnia Calliope Urania	(Dancing) (Lyric Poetry) (Singing Rhetoric) (Eloquence, Heroic Poetry) (Astronomy)

"The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character." (see Addendum). Due to the medium of glass mosaic tiles, the whole is "simplified and controlled in tonal pattern, so as not to destroy the basic composition. In this way it is both striking and beautiful". (George Davis, May 11, 1960)

The Graces (figures 5, 6 and 7) are classical nude figures.

The figures either side of the central group, face toward the Graces, a method used to unify the whole along the extensive length. The colour balance also promotes harmony within the whole form. The composition of the trilogy of Graces has be middle figure looking forward and slightly downward, the figures either side face slightly right and left respectively.

The construction involved glass tiles mounted on specially selected paper and entirely prefabricated off-site. The length and breadth of the mural was divided up into a complex grid on which to lay out the pattern. Each 18 inch section was taken to the site in custom made timber boxes individually coded and packed. The artist George Davis described the project as being one of the most complex and intensive, yet most rewarding of his career. The project took over two years to make and erect on site. Davis required the assistance of one artist to help with the mosaic layout, and an expert tiler, with one assistant, to lay the tiles on site. The jointing is staggered like that of brickwork with the erection of each section to the prepared will taking five days in of brickwork, with the erection of each section to the prepared wall taking five days in all. The mosaic fitted perfectly.

A plaque was erected by the Commission in the foyer of the Television studio, explaining the mosaic mural. An accompanying booklet was to be produced, promoting the ABC and illustrating the mural, but this idea was not carried through. It is the largest mural in Tasmania.

 $<sup>^{2}</sup>$  Correspondence from George Davis to T S Duckmaton, Assistant General Manager (Administration), Australian Broadcasting Commission, Sydney, outlining his response to the design brieffogether with the re-submitted cartoon and detailed section of figure, May 11, 1960 <sup>a</sup> Personal conversation with Davis, 1966

5-7 Harrington Street, Hobart

## Statement of cultural significance

Criterion B2:

Importance in demonstrating a distinctive way of life, custom, process, land use, function or design no longr practisd, in danger of being lost or of exceptional interest.

The Italian Glass Mosaic Mural designed and executed by George Davis is a major piece of public art work in Hobart and the only one of its kind in Tasmania.

In 1959 the ABC held a design competition for a mural of the recently completed television studio building at Rosehill, in Perth. The Commission's expansion included the building of a similar station in Hobart, Tasmania, and equally, a design competition was held.

The Competition was amongst a small number of selected artists:

- John Coburn, recommended by Hal Missingham (a member of the previous independent Assessors Committee for the Perth submissions). John Coburn was an entrant for the Perth mural.
- Andor Meszaros of Victoria, who had designed a plaque for the ABC.
   John Santry, an artist in the design section of the Television Service.

- Leonard Hessing
  Stan de Teliga of the Tasmanian Art Gallery, who had just taken up a position as Manager of the Blaxland Galleries, Sydney. (Since he had recently moved to Sydney, de Teliga was not in a position to submit a design as his materials were still in Tasmania.)

As the Commission was intent on including at least one Tasmanian artist, Stan de Teliga recommended George Davis in a letter to Mr T S Duckmanton, the Assistant General Manager (Administration) of the ABC, Sydney, April 1, 1960. George Davis was currently a teacher at the Hobart Technical College, and "an excellent painter and winner of the Tasmanian Travelling Scholarship" 4, which had allowed him to study and travel in Europe.

The design was to be made on the basis of:

Intention to depict the function of general broadcasting in the community or some aspect of this general subject, also:

(i) A subject indicating the contribution made by national sound broadcasting and TV to community life;

- (ii) A subject indicating the contribution made by sound broadcasting and TV to the
- development of the arts; (iii) A subject indicating the contribution made by broadcasting and TV to the life and development of Tasmania; (iv) A subject indicating the value of broadcasting and TV as educational media, in
- The broad sense, eg. as means of disseminating information on current events etc, and providing specialised services for the man on the land, for school children and so on.

<sup>4</sup> de Teliga, April 1, 1960, correspondence.

5 -7 Harrington Street, Hobart

Each entrant was offered a fee of £26.5.0 for their original design submission. (August 16, 1960). The submissions were to be in by April 20, 1960. Davis received the correspondence regarding the entry on April 8, 1960.

The independent Assessors Committee included Hal Missingham, Stan de Teliga and Frank Hinder. The designs were submitted to these assessors in Sydney, before being considered by the Commission in Hobart. The Committee reported that "the designs suffered from the weakness that the submissions failed to relate sufficiently the shapes and colours of their designs to the general mass and detail of the building itself."  $\circ$ 

The Commission inspected the designs on June 4, 1960, with a resolution passed ;'that Davis and Santry be invited to submit revised designs'. The design by George Davis was reported as having the greatest possibilities. The re-submission statement of December 6, 1960 included that the artists be made aware of the criticisms and to submit a small drawing that would be scaled to fit the nominated area of the ABC bullding design.

The 34th Meeting of the Commission was held in Melbourne on the 15th and 16th of December 1960 and the re-submissions of Davis and Santry were inspected on the 16th. A resolution was passed that the Davis proposal be accepted and he be invited to execute the design. The Davis submission had included the mural cartoon along with a detailed section of the mural. On January 18, 1961 correspondence was sent to George Davis stating the selection of his design for the mural.

There was a resurgence of mural works in the late 1950's on the international scene, in particular the United States, Mexico and South America. The co-operation of artist and architect in producing buildings was promoted. The phase was a reaction against the unadorned surfaces of the pre-Second World War Modernist idiom. Colour was 'in', along with a rise in the use of combining building materials of varying textural qualities. With overseas publications readily available the outstanding use of the mural in the countries mentioned above stimulated interest in the Australian environment. A building of international acclaim, with extensive mosaic work, publicised in the 1950's was The University Library of the National Autonomous University of Mexico (1950-52). There, the book-stack tower was entirely mosaiccovered. (Artist: Joan O'Gorman). *Tamanian Architect* ran an issue in Spring 1957 with a full page write up by Tasmanian artist Max Angus entitled "What Price Murals?" It promoted the co-operation of disciplines:

...it would seem that the great masters in the past expressed themselves very ably within the limits of the subject matter expected by the church, and that, except for a brief period, the Egyptian wall paintings we so admire today were produced by painters working to a system which was anything but personal.

The scope today for architect, engineer or artist to work together is practically unlimited, in solving problems of space control by orchestration of colour in relation to form whether in straight colour, abstract design, or pictorial mural."

Max Angus, Tasmanian Architect, 1957, p.15

 $<sup>^{\</sup>rm s}$  Correspondence from Independent Assessors Committee to Mr Duckmanton, May 18 1960.

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In 1983, when the planning for new premises for th ABC was underway, the future retention of the mural was placed under some threat.

From this period and up until the early 1990's an enlightened few were concerned for the future of the mural. At this time the Tasmanian Parliament had no Heritage Legislation, which added to fears that the mural may not be safeguarded.

Max Angus wrote to Dr Gerry Bates MHA, the then Independent Member for Franklin, (September 1991) who in turn wrote to the ABC, expressing his concern for the mural's future.,

Hendrik Kolenberg, former Curator of Art, for the Tasmanian Museum and Art Gallery, was also involved in the efforts to retain the mosaic:

...It is a fine and monumental work and I believe must be cared for and protected from damage in the future. It is one of few examples of public art in Hobart. I understand that the building is likely to be on the market soon and I can only hope that the purchaser of the building will look after that fine piece of art work.

The University of Tasmania put in a submission to the Minister for the Arts and Education for government assistance to purchase the ABC as premises for the Conservatorium of Music. The University gave an assurance that the George Davis Mural would be retained.

#### Criterion E.1:

Importance for a community for aesthetic characteristics held in high esteem or otherwise valued by the community.

The expressions stated above regarding the danger of loss predicate the value of the mosaic. Further weight in terms of its standing is added by the following statement of John White, Member for Denison, in an address to the Lower House in 1988.

... I want to refer briefly to a recent Commonwealth publication, 'Artworks on Commonwealth properties in Australia and Overseas'. That quite fine publication has the mural on the Australian Broadcasting Corporation building in Harrington Street as being done by an unknown artist. It was in fact done by George Davis, a well known and very distinguished Tasmanian-born artist. George Davis was commissioned to do it in 1961 following a design competition, and it was widely publicised in Hobart at the time and up to its completion two years later.

There is suggestion that this mural was the beginning of the ABC's symbol that it uses at the moment - the infinity symbol. It is argued, I believe with some competance, that the Tasmanian artist, Geoge Davis, was responsible for also inspiring that symbol. ?

Hendrik Kolenberg, Curator of Art, Tasmanian Museum and Art Gallery, correspondence August 17, 1988, to Desmond Macauley, see also "Condition and Integrity", nd "Criterion E, 1."

<sup>7</sup> John White, Member for Denison, Hansard, "George Davis Mural", August 3, 1988,.

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Correspondence was sent from Hendrik Kolenberg, August 17, 1988, as curator of Art at the Tasmanian Museum and Art Gallery to Mr Desmond Macauley, author of Spirit and Space: Artworks on Commonwealth Properties in Australia and Overseas, regarding the omission of artist's name for the 'Hobart Mural', listed as unknown in the inventory.

The artist believes that it may have inspired the ABC's infinity symbol first produced then." It is a fine and monumental work and must be cared for and protected from damage in the future."

The Arts community was both astonished and disappointed that an artist of such stature as George Davis was omitted from the publication.

During the movement of the ABC into new premises, and the potential purchase of use by the University of Tasmania there was substantial community comment in *The Mercury*'s "Letters to the Editor".

#### Criterion F.1:

Importance for technical, creative, design or artistic excellence, innovation or achievement.

The laying out of the mosaic proved a major technical achievement. George Davis worked from a studio space in the City. The systemisation and organisation necessary was constant due to the magnitude of the task, with unity in colour control, and the precision necessary for laying the tiny individual mosaics on a pattern designed and executed from the centreline outwards.

Davis designed a table with two panelled sections that could slide apart on rollers, allowing access to the horizontal centreline. A rolling bench-frame was erected to work from above. When the two table top sections are joined two people may work simultaneously. The mosaics were held in tin cans of individual tonal pieces. After some experiment the use of the rolling bench-frame was discontinued.

The mosaics were laid in 2ft x 1ft sections (approx., 60 x 30cm-length times breadth), with each section having two separate codes of an initial and a number as per the designed grid pattern. The sections are also staggered in the manner of brickwork. Davis sought out a speciality paper that was used for the making of geological sample bags. The paper when wet will not tear and it is very strong. The paper was adhered to the front face of the tiled sections, having the strength of a thin, light board. Individual boxes were then made to store each piece, and coded and stacked for erection on site. The tiled sections were placed on a prepared screed surface, and when set, the paper covering was stripped away. The final task was to grout gaps in the tiling, and wash clean.

#### Criterion H.1:

Importance for close association with individuals whose activities have been significant within the history of the nation, State or region.

George Davis was born in Hobart in 1930 and is a significant Tasmanian artist. Davis studied at the Hobart Technical College & Art School studying fine arts and teaching for a period of two years, from 1949-51.

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During this period George Davis applied for the Tasmanian Travelling Scholarship. Some of the competitors were his teachers. Davis worked on his competition entry for six months. Davis recalls the independent judge invited from Sydney, Adelaide Perry and has maintained a strong interest in her work over the years, with a reverential regard for her draftsmanship.

Having gained the scholarship, Davis had three years of study travel overseas, attending the Royal Academy, London in 1952-54. On his return to Tasmania, Davis went through a long period neither painting nor teaching.

Davis' teaching career began in 1955, spanning fourteen years. His first position was at the Hobart Technical College Art School for over five years. He also taught through Adult Education and privately.

His works are represented in the following collections:

Art Gallery of NSW Tasmanian Museum & At Gallery Queen Victoria Museum & Art Gallery, Launceston S H Erwin (National Trust) Gallery, Sydney University of Tasmania Antarctic Division, Department of Science, Hobart Department of Parks, Wildlife & Heritage Department of Sea Fisheries, Tasmania Private Collections, Australia and abroad

For George Davis' other achievements see Addenda to this section.

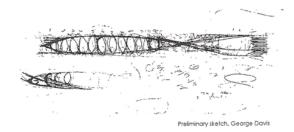
,

5 -7 Harrington Street, Hobart

## Condition and integrity

The mural has not altered since its inception. The extensions and refurbishment to the building in 1994, due to change of use, were carried out by the office of Forward, Viney Woollan (project architect: Elvio Brianese). The team appreciated the integrity of the piece, and consequently the work was untouched.

George Davis believes that the wall could be sawn and dismantled in sections for transportation and re-erection, provided that it was initially protected during possible demolition of the building. "It is quite an asset and could be more effectually sited and displayed."  $_{\rm 0}$ 



Pers.Conv., 1996.

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## Sources of further information (Bibliography)

Angus M, Tasmanian Architect, "What Price Murals?", Spring 1957, p.15

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The Mercury, "ABC TV Mural may be saved", 18/10/1991.

The Mercury, Letters to the Editor, "Mural Morality", Scott Campbell, Department of Philosophy, University of Tasmania, 3/12/1992.

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Personal Conversation with George Davis, 1996.

Pos, M, <u>The Saturday Mercury</u>, Weekend Arts, regular column, "Positively Speaking", "Conservatorium finds new home", October 19, 1991, p.22.

Project correspondence held by the ABC archives.

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TV Week, "Harrington Street Goes Gay", February 26, 1964, p.16-17.

White, J, Comments, Hansard, "George Davis Mural", August 23, 1988, p.2337.

ABC Glass Mural 5 -7 Harrington Street, Hobart

## Addenda

Artist's Achievements
 Mural's Content

One Man Exhibitions

<ul> <li>Hedy Juer Gallery, Hobart</li> <li>Arts Council of Austrolia, Civic Centre, Canberra</li> <li>Solanca Gallery, Hobart</li> <li>Soddlers Court, Richmond</li> <li>"Tasmania's Islands", Tasmanian Museum &amp; Art Gallery</li> <li>Saddlers Court Gallery, Richmond</li> <li>"Man and His Art' Series, University of Tas, A Retrospective</li> <li>Harrington Street Gallery</li> </ul>	1951 1945 1970 1975 1978 1978 1978 1980 1981
Group Exhibitions	
Art Society of Tasmania Invitation     Tasmanian Group of Painters     Australian Women's Weekly Portrait Prize Travelling Exhib.     Tasmanian Art Gallery Acquisitive Exhibitions     Perth Prize for Drawing     Rose Skinner Gallery, Perth     "Recent Australian Painling", Whilechapel Gallery, London     Second Paris Biennale for Young Painters     South Yarra Gallery     "Tasmanian painters", (Adult Eduation sponsored) Canberra     Launceston Art Purchase     Queen Victoria Museum & Art Gallery     Opening Exhibitions, Coughton Galleries Hobart     197.     Southlands Gallery, Canberra	1949 1954-61 1956 1958, 1961, 1965, 1973 1959-60 1960 1961 1963 1963 1964 1964 1964 6 6
"Contemporary Tasmanian Drawing", University of Tas     "Works on Paper", Burnie Art Gallery	9 1980
<ul> <li>John McCaughey Memorial Prize Exhibition, Nat.Gall.Vic. 198</li> <li>Salamanca Arts Festival</li> <li>Freemantle Drawing Prize Exhibition</li> </ul>	
Tutors Art Exhibition, (Ad.Education) Hobart 198.     Saddlers Court, Richmond 198     "Artists Self-Portraits", David Jones Gallery, Sydney 198     "A Place for Art", Plimsoll Gallery, Centre for the Arts, Hobart 19.     Centenary of Hobart Technical College 198     " Moral censorship in the Visual Arts", Aust. Centre for     Contemporary Art, Melbourne 198     "The Portrait and the Nude", Art Gallery of NSW 199	5 7 8 8 8 8 8 9
Commissions	
External Mural ABC Television Studio Harrington St Hobart 196     "Tasmania's Islands", Tasmania Arts Advisory Board 197     Theatre RoyalDome (twelve new portraits commission) 198     Or Winifred M Curtis A M 196     for Herbarium, University of Tasmania, Sandy Bay	8

"Tasmania's Islands", Tasmania Arts Advisory Board
 Theotre RoyalDome (twelve new portraits commission)
 Dr Winifred M Curlis A M for Herbarium, University of Tasmania, Sandy Bay
 Professor Jae Correy for Royal Australian College of Obstetricians & Gynaecologists, Victoria
 The Hon Doug Lowe, for Government of Tasmania

1988 1990

5-7 Harrington Street, Hobart

Publications

<ul> <li>"Recent Australian Painting", Whitechapel Art</li> </ul>	
Gallery London	1961
<ul> <li>Launceston Art Purchase</li> </ul>	1964
<ul> <li>Encyclopaedia of Australian Art, McCulloch,</li> </ul>	
lst and 2nd editions	1968, 1984
<ul> <li>Artists &amp; Galleries of Australia, Germaine,</li> </ul>	
1st and 2nd editions	1979, 1984
<ul> <li>Contemporary Tasmanian Drawings</li> </ul>	1979
<ul> <li>"Works on Paper", Burnie Art Gallery</li> </ul>	1980
<ul> <li>Oil Paintings from Queen Victoria Museum &amp;</li> </ul>	
Art Gallery, Launceston (colour)	1984
<ul> <li>"Burning Desires", Stuyvescent Foundation in</li> </ul>	
Tasmania (with colour reproduction)	1984
<ul> <li>Art &amp; Australia, Vol.22 No.4 (with colour reproduc.)</li> </ul>	1985
<ul> <li>Considering Art in Tasmania (with colour reproduc.)</li> </ul>	1985
RACOCBulletin	1988
<ul> <li>Recent Acquisitions, Tasmanian Mus. &amp; Art Gallery</li> </ul>	1988
<ul> <li>Australian Artists, Australian Birds, B Pearce, (4 colour</li> </ul>	
reprods.)	1989

2. Mural Content

Mu'sae (Muses). Daughlers of Zeus (Jupiter) and Mnemosyne. Born at Pieria at the foot of Mount Olympus. They were nine in number.

(1) Cli'o. Muse of history. Represented standing or sitting with a chest of books or an open roll Cilio, Muse of history. Represented standing or sitting with a creat or books or an operator of paper.
 Cilio, Muse of lyric poetry. Attribute, a flute.
 Fuhli'a. Muse of comedy and idyllic poems. Attributes, a comic mask and wreath of ivy or a shepherd's staff.
 Melporn'ene. Muse of tragedy. Attributes, a tragic mask, a sword or club of Hercules. She wears the colhurnus and is crowned with vine leaves.
 Tensich'ore. Muse of dance and song. Attributes, the lyre and plectrum - (terpein delight + khoros - dance).
 Eralo. Muse of staff.
 Franch. Muse of sublime hymns. Is represented in a thoughtful pensive attributes, without attributes.

(8) Uran'ia. Muse of astronomy. usually represented pointing to a globe with a staff.
 (9) Calli'ope or Calliope'a. Muse of epic poetry. Attributes, tablet and stylus, or a roll of paper or a book.

They were connected with Apollo, who is said to have been the leader of their choir. Mnemos'yne, the Goddess of Memory, daughter of Uranus (Heaven) and Mother of the Muses by Zeus (Jupiter).

Chal'ites (Gratice, Graces), wre three in number. Faughlers of Zeus (Jupiter). Euphrosyne, Aglaia, and Thalia. They are the personification fo grace, beauty, and refinement. They were in the service of other divinities and lent enjoyment to life by gentleness and all that elevates and refines. They were companions of the Muses and dwelt with them in Olympus.

They especially favoured poetry. In most ancient representations they were draped but in later art they are nude. They usually embrace each other, and ar maidens in the bloom of life and beauty.

	AUSTRALIAN HERITAGE COMMISSION REGISTER OF THE NATIONAL ESTATE NOMINATION FORM - PART A Nom # 48
	Dotted Lines to be Completed by Nominator, Boxed Areas are for AHC use only
1.	IDENTIFICATION ABC Glass Mosaic Mural
(a)	CURRENT NAME OF PLACE:
	FORMER OR OTHER NAMESABC Television Studios
(c)	ADDRESS: Number(s)5-7. Street Sandy Bay Road Suburb Hobart. Town/CityHobart. P'code 7000
	Distance form that town
	StateS. Tas. Local Gov't Area Hobart City Council
(d)	DESCRIPTION OF LOCATION, PLACES INCLUDED AND BOUNDARIES
(e)	
(f)	PROPERTY DETAILS:
(g)	
(h)	MAP SHEETS (1:100,000):
2.	SIGNIFICANCE
	STATEMENT OF CULTURAL SIGNIFICANCE: Refer to part B
з.	DESCRIPTION & HISTORY
(a)	GENERAL DESCRIPTION       9630       Large conservation region       9636       Garden         CODE: (tick appropriate       9631       City/Town       9637       Urban Park         numbers)       9632       Part City/Town       9638       Urban Open Space         9633       Historic Site       9639       Other (specify)         9634       Individual building or group
(b)	DETAILED DESCRIPTION: Refer to part B

RE	USTRALIAN HERITAGE CO GGISTER OF THE NATION/ OMINATION FORM -		TE		
(c)	PROMINENT, ASSOCIATE PERSONS & THEIR ASSOCIATION WITH THE PLACE:		HITECT: ER:George Davis - Artist 		
(d)	TIME OF CONSTRUCTION ACTIVITY /PERIOD: (tick appropriate number)	1	9601: Pre 1788 9602: 1788-1850 9603: 1851-1914		9604: 1915-1945 9605: Post 1945
	IMPORTANT DATE(S): (years only)	BUIL	<u>T: 1960</u>	כבבכ	
(e)	CONDITION AND INTEGRIT	Y: Refe	r to part B		
(f)		<ul> <li>✓9821</li> <li>✓9822</li> <li>9823</li> <li>9824</li> <li>9825</li> <li>9826</li> <li>✓9827</li> <li>9828</li> </ul>	Residential Social/recreational Educational Scientific Commercial Industrial Transport/Communication Governmental Military Health	9831 9832 9833 9834 9835 9835	Religious Monument/ Cemetery Forestry Mining Farming/Pastoral Park/Reserve Vacant/Unused Other (specify)
4.	OWNERSHIP				
(a)	GENERAL DESCRIPTION: (tick Numbers)	9983 9951 9952	Crown - Commonwealth Crown - State or Territory Crown - leasehold Private - freehold Local Government	9979 9980 9981	Aboriginal Reserve Dept. of Defence Dept. of Transport Telecom Australia Post
(b)		ddress	burb State		
		ddress	burb State		.Postcode

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AUSTRALIAN	HERITA	GE COM	<b>MISSION</b>
REGISTER OF	THE NA	TIONAL	ESTATE
NOMINATION	FORM	-	PART A

## 5. PREVIOUS HERITAGE ASSESSMENTS OR LISTINGS

(1	) Name of Agency
	Agency Reference Number:
(2	) Name of Agency Result of Assessment Agency Reference Number:
(3	) Name of Agency

Agency Reference Number: .....

6. BIBLIOGRAPHY: Refer to Part B

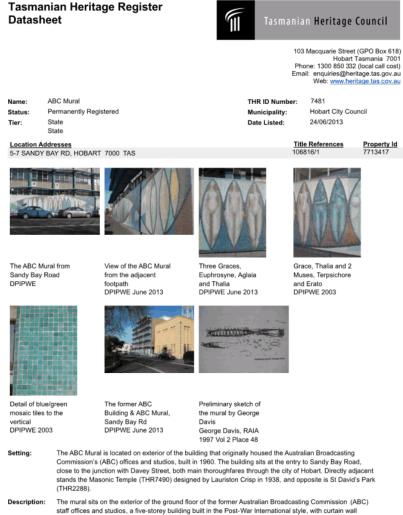
## 7. ATTACHMENTS:

(a)

(b)

8.

MANDATORY	Location map	or sketch	
ATTACHMENTS: (tick if present)	Site Plan or s of significance	ketch showing elements	
	Photographs	/slides	M
OTHER ATTACHMENTS	Boundary pla	n/sketch	
	Other (Please	list)	
DETAILS OF	Name:	Assoc Prof Barrie Shelton	
NOMINATOR:	Position: Organisation	Uni of Tas - Dept of Architecture Desian.	& Urban
	Address	Centre for the Arts, Hunter Stre	et
	Town/Suburt	Hobart State. TAS	Postcode.7000
	Signature	Beune Steller	Date 27,5,97



elevation to Sandy Bay Road. The mosaic mural extends over five bays of the building and measures 2.7 metres high and 19.2 metres long, covering a total area of 56 square metres, with a total of 150 000 Italian glass mosaic tiles. The glass tiles range in colour and tone, dominated by shades of blue and green, creating a patchwork like effect.

The composition of the mural design is based on the mathematical infinity sign, which may be further read as the ancient symbol of a fish or the ABC symbol. Within this form are fifteen stylised figures of pointed ellipses in silouette and graduated within an outline of the infinity shape. The pattern is also representative of the emission of sound waves (see images). The first twelve figures comprise the nine Muses (Figures 1. Clio, 2. Euterpe, 3. Thalia, 4. Melpomene, 8.

Friday, March 10, 2017

Page 1 of 5

Terpsichore, 9. Erato, 10. Polyhymnia, 11. Calliope, 12. Urania) and three Graces (Figures 5. Euphrosyne 6. Aglaia, 7. Thalia), and the second group of three are a man, woman and child. The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character. White mosaic tiles wrap around the ends of the mural and appear internally on the other side of the mural. The vertical piers are covered with blue/green mosaic tiles (Savio Colour No.250).

History:

(This history is largely taken from Royal Australian Institute of Architects (Tasmanian Chapter), 'Twentieth Century Buildings for the National Estate Register', Unpublished Report, 1997. Vol 2. Place 48). Designed by Tasmanian artist George Davis (b1930) in 1960, the mosaic mural covers an extensive section of the lower part of the street elevation of the former studio and staff offices of the Australian Broadcasting Commission (ABC) television service, designed by Hungarian immigrant architect Oscar AT Gimsey during the late 1950s

Co-operation between artists and architects During the post-war period there was a resurgence of mural works on the international scene, particularly in the United States, Mexico and South America. The co-operation of artist and architect in building design was promoted. Colour was 'in', along with a rise in combining building materials of varying textural qualities. With overseas publications readily available, the outstanding use of murals in the countries mentioned above stimulated interest in the collaboration of artists, designers and architects in Australia.

The Spring 1957 issue of local publication Tasmanian Architect ran an article by Tasmanian artist Max Angus (Giles 2005:18) entitled 'What Price Murals?'. Itpromoted the co-operation of disciplines, stating 'The sope today for architect, engineer or artist to work together is practically unlimited, in solving problems space control by orchestration of colour in relation to form whether in straight colour, abstract design, or pictorial mural.' (p15).

During this period a number of architects and artists collaborated on projects in Tasmania , including architect Dirk Bolt and artist/designer Ronald Sinclair (see THR7480, THR7500). In 1958 an exhibition staged by the Tasmanian Chapter of the Royal Australian Institute of Architects and housed in a temporary staged by the tasmanian Chapter of the Royal Australian Institute of Architects and housed in a temporary pavilion designed by Dirk Bolt and constructed in Franklin Square, addressed the issue of 'Design in Architecture and Industry'. The exhibition promoted cooperation between architects, artists, designers and craftsmen in Tasmania, with the hope that design would play a major role in the cultural and economic future of the state (*Tasmanian Architect* August 1960 p10-11).

#### Heathfield Estate

The ABC building, and surrounding properties, are located on part of what was the former Heathfield estate. granted to Asistant Commissary General Affleck Moodie during the 1820s (THR 2289). The estate originally aran from Davey Street almost to Wilmot Street, and from Hampden Road down to what was then Harrington Street (now Sandy Bay Road). Andrew Bell built Heathfield for Moodie between 1827 and 1829, a fine Regency villa and the first of that category of dwelling in Hobart. The Heathfield estate was purchased in 1920 by Cecil Walker, a Hobart solicitor, who transferred it to his

sister Elinor Wayne Walker. In 1925 the first allotment subdivided from the Heathfield estate was the corner of Harrington (now Sandy Bay Road) and Davey Streets. Acquired by the Commonwealth the current site for the Telstra Exchange building, constructed c1950s (Oakman 2000:20). alth Govern ment, it is Over the following years a number of parcels of land were subdivided from the *Heathfield* estate, including the land where the former ABC Building is located. An image of the construction of the Rotunda in St David's Park (c1926) shows that there were a number of modest Georgian cottages located where the current forecourt and car park area of the building are located. Later oblique aerials of the area close to the Anglesea Barracks and Repatriation hospital, dating from the 1950s, show that the area where the ABC offices and studio was built was a vacant block of land (see im).

#### The Australian Broadcasting Commission

The ABC building was designed by Oscar AT Gimsey & Associates, Sandringham VIC, Architects and Engineer for the ABC during the late 1950s. Gimsey emigrated to Australia from Hungary. However, the ABC felt that the panel of white mosaic tiles to the street elevation, as designed by Gimsey, should be filled with a suitably designed glass mosaic mural. The first stage of the ABC building consisted of three floors and was designed to accommodate two additional floors and a radio tower, which were added at a later date. During the 1960s the ABC also owned the nearby Sunray Flats (THR 3441) on the corner of Heathfield Avenue and Davey Street (pers comm.. G Williams Nov 2012). The bachelor flats were designed by Colin Philp, of Philp & Wilson, and were most likely used as accommodation for ABC employees.

#### orge Davis and the Mural

In June 1960 the ABC invited a number of artists and designers to submit a design for the mosaic mural. The selected artists were, John Coburn, an entrant for the Perth ABC studio and offices mural competition held in 1959, Andor Maszaros of Victoria, who had designed a plaque for the ABC, John Santry, a Sydney-based artist in the design section of the Television service. Leonard Hessing and Stan de Teliga of the Tasmanian Museum and Art Gallery who had taken up a position as Manager of Blaxland Galleries, Sydney, but was not able to submit a design.

The Commission was intent on including at least one Tasmanian artist. In a letter to Mr TS Duckmanton, the Assistant General Manager (Administration) of the ABC, Sydney in April 1960 de Teliga recommen Page 2 of 5

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George Davis. Davis was 'an excellent painter and winner of the Tasmanian Travelling Scholarship' (de Teliga 1960 in RAIA Nomination No 48).

George Davis was born in Hobart in 1930, studying fine arts and teaching at the Hobart Technical College and Art School between 1949 and 1951, he was a student of Jack Carrington Smith and Dorothy Stoner. Davis was awarded a Tasmanian Travelling Scholarship which allowed him to attend the Royal Academy in London between 1952 and 1954. Davis' teaching career began upon his return to Tasmania in 1955, and spanned fourteen years. His first position was at the Hobart Technical College Art School, however, Davis also taught at Adult Education and privately. Davis' work is held in public collections across Australia, including the Art Gallery of NSW, the Tasmanian Museum and Art Gallery, Hobart, the Queen Victoria Museum and Art Gallery, Lauceston, SH Erwin Gallery, Sydney and private collections in Australia and internationally. Davis has exhibited extensively, and was responsible for the portraits of ten composers in the restored dome of the Theatre Royal (THR2191), Hobart in 1984 (Kohlenberg 2005:98, RAIA Nomination No 48). Davis is the father of actress Fasis Davis (*Marcury* 16 April 2009).

No 48). Davis is the father of actress Essie Davis (*Mercury* 16 April 2009). The design of the mural was to be made on the basis of: 'Intention to depict the function of general broadcasting in the community or some aspect of this general subject, also: (i) A subject indicating the contribution made by sound broadcasting and TV to the development of the arts: (iii) A subject indicating the contribution made by sound broadcasting and TV to the development of the arts: (iii) A subject indicating the contribution made by sound broadcasting and TV to the development of the arts: (iii) A subject indicating the contribution made by sound broadcasting and TV to the general subject indicating the value of broadcasting and TV as educational media, in the broad sense, eg as means of disseminating information on current events etc, and providing specialised services for the man on the land, for school children and so on: (RAIA Nomination No 48).

The designs were submitted to an independent Assessors Committee before being considered by the Commission in Hobart. The Committee reported that 'the designs suffered from the weakness that the submissions failed to relate sufficiently the shapes and colours of their designs to the general mass and details of the building itself' (correspondence from Assessors to Duckmanton May 1960 in RAIA Nomination No 48).

In the end the competition came down to two designs: one by Tasmanian artist George Davis and one by Sydney-based designer TJ Santry (b1910) (see Kerr and Mendelssohn). The two qualifying entrants were asked to re-submit, with the suggestion from the judging panel that the vertical tie with the projecting blue tiled columns, be more apparent. The Commission accepted Davis' design on 17 July 1961, with an estimated contract price of £1500 and

The Commission accepted Davis' design on 17 July 1961, with an estimated contract price of £1500 and materials supplied by the ABC. The success of Davis' design was in heeding the recommendation that the vertical tie-in to the building be more apparent, for reasons of symmetry and readability.

Davis stated of his design, 'The general pattern is static and architectural, yet embodies movement through time, and the infinity sign within the classical figures links the past with the present and the future ... The Muses are all draped figures, holding symbols of their spheres and following the orthodox Greek character.' Due to the medium of glass mosaic tiles, the whole is 'simplified and controlled in tonal pattern, so as not to destroy the basic composition. In this way it is both striking and beautiful' (Davis, 1960 in RAIA Nomination No 48).

The mural, made up of 150,000 Italian made glass tiles was fabricated entirely off-site in a studio space located in Hobart. Davis' designed a table with two panelled sections that could slide apart on rollers , allowing access to the horizontal centreline. A rolling bench-frame was constructed so that Davis could work from above. The construction involved glass tiles mounted on specially selected paper and entirely pre-fabricated off site. The length and breadth of the mural was divided up into a complex grid on which to lay out the pattern. Each 18 inch section was taken to the site in custom made timber boxes individually coded and packed (Davis 1966 in AIA Nomination No 48, see Related Documents for more information on the process).

Davis described the project as being one of the most complex and intensive, yet most rewarding of his career. The project took over two years to make and erect on site. Davis required the assistance of one artist to help with the mossic layout, and an expert liter, with one assistant, to lay the tiles on site. The jointing is staggered like that of brickwork. The placement of each section on the prepared wall taking five days in all. It is the largest mosaic mural in Tasmania (Davis 1966 in AIA Nomination No 48, see document for more information on the process).

Noraic tiles were a popular decorative material during the mid-twentieth century. In Hobart, during this period, mosaic tiles were used on a number of large public projects indicative of the 1960s, including the Cat and Fiddle Arcade (1962), the 1966 Annexe Building at the Tasmanian Museum and Art Gallery, and the tunnels at the Railway Roundabout and Memorial Fountain (1963). The base of the Memorial Fountain features a mosaic mural. A smaller public mosaic mural was also placed at the entrance to the Clinical School (1970) at the Royal Hobart Hospital (THR 2409). Eminent Tasmanian artist, Max Angus was responsible for the Mondrian inspired mosaic murals which form the spandrels between each floor of the Department of Education and Teachers' Federation Building (THR10057) at 116 Bathurst Street, Hobart.

#### The ABC relocates

In 1983, after approximately twenty years in the building, the ABC started planning for a move to new premises, and the future of the mural was placed under threat. A number of concerned citizens and prominent Tasmanian figures, including Max Angus and John White, Member for Denison, were involved in efforts to retain the ABC mural. However, during the late 1980s the University of Tasmania put in a

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submission to the Minister for Arts and Education for Government assistance to purchase the ABC studio and offices as premises for the Conservatorium of Music, and gave assurances that the mural would be retained.

It has been suggested that the mural was the beginning of the ABC's symbol that it has used for many

years, the infinity symbol (J White, 1988 in RAIA Nomination No 48). The ABC relocated to its current location on Liverpool, close to the Railway Roundabout, during the early 1990s. Extensions and refurbishment of the former ABC studios and offices to the Conservatorium of Music were carried out by architects Forward, Viney Woolan in 1994. The nural remains intact. The ABC Mural is considered a major piece of public art work in Hobart and the only one of its kind in Tasmania (RAIA Nomination No 48).

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Rosinant install, on Marking of Neural Information, Product pool. Oakman, W. Heathfield, 70 Davey Street. Conservation Plan', Unpublished Report, November 2000. Royal Australian Institute of Architects (Tasmanian Chapter), "Twentieth Century Buildings for the National Estate Register", Unpublished Report, 1997. Vol 2. Place 48.

Statement of Significance: (non-statutory

. summary)

The ABC Mural is of cultural heritage significance because it was produced in an era of growing cooperation and collaboration between architects and artists in Tasmania , and a growing emphasis on public art. The ABC Mural is a major and prominent piece of public art, and the only one of its kind in Tasmania. The design and method of installation of the ABC Mural displays a high degree of creative and technical achievement. The large scale of the mural, unity in colour control and precision necessary for laying small mosaic tiles meant that the artist George Davis adopted innovative and original methods to layout and execute his design. The ABC Mural has a special association with significant Tasmanian artist, George Davis, who has works represented in collections throughout Australia. The Mural was commissioned by the Australian Broadcasting Commission (ABC), Australia's national public broadcaster.

## Significance

The Heritage Council may enter a place in the Heritage Register if it meets one or more of the following criteria from the Historic Cultural Heritage Act 1995:

#### The place is important to the course or pattern of Tasmania's history. a)

The ABC Mural was produced in an era of growing cooperation and collaboration between architects and artists in Tasmania, and a growing emphasis on public art. Designed by Tasmanian artist George Davis (b1930) in 1960 for the Australian Broadcasting Commission's (Australia's national public broadcaster) new staff offices and studios designed by Hungarian immigrant architect Oscar Gimsey. The ABC Mural is a major and prominent piece of public art, and the only one of its kind in Tasmania.

The place possesses uncommon or rare aspects of Tasmania's history. b)

No Data Recorded

The place has the potential to yield information that will contribute to an understanding of Tasmania's c) history.

No Data Recorded

The place is important in demonstrating the principal characteristics of a class of place in Tasmania's d) history.

No Data Recorded

The place is important in demonstrating a high degree of creative or technical achievement. e)

The design and method of installation of the ABC Mural displays a high degree of creative and technical achievement The large scale of the mural, unity in colour control and precision necessary for laying small mosaic tiles meant that Davis adopted innovative and original methods to layout and execute his design.

#### The place has a strong or special association with a particular community or cultural group for social or f) spiritual reasons

The ABC Mural is a well-known and appreciated piece of public art that is prominently located adjacent to a main thoroughfare through the city of Hobart.

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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.

The ABC Mural has a special association with significant Tasmanian artist, George Davis, who has works represented in collections throughout Australia. The Mural was commissioned by the Australian Broadcasting Commission (ABC), Australia's national public broadcaster.

- h) The place is important in exhibiting particular aesthetic characteristics. No Data Recorded
- PLEASE NOTE This data sheet is intended to provide sufficient information and justification for listing the place on the Heritage Register. Under the legislation, only one of the criteria needs to be met. The data sheet is not intended to be a comprehensive inventory of the heritage values of the place, there may be other heritage values of interest to the Heritage Council not currently acknowledged.

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# **Apartment Block**

## **Site Servicing Report**

5-7 Sandy Bay Road, Hobart TAS 7000 for Scanlan Architects

9<sup>th</sup> August 2019

19.0174 – Site Servicing Report — 09/08/2019

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## Version control

Revision	Description	Issue date	Issued by
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PROJECT NUMBER **19.0174** REPORT AUTHOR **Dale Hayers** CHECKED BY **Andrew Cupit** 

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## 1 Context

Gandy and Roberts Consulting Engineers have been engaged by Scanlan Architects to provide concept servicing documentation for a proposed apartment block located at 5-7 Sandy Bay Road in Hobart.

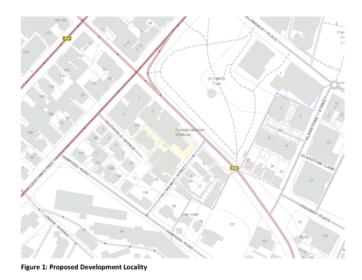
This report has been prepared as part of the Development Application submission process and aims to discuss the methodology in which the sites sewer, water and stormwater infrastructure will be delivered to existing TasWater and Hobart City Council owned infrastructure.

## 2 Development Locality

## 2.1 Development Site

The proposed development is located on the site of the Conservatorium of Music and consists of two apartment blocks, one being 6 levels and the other one 9 levels. The site is owned by Fragrance Group and is addressed as 5-7 Sandy Bay Rd (PID 7713417). These title is: CT 106816/1.

The proposed development area is approximately 3400m<sup>2</sup> in size, whilst the proposed development is approximately 2400 m<sup>2</sup> in size. Development is proposed in the area where an existing six story building and car parking zone is currently located.



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## 2.2 Adjacent Affected Properties

To service development at this property, extension of services is proposed within publically owned streets. Water connections to existing properties in Wilmot Street will need to be reconnected to the proposed upgraded DN100 water main. Upgrades to the sewer and stormwater will not affect other properties.

## 3 Existing Site Services

## 3.1 Site Sewer Connections

The development site is currently served by a range of private lot sewer connections from Sandy Bay Road and Wilmot Street. All existing connections are proposed to be capped and sealed.

### 3.2 Site Water Connections

The development site is currently served by a DN100 CICL water main located in Sandy Bay Road and a DN75 CICL water main located in Walmot Street.



Figure 2: Aerial view of site and surrounding TasWater owned infrastructure.

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## 3.3 Site Stormwater Connections

The development site is currently served by a range of different stormwater connections from Sandy Bay Road and Wilmot Street. Most connections are made direct to kerb and gutter. All flows from the site are directed via kerb and gutter to the DN300 Hobart City Council stormwater main within Sandy Bay Road.



Figure 3: Aerial view of site and surrounding Hobart City Council owned infrastructure.

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## 4 Proposed New Site Services

### 4.1 Site Sewer Connections

It is proposed that the existing DN150 VC will be upgraded to DN225 from the development site, along the front of 3 Sandy Bay Road and will reconnect to existing DN225 Taswater sewer services within maintenance hole A443616 in Sandy Bay Road.

Development Flows are as follows:

Fixture Units: 1531, approximate flow: 11.90 L/s Equivalent Tenements: 55 PWDF: 4.10 L/s ADWF: 0.36 L/s

#### 4.2 Site Water Connections

As the Building is over 25m in effective height, it is assumed that water storage tanks and pumps will be required to serve the site for firefighting purposes. Limited utility water services are available in the area close to the development and so maximising the inflow based on flow available will be required to reduce the volume of onsite fire water storage required.

Network modelling by Taswater has shown that pressures available at the development location are as follows:

Domestic Water:	6.00 L/s @ 70m Head
Fire Services (Sprinkler and Hydrant):	32.00 L/s @ 56m Head

Based on this information, all floors of the development could be served for domestic water services directly from the water main without the need to boost pressures.

Taswater have further provided information that this development is likely to cause head loss within the DN100 water main adjacent to the property to increase to over the Sm/km limit as presented in Water Supply Authority guidelines and so it is unlikely that Taswater will approve connection to this main without upgrade of water services within the region.

As such, upgrade of the existing DN75 Taswater owned water main within Wilmot Street is proposed. Taswater have indicated that this upgrade would likely provide 89m Head under the fire service flow.

Based on the above information, the proposed site demands are:

 Domestic Water:
 6.00 L/s @ 80m Head

 Fire Services (Sprinkler and Hydrant):
 32.00 L/s @ 80m Head

The size of onsite firefighting water storage will be based on the difference between flow available from the new water main and the required fire flow rate (32 L/s) and will be determined during detailed design.

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## 4.3 Site Stormwater Connections

A new DN300 private lot stormwater connection for the site is proposed as part of the development. The private lot connection is proposed to connect to the Hobart City Council owned DN300 stormwater main in Sandy Bay Road via a new manhole adjacent to the site. See Drawing C011.

The existing 5-7 Sandy Bay Road property is entirely hardstand or roof area and so existing flows are estimated as:  $Q_{20}\!=\!114.5$  L/s.

Any additional stormwater flows that are generated from the proposed site due to a higher façade elevation, would amount to a decrease in adjacent areas within the same catchment, thus there is no additional load on the existing Hobart City Council stormwater infrastructure, see Figure 4. As such, stormwater detention is not being proposed for this development.



NOTE: CONSERVATORIUM OF MUSIC SHOWN SHADED IN RED WITH HEIGHT LEVELS

Figure 4: Change in Building Heights

## 4.3.1 Planning Scheme Requirements

The current Hobart Interim Planning Scheme 2015 requires that this development manages stormwater in compliance with the Stormwater Management Code. Code requirements for this development are:

Acceptable Solution A1 of Clause E7.7.1 Stormwater Drainage and Disposal states:

Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure.

This development will be connected to the Hobart City Council owned gravity stormwater network within Sandy Bay Road and so the acceptable solution is achieved.

## Acceptable Solution A2 of Clause E7.7.1 Stormwater Drainage and Disposal states:

A stormwater system for a new development must incorporate water sensitive urban design principles  $R^1$  for the treatment and disposal of stormwater if any of the following apply:

<sup>81</sup> Water Sensitive Urban Design Engineering Procedures for Stormwater Management in Southern Tasmania or the Model for Urban Stormwater Improvement Conceptualisation (MUSIC), a nationally recognised stormwater modelling software package used to assess land development proposals based on local conditions including rainfall, land use and topography, is recognised as current best practice.

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- (a) the size of new impervious area is more than 600 m<sup>2</sup>;
- (b) new car parking is provided for more than 6 cars;
- (c) a subdivision is for more than 5 lots.

This development meets criteria (b) of the clause and therefore water sensitive urban design principles must be incorporated into the design of stormwater management for the site.

Acceptable Solution A3 of Clause E7.7.1 Stormwater Drainage and Disposal states:

A minor stormwater drainage system must be designed to comply with all of the following:

- (a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed;
- (b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or upgraded public stormwater infrastructure.

This development incorporates a minor stormwater drainage system, therefore the design must satisfy both criterion (a) and criterion (b) of Acceptable Solution A3. As the development site is innercity, the 20-year ARI storm must be accommodated in the design. Stormwater flows from the proposed development will increase by 31.4 I/s, however there is no additional load placed on the catchment thus flows can be accommodated within existing HCC stormwater infrastructure.

## 4.3.2 Stormwater Management

- 4.3.2.1 Water Sensitive Urban Design
- 4.3.2.2 Performance Criteria
- Performance Criteria P2 of Clause E7.7.1 requires:

A stormwater system for a new development must incorporate a stormwater drainage system of a size and design sufficient to achieve the stormwater quality and quantity targets in accordance with the State Stormwater Strategy 2010, as detailed in Table E7.1 unless it is not feasible to do so.

The acceptable stormwater quality and quantity targets are:

80% reduction in the average annual load of total suspended solids (TSS) based on typical urban stormwater TSS concentrations.

45% reduction in the average annual load of total phosphorus (TP) based on typical urban stormwater TP concentrations.

45% reduction in the average annual load of total nitrogen (TN) based on typical urban stormwater TN concentrations.

Stormwater quantity requirements must always comply with requirements of the local authority including catchment-specific standards. All stormwater flow management estimates should be prepared according to methodologies described in Australian Rainfall and Runoff (Engineering Australia 2004) or through catchment modelling completed by a suitably qualified person.

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## 4.3.3 Stormwater Treatment Concept

The stormwater treatment for the proposed development may incorporate the following treatment elements, as shown on **Drawing 19.0174-C011**:

1x Ocean Protect 'Jellyfish' Treatment package

## 4.3.4 MUSIC Modelling

MUSIC V6.2.1 was used to model the performance of the proposed stormwater treatment. The model predicted the following performance outcomes:

- Reduction in Total Suspended Solids: 88.20% •
- Reduction in Total Phosphorous: Reduction in Total Nitrogen: Reduction in Gross Pollutants: 64.50% 53.90% •
- •
- 98.90%

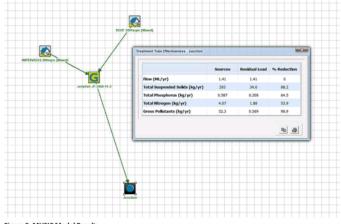


Figure 5: MUSIC Model Results

## 5 Appendix

- Proposed development demand calculations
- C010 Concept Water & Sewer
- C011 Concept Stormwater & Site Reserved
   C012 Concept Vehicle Access & Site Lines

Total Fixture Units	Sewer FU's	Water LU's	Basins	Bath	Trough	WC	Sink	Shower	ET Code	ET (water)	Total ET's (water)	ET (sewer)	Total ET's (sewer)	Area Type
Lower Basement	0	0	0	0	0	0	0	0	-	-				Carpark and Storage
Upper Basement	0	0	0	0	0	0	0	0	-	-	-	-	-	Carparh and Storage
Level 1	176	184	21	6	6	14	7	12	RA03/Pool	0.67/TBC	4.02	1/TBC	6	6 x 2 & 3 Bedrooms Units and Pool Area
Level 2	217	233	25	8	8	16	8	16	RA03	0.67	5.36	1	8	8 x 2 & 3 Bedroom Units
Level 3	245	263	29	9	9	18	9	18	RA03	0.67	6.03	1	9	9 x 2 & 3 Bedroom Units
Level 4	245	263	29	9	9	18	9	18	RA03	0.67	6.03	1	9	9 x 2 & 3 Bedroom Units
Level 5	218	234	26	8	8	16	8	16	RA03	0.67	5.36	1	8	8 x 2 & 3 Bedroom Units
Level 6	172	182	21	6	6	13	7	12	RA03	0.67	4.02	1	6	6 x 2 & 3 Bedroom Units
Level 7	137	147	17	5	5	10	5	10	RA03	0.67	3.35	1	5	5 x 2 & 3 Bedroom Units
Level 8	82	88	10	3	3	6	3	6	RA03	0.67	2.01	1	3	3 x 2 & 3 Bedroom Units
Level 9	39	39	5	1	1	4	1	3	RA03	0.67	0.67	1	1	1 x Penthouse
Total	1531	1633	183	55	55	115	57	111			36.85		55	
Fixture Units	1531		183	220	275	460	171	222						

Fixture Unit Flow	11.9 L/s	Extrapolated from AS3500.2 Table 6.2(B)
Sewer Pipe Size	150 DN @ 2.50%	
	225 DN @ 1.00%	
Sewer Loading Rate	540 L/ET/Day	
Development Area	0.2 Ha	
Peaking Factor 'd'	11.51	
Average Dry Weather Flow	0.36 L/s	
Peak Dry Weather Flow	4.10 L/s	
Domestic Cold Water Flor	5.98 L/s	Extrapolated from AS3500.1 Table 3.2.3
Water Pipe Size	100 DN Nom	
Fire Service Flow	20 L/s @ 800 kPA	(2 Hydrants @ 10L/s 200kPa + 450kPa Elevation Loss + 150kPa Friction Loss)
Fire Service Connection	DN Nom	, , , , , , , , , , , , , , , , , , , ,
Fire Sprinkler Flow	12 L/s @ 800 kPA	Carpark Basement worst case-12x sprinkler heads delivering 60L/min
Fire Sprinkler Connection	DN Nom	

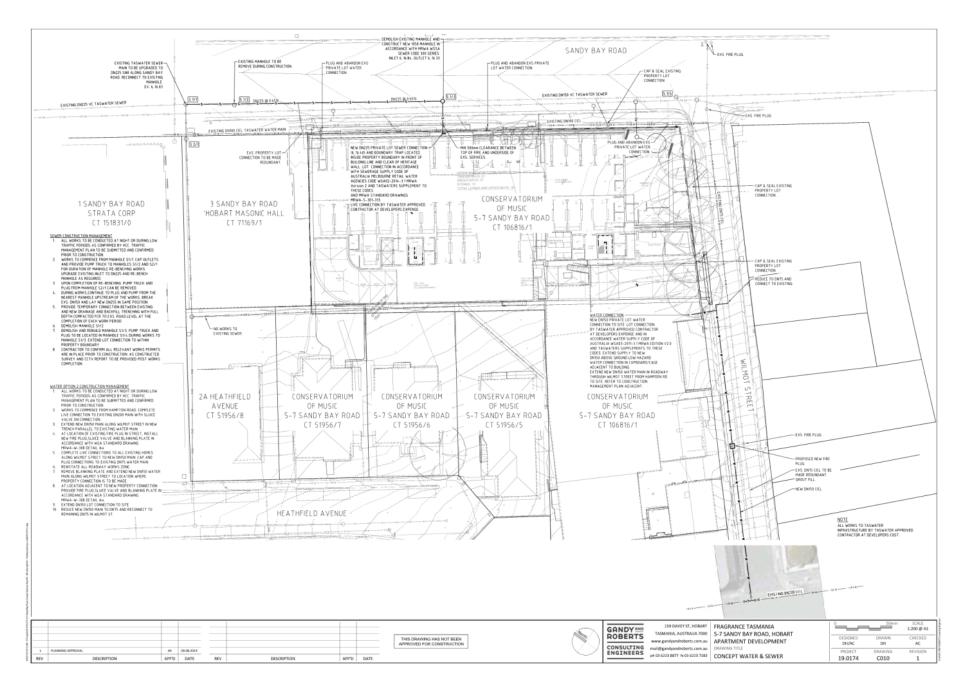
Notes:

Notes: Largest Fire Compartment is carpark basement: Approx 1850sqm = 2 hydrants simultaneous Upper Level Fire Compartments max is around 660sqm = 1 hydrant. When over 25m though ring main required and 2 hydrants needed Over 25m so Pumps and Tanks required, water main to be either upgraded or tank size matched to inflow available.

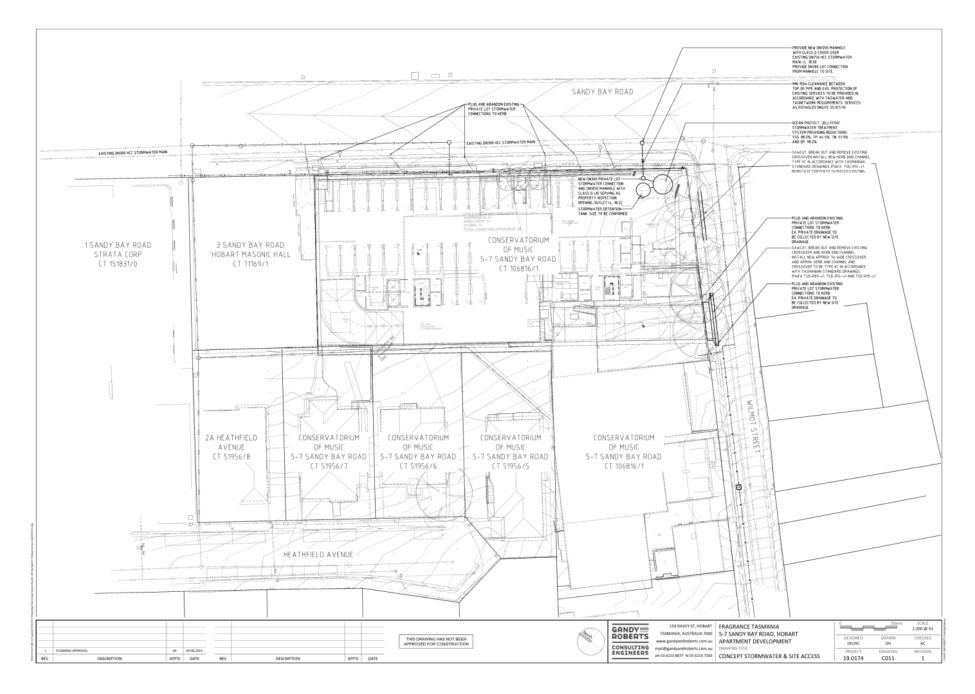
#### STORMWATER

	PROPOSED:	EXISTING:			
Total Titles Area:	3417		3417		
Garden:	35	0.5	35	0.5	
Pavement:	290	8.4	1025	29.5	
Roof:	3091	98.75	2356	75.26	
SW Side of Building:	2400	38.33	580	9.3	
Total		145.98		114.56	
Increase In Flow:		31.42 L/s			
Detention		9426		5 min duration	
		9426 L		Provide 10k Tank	

## Page 572 ATTACHMENT B



## Page 573 ATTACHMENT B



## Page 574 ATTACHMENT B





SITE INSPECTION REPORT RESPONSE TO RFI

ENGINEEERS DIRECTION

This memo aims to address the Request for Additional Information received from Hobart City Council in regards to application PLN-19-706, Item ENGr Fi. This request seeks for further information as to works within the road reservation.

With reference to Gandy and Roberts Engineers drawing CO11, it is noted that there are no proposed changes to kerb or footpath alignments along both Wilmot Street and Sandy Bay Road. An existing driveway entry to the site is to be removed on Wilmot Street (see Figure 1), whilst another existing driveway entry is to be upgraded (see Figure 2).

Reinstatement of kerb and gutter and construction of the upgraded driveway will be in accordance with TSD-R09-v1, TSD-R11-v1 and TSD-R14-v1.

Longitudinal grades on the Wilmot Street footpath are not proposed to change, this demonstrated in the vehicle entry plan C013 as produced by Gandy and Roberts Engineers. All new pedestrian accesses to buildings are proposed to match to existing footpath levels and grades both along Wilmot Street and Sandy Bay Road.

Structural retaining walls are all proposed to be located within the property boundaries, refer Architectural drawings. Construction management through temporary works engineering will be provided by the contractor as to confirm that no risk is placed on existing footpaths and services during excavation.

SIGNED: Mayers

SHOULD THIS ADVICE ENTAIL A COST VARIATION THE CONTRACTOR SHALL INFORM THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK

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HOBART TASMANIA AUSTRALIA 7000 CONSULTING ENGINEERS



Figure 1: Existing Driveway on Wilmot Street to be removed and new kerb and channel installed

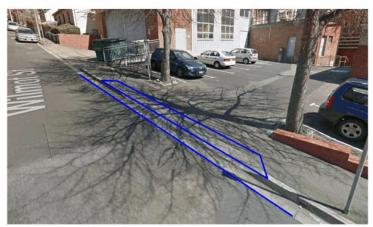


Figure 2: Existing Driveway on Wilmot Street to be upgraded and widened

SHOULD THIS ADVICE ENTAIL A COST VARIATION THE CONTRACTOR SHALL INFORM THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK

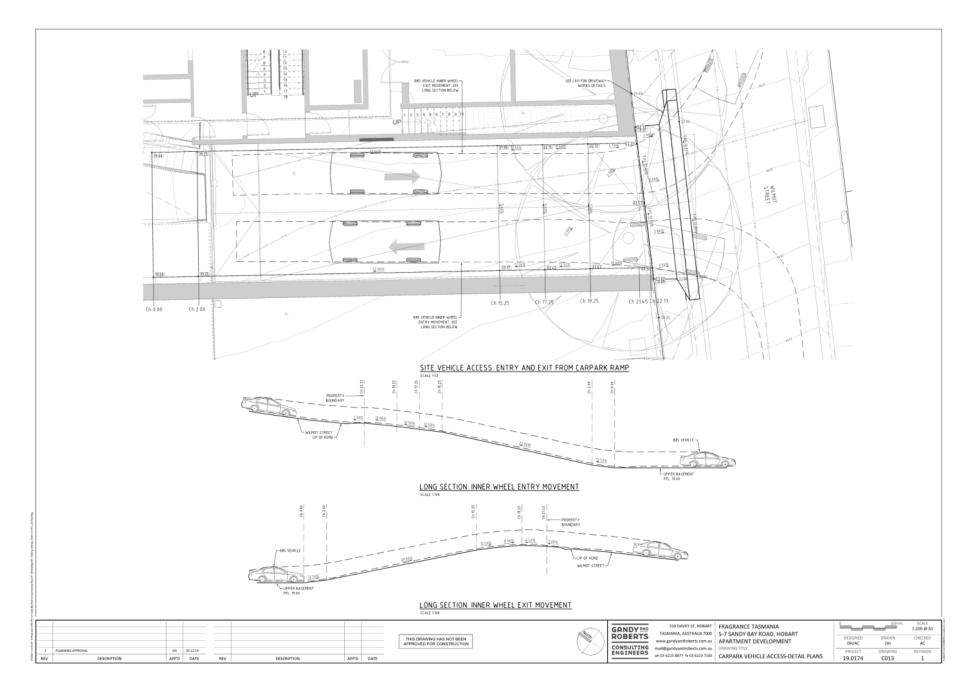
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Figure 1: No changes proposed to footpath, kerbs or lighting along Sandy Bay Rd

SHOULD THIS ADVICE ENTAIL A COST VARIATION THE CONTRACTOR SHALL INFORM THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK

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Fragrance Tas Hobart (Sandy Bay) Pty Ltd

5-7 Sandy Bay Road, Residential Apartments Traffic Impact Assessment

September 2019





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# 1. Introduction

### 1.1 Background

Midson Traffic were engaged by Fragrance Tas Hobart (Sandy Bay) Pty Ltd to prepare a traffic impact assessment for a proposed residential apartment complex at 5-7 Sandy Bay Road, Hobart.

### 1.2 Traffic Impact Assessment (TIA)

A traffic impact assessment (TIA) is a process of compiling and analysing information on the impacts that a specific development proposal is likely to have on the operation of roads and transport networks. A TIA should not only include general impacts relating to traffic management, but should also consider specific impacts on all road users, including on-road public transport, pedestrians, cyclists and heavy vehicles.

This TIA has been prepared in accordance with the Department of State Growth (DSG) publication, A Framework for Undertaking Traffic Impact Assessments, September 2007. This TIA has also been prepared with reference to the Austroads publication, Guide to Traffic Management, Part 12: Traffic Impacts of Developments, 2009.

Land use developments generate traffic movements as people move to, from and within a development. Without a clear understanding of the type of traffic movements (including cars, pedestrians, trucks, etc), the scale of their movements, timing, duration and location, there is a risk that this traffic movement may contribute to safety issues, unforeseen congestion or other problems where the development connects to the road system or elsewhere on the road network. A TIA attempts to forecast these movements and their impact on the surrounding transport network.

A TIA is not a promotional exercise undertaken on behalf of a developer; a TIA must provide an impartial and objective description of the impacts and traffic effects of a proposed development. A full and detailed assessment of how vehicle and person movements to and from a development site might affect existing road and pedestrian networks is required. An objective consideration of the traffic impact of a proposal is vital to enable planning decisions to be based upon the principles of sustainable development.

This TIA addresses E5.0, Road and Railway Assets Code, and E6.0, Parking and Access Code, of the Hobart Interim Planning Scheme, 2015.

### 1.3 Statement of Qualification and Experience

This TIA has been prepared by an experienced and qualified traffic engineer in accordance with the requirements of Council's Planning Scheme and The Department of State Growth's, A Framework for Undertaking Traffic Impact Assessments, September 2007, as well as Council's requirements.

The TIA was prepared by Keith Midson. Keith's experience and qualifications are briefly outlined as follows:

- 23 years professional experience in traffic engineering and transport planning.
- Master of Transport, Monash University, 2006
- Master of Traffic, Monash University, 2004



- Bachelor of Civil Engineering, University of Tasmania, 1995
- Engineers Australia: Fellow (FIEAust); Chartered Professional Engineer (CPEng); Engineering Executive (EngExec); National Engineers Register (NER)

# 1.4 Project Scope

The project scope of this TIA is outlined as follows:

- Review of the existing road environment in the vicinity of the site and the traffic conditions on the road network.
- Provision of information on the proposed development with regards to traffic movements and activity.
- Identification of the traffic generation potential of the proposal with respect to the surrounding road network in terms of road network capacity.
- Review of the parking requirements of the proposed development. Assessment of this parking supply with Planning Scheme requirements.
- Traffic implications of the proposal with respect to the external road network in terms of traffic
  efficiency and road safety.

# 1.5 Subject Site

The subject site is located at 5-7 Sandy Bay Road; 9, 11 and 13 Wilmot Street; and 4, 6 and 8 Heathfield Avenue, Hobart.

The subject site and surrounding road network is shown in Figure 1.





Image Source: LIST Map, DPIPWE

### 1.6 Reference Resources

The following references were used in the preparation of this TIA:

- Hobart Interim Planning Scheme, 2015 (Planning Scheme)
- Austroads, Guide to Traffic Management, Part 12: Traffic Impacts of Developments, 2009
- Austroads, Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections, 2019
- Department of State Growth, A Framework for Undertaking Traffic Impact Assessments, 2007
- Roads and Maritime Services NSW, Guide to Traffic Generating Developments, 2002 (RMS Guide)
- Roads and Maritime Services NSW, Updated Traffic Surveys, 2013 (Updated RMS Guide)
- Australian Standards, AS2890.1, Off-Street Parking, 2004 (AS2890.1:2004)



# 2. Existing Conditions

### 2.1 Transport Network

For the purpose of this report, the transport network consists of Sandy Bay Road, Wilmot Street, Hampden Road, Gladstone Street and Davey Street.

### 2.1.1 Sandy Bay Road

Sandy Bay Road is a major collector road that traverses through the heart of Sandy Bay, connecting between Taroona at its southern end and Hobart, Battery Point and Sullivans Cove at its northern end.

The northern end of Sandy Bay Road terminates at the Davey Street/ Harrington Street junction near the subject site. Access to Sandy Bay Road is available from Davey Street via a left turn slip lane. Sandy Bay Road provides access for a large volume of traffic entering the Couplet, or travelling across the Couplet to Harrington Street.

The average daily traffic volume of Sandy Bay Road is around 18,000 vehicles per day near the subject site. It has peak volumes of 1,400 to 1,500 vehicles per hour<sup>1</sup>.

The left lane of Sandy Bay Road operates as a clearway during the evening peak period (4:30pm to 6:00pm) in both directions. The westbound left lane is a clearway during the morning peak period (7:30am to 9:30am).

On-street parking outside clearway times is a mix of 1/2P, 2P and 8P (metered). Metro bus stops are also provided on both sides of Sandy Bay Road near the subject site.

### 2.1.2 Wilmot Street

Wilmot Street is a one-way road that connects between Hampden Road and Sandy Bay Road. It is approximately 120 metres in length and provides access to a number of residential and commercial properties along its length.

Wilmot Street is estimated to carry approximately 550 vehicles per day. This is based on surveys undertaken in 2017 (54 vehicles recorded during a 1-hour period between 16:44pm and 17:44pm, assuming approximately 10% average daily traffic peak during this period).

The pavement width is approximately 6.0 metres between kerbs. It has a grade of approximately 13% along the majority of its length (downhill grade towards Sandy Bay Road).

Wilmot Street is shown in Figure 2.

<sup>1</sup> Reference: SCATS traffic signal data at the intersection of Harrington Street/ Sandy Bay Road/ Davey Street, February 2017.



# Figure 2 Wilmot Street



View north towards Sandy Bay Road

View to south towards Hampden Road

### 2.1.3 Hampden Road

Hampden Road connects between Davey Street at its western end and Castray Esplanade at its eastern end. It is bisected by Sandy Bay Road, with only left-in/ left-out movements permitted at Hampden Road's junction with Sandy Bay Road. On-street parking is available on the southern side of Hampden Road between Davey Street and Sandy Bay Road.

# 2.1.4 Davey Street

Davey Street is a major arterial road that forms the southbound component of the Davey Street/ Macquarie Street Couplet and carries approximately 43,000 vehicles per day at the Harrington Street/ Sandy Bay Road junction<sup>2</sup>.

Davey Street has three lanes on the approach to Harrington Street/ Sandy Bay Road and three lanes south of the intersection.

Metered parking is available on both sides of Davey Street with 2-hour and 3-hour time restrictions.

### 2.2 Road Safety Performance

Crash data can provide valuable information on the road safety performance of a road network. Existing road safety deficiencies can be highlighted through the examination of crash data, which can assist in determining whether traffic generation from the proposed development may exacerbate any identified issues.

<sup>2</sup> Reference: SCATS traffic signal data at the intersection of Harrington Street/ Sandy Bay Road/ Davey Street, February 2017.



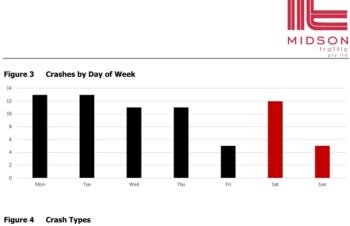
Crash data was obtained from the Department of State Growth for a 5½ year period between 1<sup>st</sup> January 2014 and 30<sup>th</sup> June 2019 for Wilmot Street, and Sandy Bay Road between Gladstone Street and Davey Street.

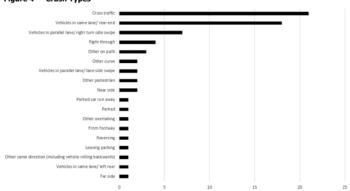
The key findings of the crash data is summarised as follows:

Wilmot Street

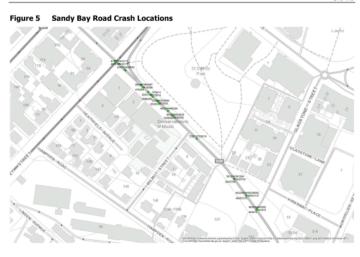
- No crashes were reported in Wilmot Street during this period
- Sandy Bay Road
  - A total of 70 crashes have been reported during this period.
  - <u>Severity</u>. 2 crashes involved serious injury; 13 involved minor injury; 6 involved first aid at the scene; 49 involved property damage only.
  - <u>Day of week</u>. Fridays and Sundays had the lowest crash rates with 5 reported crashes each. All
    other days were relatively consistent, with between 11 and 13 reported crashes. The crashes by
    day of week are shown in Figure 3.
  - <u>Time of day</u>. 48 crashes were reported between 7:00am and 7:00pm. 16 crashes were reported between 7:00pm and midnight. 6 crashes were reported between midnight and 7:00am.
  - <u>Crash types</u>. The most frequent crash types were 'cross-traffic' (21 crashes); 'rear-end' (18 crashes); and 'right-lane-side-swipe' (7 crashes). The crash types are summarised in Figure 4.
  - <u>Vulnerable road users</u>. 5 crashes involved pedestrians (3 at Gladstone Street intersection and 2 at the Davey Street intersection); 2 involved bicycles (both near Davey Street intersection); 2 involved motorcyclists (1 at Gladstone Street intersection and 1 at Davey Street intersection).
  - <u>Crash locations</u>. 37 crashes were reported at the Davey Street/ Harrington Street/ Sandy Bay Road intersection. 15 crashes were reported at the Gladstone Street intersection. 17 crashes were reported at mid-block locations. The crash locations are shown in Figure 5.

The crash data is considered to be typical of a major arterial road in an urban environment. The relatively high crash rate at the signalised intersections of Davey Street and Gladstone Street are most likely attributed to the high volumes on the approaches rather than any specific road safety deficiency. Importantly, no crashes were reported in Wilmot Street or its intersection with Sandy Bay Road.



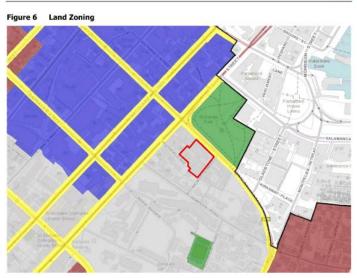






2.3 Land Zoning The subject site is zoned 'Urban Mixed Use' under the Planning Scheme. The zoning is shown in Figure 6.







# 3. Proposed Development

### 3.1 Development Proposal

The proposed development involves the demolition of the existing buildings and the construction of two apartment blocks with the following components:

- 55 apartments (26 x 2-bedroom, 28 x 3-bedroom, 1 x 5 bedroom)
- 86 car parking spaces on two levels. A gate is proposed separating the upper and lower parking areas. A gate also separates the public and resident parking areas on the upper parking level (shown in Figure 7).
- Gymnasium
- Pool
- Common area meeting room
- Café (97m<sup>2</sup>, 46 seats)

The proposed development plans for car parking are shown in Figure 7 and Figure 8.

### Figure 7 Proposed Development Plans – Lower Basement









# 4. Traffic Impacts

### 4.1 Traffic Generation

# 4.1.1 Residential Trip Generation

For high density residential dwellings, the RMS Guide recommends a rate of 4.58 trips per day per dwelling, with a peak of 0.53 trips per dwelling per hour in the morning peak and 0.32 trips per hour in the evening peak.

This equates to the following residential traffic generation for 55 apartments:

- 252 trips per day
- 29 trips per hour in the morning peak
- 18 trips per hour in the evening peak

The RMS Guide also provides trip generation rates for parking spaces associated with high density residential dwellings. The RMS Guide recommends a rate of 3.22 trips per day per parking space, with a peak of 0.35 trips per parking space per hour in the morning peak and 0.26 trips per hour in the evening peak.

The proposed development provides a total of 86 parking spaces for the residential component of the development. This equates to the following trip generation:

- 277 trips per day
- 30 trips per hour in the morning peak
- 22 trips per hour in the evening peak

The higher residential traffic generation rate (based on parking spaces) has been adopted in this report.

### 4.1.2 Café Trip Generation

The RMS Guide indicates a rate of 60 trips per day per  $100m^2$  of floor area, with an evening peak of 5 trips per hour per  $100m^2$ . This equates to a rate of 58 trips per day and a peak of 5 trips per hour.

The café component of the development is likely to be high ancillary the residential component. It is also likely that many customers will arrive as pedestrians (people working in the nearby area, etc). The actual traffic generation of this component of the development is therefore likely to be lower.



# 4.1.3 Total Trip Generation

- The total trip generation of the development is likely to be:
  - 335 vehicles per day
  - AM peak 30 vehicles per hour
  - PM peak 27 vehicles per hour

### 4.2 Trip Distribution

All traffic will access the site via the ramp on Wilmot Street. Wilmot Street is one-way from Hampden Road to Sandy Bay Road. All traffic will therefore enter the site via a left- turn, then exit via a right-turn.

### 4.3 Access Impacts

The Acceptable Solution A2 of Clause E5.6.2 of the Planning Scheme states "No more than one access providing both entry and exit, or two accesses providing separate entry and exit, to roads in an area subject to a speed limit of 60km/h or less".

The development provides one access providing both entry and exit movements, therefore satisfying the Acceptable Solution A2 of Clause E5.6.2 of the Planning Scheme.

### 4.4 Sight Distance

The Acceptable Solution A1 of Clause E5.6.4 of the Planning Scheme states "Sight distances at an access or junction must comply with the Safe Intersection Sight Distance shown in Table E5.1".

The requirements of Table E5.1 for a vehicle speed of 50-km/h in a speed limit of 60-km/h or less (Wilmot Street is 50-km/h) is 80 metres. The available sight distance at the access's junction with Wilmot Street exceeds this minimum requirement (noting that sight distance is only required to the south of the access due to the one-way nature of Wilmot Street). It is further noted that the vehicle speeds are also lower than 50-km/h due to relatively short length of the road and the narrow pavement width (thus resulting in a lower SISD requirement).

The available sight distance therefore complies with the Acceptable Solution A1 of Clause E5.6.2 of the Planning Scheme.

### 4.5 Pedestrian Impacts

A relatively high standard of pedestrian infrastructure is provided on all roads connecting to the site. Existing pedestrian infrastructure in the surrounding road network near the subject site consists of footpaths on both sides Wilmot Street, as well as pedestrian activated crossings at all traffic signals in the surrounding network (including Sandy Bay Road/ Gladstone Street and Sandy Bay Road/ Davey Street).

The nature of the development is likely to result in pedestrian movements to/ from the site to areas such as Hobart CBD and Sullivans Cove.

Pedestrian access to the site is separated from the vehicular access.



# 4.6 Road Safety Impacts

The proposed development was assessed against key road safety considerations. Road safety predominantly relates to the access conditions for all road users.

The following points are relevant for the proposed development:

- Pedestrian access to the site is separated from the vehicular access.
- Access conditions at Wilmot Street is considered safe in terms of the speed environment and sight distance provision.
- There is sufficient spare capacity in Wilmot Street and the surrounding road network to absorb
  the predicted increase in peak hour traffic generated from the proposed development. No change
  to the level of service of the road network would be expected as a result of the development.
- The crash history in the surrounding road network near the subject site does not indicate that
  there are any existing road safety issues that may be exacerbated by the increased traffic
  generated by the proposed development.



# 5. Parking Assessment

### 5.1 Parking Provision

The proposed development provides a total of 86 on-site car parking spaces. This consists of the following:

- Lower basement car park 50 spaces (44 single bays, 6 tandem bays)
- Upper basement car park
   36 spaces (this includes 30 resident spaces and 6 visitor spaces)

## 5.2 Empirical Car Parking Demand

The RMS Guide recommends the following parking provision for high density residential dwellings:

- Metropolitan sub-regional centres (non-CBD)
- 0.6 spaces per 1-bedroom unit
- 0.9 spaces per 2-bedroom unit
- 1.4 spaces per 3-bedroom unit
- + 1 space per 5 units (visitor parking)

This equates to a parking provision of 75 spaces (based on 29 x 3+ bedroom and 26 x 2-bedroom apartments).

The RMS Guide recommends that the restaurant component is likely to require 15 spaces per  $100m^2$  or 1 space per 3 seats (whichever is greater). This is a requirement for 16 spaces (based on seats).

The total empirical parking requirement is therefore likely to be 91 spaces. The parking provision of 86 spaces is a shortfall of 5 spaces under the RMS Guide assessment.

Considering the location of the café, it would be unusual for parking to be provided for customers. It would be likely that many of the customers would be residents of the apartment component of the development, staff working nearby, residents living nearby, etc. Therefore the parking provided caters for the likely demands of the residential component of the development, with some parking available for staff and visitors of the café. The parking supply is deemed to be acceptable on this basis.



### 5.3 Planning Scheme Parking Requirements

The Acceptable Solution A1 of Clause E6.6.1 of the Planning Scheme states:

"the number of on-site car parking spaces must be no less than and no greater than specified in Table E6.1".

For multiple dwellings, Table E6.1 requires 2 spaces for each dwelling and 1 dedicated visitor space parking space per 4 dwellings. This is a requirement for 124 spaces.

The restaurant component requires 15 spaces per  $100 m^2$  of floor area of 1 space for each 3 seats, whichever is greater. This is a requirement for 16 spaces (based on seats) under Table E6.1.

The total parking requirement is therefore 139 spaces.

The development provides a total of 86 spaces, which is lower than the requirements of Table E6.1. The requirements of Acceptable Solution A1 of Clause E6.6.6 of the Planning Scheme are therefore not met. The Performance Criteria P1 of Clause E6.6.1 of the Planning Scheme states:

"The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

- (a) car parking demand;
- (b) the availability of on-street and public car parking in the locality;
- (c) the availability and frequency of public transport within a 400m walking distance of the site;
- (d) the availability and likely use of other modes of transport;
- (e) the availability and suitability of alternative arrangements for car parking provision;

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;

(g) any car parking deficiency or surplus associated with the existing use of the land;

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;

 the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

- (j) any verified prior payment of a financial contribution in lieu of parking for the land;
- (k) any relevant parking plan for the area adopted by Council;

(1) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;



(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code".

The following is relevant with respect to the development proposal:

- a. <u>Car parking demand</u>. The actual parking demands of the development are lower than the Planning Scheme Acceptable Solution. The likely parking demands are set out in Section 5.2. There is sufficient parking provision to cater for the residential component of the development (further noting that residents living in these apartments would be aware of their parking allocation). The café component of the development is considered to be partly ancillary and will also cater for people living and working in the nearby area who are likely to visit as pedestrians.
- b. <u>Availability of on-street and public car parking</u>. On-street parking is available but relatively limited in the surrounding road network. A moderate amount of time restricted and metered parking is available in Sandy Bay Road, Davey Street, Hampden Road and Gladstone Street within a reasonable walking distance to the site. Nearby public car parking stations include Salamanca Square Car Park, Secure Parking (Village Cinema car park) and Hobart Central Car Park.
- c. <u>Public transport</u>. Metro Tasmania operates bus services along Sandy Bay Road. Routes 401, 402, 426, 427, 428, and 429 travel along Sandy Bay Road past the site on a frequent basis.
- d. <u>Other modes of transport</u>. Key attractions such as Salamanca Market, Hobart and Battery Point are within walking distance. The location of the site is likely to result in many customers of the café visiting as pedestrians. Transport to and from other tourist attractions are also available via tourist operated coach and bus services in Hobart.
- <u>Alternative parking arrangements</u>. Alternative parking arrangements are not considered necessary as the development provides sufficient parking to cater for the likely needs of the site.
- f. Shared parking. Not applicable.
- g. Parking deficiency or surplus. Not applicable.
- h. Previous use parking credit. Not applicable.
- i. Cash in lieu. Not applicable.
- j. Cash in lieu contribution. Not applicable.
- k. Parking plan. Not applicable.
- I. <u>Cultural heritage significance</u>. Not applicable.
- m. Significant trees. Not applicable.

Based on the above assessment, the development meets the requirements of Performance Criteria P1 of Clause E6.6.1 of the Planning Scheme.



# 5.4 Car Parking Layout

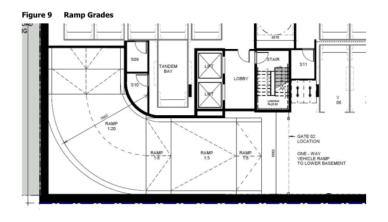
The Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme states "The layout of car parking spaces, access aisles, circulation roadways and ramps must be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking and must have sufficient headroom to comply with clause 5.3 "Headroom" of the same Standard".

Typical car parking dimensions within the on-site car park are as follows:

- Space width 2.4 metres
- Space length 5.4 metres
- Aisle Width 6.0 metres

These spaces therefore comply with the dimension requirements of User Class 1A in Australian Standards, AS2890.1:2004 (Residential, domestic and employee parking).

Ramps within the car park have a maximum grade of 20%, which is permitted under AS2890.1. Transitions are provided at 1:8 either side of the maximum grade as required by AS2890.1. The car parking design therefore complies with the requirements of Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme.





### 5.5 Accessible Parking

The Acceptable Solution A1 of Clause E6.6.2 of the Planning Scheme states:

- "Car parking spaces provided for people with a disability must:
- (a) satisfy the relevant provisions of the Building Code of Australia;
- (b) be incorporated into the overall car park design;
- (c) be located as close as practicable to the building entrance".

The National Construction Code (NCC) classifies the public areas of the development as a Class 6 building. This includes the café. This requires 1 space for every 50 car parking spaces or part thereof to be for persons with a disability.

If the parking requirement of the café is considered in isolation (16 spaces), then the NCC requires a total of 1 disabled parking space. Two disabled parking spaces are provided, therefore the Acceptable Solution A1 of Clause E6.6.2 of the Planning Scheme is met. The disabled parking space is shown in Figure 10.

Figure 10 Disabled Parking Provision Recommendation



Note the residential component of the development is classified as a 'Class 2' building under the NCC, which does not require accessible parking provision.



### 5.6 Motorcycle Parking Provision

The Acceptable Solution A1 of Clause E6.6.3 of the Planning Scheme states "The number of on-site motorcycle parking spaces provided must be at a rate of 1 space to each 20 car parking spaces after the first 19 car parking spaces except if bulky goods sales, (rounded to the nearest whole number). Where an existing use or development is extended or intensified, the additional number of motorcycle parking spaces provided must be calculated on the amount of extension or intensification, provided the existing number of motorcycle parking spaces is not reduced".

This is a requirement for 4 motorcycle spaces (rounded up from 3.45 spaces). No motorcycle parking is provided and therefore the Acceptable Solution is not met.

The Performance Criteria P1 of Clause E6.6.3 of the Planning Scheme states:

"The number of on-site motorcycle parking spaces must be sufficient to meet the needs of likely users having regard to all of the following, as appropriate:

- (a) motorcycle parking demand;
- (b) the availability of on-street and public motorcycle parking in the locality;
- (c) the availability and likely use of other modes of transport;

(d) the availability and suitability of alternative arrangements for motorcycle parking provision".

The on-site car parking is primarily associated with the residential component of the development. It is unusual to provide motorcycle parking for residential developments. It would be expected that parking would be allocated to units (some units will have two spaces in a jockey style parking arrangement). The parking of motorcycles for residents can therefore be achieved by utilising allocated parking spaces, noting that two or three motorcycles can be stored within one car parking space.

For these reasons, the requirements of Performance Criteria P1 of Clause E6.6.3 of the Planning Scheme is met.

### 5.7 Design of Vehicular Access

The Acceptable Solution A1 of Clause E6.7.2 of the Planning Scheme states:

"Design of vehicle access points must comply with all of the following:

(a) in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 – "Access Facilities to Off-street Parking Areas and Queuing Areas" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking;

(b) in the case of commercial vehicle access; the location, sight distance, geometry and gradient of an access must be designed and constructed to comply with all access driveway provisions in



section 3 "Access Driveways and Circulation Roadways" of AS2890.2 - 2002 Parking facilities Part 2: Off-street commercial vehicle facilities".

In this case the access is a non-commercial access. The access was therefore assessed against the requirements of Section 3 of AS2890.1.

AS2890.1 defines the access as a 'Category 1' access (Class 1A spaces, with access fronting a local road accessing less than 100 but more than 25 spaces). The AS2890.1 access requirements are summarised in Table 1.

### Table 1 AS2890.1 Access Requirements

Element	Requirement	Comment	
Access width	3.0m to 5.5m	Access is 5.5m, thus complying with the AS2890.1	
Sight distance	50-km/h frontage road requires minimum 45m sight distance	Sight distance only required to south (one-way road). More than 45m is available, thus complying with the requirements of AS2890.1.	
Geometry	To satisfy design vehicle	B85 vehicles can access and manoeuvre within the car park. AS2890.1 requirements are satisfied.	
Gradient	Maximum grade = 20%	Maximum grade =20% with transitions to 12.5%. Complies with AS2890.1.	
Location	Location of access should not interfere with intersections opposite the access.	No road junction is located opposite the access. AS2890.1 requirements are satisfied.	

Based on the above assessment, the access meets the requirements of AS2890.1, therefore satisfying the requirements of Acceptable Solution A1 of Clause E6.7.2 of the Planning Scheme.

# 5.8 Commercial Vehicles

No dedicated loading bay is provided on-site. An existing loading zone is located on Sandy Bay Road immediately adjacent to the site (operating outside normal clearway times). This loading zone would be utilised for deliveries to the café.

The Acceptable Solution A1 of Clause E6.7.13 of the Planning Scheme states:

"Commercial vehicle facilities for loading, unloading or manoeuvring must be provided on-site in accordance with Australian Standard for Off-street Parking, Part 2 : Commercial. Vehicle Facilities AS 2890.2:2002, unless:



(a) the delivery of all inward bound goods is by a single person from a vehicle parked in a dedicated loading zone within 50 m of the site;

(b) the use is not primarily dependent on outward delivery of goods from the site".

In this case, the development does not typically require commercial loading facilities on site. The use of the site is not primarily dependent on outward delivery of good from the site. The existing loading zone is located within 50 metres of the site, thereby satisfying the requirements of Acceptable Solution A1 of Clause E6.7.13 of the Planning Scheme.



# 6. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed residential and café development at 5-7 Sandy Bay Road, Hobart.

The key findings of the TIA are summarised as follows:

- The proposed development involves the construction of a 9-storey building containing 55 residential apartments and a café. The development will include on-site car parking for 86 spaces over two levels.
- Access to the site is via a single driveway with separated pedestrian access.
- The traffic generated by the development is likely to be 341 trips per day, with a peak of 28 trips
  per hour in the morning peak and 31 trips per hour in the evening peak.
- The development complies with Performance Criteria P1 of Clause E6.6.1 in terms of parking
  provision and Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme in terms of layout.

Based on the findings of this report and subject to the recommendations above, the proposed development is supported on traffic grounds.



Midson Traffic Pty Ltd ABN: 26 133 583 025 25 Hinman Drive Kingston TAS 7050 T: 0437 366 040 E: <u>admin@midsontraffic.com.au</u> W: <u>www.midsontraffic.com.au</u>

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### **Document Status**

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	16 July 2019
1	Keith Midson	Zara Kacic-Midson	8 August 2019
2	Keith Midson	Zara Kacic-Midson	20 September 2019



23 December 2019

Irenenc Planning and Urban Design 49 Tasma Street North Hobart TAS 7000

Dear Irene,

# 5-7 SANDY BAY ROAD - PLN-19-706 - RESPONSE TO COUNCIL RFI

I refer to Council's request for further information for the abovementioned development proposal. This letter responds to the relevant traffic and parking matters raised in Council's request.

### 1. Ramp Assessment

Council have requested the following with regards to Clause E6.7.2 of the Hobart Interim Planning Scheme, 2015:

PA 2.1 Scaled and dimensioned drawing(s) demonstrating the vehicular access design, or a design that provides safe and efficient access.

To satisfy Hobart Interim Planning Scheme 2015 clause E6.7.2 Acceptable Solution A1 and AS/NZS 2890.1:2004 Section 3, the scaled and dimensioned design drawings must include:

 Plan view and long section for the centreline and both outside wheel paths along the proposed crossover and footpath(s), showing the gradient and elevation of the finished surface level and existing natural surface level; including transitions at change of grades, where required to comply with ASINZS 2890.1:2004 Section 2.5.3(d). The long section must demonstrate that a B85 vehicle, in accordance with ASINZS 2890.1:2004 Section 2.6.2, can access the driveway from the road pavement into the property without scraping the car's underside.

### This is provided in Figure 1 and

Figure 2. These plans clearly demonstrate that a B85 vehicle does not scrape the car's underside when undertaking these manoeuvres. The changes in gradient along the ramp is also shown in Figure 2.

The maximum grade of the driveway is 20% for a distance of approximately 14 metres. This grade is approximately 22% on the inward wheel path for this distance. The full length of the ramp into the car park is approximately 19 metres.

1 | Page

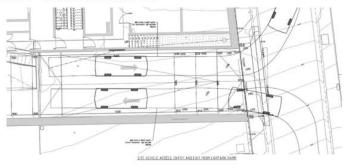
Section 2.5.3(b) of AS2890.1 states the following regarding the maximum grade of straight ramps:

i. Longer than 20 m - 1 in 5 (20%) maximum.

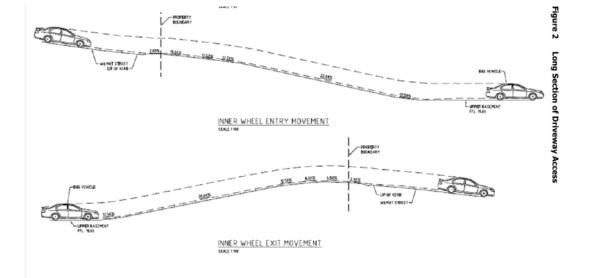
Up to 20 m long – 1 in 4 (25%) maximum. The allowable 20 m maximum length shall include any parts of the grade change transitions at each end that exceed 1 in 5 (20%).

In this case, the full length of the ramp is less than 20 metres in length and therefore the maximum AS2890.1 permissible grade is 25%. The ramp grade complies with this requirement.

### Figure 1 Plan View of Driveway Access







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# 2. Car Parking Layout Assessment

The layout of the car park was assessed against the requirements of AS2890.1 in terms of layout.

The car park services the residential component of the site (User Class 1A). The dimensional requirements of this User Classes is as follows:

User Class 1A (residential):

- Space width 2.4 metres (provided 2.4m)
- Space length 5.4 metres (provided 5.4m)
- Aisle Width 5.8 metres (provided 6.0m)

The parking spaces within the car park all comply with the requirements of User Class 1A (width constraint).

Other requirements of AS2890.1 car parking layout are summarised as follows:

 AS2890.1 requires the location of the columns to be 750mm in from the front of the parking space for 90-degree parking. This spacing is provided within the car park, thus complying with this AS2890.1 requirement.

- The parking spaces that are located adjacent to a vertical wall structure have an additional 300mm clearance as required by AS2890.1.
- Dead end aisles provide an additional 1.0 metre aisle extension (or greater)

Based on the above assessment, the car park meets the requirements of AS2890.1.

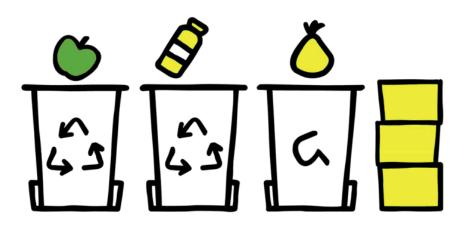
Please contact me on 0437 366 040 if you require any further information.

Yours sincerely,

Keith Midson BE MTraffic MTransport FIEAust CPEng EngExec NER DIRECTOR Midson Traffic Pty Ltd

**4 |** P a g e

# Low Impact Development Consulting



# Waste Management Plan

Multiunit townhouse development

info@lidconsulting.com.au 03 9016 9486 Suite 7, 252 St Georges Rd, Fitzroy North Vic 3068

Waste Management Plan 5-7 Sandy Bay Rd, 9, 11, 13 Wilmot St, 4, 6, 8 Heathfield Avenue Hobart

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### Summary

- A private collection service is recommended to collect the shared 5 x 660L garbage bins and 5 x 660L recycling bins from Block A's bin store twice a week.
- On the day of collection, private waste contractor will access Point 1 via Wilmot Street and shifts bins to the collection location by a mechanical tug and empty the bins and return them to the bin store and then exit Wilmot St in a forward direction.
- It is the responsibility of the Owner's Corporation to ensure that bins do not overfill.
- Building Management is responsible for ensuring the waste contactor has access to the site and bin store on the days of collection.

NOTE: the approved Waste Management Plan (WMP) will be the model to be adopted for this development. Detailed design and as-built installation must incorporate the design proposed and approved under this WMP. Any revisions of the WMP or changes to the approved waste system of the development require Council approval and may require a re-submitted Waste Management Plan.

More detail is contained within this report.

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#### 1 Waste Management

A waste management analysis has been undertaken based on the Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments 2019. The purpose of this report is to document a Waste Management Plan for the above project, as required by Town Planning permit conditions. The report is based on A1.02-A3.01 supplied by Scanlan Architects.

- 2 Parameters
- 2.1 Residential

Break up of units

### Block A: (55 Units) 26 x 2 bed apartments 28 x 3 bed apartments 1 x 4 bed apartment

55 Units Total

	Garbage Waste Streams	Recycling Waste Streams
Council residential waste allowances	Garbage 80L per 1B units per week 100L per 2B units per week 120L per 3B & 4B units per week.	Recycling 160L per 1B units per fortnight 200L per 2B units per fortnight 240L per 3B & 4B units per fortnight
Total estimated weekly waste volume	Block A: 29 x120L + 26 x 100 = 6080L	Block A: 29 x120L + 26 x 100 = 6080L
	6080L of Garbage per week	6080L of recycling per week
Number of bins required to cover total weekly waste generated	Block A: 5 x 660L garbage bins collected twice a week	Block A: 5 x 660L garbage bins collected twice a week

### 3 Background to proposed waste collection solutions

#### 3.1 Proposed bin location

The proposed bin store is located in the upper basement, inside a dedicated bin store where there is a ramp from the basement to the street level and bins will be shifted to the collection location by a mechanical tug.

#### 3.2 Waste considerations

For a development of more than 15 apartments, council requires a private waste collection service. The development will not be serviced by council's general waste, recycling, hard waste or green waste collections.

- Utilizing the Council collection service is not possible in this instance for general waste/recycling, or hard waste due to the large volume of bins to be placed on the kerbside for collection and requirement for bins to be placed in one row all 300mm apart. There is insufficient space on the nature strip.
- Bin store size(s) 10 bins (660L) will fit in the Block A's bin store. Building management can rotate bins to place full ones at the back and empty at the front. •
- The ramp is a relatively moderate grade of 1:5 and 1:8.
- A mechanical tug may be required to take bins up the ramp.

### 4 Proposed collection solutions

#### 4.1 Garbage and recycling waste stream collections

- A private collection service is recommended to collect the shared 660L garbage and 660L recycling bins from the bin room twice a week
- The Owner's Corporation is responsible for all aspects of waste management including access for the waste contractor to enter the site and bin store on the days of collection.
- A private waste contractor will access Point 1 via Wilmot Street and shifts bins to the collection location by a mechanical tug and empty the bins and return them to the bin store and then exit Wilmot St in a forward direction.

#### 4.2 Hard waste collection

- A private collection service arranged by the owner's corporation will be engaged for hard waste items as required. Items will be required to be stored within and collected from apartments by the hard waste collection contractor. Alternatively, items can be taken to the local waste recovery centre by residents.
- Residents should liaise with body corporate to ensure hard waste collection occurs throughout the year, minimising substantial hard waste that is placed on the kerbside or in the bin store.

#### 4.3 Green Garden Waste Collection

- More commonly the private maintenance contractor will be responsible for removing any green waste from common areas and can also by arrangement, remove green waste from private spaces. Residential green waste is not applicable for properties under 400sqm.

#### 4.4 Miscellaneous recycling containers

 Container(s) with drawers or number of small stackable plastic crates minimum footprint 500x500mm are recommended to be supplied to house recyclables such as batteries, light globes, printer cartridges, e-waste, and clothes. These items are to be recycled periodically as arranged by an interested tenant or the Owners Corporation eg by the maintenance or gardening contractor

#### 4.5 Waste Vehicle Requirements

- A private collection service is recommended to collect all waste from the bin room twice a week.
- A 6.4m min loader or 8.8m MRV waste vehicle is to access Point 1 via Wilmot Street and shifts bins to the collection location by a mechanical tug and empty the bins and return them to the bin store and then exit Wilmot St in a forward direction.
- The waste contractor will be responsible for retrieving, emptying and returning bins to/from the bin store at the time of collection.
- Building Management is responsible for ensuring the waste contactor has access to the site and bin store on the days of collection.

#### 5 Allowance for different rates of waste generation

- Should the garbage allowance be exceeded, the first action should be to encourage the tenants to reduce their garbage and recycle more.
- Garbage volumes can also be reduced if E-waste, food waste and soft plastics are directed to recycling streams (see below).
- Should recycling be exceeded while garbage is not exceeded then, residents should be reminded to crush and flatten all cardboard boxes and plastic containers before placing these in the recycling bin(s). If this occurs effectively and there is still an issue it may be appropriate to swap a garbage bin for a recycling bin.
- A waste audit can be undertaken to understand the content of the waste bins and provide images and feedback to clients of good or poor recycling practices.
- Should recycling be exceeded then it may be appropriate to obtain an additional recycling bin.
- Balers can help to reduce cardboard/paper volumes. Refer to http://wastech.balers.bramidan.com.au/ for options on typical units and sizes.
- The installation of plastic or can crusher units may help facilitate better crushing of these
  recyclable waste items. See www.plasticbottlecrusher.com
- If glass bottles comprise a significant amount of the recycling waste, then the option might be to include an onsite bottle crushing Bottle crusher http://www.bottlecrusher.com.au/ or Bottle cycler system www.bottlecycler.com in the development to reduce bottle volumes and collection frequencies.
- More space could readily be made available in the bin store / property for additional bin storage.
- More regular collections of garbage or recycling could occur.

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### 6 Design inclusions

#### 6.1 Litter spread

- Litter spread is to be managed by ensuring garbage and recycling bins are not overloaded, and lids are always closed.
- The private collection contractor's agreement should require their pickup of any waste that spills from the bins during emptying.

#### 6.2 Traffic Management

Traffic management along Wilmot St should not be an issue with the quick emptying times. The collection zone is also an appropriate distance from the intersection.

Engineering standards – appropriate engineering standards will need to be addressed in the detailed design stage to ensure adequate basement pavement depths and roadway widths, heavy duty pit lids that are trafficable by collection vehicles, wider driveway splays and sweep paths.

#### 6.3 Noise Management

Minimizing noise associated with waste collections include:

- Locating bin stores and collection points at an appropriate distance from residences including minimising the need for the waste vehicle to reverse; insulating waste chutes.
- Collections occurring during the below stipulated collection times restricts the hours of noise from collections.
- · Collection vehicles should not break up bottles at the point of collection, only once off site.
- Compaction of waste should only be carried out whilst waste vehicles are on the move.
- 6.4 Odour reduction

Odour from waste primarily emanates from bin store areas. Control of odour must occur in the bin store area with the provision of sultable natural or mechanical ventilation. If installed the mechanical ventilation system for the bin storage area must not cause a public health nuisance (noise and odour generation) and comply with EPA requirements and in accordance with the ventilation requirements of the Building Code of Australia and AS 1668.2.

 The bin store area and bins should be monitored and cleaned on a regular basis to remove sources of smells.

#### 6.5 Bin store design

Bin Store Design must include the following:

- A layout that allows access to all of the bins with adequate size to allow easy
  movement/transfer of the required number of bins. There is to be convenient access by
  residents and made easily accessible to people with limited mobility.
- Space suitable for bin wash down is to be available in the development. If this is the bin store then the floor is to be graded to a waste outlet with a litter trap.

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- A water tap and hose installed in or near the bin wash areas and correct drainage to sewer . (never direct waste to storm water drains) and should be designed in accordance with the relevant EPA Bunding Guidelines. Drains to the sewer to be located undercover to prevent rainwater infiltration.
- Adequate doorway width to allow the easy access of bins and larger hard waste
- Bin stores must be vermin proof particularly where food waste is included. (The bin store is in the basement which is a closed space and considered to be largely vermin proof). • Consider using baits for vermin control and maintained as an ongoing requirement.
- A waterproof power point in or near the bin store.
- Adequate lighting
- · Adequate mechanical or natural ventilation
- Space for a tug or bin lifter if required by the waste contractor(s) / facility management. •
- Meter boxes should not be included in bin stores due to the need to regularly wash bin stores out.

#### 6.6 Collection Times

Collection times - Domestic waste - bin collection shall be in accordance with EPA and Council guidelines and shall be completed at times of least interference / inconvenience to the local amenity and traffic conditions. The EPA Noise Control Guidelines Publication 1254 it states:

Collections occurring more than once a week should be restricted to the hours 7 am - 6 pm Monday to Saturday

Collection times - Waste collection from private services are best suited on an alternate day to the Council service and completed at times of least interference/inconvenience to the local amenity and traffic conditions.

#### Internal waste Management 6.7

- General / domestic garbage shall be placed in plastic bags before placement into bins Recycling materials are not to be bagged and but should be placed loosely into the recycling bins. (Items in plastic bags in recycling bins are not recycled). Recyclable items in domestic bin collections include:
  - Rigid plastic containers 0
  - 0 Paper, cardboard
  - Glass bottles and jars 0
  - 0 Steel cans, aluminium cans and aluminium foil are among items that can be recycled.
- But exclude:
  - Plastic bags
     Garden hoses

  - 0 Rope (ropes and garden hoses can wrap around and damage equipment in the recycling plant).
- To improve recycling:

- Empty containers and bottles of any leftover food or liquid. Ideally rinse them out.
   Remove lids before placing them in the recycling bin.
- All waste bins are not to be placed out prior to 24 hours before the collection and to be returned to the storage are within 24hours of collection.

#### 6.8 Signage, education & safety

It will be the responsibility of the Owner's Corporation / Building Management to ensure all residents have all of the material available to them and that they adhere to the required practices regarding waste management, sustainability and promoting waste minimization. All residents are to operate and maintain safe practiced in all aspects involving the waste management of the development.

- All education material will be in accordance with Council requirements or if this is not available, per signage on the following website: https://www.sustainability.vic.gov.au/government/waste-management/public-placerecycling?query=signage
- Directional signage should be installed to direct occupants and bin collectors to the bin storage areas.
- Instructional signage within shared communal bin stores is to indicate which bin is for garbage and which is for recyclables (or food waste/organics) and also include what items can be included in garbage and recycling bins, and items that need to be disposed of via other services.
- The hard waste storage zone should also be signed.
- A sign will be placed on the wall in the bin store identifying that the following soft plastics can be recycled at any location identified on the Redcycle website <u>http://www.redcycle.net.au/where-to-redcycle/</u> (Currently primarily Coles store locations). Quick guide to some most commonly recycled Soft Plastic items:



- A preliminary OHS risk assessment has been included to identify potential OHS issues, however this risk assessment does not replace the need for the building management/Owners Corporation and collection contractors to complete their own OHS assessment for the bin collection process.
- If the building management/Owners Corporation or contractors OHS requirements demand it, a mechanical tug (details below) will be provided for shifting bins to the collection locations.

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### 7 Ongoing management

The management and maintenance of the waste system will be a responsibility of the apartment complex building management/owner's corporation. Items to be addressed in maintaining the system include:

- The tenancy agreements should outline a schedule of waste collection dates in accordance with the above parameters.
- Allocation of responsibility to the contractor for bringing bins from the bin store location to
  the collection vehicle and also for returning the emptied bins to the bin store. Responsibility
  should include ensuring any waste that spills from the bins during emptying is collected by
  the contractor.
- Ensuring the waste contractor has access to the site and bin store on the days of collection.
- That bins and bins stores are monitored regularly with bins rotated as required to ensure areas are fully operational with regular cleaning of the bins and bin store spaces and cleanup after collection if necessary.
- Management and coordination for hard waste collection
- Managing communal composting areas (if applicable)
- Provision of information to residents in relation to the requirements of using the system eg boxes to be flattened, containers for recycling washed, bagged recycling not permitted, bins to not be over-full etc
- Monitoring and feedback to residents if the system is not working properly. Undertake a
  waste audit should it be suspected waste is not being placed in the correct bins

#### 7.1 Further Waste Reduction Measures

Separation of garbage and recycling should initially occur in residences. For this reason, the
development should include streamed waste bins (perhaps included under the sink) in
each dwelling. Bin types include garbage (Landfill) waste, Recycling, Organic Food Waste,
and Soft Plastics.

#### All bins should be placed alongside each other to ensure recycling is easy.

- Miscellaneous recycling container(s) a container(s) with drawers or number of small stackable crates minimum footprint 500x500mm are recommended to be supplied for incidental recyclables such as batteries, light globes, printer cartridges, e-waste and clothes. These items are to be recycled monthly or as arranged by the Owners Corporation/ Building Management.
- E-waste or electronic waste including computers and accessories, televisions and occasionally printers can be recycled for free at select drop-off locations under the National Television and Computer Recycling Scheme (NTCRS). E-waste is not to be disposed of in landfill bins, A 120L MGB Bin (minimum size) is to be included. A separate bin should be provided for printer cartridges, batteries, old phones, light globes.

This bin is to be emptied periodically by arrangement through the owners corporation / building management. Locations and more information can be found at:

- http://www.recyclingnearyou.com.au/ewastescheme/
- <u>http://www.techcollect.com.au/</u>

Local information regarding the disposal and recycling of common household items can be found at:

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http://www.hobartcity.com.au/Environment/Recycling\_and\_Waste/Tip\_Information

Recycling contractors for different products can be found at the website http://recyclingnearyou.com.au/

- Polystyrene is collected for recycling by various councils. In addition suppliers such as ecycle www.ecyclesolutions.net.au will deliver whitegoods and either collect clean polystyrene from retailers or take polystyrene away after delivery.
- Unwanted bulky items, clothes and other consumables can be donated to charities, sold on
  online or at second-hand local market places as is if in good condition. If repair is required,
  seek out repair community centres for re-purposing.

#### 7.2 Organic food waste diversion methods

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- As 40% of domestic waste is from food, reducing the volume of food waste in bins, will assist residents in reducing their volume of garbage. See <u>http://yourenergysavings.gov.au/waste/reducing-recycling/kitchen-food-waste</u>
- Aerobic green cone bio-biodigesters are an option for some households including multi-unit developments to divert food waste (including bread, dairy, meat and small bones). Refer to https://www.treehugger.com/lawn-garden/green-cone-solar-food-digester-will-reduce-90food-waste-your-backyard.html
- Bokashi bins <a href="http://www.bokashi.com.au/">http://www.bokashi.com.au/</a> are an effective way of reducing waste volumes and breaking down food waste for apartment dwellers. Food scraps are placed in bokashi bins with an accelerator mix added. The volume of waste food is reduced, and the waste in the bin is already on the path to being composted. Bokashi bins can be emptied into compost bins so providing a compost bin on site and having a garden also helps. Bokashi bins are also available from <a href="http://www.eco-organics.com.au/about-us.htm">http://www.bokashi bins with an accelerator mix added. The volume of waste food is reduced, and the waste in the bin is already on the path to being composted. Bokashi bins can be emptied into compost bins so providing a compost bin on site and having a garden also helps. Bokashi bins are also available from <a href="http://www.eco-organics.com.au/about-us.htm">http://www.eco-organics.com.au/about-us.htm</a>
- On site food and organic waste treatment/pre-processing systems can reduce the footprint area of a bin store by reducing the number of bins required, and can reduce waste collection frequency when food or organics waste can be diverted to these units. These units reduce food scraps to 90% of their original volume in 24 hours, through heat and agitation, and the by-product is a compost material. These units take all kinds of food ie fruit, vegetables, meat, fish, eggshells so sorting is not an issue. These units prevent generation of the greenhouse gas methane (methane is 25 times more detrimental than carbon dioxide) which otherwise is generated when organic wastes decompose anaerobically in landfills. The suppliers usually can provide Green-house gas cost v benefit assessments of their units.
  - Closed Loop Organics provide CLO'ey bins of different capacity and rental servicing costs. More information available at: <u>http://www.closedloop.com.au/domestic-</u> <u>composter</u>
  - Other systems such as PulpMaster, EcoGuardians (Gaia system) or Biobin generally
    provide systems that dehydrate or mash up food waste to reduce total volumes, but
    operate slightly differently to the above two systems.
- Surplus food re-use. There are organisations that collect surplus food for human consumption. Collectors that provide this service within the City of Hobart include:

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- Foodbank Hobart is a non-denominational, non-profit organisation that acts as a pantry to the charities and community groups who feed the hungry. It was first established in 1992 in NSW and now has a presence in every state and the Northern Territory with distribution centres in all state capitals as well as a number of regional centres. https://www.foodbank.org.au/tasmonia/
- SecondBite Hobart SecondBite redistributes surplus fresh food to community food programs around Australia. Food is donated by farmers, wholesalers, markets, supermarkets, caterers and events. This high quality surplus food is redistributed to community food programs that support people who are homeless, women and families in crisis, youth at risk, indigenous communities, asylum seekers and new arrivals. Contact: 1800 263 283

#### 8 Supplementary information

### 8.1 Mechanical Tug Details

Where mechanical tugs are recommended, the following details will assist.

Suppliers include <u>www.electrodrive.com.au</u>, <u>http://www.mastermover.com.au</u>, <u>www.sitecraft.net.au</u>, <u>http://www.hercules.com.au/index.php?tug2</u>. Space required for tug storage:

Four-wheel bins can be towed directly by the tug and require less space as only the tug is required to be stored, not a trailer. Towing brackets and directional wheel locks are available from Sulo <u>www.sulo.com.au</u> and can readily be retrofitted to 660-1100L bins for towing. Towing brackets and wheel locks do not project outside of the bin footprint area.



Mechanical tug systems will usually cost in the range of \$10,000 - \$15,000, with trailer possibly extra.

#### 8.2 Sustainability initiatives

Residents / Occupants should be made aware of Sustainability Victoria's recommendations for waste reduction <u>www.sustainability.vic.gov.au</u>

Where possible they should practice the waste reduction hierarchy identified in the Environmental Protection Act 1970;

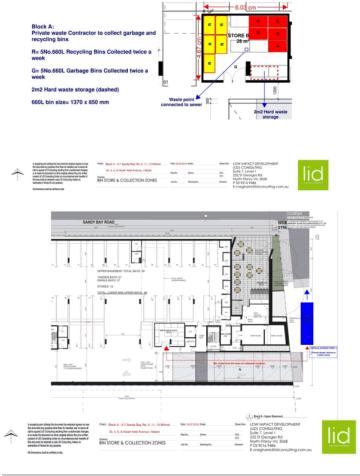
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City of Hobart Council website: Hobart City Council website: http://www.hobartcity.com.au/Home

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## Appendix 1 - Bin collection plan



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## Appendix 2 - Preliminary risk review

APPENDIX 2 Risk Assessment – Waste Collection process For proposed development at 5-7 Sandy Bay Rd, 9, 11, 13 Wilmot St, 4, 6, 8 Heathfield Avenue Hobart (Block A)

Class 1 Risk = Potential to ca injury.	use death or permanent	Class 2 Risk = Potential attention.	to cause i	injury requiring medical	Class 3 Risk = Potential to car with first aid.	use an injury treatable	
Activity	Steps involved in cor risk	npleting activity &	Risk level	Risk mitigating measures		Implementatio	
Moving bins within waste / recycling collection room on the upper basement	Manual handling. Ris handling injuries.	Manual handling. Risk of manual handling injuries.		Appropriate design of a space. Training of design		Building Designer / Owners Corporation	
Moving of bins from bin store to collection space	in store to collection Risk of manual handling injuries		2		oin sizes of 660L &/ or mechanical tug		
Moving of bins from bin store up the ramp to the collection zone	Distance bins to be r including up ramp of enough width for sho and cars in one way	5500mm wide – just ring by pedestrian	2	Use a mechanical tug t handling injuries. Install curved mirrors at bottom of the ramp to	the top and potentially	Building Designer / Owners Corporation	
	Risk of manual hand not used and bins ar heavy waste.		1	around corners and be transfer operation occu	iming.		
	Risk of collision with o restricted vision point bottom of the ramp, roadway use in the le	s at the top and and shared	2	transfers take place an	take feedback from bin		
				oject. It is <u>not</u> to replace o e waste removal process	a risk assessment / Safe W	ork Method	

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### ireneinc & smithstreetstudio PLANNING & URBAN DESIGN

10 October 2019

The General Manager Hobart City Council GPO Box 503 HOBART, TAS 7001

Dear Mr Heath,

#### COUNCIL CONSENT REQUEST - 5-7 SANDY BAY ROAD

I am writing to request Council consent to lodge a development application at 5-7 Sandy Bay Road, Hobart. This consent request forms part of a full development application for the site, which has been submitted to Council for planning approval.

The application requires works on land that is owned by Hobart City Council, and as required by S52 of the Land Use and Approvals Act 1992, we request Council's consent to lodge the forthcoming development application.

The following works are proposed within Wilmot Street:

- · Relocation and re-establishment of an existing crossover from the site to Wilmot Street (southeastern side) and installation of new kerb and channel were crossovers removed and relocated;
- Removal of existing crossover (north-eastern side);

• Upgrade of existing DN75 Water Main in Wilmot Street.

The works proposed within Sandy Bay Road are as follows:

- New DN1200 manhole over existing HCC stormwater main & plug and abandon several existing private stormwater connections to the kerb;
- Upgrade of existing DN150 sewer connection to DN225; and
- New DN300 private stormwater connection to existing DN300 main in Sandy Bay Road.

The specific details of the proposed works are detailed in the accompanying attachments to the Site Servicing Report prepared by Gandy and Roberts. If you have any further queries in relation to any of the above, please contact me on 6234 9281.

Yours sincerely

J. Corroll

Phil Gartrell Planner **IRENEINC PLANNING & URBAN DESIGN** 

smithstreetstudio ireneinc

49 Tasma St, North Hobart, TAS 7000 Tel (03) 6234 9281 Fax (03) 6231 4727 Mob 0418 346 283 Email plann com.au

PLANNING TAS PTY LTD TRADING AS IRENEINC PLANNING & SMITH STREET STUDIO PLANNING & URBAN DESIGN ABN 78 114 905 074



Enquiries to: City Planning Phone: (03) 6238 2715 Email: coh@hobartcity.com.au

11 November 2019

Phil Gartrell (IreneInc Planning & Urban Design) 49 Tasma Street NORTH HOBART TAS 7000 mailto: tim@ireneinc.com.au

Dear Sir/Madam

#### 5 - 7 SANDY BAY ROAD, HOBART - WORKS IN ROAD RESERVE AND STORMWATER UPGRADES NOTICE OF LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-19-25

#### Site Address:

5-7 Sandy Bay Road, Hobart

#### Description of Proposal:

Works in Road Reserve and Stormwater Upgrades related to proposed demolition and development of a multi-level residential apartment complex

#### Applicant Name:

Phil Gartrell IreneInc Planning and Urban Design

PLN (if applicable):

PLN-19-706

I write to advise that pursuant to Section 52 of the Land Use Planning and Approvals Act 1993, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.

Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 
 Hobart Council Centre
 City of Hobart

 16 Elizabeth Street
 GPO Box 503

 Hobart TAS 7000
 Hobart TAS 7001

rt T 03 6238 2711 3 F 03 6234 7109 7001 E coh@hobartcity.com.au W hobartcity.com.au f CityofHobartOfficial ABN 39 055 343 428 Hobart City Council as the statutory planning authority.

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully

n. bead

(N D Heath) GENERAL MANAGER

Relevant documents/plans:

Plans by Scanlan Architects

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000

 City of Hobart
 T
 03 6238 2711

 GPO Box 503
 F
 03 6234 7109

 Hobart TAS 7001
 E
 coh@hobartcity.com.au

 W
 hobartcity.com.au

 CityofHobartOfficial
 ABN 39 055 343 428 Hobart City Council

SANDY BAY ROAD DRAWING LIST

RIGHT OF THIS DRAWING AND THE INTELLECTUAL PROF

Sheet Name

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### Page 628 ATTACHMENT B

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11/11/2019	

SANDY BAY ROAD DRAWING LIST		SANDY BAY ROAD DRAWING LIST
Sheet Name		Sheet Name
lock A - Level 4		
	DA 302	Sandy Bay Road Elevation Height Study
lock A Level 5	DA 400	Sections

DA 000 Cover Sheet & Drawing List DA 205 Block A - Level 4 DA 107 Urban Contextural Views 3 DA 100 Existing Site Survey DA 206 Block A Level 5 DA 108 Urban Contextural Views 4 DA 101 Location & Demolition Plan DA 207 Block A Level 6 DA 200 Block A Lower Basement DA 102 Demolition Elevation & Diagram DA 208 Block A Level 7 DA 201 Block A - Upper Basement DA 103 Shadow Diagram Study DA 209 Block A Level 8 DA 202 Block A Level 1 DA 104 Proposed Overall Site Plan DA 210 Block A Level 9 DA 203 Block A Level 2 DA 105 Urban Contextual Views 1 DA 300 North Elevation (Sandy Bay Road) & South Elevation DA 204 Block A Level 3 DA 106 Urban Contextual Views 2 DA 301 East and West Elevations

			_	io Date Signamba	Development Application	Description	CLIENT	TITLE	PROJECT	Job No.	1718	Drawing No.
SCANI ANI	Studio	79 King Street PERTH WA 6000 general@scanlan.com.au		20/10			FRAGRANCE TAS HOBART (SANDY BAY) Pty	0	5-7 SANDY BAY ROAD.	Date	11/01/2019	TH
SCALAN	Email Web Phone	www.scanlan.com.au +61 8 9321 0166		-			Ltd	Cover Sheet &	ST SHIET BAT HORE.	Scale		DA 000 ***
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01. DISTANT N.E. VIEW FROM ST DAVIDS PARK



02. CLOSER N.E. VIEW FROM ST DAVIDS PARK

Any DTM modeling that is to be undertaken from the accompanying 3D digital file must be done using only the layer "RNANGLE\_3D" or "RNANGLE\_3D FACES to ensure that surface matches that warried by PDA Surveyons. No responsibility is taken for the use or integretation of this data in any other format.

Some feature levels are not shown on this plan for darity. These can be found turned on in model space or on the OFF Levels layer.







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SANDY BAY ROAD

SEW MH

**Brick Building** 

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- CHILD





3. CORNER VIEW OF THE CONSERVATORIUM OF MUSIC



CONSERVATORIUM OF MUSIC STREET VIEW

06. HOBART MASONIC HALL STREET VIEW

Pict Date 24/09 tobert Block A Single CENTRAL\_BinChule\_aliced Dates of Survey: 22nd, 27th, 29th 30th June & 6th July 2017 Bearing Datum is GDA94 per observation to St76MWT from SPM970.

NOTES

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89 SANDY BAY ROAD F.R. 171493-1 5 SANDY BAY ROAD FTY LTD -OWNER

#9 SANDY BAY ROAD F.R. 171493-1

S SANDY BAY FOND PTY LTD -OWNER

46 MILPIOT STREET F.R. 3198-2 SALRDERS (VALUATIONS) PTV LTD. -OWNER

#18 WILMOT STREET F.R. 192957-1 ROGER DIXON - DWNER

Hortzontal Datum is MCA04 per SPM970, with coordinates of E 526 737.469 N 5251 755.353N per SURCCOM. Al other coordinates have been breated as plane

Vertical datum is AHD per SPM 970 with reputed RL 16.605m

Only those features/points specifically requested by Neil McIntosh of JAWS Architects have been located and subsequently shown on this plan.

Some services have been plotted from DBYD (Dial Before Yoy Dig) records, and as such are approximate only. Some services have been located and marked on ste by AUS Locations.

While reasonable effort has been made to locate all visible above ground services, and those underground services as marked by AUS Locations there may be other services which were not located during survey.

Prior to any denoition, excavation, final design or construction on this site, a compre site investigation should be undertaken to locate all above and belowground service intrastructure.

Sever house connections have been plotted from DBVD intormation. No surface teatures exist to verify these connections and other house connections. In the accompanying AutoCA life the layering identifies the services which are plotted exclusively from DBVD intornation. ALLOCAD

All coordinates valivin this file, although stated to the nearest 0.001 metie, are approximate only and are only within 0.05m of the stated coordinate (hysicantality and vestically). Portis higher than 2m above ground level have been measured remotely and have a reduced accuracy of 0.05m (histcantality and verticality).

The boundaries shown on this plan are compiled from SP51956 and as such, are approximate only. If any vorits are to be conducted on or near the boundary a re-establishment survey will be required.

Contour interval 0.25m. In the accompanying Autocad Drawing life additional Contour intervals are included in a trozen layer.

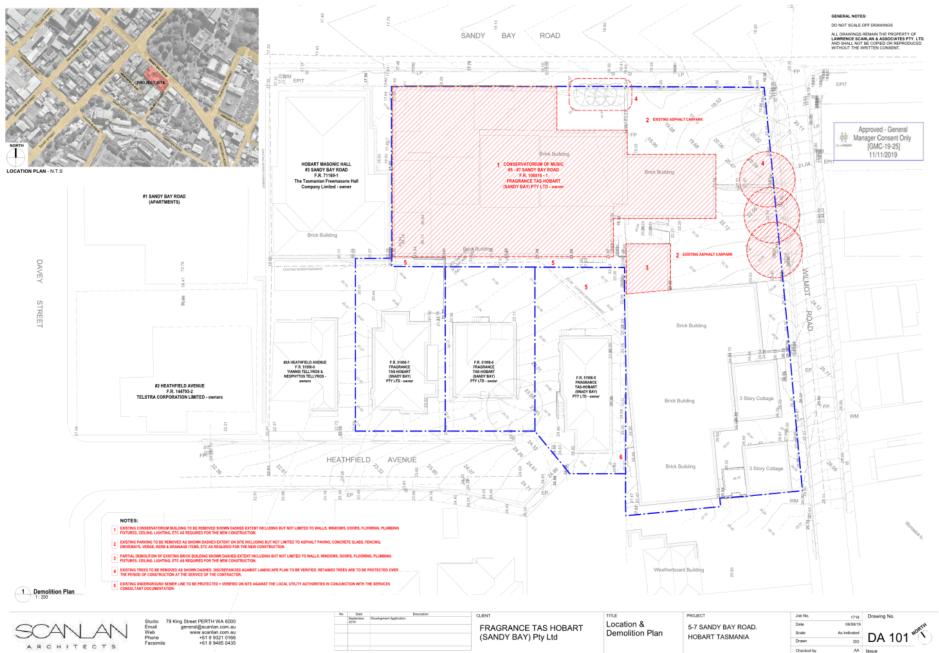
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TITLE BOUNDARY ----RIGHT OF WAY/EASEMENT LINE
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 EXTENT OF GUTTERING / ROOFING

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## Page 630 ATTACHMENT B

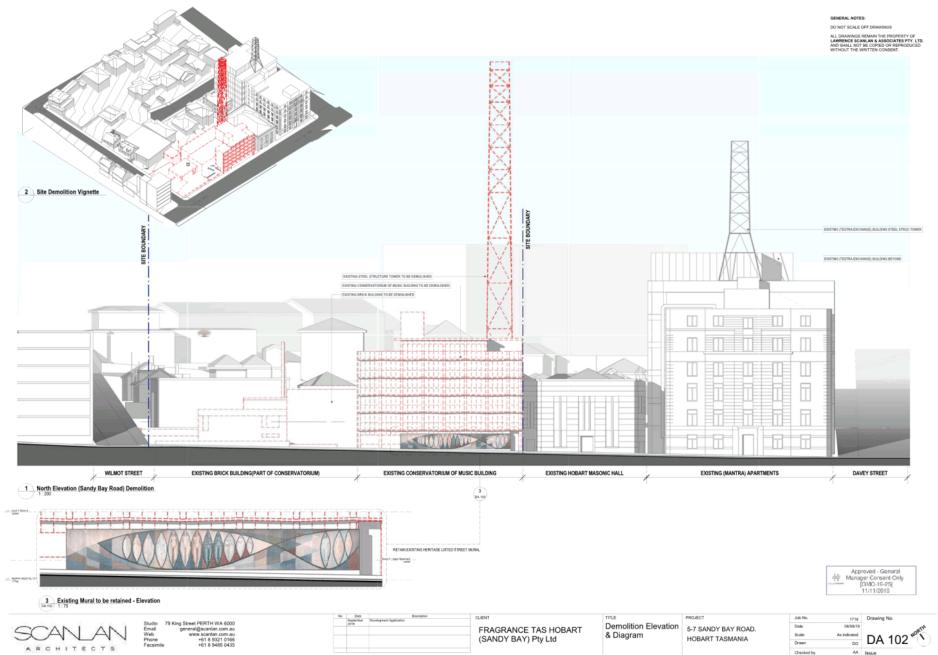


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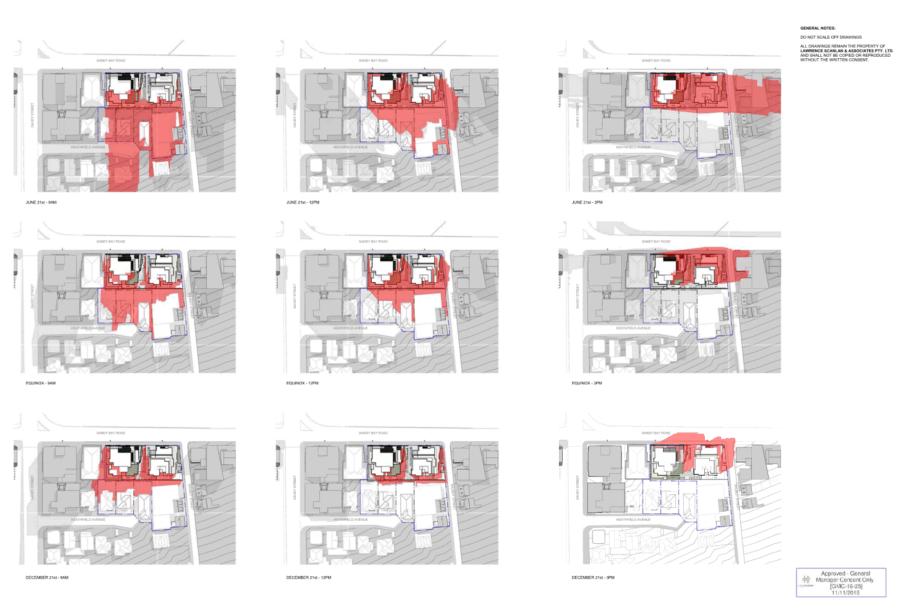
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## Page 632 ATTACHMENT B



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# Page 634 ATTACHMENT B





1 MACQUARIE STREET VIEW FROM ST JOSEPH'S CHURCH





AFTER

2 DAVEY ST VIEW FROM THE ENTRANCE OF DAVIS PARK



3 VIEW FROM THE END OF WILMOT ST

ITECTS ALL RIGHTS RESERVED. ACN 008 644 525

+61 8 9321 0166 +61 8 9485 0435



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	September	Development Application	SCR.11
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			FRAGRANCE TAS HOBART
			(CANDY DAV) DE LES
			(SANDY BAY) Pty Ltd

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(4) NEARER VIEW FROM WILMOT ST TOWARDS SANDY BAY RD





5 PERSPECTIVE VIEW FROM DAVIS PARK





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6 PERSPECTIVE VIEW FROM GLADSTONE ST

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Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au Web www.scanlan.com.au Phone +618 9321 0166 Facsimile +618 9485 0435

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7 MORRISON ST VIEW FROM COSTUMS HOUSE HOTEL





8 VIEW FROM PARLIAMENT HOUSE LAWN





9 LOCATION VIEW FROM CASTRAY ESPLANADE



Studio	79 King Street PERTH WA 6000	
Email	general@scanlan.com.au	
Web	www.scanlan.com.au	
Phone	+61 8 9321 0166	
Facsimile	+61 8 9485 0435	

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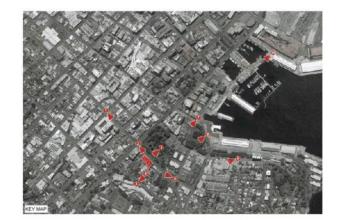
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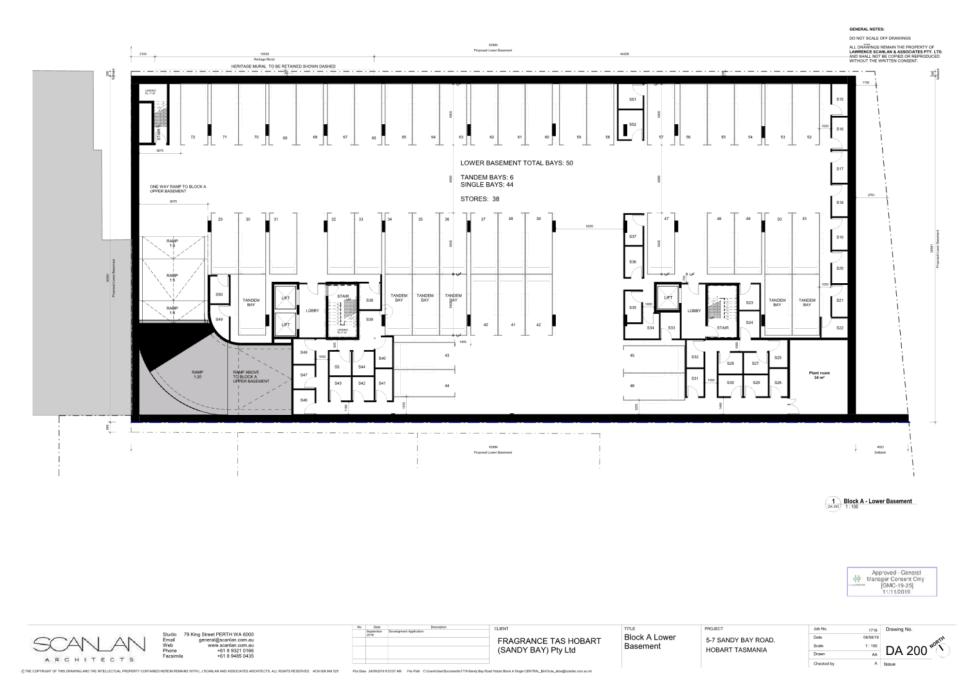


10 HUNTER ST VIEW FROM UNIVERSITY OF TASMANIA



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Studio 79 King Street PERTH WA 6000	279	FRAGRANCE TAS HOBART	Urban Contextural	5-7 SANDY BAY ROAD.	Date	06/08/19		
VA VA Z	Email general@scanlan.com.au Web www.scanlan.com.au Phone +618 9321 0166			Views 4	HOBART TASMANIA	Scale	1 : 2000	DA 100
	Phone +61 8 9321 0166 Facsimile +61 8 9485 0435		(SANDY BAY) Pty Ltd		HOBART TASMANIA	Drawn	Autor	DA 108
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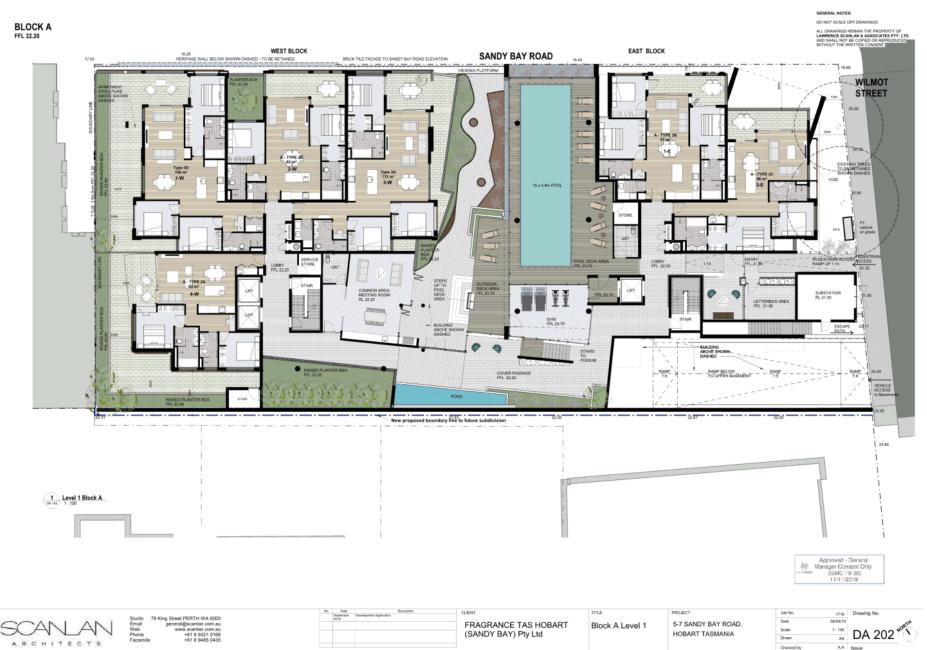
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## Page 639 ATTACHMENT B



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## Page 641 ATTACHMENT B

GENERAL NOTES:





1 Level 2 Block A



ARCHITECTS Facsimile +61894850435	SCANLAN Studio 79 King Street PERTH WA 6000 Email www.scarlina.com.au Web www.scarlina.com.au Phone •91 9321 0166	No Dere Description Beginnen Dovelopment Application	FRAGRANCE TAS HOBART (SANDY BAY) Pty Ltd	Block A Level 2	PROJECT 5-7 SANDY BAY ROAD. HOBART TASMANIA	Job No. Date Scale Drawn	1716 06/03/19 1:100 AA 203 100711
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Level 5 Block A

BLOCK A FFL 34.20

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COANI ANI		2219	FRAGRANCE TAS HOBART	Block A Level 5	5-7 SANDY BAY ROAD.	Date	06/08/19	ath
JAN AN	Email general@scanlan.com.au Web www.scanlan.com.au		(SANDY BAY) Pty Ltd	BIOCK A Level 5	HOBART TASMANIA	Scale	1:100	DA 206 *
	Phone +61 8 9321 0166 Facsimile +61 8 9485 0435		(SANDT BAT) FLY LLU		HOBART TASMANIA	Drawn	AA	DA 200
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1 Level 6 Block A



	Studio 79 King Street PERTH WA 6000	No Date Development Application	CLIENT	TITLE	PROJECT	Job No.	1718	Drawing No.			
COANI ANI		2019	FRAGRANCE TAS HOBART	Block A Level 6	5-7 SANDY BAY ROAD.	Date	06/08/19	ath			
VA VA Z	Email general@scanlan.com.au Web www.scanlan.com.au Phone +61 8 9321 0166		(SANDY BAY) Pty Ltd	BIOCK A Level 0	HOBART TASMANIA	Scale	1:100	DA 207 **			
	Phone +61 8 9321 0166 Facsimile +61 8 9485 0435		(SANDT BAT) FLY LLU		HODART TASMANIA	Drawn	AA				
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## Supporting Information Council Meeting - 25/5/2020

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Studio 79 King Street PERTH WA 6000 Email general@scanian.com.au		2018			FRAGRANCE TAS HOBART	Block A Level 7	5-7 SANDY BAY ROAD.	Date	06/08/19	TH
Web www.scanian.com.au		-			(SANDY BAY) Pty Ltd	BIOCK A Level 7	HOBART TASMANIA	Scale	1:100	DA 208 **
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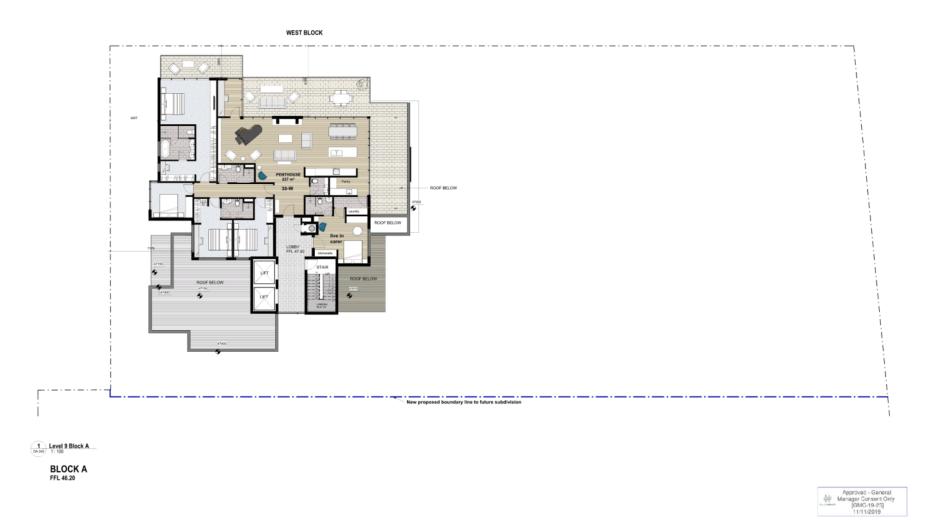
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SCANLAN	Studio 79 King Street PERTH WA 6000 Email general@scanlan.com.au Web www.scanlan.com.au Phone +619 89210166	No Date September 2018	Description Development Application	FRAGRANCE TAS HOBART (SANDY BAY) Pty Ltd	Block A Level 9	PROJECT 5-7 SANDY BAY ROAD. HOBART TASMANIA	Job No. Date Scale	06/08/19	Drawing No.
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## Page 649 ATTACHMENT B

#### GENERAL NOTES:

FACADE TYPES

FACE BRICK - Woodbridge- midlandbrick or similar

DULUX - DURALLOY BLACK (CB NIGHT SKY) SATIN

ALUMINUM BALUSTRADE - DULUX DURALLOY - CLASSIC PEARL WHITE

DULUX - TEAHOUSE SN4GE - CANOPIES

DULUX - BLACKHOOD BAY N210H2

CAST-IN CONCRETE - CLASS 3

CAST- IN CONCRETE - CLASS 2

CONCRETE PANEL - POUSH

GLASS BALUSTRADE

ALL CLEAR BLACED UNLESS DEFERENTLY NOTED IN ELEVATION. SOME WINDOWS PHALLS WAYSE NOTED AS FRONTED QLASS FOR PROVIDY REASON

DULUX - MT ASPIRING SWIE4

BRK

PT-01

PT-02

PT-03

PT-04

CONC-01

CONC-60

CONC-68

BAL-01

BAL-12

GLASS TYPES

SPANDREL TYPES CLEAR GLASS

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# Approved - General Manager Consent Only [GMC-19-25] 11/11/2019

2 South Elevation (Sandy Bay Road)

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	2010	FRAGRANCE TAS HOBART	(Sandy Bay Road) &	5-7 SANDY BAY ROAD.		08/19	
		(SANDY BAY) Pty Ltd	South Elevation	HOBART TASMANIA	Scale As indic	📆 DA 300 🏷	
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#### **Supporting Information** Council Meeting - 25/5/2020

## Page 650 ATTACHMENT B

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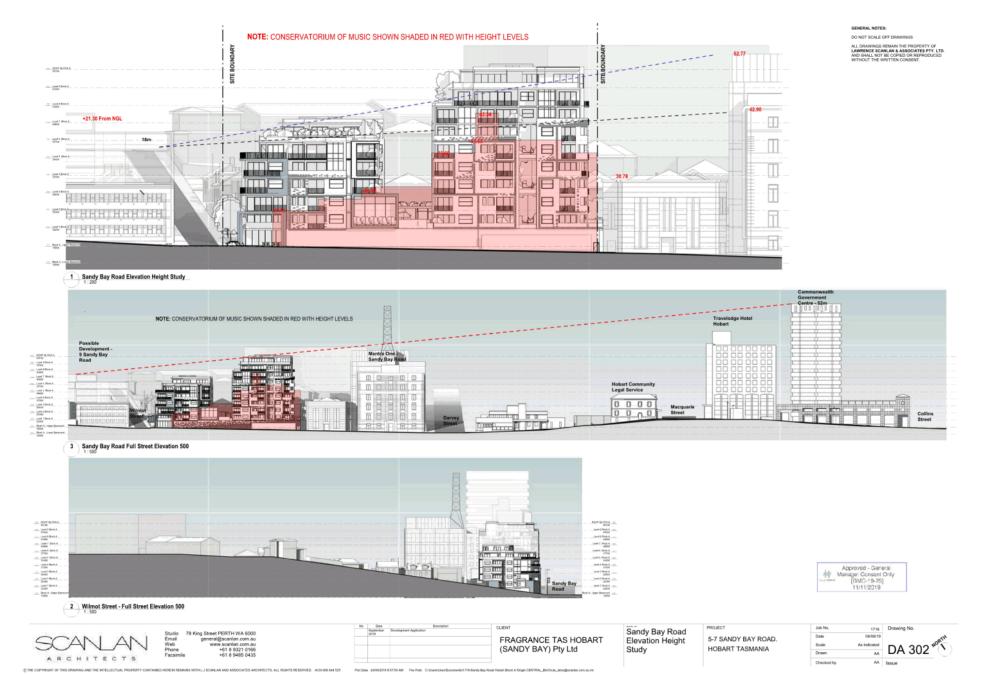




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Studio 79 King Street PERTH WA 6000	2/10	FRAGRANCE TAS HOBART	East and West	5-7 SANDY BAY ROAD.	Date	06/08/19	ath
Web www.scanlan.com.au Phone +61.8 9321 0166		(SANDY BAY) Pty Ltd	Elevations	HOBART TASMANIA	Scale	As indicated	DA 301 *
Facsimile +61.8.9485.0435		(SANDT BAT) FLY LLU		HOBART TASMANIA	Drawn	AA	DA 301 ()
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## Supporting Information Council Meeting - 25/5/2020

## Page 652 ATTACHMENT B



Tasmanian Heritage Council **ÍII** 

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

PLANNING REF: THC WORKS REF: REGISTERED PLACE NO: PLN-19-706 6101 7481 FILE NO: APPLICANT: DATE: 10-53-09 THC Fragrance TAS - Hobart (Sandy Bay) Pty Ltd 04 May 2020

#### NOTICE OF HERITAGE DECISION

(Historic Cultural Heritage Act 1995)

The Place: ABC Mural, 5-7 Sandy Bay Road, Hobart. Proposed Works: Demolition and new building.

Under section 39(6)(b) of the Historic Cultural Heritage Act 1995, the Heritage Council gives notice that it consents to the discretionary permit being granted in accordance with the documentation submitted with Development Application PLN-19-706, advertised on 08/04/2020, subject to the following condition:

## I. The mural must be retained in situ and protected from damage during the construction process under the guidance of a suitably qualified art conservator.

Reason for condition To ensure that heritage place is adequately protected and conserved.

Advice

- I. Any damage to the mural should be repaired by a suitably skilled person as soon as practicable. 2. The applicant is strongly encouraged to modify the proposed facade to better respond
- to the vertical emphasis and colours of the mural.

Should you require clarification of any matters contained in this notice, please contact Russell Dobie on 1300 850 332.

W4

Pete Smith Director - Heritage Tasmania Under delegation of the Tasmanian Heritage Council

Notice of Heritage Decision 6101, Page 1 of 1



#### **Submission to Planning Authority Notice**

Council Planning Permit No.	PLN-19-706		Council notice date	26/11/2019			
TasWater details							
TasWater Reference No.	TWDA 2019/0174	TWDA 2019/01747-HCC Date of response 04					
TasWater	Anthony Cengia		Phone No.	(03) 6237 8243			
Contact	Greg Cooper (Trad	le Waste)	Phone No.	(03) 6237 8280			
Response issued to							
Council name	HOBART CITY COUNCIL						
Contact details	coh@hobartcity.com.au						
Development det	ails						
Address	5-7 SANDY BAY RD	), HOBART	Property ID (PID)	7713417			
Description of development	Demolition and Ne	ew Building for 55	Multiple Dwe	llings			
Schedule of draw	ings/documents						
Prepa	red by	Drawing/document No.		Revision No.	Date of Issue		
Scanlan Architects		1718 Sheets DA 100 to DA 400		)	September 2019		
Gandy & Roberts		Site Servicing Report		A	09/08/2019		
Conditions							

#### SUBMISSION TO PLANNING AUTHORITY NOTICE OF PLANNING APPLICATION REFERRAL

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

#### CONNECTIONS, METERING & BACKFLOW

 A suitably sized water supply with metered connections / sewerage system and connections to the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.

Advice: TasWater will not accept direct fire boosting from the network unless it can be demonstrated that the periodic testing of the system will not have a significant negative effect on our network and the minimum service requirements of other customers serviced by the network. To this end break tanks may be required with the rate of flow into the break tank controlled so that peak flows to fill the tank do not also cause negative effect on the network.

- 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.
- Prior to commencing construction/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.

#### TRADE WASTE

- 4. Prior to the commencement of operation the developer/property owner must obtain Consent to discharge Trade Waste from TasWater.
- 5. The developer must install appropriately sized and suitable pre-treatment devices prior to gaining

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#### Consent to discharge

 The Developer/property owner must comply with all TasWater conditions prescribed in the Trade Waste Consent.

#### **ASSET CREATION & INFRASTRUCTURE WORKS**

- Plans submitted with the application for Certificate(s) for Certifiable Work (Building and/or Plumbing) / Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.
- 8. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements to TasWater's satisfaction.
- Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All
  infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
- In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
- 11. Prior to the issue of a Certificate of Water and sewerage Compliance (Building and/or Plumbing) all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
- 12. After testing to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost
- 13. At practical completion of the water and sewerage works and prior to TasWater issuing a Certificate of Water and Sewerage Compliance (Building and/or Plumbing), the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
  - Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
  - A request for a joint on-site inspection with TasWater's authorised representative must be made;
  - Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
  - As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
- 14. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
- 15. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly

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reported to TasWater and repaired by TasWater at the developer's cost

- 16. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
- 17. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

#### **BOUNDARY TRAP AREA**

18. The proposed development is within a boundary trap area and the developer must provide a boundary trap that prevents noxious gases or persistent odours back venting into the property's sanitary drain. The boundary trap must be contained within the property boundaries and the property owner remains responsible for the ownership, operation and maintenance of the boundary trap.

#### DEVELOPMENT ASSESSMENT FEES

19. The applicant or landowner as the case may be, must pay a development assessment fee of \$1,139.79 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.

The payment is required by the due date as noted on the statement when issued by TasWater.

#### Auvice

General

For information on TasWater development standards, please visit

https://www.taswater.com.au/Development/Technical-Standards

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

#### Trade Waste

Prior to any Building and/or Plumbing work being undertaken, the applicant will need to make an application to TasWater for a Certificate for Certifiable Work (Building and/or Plumbing). The Certificate for Certifiable Work (Building and/or Plumbing) must accompany all documentation submitted to Council. Documentation must include a floor and site plan with:

Location of all pre-treatment devices i.e. grease arrestor;

Schematic drawings and specification (including the size and type) of any proposed pre-treatment device and drainage design; and

Location of an accessible sampling point in accordance with the TasWater Trade Waste Flow Meter and Sampling Specifications for sampling discharge.

Details of the proposed use of the premises, including the types of food that will be prepared and served; and

The estimated number of patrons and/or meals on a daily basis.

At the time of submitting the Certificate for Certifiable Work (Building and/or Plumbing) a Trade Waste Application form is also required.

If the nature of the business changes or the business is sold, TasWater is required to be informed in order to review the pre-treatment assessment. The application forms are available at <a href="http://www.taswater.com.au/Customers/Liquid-Trade-">http://www.taswater.com.au/Customers/Liquid-Trade-</a>

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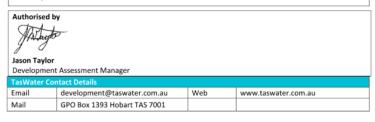
#### Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure. A copy of the GIS is included in email with this notice and should aid in updating of the documentation.

- The location of this infrastructure as shown on the GIS is indicative only.
  A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater
  - TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit <u>www.taswater.com.au/Development/Service-location</u> for a list of companies
  - TasWater will locate residential water stop taps free of charge
  - Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

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



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Page 4 of 4 Version No: 0.1

## **Application Referral Cultural Heritage - Response**

From:	Nick Booth
Recommendation:	Proposal is acceptable subject to conditions.
Date Completed:	
Address:	5 - 7 SANDY BAY ROAD, HOBART ADJACENT ROAD RESERVE
Proposal:	Demolition and New Building for 55 Multiple Dwellings, Food Services and Associated Works within the Adjacent Road Reserve
Application No:	PLN-19-706
Assessment Officer:	Tristan Widdowson,

### **Referral Officer comments:**

This application relates to site containing a collection of mid to late 20<sup>th</sup> century buildings of between 2 to 6 storeys in height, associated car parking area, tall metal pylon and collection of Victorian cottages and later two storey Federation residential style properties. Principally facing onto Sandy Bay Road, the Victorian units face onto Wilmot Street and the Federation units onto Heathfield Avenue.

The principal building to the front is a largely glazed building dating from the mid19<sup>th</sup> Century and built to contain the then new offices and studios of the ABC in Hobart. Most recently used as the Conservatorium of the University of Tasmania, the site is notable for its distinctive architectural form and a commissioned tiled mural that forms part of the front façade. The Wilmot facing cottages (Numbers 9, 11 and 13) are brick single storey Georgian style cottages, one of which has later larger Dormer windows added to the front roof plane. Both properties have narrow front yards. Rear gardens have been lost and have instead been built over with large flat roofed 'warehouse' style structures associated with the former use of the wider site. The Federation properties facing onto Heathfield Ave (Numbers 4 and 6) are two storey, brick developments properties, one of which has been converted into office accommodation and the other sub-divided into flats.

The site forms part of the mixed use area set between Sandy Bay Road and Hampden Road. The site falls within the area identified as being of Archaeological Potential and the three Wilmot Street and two Heathfield Avenue properties to the rear are individually heritage listed and form part of the Hampden Road Heritage Precinct (H2). The circumstances regarding referral are unusual in that only these smaller properties to the rear are designated as individually heritage listed whilst the Heathfield Avenue properties also form part of the Hampden Road Heritage Precinct. As such, other than the Archaeological considerations, Heritage Considerations can only be applied to those parts of the plot covered by these designations and not the bulk of the site.

The proposal seeks approval for the demolition of the former ABC building in its entirety, and the erection of two blocks of residential accommodation based on a shared 'podium' of two levels of partial and entirely subterranean parking for 86 cars accessed from Wilmot Street. The 'East' block would then rise by an additional 6 stories, and the 'West' by 9, providing 55 apartments of between 2, 3 and 4 bedrooms, as well as communal swimming pool, gym, open space and a standalone commercial café.

It is noted that the entirety of the proposed development would fall outside of the areas identified as Heritage Listed or within the Hampden Road Heritage Precinct. Whilst views into and out of the Precinct would be extremely affected, this is not a heritage consideration under the HIPS.

With regard to the issue of Archaeological Potential, a Statement of Archaeological Potential has been produced by a recognised Historical Archaeologist & Heritage Consultant in support of the application. The report is considered to follow correct established research methodology and provides a detailed examination of the development of the site, sub-dividing it into different zones based on the passed uses and the associated strength of potential archaeological finds. It sets out the degree to which the site remained largely free of significant development and that the construction of the former ABC building would have removed any likely potential for archaeological finds of any significance. Given the above, the report recommends that only a relatively small area close to the corner of Wilmot Street and Sandy Bay on the site of a former 1840's building holds potential for finds an should be subject to a full archaeological investigation, monitoring reporting and potential response in the event of finds and how best to they can be utilised for public benefit.

The report is considered to be reasonable and the recommendations as set out in the report are considered to represent an appropriate method based process for site investigation and response. As such, in the event of permission being granted, it is considered reasonable that any approval contain a condition requiring the implementation of the recommendations set out in the report in full.

#### Representations

It is noted that representations have been received in response to the consultation process which raise concerns as to the impact of the proposal upon neighbouring and nearby heritage buildings and sites, the surrounding streetscape, the loss of the former ABC site building itself and the potential impact upon the ABC mosaic Mural that forms part of the Sandy Bay frontage.

With regard to the above, as previously noted, the site contains five heritage listed properties at Wilmot Street and Heathfield Avenue, the latter of which also form part of the Hampden Road Heritage Precinct. The site also neighbours the heritage listed Masonic Hall at 3 Sandy Bay Road and is located directly opposite St David's Park, therefore playing a significant role in setting the context to these sites and the character of the immediate streetscape. Further, it is noted that all of the above mentioned sites also appear on the Tasmanian Heritage Register, as does the distinctive ABC Mural on the front façade of the existing Conservatorium.

Not with standing the above, the proposed demolition and new development sit outside of the Planning Scheme's Heritage Provisions. It is noted that 15.4.1 relating to Development Standards for Buildings and Works with regard to height within the Urban Mixed use Zone requires that 'building height contributes positively to the streetscape', and Performance Criteria P1 requires that building height must be compatible with the scale of nearby buildings and allow for a transition in height between adjoining buildings, where appropriate. However, both of these are not relevant to the heritage discretions of the planning scheme and would instead fall under the consideration of the Planning Officer.

By way of advice and comment, with regard to the distinctive ABC Mural on the front façade of the existing Conservatorium, the mosaic is considered to be both a unique piece of public art and a significant contributor to the cultural and social wealth of the city. Designed by Tasmanian artist George Davis (b1930) in 1960 for the Australian Broadcasting Commission's new staff offices and studios designed by Hungarian immigrant architect Oscar Gimsey, (itself considered to be an important example of the 1960's architectural expression), it was produced in an era of growing cooperation and collaboration between architects and

artists in Tasmania, and a growing emphasis on public art. Designed specifically to reflect the use of the building as the regional headquarters of the national broadcaster, its depiction of the nine Muses of Greek classical mythology, contained within a sound wavelength (in a figure later adopted as the ABC's formal logo), is indelibly linked to the building and its original occupier. The mosaic tiling then extends beyond the depiction and is applied to the external front façade supporting columns to the entire height of the building, essentially making the façade a continuation of the Mural. It is therefore considered to be a major and prominent piece of public art, the only one of its kind in Tasmania and in its size, complexity and as a representation of its method of construction, almost unique in Australia.

It is noted that George Davis, the Murals artist has provided a representation with regard to the current application, and has provided specific permission to allow his comments to be reproduced within this report. With regard to the Mural he writes:

My work was designed to relate to the vertical elements of the one time ABC TV Studios. The attempt to relate the fenestration in groupings in the facade of this proposal to elements of my design does not do so. They are massive and monotonous. The colour too of the fabric is so markedly different that it swamps the work of art below. I think that another solution must be found that preserves the unique concept and the meticulous design of this work of art.

Whilst the proposed plans show the retention and incorporation of the Mural into the fabric of the front elevation of the proposed development, it is questioned as to whether this would be appropriate. Given the specific design, and intention of the curator and artist it could be argued that the Mural is indelible linked to the building and its significant role in the cultural and social history of the state and broadcasting history. Given the above, its continued presence on the site if the building were to be removed could be argued to be both culturally diminishing and arbitrary to the point of inappropriate. Rather, it could be argued that a more appropriate resolution were to see the mural carefully removed from the site, renovated and relocated to a public museum or appropriate public space as a standalone piece of public art.

Notwithstanding the above, as stated above, as no demolition or development would occur to any heritage listed structures as defined in the Hobart Interim Planning Scheme 2015, it is therefore considered that the proposals would not result in detriment to the historic cultural heritage significance of the site and that subject to the adaption of the submitted Archeological Report and recommendations in full, the proposal is considered acceptable when measured against the performance criteria of HIPS 2015.

#### Suggested Condition

HER s1 The recommendations and methodology contained within Chapter 6 – Archeological Impact Assessment and Method Statement of 'Heritage Impact Assessment Fragrance Development 5-7 Sandy Bay Road, Hobart Tasmania" prepared by Brad Williams of Praxis Environment (July 2019) are to be implemented in full.

#### Reason for condition

To ensure that work is planned, implemented and subject to review in a manner that seeks to understand, retain, protect, preserve and manage significant archaeological evidence.

Nick Booth Heritage Officer 19 May 2020

## **URBAN DESIGN ADVISORY PANEL**

## MINUTES

MINUTES OF A MEETING OF THE URBAN DESIGN ADVISORY PANEL HELD AT 2:00 PM ON MONDAY 21 APRIL 2020 VIA VIRTUAL MEETING

## PLN-19-706 5-7 Sandy Bay Rd

The Panel met to discuss the proposal in detail and the advice below is provided for the consideration of the proponents and officers.

### Description:

The proposal is for the demolition of the existing 'Conservatorium of Music' building and steel tower to facilitate the construction of two apartment buildings containing a total of 55 dwellings, communal spaces and a café. The building on the corner of Wilmot Street and Sandy Bay Road is to contain the café and is to be 7 storeys with a maximum height of 22.35m. The other larger apartment building is to be 10 storeys and extend to a maximum height of 33.23m. There will be two levels of basement car parking containing 86 spaces and bicycle storage which is accessed via a ramp from Wilmot Street.

### Comments:

The Panel notes that while the current development proposal is limited to part of a lot that fronts Sandy Bay Road and Wilmot St, the application and the Proponent foreshadow further development on this lot and three adjacent lots on Heathfield Avenue that together comprise the property at 5-7 Sandy Bay Road. These adjacent lots are already in the ownership of the same developer.

The Proponent has advised that a second stage of development incorporating all four lots is currently at a preliminary design stage. The Panel sees no problem in the project proceeding in stages but, in the interests of achieving the best urban design outcomes for the current and adjacent development sites would have preferred an integrated approach and complete disclosure of the intended development potential for all the sites in question.

The foregoing is especially relevant given that two heritage listed cottages are located on part of the lot to be developed, and that a portion of this lot is also in a Heritage

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Precinct that extends over much of the immediate neighbourhood including the adjacent sites which will be the subject of the further stage of development referred to above. A number of the adjacent properties are on the Hobart City Council Heritage List and also on the Tasmanian Heritage Council List including two properties in Wilmot Street and properties in Heathfield Avenue owned by the developer.

Similarly the two heritage buildings (cottages) that are facing onto Wilmot Street but form part of the development site are of interest to the Panel because of their significant townscape qualities.

While no works are proposed as part of this current development application they have the potential to be impacted upon during the course of construction. Appropriate recording of the condition of the buildings should occur and a method of protection during construction should be submitted as a condition of any approval.

Returning to the current Development Application, the Conservatorium of Music building to be demolished contains a heritage listed component, which is the George Davis mosaic mural at the front of the building. This is to be protected and integrated into the new and extended boundary wall on Sandy Bay Road. The retention of the mural is an important part of the redevelopment. It should remain a highly relevant and integrated feature within the context of the new wall and buildings above and continue to display strong connection with the building scale and form around it.

The Panel supports an approach of extending the mural's influence into other aspects of the building design such as material and colour selection.

Early collaboration with skilled artists could lead to a range of further opportunities associated with the substantial boundary wall on Sandy Bay Road, the Café, the pedestrian entry on Wilmot St and other public and shared spaces throughout the site.

The Panel questioned how the preservation of the Mural was going to be achieved and expressed a preference for it to be protected in situ, rather than removed and then reinstated.

The Proponent indicated the intention to keep and/or relocate the mature trees that are presently on the site. The Panel notes and supports the landscaping proposed throughout the site, particularly in Wilmot Street. Early engagement of an arborist and landscape architect to assist with relocation and protection is encouraged. The identification of further opportunities for landscaping to the rear of the building to improve the overall level of neighbourhood amenity should also occur.

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With regard to the form of the development the Panel supports the approach taken to create two separate buildings. This approach presents a scale and form generally more consistent with the character of the area. It also presents opportunities for vistas into and out of the site to the benefit of some residential properties behind. The Panel supported, in principle, the carefully considered design approach taken in respect of the modelling of the façades, including the use and detailing of brickwork on the Sandy Bay Road and Wilmot Street elevations. Similarly it endorsed the general layout of the apartments but did encourage some rearrangement of apartments to the rear on Wilmot Street to improve view lines and access to sunlight.

The curved form on the corner of Wilmot Street and the creation of an active public edge on the corner of Wilmot Street, through the introduction of a Café was also supported.

The rear elevations were seen as somewhat bland in comparison and the Panel would encourage the introduction of further detailing, additional materials and landscaping (at both ground and upper levels) to soften these elevations and improve the relationship with the residential nature and character of the neighbourhood behind.

In the Panel's view the critical urban design consideration of the proposal is its appropriateness in terms of height.

In this Zone the provisions of the Planning Scheme seek to ensure building height contributes positively to the streetscape. A proposal must be compatible with the scale of nearby buildings and must allow for a transition in height between adjoining buildings where appropriate. The Scheme's definition of streetscape includes the visual quality of the street as depicted by the quality, scale, bulk and design of buildings and structures fronting the road reserve.

The Proponent presents an analysis of building height and form in the area and arrives at a height plane within which, it is claimed development can reasonably occur. The height plane is presented as a line drawn from the top of the proposed new development at 9 Sandy Bay Road (which has since been reduced in height) to the top of the distant Commonwealth Centre Building in Collins Street. It in essence concludes that, because the proposal falls within this plane, it is acceptable.

The Panel considers that this extended height plane has no credible basis and that, for the purpose of this assessment, the cluster of buildings within which the subject site is located finishes at the southern side of Davey Street.

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The Panel considers that if a theoretical height plane is to be of any assistance at all in determining an appropriate height for this proposal then it should be drawn from the top of the existing units adjacent to 9 Sandy Bay Road to the top of the Mantra building on the corner of Davey Street and Sandy Bay Road. Building within such a plane would likely have the effect of reducing the height of the taller of the two proposed buildings by several storeys – possibly two or three.

In conclusion the Panel is of the opinion that the height and character of any new development within this conspicuous row of buildings (1-9 Sandy Bay Road) should be determined within the narrower context presented by those buildings. The development should also be cognisant of its impact on the adjacent heritage precinct, its character and values.

Accordingly it is the Panel's advice that the height of the proposed development, particularly the West Building, does not satisfy the City of Hobart Planning Scheme performance criteria to provide an acceptable transition in heights of adjoining buildings along Sandy Bay Road, and also is not compatible with the scale of the nearby heritage listed buildings in Wilmot Street and Heathfield Avenue.

## Application Referral Development Engineering -Response

From:	
Recommendation:	Proposal is acceptable subject to conditions.
Date Completed:	
Address:	5 - 7 SANDY BAY ROAD, HOBART ADJACENT ROAD RESERVE
Proposal:	Demolition and New Building for 55 Multiple Dwellings, Food Services and Associated Works within the Adjacent Road Reserve
Application No:	PLN-19-706
Assessment Officer:	Tristan Widdowson,

## **Referral Officer comments:**

E5.0 Road and railway access code	

E5.1 Purpose			E5.1.1
			The purpose of this provision is to:
			(a) protect the safety and efficiency of the road and railway networks; and
			(b) reduce conflicts between sensitive uses and major roads and the rail network.
E5.2 Application of this	YES		
Code			
			This Code applies to use or development of land:
		No	(a) that will require a new vehicle crossing, junction or level crossing; or
	Yes		(b) that intensifies the use of an existing access; or
		No	(c) that involves a sensitive use, a building, works or subdivision within 50m metres of a Utilities zone that is part of:
		No	(i) a rail network;
		No	(ii) a category 1 - Trunk Road or a category 2 - Regional Freight Road, that is subject to a speed limit of more tha 60km/h kilometres per hour.
Clause for Assessment			Comments / Discussion (in bold)
Clause 5.5.1 Existing road accesses and junctions			The existing road access must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).

PERFORMANCE CRITERIA	the Acceptable Solution for clause E5.5.1 (A3) and as such, shall be assessed under Performance Criteria.
	Acceptable Solution A3: The annual average daily traffic (AADT) of vehicle movements, to and from a site, using an existing access or junction, in an area subject to a speed limit of 60km/h or less, must not increase by more than 20% or 40 vehicle movements per day, whichever is the greater NON COMPLIANT
	Performance Criteria – P3: Any increase in vehicle traffic at an existing access or junction in an area subject to a speed limit of 60km/h or less, must be safe and not unreasonably impact on the efficiency of the road, having regard to:
	(a) the increase in traffic caused by the use; - The increased traffic generated by the proposed development is likely to be greater than 40 vehicles per day from the existing 19 car parking space car park to the 86 car parking spaces proposed. The TIA has identified that the residential component will generate approximately 283 trips per day and approximately 58 trips per day for the cafe.
	(b) the nature of the traffic generated by the use; - Traffic generated by the proposed development will be mostly residential in nature with a smaller proportion of traffic generated by the cafe. This is compatible with the existing traffic utilising the streets near the subject site.
	(c) the nature and efficiency of the access or the junction; - The driveway access servicing the site will operate at a high level of service based on the traffic volumes.
	(d) the nature and category of the road; - Wilmot Street is a minor road that has a relatively low traffic volume near the site. It provides access to a residential catchment that is relatively stable and closed in nature.
	(e) the speed limit and traffic flow of the road; - The general urban speed limit of 50-km/h applies to Wilmot Street. This speed limit is appropriate for the residential nature of the development.
	(f) any alternative access to a road; - No alternative access is possible for the proposed development.
	(g) the need for the use; - The need for the use has not been assessed and is this report.

	(h) any traffic impact assessment; and - No Traffic Impact Assessment was submitted.
	(i) any written advice received from the road authority No written advice was requested by the road authority (Council) relating to the access.
	Based on the above assessment and given the submitted documentation, the proposed access may therefore be accepted under <i>Performance Criteria P3:E5.5.1</i> of the Planning Scheme.
Clause 5.5.2 Existing level crossings	Documentation submitted to date appears not to invoke clause E5.5.2.
NOT APPLICABLE	No intensification of an existing level crossings proposed.
Clause 5.6.1 development adjacent to roads and railways	Documentation submitted to date appears not to invoke clause E5.6.1.
NOT APPLICABLE	No development adjacent to category 1 or category 2 road proposed.
Clause 5.6.2 road and access junctions	Documentation submitted to date appears not to invoke clause E5.6.2.
NOT APPLICABLE	No new accesses or access junctions proposed.
Clause 5.6.3 new level	Documentation submitted to date appears not to
crossings	invoke clause E5.6.3.
NOT APPLICABLE	No new level crossings proposed.

Clause 5.6.4 sight distance at access and junctions	The sight distance at access and junctions must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).
ACCEPTABLE SOLUTION	Documentation submitted to date does appear to satisfy the Acceptable Solution for clause E5.6.4. Wilmot Street is a one-way street running form Hampden Road to Sandy Bay Road. Therefore, sight distance would only require measurement to the south toward Hampden Road. Given the site is located on the northern end of Wilmot Street, the distance between the site entrance and the junction between Wilmot Street and Hampden Road would be over 80m which meets the requirements of Table E5.1.
	Acceptable solution - A1: Sight distances at: (a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E5.1; and - <u>COMPLIANT</u> (b) rail level crossings must comply with AS1742.7 Manual of uniform traffic control devices - Railway crossings, Standards Association of Australia <u>N/A</u>

## E 6.0 Parking and Access Code

E6.1 Purpose		E6.1.1
		The purpose of this provision is to:
	Yes	(a) ensure safe and efficient access to the road network for all users, including drivers, passengers, pedestrians and cyclists;
	Yes	(b) ensure enough parking is provided for a use or development to meet the reasonable requirements of users, including people with disabilities;
	Yes	<ul> <li>(c) ensure sufficient parking is provided on site to minimise on-street parking and maximise the efficiency of the road network;</li> </ul>
	Yes	<ul> <li>(d) ensure parking areas are designed and located in conformity with recognised standards to enable safe, easy and efficient use and contribute to the creation of vibrant and liveable places;</li> </ul>
	Yes	(e) ensure access and parking areas are designed and located to be safe for users by minimising the potential for conflicts involving pedestrians, cyclists and vehicles; and by reducing opportunities for crime or anti-social behaviour;
	Yes	<ul> <li>(f) ensure that vehicle access and parking areas do not adversely impact on amenity, site characteristics or hazards;</li> </ul>

	Yes		(g) recognise the complementary use and benefit of public transport and non-motorised modes of transport such as bicycles and walking;
		N/A	(h) provide for safe servicing of use or development by commercial vehicles.
E6.2 Application of this Code	YES	-	This code applies to all use and development.
Clause for Assessment			Comments / Discussion (in bold)
Clause for Assessment Clauses 6.6's are all to do with parking number assessment. These will be assessed by planner based on DE assessment of the following relevant clauses. PERFORMANCE CRITERIA			The parking number assessment must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does not satisfy the Acceptable Solution for clause E6.6.1 (a) and as such, shall be assessed under Performance Criteria. 86 carparking spaces are proposed for 55 apartments that have two or more bedroom which are required to provide a total of 110 carparking spaces plus 14 visitor spaces in accordance with Table E.6.1. The TIA has identified the provision of car parking spaces will be 80 spaces for residents and 6 spaces for visitors. 26 apartments will have access to one car parking space and 27 apartments will have access to two car parking spaces. No car parking spaces are proposed for the cafe tenancy included in this development which requires 16 car parking spaces in accordance with Table EE.6.1. Therefore the total number of car parking spaces required for the full development is 140 with only 86 spaces provided, this creates a defficiency of 54 car parking spaces. TIA identifies that the residential parking demand of the development is considered to be less than what the development generates under the scheme given its proximity to the city centre, services and employment. Many of the cafe customers would likely be residents of the apartments on site or those living or working in the area. It is therefore considered that the parking provided is sufficient to meet the demand of the development. Acceptable solution - A1: The number of on-site car parking spaces must be: (a) no less than and no greater than the number specified in Table E6.1; - <u>NON COMPLIANT</u> Performance Criteria - P1:
			The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

(a) car parking demand; - The empirical parking assessment indicates that the provision of 86 onsite car parking spaces will sufficiently meet the likely demands associated with the development.

(b) the availability of on-street and public car parking in the locality; - There is a limited supply of on-street parking in the surrounding road network. Much of the available parking is in the form of timerestricted parking, with authorised residents excepted.

(c) the availability and frequency of public transport within a 400m walking distance of the site; - Metro Tasmania operate regular bus services along Sandy Bay Road and Davey Street which is within 400 metres of the subject site.

(d) the availability and likely use of other modes of transport; - The site is located a convenient walking distance from shops, schools and services.

(e) the availability and suitability of alternative arrangements for car parking provision; - No alternative parking provision is available or considered necessary.

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces; - **Not applicable**.

(g) any car parking deficiency or surplus associated with the existing use of the land; - **Not applicable.** 

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site; - **Not applicable.** 

(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity; - **Not applicable.** 

(j) any verified prior payment of a financial contribution in lieu of parking for the land; - **Not applicable**.

(k) any relevant parking plan for the area adopted by Council; - **Not applicable**.

(I) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code; - **Not applicable.** 

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code. - **No impact.** 

Based on the above assessment and given the submitted documentation, the parking provision may be accepted under *Performance Criteria P1:E6.6.1* of the Planning Scheme. This is particularly due to the actual parking demands that will be generated by the development.

Documentation submitted to date appears to satisfy the Acceptable Solution for clause E6.6.2 Accessible Parking

The residential component does not generated a requirement for accessible parking under the *Hobart City Interim Planning Scheme 2015,* however accessible parking has been proposed on the upper basement level in close proximity to the lifts and internal entrance to the cafe tenancy. One space will meet the provisions of the Building Code.

#### Acceptable solution - A1: COMPLIANT

Car parking spaces provided for people with a disability must:

(a) satisfy the relevant provisions of the Building Code of Australia;

(b) be incorporated into the overall car park design;(c) be located as close as practicable to the building entrance.

Documentation submitted to date does not satisfy the Acceptable Solution for clause E6.6.3 Motorcycle Parking

86 car parking spaces proposed, this requires 4x motorcycle spaces, however no motorcycle spaces have been provided. Given the proximity of the site to the CBD and other key sites and public transport corridors the applicant has considered that provision of 4 motorcycle spaces is not necessary.

### Acceptable solution - A1: NON COMPLIANT

The number of onsite motorcycle parking spaces provided must be at a rate of 1 space to each 20 car parking spaces after the first 19 car parking spaces except if bulky goods sales, (rounded to the nearest whole number). Where an existing use or development is extended or intensified, the additional number of motorcycle parking spaces provided must be calculated on the amount of extension or intensification, provided the existing number of motorcycle parking spaces is not reduced.

Performance Criteria - P1<u>:</u> The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

(a) motorcycle parking demand; - The empirical parking assessment indicates that the provision of no motor cycle parking spaces will sufficiently meet the likely demands associated with the development.

(b) the availability of on-street and public motorcycle parking in the locality; - There is a limited supply of on-street parking in the surrounding road network. Much of the available parking is in the form of timerestricted parking, with authorised residents excepted.

(c) the availability and frequency of public transport within a 400m walking distance of the site; - Metro Tasmania operate regular bus services along Sandy Bay Road and Davey Street which is within 400 metres of the subject site.

(d) the availability and suitablility of alternative arrangements for motorcycle parking provisions; - No alternative arrangements available or considered necessary.

Based on the above assessment and given the submitted documentation, the parking provision may be accepted under *Performance Criteria P1:E6.6.3* of the Planning Scheme. This is particularly due to the actual parking demands that will be generated by the development.

Documentation submitted to date appears to satisfy the Acceptable Solution for clause E6.6.4 Bicycle Parking

The residential use does not generate a requirement for bicycle parking however a bicycle storage space has been provided for residents to promote alternate forms of transport which may accommodate approximately 7 bicycles. The proposed cafe will generate a minumim requirement of 2 bicycle spaces and these spaces have been provided outside the cafe entrance in accordance with class 3 bicycle parking.

A representation regarding the level of bicycle parking proposed vs what would be realistically required by the residential needs was submitted suggesting a minimum 55 bicycle spaces be

	provided. Although there may be some merit to the representation, the assessment must be made against the planning scheme Table E6.2 which does not require residential bicycle parking. The application does provide bicycle storage which is in surplus to the requirements. Acceptable solution - A1: COMPLIANT The number of onsite bicycle parking spaces provided must be no less than the number specified in Table E6.2.
Clause 6.7.1 number of vehicle accesses ACCEPTABLE SOLUTION	The number of vehicle accesses must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date appears to be able to satisfy the Acceptable Solution for clause E6.7.1. Acceptable solution: The number of vehicle access points provided for each road frontage must be no more than 1 or the existing number of vehicle access points, whichever is the greater <u>COMPLIANT</u>
	One (1x) crossover (Wilmot Street frontage) - Proposed as shown on the submitted plans. There are two existing crossovers to the site from Wilmot Street. One of the existing crossovers will be redundant and the kerb is to be reinstated. The other existing crossover will be used as the only vehicle access point to the site which will provide both entry and exit.

Clause 6.7.2 design vehicle access ACCEPTABLE SOLUTION	The design of the vehicle access must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date appears to satisfy the Acceptable Solution for clause 6.7.2. Acceptable Solution - A1: Design of vehicle access points must comply with all of the following: (a) in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 – "Access Facilities to Off-street Parking Areas and Queuing Areas" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking - COMPLIANT Location - <u>Feasible</u> Sight distance <u>Feasible</u> Width - <u>Feasible</u> Gradient - <u>Feasible</u>
Clause 6.7.3 vehicle passing ACCEPTABLE SOLUTION	<ul> <li>Vehicle passing must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).</li> <li>Documentation submitted to date appears to be able to satisfy the Acceptable Solution for clause E6.7.3.</li> <li>Acceptable solution - A1: - COMPLIANT Vehicular passing areas must:         <ul> <li>(a) be provided if any of the following applies to an access:</li> <li>(i) it serves more than 5 car parking spaces; - Yes</li> <li>(ii) is more than 30 m long; - Yes</li> <li>(iii) it meets a road serving more than 6000 vehicles per day; - No</li> <li>(b) be 6 m long, 5.5 m wide, and taper to the width of the driveway; - Feasible - As shown</li> <li>(c) have the first passing area constructed at the kerb; - Feasible - As shown</li> <li>(d) be at intervals of no more than 30 m along the access Feasible - As shown</li> </ul> </li> </ul>

Clause 6.7.4 on site turning ACCEPTABLE SOLUTION	On-site turning must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).         Documentation submitted to date appears to satisfy the Acceptable Solution for clause         E6.7.4.       The proposed vehicle circulation within the basement and ground floor car parks ensures vehicles can turn on-site and enter and exit the site in a forward direction         Acceptable solution - A1:       On-site turning must be provided to enable vehicles to exit a site in a forward direction, except where the access complies with any of the following:         (a) it serves no more than two dwelling units; - APPLIES         (b) it meets a road carrying less than 6000 vehicles per day APPLIES
Clause 6.7.5 layout of parking area PERFORMANCE CRITERIA	The layout of the parking area must satisfy either         Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).         Documentation submitted to date does not satisfy the Acceptable Solution for clause E6.7.5 and as such, shall be assessed under Performance Criteria.         Acceptable Solution A1: - NON COMPLIANT         The layout of car parking spaces, access aisles, circulation roadways and ramps must be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking and must have sufficient headroom to comply with clause 5.3 "Headroom" of the same Standard.         Car Parking Space Dimensions (AS2890.1 Fig 2.2 = 2.4x5.4m Class 1A): - Feasible         Car Parking Space Design Envelope (AS2890.1 Fig 5.2 300mm clearance on side): - Feasible         Headroom: (AS2890.1 Fig 5.3 = 2.2m clearance): - Feasible         Parking Space Gradient (5%): - Feasible         Aisle Width (AS2890.1 Fig 2.2 = 5.8m Class 1A): - Feasible         Garage Door Width & Apron (AS2890.1 Fig 5.4 = 2.4m wide => 7m wide apron): - Feasible         Parking Module Gradient (manoeuvring area 5% Acceptable Soln, 10% Performance): - Feasible         Driveway Gradient & Width (AS2890.1 Section 2.6 = 25% and 3m): - Feasible         Transitions (AS2890.1 Section 2.5.3 = 12.5% summit, 15% sag => 2m transition): - Feasible

			Blind Aisle End Widening (AS2890.1 Fig 2.3 = 1m extra): - <u>N/A</u> "Jockey Parking" (Performance Assessment): - <u>YES</u> but assessed under Performance Criteria <u>Performance Criteria - P1:</u> The layout of car parking spaces, access aisles, circulation roadways and ramps must be safe and must ensure ease of access, egress and manoeuvring on- site <u>Feasible</u> Residential car parking space layout may utilise 'Jockey Parking' configuration in which one car parking space is behind another car parking space and this arrangement is considered reasonable if it only serves the same apartment and is not designated for visitors. Submitted documentation appears to show that these parameters can be
			met, therefore may be accepted under <i>Performance Criteria P1:E6.7.5.</i> Condition on planning permit to ensure these parameters are met.
Clause 6.7.6 surface treatment ACCEPTABLE SOLUTION			The surface treatment must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does satisfy the Acceptable Solution for clause E6.7.6.
			Acceptable Solution - A1: - <b>COMPLIANT</b> Parking spaces and vehicle circulation roadways must be in accordance with all of the following; (a) paved or treated with a durable all-weather pavement where within 75m of a property boundary or a sealed roadway; (b) drained to an approved stormwater system, unless the road from which access is provided to the
			Submitted plans indicate a concrete surface treatment and able to be drained to an approved stormwater system. Condition on Planning Permit to ratify timing.
Clause 6.7.7 Lighting of parking area Planner and health unit to assess		-	Planner to assess
Clause 6.7.8 Landscaping Planner to assess	_	-	Planner to assess

Clause 6.7.9 motor bike parking	Documentation submitted to date appears to not invoke clause E6.7.9
NOT APPLICABLE	No motorcycle parking is proposed to be provided.
Clause 6.7.10 bicycle parking ACCEPTABLE SOLUTION	The bicycle parking must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does satisfy the Acceptable Solution for clause E6.7.10.
	Acceptable Solution A1: The number of on-site bicycle parking spaces provided must be no less than the number specified in Table E6.2 <u>COMPLIANT</u>
	Acceptable Solution A2: The design of bicycle parking spaces must be to the class specified in table 1.1 of AS2890.3-1993 Parking facilities Part 3: Bicycle parking facilities in compliance with section 2 "Design of Parking Facilities" and clauses 3.1 "Security" and 3.3 "Ease of Use" of the same Standard COMPLIANT
	Table E6.2 sets out the number of bicycle parking spaces required. The requirement for spaces for a use or development listed in the first column of the table is set out in the second and forth columns of the table with the corresponding class set out in the third and fifth columns. If the result is not a whole number, the required number of (spaces) is the nearest whole number. If the fraction is one-half, the requirement is the next whole number.
Clause 6.7.11 bicycle end trip Planner to assess	 Planner to assess
Clause 6.7.12 siting of car parking Planner to assess based on DE assessment of Clause 6.7.5 layout of parking area	 Planner to assess

Clause 6.7.13 facilities for commercial vehicles ACCEPTABLE SOLUTION	<ul> <li>The facilities for commercial vehicles must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015).</li> <li>Documentation submitted to date does satisfy the Acceptable Solution for clause E6.7.13.</li> <li>The TIA has identified that there is a loading within 50m of the site. The use is not primarily dependent on outward delivery of goods from the site.</li> <li>An ongoing waste management plan has been provided that identifies waste is to be collected by a private contractor. Council's Customer Liaison Officer of the Cleansing &amp; Solid Waste Unit has reviewed the on going waste management plan and determined that it is acceptable such that the waste is to be collected by a private contractor.</li> <li>Acceptable Solution A1: - COMPLIANT Commercial vehicle facilities for loading, unloading or manoeuvring must be provided on-site in accordance with Australian Standard for Off-street Parking, Part 2 : Commercial. Vehicle Facilities AS 2890.2:2002, unless:</li> </ul>
	<ul> <li>(a) the delivery of all inward bound goods is by a single person from a vehicle parked in a dedicated loading zone within 50 m of the site;</li> <li>(b) the use is not primarily dependent on outward delivery of goods from the site.</li> </ul>
Clause 6.7.14 access to a road ACCEPTABLE SOLUTION	The access to a road must satisfy the Acceptable Solutions of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does appear to satisfy the Acceptable Solution for clause E6.7.14. Acceptable Solution A1: Access to a road must be in accordance with the requirements of the road authority <u>COMPLIANT</u> Performance Criteria - P1: No Performance Criteria Submitted plans appear to indicate access to a road in accordance with relevant LGAT drawings.
Clause 6.7.15 access to Niree Lane <b>NOT APPLICABLE</b>	The access to Niree Lane must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date appears not to invoke clause E6.7.15. No development proposed within Niree Lane.

E7.1.1 Purpose		E7.1.1 The purpose of this provision is to ensure that stormwater disposal is managed in a way that furthers the objectives of the State Stormwater Strategy.
E7.2 Application of this Code	YES	This code applies to development requiring management of stormwater. This code does not apply to use.
Clause for Assessment		Comments / Discussion (in bold)
A1 (SW disposed to Public SW Inf via Gravity / P1 (onsite/pump) ACCEPTABLE SOLUTION		The stormwater drainage and disposal must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does appear to satisfy the Acceptable Solution for clause E7.7.1 (A1 Acceptable Solution A1: Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure. Submitted plans appear to indicate stormwater from new impervious surfaces being able to be disposed of by gravity to public stormwater infrastructure. To be verfied at Plumbing Permit stage.

(Mechanical Treatment) ACCEPTABLE SOLUTION	The stormwater drainage and disposal must satisfy either Acceptable Solutions or Performance Criteria for each clause of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does appear to satisfy the Acceptable Solution for clause E7.7.1
	<ul> <li>(A2).</li> <li>Acceptable Solution A2: A stormwater system for a new development must incorporate water sensitive urban design principles R1 fo the treatment and disposal of stormwater if any of the following apply:</li> <li>(a) the size of new impervious area is more than 600 m2; Yes</li> <li>(b) new car parking is provided for more than 6 cars;</li> <li>YES</li> <li>(c) a subdivision is for more than 5 lots - No</li> </ul>
	Submitted documentation appears to indicate (E7.7.1.R1) - Water Sensitive Urban Design Engineering Procedures for Stormwater Management in Southern Tasmania or the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) from a nationally recognised stormwater modelling software package used to assess land development proposals based on local conditions including rainfall, land use and topography, is recognised as current best practice.
A3 (Minor SW System) ACCEPTABLE SOLUTION	The stormwater drainage and disposal must satisfy the Acceptable Solutions of the Hobart Interim Planning Scheme 2015 (HIPS 2015). Documentation submitted to date does appear to satisfy the Acceptable Solution for clause E7.7.1 (A3
	Acceptable Solution A3: A minor stormwater drainage system must be designed to comply with all of the following: (a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed; - <u>Feasible</u> (b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or upgraded public stormwater infrastructure <u>Feasible</u>
	<u>Performance Criteria – P3:</u> No Performance Criteria.

A4 (Major SW System accommodates 1:100 ARI)	The stormwater drainage and disposal must satisfy the Acceptable Solution of the Hobart Interim Planning Scheme 2015 (HIPS 2015).
NOT APPLICABLE	Documentation submitted to date appears not to invoke clause E7.7.1 (A4).
	Submitted documentation does not appear to show any proposal for construction of major stormwater drainage.

### PROTECTION OF COUNCIL INFRASTRUCTURE

Council infrastructure at risk	Why?
Stormwater pipes	Not required
Council road network	Yes - During construction

#### COMMENTS:

Representation submited with concerns regarding traffic generation, traffic congestion, garbage collection method and provision for bicycles. The acces conditions at Wilmot Street are considered sufficient and safe with regard to the speed environment and sight distance provisions. Wilmot Street is a one-way road that provides a connection between Hampden Road and Sandy Bay Road. The street supports a mix of residential and commercial vehicles. The speed imit along Wilmot Street is 50km/hr, however it is unlikely that vehicles would exceed 40km/hr. The TIA states that vehicle movements generated by the proposal are not considered to have any adverse impacts on the safety or efficiency of Wilmot Street given the one-way nature of the street. It is not anticipated that there will be any impacts on Sandy Bay Road, given that the left lane operates as a clearway during the evening peak period, whilst the west bound left lane is a clearway during the morning peak period.

An ongoing waste management plan has been provided that identifies waste is to be collected by a private contractor. Council's Customer Liaison Officer of the Cleansing & Solid Waste Unit has reviewed the on going waste management plan and determined that it is acceptable and such the waste is to be collected by a private contractor.

A representation regarding the level of bicycle parking proposed vs what would be realistically required by the residential needs. This representor suggested a minimum of 55 bicycle spaces. Although there may be some merit to the representation, the assessment must be made against the planning scheme Table E6.2 which does not require residential bicycle parking. The application does provide bicycle storage for approximately 7 bicycles, which is in surplus to the requirements. This representor has also requested the driveway crossover have no lip or a maximum of 10mm for safety reasons. The crossover is required to be constructed in accordance with the Tasmanian Standard Drawings which show a 0 to 10mm lip which meets the representors request.

#### CONDITIONS:

In a council related engineering context, the proposal can be supported in principal subject to the following conditions and advice.

General Conditions: ENG1: Pay Costs ENG 2a: Vehicular barriers compliant with the Australian Standard AS/NZS1170.1:2002 must be installed

ENG 3a: The access driveway and parking module (parking spaces, aisles and manoeuvring area) must be designed and constructed in accordance with Australian Standard AS/NZS2890.1:2004

ENG 3b: The access driveway and parking module design

ENG 3c: The access driveway and parking module (parking spaces, aisles and manoeuvring area) construction certification

ENG 4: Surface treatment

ENG 5: The number of car parking spaces approved on the site

ENG 6: The number of bicycle parking spaces

ENG 9: Disability Parking

ENG 12: Construction Waste management

ENG sw4: Development must be drained to Council infrastructure taking into account the

limited receiving capacity of Council's infrastructure (Enviro Report)

ENG sw5: Stormwater manhole

ENG sw6: The new stormwater infrastructure design

ENG sw7: Stormwater pre- treatment and detention for stormwater discharges from the development (Enviro Report)

ENV 2: SWMP design

ENG tr2: Construction traffic management plan

ENG r1: Highway reservation protection

ENG r3: Crossover design

ENG s1: Gate and doors highway reservation encroachment

ENG s2: Stairs and ramps highway reservation encroachment

Part 5 r1: Part 5 Highway reservation protection

#### ADVICE:

- Dial before you dig
- Fees and charges
- Building Permit
- Plumbing Permit
- Driveway surfacing over highway reservation
- Occupation of the Public Highway
- Condition endorsement engineering
- Residential parking permit eligibility
- General exemption parking permits
- Permit to construct public infrastructure
- New service connection
- Stormwater
- Structures close to Counicl's Stormwater infrastructure
- Work within the highway reservation
- CBD and high volume footpath closures
- Redundant crossovers
- Access
- Workplace health and safety
- Waste disposal

Planning: #187345

#### Property

9 SANDY BAY ROAD HOBART TAS 7000

## People

Applicant * 9 Sandy Bay Road Pty Ltd, by their agent, Ireneinc Planning
9 Sandy Bay Road Pty Ltd, by their agent, Ireneinc Planning
and Urban Design
c/o 49 Tasma Street
NORTH HOBART TAS 7000
62349281
phil@ireneinc.com.au
pini@renemc.com.au
Owner
9 Sandy Bay Road Pty Ltd
c/o 49 Tasma Street
NORTH HOBART TAS 7000
62349281
phil@ireneinc.com.au
pini@relienc.com.au
Entered By
POPPY SCHARKIE
49 TASMA STREET
NORTH HOBART TAS 7000 62349281
pscharkie@ireneinc.onmicrosoft.com

## Use

Multiple dwellings

#### Details

Have you obtained pre application advice?

• ...No

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

• ...No

# Supporting Information Council Meeting - 25/5/2020

Is the application for SIGI number of signs under O *	NAGE ONLY? If yes, please er ther Details below.	nter \$0 in the	e cost of developr	nent, and you must enter th
• No				
	ed to an enforcement action ple	ease enter E	nforcement Num	ber
Details				
What is the current appro	oved use of the land / building(s	5)?		
Multiple dwellings				
Please provide a full dese swimming pool and gara *	cription of the proposed use or ge)	developme	ent (i.e. demolition	and new dwelling,
Multiple dwellings				
Estimated cost of develo	pment			
700000.00				
Existing floor area (m2)	Proposed floor are	a (m2)	Site area (	m2)
Carparking on Site				
	•	N/A		
			(no selection	
Total parking spaces	Existing parking spaces	chosen)		
Other Details				
No How many signs, please involved in this applicatio Tasmania Heritage B Is this property on the Ta Register?	nn? Register			
Required Documen	ts			
Title (Folio text and Plan an *	nd Schedule of Easements)			
combined.pdf				
Plans (proposed, existing) *				
DA_IRENEINC_JASON				
Supporting Docume	ents			
Concept Servicing Plan 190730 CIV 19E45-1 B.pd	df			
Traffic Impact Assessment 9 Sandy Bay Rd TIA Final	pdf			
Archaeological Report	•			
Landscape Plan	Sandy Bay Road v2 180819.pdf			
St_David_DA_Landscape_ Planning Report	_Review_B (003).pdf			
Sandy Bay Road 9 Planning	g Report.pdf			
Stormwater 190730 SR 19E45-1.pdf				

taswater 190730 INST 19E45-1 TasWater Demands.pdf

#### Supporting Information Council Meeting - 25/5/2020





# **RESULT OF SEARCH**

DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO		
171493	1		
EDITION	DATE OF ISSUE		
1	11-Jul-2016		

SEARCH DATE : 13-Aug-2019 SEARCH TIME : 04.20 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 1 on Plan 171493 Derivation : Part of 2 Acres Granted to William Murray Prior CTs 141002/1 and 141002/2

#### SCHEDULE 1

M528729 TRANSFER to 9 SANDY BAY ROAD PTY LTD Registered 07-Aug-2015 at 12.01 PM

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any E17058 MORTGAGE to National Australia Bank Limited Registered 07-Aug-2015 at 12.02 PM

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

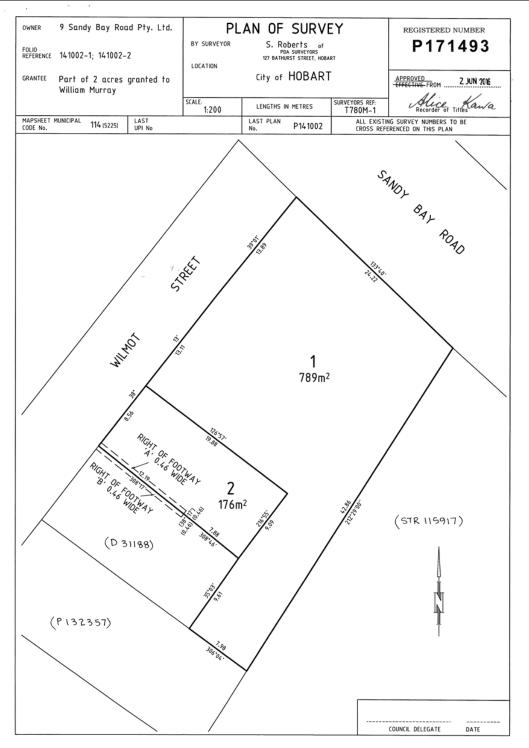
Page 1 of 1 www.thelist.tas.gov.au

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# **FOLIO PLAN**

DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980





 Search Date: 13 Aug 2019
 Search Time: 04:20 PM
 Volume Number: 171493
 Revision Number: 01
 Page 1 of 1

 Department of Primary Industries, Parks, Water and Environment
 www.thelist.tas.gov.au

the





# **RESULT OF SEARCH**

DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO	
171493	2	
EDITION	DATE OF ISSUE	
1	11-Jul-2016	

SEARCH DATE : 13-Aug-2019 SEARCH TIME : 04.20 PM

#### DESCRIPTION OF LAND

City of HOBART Lot 2 on Plan 171493 Derivation : Part of 2 Acres Granted to William Murray Prior CTs 141002/1 and 141002/2

#### SCHEDULE 1

M528729 TRANSFER to 9 SANDY BAY ROAD PTY LTD Registered 07-Aug-2015 at 12.01 PM

#### SCHEDULE 2

Reservations and conditions in the Crown Grant if any

- 30/1790 CONVEYANCE: BENEFITING EASEMENT: Right to pass and repass but on foot only over the strip of land marked Right of Footway 'B' 0.46 Wide on Plan 171493
- 30/1790 CONVEYANCE: BURDENING EASEMENT: Right to pass and repass but on foot only (appurtenant to Lot 2 on Diagram 31188) over the strip of land marked Right of Footway 'A' 0.46 Wide on Plan 171493
- 30/1790 BURDENING EASEMENT: subject to a right to maintain spouting (appurtenant to Lot 2 on Diagram 31188) over the strip of land marked Right of Footway 'A' 0.46 Wide on Plan 171493
- E17058 MORTGAGE to National Australia Bank Limited Registered 07-Aug-2015 at 12.02 PM

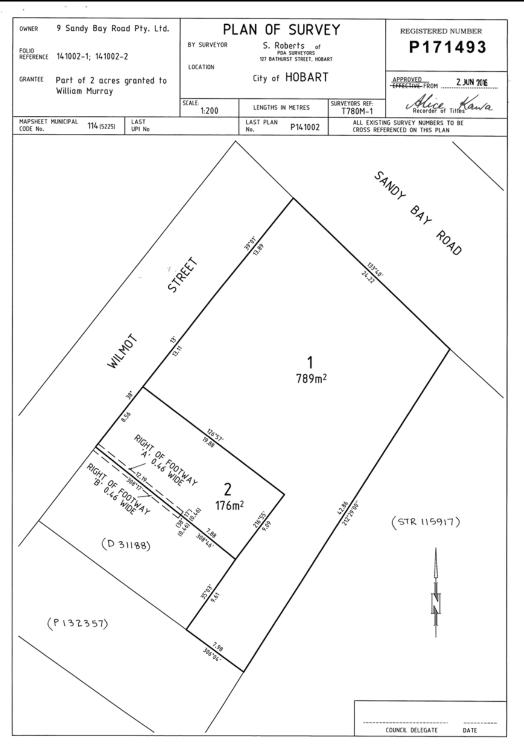
UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

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DEPUTY RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980





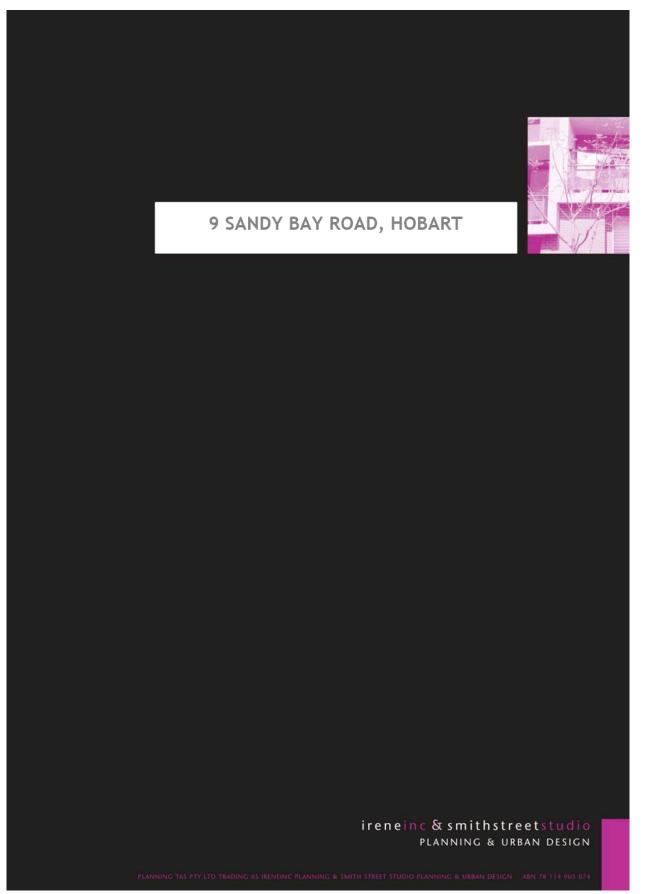
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 Revision Number: 01
 Page 1 of 1

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## Supporting Information Council Meeting - 25/5/2020

# Page 691 ATTACHMENT B



# 9 SANDY BAY ROAD, HOBART

**Planning Report** 

Last Updated - March 2020 Author - Phil Gartrell/ Poppy Scharkie Reviewed - Irene Duckett

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9 Sandy Bay Road

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# 1. INTRODUCTION

This report forms part of the planning application for use and development in accordance with the requirements of the *Hobart Interim Planning Scheme 2015* relating to land at 9 Sandy Bay Road, Hobart.

#### 1.1 THE SITE

The subject site is comprised of CT171493/1 and CT 171493/2 and is addressed as 9 Sandy Bay Road, Hobart. The following figure describes the location of the site.

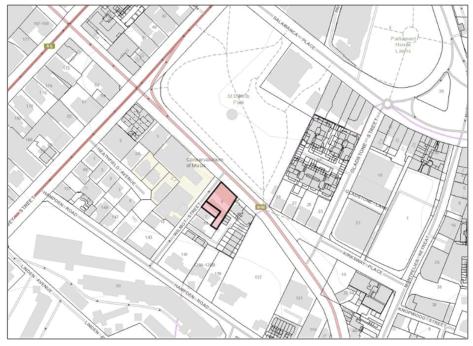


Figure 1: Locality Map (source: www.thelist.tas.gov.au © State Government of Tasmania)

The site is situated on the corner of Wilmot Street and Sandy Bay Road and both titles combined have an approximate site area of 961m<sup>2</sup>.

The site currently accommodates a residential/rental apartment complex. Primary access to the site is provided from Wilmot Street, however the site does not currently provide any car parking for residents.

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The adjoining properties are varying residential scales from small cottages located on Wilmot Street and a 3-storey apartment building located at 12 Wilmot Street.

Figure 2: Aerial (Source: www.listmap.tas.gov.au © State Government of Tasmania)

1.2 SITE SURROUNDS

The site is surrounded by a mix of residential and commercial properties within the vicinity of the site, which is a consistent theme along Sandy Bay Road. The site sits adjacent to St. David's Park and is in close proximity to restaurants and cafes within Salamanca Place and the wider CBD.

Immediately to the north-west is the existing UTAS Conservatorium of Music building which has recently been sold and will be relocated to the Hedberg in Campbell Street.

#### 1.3 BACKGROUND

A previous application was made on the site in 2016 for a Hotel, café and bar. That proposal was initially refused by Council based on an inconsistency with the purpose of the zone, that the height of the building exceeded the permitted height and was not considered compatible with the scale of nearby buildings. The proposal was then the subject of an appeal in 2017, (9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors [2017] TASRMPAT 19).

The proposal before the Tribunal was amended from the originally submitted development which was refused by Council, subsequently providing a height setback to allow a greater transition between the proposed building and the adjoining building at 12 Wilmot Street (when viewed from Sandy Bay Road). Following these changes, Council supported the application.

The revised application was subsequently refused by the Tribunal on a number of grounds, however the most notable comments from that refusal related specifically to height transition and is detailed below:

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58. The Tribunal holds that "scale" in this Clause should be read in the context of P1; the term takes its colour from that context. The terms of P1 relate to building height. Accordingly, the reference to scale in this part is an inference to height and requires compatibility in that respect. Such matters cannot ignore altogether the form of the building, since height generates mass as Ms Duckett has said, but the intent is that building height must be compatible with the scale (height) of "nearby" buildings.

89. Clause 15.4.1 P1(d) aims to "allow for a transition in height between adjoining buildings, where relevant." In this case, the relevant adjoining buildings are the proposal and No. 6 Wilmot Street.

90. It is noted that this provision of the Scheme is one of several in P1 which are aimed at achieving the objective of Clause 15.4.1. That is "to ensure that building height contributes positively to the streetscape…" (emphasis added); this, like the scale requirement of the Scheme may sometimes be an onerous task.

91. Transitions between adjoining buildings are common provisions in town planning controls. Obviously, the intent of such controls is to avoid discordant differences in building heights by requiring the design of higher buildings to have regard for, and a recognition of, lower building. Stepped buildings are one way to achieve a transition, and that is the predominant approach adopted in the present case .<sup>1</sup>

The statement makes clear that the consideration of transition and compatibility is determined by determining the height difference between the proposed building and adjacent buildings within the streetscape.

The alleviating factors were specified as being the topography of the Wilmot Street, setback of the proposed building from the cottage at 6 Wilmot Street and landscaping along the frontage.



The following figure shows the previous proposal, as viewed from Wilmot Street:

Figure 3: Previous proposed building on the site (source: Advertised architectural documentation)

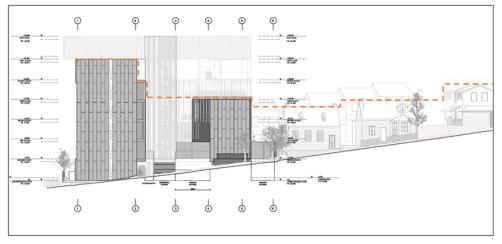
<sup>1</sup> 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors [2017] TASRMPAT 19), p 15.

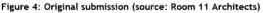
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As can be seen above, the bulk of the previous building was quite evident within the streetscape with little to no alleviating factors aside from the height transition provided on the south-western corner adjoining 6 Wilmot Street.

The previous building presented as significantly larger building within the immediate streetscape, with little to no horizontal setback from the street frontage. This is considered to result in a substantial increase in the overall scale of the building when considered in context with adjoining buildings to the south. Figure 4 illustrates in elevation form, the distinction from the earlier (refused) scheme, shown in figure 3, particularly with regard to Wilmot Street.

The following figure illustrates the original proposal submitted as part of this application along with the current revised proposal currently under assessment.





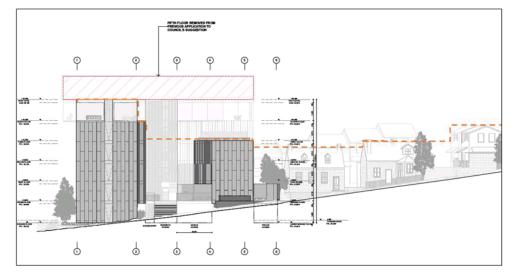


Figure 5: Revised design from Wilmot Street, noting removal of the 7<sup>th</sup> level (source: Room 11 Architects)

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It is worth noting that elevation drawing shown in figures 4 & 5 is from a significantly closer range than the elevation shown in the previous application on the site in figure 3.

In the earlier scheme which was subject to the Tribunal proceedings, it was accepted by the experts and the tribunal, that the building fronting Sandy Bay Road was of an appropriate scale for the context and nature of existing and appropriate development on this road. The key weakness in the earlier proposal was the failure to meaningfully scale down development to a transitional scale on Wilmot Street.

94. It is clear from the evidence that the proposal provides an insufficient transition from the adjoining building - being the cottage at No. 6. The three storey component of the proposal closest to No. 6 presents a height which is unable to act as a transitioning element anticipated by Clause 15.4.1 P1(d). This component is significantly higher than the front elevation of No. 6 and cannot be properly considered a "transition". The proposal does not adopt or recognise the dimensional attributes of No. 6 which are central to the provision of an acceptable transitioning element between these buildings.

The revised proposal currently before Council has been designed in clear response to the dimensional attributes of 6 Wilmot. Scale is modulated both in vertical form, and in the horizontal massing and rhythm recognising the smaller scale urban form. Increased separation between the two building elements, as well as to the building to the south further reduce apparent scale. The proposed building presents as two building forms within the immediate streetscape, with the lower section on the south-western corner siting at a comparable height with the adjoining building at 6 Wilmot Street.

The higher element of the building to the south east is set back over 8m (the equivalent depth of the neighbouring cottages), allowing this element to appear as a neighbouring building to the rear, rather than an element on the streetscape. Together with the recessive nature afforded by the setback, the overall scale of the building is reduced.

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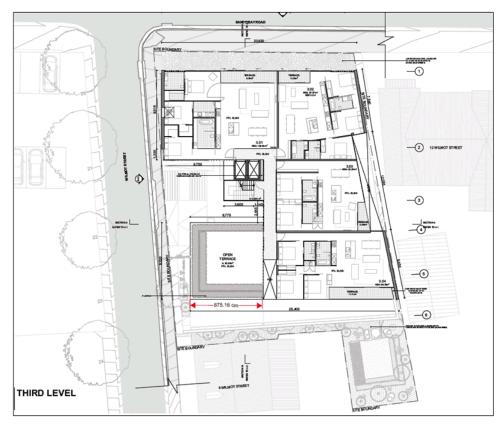


Figure 6: Third level plan, demonstrating the setback of the building from level 3 (source: Room 11 Architects)

The variable setbacks of the building ensures that the bulk and height of the building is not unreasonable and ensures that the proposal provides a suitable level of transition from adjoining buildings along Wilmot Street.

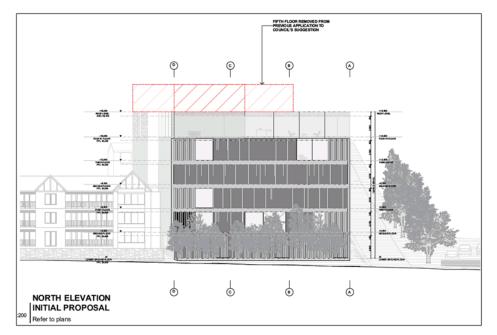


Figure 7: Proposed elevation along Sandy Bay Road (source: Room 11 Architects)

Whilst the previous proposal provided a small 'step' in the building form on the north-eastern corner as a gesture to the transition between the two buildings, this was not raised as a requirement or issue by the tribunal in relation to the Sandy Bay Road elevation, but rather an observation of the evidence provided.

It is our view that the design of the current revised proposal has been undertaken with consideration of the finer grain of the Wilmot Street urban form, transitioning to the more robust Sandy Bay Road urban form.

A further analysis of the proposal from both Wilmot Street and Sandy Bay Road, with regard to the relevant provisions of Clauses 15.4.1, 15.4.2 and 15.4.3, is provided in section 3 and 4 of this report.

# 2. PROPOSED DEVELOPMENT

The proposed development is for a 6-storey residential apartment building which will provide 28 residential apartments, including a penthouse on the top floor. The apartments will provide a variety of living options, varying from 1 bedroom through to 3 bedrooms, as follows:

- 10 x 1 Bedroom apartments;
- 10 x 2 Bedroom apartments;
- 7 x 3 Bedroom apartments; and
- 1 x 3 Bedroom Penthouse

Primary access to the site will be provided from Wilmot Street as existing, with car parking to be provided for 22 cars. The building will be replacing an existing apartment building on the site, providing high quality apartment options in close proximity to key tourist, economic and sociocultural areas such as the CBD, Sullivan's Cove and the nearby Sandy Bay shopping and retail precinct.



Figure 8: Artist's Impression of the proposed building from Sandy Bay Road (source: Room 11 Architects & Stab Studio)

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Figure 9: 3D render illustrating the proposal Sandy Bay Road (source: Room 11 Architects)

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# 3. URBAN ANALYSIS

#### 3.1 STREETSCAPE ASSESSMENT

Streetscape is defined by the Hobart Interim Planning Scheme 2015 as follows:

means the visual quality of a street depicted by road width, street planting, characteristics and features, public utilities constructed within the road reserve, the setbacks of buildings and structures from the lot boundaries, the quality, scale, bulk and design of buildings and structures fronting the road reserve. For the purposes of determining streetscape with respect to a particular site, the above factors are relevant if within 100 m of the site.

In relation to the proposal, the streetscape is identified as the relationship of the proposed building (building height, massing, spatial relationships, detailing, form, setbacks, boundary treatment), to those existing elements in the street, and to the extent where those elements come together to form a distinguishable pattern or character, the extent to which the proposed building respects or disrupts that character. In relation to this site, Sandy Bay Road and Wilmot Streets have been considered as the two relevant streetscapes.



Figure 10: Areas relevant for determining the nature of the streetscape - 100m for streetscape analysis and 200m-300m for broader context (source: www.thelist.tas.gov.au © State Government of Tasmania)

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9 Sandy Bay Road

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WILMOT STREET



Figure 11: Wilmot Street from Sandy Bay Road taken by Natalie Holman 4/4/2017, 9:11am, Canon EOS M3, 18mm, ISO160, f/8, 1/320.



Figure 12: Wilmot Streetscape, looking south west. (source: Google Earth 2019)

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9 Sandy Bay Road

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Figure 13: Wilmot Street Streetscape looking north east (source: Google Earth 2019)



Figure 14: Wilmot Street Streetscape looking northeast (source: Google Earth 2019).

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SANDY BAY ROAD



Figure 15: Sandy Bay Road Streetscape, looking west (source: Google Earth 2019).



Figure 16: Sandy Bay Road Streetscape looking southeast (source: Google Earth 2019).

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#### STREETSCAPE CHARACTER

Sandy Bay Road takes the form of a main arterial, passing through Sandy Bay local shopping district, a major north south arterial road, connecting to the CBD, and key east west arterials. The landscape character is one of built edge urban form. Wilmot Street is a small suburban street, with buildings interspersed with mature trees.

#### HEIGHT

Sandy Bay Road has historically attracted commercial buildings and larger scale residential dwellings. Building height increases with proximity to the CBD, from an average one to two storeys, to a four storey equivalent south east of the subject site; five to six storeys at the Conservatorium of Music to the north west, and six storeys at 9 Davey Street (on the corner of Sandy Bay Road and Davey). Beyond that, the scale of buildings rises with the topography towards the Macquarie Street ridgeline. Building form and scale is more robust, with no overriding or consistent height, and variations of several storeys between buildings are easily tolerated in the existing streetscape form.

The Wilmot Street streetscape on the other hand presents a lower scale of development. Wilmot Street traditionally housed modest workers' cottages, with the larger residential buildings located along Hampden Road. Houses are predominantly single storey, with steeply pitched roofs and dormers, stepping up the relatively steep rise in topography. The apartments currently occupying the subject site present two storeys to Wilmot Street.

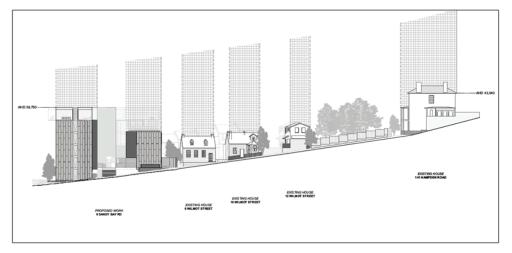


Figure 17: Elevation plan showing the variable heights of buildings along Wilmot Street in response to the topography (source: Room 11 Architects)

#### SETBACK AND BOUNDARY TREATMENT

Frontages to Sandy Bay Road are predominantly built to the front boundary, or with a minor setback, presenting a hard-edged urban form, with little or no landscaping.

On Wilmot Street, front setbacks are relatively consistent at 1 to 2 metres, and front boundaries are generally defined by low picket fences for the cottages, and higher masonry walls for the two larger houses on the corner of Hampden Road. The existing northern block of apartments on the subject site is built to the Wilmot Street boundary and presents a solid masonry wall for a length

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of approximately four metres, with a further four metres a semi-open screen to porches and stairwell.

Houses were traditionally designed with both front and side gardens, and low fences along the front boundary.



Figure 18: Existing pattern of massing, creating a rhythm of traditional lot widths (source: Google Maps 2018)

#### MASSING

The scale of a building is represented not only in height but in massing, and the effect of height can be exacerbated by bulk. For example, a tall slender building would have a different contribution to the streetscape than a tall wide building. In Wilmot Street in particular this is apparent notwithstanding the differing heights of buildings, where a similar width of building is presented to the streetscape, creating a rhythm or modulation of building to space.

The building scale is also represented in separation, reflecting the traditional lot pattern even where the cadastral boundaries have been adhered. This pattern is evident in the streetscape as a regular pattern of built form (solid and void), reducing the scale of development to a residential scale.

This is evident in the existing development on the subject site, with the separation of the two apartment buildings, and the rear infill of the two cottages within the Conservatorium site (formerly 9 and 13 Wilmot Street) with infill development consolidating the lots to the rear, but

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maintaining the separation of the cottages to the street and therefore the rhythm of the traditional lot pattern in the street.

#### MATERIALS AND BUILDING DETAILS

Sandy Bay Road dwellings present a range of finishes and materials, ranging from untreated brick to rendered and painted surfaces. Building form varies, reflecting the varied commercial purposes for which the buildings originated. Residential buildings (apartments) are also designed to minimise intrusion of privacy and noise, and as such do not encourage open interaction with the street.

Wilmot Street on the other hand adopts a more traditional residential presentation. Houses are generally constructed of brick with painted or rendered finish. Detailing is characterised by windows and front door addressing the street.

#### HISTORIC AREAS AND BUILDINGS

The subject site is located adjacent to a number of individually listed properties, as well as within and adjacent to a Heritage Precinct H2, and H1 (St Davids Park). The planning scheme makes reference to historic areas and buildings within the context of the density of new development being responsive to the character of these heritage areas.

As illustrated by figure 18, the site is surrounded by a number of heritage listed properties and areas (designated as heritage precincts). The established character of these heritage properties and areas are houses set in a garden setting, one to two storeys in height, and ranging from large mansions to modest cottages.



Figure 19: Surrounding Heritage Areas (diagonal stripe) and listed properties (source: www.thelist.tas.gov.au © State of Tasmania)

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A portion of the site is located within a historic precinct however, this area will be landscaped to provide a substantial communal outdoor area which will serve to significantly improve the amenity of the site and ensure activation of a previously disregarded aspect of the site.

#### SURROUNDING RESIDENTIAL AREAS

The subject site and surrounding area are all within the Urban Mixed Use zone. As this clause is specific to the Urban Mixed Use zone provisions, it cannot be read to mean surrounding residential zone. The nearest adjacent residential zones are to the south eastern side of Sandy Bay Road, and the north western side of Albuera Street. Similarly, the terminology does not limit the area to residential uses. Given the context of this statement in relation to scale appropriate to existing buildings, what might reasonably be described as a residential area would be those buildings constructed for residential purpose, regardless of subsequent uses. The zone itself contains a mixture of commercial buildings as well as residential buildings of varying scale.

For the purpose of this assessment, we have taken Residential Areas to be buildings located on Hampden Road (west of Sandy Bay Road) and Wilmot Street (excluding the Repat Hospital).

#### NEARBY BUILDINGS

In 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors the tribunal determined that:

"Nearby" means "close to" the subject development. The Tribunal...is satisfied that it can be extended along Sandy Bay Road without straying from the intended meaning. As such the Freemasons Lodge and the Mantra Hotel on the corner of Sandy Bay Road and Davey Street can be included.

#### ADJOINING BUILDINGS

Similarly, the term "adjacent buildings" is referenced in performance criteria of the planning scheme in relation to the exercise of the height discretion beyond the permitted 10m acceptable solution, requiring that the proposal allow for a transition in height between adjoining buildings, where appropriate. The tribunal ruled in 9 Sandy Bay Road Pty Ltd v Hobart City Council & Ors that adjoining was defined as:

75. The Tribunal prefers a wider interpretation of this concept. 'Adjoining' should be construed to mean 'next to', without a requirement for physical connection between structures.

The properties identified as adjoining are shown in Figure 20 below.

9 Sandy Bay Road 🛛 🛛 🖊



Figure 20: Adjoining properties (source: www.thelist.tas.gov.au © State of Tasmania)

The scheme calls for a judgement of where such a transition is deemed to be appropriate. In this instance the existing apartment building is approximately 9m high at 3 storeys. The existing streetscape pattern represents an existing transition pattern reduced scale of height with distance from the CBD. The Conservatorium of Music building represents a scale of 6 storeys. The highest elements sit close to Sandy Bay Road, with other building elements fronting Wilmot Street adopting a subservient scale of single storey height, to ensure height consistency with the single storey cottages.

It is appropriate therefore to expect a scale which reduces in height as a transitionary element, and from north to south, from Sandy Bay Road to Wilmot Street. Scale is represented by more than just height, and where other elements of reduced scale are incorporated, such as breaking up of building mass, boundary treatment, or building detailing; greater height tolerance occurs.

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Figure 21: Scale of buildings at RL 37, 32 and 39 respectively. Image taken by Natalie Holman, 4/4/2017, 9:09am, Canon EOS M3, 18mm, ISO200, f/5.6, 1/1250.



Figure 22: Sandy Bay Road streetscape. Buildings east of Wilmot St, Hampden Court RL 32.8 9 Sandy Bay Rd RL 32.15. Image taken by Natalie Holman, 4/4/2017, 9:17am, Canon EOS M3, 18mm, ISO200, f/5.6, 1/1250.

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9 Sandy Bay Road

23

#### 3.2 STREETSCAPE ANALYSIS

#### LANDSCAPE CHARACTER

#### Sandy Bay Road

The proposal retains a similar setback to the existing building and is consistent with the built edge form that defines much of the northern parts of Sandy Bay Road and the relevant streetscape. Whilst the building form provides a strong street edge, it offers articulation and a softness to the treatment of the façade which indicates its residential use. This is reinforced by the palette which draws on colours which are familiar to the streetscape whilst still positioning the building as new through the contemporary materials.

#### Wilmot Street

The building responds the landscape character by transitioning to a compatible height along Wilmot Street. It reinforces the residential character and human scale of the street by introducing the pedestrian access the building along the Wilmot Frontage and provides varying setbacks and reliefs in order to follow the rhythm of Wilmot Street. The design of the entry creates a positive contribution to the interaction and permeability with the street.



Figure 23: Known RLs of nearby buildings and proposed development (cadastre map source: <u>www.thelist.tas.gov.au</u> © State of Tasmania). RLs adapted from 9 Sandy Bay Road V Hobart City Council 2016 and the proposed development)

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#### Sandy Bay Road

Heights of nearby buildings:

Address	RL (m)
12 Wilmot Street (fronts Sandy Bay Road)	32.82
9 Sand Bay Road (Proposed)	Max 39.750 Min 12.9
5-7 Sandy Bay Road	37.63
3 Sandy Bay Road	32.55
1 Sandy Bay Road	47.99
2 Heathfield avenue (Telstra Exchange Building)	53.67

When considering height in relation to the Sandy Bay streetscape, the proposal is compatible with the commercial scale of buildings to the northeast along Sandy Bay Road. There is significant variation in height along Sandy Bay road, however, the scale of the building is one of a commercial scale. In relation to the proposal the tallest part of the Sandy Bay Road Frontage is a RL of 39.750. The majority of the façade is a RL of 39.750 which is consistent with the building to the northeast. The site is located at the base of a rise in topography both to the south and north east. As a result, the siting and scale of the nearby buildings creates a multidimensional and layered visual quality to the streetscape. Buildings set behind those located on the Sandy Bay Road contributing to the appearance height along Sandy Bay Road such as 2 Heathfield Avenue, and whilst outside of the parameters of the streetscape, 188 Collins Street, as demonstrated in the below image:

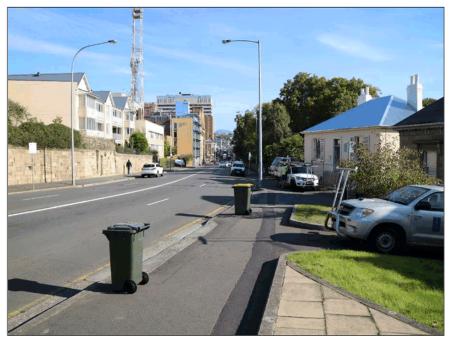


Figure 24: Layering of height along Sandy Bay Road (Ireneinc Planning and Urban Design).

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The use of modular architectural elements of varying height within the proposal is consistent with the layered streetscape of Sandy Bay Road. 12 Wilmot Street located along the frontage of Sandy Bay Road directly adjoins the proposal site. Whilst of lower height than buildings to the north, it is a robust structure with a dominant presence along Sandy Bay Road which contributes to commercial scale of the streetscape. The proposed design at 9 Sandy Bay Road addresses the transition in scale where appropriate, including setting back an area of the upper levels approximately 10 metres; and contrasting upper levels with the body of the building in arrangement, shape, volume and materiality in order to create the experience of a separately defined architectural element and a visual transition to increased height. As the below diagram illustrates the body of the building is of a complimentary mass to that of 12 Wilmot Street. Whilst the transition needs to be responsive to the adjoining 12 Wilmot Street, it must also take into consideration the commercial character of Sandy Bay Road.

#### Wilmot Street

The presentation of building form to Wilmot Street addresses the transition from commercial building forms to residential building forms. Wilmot Street is significant as a streetscape and recognised as a heritage precinct, as well as a significant collection of individually listed buildings.

The proposal illustrates how a building can effectively adopt a greater height (at 6 storeys) but be modified in form to address the transition from Sandy Bay Road to Wilmot street with reduced building mass and modulation of built elements, to reduce apparent scale. The portion of the proposed building closest to 6 Wilmot Street has a height transition (roofline) difference of approximately 550mm and has similar widths to the cottages along Wilmot Street, further complimented by maintaining a compatible horizontal separation between the buildings evident along Wilmot Street.

The building has used modular separation and stepping in order to increase height toward Sandy Bay Road and to the southeast corner of the site. However, within the development creates a pattern of massing which provides permeability and respite and therefore reducing the impact of the scale along Wilmot Street. This allows for the height to be responsive to the streetscape of Wilmot Street.



Figure 25: Elevation plan showing the building within the streetscape along Wilmot Street (source: Room 11 Architects)

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Figure 26: Adjoining properties and height above natural ground level (source: Ireneinc)

Wilmot Street has a relatively moderate slope. The traditional lot width and building massing allows for buildings to step up the slope of Wilmot Street without significant excavations or retaining walls. Building details allow presentation of floor level to street level, in an intimate and pedestrian friendly environment.

The proposal has also utilised the slope of Wilmot Street in order to provide heights which are responsive to the nearby residential scale and utilise the topography of the site and streetscape. When viewing the south eastern elevation of Wilmot Street, the portions of the building located along Wilmot Street are compatible with nearby scales such as 10 and 12 Wilmot Street.

The design has set back the elements of the building with a greater scale, in order to maintain the residential scale of Wilmot Street, with the more commercial massing locating along the sandy bay frontage and south east corner. Furthermore, the interaction of design elements such as height, setback has allowed for pattern of massing on Wilmot Street which supports the intimate character of the streetscape.

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#### SETBACK AND BOUNDARY TREATMENT

The proposal retains a similar setback to that of the existing building along Sandy Bay Road. It presents a hardedge urban form that defines the streetscape of Sandy Bay, with some landscaping in order to create a buffer between Sandy Bay Road and the residential uses which is consistent with the south-eastern areas Sandy Bay Road.

On Wilmot Street, the proposal must also address a setback transition from residential character to the commercial character of Sandy Bay Road. The setbacks vary from 0.6m closest to the Sandy Bay Road and transitions to up to 2m along Wilmot Street which is consistent with the setback character of the street.

The proposal has provided a contemporary interpretation of many of the elements of the boundary treatment along Wilmot Street such as the feature stairwell and semi-open screen to porches with pockets of landscaping.

The following image illustrates the existing setback pattern within the streetscape, along with a comparison showing the proposed setback treatment, which as can be seen is largely the same as existing.



Figure 27: Existing streetscape setback pattern (source: Google Maps 2019)

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Figure 28: Streetscape setback showing the approximate proposed setback - clearly indicating that the proposed development will retain the dominant setback pattern evident within the street (source: www.thelist.tas.gov.au @ State of Tasmania)

#### MASSING

The proposal maintains the pattern of built form evident along Wilmot where a similar width of building is presented to the streetscape, creating a rhythm or modulation of building to space. The widths of the proposed building presented to the streetscape are similar widths to those of the existing buildings which allow for familiar massing to be carried through.

The central entrance of the building is open and permeable in order for the solid-void pattern to interpreted on the site.

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Figure 29: pattern of massing with proposed building (source: Room 11 Architects)

#### MATERIALS AND BUILDING DETAILS

The primary façade fronting Sandy Bay Road is primarily glazing and steel. The frame creates a robust and modular character which is compatible with the commercial scale of Sandy Bay Road.

The widths of the proposed building presented to the Wilmot streetscape are similar widths to those of the existing buildings which allow for familiar massing to be carried through. The existing building has solid walls presenting to Wilmot Street, which reflect the use and desired orientation of the dwellings for privacy and amenity. This is also true of the proposed apartments resulting in solid façade facing toward Wilmot Street and the private open space of each apartment orientated northeast/southwest. However, the proposal is of a reduced width and in turn has a lesser impact on the pedestrian experience of the streetscape. The chosen cladding is articulated through pattern and the panels run perpendicular which also reduces the impact of the mass at pedestrian level.

As detailed previously, the proposal has provided a contemporary interpretation of many of the streetscape elements along Wilmot Street, with fine grain detail focused around the primary entrance to the building which captures the residential scale and the concept of 'addressing the street.'

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## 3.3 COMPATIBILITY

#### EXISTING STREETSCAPE

Address	Front Setback (from Wilmot Street) (m)	Street Edge Treatment	Height (Storeys)	Massing (building width to Wilmot St/ Wilmot Frontage width = ratio)
9 Sandy Bay Road (upper wilmot) (Existing)	2m	Masonry side wall	2	8m/35.5=0.22
9 Sandy Bay Road (lower wilmot) (Existing)	0	Masonry side wall	3	12/35.5=0.33
6 Wilmot Street	1m	No fence, low masonry wall	1 (dormers)	7.9/10.3=0.76
10 Wilmot Street	2m	Masonry wall/masonry plinth, picket fence	1 (dormers)	8/12.1=0.66
12 Wilmot Street	3.8	Stone wall, picket fence	2	6/13=0.46
141 Hampden Road	6.5	Masonry wall/ masonry plinth, timber fence with concrete base	2	15/44=0.34
143 Hampden Road	0	Masonry wall/paling	2	13/29=0.44
15 Wilmot Street	16	Car park	1	11/16=0.68
13 Wilmot Street (now 5-7 Sandy Bay Road)	1	Picket fence	1	8/13=0.61
11 Wilmot Street (now 5-7 Sandy Bay Road)	1.2	Picket fence	1 (dormers)	10/11.9=0.84
9 Wilmot Street (upper Wilmot Street) (now 5-7 Sandy Bay Road)	4	Driveway	1 (garage built to side edges)	12/12=1
9 Wilmot Street (lower) (now 5-7 Sandy Bay Road)	9	Carpark with landscaping	1	10.96/34=0.32
Average	4.2	-	1.4	0.55

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#### PREVIOUS PROPOSAL

Previous pr (upper Wilmot)	roposal	0	Cladding and glazing	4-6	12/35.5=0.33
Previous pr (lower Wilmot)	roposal	0	Cladding and glazing	6-7	13/35.5=0.36

#### CURRENT PROPOSAL

9 Sandy Bay Road Proposed (upper Wilmot referred to as (a))	2.2	Clad wall	3	6.65/35.5=0.19
9 Sandy Bay Road Proposed (lower Wilmot, referred to as (b))	0.75	Clad wall	6	10.6/35.5=0.29

It is reasonable to conclude that the streetscape is primarily experienced at street level. Where height and mass increase, generally the perception of scale at street level increases.

The massing ratio along Wilmot Street for the proposed development is 0.29 (A) and 0.19, in comparison to the average for Wilmot Street of 0.55. The building proposed as part of this current application is compatible with the Wilmot Street Streetscape, in that it has reduced the massing in order to accommodate an increased height. When considering scale (height), massing in respect to arrangement, volume and shape cannot be ignored. By reducing the massing particularly in relation to portion (a) of the proposal, the streetscape presentation is not dissimilar to the experience of other buildings within the street such as 141 and 143 Hampden Road, and 12 Wilmot Street. The relative height transition from 6 Wilmot Street is approximately 550mm from the proposed building (where the building fronts Wilmot Street - the larger form is well setback from Wilmot Street) offering a comfortable transition.

In considering the streetscape as a whole, 6 Wilmot Street is considered one of the lowest built forms. The proposed built form which directly adjoins 6 Wilmot Street is a comparable height to buildings within 12 Wilmot Street, the other adjoining property. The modulation and arrangement of height within the topography has allowed for a stepped transition to Sandy Bay Road, and in turn an appropriate transition from residential to commercial scales.

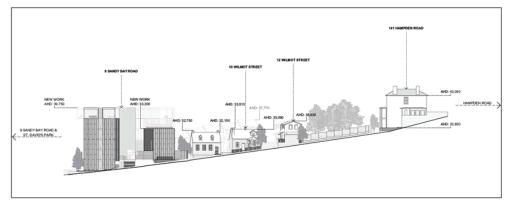


Figure 30: Streetscape along Wilmot Street indicating RLs (source: Room 11 Architects)

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# 4. PLANNING SCHEME PROVISIONS

The area is within the *Hobart Interim Planning Scheme 2015*, the following provisions are relevant to the site and proposed use and development.

4.1 URBAN MIXED USE ZONE

The subject land is zoned Urban Mixed Use (grey). The entire block is also zoned Urban Mixed Use, with St David's Park to the east zoned open space.



Figure 31: Zoning (Source: www.thelist.tas.gov.au © State Government of Tasmania)

4.1.1 ZONE PURPOSE

The Purpose Statements for the zone are:

### 15.1.1 Zone Purpose Statements

15.1.1.1 - To provide for integration of residential, retail, community services and commercial activities in urban locations.

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The proposal will provide additional residential accommodation within close proximity to key retail and commercial locations within Salamanca and the CBD.

15.1.1.2 - To encourage use and development at street level that generates activity and pedestrian movement through the area.

The primary entrance to the building will be via Wilmot Street and will be clearly visible and accessible. The design of the entrance to the building promotes a varied built form at street level along Wilmot Street and will result promote further street-level activity.

15.1.1.3 - To provide for design that maximises the amenity at street level including considerations of microclimate, lighting, safety, and pedestrian connectivity.

The proposal is anticipated to significantly improve the existing streetscape and pedestrian amenity at street level by setting back the bulk of the building from Wilmot Street and breaking up the façade of the building through a number of design elements including glazing and clear articulated entrance to the building. The main pedestrian entrance is recessed into the overall form, providing a clear pathway into the 'open heart' of the building. This design consideration results in a significant improvement to the streetscape and is considered to maximise amenity at street level providing a unique and welcoming residential entry to the building.

15.1.1.4 - To ensure that commercial uses are consistent with the activity centre hierarchy.

No commercial uses are proposed as part of the application.

15.1.1.5 - To ensure development is accessible by public transport, walking and cycling.

The proposal is located on Sandy Bay Road which is a primary thoroughfare into and out of the CBD, providing ample access to public transport. The proximity of the site to Salamanca and the CBD ensures the viability of walking and cycling as alternate transport options.

15.1.1.6 - To provide for a diversity of uses at densities responsive to the character of streetscapes, historic areas and buildings and which do not compromise the amenity of surrounding residential areas.

The proposal will provide additional residential accommodation, replacing an existing apartment complex. It is considered that the design of the building provides a contemporary built from that responds to the site constraints, specifically the change in topography along Wilmot Street and proximity to existing heritage cottages. Given that the proposal is for residential use it is not anticipated to result in any additional impacts on residential amenity. The nearest residential zoned land is located approximately 230m to the east of the site, however there are a number of existing cottages in the vicinity of the site which are utilised for residential and visitor accommodation purposes.

15.1.1.7 - To encourage the retention of existing residential uses and the greater use of underutilised sites as well as the reuse and adaptation of existing buildings for uses with a scale appropriate to the site and area.

The existing buildings on the site are residential apartments. The proposal seeks to redevelop the site for the same purpose, providing increased amenity for future residents. The location of the site on a major arterial road, with close proximity to amenities, public transport and easy walkable distance to the city and waterfront supports the use of this site for the scale of residential development proposed.

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15.1.1.8 - To ensure that the proportions, materials, openings and decoration of building facades contribute positively to the streetscape and reinforce the built environment of the area in which the site is situated.

The architectural detail states that a 'cluster' approach was adopted to address building mass, which has allowed for a more flexible and effective way of integrating the building into both Sandy Bay Road and Wilmot Street.

The proportions, materials and openings of the building have been carefully constructed with regard to the surrounding urban built form. The proportions of the building, particularly along Wilmot Street demonstrate a level of consistency in height and overall built form when viewed in street elevation. With regard to materials, opening and decoration, the building will present as a contemporary addition to the streetscape through the use of materials and design elements such as brass piping, glazing and offset awnings.

The vertical piping along Wilmot Street delineates and frames the pedestrian entrance to the building whilst also providing a visual contrast between the darker material cladding both behind and to either side of the entrance. The provision of a thin strip of vertical glazing on the northwestern elevation facing Wilmot Street also serves to break up the building façade and provide a variable material palette, increasing the overall visual qualities of the building.

Along the Sandy Bay Road frontage, the material palette will include fixed and variable vertical screening between glazed windows. Which provides an articulation to the façade of the building which varies depending on which screens are drawn or open, creating a variable building façade which changes throughout the day. The landscaping provided along Sandy Bay Road at ground level will add dimension to the palette and improve both physical amenity for residents and visual amenity when viewed from along Sandy Bay Road.

15.1.1.9 - To maintain an appropriate level of amenity for residential uses without unreasonable restriction or constraint on the nature and hours of commercial activities.

The proposal does not involve any commercial activity and there are no major commercial uses in the immediate vicinity of the site which would be impacted upon by the proposed development.

15.1.1.10 - To ensure that retail shopping strips do not develop along major arterial roads within the zone.

It is considered that the proposal is consistent with the purpose statements for the zone.

There are no Local Area Objectives or Desired Future Character Statements for the Zone.

4.1.2 USE STATUS

The proposal is considered under the residential use class, which is defined as follows:

#### Residential - Permitted

use of land for self contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.

The use is permitted in the zone.

4.1.3 USE STANDARDS

The use standards only apply to non-residential development, of which none is proposed as part of the application.

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#### 4.1.4 DEVELOPMENT STANDARDS

#### 15.4.1 Building Height

**Objective**: To ensure that building height contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in the General Residential Zone or Inner Residential Zone.

#### SCHEME REQUIREMENTS

A1

Building height must be no more than:

10m.

Ρ1

Building height must satisfy all of the following:

(a) be consistent with any Desired Future Character Statements provided for the area;

- (b) be compatible with the scale of nearby buildings;
- (c) not unreasonably overshadow adjacent public space;
- (d) allow for a transition in height between adjoining buildings, where appropriate;

# RESPONSE

The building exceeds the permitted 10m height limit. Therefore, the performance criteria have been addressed.

Ρ1

(a) there are no desired future character statements provided for the zone.

(b) and (d), these two points will be addressed in two parts, one addressing the height of the building along Sandy Bay Road and the other addressing the height along Wilmot Street.

(c) The adjacent public space is St David's Park. The proposal will not overshadow St. David's Park and the level of overshadowing on the adjacent streets is not anticipated to result in an unreasonable level of overshadowing.

### Sandy Bay Road

The height of the building along the northern elevation (fronting Sandy Bay Road) is relatively uniform, with a minimum height of approximately 19.9m to a maximum of 20.4m.

The streetscape along Sandy Bay Road adopts a more robust form and scale, commensurate with the scale (width) of Sandy Bay Road and the function of the road as a major arterial route, carrying high traffic volumes. The Mantra Hotel (1 Sandy Bay Road) establishes a comparable height, which forms a strong corner edge with zero setbacks. This bold form and scale continues east towards the site.

To the east of the site, further along Sandy Bay Road, the adjoining apartment at 12 Wilmot Street is built to a maximum height of approximately 11.5m above NGL along Sandy Bay Road.

Figure 32 below demonstrates the height relationship between the proposed building and the adjoining building along Sandy Bay Road (identified as 12 Wilmot Street).

The following figure demonstrates the height of the building and the effect of the bulk being setback from Wilmot Street.

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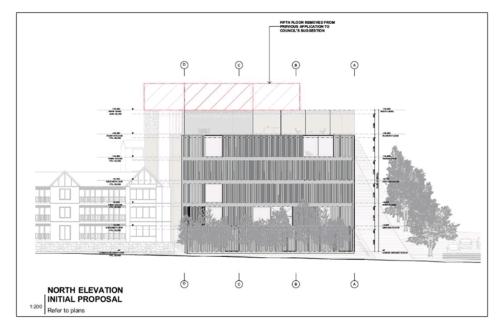


Figure 32: Northern elevation along Sandy Bay Road (source: Room 11 Architects)

### Wilmot Street

The western elevation of the building fronts Wilmot Street and presents as two distinct built forms with the larger bulk of the building set back from the scaled down portions, and from the street frontage.

On the corner of Wilmot and Sandy Bay Road the building presents as a 6-storey building at a height of 20m above NGL.

From the corner of Wilmot Street and Sandy Bay Road the building transitions from approximately 20m (6 storeys) from NGL down to 10.3m (3 storeys above NGL on the south-western corner of the site). The 3-storey section on the south-western corner extends to a maximum height of approximately 10.3m before being setback over 8m where it extends to a full height of approximately 16.1m (measured from NGL on the south-western corner of the site).

The Tribunal's decision regarding the previous proposal was considered during the design of the current proposal and a response detailing the key differences between the two proposals has been provided under section 1.3 of this report. As a result of this, the proposed building has been designed to ensure that the larger portion of the building is significantly setback from the Wilmot Street frontage allowing the south-western section of the building to be compatible with the streetscape and allow an appropriate transition to the adjoining cottage at 6 Wilmot Street.

This transition can be seen in the figures below, along with the substantial rise in topography along Wilmot Street upward toward Hampden Road. The change in topography and setback of the larger bulk of the building is considered to significantly reduce the overall visual bulk of the building when viewed along Wilmot Street, particularly from the higher elevations.

The appearance of the western elevation as two built forms broken up by the pedestrian entrance and vehicle access point also aids in responding to the streetscape, breaking up the

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building façade and demonstrating a transition to the immediately adjoining cottages at 6 Wilmot Street and 10 Wilmot Street.

The height of the cottage at 6 Wilmot Street at the highest point from NGL is approximately 8.9m from street level. The difference in height between the proposed south-western corner of the building and the cottage at 6 Wilmot Street is approximately 550mm.

It is considered that the change in topography, combined with the height transition of the two building sections and the setback of the remaining built form behind ensures that the building presents a 'stepped' pattern and adequately demonstrates a compatible height transition.

The combined effects of topography, setback and design of the building along Wilmot Street results in a building form that respects the scale of buildings within the immediate surrounds.

Figure 33 and 34 below also illustrates how the vast majority of the bulk and height of the building is setback behind the frontage and indeed behind the built form of 6 Wilmot Street.

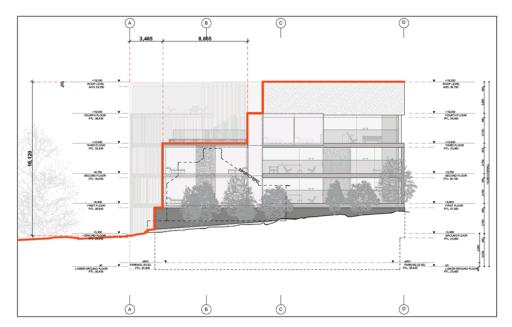


Figure 33: Southern elevation showing height transition and setback from Wilmot Street (source: Room 11 Architects)

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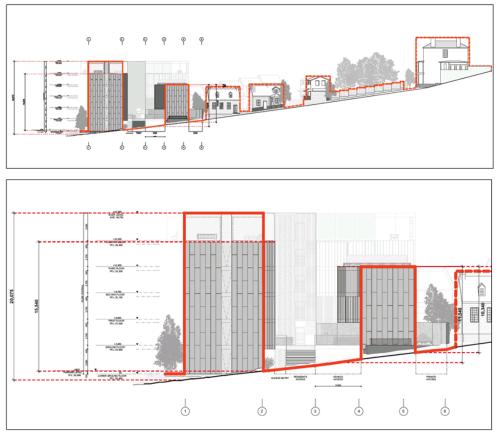


Figure 34: Western elevation demonstrating the distinct building forms and height transition along Wilmot Street (source: Room 11 Architects)

SCHEME REQUIREMENTS	COMMENT
A2 Building height within 10m of a residential zone must be no more than 8.5m.	The site is not within 10m of any residential zones. The nearest residential zone is located approximately 220m to the south-east. Therefore, the proposal complies with A2.

# 15.4.2 Setback

**Objective**: To ensure that building setback contributes positively to the streetscape and does not result in unreasonable impact on residential amenity of land in a residential zone.

# SCHEME REQUIREMENTS

# A1

Building setback from frontage must be parallel to the frontage and must be no more than: 1m from the median street setback of all existing buildings on the same side of the street within 100m of the site.

Р1

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Building setback from frontage must satisfy all of the following:

- (a) be consistent with any Desired Future Character Statements provided for the area;
- (b) be compatible with the setback of adjoining buildings, generally maintaining a continuous building line if evident in the streetscape;
- (c) enhance the characteristics of the site, adjoining lots and the streetscape;
- (d) provide for small variations in building alignment only where appropriate to break up long building facades, provided that no potential concealment or entrapment opportunity is created;

(e) provide for large variations in building alignment only where appropriate to provide for a forecourt for space for public use, such as outdoor dining or landscaping, provided the that no potential concealment or entrapment opportunity is created and the forecourt is afforded very good passive surveillance.

### RESPONSE

The proposed setback of the building varies along each frontage.

To Sandy Bay Road, the proposal will be setback approximately 2m, to allow provision of open space for the lower ground floor apartments. This setback is consistent with the setback of the existing building on the site and adjoining building to the west.

The existing buildings to the north along Sandy Bay Road (Conservatorium, Masonic Hall and Mantra) are setback 0m from the frontages.

The setback of the Conservatorium building will be reduced pending approval of the proposed redevelopment of that site. The immediately adjoining apartment building to the south-east (11 Wilmot Street) has a greater setback which also provides open space.

The remaining setbacks to the south-east along Sandy Bay road vary, given that a number of the adjoining lots have direct frontage to Hampden Road.

It is considered that the setback to Sandy Bay Road complies with A1.

However, the setback along Wilmot Street will vary from 0m to 8.1m due to the proposed pedestrian and vehicle entry.

The setback of existing buildings along the eastern side of Wilmot Street is as follows:

- 12 Wilmot Street 4m approx.
- 10 Wilmot Street 1.4m
- 6 Wilmot Street 1.8m

The existing building on the site is identified as 9 Sandy Bay Road and has a setback ranging from 0m to approximately 2.4m. The building at the southern end of Wilmot Street identified as 141 Hampden Road also has frontage to Wilmot Street and is setback approximately 4.7m.

If the existing building at 9 Sandy Bay Road and the building at 141 Hampden Road are considered, the median setback would be approximately 2.4m along the eastern side of Wilmot Street.

Therefore, a response to P1 has been provided.

Ρ1

Wilmot Street

(a) There are no desired future character statements for the zone.

(b) Along Wilmot Street, the building will have a variable setback ranging from 0m to 8.1m. The section setback approximately 8.1m is where the primary pedestrian and vehicle entrance is provided and will occupy approximately 10m of the frontage. The entrance lobby will be

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bounded to the north and south by the building where the setbacks range from 0m to 0.9m on the northern side of the entrance and 0.8m to 2.7m on the southern side.

Given the pattern of development to the south of the site along Wilmot Street, the proposed setbacks are considered consistent with the variable setbacks evident in the streetscape, as shown in the figure below.

In addition, the building will also be setback from the southern boundary (at the building at 6 Wilmot Street) by approximately 1.4m from ground level.

From level 1 through to level 5 the building is setback approximately 3.7m at the shortest point and 5.5m at the widest point.

(c) The design of the building is considered to significantly improve the characteristics of the site and streetscape, due to finishes, materials and overall contemporary form. The variable setback ensures that the building will not present as a solid wall along Wilmot Street.

(d) & (e) despite the variation in setback, due to the pedestrian and vehicle access, the proposed setback of the building along Wilmot Street is considered generally consistent with the setbacks in the street, particularly given the large variations evident on the southern end of Wilmot Street.

The proposed entrance area will be landscaped and will not result in the creation of any entrapment spaces. It is considered that the entrance way will improve the streetscape and ensure visual activation of the street.



It is considered that the Wilmot Street frontage proposal complies with P1.

Figure 35: Existing Variable setbacks along Wilmot Street (source: www.thelist.tas.gov.au @ the State Government of Tasmania)

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A2 does not apply as the nearest residential

#### A2

Building setback from a residential zone must zone is located approximately 220m to the be no less than:

(a) 3m;

(b) half the height of the wall,

whichever is the greater.

### 15.4.3 Design

Objective: To ensure that building design contributes positively to the streetscape, the amenity and safety of the public and adjoining land in a residential zone.

south-east.

SCHEME REQUIREMENTS	COMMENTS
A1 Building design must comply with all of th following:	Given that the site fronts both Sandy Bay Road and Wilmot Street, both street elevations will be assessed separately.
<ul> <li>(a) provide the main pedestrian entrance t the building so that it is clearly visibl from the road or publicly accessible area on the site;</li> </ul>	<ul> <li>e Street frontage at ground floor level will fall</li> <li>marginally below the required 40% under A1</li> <li>(b). Therefore, the proposal will be assessed</li> </ul>
(b) for new building or alterations to a existing facade provide windows and doc openings at ground floor level in the fror façade no less than 40% of the surfac area of the ground floor level facade;	<sub>r</sub> P1 t (a) The main pedestrian/resident access is via
(c) for new building or alterations to a existing facade ensure any single expans of blank wall in the ground level fror façade and facades facing other publ spaces is not greater than 30% of th length of the facade;	e along the Wilmot frontage and ground floor t level are sufficient to ensure that the c streetscape is significantly enhanced. The
<ul> <li>(d) screen mechanical plant an miscellaneous equipment such as hea pumps, air conditioning unit: switchboards, hot water units or simila from view from the street and othe public spaces;</li> </ul>	, solution. ;, The Sandy Bay Road façade will be r characterised by predominately glazed
<ul> <li>(e) incorporate roof-top service infrastructure, including service plant and lift structures, within the design of the roof;</li> </ul>	<ul> <li>f (c) The façade of the building along Wilmot</li> <li>f Street will be treated with a contemporary</li> <li>high-quality fibre cement panels and a section</li> </ul>
<ul> <li>(f) provide awnings over the public footpatility of existing on the site or on adjoining lots</li> <li>(g) not include security shutters over windows or doors with a frontage to street or public place.</li> </ul>	; glazed window which will run vertically up the face of the building. The pedestrian entrance

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### Ρ1

Building design must enhance the streetscape by satisfying all of the following:

 (a) provide the main access to the building in a way that addresses the street or other public space boundary;

(b) provide windows in the front façade in a way that enhances the streetscape and provides for passive surveillance of public spaces;

(c) treat large expanses of blank wall in the front façade and facing other public space boundaries with architectural detail or public art so as to contribute positively to the streetscape and public space;

(d) ensure the visual impact of mechanical plant and miscellaneous equipment, such as heat pumps, air conditioning units,

switchboards, hot water units or similar, is insignificant when viewed from the street;

(e) ensure roof-top service infrastructure,

including service plants and lift structures, is screened so as to have insignificant visual impact;

(f) not provide awnings over the public
footpath only if there is no benefit to the
streetscape or pedestrian amenity or if not
possible due to physical constraints;
(g) only provide shutters where essential for
the security of the premises and other
alternatives for ensuring security are not

feasible; (h) be consistent with any Desired Future

Character Statements provided for the area.

large expanses of blank wall and will positively contribute to the streetscape.

The Sandy Bay Road frontage is primarily clad with fixed and operable vertical awnings and glazed windows. The upper levels will also include cladding and brass piping detail. Landscaping will be provided at ground level to screen the private open space of the lower ground level apartments.

(d) A plant room will be provided on the lower ground floor facing Wilmot Street and will be enclosed within the building ensuring that the equipment will not be visible from street or public places.

(e) The lift structure will be contained within the building and will not require any overrun to be screened.

(f) No awnings over the public footpath are proposed.

(g) No security shutters are proposed.

(h) There are no desired future character statements for the zone.

Both the primary facade to Sandy Bay Road and secondary façade to Wilmot Street are consistent with the performance criteria.

A2	Not applicable. The site does not front a
Walls of a building facing the General Residential Zone or Inner Residential Zone must be coloured using colours with a light	residential zone.
reflectance value not greater than 40 percent.	

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# Clause 15.4.4 - Passive Surveillance

Not applicable.

15.4.5 Landscaping	
Objective: To ensure that a safe and att appearance of the site and if relevant provides	ractive landscaping treatment enhances the a visual break from land in a residential zone.
SCHEME REQUIREMENT	COMMENT
<ul> <li>A1</li> <li>Landscaping along the frontage of a site is not required if all of the following apply:</li> <li>(a) the building extends across the width of the frontage, (except for vehicular access</li> </ul>	The proposal will not comply with A1 with regard to either the Wilmot Street frontage or Sandy Bay Road frontage. Therefore, a response to the performance criteria has been provided. P1
<ul> <li>ways);</li> <li>(b) the building has a setback from the frontage of no more than 1m.</li> <li>P1</li> <li>Landscaping must be provided to satisfy all of the following:</li> <li>(a) enhance the appearance of the development;</li> <li>(b) provide a range of plant height and forms to create diversity, interest and amenity;</li> <li>(c) not create concealed entrapment spaces;</li> <li>(d) be consistent with any Desired Future Character Statements provided for the area.</li> </ul>	<ul> <li>(a) &amp; (b) landscaping will be provided along the Sandy Bay Road frontage to provide screening and privacy for the private open space for the lower ground floor apartments.</li> <li>Landscaping will also be provided within and around the pedestrian entrance/lobby area on Wilmot Street to enhance the overall appearance of the site at ground level.</li> <li>(c) The proposal does not result in the creation of any entrapment spaces.</li> <li>(d) there are no desired future character statements for the zone.</li> <li>The landscaping provided is considered to comply with P1.</li> </ul>
A2 Along a boundary with the General Residential Zone or Inner Residential Zone landscaping must be provided for a depth no less than: 2m. P2 Along a boundary with the General Residential Zone or Inner Residential Zone landscaping or a building design solution must be provided to avoid unreasonable adverse impact on the visual amenity of adjoining land in the General Residential Zone or Inner Residential Zone, having regard to the characteristics of the site and the characteristics of the adjoining residentially-zoned land.	The proposal does not adjoin any residential zones. However, the adjoining building at 6 Wilmot Street is used for residential/visitor accommodation and landscaping is proposed along the boundary with this property to maintain and improve visual amenity along that elevation.

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#### 15.4.6 Outdoor Storage Areas

No outdoor storage areas are proposed.

#### 15.4.7 Fencing

**Objective**: To ensure that fencing does not detract from the appearance of the site or the locality and provides for passive surveillance.

SCHEME REQUIREMENT	COMMENT
A1	No new fencing is proposed.
Fencing must comply with all of the following:	
<ul> <li>(a) fences, walls and gates of greater height than 1.5m must not be erected within 4.5m of the frontage;</li> </ul>	
<ul> <li>(b) fences along a frontage must be at least 50% transparent above a height of 1.2m;</li> </ul>	
(c) height of fences along a common boundary with land in the General Residential Zone or Inner Residential Zone must be no more than 2.1m and must not contain barbed wire.	

#### 15.4.8 Residential Amenity

**Objective**: To ensure that buildings for residential use provide reasonable levels of residential amenity and safety.

#### SCHEME REQUIREMENTS

A1 - A dwelling must have at least one habitable room window (other than a bedroom) facing between 30 degrees west of north and 30 degrees east of north.

**P1** - A dwelling must be sited and designed to optimise sunlight to at least one habitable room (other than a bedroom).

#### PROPOSAL RESPONSE

Due to the orientation of the lot and street frontages, the windows to habitable rooms (other than bedrooms) along the northern, eastern and western and southern elevations do not face 30 degrees east or west of north.

Therefore, a response to the performance criteria is required.

P1

The orientation of the lot and windows is constrained by the size and orientation of the lot to the primary street frontages. Due to the crisscross pattern of streets across Hobart, many lots such as 9 Sandy Bay Road only have two elevations which are capable of being oriented between 30 degrees east or west of north and in any case would make it difficult for a building to correctly align with the street frontages, which is required within 1m in the zone. Inevitably, there will be windows to habitable rooms that cannot meet this requirement.

The scheme does not define the terms optimise however the Cambridge Dictionary defines it as

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"Optimise to make something as good as possible".

The building is designed to maximise morning sun and extensive views over St Davids Park and towards Sullivans Cove. As this is the contributory element to the amenity of the apartments, accommodation of sunlight to habitable rooms throughout the day has been managed within the remaining site constraints, that is it has been made as good as possible, in light of the constraints.

The terraces provided across each elevation directly adjoin living areas and serve as extensions to these areas. The northern and western elevation will receive substantial daylight/sunlight throughout the year due to the large open areas provided by Wilmot Street and Sandy Bay Road, which allow sunlight to penetrate across all levels along these elevations.

The setback of the building along the southern and eastern elevations, combined with the small scale of adjoining buildings ensures that terraces and windows along these elevations will also receive daylight/sunlight despite not being oriented to the north-west or north-east.

During the summer months when the sun is higher (December through February) and during the spring equinox during September through to November, the southern and eastern elevations will receive direct sunlight.

In addition, the apartments along the southern elevation are generally 1 bedroom and marketed toward space for individuals and couples who work within the CBD and surrounding area, who are unlikely to spend large portions of time at home.

Therefore, the siting and design of the building is sufficient to optimise access to daylight/sunlight to habitable rooms (other than bedrooms) and is considered sufficient to meet the needs of users.

A2 - The potential for direct overlooking from windows of habitable rooms with a finished surface or floor level more than 1m above natural ground level on one lot to the windows of habitable rooms, balconies, decks and roof gardens on adjacent lots must be avoided or minimised by complying with any of the following:

(a) have a side boundary setback no less than 3 m;

(b) be offset no less than 1.5 m from the windows of habitable rooms on adjacent lots where on the same horizontal lane;

(c) have a window seal height no less than 1.5 m.

#### RESPONSE

The standard refers to overlooking from one lot onto another lot.

Along the eastern elevation, the adjoining building does not have any windows, decks, balconies or roof gardens within 3m of the boundary.

The western elevation fronts Wilmot Street, which provides a buffer between the proposal and adjacent properties in excess of 3m.

To the south, all windows and terraces beyond 1m from NGL are setback over 3m.

The proposal complies with A2 (a).

A3 - Outdoor living space must be provided for a dwelling that complies with all of the following:

(a) be no less than 10 m2;

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(b) have a width no less than 2 m.

**P3** - Outdoor living space must be provided for a dwelling with dimensions sufficient for the projected requirements of the occupants.

#### RESPONSE

The private outdoor living space (balconies) for each apartment vary from a minimum of  $4.3m^2$  to a maximum of approximately  $43m^2$ .

In addition, each apartment will have access to the  $3^{rd}$  level roof-top terrace which provides  $82m^2$  of outdoor living space for residents. The outdoor space at ground level on the southern side of the site will also provide a further  $74m^2$  of outdoor living space.

Inner city living is generally characterised by small-moderate sized living spaces and limited private and outdoor living space, which is particularly evident in larger cities such as Melbourne and Sydney where the intent is to maximise floor area.

The combination of the outdoor living space provided at ground level and level 3, along with the private open space provided by the individual terraces for each apartment ensures that the projected requirements of the occupants can be satisfied.

The outdoor living spaces provided on level 3 and at ground level comply with A3.

A4 - Habitable rooms of dwellings adjacent to streets carrying more than 6000 vehicle per day must be designed to achieve internal noise levels no more than 45 dBa in accordance with relevant Australian Standards for acoustics control, (including AS3671 - Road Traffic, and AS2107 - Habitable Rooms).

**P4** - Habitable rooms of dwellings adjacent to streets carrying more than 6000 vehicle per day must be designed, through site layout and building design, to provide internal noise levels that accord a reasonable level of residential amenity for the occupants.

#### RESPONSE

All windows and doors to apartments will be double glazed, which is now standard practice to improve building efficiency. Double glazing incorporates two panes of glass within which is a void filled with gas to regulate heat loss and absorption. These design elements also substantially reduce noise emissions and are considered sufficient to achieve internal noise levels of no more than 45dBa.

The design of windows and doors to both habitable and non-habitable rooms are in accordance with the relevant BCA requirements.

The proposal complies with A4.

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# 5. CODES

# 5.1 POTENTIALLY CONTAMINATED LAND CODE

To our knowledge, the site has not been used for potentially contaminating activities and has been utilised for residential use since construction of the current building on the site in 1960. A detailed site history is provided in the accompanying archaeological report.

#### 5.2 ROAD AND RAILWAY ASSETS CODE

#### 5.2.1 USE STANDARDS

### E5.5.1 Existing road accesses and junctions

**Objective**: To ensure that the safety and efficiency of roads is not reduced by increased use of existing accesses and junctions.

SCHEME REQUIREMENTS	COMMENT
A3 The annual average daily traffic (AADT) of vehicle movements, to and from a site, using an existing access or junction, in an area subject to a speed limit of 60km/h or less, must not increase by more than 20% or 40 vehicle movements per day, whichever is the greater. P3 Any increase in vehicle traffic at an existing access or junction in an area subject to a speed limit of 60km/h or less, must be safe and not unreasonably impact on the efficiency of the road, having regard to: (a) the increase in traffic caused by the use;	The proposal is primarily aimed at residents who require close proximity to employment and have a relatively low reliance of private vehicle use. The TIA states that the proposal is anticipated to generate approximately 71 trips per day, with 8 trips per hour during morning peak hour and 6 trips per hour in the evening peak. Given that the current residential development on the site does not provide any on-site parking, the proposal is anticipated to result in an increase in vehicle movements over that specified under A3. Therefore, a response to P3 has been provided. P3
<ul> <li>(a) the intrease in traffic generated by the last,</li> <li>(b) the nature of the traffic generated by the use;</li> <li>(c) the nature and efficiency of the access or the junction;</li> <li>(d) the nature and category of the road;</li> <li>(e) the speed limit and traffic flow of the road;</li> <li>(f) any alternative access to a road;</li> <li>(g) the need for the use;</li> </ul>	<ul> <li>(a) the TIA states that there is spare capacity within Wilmot Street to absorb the anticipated increase in vehicle movements, particularly given that during peak periods the total movements per hour is quite low at round 8 movements per hour.</li> <li>(b) the nature of the traffic will be residential and relatively limited given the anticipation that the proximity of the site to the CBD and</li> </ul>

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(h) any traffic impact assessment; and (i) any written advice received from the road authority.	other key attractions will further reduce reliance of private vehicle use. (c) the existing crossover to Wilmot Street will be relocated and upgraded and the sight distances to the south along Wilmot Street are more than sufficient to ensure no impacts on the efficiency of the road and access.
	(d) & (e) the TIA specifies that vehicle speeds along Wilmot Street are below 50km/hr and it is considered that Wilmot Street is capable of absorbing the additional vehicle movements.
	<ul> <li>(f) n/a</li> <li>(g) The existing residential building on the site provides no on-site parking. This proposal will result in a greater level of amenity for residents.</li> </ul>
	(h) refer to the attached TIA prepared by Midson Traffic.
	<ul><li>(i) n/a</li><li>The proposal is considered to comply with P3.</li></ul>

#### 5.2.2 DEVELOPMENT STANDARDS

E5.6.2 Road accesses and junctions			
<b>Objective</b> : To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and junctions.			
SCHEME STANDARDS	COMMENT		
A2 No more than one access providing both entry and exit, or two accesses providing separate	It is proposed to relocate the existing vehicle crossover to Wilmot Street further south of it's existing location.		
entry and exit, to roads in an area subject to a speed limit of 60km/h or less.	The relocated crossover will provide both entry and exit and complies with A2.		

# E5.6.4 Sight distance at accesses, junctions and level crossings

**Objective**: To ensure that accesses, junctions and level crossings provide sufficient sight distance between vehicles and between vehicles and trains to enable safe movement of traffic.

SCHEME REQUIREMENTS	COMMENT
A1 Sight distances at: (a) an access or junction must comply with the Safe Intersection Sight Distance	Given that Wilmot Street is a one-way street, with entry from Hampden Road and exit onto Sandy Bay Road the only relevant sight distance is to the south.
shown in Table E5.1;	The proposed building is at the northern end of Wilmot Street, therefore the sight distance

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from the proposed access to Hampden Road is approximately 95 metres.

The minimum sight distance for streets with a speed limit of 50km/hr or less is 80m, as specified under Table E5.1.

This conclusion is supported in the accompanying TIA.

The proposal complies with A1.

#### 5.3 PARKING AND ACCESS CODE

5.3.1 USE STANDARDS

### E6.6.1 Number of Car Parking Spaces

Objective: To ensure that:

- (a) there is enough car parking to meet the reasonable needs of all users of a use or development, taking into account the level of parking available on or outside of the land and the access afforded by other modes of transport.
- (b) a use or development does not detract from the amenity of users or the locality by:
  - (i) preventing regular parking overspill;

(ii) minimising the impact of car parking on heritage and local character.

SCHEME REQUIREMENTS	COMMENT
A1 The number of on-site car parking spaces must be:	The proposal is for a mix of 28 1-3 bedroom apartments, including a penthouse on the top floor.
<ul> <li>(a) no less than the number specified in Table E6.1;</li> <li>except if:</li> <li>(i) the site is subject to a parking plan for the area adopted by Council, in which case parking provision (spaces or cash-in-lieu) must be in accordance with that plan;</li> <li>P1</li> <li>The number of on-site car parking spaces must be sufficient to meet the reasonable needs of</li> </ul>	for the existing residential apartment building. One of the 22 spaces will be capable of providing charging for an electric vehicle, whilst the remaining 21 spaces will be capable
users, having regard to all of the following: (a) car parking demand;	capabilities.
<ul> <li>(b) the availability of on-street and public car parking in the locality;</li> <li>(c) the availability and frequency of</li> </ul>	The proposal will not be capable of providing the number of spaces required under the scheme, therefore a response to the performance criteria has been provided.
public transport within a 400m walking distance of the site;	P1
<ul><li>(d) the availability and likely use of other modes of transport;</li></ul>	(a) The TIA utilises the RMS Guide to determine parking demand for high density residentia

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 (e) the availability and suitability of alternative arrangements for car parking provision;

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;

(g) any car parking deficiency or surplus associated with the existing use of the land;

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;

 the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

 (j) any verified prior payment of a financial contribution in lieu of parking for the land;

(k) any relevant parking plan for the area adopted by Council;

 (l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code. dwellings. Using this guide, the TIA specifies that the proposal would generate a parking provision of 25 spaces.

Although the number of spaces provided as part of the development are less than that specified under the RMS Guide, the proposal will not be providing visitor parking spaces. By removing the visitor parking generation, the TIA states that the parking demand of the proposal are therefore lower than what the scheme requires.

(b) (c) & (d) Although there is on-street parking available within the surrounding road network, it is relatively limited to time restricted and metered parking.

However, the site is well within walking distance of the CBD and is in close proximity to a number of key transport corridors, such as Sandy Bay Road, Davey Street and Macquarie Street where there is ample access to public transportation routes. The proximity of the site to key socio-cultural attractions such as Salamanca Market (Sullivan's Cove), the Hobart CBD, St. David's Park, Sandy Bay and Battery Point ensure that access to key services and entertainment is well within walking distance of the site.

The Hobart CBD is a primary employment area and the proximity of the site will ensure that alternate modes of transport, particularly walking, will be a significantly more attractive alternative.

(e) given the proximity of the site to the aforementioned areas and limited site area, the TIA specifies that alternative parking arrangements are not considered necessary as the development is considered to provide sufficient parking to meet the demand.

Notwithstanding this, class 3 bicycle parking spaces have been provided at ground level for residents to provide alternate transport options where required.

#### (f) n/a

(g) the existing residential use on the site does not provide any car parking and therefore the site has an existing deficiency and the provision of 22 parking spaces as part of the proposed development is considered an

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improvement over existing. This is anticipated to potentially result in an increase in availability for existing on-street parking spaces.
(h) n/a
(i) n/a
(j) n/a
(k) n/a
(l) n/a
(m) n/a.
The proposal is considered to comply with P1.

# E6.6.2 Number of Accessible Car Parking Spaces for People with a Disability

**Objective**: To ensure that a use or development provides sufficient accessible car parking for people with a disability.

SCHEME REQUIREMENTS		COMMENT
A1		The building has been classified as a Class 2
	parking spaces provided for people with a ability must:	building under the NCC and therefore no accessible parking is required.
(a)	satisfy the relevant provisions of the Building Code of Australia;	
(b)	be incorporated into the overall car park design;	
(c)	be located as close as practicable to the building entrance.	

# E6.6.3 Number of Motorcycle Parking Spaces

**Objective**: To ensure enough motorcycle parking is provided to meet the needs of likely users of a use or development.

SCHEME REQUIREMENTS	COMMENT
A1 The number of on-site motorcycle parking spaces provided must be at a rate of 1 space to each 20 car parking spaces after the first 19 car parking spaces except if bulky goods sales, (rounded to the nearest whole number). Where an existing use or development is extended or intensified, the additional number of motorcycle parking spaces provided must be calculated on the amount of extension or intensification, provided the existing number of motorcycle parking spaces is not reduced.	The proposal is providing 22 car parking spaces, therefore no motorcycle parking is required.

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### E6.6.4 Number of Bicycle Parking Spaces

**Objective**: To ensure enough bicycle parking is provided to meet the needs of likely users and by so doing to encourage cycling as a healthy and environmentally friendly mode of transport for commuter, shopping and recreational trips.

SCHEME REQUIREMENTS	COMMENT
A1 The number of on-site bicycle parking spaces	Residential use does not generate a requirement for bicycle parking.
provided must be no less than the number specified in Table E6.2.	However, bicycle spaces have been provided at ground floor level adjacent to the primary access to the building from Wilmot Street.

#### 5.3.2 DEVELOPMENT STANDARDS

#### E6.7.1 Number of Vehicular Accesses

**Objective**: To ensure that:

- (a) safe and efficient access is provided to all road network users, including, but not limited to: drivers, passengers, pedestrians, and cyclists, by minimising:
  - (i) the number of vehicle access points; and
  - (ii) loss of on-street car parking spaces;

(b) vehicle access points do not unreasonably detract from the amenity of adjoining land uses;

(c) vehicle access points do not have a dominating impact on local streetscape and character.

SCHEME REQUIREMENTS	COMMENT
A1	An existing vehicle crossover is provided to the
The number of vehicle access points provided for each road frontage must be no more than 1	site via Wilmot Street, however this is not currently used.
or the existing number of vehicle access points, whichever is the greater.	It is proposed to remove and relocate this crossover further to the south of it's existing location, and will be used for entry and exit.
	The proposal complies with A1.

#### E6.7.2 Design of Vehicular Accesses

**Objective**: To ensure safe and efficient access for all users, including drivers, passengers, pedestrians and cyclists by locating, designing and constructing vehicle access points safely relative to the road network.

SCHEME REQUIREMENTS	COMMENT
A1 Design of vehicle access points must comply with all of the following: (a) in the case of non-commercial vehicle	The access is a non-commercial access and therefore is required to comply with A1(b). As detailed in the accompanying TIA, the proposed vehicular access complies with the
access; the location, sight distance, width	

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Parking Areas and Queuing Areas" of accompanying TIA. AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking;

(b) in the case of commercial vehicle access; the location, sight distance, geometry and gradient of an access must be designed and constructed to comply with all access driveway provisions in section 3 "Access Driveways and Circulation Roadways" of AS2890.2 - 2002 Parking facilities Part 2: Off-street commercial vehicle facilities.

and gradient of an access must be relevant requirements under the Australian designed and constructed to comply with Standard and therefore complies with A1(b). section 3 - "Access Facilities to Off-street Further specified details are provided in the

#### E6.7.3 Vehicular Passing Areas Along an Access

**Objective**: To ensure that:

(a) the design and location of access and parking areas creates a safe environment for users by minimising the potential for conflicts involving vehicles, pedestrians and cyclists;

(b) use or development does not adversely impact on the safety or efficiency of the road network as a result of delayed turning movements into a site.

SCHEME REQUIREMENTS		COMMENT
A1		Given that the vehicle access ways have been
Veh	icular passing areas must:	designed as two-way, the proposal complies
(a)	be provided if any of the following applies to an access:	with A1.
	<ul><li>(i) it serves more than 5 car parking spaces;</li></ul>	
	(ii) is more than 30 m long;	
	<ul><li>(iii) it meets a road serving more than 6000 vehicles per day;</li></ul>	
(b)	be 6 m long, 5.5 m wide, and taper to the width of the driveway;	
(c)	have the first passing area constructed at the kerb;	
(d)	be at intervals of no more than 30 m along the access.	

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# E6.7.4 On-Site Turning

**Objective**: To ensure safe, efficient and convenient access for all users, including drivers, passengers, pedestrians and cyclists, by generally requiring vehicles to enter and exit in a forward direction.

SCHEME REQUIREMENTS	COMMENT
A1	The design of the car parking area ensures
On-site turning must be provided to enable vehicles to exit a site in a forward direction,	vehicles can turn on-site and enter and exit the site in a forward direction.
except where the access complies with any of the following:	The proposal is capable of complying with A1.
(a) it serves no more than two dwelling units;	
(b) it meets a road carrying less than 6000 vehicles per day.	

### E6.7.5 Layout of Parking Areas

**Objective**: To ensure that parking areas for cars (including assessable parking spaces), motorcycles and bicycles are located, designed and constructed to enable safe, easy and efficient use.

SCHEME REQUIREMENTS	COMMENT
A1 The layout of car parking spaces, access aisles, circulation roadways and ramps must be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off- street car parking and must have sufficient headroom to comply with clause 5.3	As detailed in the accompanying TIA, the proposed layout of the car parking spaces, access aisles and ramps comply with the dimension requirements under User Class 1A under the Australian Standards. The proposed parking spaces will be car stackers, the final dimensions of which will depend on the commercial car stacker product.
"Headroom" of the same Standard.	The ramps will be constructed to a maximum grade of 25%.
	The proposal complies with the relevant Australian Standards and therefore complies with A1.
	Further detail is provided in the accompanying TIA.

### E6.7.6 Surface Treatment of Parking Areas

**Objective**: To ensure that parking spaces and vehicle circulation roadways do not detract from the amenity of users, adjoining occupiers or the environment by preventing dust, mud and sediment transport.

SCHEME REQUIREMENTS	COMMENT
A1	The parking areas will be paved with durable
	all-weather pavement and will be drained to

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Parking spaces and vehicle circulation roadways must be in accordance with all of the following;

an on-site detention tank, which will then be directed to existing public infrastructure. The proposal complies with A1.

- (a) paved or treated with a durable allweather pavement where within 75m of a property boundary or a sealed roadway;
- (b) drained to an approved stormwater system,

unless the road from which access is provided to the property is unsealed.

### E6.7.7 Lighting of Parking Areas

**Objective**: To ensure parking and vehicle circulation roadways and pedestrian paths used outside daylight hours are provided with lighting to a standard which:

- (a) enables easy and efficient use;
- (b) promotes the safety of users;
- (c) minimises opportunities for crime or anti-social behaviour; and
- (d) prevents unreasonable light overspill impacts.

SCHEME REQUIREMENT	COMMENT
A1 Parking and vehicle circulation roadways and pedestrian paths serving 5 or more car parking spaces, used outside daylight hours, must be provided with lighting in accordance with clause 3.1 "Basis of Design" and clause 3.6 "Car Parks" in AS/NZS 1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting.	Internal car parking areas will be provided with lighting to comply with Australian Standards. The lighting details will be confirmed during design development.
P1 Parking and vehicle circulation roadways and pedestrian paths used outside daylight hours must be provided with lighting to a standard which satisfies all of the following:	
<ul> <li>(a) enables easy and efficient use of the area;</li> <li>(b) minimises potential for conflicts involving pedestrians, cyclists and vehicles;</li> </ul>	
<ul> <li>(c) reduces opportunities for crime or anti- social behaviour by supporting passive surveillance and clear sight lines and treating the risk from concealment or entrapment points;</li> </ul>	
<ul><li>(d) prevents unreasonable impact on the amenity of adjoining users through light</li></ul>	

overspill;

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(e) is appropriate to the hours of operation of the use.

### E6.7.8 Landscaping of Parking Areas

Objective: To ensure that large parking and circulation areas are landscaped to:

- (a) relieve the visual impact on the streetscape of large expanses of hard surfaces;
- (b) screen the boundary of car parking areas to soften the amenity impact on neighbouring properties;
- (c) contribute to the creation of vibrant and liveable places;
- (d) reduce opportunities for crime or anti-social behaviour by maintaining clear sightlines.

SCHEME REQUIREMENTS	COMMENT
A1 Landscaping of parking and circulation areas must be provided where more than 5 car parking spaces are proposed. This landscaping must be no less than 5 percent of the area of the car park, except in the Central Business Zone where no landscaping is required. P1	Although space for more than 5 parking spaces is proposed, it is considered that no landscaping is required as the parking areas are located within the building on the lower ground floor. These areas will not be visible from the streetscape or from public areas.
Landscaping of parking and circulation areas accommodating more than 5 cars must satisfy all of the following:	
<ul> <li>(a) relieve the visual impact on the streetscape of large expanses of hard surfaces;</li> <li>(b) soften the boundary of car parking areas to reduce the amenity impact on</li> </ul>	
neighbouring properties and the streetscape; (c) reduce opportunities for crime or anti- social behaviour by maintaining passive surveillance opportunities from nearby public spaces and buildings.	
E6.7.9 Design of Motorcycle Parking Areas	

**Objective**: To ensure that motorcycle parking areas are located, designed and constructed to enable safe, easy and efficient use.

SCHEME REQUIREMENTS	COMMENT
A1 The design of motorcycle parking areas must comply with all of the following:	The proposal does not generate a requirement for motorcycle parking.
<ul> <li>(a) be located, designed and constructed to comply with section 2.4.7 "Provision for Motorcycles" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking;</li> </ul>	

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(b) be located within 30 m of the main entrance to the building.

# E6.7.10 Design of Bicycle Parking Facilities

**Objective**: To encourage cycling as a healthy and environmentally friendly mode of transport for commuter, shopping and recreational trips by providing secure, accessible and convenient bicycle parking spaces.

SCHEME REQUIREMENTS	COMMENT
A1 The design of bicycle parking facilities must comply with all the following;	The proposal is for residential use and does not generate a requirement for bicycle parking.
<ul> <li>(a) be provided in accordance with the requirements of Table E6.2;</li> <li>(b) be located within 30 m of the main entrance to the building.</li> </ul>	However, class 3 bicycle parking arrangements have been provided for residents and are located within 30m of the main entrance to the building.
A2	As per above.
The design of bicycle parking spaces must be to the class specified in table 1.1 of AS2890.3- 1993 Parking facilities Part 3: Bicycle parking facilities in compliance with section 2 "Design of Parking Facilities" and clauses 3.1 "Security" and 3.3 "Ease of Use" of the	

### E6.7.11 - Bicycle End of Trip Facilities

### N/A

### E6.7.12 Siting of Car Parking

same Standard. <sup>R1</sup>

**Objective**: To ensure that the streetscape, amenity and character of urban areas is not adversely affected by siting of vehicle parking and access facilities.

SCHEME REQUIREMENTS	COMMENT
A1 Parking spaces and vehicle turning areas, including garages or covered parking areas in the Inner Residential Zone, Urban Mixed Use Zone, Village Zone, Local Business Zone and General Business Zone must be located behind the building line of buildings located or proposed on a site except if a parking area is already provided in front of the building line of a shopping centre.	The proposed parking area will be located on the lower ground level and will be located behind the building line of the proposed building along both elevations. Therefore, complying with A1.

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<b>Objective</b> : To ensure that facilities for appropriate.	commercial vehicles are provided on site, as
SCHEME REQUIREMENTS	COMMENT
A1 Commercial vehicle facilities for loading unloading or manoeuvring must be provide on-site in accordance with Australia Standard for Off-street Parking, Part 2 Commercial. Vehicle Facilities AS 2890.2:2002 unless:	d goods. n Therefore, there is no requirement for : commercial vehicle facilities.
<ul> <li>(a) the delivery of all inward bound goods by a single person from a vehicle parke in a dedicated loading zone within 50 m o the site;</li> </ul>	d
(b) the use is not primarily dependent of outward delivery of goods from the site.	

Objective: To ensure that access to the road ne	etwork is provided appropriately.							
SCHEME REQUIREMENTS	COMMENT							
A1	Road access from Wilmot Street will be							
Access to a road must be in accordance with the requirements of the road authority.	reinstated in accordance with requirements of the road authority.							

# 5.4 STORMWATER MANAGEMENT CODE

5.4.1 DEVELOPMENT STANDARDS

<b>Objective</b> : To ensure that stormwater quality of	and quantity is managed appropriately.
SCHEME REQUIREMENTS	COMMENT
A1 Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure.	The site stormwater will be directed to an on- site detention tank, which will then be discharged to public stormwater via gravity.
A2 A stormwater system for a new development must incorporate water sensitive urban design principles <sup>R1</sup> for the treatment and disposal of stormwater if any of the following apply:	The proposed development will increase the impervious areas and will provide parking for more than 6 cars. As per the accompanying Civil plans and stormwater report, the proposal will include WSUD principals in the form of an on-site Ocean Protect Storm-filter system which includes a 2000L detention tank. This system

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<ul> <li>(a) the size of new impervious area is more than 600 m2;</li> <li>(b) new car parking is provided for more than 6 cars;</li> <li>(c) a subdivision is for more than 5 lots.</li> </ul>	will ensure that the post-development discharge will be less than the pre- development stormwater discharge. The proposed Ocean Protect system is capable of satisfying the state stormwater targets. The proposal complies with A2.
P2 A stormwater system for a new development must incorporate a stormwater drainage system of a size and design sufficient to achieve the stormwater quality and quantity targets in accordance with the State Stormwater Strategy 2010, as detailed in Table E7.1 unless it is not feasible to do so.	
<ul> <li>A3</li> <li>A minor stormwater drainage system must be designed to comply with all of the following:</li> <li>(a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed;</li> <li>(b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or</li> </ul>	The proposed stormwater system has been designed to ensure that runoff will be detained on-site prior to discharge to the public system. This ensures that the runoff entering the public system will be less than pre-existing runoff. The proposal complies with A3(b).
upgraded public stormwater infrastructure.	

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9 Sandy Bay Road 6

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### 5.5 HISTORIC HERITAGE CODE

A portion of the site falls within the H2 Heritage Precinct, as shown in the figure below.

Figure 36: Extent of the H2 Heritage Precinct (source: <u>www.thelist.tas.gov.au</u> © State Government of Tasmania).

This precinct is significant for the following reasons:

1. It contains a broad range of residential types; from intact examples of Colonial, Victorian and Inter War architecture exemplifying economic boom periods and great individual prosperity alongside smaller cottages and a collection of residential flats built at the height of the Great Depression for a new middle class market.

2. This precinct contains a large number of individual buildings and features that are of historic merit demonstrating the early settlements of Hobart.

3. Places within this precinct of architectural merit with original external detailing, finishes and materials demonstrating a high degree of integrity with a distinctive historic character. Features of significance include high boundary walls a well as sections of continuous built form creating distinctive and strong visual characteristics.

4. The original and/or significant external detailing, finishes and materials demonstrating a high degree of importance.

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The proposed development does not seek the demolition or erection of any buildings within the small section of the site that falls within the precinct, however the area will be landscaped and provided with a reflection pond to serve as an additional outdoor recreation space for residents.

It is not considered that these works would result in any detriment to the heritage characteristics of the precinct and generally will not be visible from the street.

The site and immediately adjoining areas are identified within a place of archaeological potential, therefore the following provisions will apply.

5.5.1 DEVELOPMENT STANDARDS FOR PLACES OF ARCHAEOLOGICAL POTENTIAL

#### E13.10.1 - Building, Works and Demolition

 Objective: To ensure that building, works and demolition at a place of archaeological potential is planned and implemented in a manner that seeks to understand, retain, protect, preserve and otherwise appropriately manage significant archaeological evidence.

 SCHEME REQUIREMENTS
 COMMENT

A1	An archaeological assessment has been
No acceptable solution.	prepared by Praxis Environment, and a
P1	response to P1 has been provided below.
<ul> <li>Buildings, works and demolition must not unnecessarily impact on archaeological resources at places of archaeological potential, having regard to:</li> <li>(a) the nature of the archaeological evidence, either known or predicted;</li> <li>(b) measures proposed to investigate the archaeological evidence to confirm predictive statements of potential;</li> <li>(c) strategies to avoid, minimise and/or control impacts arising from building, works and demolition;</li> <li>(d) where it is demonstrated there is no prudent and feasible alternative to impacts arising from building, works and demolition, measures proposed to realise both the research potential in the archaeological evidence and a meaningful public benefit from any archaeological investigation;</li> <li>(e) measures proposed to preserve significant archaeological evidence 'in situ'.</li> </ul>	P1 The report provides a detailed history of the site, including the origins of the existing apartment building on the site. The review has determined that as a result of previous development and excavation on the site, there is little or no archaeological potential remaining on the site. Therefore, no measures to investigate or strategies to avoid impacts are considered to be required and the report recommends that the development can proceed without any further archaeological input.

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# 6. SUMMARY

This report has been prepared to accompany an application for the development of a residential apartment building on the site at 9 Sandy Bay Road.

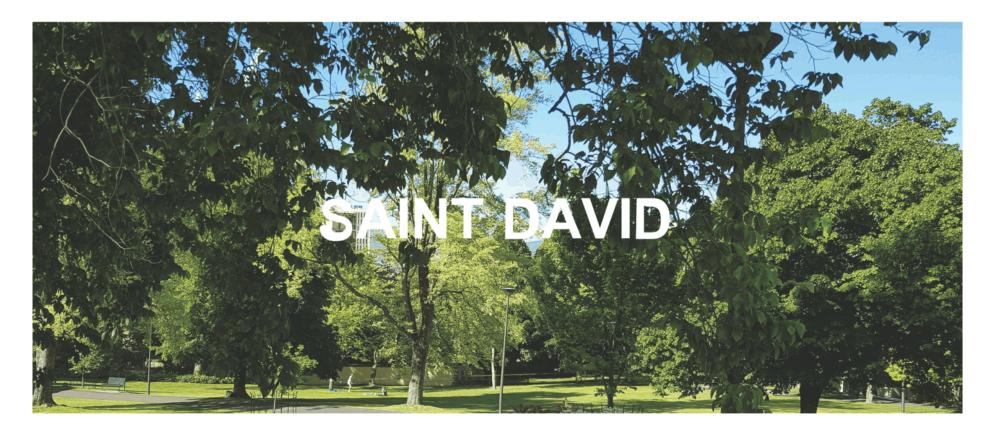
The previous application on the site and subsequent Tribunal decision have been addressed in section 1 and 3 of this report, primarily to outline the differences between the two proposals and what has been achieved through the design of the current proposal to alleviate the concerns raised with regard to height, bulk and ultimately scale and transition. The proposed building will present a similar scale to Sandy Bay Road, however as a result of the design the proposed building responds more effectively to the sensitivities of Wilmot Street.

With regard to parking, the view has been taken by the traffic consultant that the parking provided is sufficient to meet the demand of the development and will potentially reduce the demand for on-street parking, given that the existing building on the site does not provide any on-site parking. The site is well within walking distance of key social, economic and cultural areas ensuring a reduced need for private vehicle provision.

The parking area will utilise vehicle stackers to add additional spaces on-site and the vehicle access and layout have been designed in accordance with the relevant Australian Standards.

Overall, the building has been designed with respect to adjoining and nearby built forms, respects the character and diversity of surrounding development as far as practicable, whilst presenting as a readily identifiable contemporary form within the streetscape.

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DATE 3/12/2020

ST. DAVID - 9 SANDY BAY RD.



DRAWING INDEX		DRAWING INDEX		DRAWING INDEX	
Layout ID	Layout Name	Layout ID	Layout Name	Layout ID	Layout Name
0.1	BRAND ART	3.6	1:200 ELEVATION SOUTH	6.1	MACQUARIE STREET INITIAL PROPOSAL
		3.7	1:200 ELEVATION SOUTH UPDATED	6.2	MACQUARIE STREET REVISED PROPOSAL
1.1	LOCATION PLAN 1:2000	3.8	1:100 ELEVATION SOUTH	6.3	DAVEY STREET INITIAL PROPOSAL
1.2	SITE PLAN 1:500			6.4	DAVEY STREET REVISED PROPOSAL
		3.9	1:200 ELEVATION WEST	6.5	WILMOT STREET - TOP INITIAL PROPOSAL
2.1	1:200 LOWER GROUND LEVEL PLAN	3.10	1:200 ELEVATION WEST UPDATED	6.6	WILMOT STREET - TOP REVISED PROPOSAL
2.2	1:200 GROUND LEVEL PLAN	3.11	1:100 ELEVATION WEST	6.7	WILMOT STREET - NEAR VIEW INITIAL PROPOSAL
2.3	1:200 FIRST LEVEL PLAN			6.8	WILMOT STREET - NEAR VIEW REVISED PROPOSAL
2.4	1:200 SECOND LEVEL PLAN	3.12	1:200 ELEVATION EAST	6.9	SANDY BAY RD. INITIAL PROPOSAL
2.5	1:200 THIRD LEVEL PLAN	3.13	1:200 ELEVATION EAST UPDATED	6.10	SANDY BAY RD. REVISED PROPOSAL
2.6	1:200 FOURTH LEVEL PLAN (PENTHOUSE)	3.14	1:100 ELEVATION EAST	6.11	FRANKLIN WHARF/MAQ 01
2.7	1:200 ROOF PLAN			6.12	FRANKLIN WHARF/MURES
		4.1	1:200 SECTION A	6.13	PARLIAMENT HOUSE LAWNS
3.1	SANDY BAY ROAD CONTEXT	4.2	1:200 SECTION B	6.14	SALAMANCA PLACE
3.2	WILMOT STREET CONTEXT	4.3	SECTION DETAIL 01 - LOWER GROUND FLOOR LEVEL		
		4.4	SECTION DETAIL 02 - PENTHOUSE		
3.3	1:200 ELEVATION NORTH				
3.4	1:200 ELEVATION NORTH UPDATED	5.1	ARTIST'S IMPRESSION		
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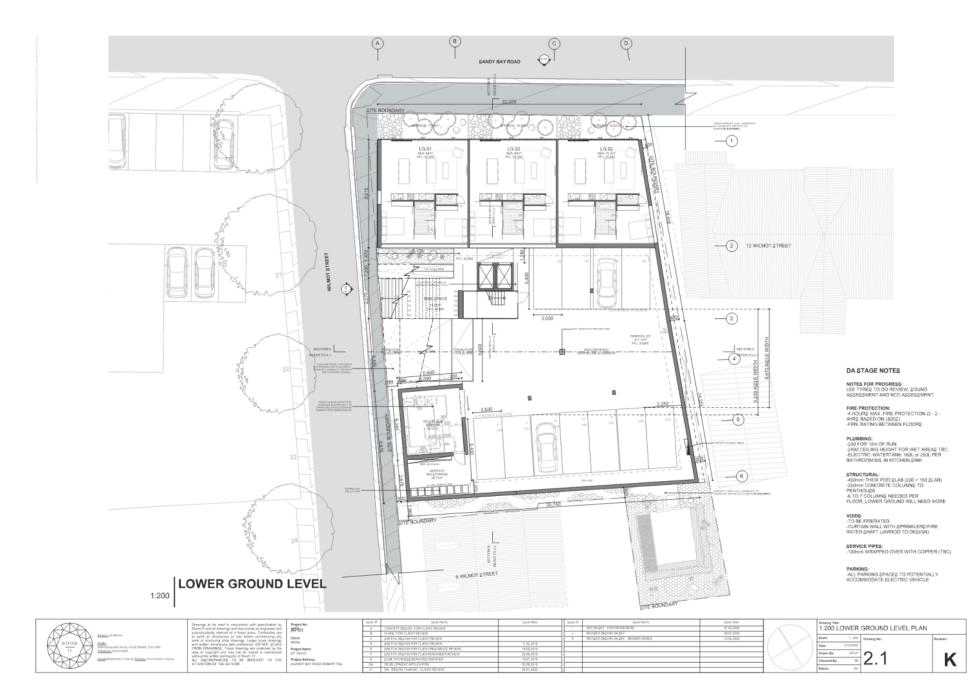
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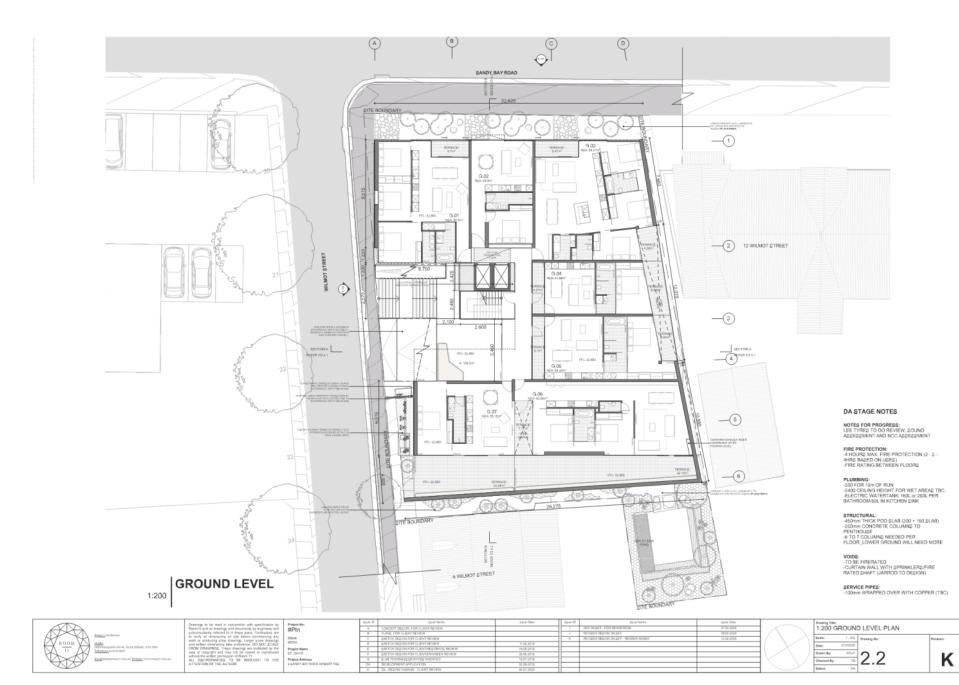
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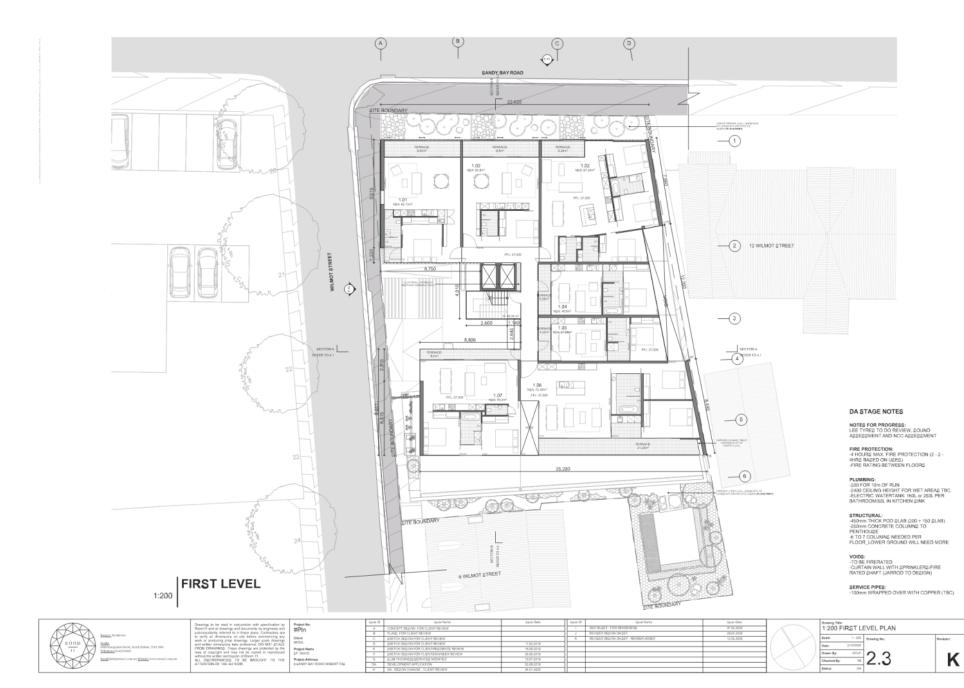
## Page 757 ATTACHMENT B

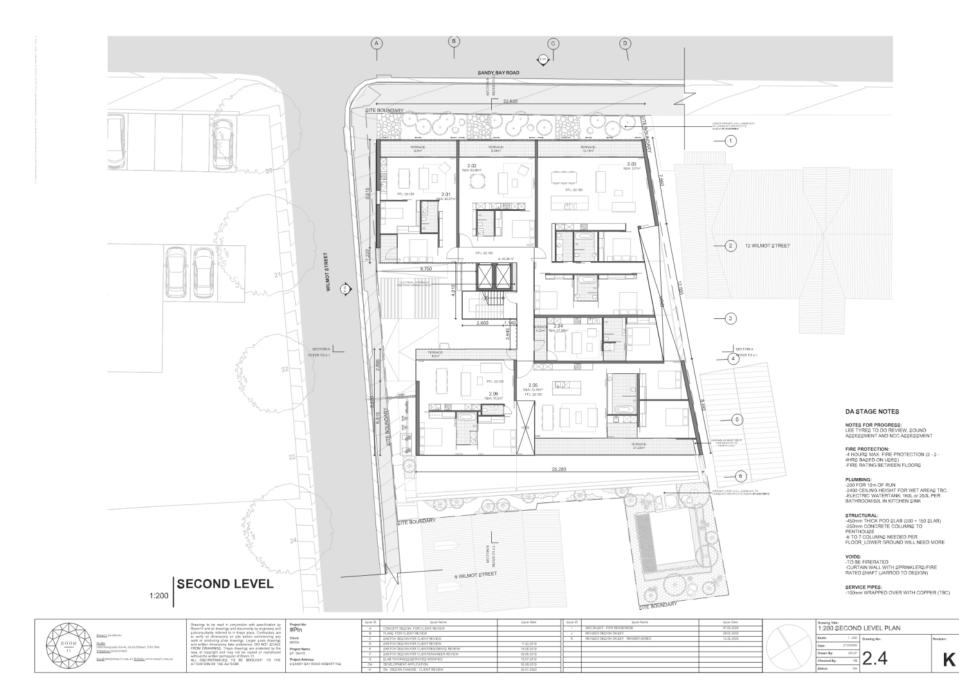


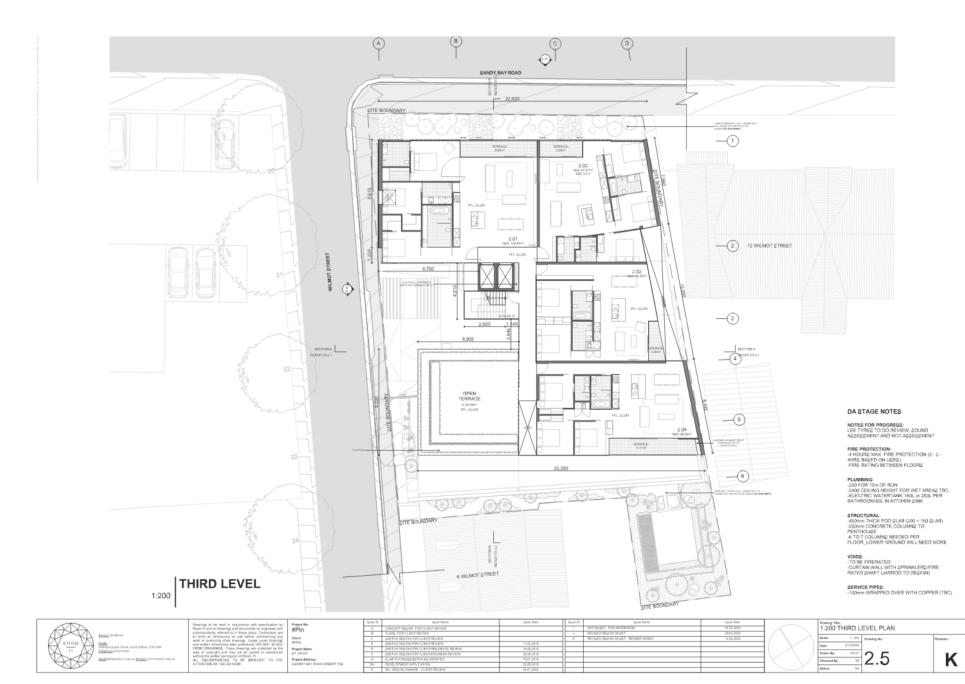
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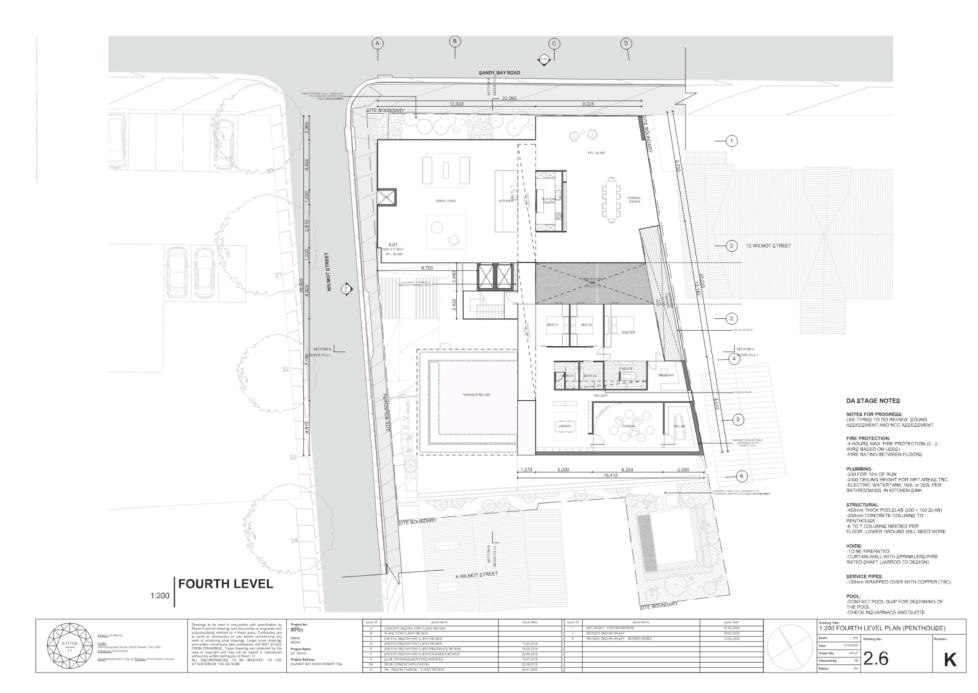


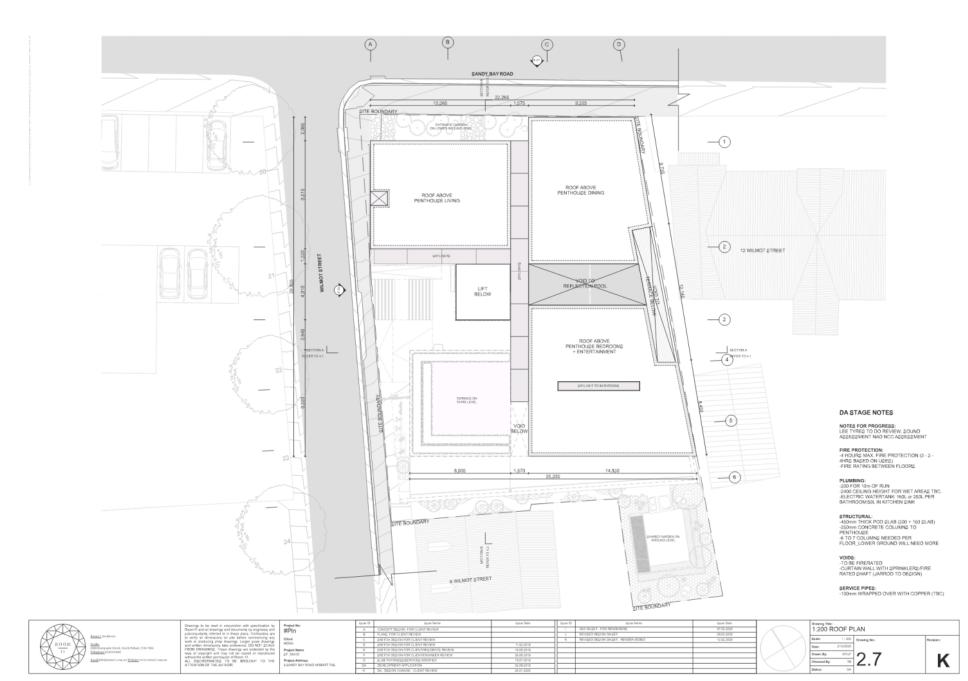


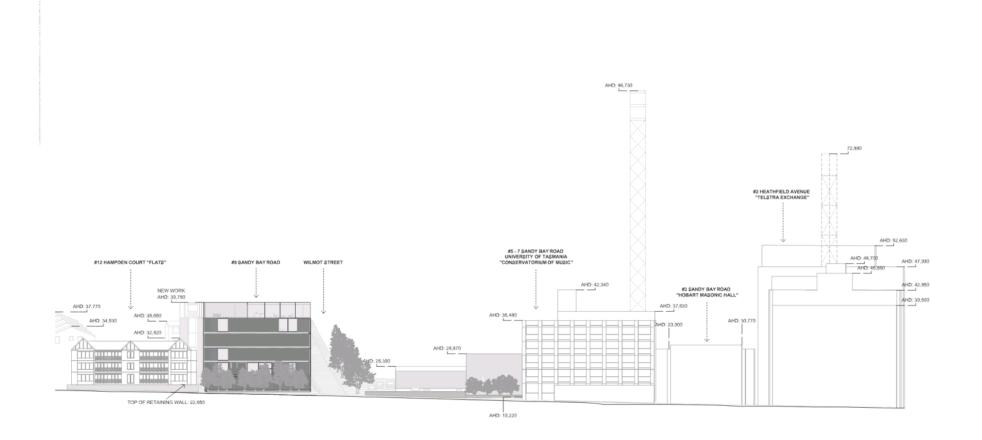






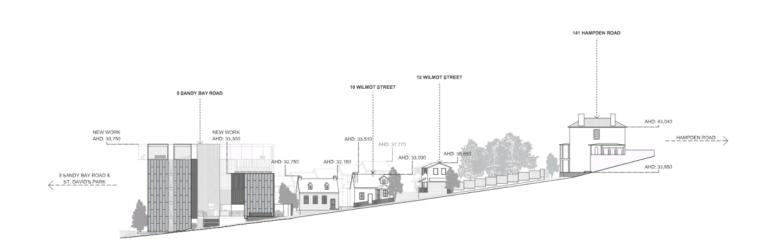






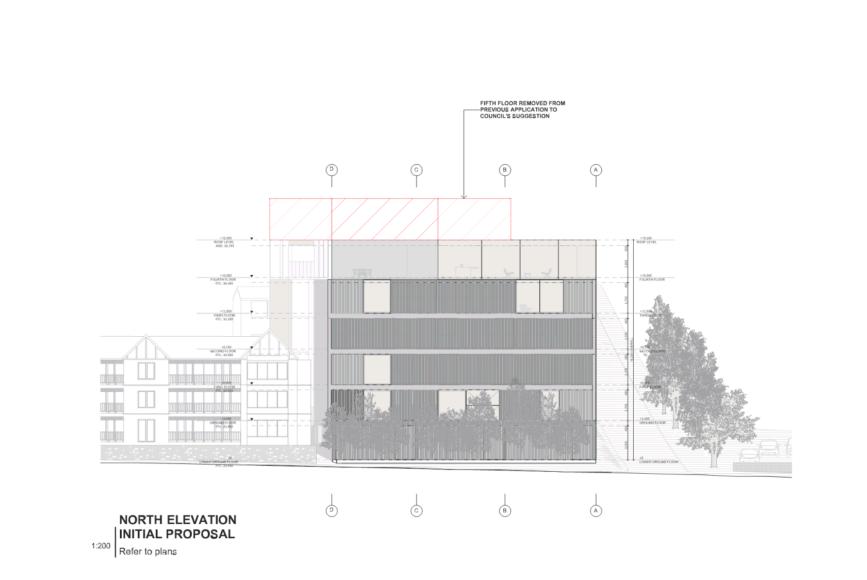
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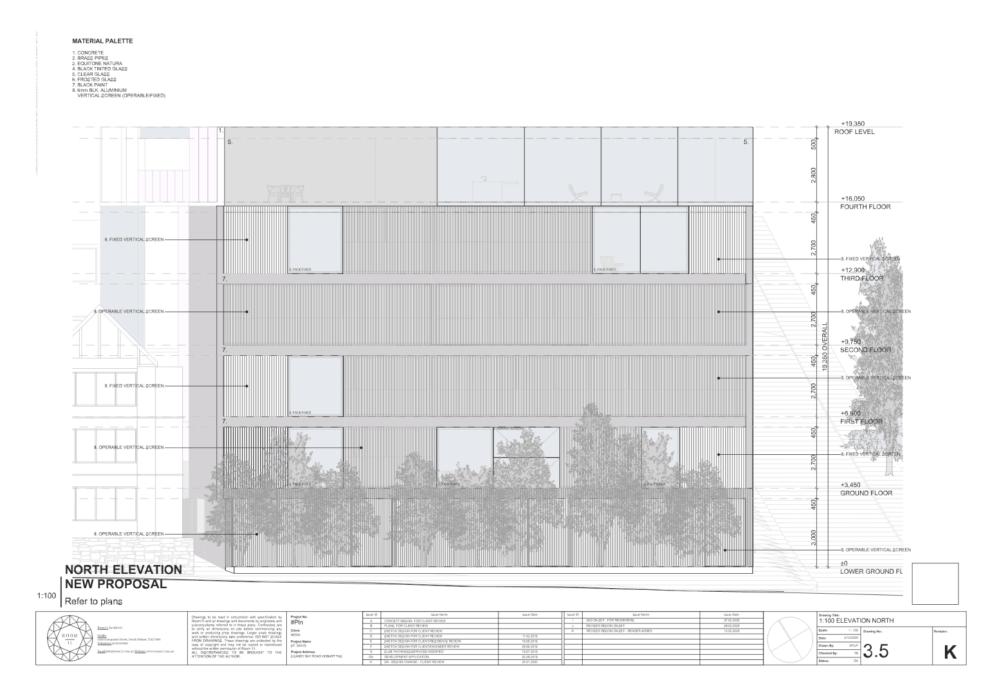
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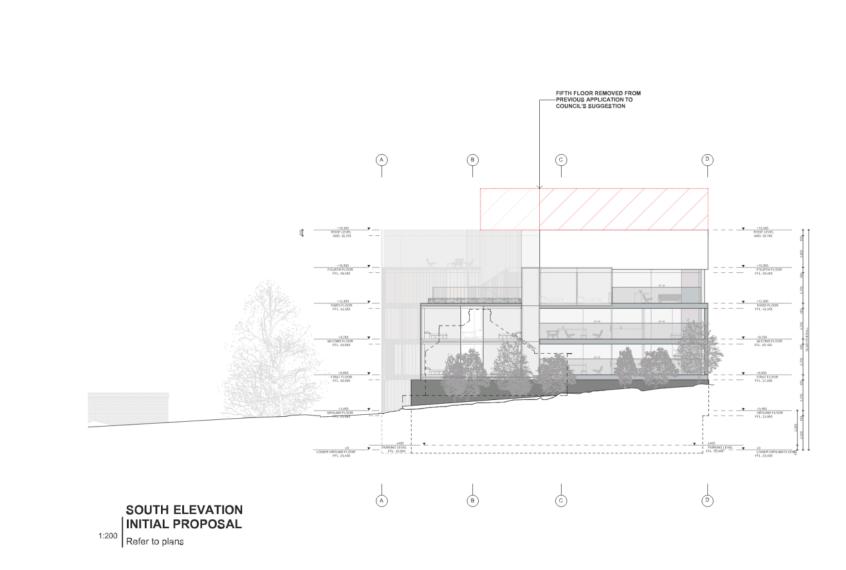


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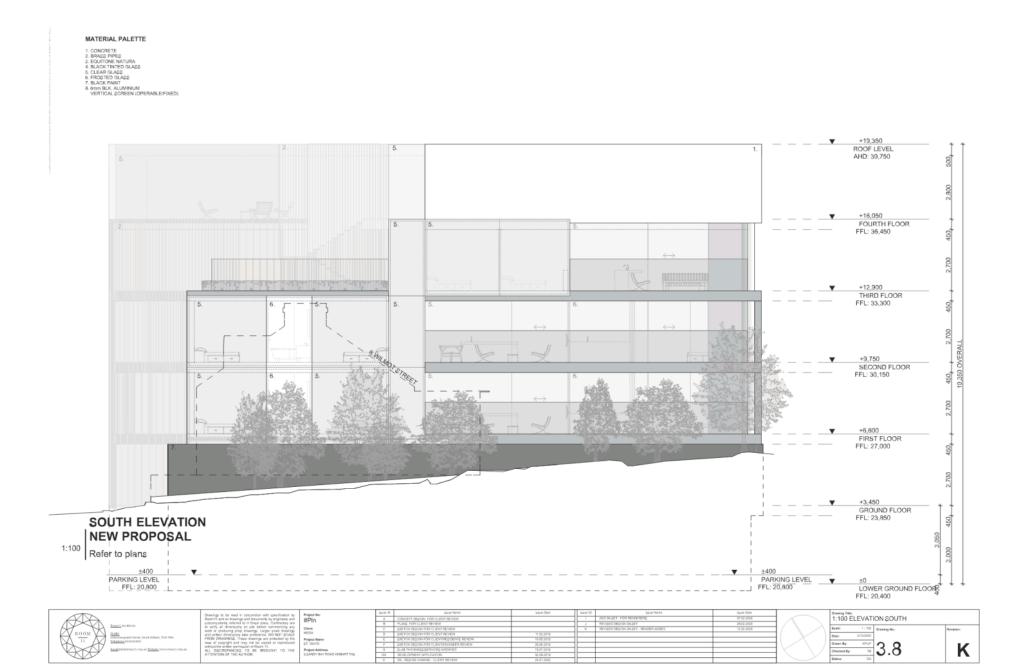
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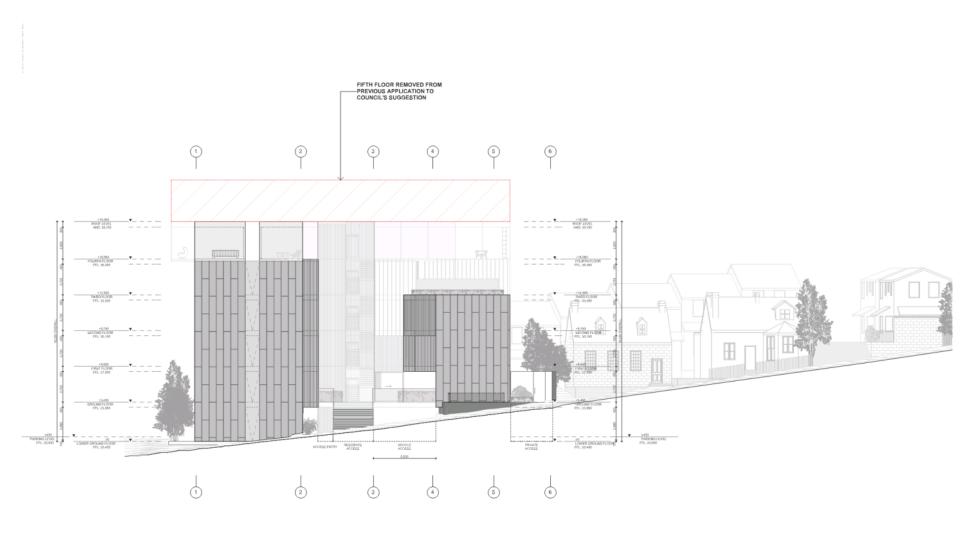


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#### Page 772 ATTACHMENT B

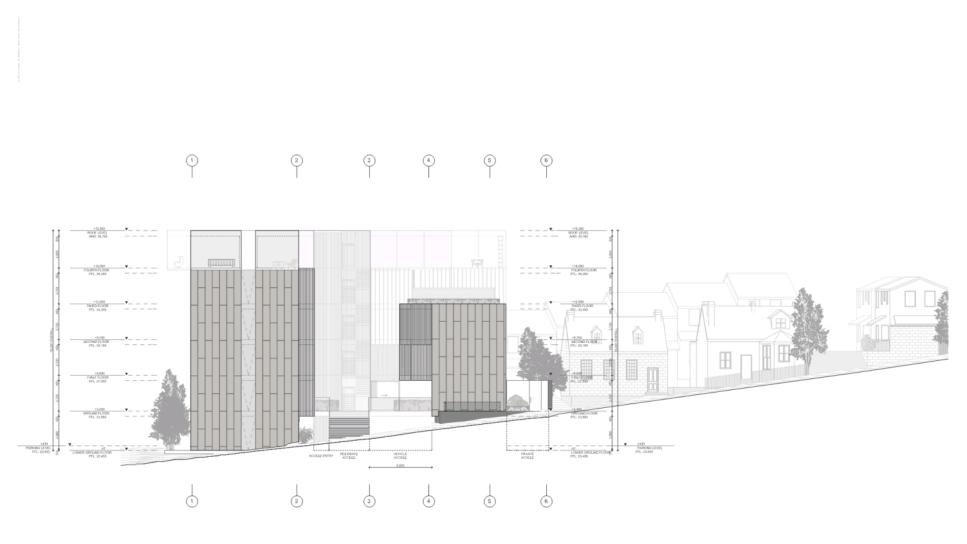






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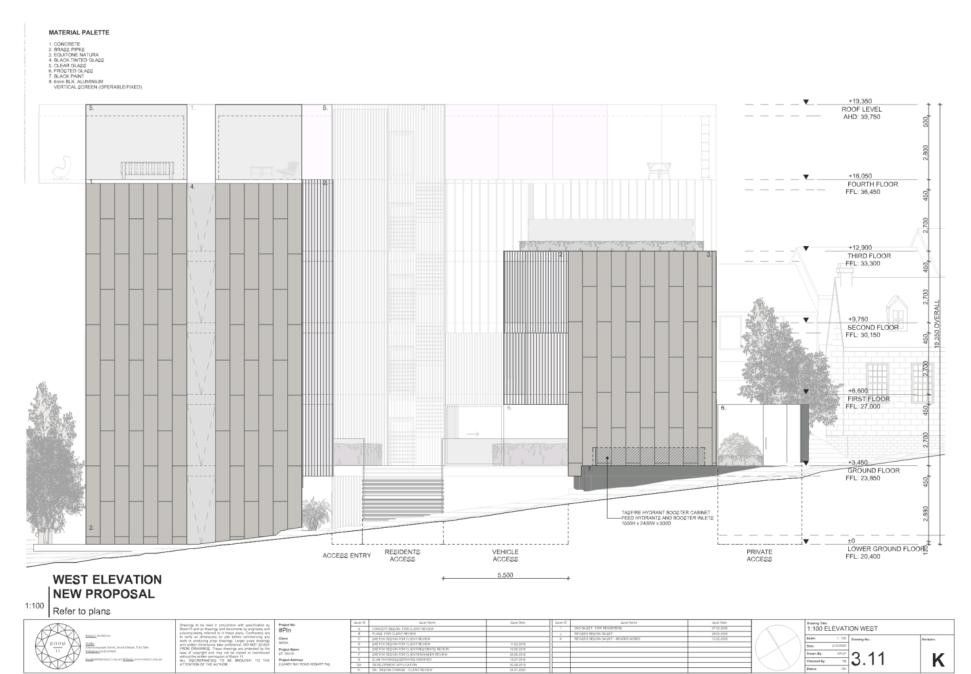


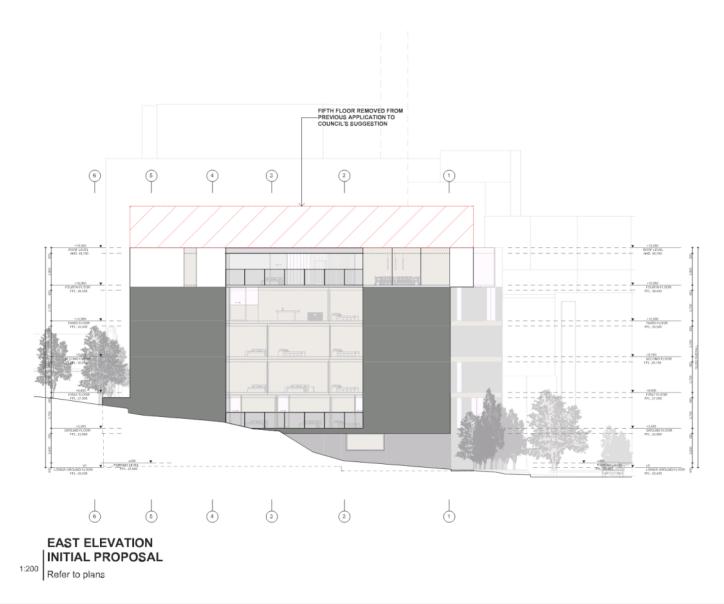


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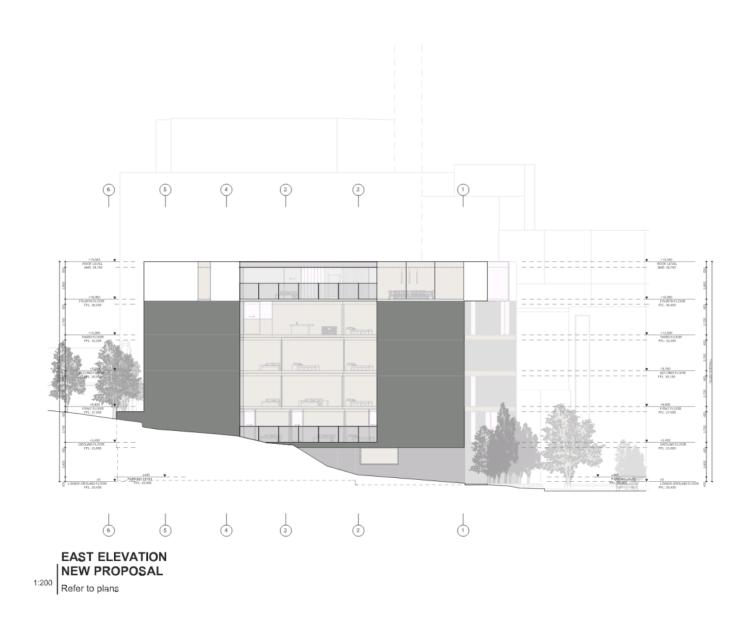
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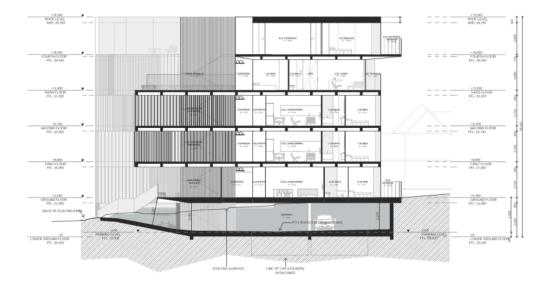


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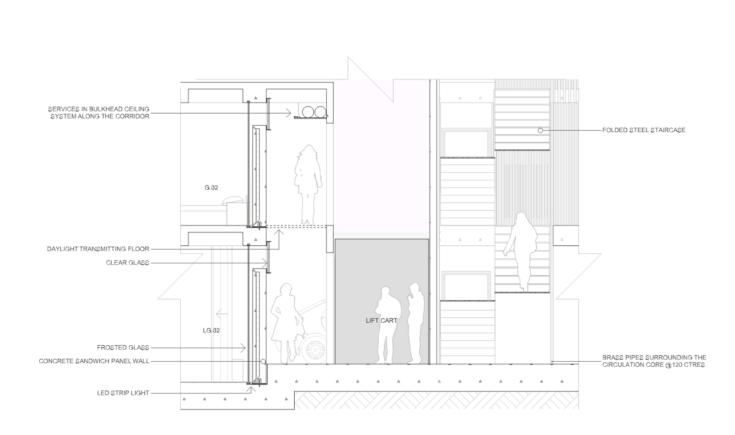


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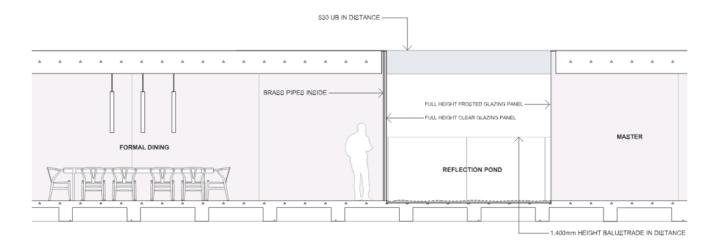
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SECTION DETAIL 01\_LOWER GROUND/GROUND FLOOR SERVICE CORE 1:50

#### 1:50 SECTION DETAIL 01 LOWER GROUND/GROUND FLOOR REFER TO SHEET 2.1

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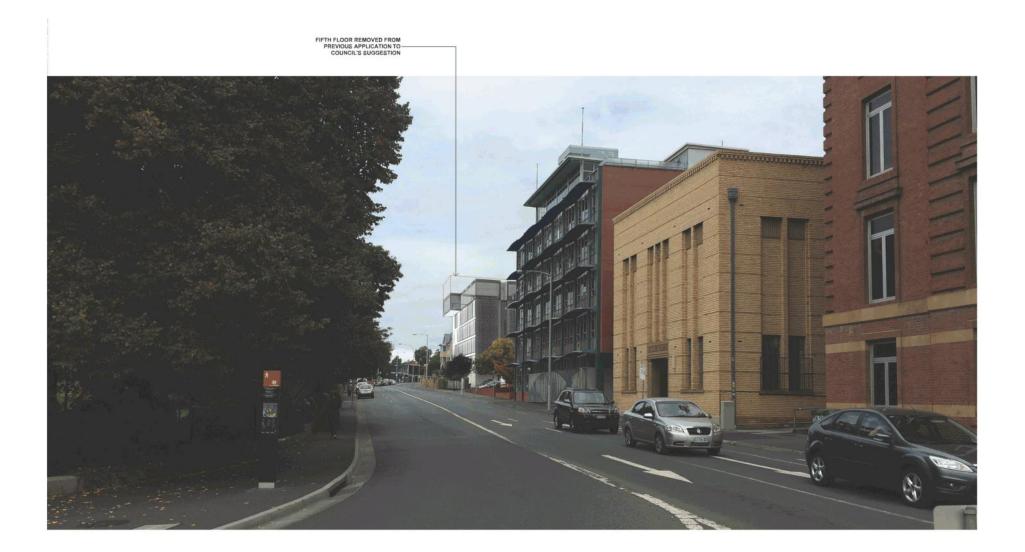


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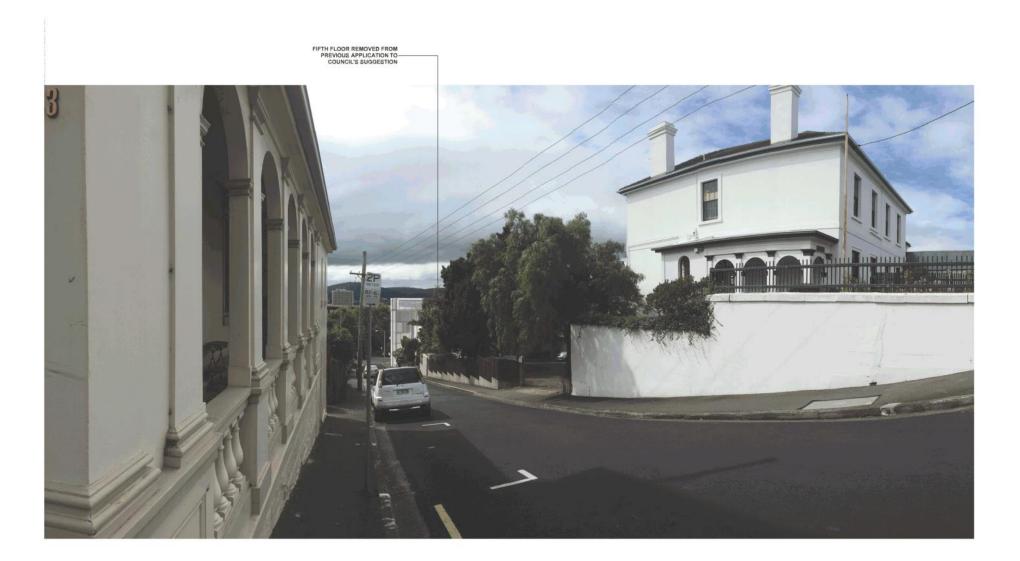


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THE PROPOSAL COMPLETES SUCCESSFUL TRANSITION FROM #12 HAMPDEN COURT "FLATS" TO MUCH TALLER BUILDINGS IN THE CITY.

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THE PROPOSAL COMPLETES SUCCESSFUL TRANSITION FROM #12 HAMPDEN COURT "FLATS" TO MUCH TALLER BUILDINGS IN THE CITY.

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Room 11 Architects Studio 358B Macquarie St, South Hobart 7004, Tasmania Post PO Box 116, South Hobart 7004, Tasmania Telephone 03-6224-8642 Email info@room11.com.au Website www.room11.com.au

<u>9 Sandy Bay Road – Architectural Statement</u> Date: 12.03.2020

Room11's Architectural proposal at 9 Sandy Bay Road for MODA is a carefully considered intervention into the fabric of Hobart City.

Room11 has considerable respect for the existing buildings on the site. However, retaining the buildings was not feasible. Our respect of the existing buildings promoted a desire to ensure that our proposal gave even more to the immediate context, and the greater city than the existing built fabric.

The approach to the design process has been one of synthesis based on key Urban Design and Architectural principles, including a detailed analysis of previous development applications for the site. As a result of this analysis Room 11 Architects have collaborated with Irene Inc. planning consultants to develop a considerate proposition for the site. From this collaboration Room11 developed an approach to volume and massing which understands the rhythm of the highly valuable residential streetscape of Wilmot Street. Balancing this desire is the need to enhance and continue the existing strong Urban edge to Sandy Bay Road. As can be seen in our 'Sandy Bay Road Context 3.1' elevation the height of 1 Sandy Bay Road (Mantra Hotel), 3 Sandy Bay Road (Hobart Masonic Hall), 5-7 Sandy Bay Road (former Conservatorium of Music) these significant structures present a strong built edge to Sandy Bay Road.

Moving forward from these key principles, strategic voids and massing breaks have been incorporated into our proposal. The Eastern wall is pushed in to create light and amenity for our apartments, while stepping away from Hampden Court Apartments. The Southern elevation has a void in its facade, to act as a conceptual break for future residents, and to avoid continuous massing towards 6 Wilmot Street.

Material and colour are also key elements in this proposition. Room11 has made well over a hundred buildings and early in our development sought to generate buildings that recede into their context from a distance. This has been a key component to our architectural work since 2002. Similarly, this proposal when viewed at close quarters will be refined and sophisticated, while from a distance it is either obscured by other buildings or it will recede into its context, due to its dark colour palette. We strongly believe that this is an appropriate response to our treed context. As Leigh Wooley has stated numerous times 'Hobart is a small City in a Large Landscape' while another mentor for Room11, Richard Le Plaistriar has often paraphrased Lloyd Reece's eloquent statement "What is a city if not a gallery of beautiful buildings?".

It is widely known that Hobart is in a housing crisis, with the city becoming the least affordable to rent as of 2019 (RAI 2019). This proposal will provide for much needed inner-city accommodation for professionals and families. The proposal is for a mix of one, two, and three-bedroom apartments, and is designed to provide accommodation in the city for a diverse range of Hobart residents.

The design approach is vigorously progressive in all areas. Room11 share Hobart City Council's advocacy for increased pedestrian and cycling amenity within the city. Providing ample bicycle parking (two - three per apartment), and electric bicycle and vehicle charging points, the proposal is a significant yet subtle advocate for the move towards sustainable transport options for inner city living. The building also challenges the requirement for two vehicles per apartment. Whilst modest parking is provided, a commercial risk has been taken by our client to promote sustainable transport options. The proposal is on a main arterial and bus route in Hobart City, and has a close connection with the open space of St David's park, providing further amenity for the occupants within walking distance.

The immediate context is also a key element to the building being embedded into its surroundings. Our landscape proposition generated in collaboration with Playstreet Landscape Architects proposes to remove existing birch trees from the site and replant them post construction. These mature Birch trees are an extraordinary resource for the project, not only do they provide a link to the immediate history of the site and give the project anchoring for our new building, they also generate a literal link to the vegetation in St David's Park. The building facade also breathes, and its use is seasonal, akin to the deciduous trees in the park.

The building has a strong form with soft skin that is malleable and accommodates the climatic and privacy needs of tenants.

In evaluating the value of a proposal, we believe that the Architectural design, and quality of build are very significant factors. Our client has made it absolutely clear from the initial inception that this will be a building of the highest quality material, craftsmanship and design. The work of Room11 has long illustrated dedication to detail and construction, and as a practice is recognised globally as a leader in the field. Whilst publications across the world are champions of this dedication and continued achievement at the highest level, our crowning achievement is being the first Australian architectural office in history to be exhibited in the hallowed ground of Giardiniera in Venice for the Venice Biennale 2018. While cynically, one could presume that a statement regarding the 'world class' quality of a design proposition could be provided by any architect for any proposition, Room11 with MODA have the design pedigree and peer recognition to back up the statement. We are confident that this will be a significant architectural contribution in the history of Hobart.

Yours sincerely,

Thomas Bailey, Architect AIA, Director, Room11

# ireneinc & smithstreetstudio

15 November 2019

Adam Smee Hobart City Council GPO Box 503 HOBART TAS 7001 (Submitted through e-Portal)



Dear Adam,

#### FURTHER INFORMATION - 9 SANDY BAY ROAD

I am writing in response to your letter of the 6/11/19 requesting further information in response to the proposed development at 9 Sandy Bay Road, Sandy Bay (PLN-19-641).

The following is in response to your enquiries:

PLN Fi1

To enable the Council to assess the application against clause 15.4.8 Residential Amenity of the Urban Mixed Use Zone of the Hobart Interim Planning Scheme 2015, please provide advice regarding whether the proposed dwellings would be designed to achieve internal noise levels no more than 45 dBa, in accordance with relevant Australian Standards for acoustics control (including AS3671 Road Traffic, and AS2107 Habitable Rooms), as required by the acceptable solution A4 for this clause. Alternatively, please demonstrate how the proposal would comply with the performance criterion P4 for the clause, which states:

Habitable rooms of dwellings adjacent to streets carrying more than 6000 vehicle per day must be designed, through site layout and building design, to provide internal noise levels that accord a reasonable level of residential amenity for the occupants.

The building will be designed in accordance with the relevant requirements under the Building Code and will include double glazed windows, balustrades and timber screening which will serve to substantially reduce noise levels generated by pedestrian and traffic movements along Sandy Bay Road.

It is considered that these standard measures will be sufficient to ensure noise levels do not exceed those identified under the acceptable solution.

Stormwater Code

Sw1

Council records show the side entry pit's receiving main in Sandy Bay Road as only DN225, not DN750 as shown in the civil drawings. The main in Sandy Bay Road is DN300 and located in the road (not under gutter as shown). The DN225 has extremely limited receiving capacity. A connection to the DN300 main in the road, with associated manhole, is required.

Please amend the report and plans to reflect existing infrastructure.

smithstreetstudio

ireneinc 49 Tasma St, North Hobart, TAS 7000 Tel (03) 6234 9281 Fax (03) 6231 4727 Mob 0418 346 283 Email planning@ireneinc.com.au ABN 78 114 905 074

PLANNING TAS PTY LTD TRADING AS IRENEINC PLANNING & SMITH STREET STUDIO PLANNING & URBAN DESIGN 🖡 ABN 78 114 905 074

Please confirm the proposed stormwater system will be able to fully drain via free flowing gravity, taking the proposed detention and treatment systems into account.

Please refer to the amended civil drawings, correctly referencing existing infrastructure and confirming that the proposed stormwater system will be capable of draining stormwater via gravity from the on-site detention tank to public infrastructure.

Sw3

Detailed design and associated calculations (including pump curves) of any required stormwater pump system prepared by a suitably qualified engineer and demonstrating compliance with AS3500 and the Hobart City Council's Guidelines for Property Owners and Developers "Private Stormwater Pumping Stations". All stormwater which is practicable to drain to Council infrastructure via a gravity system (including suspended or charged systems) must do so.

The long section provided on the revised civil drawings (C2.01) illustrates that all stormwater will be drained into the on-site detention tank, which will then drain via gravity to public infrastructure within Sandy Bay Road. Therefore, there is no requirement for any stormwater pump system.

If you have any further queries in relation to any of the above, please contact me on 6234 9281.

Yours sincerely,

J. Courtell

Phil Gartrell Planner IRENEINC PLANNING & URBAN DESIGN

ireneinc planning & urban design

9 Sandy Bay Road, Moda

# ireneinc & smithstreetstudio

30 September 2019

The General Manager Hobart City Council GPO Box 503 HOBART, TAS 7001



Dear Mr Heath,

#### COUNCIL LANDOWNER CONSENT REQUEST - 9 SANDY BAY ROAD

I am writing to request Council consent to lodge a development application at 9 Sandy Bay Road, Hobart (CT 171493/1 & CT 171493/2). This consent request forms part of a full development application for the site, which will be submitted to Council for planning approval.

The application requires works within the Wilmot Street road reserve, which is owned by Hobart City Council. Therefore, as required by S52 of the *Land Use and Approvals Act 1992*, we request Council's consent to lodge the forthcoming development application.

The works required include the following:

Wilmot Street

- Relocation of existing vehicle crossover;
- Infrastructure upgrades to existing water main and stormwater kerb connection.

Sandy Bay Road

- New sewer connection point;
- Upgrade of existing stormwater infrastructure.

In addition, the relocation of the vehicle crossover will require the removal or upgrade of an existing Telstra Pit which will be determined during design development.

Details regarding the above works are contained on the accompanying Civil and Architectural plans and Traffic Impact Assessment.

If you have any further queries in relation to any of the above, please contact me on 6234 9281.

Yours sincerely,

N. Correll

Phil Gartrell Planner IRENEINC PLANNING & URBAN DESIGN

#### smithstreetstudio ireneinc

## 49 Tasma St, North Hobart, TAS 7000 Tel (03) 6234 9281

Fax (03) 6231 4727 Mob 0418 346 283 Email planning@ireneinc.com.au ABN 78 114 905 074

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Enquiries to: City Planning Phone: (03) 6238 2715 Email: coh@hobartcity.com.au

21 October 2019

Poppy Scharkie (ireneinc Planning & Urban Design) 49 Tasma Street NORTH HOBART TAS 7001 mailto: poppy@ireneinc.com.au

Dear Sir/Madam

## 9 SANDY BAY ROAD, HOBART - WORKS IN WILMOT STREET ROAD RESERVE NOTICE OF LAND OWNER CONSENT TO LODGE A PLANNING APPLICATION - GMC-19-20

Site Address:

9 Sandy Bay Road, Sandy Bay including works in Wilmot Street road reservation

Description of Proposal:

Works in road reservation in relation to demolition and new building for 28 multiple dwellings

Applicant Name:

Poppy Scharkie ireneinc Planning & Urban Design poppy@ireneinc.com.au

PLN (if applicable):

PLN-19-641

I write to advise that pursuant to Section 52 of the *Land Use Planning and Approvals Act 1993*, I grant my consent on behalf of the Hobart City Council as the owner/administrator of the above land for you to make application to the City for a planning permit for the development described above and as per the attached documents.

Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au f CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council Please note that the granting of the consent is only for the making of the application and in no way should such consent be seen as prejudicing any decision the Council is required to make as the statutory planning authority.

This consent does not constitute an approval to undertake any works and does not authorise the owner, developer or their agents any right to enter or conduct works on any Council managed land whether subject to this consent or not.

If planning approval is granted by the planning authority, you will be required to seek approvals and permits from the City as both landlord, land manager, or under other statutory powers (such as other legislation or City By-Laws) that are not granted with the issue of a planning permit under a planning scheme. This includes the requirement for you to reapply for a permit to occupy a public space under the City's Public Spaces By-law if the proposal relates to such an area.

Accordingly, I encourage you to continue to engage with the City about these potential requirements.

Yours faithfully

Chuchury

(Heather Salisbury)
ACTING GENERAL MANAGER

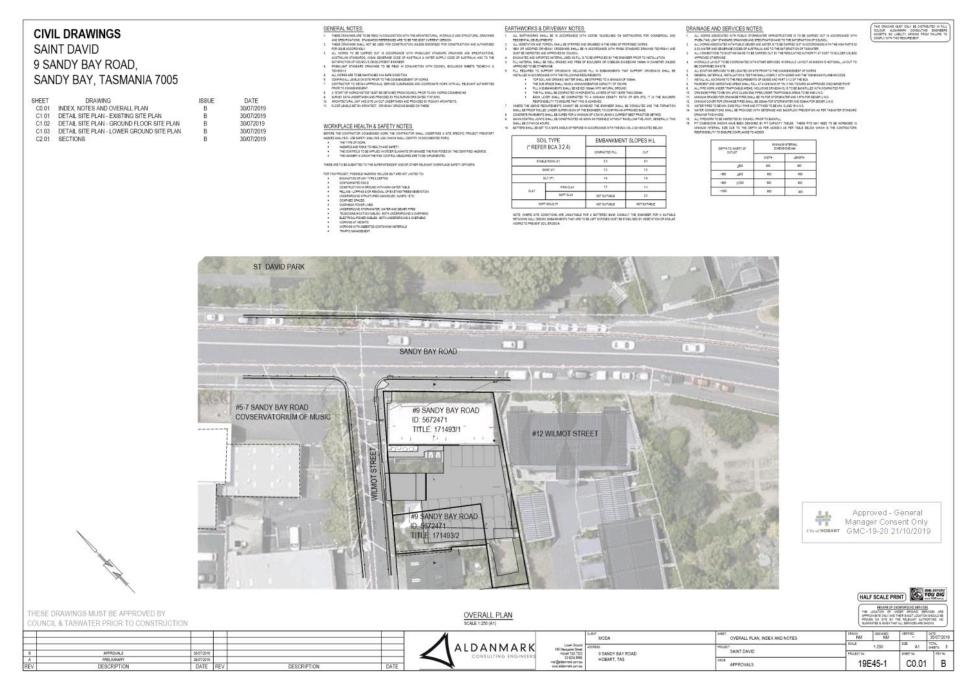
Relevant documents/plans:

Aldanmark Consulting Engineers Plans C0.01B, C1.01B, C1.02B, C1.03B and C2.01B

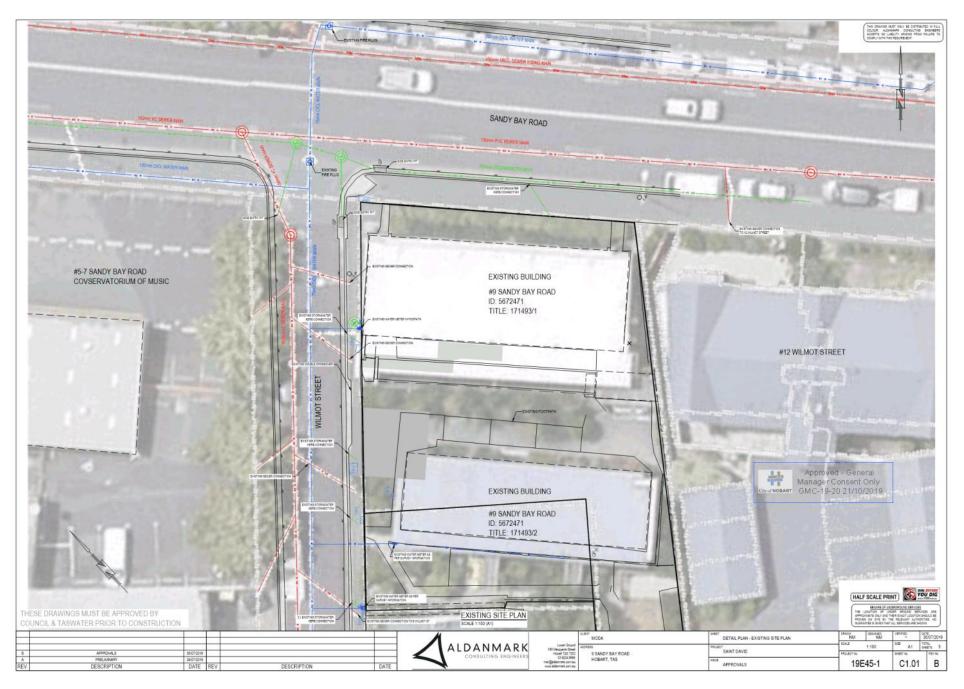
Hobart Town Hall 50 Macquarie Street Hobart TAS 7000 Hobart Council Centre 16 Elizabeth Street Hobart TAS 7000 City of Hobart GPO Box 503 Hobart TAS 7001 T 03 6238 2711 F 03 6234 7109 E coh@hobartcity.com.au W hobartcity.com.au **f** CityofHobartOfficial

ABN 39 055 343 428 Hobart City Council

### Page 806 ATTACHMENT B



## Page 807 ATTACHMENT B



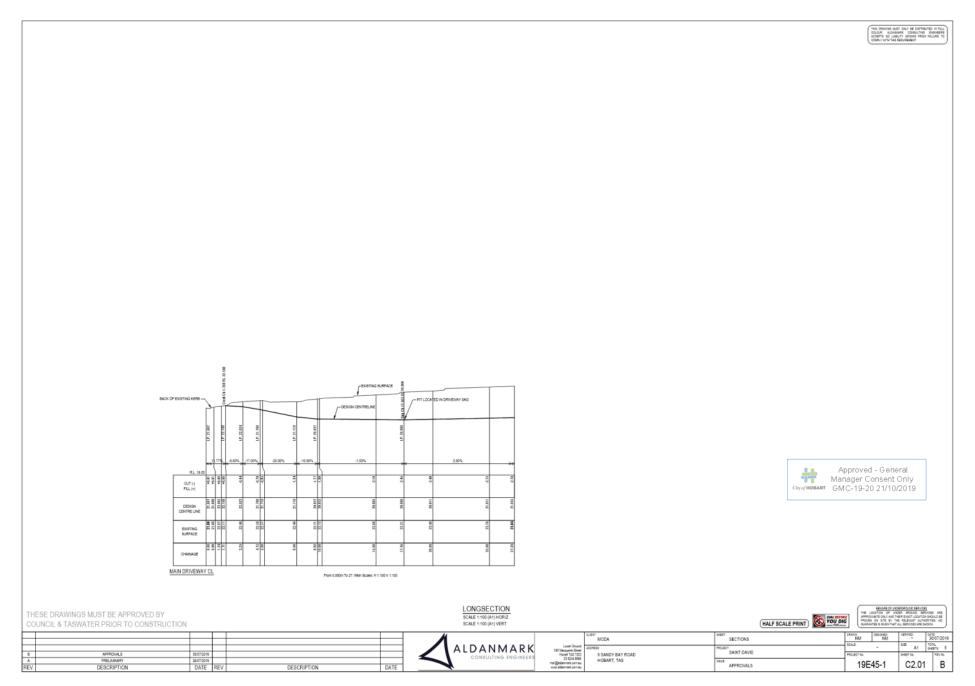
## Page 808 ATTACHMENT B



## Page 809 ATTACHMENT B



#### Page 810 ATTACHMENT B



ALDANMARK

Lower Ground - 199 Macquarie Street, Hobart TAS 7000

CONSULTING ENGINEERS

GPO Box 1248, Hobart TAS 7001

03 6234 8666 mail@aldanmark.com.au www.aldanmark.com.au

30/7/2019

ENGINEER'S ADVICE

190725 INST 19E45-1 TasWater Demands

Inspection 🗌	Room 11 thomas@room11.com.au	Thomas Bailey	To:
Instruction $ extsf{N}$			Cc:
Memo 🗌			
RFI Response			
Shop Drawing Approval			
	avid Park): 9 Sandy Bay Road, SANDY BAY	ect: MODA (Saint Da	Proje

Project:	MODA (Saint David Park): 9 Sandy Bay Road, SANDY BAY
Subject:	TasWater Demands Development Application
Relevant d	documents:

1. Architectural/building design drawings by Room 11 Architects Rev F 9 Sandy Bay Road – MODA, St. David

2. Engineering design documents by Aldanmark 19E45-1 CIV Rev A

3. TasWater Supplement to WSA 02-2014-3.1

The proposed development at 9 Sandy Bay Road include 28 multiple dwellings from 1 bedroom to 3-bedroom apartments. Sewerage loadings are in accordance with TasWater Sewerage Code Supplement to the Sewerage Code of Australia WSA 02-2014 Version 3.1.

Gross development area for the applicable apartment ratings are based on survey documents Aldanmark provided by PDA surveyors dated 17/7/2015. The total equivalent (ET's) calculation is provided in tabular form below:

#### Table 1 – Sewerage Equivalent Tenements

Туре	Comments	Quantity	Unit Rating	Total Sewerage ET's
RA01 – Apartment – 1 Bedroom	Floors 1 & 2	11	0.5	5.5
RA02 – Apartment – 2 Bedroom	Floors 3 – 9	9	0.75	6.75
RA03 – Apartment – 3+ Bedroom	Floors 10 - 14	8	1	8
	Tota	l Approximate Equivaler	nt Tenements (ET's)	20.25

Based on the above information and WSA 02-2014 and 450L/ET/day, the sewerage flows are:

$$\begin{split} & Q_{ADWF} = 0.105 \text{ L/s} \\ & Q_{PDWF} = 0.467 \text{ L/s} \\ & Q_{RDI} = 0.12 \text{ L/s} \\ & Q_{TOTAL} = 0.587 \text{L/s} \end{split}$$

As per TasWater Supplement to Water Supply Code of Australia WSA 03-2011-3.1 MRWA Edition V2.0, where ET's in the serviced zone is <100, probable simultaneous demand (PSD) effects shall be considered.

As per Section 3 of AS3500.1:2018 Table 3.2.3, the PSD = 3.25 L/s for 28 Dwellings.

The site will require a DN50 (I.D) low hazard property service connection as per TWS-W-0002. Static rise of 21.85m (215kPa), dynamic losses of 24kPa (allowing 1.5 fixture loss multiplier as per AS3500) and min. fixture

pressure of 50kPa.

Version 180513

#### 30/7/2019

190725 INST 19E45-1 TasWater Demands

Total fire demands will not be known until detailed design has commenced. Based on previous projects, Aldanmark anticipate the fire supply must take in consideration:

- Attack hydrants and;
- Sprinkler systems (if required)

The proposed building will require 2 internal fire hydrants operating simultaneously with a flow rate of 10 L/s @ 350kPa The sprinkler zones will be broken up into (if required):

- Hotel Light Hazard; 4.8L/s per group of six sprinklers, each sprinkler operating @ 70kPa
- Carpark garage Ordinary Hazard 2; 17 L/s, each sprinkler operating @ 100kPa

Regards,

Nathan Morey BEng (Hons) Civil Engineer

Version 141001

#### Page 813 ATTACHMENT B



ALDANMARK CONSULTING ENGINEERS

## **STORMWATER REPORT**

SAINT DAVID 9 Sandy Bay Road SANDY BAY TAS 7005

Room 11

Aldanmark Reference: 19 E 45 - 1



GPO Box 1248 Hobart TAS 7001

03 6234 8666

mail@ aldanmark.com.au www.aldanmark.com.au

ABN 79 097 438 714

30/7/2019



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#### DOCUMENT CONTROL

VERSION	DATE	AUTH	OR	APPROVED			
0	30/07/2019	Nathan Morey	Hu	Mark Gardner	Wkigh-		

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30/7/2019



## 1. INTRODUCTION AND SCOPE OF ENGAGEMENT

Aldanmark have been engaged to design a stormwater system for the proposed apartment development at 9 Sandy Bay Road, SANDY BAY. In accordance with E7 of Hobart City Council Interim Planning Scheme 2015 the sites post-development peak discharge must not exceed the predevelopment peak discharge for stormwater runoff and the project must incorporate the principles of Water Sensitive Urban Design (WSUD). The following report outlines the methodology and assumptions used to ensure the proposed development complies with the permit conditions.

#### 2. DETENTION MODEL

The following areas were determined from Room 11 drawing set dated July 2019 and Survey data provided by PDA Surveyors for Salta Properties Pty Ltd 15<sup>th</sup> May 2015:

Total site area:	≈ 969m²
Pre-development areas:	
Roof/driveways	≈ 355m <sup>2</sup>
Pavements	≈ 125m <sup>2</sup>
Pervious	≈ 489m²
Post-development areas:	
Roofs/driveways	≈ 892m <sup>2</sup>
Pervious	≈ 77m²
Coefficients of run-off adopted for design are as follows:	
Impervious areas	
- Roof	C = 1.0
- External path	C = 0.90
Pervious areas	C = 0.30
5-minute duration - 5% AEP Hobart (incl. global warming):	I = 100mm/hr (BOM IFD)

Calculations have been based on the Modified Rational Method for stormwater run-off:

$$Q = \frac{C \times I \times A}{3600}$$

Where:

Q = Design Volumetric Flow Rate [L/s] C = Runoff Coefficient I = Rainfall Intensity [mm/hr] (5 minute - 5% AEP storm) A = Sum of all equivalent areas [m<sup>2</sup>]

Pre-Development Permissible Site Discharge (PSD):

$$Q_{PSD} = \frac{(0.3 \times 489 + 0.9 \times 125 + 1.0 \times 355) \times 100.0}{3600} = 17.0 L/s$$

190729 SR 19E45-1 ABN 79 097 438 714 Page 3 of 5

30/7/2019



Post-Development:

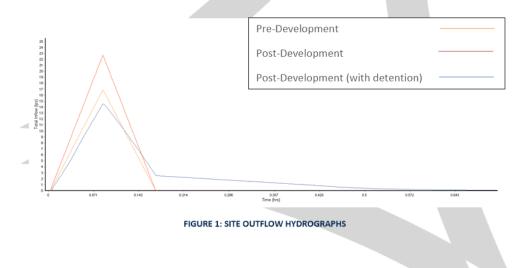
$$Q_{Post} = \frac{(0.3 \times 77 + 0.9 \times 892) \times 100.0}{3600} = 23.0 L/s$$

As shown above the post development flow  $Q_{Post}$  is 6.0 L/s greater than the permissible site discharge  $Q_{PSD}$  and therefore on-site detention (OSD) is required. To determine the volume of storage required to reduce the post development peak discharge to the permissible site discharge Autodesk Software - Storm and Sanitary Analysis was utilised.

The model simulated a detention tank in the lower ground carpark fitted with a 50mm low flow orifice device, connected to the site stormwater system. The final roof design is not known at this stage, as a conservative approach, half of the impervious site had been modelled to the detention tank, with the remaining site discharging directly to the new 150mm stormwater connection on Sandy Bay Road.

The results of the model showed that a detention volume of 2000L is required to allow  $Q_{Post} \leq Q_{PSD}$ , the concept stormwater plan is shown on Aldanmark civil drawings C1.03 Job No 19E45-1.

The outflow hydrographs for the site, as shown in Figure 1, demonstrate the post-development peak discharge is below the pre-development.



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30/7/2019



#### 3. WATER SENSITIVE URBAN DESIGN

Detailed MUSIC model has not been completed at this early stage of the design development. The main area to be treated will be the under-ground carpark which for is majority will not be exposed to stormwater runoff. Based on previous projects completed by Aldanmark, Ocean Protect filtration systems or eq., can satisfy the State Stormwater Strategy targets. A more detailed report and plan can be issued prior to Building Approval documents being submitted.

#### 4. CONCLUSION

This report has demonstrated that the proposed development at 9 Sandy Bay Road, SANDY BAY complies with the stormwater quantity and quality conditions of the Hobart City Council Interim Planning Scheme.

Note:

- No assessment has been undertaken of Council's stormwater infrastructure and its capacity.
- This report assumes the Council stormwater main has capacity for the pre-development peak discharge.
- It is the responsibility of Council to assess their infrastructure and determine the impact (if any) of altered inflows into their stormwater network.

Please contact me at <u>nm@aldanmark.com.au</u> if you require any additional information.

Yours faithfully,

Nathan Morey BEng (Hons) Civil Engineer

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0418 303 184 info@prax.com.au Statement of Archaeological Potential & Archaeological Impact Assessment

> 9 Sandy Bay Road HOBART TASMANIA

Brad Williams Historical Archaeologist

August 2019

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Unless otherwise stated, the north point (or approximate) of maps and plans is to the top of the page.

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## 1. Introduction

This report has been commissioned by Moda Pty. Ltd., in order to accompany an application to the Hobart City Council for the redevelopment of 9 Sandy Bay Road, Hobart. The site currently comprises of three-storey apartment block facing Sandy Bay Road with a two storey apartment block behind, with parking between.

Figures 1.1-1.3 depict the area which is subject to the proposed works, which comprises the *subject site*, a portion of a 975 square metre site comprising of Certificate of Title 141002 /1 (PID 5672471), on the southern fringe of the Hobart CBD.

A small portion of the rear of the site is within a heritage area as defined in the *Hobart Interim Planning Scheme* 2015. The subject site is also within an area of archaeological sensitivity under that scheme (see Section 2). Accordingly, the brief for this project was:

- To develop a statement of archaeological potential as the basis for archaeological planning.
- If necessary, to undertake an **archaeological impact assessment** for the proposed development as informed by the statement of archaeological potential.
- If necessary, refine the statement of potential and formulate mitigation strategies for any identified impact.

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Figure 1.1 - 2008 Aerial image of the area – the subject site depicted in red. GoogleEarth.



Figure 1.2 - 2008 Aerial image of the immediate environs of the subject site – (depicted in red). GoogleEarth.

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Figure 1.3 - Cadastral parcels comprising the subject site (depicted in red) and surrounds (<u>www.thelist.tas.gov.au</u>).

The place is within the area defined in Figure E13.1 of the scheme as a *Place of Archaeological Potential*, therefore the provisions of Part E13.10 are applicable.

Part E13.10 of the scheme details the Development Standards for Places of Archaeological Potential, with the following Objectives :

13.10.1: Building, Works and Demolition: To ensure that building, works and demolition at a place of archaeological potential is planned and implemented in a manner that seeks to understand, retain, protect, preserve and otherwise appropriately manage significant archaeological evidence.

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13.10.2: Subdivision: To ensure that subdivision does not increase the likelihood of adverse impact on a place of archaeological potential.

The scheme prescribes *Performance Criteria* for each of these *Objectives* and pursuant to Part E.13.5 of the scheme, the Planning Authority may require the following to accompany any application for development of a place of archaeological potential in order to assess the proposal against the performance criteria:

- (f) a statement of archaeological potential;
- (g) an archaeological impact assessment;
- (h) an archaeological method statement;
  - Under the definitions of the scheme:

(f) means:

- a report prepared by a suitably qualified person that includes all of the following:
  - a. a written and illustrated site history;
  - b. overlay plans depicting the main historical phases of site development and land use on a modern base layer;
  - c. a disturbance history.
  - d. a written statement of archaeological significance and potential accompanied by an archaeological sensitivity overlay plan depicting the likely surviving extent of important archaeological evidence (taking into consideration key significant phases of site development and land use, and the impacts of disturbance).
- (g) means:
  - a report prepared by a suitably qualified person that includes a design review and describes the impact of proposed works upon archaeological sensitivity (as defined in a statement of archaeological potential).
- (h) means:
  - a report prepared by a suitably qualified person that includes the following where relevant to the matter under consideration:
    - a. strategies to identify, protect and/or mitigate impacts to known and/or potential archaeological values (typically as described in a Statement of Archaeological Potential);
    - b. collections management specifications including proposed storage and curatorial arrangements;

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- c. identification of measures aimed at achieving a public benefit;
- d. details of methods and procedures to be followed in implementing and achieving (a), (b) and (c) above
- e. expertise to be employed in achieving (d) above;
- f. reporting standards including format/s and content, instructions for dissemination and archiving protocols.

The current document aims to fulfil those points in a consolidated manner in the assessment of the proposed development to assist the planning authority to make an informed assessment against the performance criteria of the scheme.

Whilst the place is not listed on the Tasmanian Heritage Register, the archaeological approach in this document has been developed with regard to the Tasmanian Heritage Council's Practice Note 2 – *Managing Historical Archaeological Significance in the Works Application Process*<sup>1</sup>, and the Tasmanian Heritage Council's *Guidelines for Historical Archaeological Research on Registered Places*<sup>2</sup> as a means of demonstrating a sound and best-practice approach.

An assessment of any possible Aboriginal heritage values is not part of the brief for this report; nonetheless the provisions of the *Aboriginal Relics Act 1975* are applicable to the place. It is noted in the conclusions of the statement of historical archaeological potential that the site has been subject to substantial disturbance.

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<sup>&</sup>lt;sup>1</sup> http://www.heritage.tas.gov.au/media/pdf/2%20Practice%20note%20-%20Archaeology.pdf

<sup>&</sup>lt;sup>2</sup> http://www.heritage.tas.gov.au/media/pdf/Archae%20ResGlines%20%20FINAL%20-%20June%202009.pdf

## 2. Statement of Historical Archaeological Potential

#### 2.1. Archaeological methodology

This statement of archaeological potential is derived from a process which identifies the potential of the site to yield archaeological remains, the significance of any remains, and their potential to yield meaningful information about the site, and which might contribute to relevant key archaeological and historical themes. The following briefly outlines the methodology followed:

Determining general archaeological potential: Through a desktop analysis of historical data and secondary sources, as well as non-invasive site observations, an understanding of the evolution of the site has been gained which has allowed an assessment of the archaeological potential (however significant) of any part of the site - resulting in substantiated predictions of the likelihood of finding *something* upon any particular part of the site.

This has been done by analysing primary source material, summarizing the developmental history of the site and developing a chronological narrative detailing an overview of the history of all known features to have ever existed on the site. Where possible, developmental overlays have been developed from historic maps, plans, photographs and other visual documentation. This overlay has been supported by other observations providing supplementary information, and also includes processes such as demolition and disturbance which may have removed or destroyed potential remains – and may have diminished the archaeological potential.

Assessing the significance and potential of any likely archaeological resources to yield meaningful information: Upon understanding the archaeological potential through desktop and site analysis, the next step was to understand its relationship to any aspect of the identified significance of the place – e.g. do the remains have the potential to demonstrate an aspect of the significance of the site or related key historic theme? The potential for any of the archaeological remains to demonstrate important aspects of the history of the site, whether in a state, regional or thematic context, is to be considered.

<u>Understanding possible impact of development and formulation of management strategies</u>: Based on any identified archaeological potential and significance of the site, consideration will be given as to whether the proposed development will impact upon any likely archaeological remains and if necessary broad management strategies will be proposed to manage any impact.

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Table 1 (below) demonstrates the steps of this assessment:

Methodology for formulation of the statement of archaeological potential		
	lf 'no'	lf 'yes'
<ol> <li>Archaeological potential.</li> <li>Are you likely to find something if you dig here? (i.e. a <u>Statement of</u> <u>Archaeological Potential).</u></li> </ol>	Further action may not be required, although a contingency plan may be required for unexpected finds.	The significance of the archaeological potential should be investigated.
2. Significance. Could anything you find here greatly contribute to our understanding of the site or related significant theme?	Further action may not be required.	The likely integrity of the archaeological remains should be investigated.
<b>3. Integrity.</b> Are any archaeological remains likely to be intact?	Further action may not be required, although a contingency plan is required for unexpected integrity.	The likelihood of significant archaeological remains is confirmed.
<b>4. Impact</b> Will proposed works impact upon the significant archaeological remains? i.e. an <u>Archaeological Impact Assessment.</u>	Further action may not be required, although a contingency plan may be required for unexpected impacts.	An <u>Archaeological Method</u> <u>Statement</u> will be required to detail how impact will be managed/mitigated.

#### 2.2. Source material

For this assessment of archaeological potential, the depiction of the physical history of the site will be the main consideration – with other aspects of site history (i.e. social histories, economic history, associations *et. al.*) likely to be more useful in any post-investigation analysis of findings (i.e. artifact assessment), therefore beyond the scope of the current document. Similarly, the history of other townscape developments is beyond the scope of the current document however may be useful in further detailed analysis of future archaeological findings.

The following overview of the known physical development history of the site aims to aid in the prediction of the likely archaeological remains. This does not represent a comprehensive site history, and has been limited to a history of the physical development of the site as relevant to the archaeological resource.

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### **Primary sources**

Broadly, the primary sources consulted in the development of the statement of archaeological potential include:

- Lands Services Department (LSD) series (Tasmanian Archive and Heritage Office).
- Department of Primary Industry, Parks, Water and Environment (DPIPWE) aerial photo collection (Service Tasmania).
- DPIPWE Land Data Branch, historic map collection (basement)
- DPIPWE Land Data Branch, titles.
- Historic newspapers, via the National Library of Australia's Newspapers Online portal.
- Hobart City Council building files (AE471 series, Tasmanian Archive and Heritage Office).
- Valuation rolls, as published in the Hobart Town Gazette.

### Secondary sources

No relevant secondary source material was found which directly relate to the subject site. No previous conservation planning or historical works include the site specifically.

Secondary source material, namely archaeological reports, were utilised in the archaeological research design and method statement (Section 3.4), as cited in that section.

## 2.3. Historical development of the subject site

In order to gain an overview of what once existed on the site, as the basis for predicting archaeological remains, the following is a brief overview of the historical development of the site based on primary source documents (the subject site depicted in red). Note that this is a brief historical overview, concentrating solely on physical development, sufficient only for basic archaeological planning. As per above, further historical research is required in order to refine a detailed archaeological research design, which is provided here in Section 3.4. Such detail is also required to supplement the interpretation of archaeological findings – requiring an iterative process of the assessment of findings against further historical and comparative research from both primary and secondary sources, which is provided fore here in the archaeological method statement (Section 5).

#### Pre 1804

The land was the home of the Mouheneener people for tens of thousands of years, prior to displacement by European settlers following 1804.

#### 1810s-20s

Subsequent to the settlement of Sullivan's Cove in 1804, following the disbandment of the initial European settlement of Ridson Cove, the settlement of Hobart Town began to grow in a somewhat organic matter. Following Governor Macquarie's inspection of 1811, Surveyor James Meehan was engaged to rationalise the layout of the settlement and install a grid-pattern of streets, as seen on his 1811 survey plan (DPIPWE Hobart 131). At this time, Macquarie Street was formalised, however settlement was concentrated further eastward around the Sullivan's Cove area.

Several 1820s survey plans of Hobart (Figures 2.1-2.3) show the subject site as undeveloped and unallotted land, between the barracks and the waterfront.

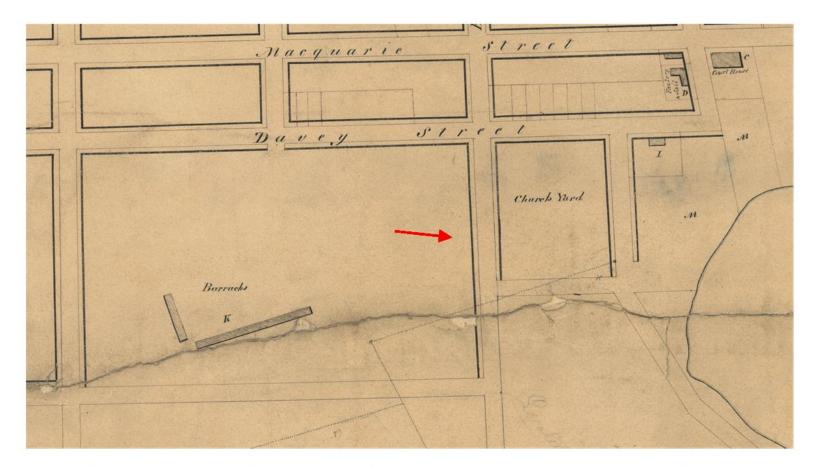


Figure 2.1 – A c1820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as unalloted and undeveloped land between the Barracks and the waterfront. DPIPWE Hobart 12.

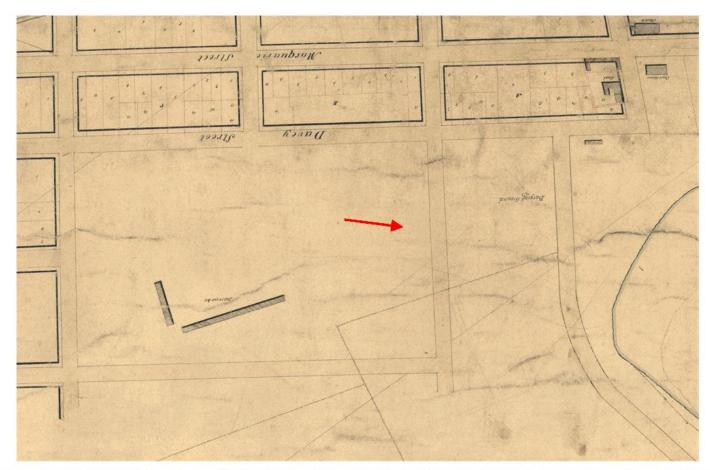


Figure 2.2 – A c1820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as unallotted undeveloped land between the Barracks and the waterfront. DPIPWE Hobart 13.



Figure 2.3 – A c1820s survey plan of Hobart Town, showing the subject site (approximately denoted by the red arrow) as undeveloped land between the Barracks and the waterfront. DPIPWE Hobart 4.

## The 1830s

By the early 1830s, the unallotted land between the barracks and the waterfront had been subdivided, and the Heathfield estate had been established just north of the subject site (see Figure 3.4). The subject site was still undeveloped at that

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time. By 1839 Wivenhoe (137 Hampden Road) and Devoren Cottage (139 Hampden Road) had been established to the south of the subject site, and Frankland's 1839 survey of Hobart Town shows the area containing the subject site as what appears to be a formal landscaped garden (see Figure 2.5) although appearing to be on a separate allotment to the large estates to the south and north. The 1841 census map (largely based on Frankland's 1839 survey) still shows the subject site as undeveloped (see Figure 2.6).



Figure 2.4 – Excerpt from a c1830s map of Hobart and surrounds, the subject site denoted in red. DPIPWE Map Hobart 5

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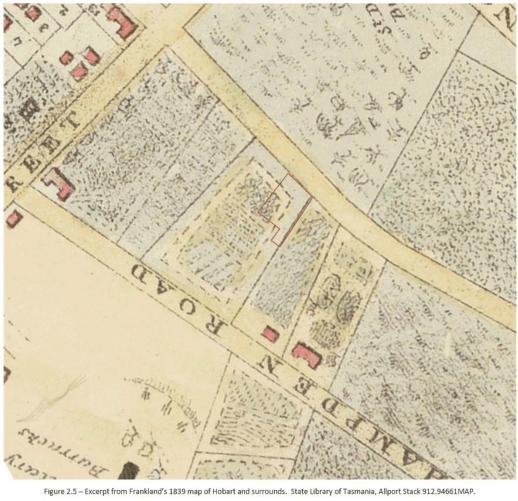


Figure 2.5 – Excerpt from Frankland's 1839 map of Hobart and surrounds. State Library of Tasmania, Allport Stack 912.94661MAP.



Figure 2.6 - Excerpt from the 1841 census map of Hobart and surrounds. Tasmanian Archive and Heritage Office, CSO8-17-578.

The subject area (shown as Lot 1 and Lot 2 on current folio plan for DPIPWE Title 141002/1 & 141002/2)<sup>3</sup> is part of a two acre block originally granted to William Murray. Overlooking the former burial ground of St David's, this 2-acre block

<sup>&</sup>lt;sup>3</sup> LISTMap cadastral data accessed 7 July 2015

(known as 'Murray's Hill')<sup>4</sup> was formally granted by the Crown to William Murray in May 1839<sup>5</sup>. This grant was not a gift from the Crown but rather a formalisation of Murray's ownership, however the Supreme Court record for this grant has not survived, thus it is not possible to ascertain how long Murray had been in possession of the land prior to having his ownership certified in May 1839. However, the newspaper advertisement from 1839 advising that the grant had been issued does record that Murray had purchased the land from the original locatee, David Burns<sup>6</sup>.

The area of this 2-acre block can clearly be seen on Frankland's 1839 survey (Figure 3.5) as undeveloped land adjoining Affleck Moodie's 'Heathfield' estate. Murray held the land until May 1845, but there is no evidence that he erected any buildings on the land during this time<sup>7</sup>. Divided into 22 lots, Murray put the land to public auction in April 1845<sup>8</sup>.

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<sup>&</sup>lt;sup>4</sup> DPIPWE Mem 5/9154

<sup>&</sup>lt;sup>5</sup> DPIPWE Mem 3/888

<sup>&</sup>lt;sup>6</sup> Hobart Town Courier 1 March 1839

 $<sup>^{7}</sup>$  Note that Sprent's 1841 survey does show a number of buildings on the land, however, they appear to be later additions to the original survey

<sup>&</sup>lt;sup>8</sup> Colonial Times, 19 April 1845 p.2; for plan of lots see DPIPWE Mem 3/883

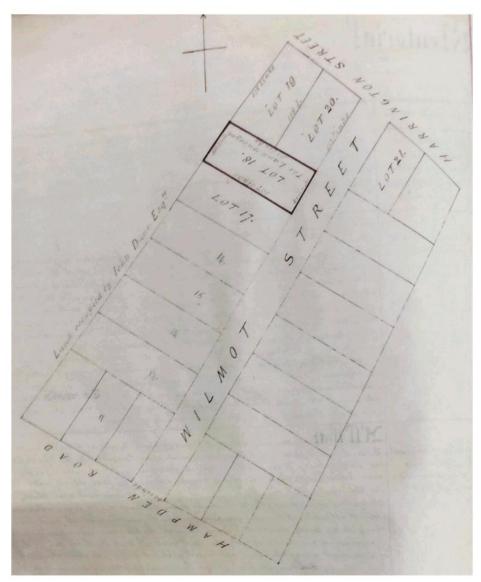


Figure 2.7 - Configuration of Murray's 22-lot subdivision of 1845, the subject site comprised of Lot 21 and adjacent lots. DPIPWE Mem 3/883

### The 1840s – Wilmot Terrace

Of Murray's subdivision, Lots 21 and 22, containing 31 4/10 perches in area and with frontage on Harrington Street (now Sandy Bay Road) were sold for £324 to Elias Grimsey, timber merchant and proprietor of the Dynyrrne Estate<sup>9</sup>. By April 1846, Grimsey had built 'Wilmot Terrace'<sup>10</sup> facing Harrington Street, comprising four conjoined brick terrace houses, with Grimsey occupying the southernmost terrace (#4). Later sources show that each terrace consisted of two stories over a raised basement service area<sup>11</sup>. A smaller masonry building had been constructed to the rear portion of the subject site (facing Wilmot Street), which is likely to be a pair to the building still standing at 6 Wilmot Street (see Figures 3.13-3.14 which show the same roof, chimney and dormer configuration of these two buildings). These buildings show on the Sprent map of 1845 (see Figure 3.7) and may be slightly later over-writing having been built just after that survey was undertaken.

Windows of information on early occupancies of the terraces can be gleaned through early newspaper advertisements, for example, a Mr. Phillipson was advertising a dental surgery in no. 2 Wilmot Terrace in August 1846.<sup>12</sup>



<sup>9</sup> DPIPWE Mem 3/889

<sup>&</sup>lt;sup>10</sup> The *Colonial Times* 24 April 1846 p1 gives Grimsey's address as 'No. 4 Wilmot Terrace'. Later sale indentures continue to refer to 'Wilmot Terrace'.

<sup>&</sup>lt;sup>11</sup> TAHO MCC AE 417/2/3067

<sup>&</sup>lt;sup>12</sup> The Colonial Times, 11<sup>th</sup> August 1846 p1.

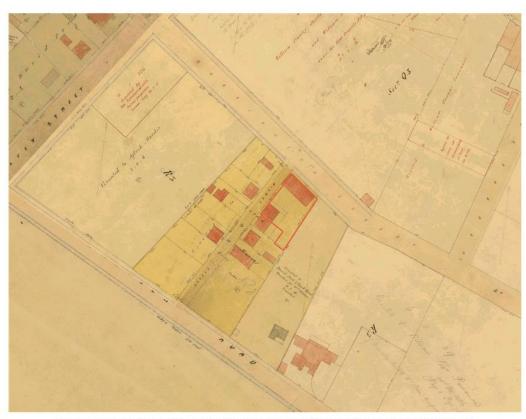


Figure 2.7 - Excerpt from Sprent's 1845 map of Hobart and surrounds, the subject site denoted in red. (www.thelist.tas.gov.au).

## Later nineteenth century occupation and the Grimsey family

Elias Grimsey died in February 1863, leaving the four cottages of Wilmot Terrace to his daughter, Ann Maria Grimsey. Grimsey's widow was given a life interest in No.4 Wilmot Terrace (the southernmost terrace), with reversion on her death to Ann Maria Grimsey.

An overview of ownership and occupation of the terraces (including the Wilmot Street addresses to the rear of the terraces, also owned by the Grimsey family) is provided here in Appendix A, as well as clarification of the changing numbering system of the buildings.

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Wilmot Terrace is depicted in a c1870 photograph by Alfred Winter (see Figure 3.8). The rear of these buildings are depicted on Alfred Abbott's c1879 panorama of Hobart (see Figure 3.10).



Figure 2.8 – Wilmot Terrace, lower Harrington Street, Alfred Winter 1870. State Library of Tasmania, W.L. Crowther Collection, AUTAS001125298679.

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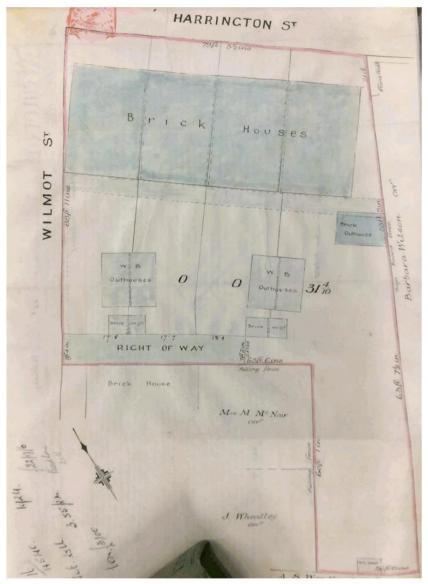


Figure 2.9 - An 1863 survey plan of Wilmot Terrace. DPIPWE Mem 5/9154.

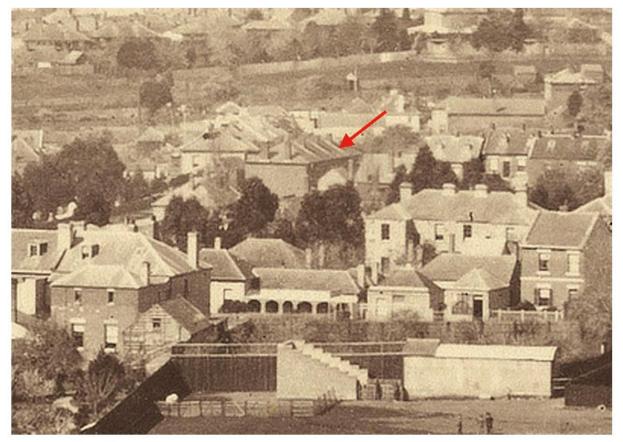


Figure 2.10 – Excerpt from Alfred Abbott's 1878 panorama of Hobart, showing of Wilmot Terrace (denoted by red arrow). Tasmanian Archive and Heritage Office AUTAS001136156486

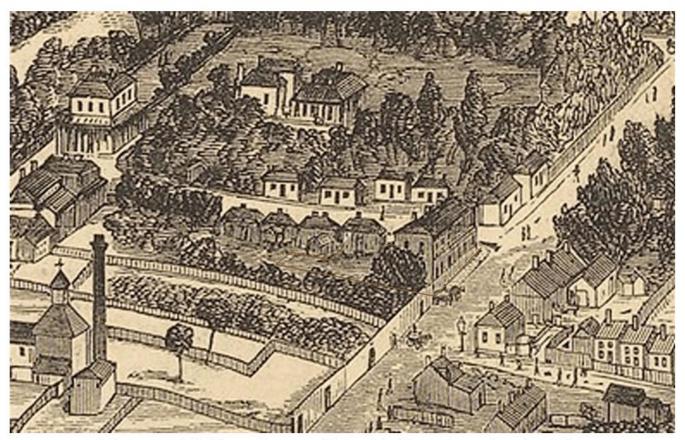


Figure 2.11 – 'Balloons eye view of Hobart' showing Wilmot Terrace and the cottage behind (fronting Wilmot Street). Australasian Sketcher 10 May 1879



Figure 2.12 – Excerpt from a c1890 panorama of Hobart, showing the rear showing of Wilmot Terrace (denoted by red arrow). Tasmanian Archive and Heritage Office NS 1013-1-494.



Figure 2.13 - Excerpt from the 1907 Metropolitan Drainage Board plan of the Hobart CBD, the subject site denoted by red lines. State Library of Tasmania TL.MAP 881.11 GBBD (Map Hobart 41).



Figure 2.14 - Detailed excerpt from the 1907 Metropolitan Drainage Board plan of the Hobart CBD, the subject site denoted by red lines. State Library of Tasmania TL.MAP 881.11 GBBD (Map Hobart 41).

Ann Grimsey married Patrick O'Shea in April 1873<sup>13</sup>, with the Wilmot Terrace property being transferred to her husband as part of the marriage settlement<sup>14</sup>. The property remained in the O'Shea family for over 50 years, before being sold in February 1924 for  $\pounds3,100^{15}$ .

13 TAHO RGD37/1/32 Number 344

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### The second quarter of the twentieth century – Henry Hope

Following the sale by the Grimsey descendants in 1924, the property then passed through several hands before being purchased by Henry James Hope for £3,030 in May 1946<sup>16</sup>. Four years later, Hope purchased the neighbouring block containing 6 4/5 perches for  $£675^{17}$ . Together, these two blocks respectively form Lots 1 & 2 of the current subject area.



Figure 2.15 – Excerpt from the 1946 aerial run of Hobart, the subject site denoted by red lines (Hobart 1946 Run 1, 10892).

14 DPIPWE Mem 9/7624

- <sup>15</sup> DPIPWE Mem 16/4540
- <sup>16</sup> DPIPWE Mem 22/8771
- 17 DPIPWE Mem 25/1888

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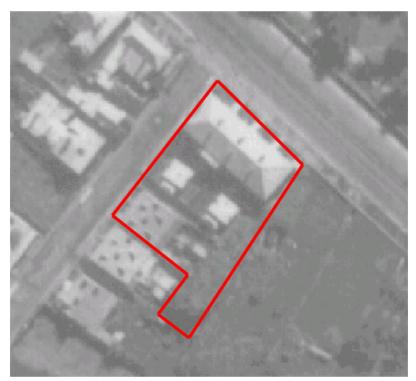


Figure 2.16 – Detail excerpt from the 1946 aerial run of Hobart, the subject site denoted by red lines (Hobart 1946 Run 1, 10892).

Henry Hope was an architect with the Hobart firm of Henry Hope & John F. Jacobs. His acquisition of the neighbouring block (conjoined cottages at 2 and 4 Wilmot Street) appears to have been done with the intention of providing a large enough amalgamated block to allow for a major redevelopment of the site. In 1952 and 1953 the amalgamated block was offered for sale, with the advertisement describing it as an 'ideal site for a block of modern flats...we have prepared plans of a block of 16 flats each of two rooms, kitchenette and bathroom'<sup>18</sup>. However the planned auction failed to realise the sale of the site.

<sup>18</sup> The Mercury 28 November 1953, p16



Figure 2.17 – A 1953 sale notice for Wilmot Terrace, together with Hope's speculative plans for development as 16 flats. The Mercury, 29/11/53 p25.

Having failed to sell the amalgamated property with the proposed 16 unit block, Hope submitted plans to Hobart City Council in November 1954 for adaptation of Wilmot Terrace to provide 12 one bedroom flats. Rather than proposing demolition and new construction, Hope's 1954 plan envisaged an entire remodelling of the existing building, including a modernist façade, removal of numerous internal walls and chimney breasts, and provision of stairs and entry facilities at the rear of the building <sup>19</sup>. No planning application survives<sup>20</sup> for the present additional block of flats at rear of the site, although the increase in value for the whole property suggests that construction of the rear block and adaptation of the former Wilmot Terrace occurred concurrently. Between 1946 and 1950, Hope had paid a total of £3,775 for the amalgamated block. In April 1957, when Hope sold the amalgamated block to the Director of Housing under the 1935 *Homes Act*, the price had increased almost tenfold to £33,479<sup>21</sup>.

<sup>19</sup> TAHO MCC AE417/2/3067

<sup>21</sup> DPIPWE Mem 30/1790

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<sup>&</sup>lt;sup>20</sup> A full search of TAHO MCC AE417 (Building applications) was undertaken with no result

The general current configuration of the building was presumably executed by the Director of Housing shortly after the purchase from Hope, as by 1958 the building and building at rear appear in their current form.

Figures 2.18-2.23 depict the conversion of the building to the flats (read in conjunction with the specification document for those works), which included:

- Replacement of the entire façade with a modernist style façade.
- Bricking up apertures in each end of the building.
- A complete reconfiguration of the rear elevation.
- Lowering of the basement floor level and excavation of the rear of the building to provide access to the new lowered ground floor.
- Removal of all chimneys and fireplaces
- Removal of walls forming the hallways on the southern side of each house.
- Blocking of stairways.
- Various new wall insertions and blocking/reconfiguration of doorways/windows.
- The Hope plans proposed retention of the roof in its original form, however as evident on the 1958 aerial photograph, the original roof form had been removed and replaced with a shallow pitched roof behind a parapet.

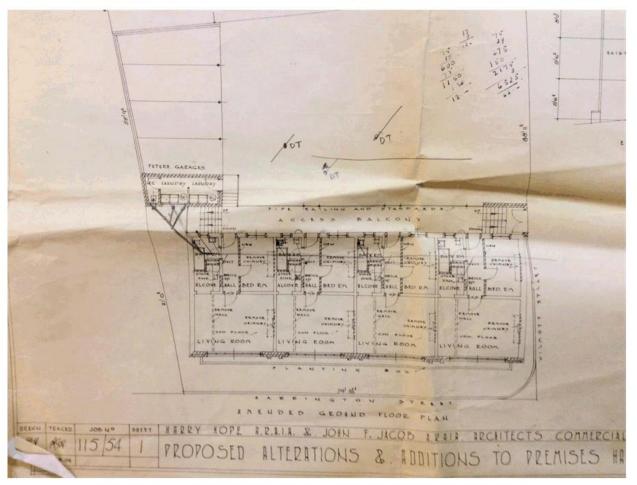


Figure 2.18 - Proposed ground floor plan of the flats, being the converted Wilmot Terrace basements.

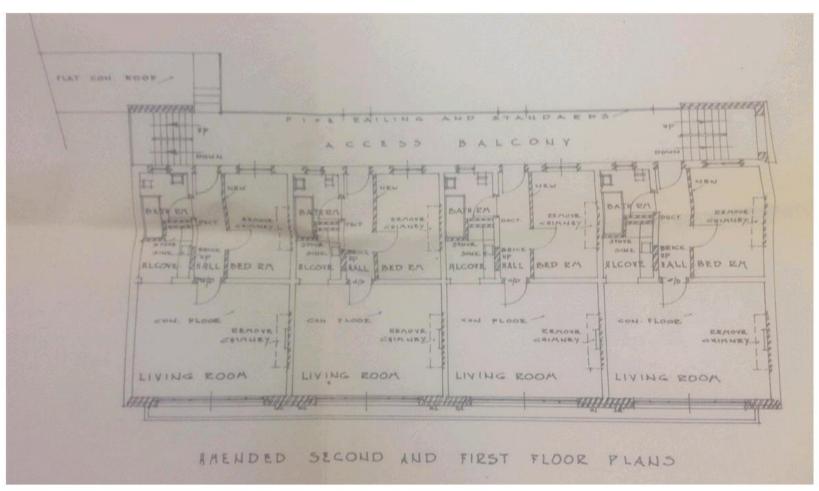


Figure 2.19 - Proposed first and second floor plans, being the converted ground and first floors of Wilmot Terrace.

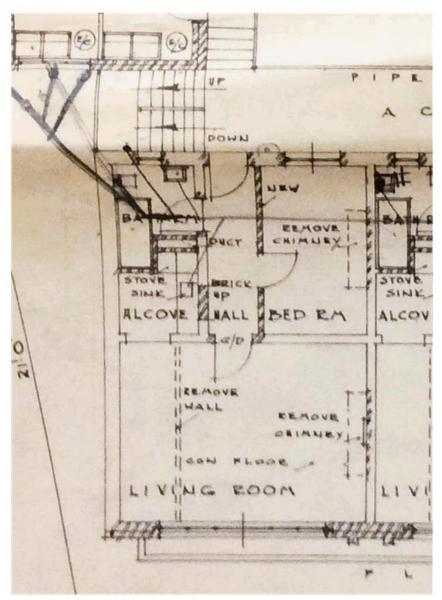


Figure 2.20 - Typical plan of converted basement space to form the ground floor flats.



Figure 2.21 - Proposed elevation and section of the conversion of Wilmot Terrace. The four bays of the original houses are discernible on the elevation.

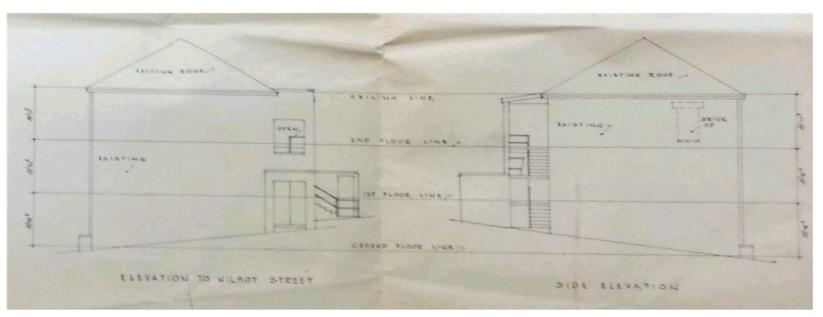


Figure 2.22 – Side elevations of the conversion of Wilmot Terrace. Note the proposed ground floor line which suggests that there was excavation to achieve this (when read in conjunction with the figure below.

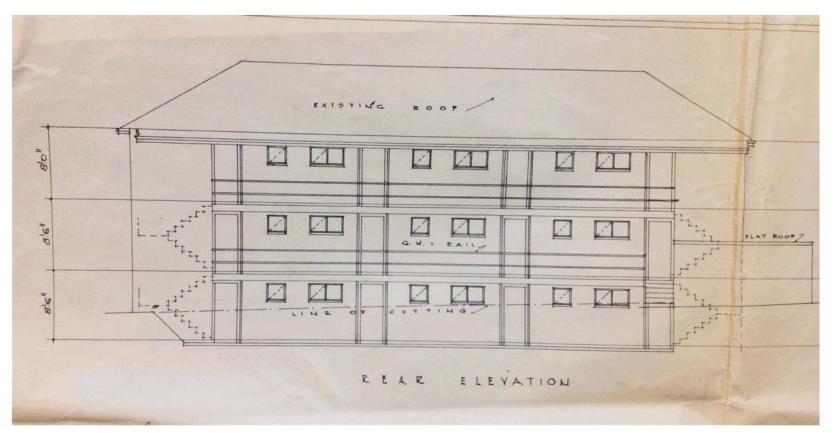


Figure 2.23 – Proposed rear elevation of the Wilmot Terrace conversion. Note the marked 'line of cutting' indicating the excavation to achieve the basement conversion to the ground floor.



Figure 2.24 – Excerpt from the 1958 aerial run of Hobart, the subject site denoted by red lines (Hobart 1958 Run 5, T332-12).

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#### 2-4 Wilmot Street

This block comprises Lot 2 on the present folio plan. As with 'Wilmot Terrace' (see above) this block was part of the 1845 auction of William Murray's 2 acres. No memorial of indenture was located for this sale, however a later indenture shows that at the time of his death in 1863 Elias Grimsey (see above) owned this block<sup>22</sup>, which then comprised all of 2 - 6 Wilmot Street, covering an area of 14 & 4/5 perches. In September 1888, the trustees of Elias Grimsey's estate sold 2 - 6 Wilmot Street to John Latham for £675<sup>23</sup>. At this time, the property was described as including '6 substantially built brick cottages...admirably suited for working men'<sup>24</sup>. These cottages were later described (1954) as being 'small brick cottages each with two rooms and two attics'<sup>25</sup> In 1922, Latham's heirs subdivided the block and sold Lot 2 of the present folio plan (ie 2 - 4 Wilmot Street, comprising 6 4/5 perches) to Minnie McNair for £650<sup>26</sup>. As with Wilmot Terrace, the property changed hands several times before being purchased by Henry Hope in 1950 and amalgamated into the present title<sup>27</sup>.

#### Summary of developmental sequence

The above historical summary shows that the subject site has had a very simple developmental history, namely:

- The c1845 original subdivision and development of Wilmot Terrace four two-storey terrace houses with basements.
- The subsequent development of 2-4 Wilmot Street, comprising of a small conjoined brick cottage.
- The 1955 redevelopment of the consolidated site, with Wilmot Terrace being very substantially modified into 12 flats and demolition of 2-4 Wilmot Street for another block of flats to the rear.

The following figures show overlay plans of known historic development in relation to the current layout of the site:

<sup>24</sup> Tasmanian News 4 December 1888 p4

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<sup>&</sup>lt;sup>22</sup> DPIPWE Mem 25/1888

<sup>&</sup>lt;sup>23</sup> DPIPWE Mem 8/1622

<sup>&</sup>lt;sup>25</sup> The Mercury 28 November 1953 p16

<sup>&</sup>lt;sup>26</sup> DPIPWE Mem 15/8486

<sup>27</sup> DPIPWE Mem 25/1888



Figure 2.25: Footprint of features as depicted on the 1841 Sprent survey plan (green) over a 2008 aerial photograph of the subject site (GoogleEarth).

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Figure 2.26: Footprint of features as depicted on the 1907 Metropolitan Drainage Board survey plan (green) over a 2008 aerial photograph of the subject site (GoogleEarth).

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Figure 2.27: Footprint of features as depicted on the 1946 aerial photograph (blue) over a 2008 aerial photograph of the subject site (GoogleEarth).

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Figure 2.28 – Composite overlay of the footprint of all known buildings and site features (colours as per coding above) in relation to the subject site (red outline) over a 2008 aerial photograph of the subject site (GoogleEarth).

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### 2.4. The likely integrity, significance and research potential of any archaeological remains

Figures 2.25-2.28 show that the subject site comprised of three main component areas, namely:

- The Wilmot Terrace building (i.e. the current building fronting Sandy Bay Road).
- The Wilmot Terrace outbuildings in the central section of the site.
- 2-4 Wilmot Street (small conjoined cottages).

The following considers the likely integrity, significance and research potential of possible archaeological remains of these components.

#### Wilmot Terrace

Figures 2.18-2.24 (as well as the associated specification documents) show that the conversion of Wilmot Terrace into the current block of flats involved very extensive modification works. The sections in those specifications indicate that the floor level of the basement area was lowered to gain greater head-height to the new ground floor flats, which would have removed all traces of occupational debris from the footprint of the building. This lowering of floor level is evident in the current building in the form of a plinth around the lower portion of the ground floor flats, in effect a visible 'underpin' of the original building.<sup>28</sup> The immediate surrounds also have bene lowered to turn what was a semi-basement into the ground floor, therefore all nearby archaeological remains would have been removed. **Overall, it is considered that the footprint and immediate environs of the building fronting Sandy Bay Road has no archaeological potential.** 

### The Wilmot Terrace outbuildings

As best seen on Figures 2.9 and 2.28, there were timber outbuildings at the rear of Wilmot Terrace which would have been ancillary outhouses associated with the main buildings. These outhouses may ordinarily have some archaeological potential as they are often associated with cesspits, drains and other deeper features even if the buildings themselves are of low potential. In this case, however, it is evident that there has been substantial earthworks to the rear of the main building, as denoted on the modification plans and specifications as well as in site observations of the terracing of the area between the converted Wilmot Terrace building and the 1955 rear building. Note also that the current rear building footprint is within the footprint of those outbuildings (See Figure 2.28), this would have further acted to destroy any remains of those

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<sup>&</sup>lt;sup>28</sup> Only flats 9 and 12 were inspected (due to occupancy of others), however these are likely to be indicative of conditions throughout the building.

buildings. Accordingly, it is considered that the portion of the site between the two blocks of flats, and within the footprint of those buildings, has no archaeological potential.

#### 2-4 Wilmot Street

Figure 2.28 shows that the footprint of the small conjoined brick cottages formerly being 2-4 Wilmot Street are mostly outside of the footprint of the rear block of flats. No specification documentation can be found for the construction of the rear block (see the history above), therefore it is not known how extensive excavations were in the vicinity of this building (namely to the rear), although it appears that the ground level of the rear of that building, as well as further rearward has been lowered to achieve a terraced footprint and rear area for that building, therefore likely to have impacted any archaeological remains in the vicinity of that building footprint (i.e. notably lower than the ground level of its contemporary neighbor at 6 Wilmot Street (although noting the natural slope of the ground may account for some of this level difference).

Whilst it is possible that there may be some remains of those buildings and associated occupational debris in this area, the standalone significance of any structural remains are questionable, given that any structural remains would tell us little about the building in-light of the fact that contemporary buildings to those demolished still exist in the street which offer a much more complete example of those structures. There may be occupational debris (i.e. artifacts) in the less-disturbed area of the site (i.e. near the boundary of 6 Wilmot Street and in the rear open-space of the site which would have formed the original backyard space of 6 Wilmot Street). Whilst such deposits may yield some information about 1840s-1950s domestic life on the Hobart CBD fringe, given that their contexts are likely to have been disturbed by the 1950s works, at best they could be considered of historical and/or interpretive interest

Overall, it is considered that the former footprint and environs of 2-4 Wilmot Street only has a low level of archaeological potential – having a low ability to yield meaningful information on the structure, and potential being limited to possible artifact assemblages which are likely to be in a disturbed context.

#### 2.5. Conclusion

It is considered that the subject site has little or no archaeological potential. Accordingly, it is recommended that the proposed development proceed with no further archaeological input.

Any proposed development of the subject site is expected to have no adverse archaeological impact; therefore an archaeological impact assessment and archaeological method statement are considered unwarranted.

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Room 11

# 9 Sandy Bay Road Traffic Impact Assessment

August 2019





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# 1. Introduction

## 1.1 Background

Midson Traffic were engaged by Room 11 Architects to prepare a traffic impact assessment for a proposed residential apartment complex at 9 Sandy Bay Road, Hobart.

## Figure 1 Saint David Development Proposal





### 1.2 Traffic Impact Assessment (TIA)

A traffic impact assessment (TIA) is a process of compiling and analysing information on the impacts that a specific development proposal is likely to have on the operation of roads and transport networks. A TIA should not only include general impacts relating to traffic management, but should also consider specific impacts on all road users, including on-road public transport, pedestrians, cyclists and heavy vehicles.

This TIA has been prepared in accordance with the Department of State Growth (DSG) publication, *A Framework for Undertaking Traffic Impact Assessments*, September 2007. This TIA has also been prepared with reference to the Austroads publication, *Guide to Traffic Management*, Part 12: *Traffic Impacts of Developments*, 2009.

Land use developments generate traffic movements as people move to, from and within a development. Without a clear understanding of the type of traffic movements (including cars, pedestrians, trucks, etc), the scale of their movements, timing, duration and location, there is a risk that this traffic movement may contribute to safety issues, unforeseen congestion or other problems where the development connects to the road system or elsewhere on the road network. A TIA attempts to forecast these movements and their impact on the surrounding transport network.

A TIA is not a promotional exercise undertaken on behalf of a developer; a TIA must provide an impartial and objective description of the impacts and traffic effects of a proposed development. A full and detailed assessment of how vehicle and person movements to and from a development site might affect existing road and pedestrian networks is required. An objective consideration of the traffic impact of a proposal is vital to enable planning decisions to be based upon the principles of sustainable development.

This TIA addresses E5.0, *Road and Railway Assets* Code, and E6.0, *Parking and Access Code*, of the Hobart Interim Planning Scheme, 2015.

### 1.3 Statement of Qualification and Experience

This TIA has been prepared by an experienced and qualified traffic engineer in accordance with the requirements of Council's Planning Scheme and The Department of State Growth's, *A Framework for Undertaking Traffic Impact Assessments*, September 2007, as well as Council's requirements.

The TIA was prepared by Keith Midson. Keith's experience and qualifications are briefly outlined as follows:

- 23 years professional experience in traffic engineering and transport planning.
- Master of Transport, Monash University, 2006
- Master of Traffic, Monash University, 2004
- Bachelor of Civil Engineering, University of Tasmania, 1995
- Engineers Australia: Fellow (FIEAust); Chartered Professional Engineer (CPEng); Engineering Executive (EngExec); National Engineers Register (NER)



### 1.4 Project Scope

The project scope of this TIA is outlined as follows:

- Review of the existing road environment in the vicinity of the site and the traffic conditions on the road network.
- Provision of information on the proposed development with regards to traffic movements and activity.
- Identification of the traffic generation potential of the proposal with respect to the surrounding road network in terms of road network capacity.
- Review of the parking requirements of the proposed development. Assessment of this parking supply with Planning Scheme requirements.
- Traffic implications of the proposal with respect to the external road network in terms of traffic
  efficiency and road safety.

### 1.5 Subject Site

The subject site is located at 9 Sandy Bay Road, Hobart. The subject site and surrounding road network is shown in Figure 2.

### Figure 2 Subject Site & Surrounding Road Network



Image Source: LIST Map, DPIPWE



### **1.6** Reference Resources

The following references were used in the preparation of this TIA:

- Hobart Interim Planning Scheme, 2015 (Planning Scheme)
- Austroads, Guide to Traffic Management, Part 12: Traffic Impacts of Developments, 2009
- Austroads, Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections, 2019
- Department of State Growth, A Framework for Undertaking Traffic Impact Assessments, 2007
- Roads and Maritime Services NSW, Guide to Traffic Generating Developments, 2002 (RMS Guide)
- Roads and Maritime Services NSW, Updated Traffic Surveys, 2013 (Updated RMS Guide)
- Australian Standards, AS2890.1, Off-Street Parking, 2004 (AS2890.1:2004)



# 2. Existing Conditions

### 2.1 Transport Network

For the purpose of this report, the transport network consists of Sandy Bay Road, Wilmot Street, Hampden Road, Gladstone Street and Davey Street.

### 2.1.1 Sandy Bay Road

Sandy Bay Road is a major collector road that traverses through the heart of Sandy Bay, connecting between Taroona at its southern end and Hobart, Battery Point and Sullivans Cove at its northern end.

The northern end of Sandy Bay Road terminates at the Davey Street/ Harrington Street junction near the subject site. Access to Sandy Bay Road is available from Davey Street via a left turn slip lane. Sandy Bay Road provides access for a large volume of traffic entering the Couplet, or travelling across the Couplet to Harrington Street.

The average daily traffic volume of Sandy Bay Road is around 18,000 vehicles per day near the subject site. It has peak volumes of 1,400 to 1,500 vehicles per hour<sup>1</sup>.

The left lane of Sandy Bay Road operates as a clearway during the evening peak period (4:30pm to 6:00pm) in both directions. The westbound left lane is a clearway during the morning peak period (7:30am to 9:30am).

On-street parking outside clearway times is a mix of 1/2P, 2P and 8P (metered). Metro bus stops are also provided on both sides of Sandy Bay Road near the subject site.

#### 2.1.2 Wilmot Street

Wilmot Street is a one-way road that connects between Hampden Road and Sandy Bay Road. It is approximately 120 metres in length and provides access to a number of residential and commercial properties along its length.

Wilmot Street is estimated to carry approximately 550 vehicles per day. This is based on surveys undertaken in 2017 (54 vehicles recorded during a 1-hour period between 16:44pm and 17:44pm, assuming approximately 10% average daily traffic peak during this period).

The pavement width is approximately 6.0 metres between kerbs. It has a grade of approximately 13% along the majority of its length (downhill grade towards Sandy Bay Road).

Wilmot Street is shown in Figure 3.

<sup>&</sup>lt;sup>1</sup> Reference: SCATS traffic signal data at the intersection of Harrington Street/ Sandy Bay Road/ Davey Street, February 2017.

<sup>9</sup> Sandy Bay Rd - Traffic Impact Assessment



Figure 3 Wilmot Street



### 2.1.3 Hampden Road

Hampden Road connects between Davey Street at its western end and Castray Esplanade at its eastern end. It is bisected by Sandy Bay Road, with only left-in/ left-out movements permitted at Hampden Road's junction with Sandy Bay Road. On-street parking is available on the southern side of Hampden Road between Davey Street and Sandy Bay Road.

#### 2.1.4 Davey Street

Davey Street is a major arterial road that forms the southbound component of the Davey Street/ Macquarie Street Couplet and carries approximately 43,000 vehicles per day at the Harrington Street/ Sandy Bay Road junction<sup>2</sup>.

Davey Street has three lanes on the approach to Harrington Street/ Sandy Bay Road and three lanes south of the intersection.

Metered parking is available on both sides of Davey Street with 2-hour and 3-hour time restrictions.

### 2.2 Road Safety Performance

Crash data can provide valuable information on the road safety performance of a road network. Existing road safety deficiencies can be highlighted through the examination of crash data, which can assist in determining whether traffic generation from the proposed development may exacerbate any identified issues.

<sup>&</sup>lt;sup>2</sup> Reference: SCATS traffic signal data at the intersection of Harrington Street/ Sandy Bay Road/ Davey Street, February 2017.



Crash data was obtained from the Department of State Growth for a  $5\frac{1}{2}$  year period between  $1^{st}$  January 2014 and  $30^{th}$  June 2019 for Wilmot Street, and Sandy Bay Road between Gladstone Street and Davey Street.

The key findings of the crash data is summarised as follows:

#### Wilmot Street

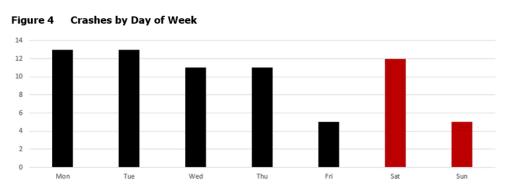
No crashes were reported in Wilmot Street during this period

#### Sandy Bay Road

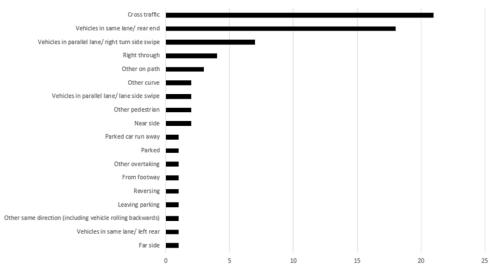
- A total of 70 crashes have been reported during this period.
- <u>Severity</u>. 2 crashes involved serious injury; 13 involved minor injury; 6 involved first aid at the scene; 49 involved property damage only.
- <u>Day of week</u>. Fridays and Sundays had the lowest crash rates with 5 reported crashes each. All
  other days were relatively consistent, with between 11 and 13 reported crashes. The crashes by
  day of week are shown in Figure 4.
- <u>Time of day</u>. 48 crashes were reported between 7:00am and 7:00pm. 16 crashes were reported between 7:00pm and midnight. 6 crashes were reported between midnight and 7:00am.
- <u>Crash types</u>. The most frequent crash types were 'cross-traffic' (21 crashes); 'rear-end' (18 crashes); and 'right-lane-side-swipe' (7 crashes). The crash types are summarised in Figure 5.
- <u>Vulnerable road users</u>. 5 crashes involved pedestrians (3 at Gladstone Street intersection and 2 at the Davey Street intersection); 2 involved bicycles (both near Davey Street intersection); 2 involved motorcyclists (1 at Gladstone Street intersection and 1 at Davey Street intersection).
- <u>Crash locations</u>. 37 crashes were reported at the Davey Street/ Harrington Street/ Sandy Bay Road intersection. 15 crashes were reported at the Gladstone Street intersection. 17 crashes were reported at mid-block locations. The crash locations are shown in Figure 6.

The crash data is considered to be typical of a major arterial road in an urban environment. The relatively high crash rate at the signalised intersections of Davey Street and Gladstone Street are most likely attributed to the high volumes on the approaches rather than any specific road safety deficiency. Importantly, no crashes were reported in Wilmot Street or its intersection with Sandy Bay Road.

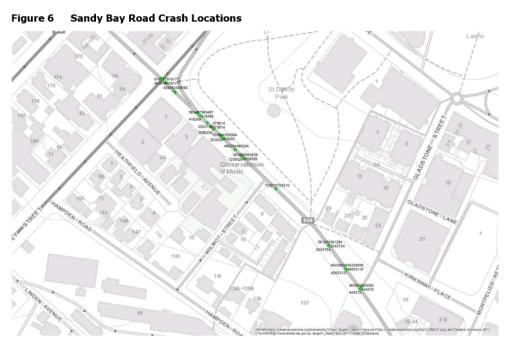








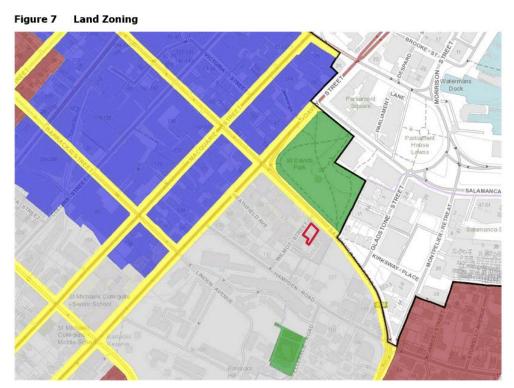




## 2.3 Land Zoning

The subject site is zoned 'Urban Mixed Use' under the Planning Scheme. The zoning is shown in Figure 7.





9 Sandy Bay Rd - Traffic Impact Assessment



#### 3. **Proposed Development**

#### 3.1 **Development Proposal**

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The proposed development involves the demolition of the existing units and the construction of a 6-storey apartment complex at 9 Sandy Bay Road, Hobart. A total of 28 units are proposed, comprising of 10 x 1bedroom apartments, 10 x 2-bedroom apartments, and 8 x 3 bedroom apartments. A total of 22 car parking spaces are proposed with 11 double car stackers within the on-site car park.

The proposed development's lower ground floor plans are shown in Figure 8. This shows the access and parking arrangements of the development. An architectural rendering of the streetscape of the development is shown in Figure 1.

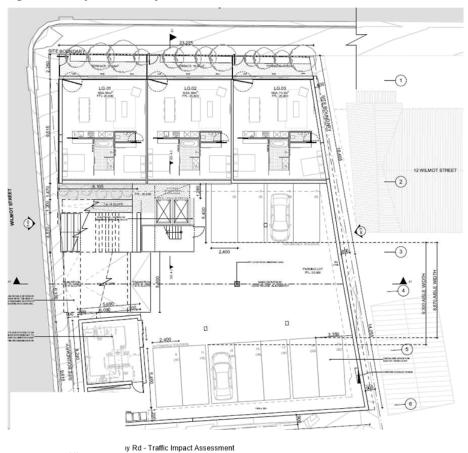


Figure 8 Proposed Development Plans – Lower Ground Floor



# 4. Traffic Impacts

### 4.1 Traffic Generation

The development is a high density residential apartment building with limited parking. It is aimed at professionals who may work nearby (city, Sullivans Cove, etc) and have a relatively low reliance on private motor vehicles. The development includes provision for an electric vehicle that is shared by all apartments.

For high density residential dwellings, the RMS Guide recommends a rate of 3.22 trips per day per car space, with a peak of 0.35 trips per car space per hour in the morning peak and 0.26 trips per hour in the evening peak.

This equates to the following residential traffic generation:

- 71 trips per day
- 8 trips per hour in the morning peak
- 6 trips per hour in the evening peak

### 4.2 Trip Distribution

All traffic will access the site via Wilmot Street. Wilmot Street is one-way from Hampden Road to Sandy Bay Road. All traffic will therefore enter the site via a right-turn, then exit via a right-turn.

### 4.3 Access Impacts

The Acceptable Solution A2 of Clause E5.6.2 of the Planning Scheme states "*No more than one access providing both entry and exit, or two accesses providing separate entry and exit, to roads in an area subject to a speed limit of 60km/h or less*".

The development provides one access providing both entry and exit movements, therefore satisfying the Acceptable Solution A2 of Clause E5.6.2 of the Planning Scheme.

### 4.4 Sight Distance

The Acceptable Solution A1 of Clause E5.6.4 of the Planning Scheme states "*Sight distances at an access or junction must comply with the Safe Intersection Sight Distance shown in Table E5.1*".

The requirements of Table E5.1 for a vehicle speed of 50-km/h in a speed limit of 60-km/h or less (Wilmot Street is 50-km/h) is 80 metres. The available sight distance at the access's junction with Wilmot Street exceeds this minimum requirement (noting that sight distance is only required to the south of the access due to the one-way nature of Wilmot Street). It is further noted that the vehicle speeds are also lower than 50-km/h due to relatively short length of the road and the narrow pavement width (thus resulting in a lower SISD requirement).



The available sight distance therefore complies with the Acceptable Solution A1 of Clause E5.6.2 of the Planning Scheme.

### 4.5 Pedestrian Impacts

A relatively high standard of pedestrian infrastructure is provided on all roads connecting to the site. Existing pedestrian infrastructure in the surrounding road network near the subject site consists of footpaths on both sides Wilmot Street, as well as pedestrian activated crossings at all traffic signals in the surrounding network (including Sandy Bay Road/ Gladstone Street and Sandy Bay Road/ Davey Street).

The nature of the development is likely to result in pedestrian movements to/ from the site to areas such as Hobart CBD and Sullivans Cove.

Pedestrian access to the site is separated from the vehicular access.

### 4.6 Road Safety Impacts

The proposal was assessed against key road safety considerations. Road safety predominantly relates to the access conditions for all road users.

The following points are relevant for the proposed development:

- Pedestrian access to the site is separated from the vehicular access.
- Access conditions at Wilmot Street is considered safe in terms of the speed environment and sight distance provision.
- There is sufficient spare capacity in Wilmot Street and the surrounding road network to absorb the predicted increase in peak hour traffic generated from the proposed development (relatively low at 8 trips per hour). No change to the level of service of the road network would be expected as a result of the development.
- The crash history in the surrounding road network near the subject site does not indicate that there are any existing road safety issues that may be exacerbated by the increased traffic generated by the proposed development.



# 5. Parking Assessment

### 5.1 Parking Provision

The proposed development provides a total of 22 spaces using 11 car stackers in two rows. Parking will be allocated to units, with no parking provided for the ten 1-bedroom apartments. It is noted that the existing residential apartment building currently on the site does not provide on-site car parking.

One space will be a shared parking space for the charging of an electric vehicle. This vehicle is proposed to be a shared vehicle (booking system, time charge) for tenants of the building.

The car parking layout is shown in Figure 8.

### 5.2 Empirical Car Parking Demand

The RMS Guide recommends the following parking provision for high density residential dwellings:

- Metropolitan sub-regional centres (CBD)
- 0.4 spaces per 1-bedroom unit
- 0.7 spaces per 2-bedroom unit
- 1.2 spaces per 3-bedroom unit
- + 1 space per 7 units (visitor parking)

This equates to a parking provision of 25 spaces (rounded up from 24.6 spaces).

The parking provision of 22 spaces is less than this amount, however the parking meets the requirements of residential parking without visitor parking (equating to 21 spaces).

It is further noted that the existing site is high density residential accommodation that provides no on-site parking. Any parking demands associated with the existing use of the site are currently absorbed in the surrounding road network.

### 5.3 Planning Scheme Requirements

The Acceptable Solution A1 of Clause E6.6.1 of the Planning Scheme states:

"the number of on-site car parking spaces must be no less than and no greater than specified in Table E6.1".

For multiple dwellings, Table E6.1 requires 2 spaces for each dwelling and 1 dedicated visitor space parking space per 4 dwellings. This is a requirement for 63 spaces.



The parking provision does not meet the requirements and therefore the development was assessed against the requirements of Performance Criteria P1 of Clause E6.6.1 of the Planning Scheme, which states:

"The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:

- (a) car parking demand;
- (b) the availability of on-street and public car parking in the locality;
- (c) the availability and frequency of public transport within a 400m walking distance of the site;
- (d) the availability and likely use of other modes of transport;
- (e) the availability and suitability of alternative arrangements for car parking provision;

(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;

(g) any car parking deficiency or surplus associated with the existing use of the land;

(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;

(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;

(j) any verified prior payment of a financial contribution in lieu of parking for the land;

(k) any relevant parking plan for the area adopted by Council;

(*I*) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;

(m) whether the provision of the parking would result in the loss, directly or indirectly, of one or more significant trees listed in the Significant Trees Code".

The following is relevant with respect to the development proposal:

a. <u>Car parking demand</u>. The actual parking demands of the development are lower than the Planning Scheme Acceptable Solution. The likely parking demands are set out in Section 5.2. There is sufficient parking provision to cater for the residential component of the development (further noting that residents living in these apartments would be aware of their parking allocation). The development does not cater for the potential visitor parking demands associated with the development.



- b. <u>Availability of on-street and public car parking</u>. On-street parking is available but relatively limited in the surrounding road network. A moderate amount of time restricted and metered parking is available in Sandy Bay Road, Davey Street, Hampden Road and Gladstone Street within a reasonable walking distance to the site. Nearby public car parking stations include Salamanca Square Car Park, Secure Parking (Village Cinema car park) and Hobart Central Car Park.
- c. <u>Public transport</u>. Metro Tasmania operates bus services along Sandy Bay Road. Routes 401, 402, 426, 427, 428, and 429 travel along Sandy Bay Road past the site on a frequent basis.
- d. <u>Other modes of transport</u>. Key attractions such as Salamanca Market, Hobart CBD and Battery Point are within walking distance. Transport to and from other tourist attractions are also available via tourist operated coach and bus services in Hobart.
- e. <u>Alternative parking arrangements</u>. Alternative parking arrangements are not considered necessary as the development provides sufficient parking to cater for the likely needs of the site.
- f. Shared parking. Not applicable.
- g. <u>Parking deficiency or surplus</u>. The existing residential use of the site provides no on-site car parking. The site therefore has an existing deficiency of parking and the provision of 22 on-site car parking spaces is considered to be an improvement on existing conditions.
- h. Previous use parking credit. Not applicable.
- i. Cash in lieu. Not applicable.
- j. Cash in lieu contribution. Not applicable.
- k. Parking plan. Not applicable.
- I. <u>Cultural heritage significance</u>. Not applicable.
- m. Significant trees. Not applicable.

Based on the above assessment, the development meets the requirements of Performance Criteria P1 of Clause E6.6.1 of the Planning Scheme.

### 5.4 Car Parking Layout

The Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme states "*The layout of car parking spaces, access aisles, circulation roadways and ramps must be designed and constructed to comply with section 2 "Design of Parking Modules, Circulation Roadways and Ramps" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking and must have sufficient headroom to comply with clause 5.3 "Headroom" of the same Standard*".

AS2890.1 requires the following dimensions for Class 1A car parking:

- Space width 2.4 metres
- Space length 5.4 metres
- Aisle Width 5.8 metres



Typical car parking dimensions within the on-site car park as shown on the plans are as follows:

- Space width 2.4 metres
- Space length 5.4 metres
- Aisle Width varies 8.7 to 9.3 metres

Note that the car parking spaces are car stackers (two car vertical storage devices). The final dimensions of the spaces will depend on the commercial car stacker product.

The parking areas as shown therefore complies with the dimension requirements of User Class 1A in Australian Standards, AS2890.1:2004 (Residential, domestic and employee parking).

Ramps within the car park have a maximum grade of 25%. Transitions are provided at 1:8 either side of the maximum grade.

Section 2.5.3(b) of AS2890.1 states the following regarding the maximum grade of straight ramps:

- i. Longer than 20 m 1 in 5 (20%) maximum.
- ii. Up to 20 m long -1 in 4 (25%) maximum. The allowable 20 m maximum length shall include any parts of the grade change transitions at each end that exceed 1 in 5 (20%).

In this case, the full length of the driveway is less than 20 metres in length. The grade transitions at each end of this section are also less than 20%, therefore the driveway complies with the requirements of Clause 2.5.3(b)(ii) of AS2890.1 for driveway grade.

The car parking design therefore complies with the requirements of Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme.

#### 5.5 Accessible Parking

The Acceptable Solution A1 of Clause E6.6.2 of the Planning Scheme states:

"Car parking spaces provided for people with a disability must:

- (a) satisfy the relevant provisions of the Building Code of Australia;
- (b) be incorporated into the overall car park design;
- (c) be located as close as practicable to the building entrance".

The National Construction Code (NCC) classifies the development as a 'Class 2' building under the NCC, which does not require accessible parking provision.

The Acceptable Solution A1 of Clause E6.6.2 of the Planning Scheme is therefore met.



### 5.6 Design of Vehicular Access

The Acceptable Solution A1 of Clause E6.7.2 of the Planning Scheme states:

"Design of vehicle access points must comply with all of the following:

(a) in the case of non-commercial vehicle access; the location, sight distance, width and gradient of an access must be designed and constructed to comply with section 3 – "Access Facilities to Off-street Parking Areas and Queuing Areas" of AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking;

(b) in the case of commercial vehicle access; the location, sight distance, geometry and gradient of an access must be designed and constructed to comply with all access driveway provisions in section 3 "Access Driveways and Circulation Roadways" of AS2890.2 - 2002 Parking facilities Part 2: Off-street commercial vehicle facilities".

In this case the access is a non-commercial access. The access was therefore assessed against the requirements of Section 3 of AS2890.1.

AS2890.1 defines the access as a 'Category 1' access (Class 1A spaces, with access fronting a local road accessing less than 25 spaces). The AS2890.1 access requirements are summarised in Table 1.

Element	Requirement	Comment	
Access width	3.0m to 5.5m	Access is 5.5m, thus satisfying requirements of AS2890.1	
Sight distance	50-km/h frontage road requires minimum 45m sight distance	Sight distance only required to south (one-way road). More than 45m is available, thus complying with the requirements of AS2890.1.	
Geometry	To satisfy design vehicle	B85 vehicles can access and manoeuvre within the car park. AS2890.1 requirements are satisfied.	
Gradient	Maximum grade = 25% for lengths less than 20m	Maximum grade =25% for 5.09m with transitions to 12.5%. Complies with AS2890.1.	
Location	Location of access should not interfere with intersections opposite the access.	No road junction is located opposite the access. AS2890.1 requirements are satisfied.	

Table 1 AS2890.1 Access Requirements

Based on the above assessment, the access meets the requirements of AS2890.1, therefore satisfying the requirements of Acceptable Solution A1 of Clause E6.7.2 of the Planning Scheme.



# 6. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed residential development at 9 Sandy Bay Road, Hobart.

The key findings of the TIA are summarised as follows:

- The proposed development is a 6-storey residential building with 28 units. This comprises of 10 x 1-bedroom apartments, 10 x 2-bedroom apartments, and 8 x 3 bedroom apartments.
- Access to the site is via a single driveway with separated pedestrian access.
- The traffic generated by the development is likely to be 71 trips per day, with a peak of 8 trips per hour in the morning peak and 6 trips per hour in the evening peak.
- The development complies with Performance Criteria P1 of Clause E6.6.1 in terms of parking provision and Acceptable Solution A1 of Clause E6.7.5 of the Planning Scheme in terms of layout.

Based on the findings of this report the proposed development is supported on traffic grounds.



Midson Traffic Pty Ltd ABN: 26 133 583 025

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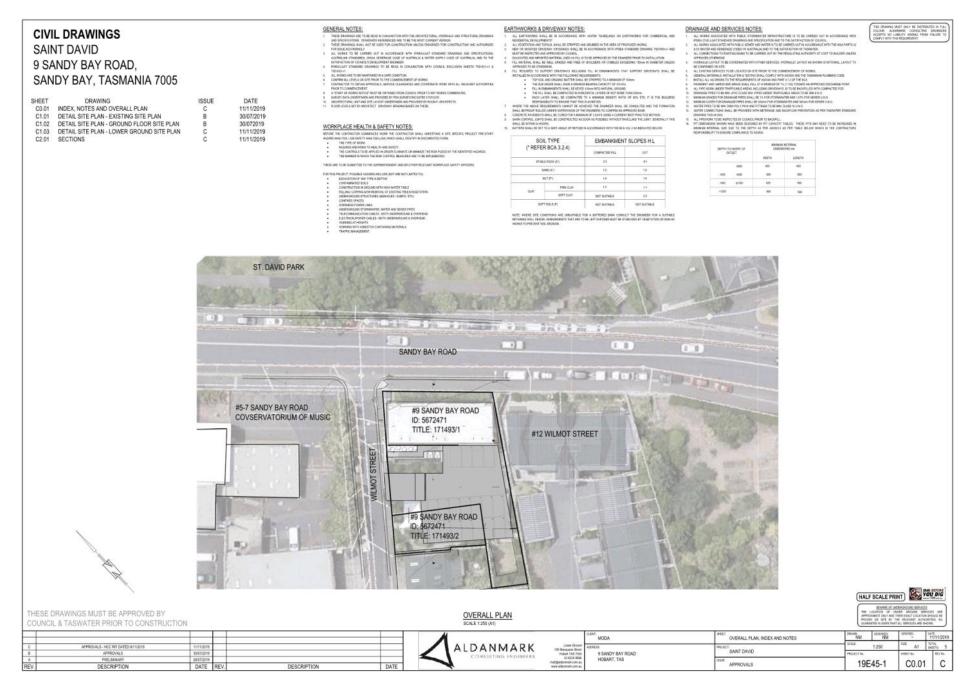
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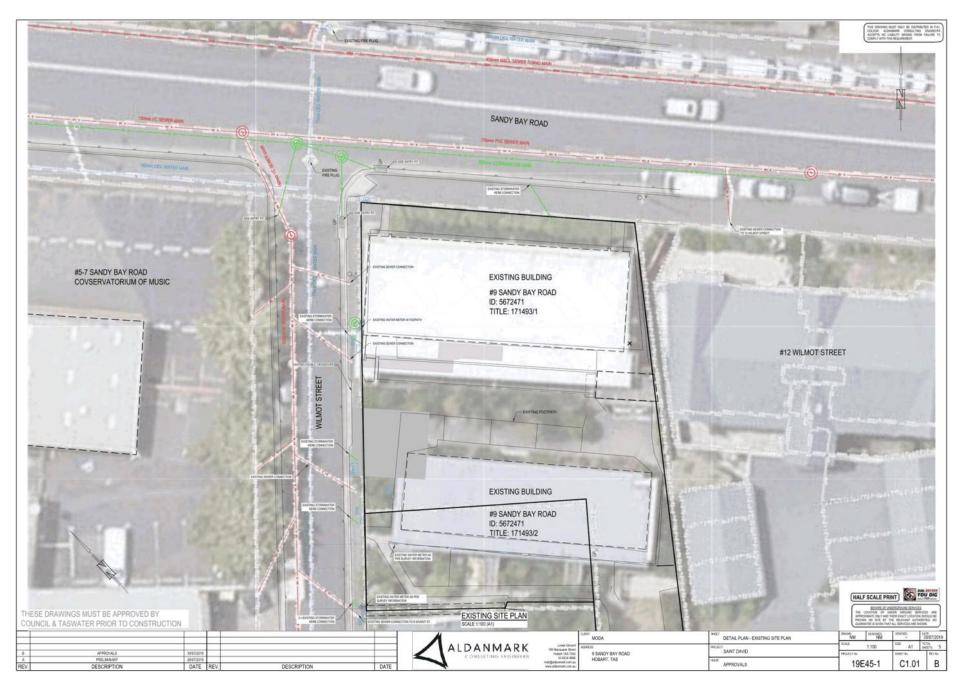
#### **Document Status**

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	31 August 2019

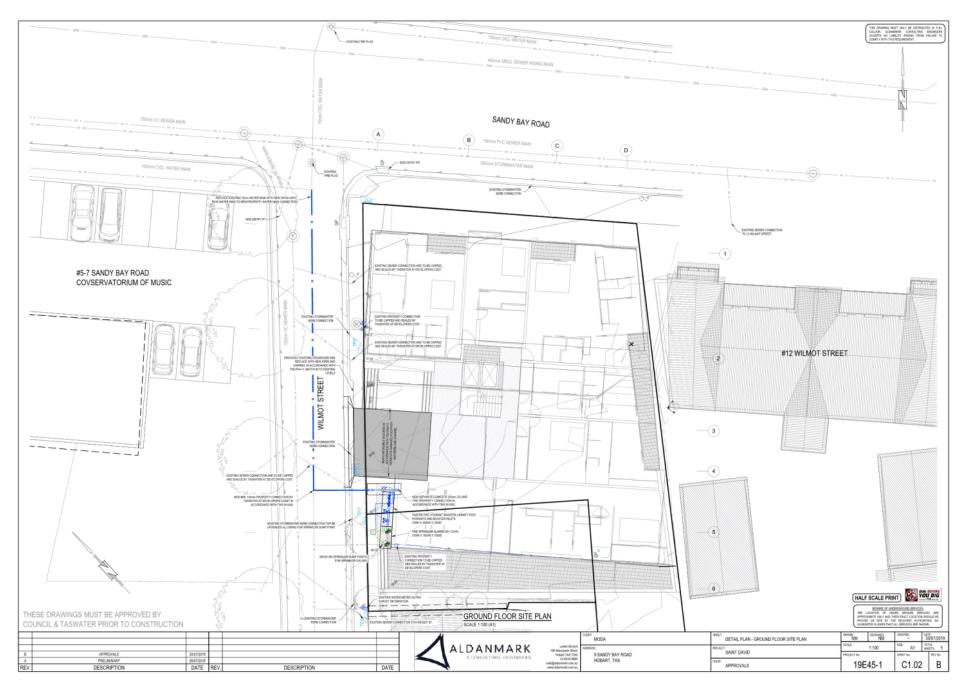
### Page 897 ATTACHMENT B



## Page 898 ATTACHMENT B



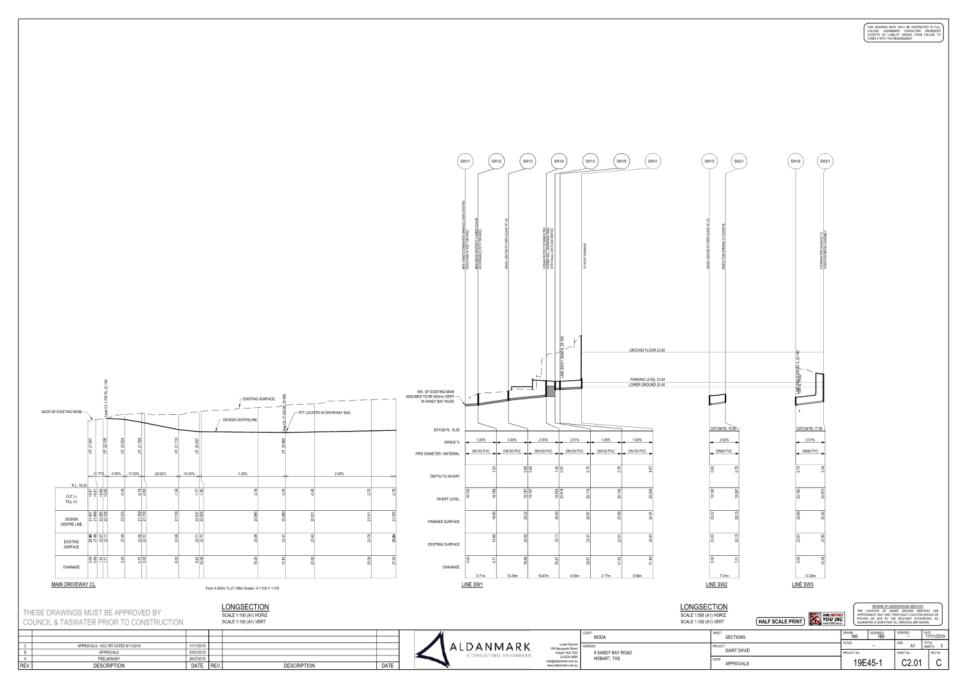
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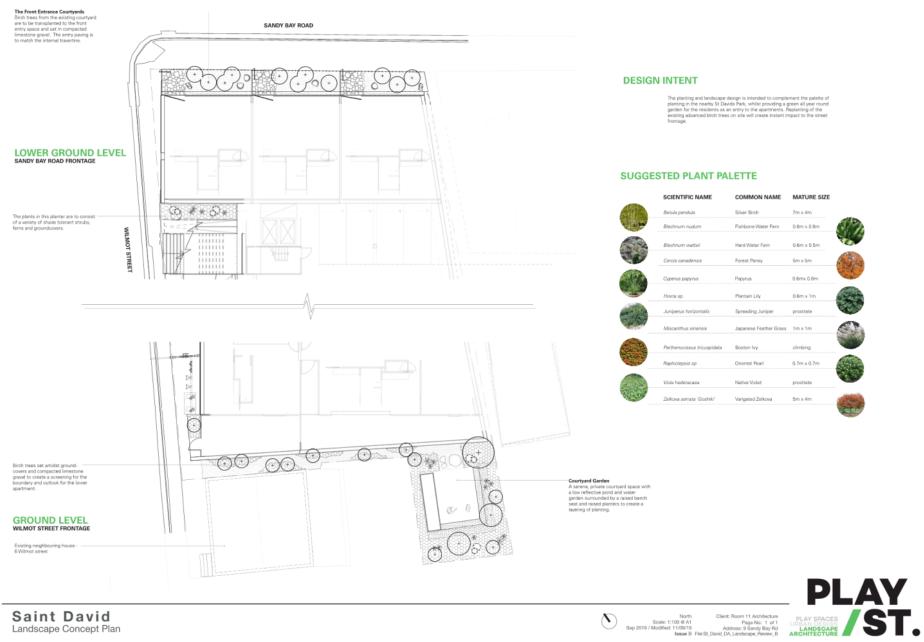


### Page 901 ATTACHMENT B



### **Supporting Information** Council Meeting - 25/5/2020

### Page 902 ATTACHMENT B



Saint David Landscape Concept Plan

5

# **URBAN DESIGN ADVISORY PANEL**

# MINUTES

MINUTES OF A MEETING OF THE URBAN DESIGN ADVISORY PANEL HELD AT 2:30 PM ON THURSDAY 9 APRIL 2020 VIA VIRTUAL MEETING

### NOTE

THE MINUTES OF ALL URBAN DESIGN ADVISORY PANEL MEETINGS ARE CONFIDENTIAL AND AS SUCH ARE NOT TO BE MADE AVAILABLE OR DISCLOSED IN WHOLE OR IN PART TO ANY PERSON/S WITHOUT THE EXPLICIT PRIOR APPROVAL OF THE PANEL

MEMBERS PRESENT					
NAME	POSITION				
Peter Curtis	Panel Member and Chairman				
Jamieson Allom	Panel Member				
Sue Small	Panel Member				
lan James	Panel Member				
ALSO PRESENT					
NAME	POSITION				
Karen Abey	Manager Development Appraisal				
Ben Ikin	Senior Statutory Planner				
Cameron Sherriff	Development Appraisal Planner				
Qian Pei Choi	Senior Project Coordinator – City Place Making				
Rachel Rust	Executive Officer – City Planning				
Georgia Young	Senior Administrative Officer – City Planning				
Sandy Ross	Administrative Coordinator - City Planning				

URBAN DESIGN ADVISORY PANEL MINUTES 09/04/2020

### PLN-19-641 – 9 SANDY BAY RD, HOBART

In Attendance: Thomas Bailey (Director – Room 11 Architects), Jason Park (Architect – Room 11 Architects), Phil Gartrell (Planner – Ireneinc Planning & Urban Design), Irene Duckett (Director – Ireneinc Planning & Urban Design)

The Panel met to discuss the proposal in detail and the advice below is provided for the consideration of the proponents and officers.

### Description:

The proposal is to demolish the existing apartment buildings on the site and to construct a new building that would contain 28 apartment style, multiple dwellings. The new building would have a maximum of seven storeys (including one parking level below ground) and a maximum height above ground level of 19.35 metres. The building would occupy the majority of the site, only relatively small areas of landscaping would be provided between the façade and Sandy Bay Road and the adjoining properties to the south-west, fronting onto Wilmot Street. Car parking would be provided on the site for 22 cars, using an automobile stacker. Work within the adjacent Wilmot Street reservation is also proposed, including replacement of a water main and crossover.

Presenting to the Panel, the architect described the building as one that adds positively and unapologetically to the streetscapes of Sandy Bay Road and Wilmot Streets by responding to the character and context of these streets and in particular the residential scale and character of Wilmot Street. The quality of materials to be used, the quality of detailing and the importance of landscaping to assist in the transition in scale and character were all emphasised.

He explained that colours, materials and landscaping were chosen to reflect seasonal changes and to strengthen connections to St Davids Park opposite and the residential character of the immediate surrounds.

### Comments:

The Panel acknowledged that the current proposal had addressed some of the previous comments made by the Panel in relation to the redevelopment of the site, notably by a reduction in overall height through the removal of the top floor.

Other changes noted included a reduction in the private open space allocated to some apartments; and changes to landscaping within the site and in Sandy Bay Road and Wilmot Street.

Urban Design Advisory Panel Minutes of Meeting 9 April 2020 Page 2 | 4

### URBAN DESIGN ADVISORY PANEL MINUTES 09/04/2020

The Panel discussed the relationship and transition of the proposal to the City Centre and the adjacent historic residential character of the area.

The view from Sandy Bay Road was discussed and whether the building should incorporate a fence line along Sandy Bay Road. This would help the public delineate between public and private land and preserve private open space for these apartments

The Panel sought clarification on what materials would be utilised for the façade. The Panel was advised that the black panels would be a textured or matt surface of high quality and not a coloured off form concrete finish.

The glass penthouse on the top level was discussed as was the nature of the transition from the facade treatment on the lower floors to the penthouse floor. The Panel acknowledged that the extensive glazing of the penthouse floor may reduce the overall perceived height of the building.

The Panel raised the energy and construction implications of the glazed penthouse floor and were assured by the architect that there had been discussions with appropriate consultants and that all implications will be considered and addressed.

The Panel noted the moveable screens to the Sandy Bay Road façade and the glazed street overhang at the penthouse level. While there was some uneasiness about the overhang, the Panel acknowledged that these elements could add interest and character to the streetscape, especially at night time.

The Panel discussed the proposed landscaping for the development and raised the importance of landscaping in Sandy Bay Road and especially in Wilmot Street where landscaping is already an important characteristic of the streetscape. The Panel noted that a landscape architect had already been engaged by the proponent.

The relocation of the existing birch trees, in the view of the Panel, will be central to the successful integration and transitioning of the new development into the existing streetscapes of both Sandy Bay Road and Wilmot Street. The intention being to reinforce the residential character of the immediate area albeit in an Urban Mixed Use Zone. In this regard further opportunities should be pursued. for additional hard and soft landscaping in Wilmot Street around the main entry and by extending the Level 3 landscaping over the adjacent façade.

Urban Design Advisory Panel Minutes of Meeting 9 April 2020 Page 3 | 4

### URBAN DESIGN ADVISORY PANEL MINUTES 09/04/2020

On a final point the Panel noted that while there was provision for bicycles (including e bikes) to be stored on site it was not clear how secure or accessible this storage would be.

In conclusion the Panel considers that the reduced scale of the current proposal is appropriate from an urban design perspective and that in particular its transition in height to nearby residential properties is reasonably consistent with the relevant urban design elements of the Planning Scheme.

More consideration does however need to be given, to the provision and nature of additional landscaping in Wilmot Street to reinforce a transition to that street's residential scale and character and to the provision of private open space for the ground level apartments on Sandy Bay Road. Accordingly the Panel advises that a condition of any planning approval include the submission of an amended landscaping plan that addresses these issues to the satisfaction of the Council.

Urban Design Advisory Panel Minutes of Meeting 9 April 2020 Page 4 | 4



# **Amended** Submission to Planning Authority Notice

Council Planning Permit No.	PLN-19-641		Council notice date	22/10/2019	
TasWater details					
TasWater Reference No.	TWDA 2019/0157	2-HCC		Date of response	09/04/2020
TasWater Contact	Sam Bryant		Phone No.	(03) 6237 8642	
Response issued t	to				
Council name	HOBART CITY COU	INCIL			
Contact details	coh@hobartcity.co	om.au			
Development details					
Address	9 SANDY BAY RD, HOBART			Property ID (PID)	5672471
Description of development	Multiple dwellings x 28				
Schedule of draw	ings/documents				
Prepa	red by	Drawing/doo	ument No.	Revision No.	Date of Issue
Room 11 Architec	Room 11 Architects		Ground Level Plan/#Pln/2.2		12/03/2020
Aldanmark Consulting Engineers		Ground Floor Site Plan/19E45 1/C1.02		- В	30/07/2019
Aldanmark Consulting Engineers		Lower Ground Site Plan/19E4 1/C1.03		5- C	11/11/2019
Conditions					

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

### **CONNECTIONS, METERING & BACKFLOW**

1. A suitably sized fire and domestic water supply with metered connections / sewerage system and connections to each dwelling unit of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.

**Advice**: TasWater will not accept direct fire boosting from the network unless it can be demonstrated that the periodic testing of the system will not have a significant negative effect on our network and the minimum service requirements of other customers serviced by the network. To this end break tanks may be required with the rate of flow into the break tank controlled so that peak flows to fill the tank do not also cause negative effect on the network.

- 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 use of the development, any water connection utilised for the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

### ASSET CREATION & INFRASTRUCTURE WORKS

- 4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.
- 5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for

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Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and sewerage to TasWater's satisfaction.

- 6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
- 7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
- 8. Prior to the issue of a Certificate of Water and Sewerage Compliance (Building and/or Plumbing) all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development, generally as shown on the concept servicing plan as per the schedule of drawings above, are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
- 9. After testing/disinfection, to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
- 10. At practical completion of the water and sewerage works and prior to applying to TasWater for a Certificate of Water and Sewerage Compliance (Building and/or Plumbing), the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
  - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
  - b. A request for a joint on-site inspection with TasWater's authorised representative must be made;
  - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
  - d. As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
- 11. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
- 12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
- 13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
- 14. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans

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covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

### **BOUNDARY TRAP AREA**

15. The proposed development is within a boundary trap area and the developer must provide a boundary trap that prevents noxious gases or persistent odours back venting into the property's sanitary drain. The boundary trap must be contained within the property boundaries and the property owner remains responsible for the ownership, operation and maintenance of the boundary trap.

### DEVELOPMENT ASSESSMENT FEES

16. The applicant or landowner as the case may be, must pay a development assessment fee of \$675.71 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.

The payment is required by the due date as noted on the statement when issued by TasWater.

### Advice General

For information on TasWater development standards, please visit

https://www.taswater.com.au/Development/Technical-Standards

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

### Water Servicing

The proposed development is in the Hobart City Low Level zone supplied from the Domain Tanks, with a design supply head of 100m AHD. The elevation of the connection point to the proposed development is 25m, giving a maximum static pressure of 75m.

Approximately 31m of the DN75 DICL pipe (Asset A391049) in Wilmot Street, from Sandy Bay Road to the proposed connection point, will be required to be upgraded to DN100 PVC-M PN16 pipe.

With this upgrade, the total boundary heads (not pressures) at the proposed connection point are:

	Total boundary head (m)
Peak Hour (3.25 L/s)	91
Peak Hour + Fire Flow (41.8 L/s)	66

It should be noted that these are the boundary heads in the water main itself in Wilmot Street opposite the proposed connection point, and do not include losses through the actual connection or associated pipework.

### Declaration

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

Authorised by

Jason Taylor

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### Supporting Information Council Meeting - 25/5/2020



Development Assessment Manager					
TasWater Co	ntact Details				
Email	development@taswater.com.au	Web	www.taswater.com.au		
Mail	GPO Box 1393 Hobart TAS 7001				

Issue Date: August 2015

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# Application Referral Cultural Heritage - Response

From:	Nick Booth
Recommendation:	Proposal is acceptable without conditions.
Date Completed:	
Address:	9 SANDY BAY ROAD, HOBART ADJACENT ROAD RESERVE
Proposal:	Demolition and New Building for 28 Multiple Dwellings and Associated Works within Adjacent Road Reserve
Application No:	PLN-19-641
Assessment Officer:	Cameron Sherriff,

### Referral Officer comments:

This application relates to a pair of residential three and two storey blocks located one behind the other facing onto Sandy Bay Road. The building to the front is a heavily modified terrace dating from as far back as the mid 19<sup>th</sup> Century, whilst the second is a later structure added in the 1950's at the same time as the substantial alterations were undertaken to the front structure.

The site forms part of the established inner residential and mixed use area set between Sandy Bay Road and Hampden Road. The site falls within the area identified as being of Archaeological Potential. In addition, although the circumstances regarding referral are unusual in that only a small section of the wider plot to the rear is designated as standing within the Hampden Road Heritage Precinct and similarly, a small section of a much larger substantial sandstone wall also shares a common boundary and appears to fall just within the site. As such, these small elements of Heritage Designation have therefore triggered additional consideration under the heritage provisions of the Hobart Interim Planning Scheme 2015. However, it is noted that Heritage Considerations can only be applied to those parts of the plot covered by these designations.

The proposal seeks approval for the demolition of the residential blocks and the erection of multi-storey blocks for use as Residential accommodation, reaching heights of 19.3 to the Sandy Bay Road frontage, 16 m and 12.9 m at its lowest point. One small element of the site falls within the Hampden Road Heritage Precinct. This small element is located to the rear of the site and is not shown for development save for the inclusion of area as part of the associated outdoor space.

This precinct is significant for reasons including:

- 1. The quality and quantity of Colonial and Victorian/Federation period housing stock represent the economic boom period of the early to late nineteenth/early twentieth centuries.
- 2. A large number of individual buildings are intact examples of early to late nineteenth/early twentieth century architecture of high quality, many with landmark qualities.
- 3. The section of continuous two and three-storey early to late Victorian facades constructed from a variety of materials and located along an eastern section of Bathurst Street create a distinctive visual impression and outstanding streetscape qualities.

- 4. The section of continuous single-storey Colonial/Victorian Georgian residences constructed from brick and sandstone and located along a western section of Bathurst Street, create a distinctive visual impression and strong streetscape.
- 5. The small number of intact nineteenth/early twentieth century industrial structures located along Harrington Street are physical and working reminders of early Hobart industry.
- 6. The social significance of sections of streetscape and individual items to the local and broader community.

The proposed development does not seek the demolition or erection of any structure within the small rear part of the site that falls within the Heritage Precinct. Whilst views into and out of the Precinct would be extremely affected, this is not a heritage consideration under the HIPS. As such, it is considered that the proposal would have no impact upon the characteristics of those areas of land within the Heritage Precinct.

With regard to the potential impact of the proposal upon the small section of Heritage Listed Sandstone wall, it is noted that the building and all associated servicing would be set off from the boundary, and as such, the proposal would not have any direct impact upon the wall itself.

With regard to the issue of Archaeological Potential, a Statement of Archaeological Potential has been produced by a recognised Historical Archaeologist & Heritage Consultant in support of the application. The report is considered to follow correct established research methodology and provides a detailed examination of the development of the site. It sets out the degree to which the site remained largely free of significant development until the erection of the Victorian Terrace and that the later alterations and erection of secondary block removed any potential for archaeological finds of any significance. Given the above, it is therefore considered that the site is does not require the provision of conditions requiring the monitoring for archaeological finds prior or during the construction phase.

It is therefore considered that the proposals would not result in detriment to the historic cultural heritage significance of the site and is considered acceptable when measured against the performance criteria of HIPS 2015.

Nick Booth Heritage Officer 2 January 2019

# Application Referral Development Engineering -

# Response

From:	Cam
Recommendation:	Proposal is acceptable subject to conditions.
Date Completed:	
Address:	9 SANDY BAY ROAD, HOBART ADJACENT ROAD RESERVE
Proposal:	Demolition and New Building for 28 Multiple Dwellings and Associated Works within Adjacent Road Reserve
Application No:	PLN-19-641
Assessment Officer:	Cameron Sherriff,

### **Referral Officer comments:**

<b>Clause for Assessment</b>	AS	PC	Comments / Discussion
E5.5.1 Existing road accesses and junctions			N/A - Existing access is being removed
E5.5.2 Existing level crossings			N/A
E5.6.1 development adjacent to roads and railways			N/A
E5.6.2 road and access junctions	Y		A1 - Speed is less than 60km/h A2 - Existing crossover being removed so there will still be one access.
E 5.6.3 new level crossings			N/A
E 5.6.4 sight distance at access and junctions	Y		This has been satisfactorily addressed in the traffic impact assessment by Midson Traffic Pty Ltd dated August 2019

### E5.0 Road and railway access code

### E 6.0 Parking and Access Code

Clause for Assessment	AS	PC	Comments / Discussion
Clauses 6.6's are all to do with parking number assessment. These will be assessed by planner based on DE assessment of the following relevant clauses.			

Clause 6.6.1 number of parking spaces		Y	<ul> <li>This has been satisfactorily addressed in the traffic impact assessment by Midson Traffic Pty Ltd dated August 2019.</li> <li>It is noted that there is an (estimated) existing deficiency of 36 parking spaces associated with the current use of the site. The proposal would result in a deficiency of 31 spaces (ie. a net gain of five parking spaces). However, in order to realise the parking concept thus proposed the car stacker will need to be an independent type stacker such that each of the car parking spaces can be independently accessed (ie. do not rely on one vehicle being manually moved in order to access another). A condition is therefore required in this respect.</li> </ul>
Clause 6.7.1 number of vehicle accesses	Y		Number of access points will be no greater than 1.
Clause 6.7.2 design vehicle access		Y	Location: OK Width (AS2890.1 Table 3.2 Cat 1 = 3-5.5m) : OK - 6m Gradient (AS2890.1 & TSD): FEASIBLE - Subject to detailed design TSD Compliance: FEASIBLE - Subject to detailed design Vehicle Barriers: N/A Pedestrian Sight Distances (AS2890.1 Fig 3.3 = 2.5m deep x 2m wide): FEASIBLE - Subject to detailed design Vehicular Sight Distances( AS2890.1 Fig 3.2 = 40m for 50kph domestic): This has been satisfactorily addressed in the traffic impact assessment by Midson Traffic Pty Ltd dated August 2019 Landlord Consent (Y/N): Y
Clause 6.7.3 vehicle passing	Y		
Clause 6.7.4 on site turning		Y	FEASIBLE - Subject to detailed design

Clause 6.7.5 layout of parking area	Y	Car Parking Space Dimensions (AS2890.1 Fig 2.2 = 2.4x5.4m Class 1A): OK
		Car Parking Space Design Envelope (AS2890.1 Fig 5.2 300mm clearance on side):
		OK Headroom: (AS2890.1 Fig 5.3 = 2.2m clearance): OK
		Parking Space Gradient (5%): OK
		Aisle Width (AS2890.1 Fig 2.2 = 5.8m Class 1A): OK
		Garage Door Width & Apron (AS2890.1 Fig 5.4 = 2.4m wide => 7m wide apron): N/A
		B85 Turning Paths:
		FEASIBLE - Subject to detailed design Parking Module Gradient (manoeuvring area 5% Acceptable Soln, 10% Performance):
		OK Driveway Gradient & Width (AS2890.1 Section 2.6 = 25% and 3m): OK
		Transitions (AS2890.1 Section 2.5.3 = 12.5% summit, 15% sag => 2m transition): FEASIBLE - Subject to detailed design
		Vehicular Barriers (AS2890.1 Section 2.4.5.3 = 600mm drop, 1:4 slope): N/A
		Blind Aisle Length (AS2890.1 Fig 2.3 = 6x spaces max if public):
		N/A Blind Aisle End Widening (AS2890.1 Fig 2.3 = 1m extra): N/A
		Circulation Roadways & Ramps: N/A
Clause 6.7.6 surface treatment Only when a new hard stand area is proposed or new development is within a car park area.	Y	Surface is concrete and will be drained to the sites public stormwater connection via the internal drainage system
Clause 6.7.7 Lighting of parking area Planner and health unit to assess		Planner to assess
Clause 6.7.8 Landscaping Planner to assess		Planner to assess
Clause 6.7.9 motor bike parking		NA
Clause 6.7.10 bicycle parking		NA

Clause 6.7.11 bicycle end trip Planner to assess	Planner to assess
Clause 6.7.12 siting of car parking Planner to assess based on DE assessment of Clause 6.7.5 layout of parking area	Planner to assess
Clause 6.7.13 facilities for commercial vehicles	<ul> <li>Y FEASIBLE - Subject to detailed design noting:         <ul> <li>Private waste collection will be required for this development</li> <li>A bin storage area has been allocated within the carparking/basement area</li> <li>Truck loading from Wilmot Street will not be possible, however given the minor nature of the street a small truck reversing out of the site would be acceptable providing adequate turning manoeuvres can be demonstrated.</li> <li>A condition for a waste management plan will be required</li> <li>A condition requiring all waste collection processes to occur on-site will be required</li> </ul> </li> </ul>
Clause 6.7.14 access to a road	ОК
Clause 6.7.15 access to Niree Lane	NA

# E 7.0 Stormwater - Please refer to the Environmental Engineering Unit Stormwater Engineers report

### PROTECTION OF COUNCIL INFRASTRUCTURE

Council infrastructure at risk	Why?
Stormwater pipes	Please refer to the Environmental Engineering Unit
	Stormwater Engineers report
Council road network	Please refer to City Amenity's Road Engineers report

### COMMENTS:

Summary:

- The application is for a multi-storey 28 apartment complex, replacing an existing 18 apartment block
- No on-site parking is available for the existing apartments, hence an estimated existing deficiency of 36 on-site spaces is associated with the current use
- The proposal will be deficient by 31 spaces
- The street parking demand attributable to the development will not increase providing the proposed car-stacker is of the independent type
- Private waste collection with all processes undertaken wholly within the subject site will be required due to Wilmot Street not being able to accommodate the number of bins necessary, and not being wide enough to permit a loading zone for a truck without compromising the passage of through traffic

### PLANNING PERMIT INFORMATION:

In a council related engineering context, the proposal can be supported in principal subject to the following conditions and advice:

### General Conditions:

ENG 1: Pay Costs ENG 3A: Access & parking designed and constructed ENG 3B: Access & parking designed prior to ENG 3C: Access & parking construction certified ENG 4: Access and parking constructed, sealed and drained prior to ENG 7: Number of parks approved, allocation signage ENG 8: Car parking user type ENG 12: Construction waste management plan ENG 13: Waste management plan ENG sw1: Stormwater drained to council infrastructure ENG tr2: Construction traffic management plan TRF s2: Car parking stacker fitted and operating

### Advice:

Dial before you dig Fees and charges Building Permit Plumbing Permit Access Redundant Crossovers Work within the Highway Reservation Structures Close to Council's Stormwater Main Road Opening Permit (Occupation of the Public Highway) New Stormwater Connection Planning: #198974

### Property

654A SANDY BAY ROAD SANDY BAY TAS 7005

-	3		

### People

Applicant *		
JMG OBO Mrs Sheila Barrett		
117 Harrington Street		
HOBART TAS 7000		
62312555		
asmee@jmg.net.au		
Owner		
*		
Sheila Barrett		
31 Corinth Street		
HOWRAH TAS 7018		
0427701710		
sheila@clarecon.com.au		
Entered By		
FRANCES BEASLEY		
117 HARRINGTON STREET		
HOBART TAS 7000		
62312555		
iboss@jmg.net.au		

### Use

Single dwelling

### Details

Have you obtained pre application advice?

• GYes

If YES please provide the pre application advice number eg PAE-17-xx

Are you applying for permitted visitor accommodation as defined by the State Government Visitor Accommodation Standards? Click on help information button for definition. If you are not the owner of the property you MUST include signed confirmation from the owner that they are aware of this application.

• "No

Is the application for SIGNAGE ONLY? If yes, please enter \$0 in the cost of development, and you must enter the

### Supporting Information Council Meeting - 25/5/2020

number of signs under Othe	er Details below.			
•No				
If this application is related to an enforcement action please enter Enforcement Number				
	•			
Details				
What is the current approve	d use of the land / building(s	)?		
Single Dwelling				
Please provide a full descrips wimming pool and garage	ption of the proposed use or )	development (i.e.	demolitio	n and new dwelling,
Alterations and Additions				
Estimated cost of developm	nent			
500000.00	1			
Existing floor area (m2)	Proposed floor are	a (m2) S	Site area	(m2)
Carparking on Site		<b>N</b> 1/A		
		N/A		
Total parking spaces	Existing parking spaces	Other (no sele chosen)	ection	
Other Details				
Does the application includ * No How many signs, please en involved in this application?	ter 0 if there are none			
0				
Tasmania Heritage Reg Is this property on the Tasm Register? Documents				
Required Documents	Sebadula of Fagerrante)			
Title (Folio text and Plan and S *	schedule of Easements)			
Title Documents.pdf Plans (proposed, existing)				
*				
Architectural Plans 19-02-20.j	pdf			
Covering Letter DA Letter.pdf				
Supporting Document	s			
Concept Servicing Plan Engineering Plans.pdf				

### Supporting Information Council Meeting - 25/5/2020



JMG Ref: P203008

20 February 2020

General Manager City of Hobart Via email - planning@coh.com.au

Dear Mr Heath,

DEVELOPMENT APPLICATION - ALTERATIONS AND EXTENSIONS - 654A SANDY BAY, SANDY BAY

JMG Engineers and Planners have been engaged by the owner of the above property, Mrs Sheila Barrett, to prepare a development application for the site. This letter serves to provide an assessment of the application against the relevant provisions of the *Hobart Interim Planning Scheme 2015* (the planning scheme).

The proposal generates several discretions under the Development Standards for Buildings and Works in the planning scheme's Low-Density Residential Zone. However, the proposal is considered to meet with the relevant performance criteria as it would not cause an unreasonable loss of amenity upon adjoining lots and does not include a significant increase in site coverage. Shadow diagrams and perspective drawings have been prepared in support of the proposal.

The following documents are enclosed in support of the application:

- Title information (Attachment A);
- Architectural plans (Attachment B);
- Landowner consent (Attachment C).

Attachments are enclosed at the end of this letter.

### 1. Site, Location & Context

The subject site is located at 654A Sandy Bay Road, Sandy Bay (CT123964/2 - see title information provided at Attachment A). As noted above, the land is owned by Sheila Barrett. The owner's consent for the application to be lodged is provided at Attachment C.

The site has an area of approximately 634m<sup>2</sup>. The majority of the site is taken up by a substantial, partly two-storey residence. Vehicular access to the site is via an unnamed road off Sandy Bay Road that also provides access to the adjacent reserve to the east. This road also provides access to the residential properties immediately to the south and south-west of the site. The site is within an area serviced by reticulated networks.

The site is separated from the Derwent River estuary by only the adjacent reserve. This reserve includes substantial areas of landscaping as well as heritage features and pedestrian paths. The dwelling on the adjoining property to the south of the site is a substantial building that appears to date from a similar period of construction as the dwelling on the site. The dwelling immediately to the south-west has a smaller footprint but is also two-storey. The construction of this dwelling appears to date from the early to mid-20<sup>th</sup> century period. The dwelling to the north-west, on the opposite side of the

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49-51 Elizabeth Street Launceston 7250 Phone (03) 6334 5548 Fax (03) 6331 2954 infoltn@jmg.net.au

Johnstone McGee & Gandy Pty Ltd ABN 76 473 834 852 ACN 009 547 139 as trustee for Johnstone McGee & Gandy Unit Trust

www.jmg.net.au



access road, is a sprawling collection of buildings that appears to date from a similar period.

Figure 1 - Subject Site (outlined in blue) and surrounding land.

### 2. Proposal

The proposal is for alterations and extensions to the existing dwelling on the site. The proposed alterations include the removal of internal walls and the provision of new internal stairs to provide access to the upper level of the dwelling.

The proposed extensions would include a substantial addition on the upper level of the dwelling. The addition would provide an open plan living, dining, and kitchen area and an attached deck. The existing master bedroom suite on the upper level of the dwelling would be retained and linked to the proposed addition.

The proposal also includes a small extension to the existing entry space on the ground floor of the building and a roof over a storage area between the dwelling and the site's south-western boundary. An unroofed car parking area is also proposed in this location.

The proposed architectural plans are provided under Attachment B.

### 3. Planning Assessment

The site is within the Low Density Residential Zone of the *Hobart Interim Planning Scheme 2015* (Figure 2). The site is not within any of the planning scheme's mapped overlays.

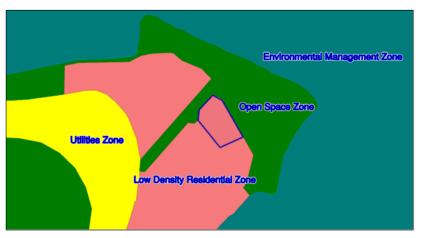


Figure 2 - Zoning

### 3.1 Low Density Residential Zone

### 3.1.1 12.2 Use Table

The proposed use is within the planning scheme's residential use class which is a permitted use in the above zone.

3.1.2 Use Standards

There are no relevant use standards as neither non-residential use nor visitor accommodation is proposed.

### 3.1.3 Development Standards for Buildings and Works

Clause 12.4.1 Non-dwelling development is not relevant as non-dwelling development is not proposed.

12.4.2 Setbacks and building envelope		
A1	P1	
Unless within a building area, a dwelling, excluding protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6 m into the frontage setback, must have a setback from a frontage that is:	N/A	
(a) if the frontage is a primary frontage, at least 4.5 m, or, if the setback from the primary frontage is less than 4.5 m, not less than the setback, from the primary frontage, of any existing dwelling on the site; or		
(b) if the frontage is not a primary frontage, at least 3 m, or, if the setback from the frontage is less than 3 m, not less than the setback, from a frontage that is not a primary frontage, of any existing dwelling on the site; or		
(c) if for a vacant site with existing dwellings on adjoining sites on the same street, not more than the greater, or less than the lesser, setback for the equivalent frontage of the dwellings on the adjoining sites on the same street.		

The proposal is considered to meet sub-clause (a) of the above acceptable solution A1, as the setback from frontage for the proposed extensions would not be less than that for the existing dwelling. The existing garage on the site's frontage with the access road is built up to the boundary. The proposed extensions would achieve a similar setback from this boundary.

A2	P2
A garage or carport must have a setback from a primary frontage of at least:	N/A
(a) 5.5 m, or alternatively 1 m behind the façade of the dwelling; or	
(b) the same as the dwelling façade, if a portion of the dwelling gross floor area is located above the garage or carport; or	
(c) 1 m, if the natural ground level slopes up or down at a gradient steeper	

This clause is not considered relevant as a garage or carport is not proposed.

than 1 in 5 for a distance of 10 m from the frontage.

P3

A dwelling, excluding outbuildings with a The siting and scale of a dwelling must: building height of not more than 2.4m (a) not cause unreasonable loss of and protrusions (such as eaves, steps, amenity by: porches, and awnings) that extend not more than 0.6m horizontally beyond the (i) reduction in sunlight to a habitable building envelope, must: room (other than a bedroom) of a dwelling on an adjoining lot; or (a) be contained within a building envelope (refer to diagrams 12.4.2A, (ii) overshadowing the private open 12.4.2B, 12.4.2C and 12.4.2D) space of a dwelling on an adjoining determined by: lot; or (i) a distance equal to the frontage (iii) overshadowing of an adjoining setback or, for an internal lot, a distance of 4.5m from the rear vacant lot; or (iv)visual impacts caused by the boundary of a lot with an adjoining apparent scale, bulk or proportions frontage: and of the dwelling when viewed from an (ii) projecting a line at an angle of 45 adjoining lot; and degrees from the horizontal at a (b) provide separation between height of 3m above natural ground dwellings on adjoining lots that is level at the side boundaries and a compatible with that prevailing in distance of 4m from the rear the surrounding area. boundary to a building height of not more than 8.5m above natural ground level; and (b) only have a setback within 1.5m of a side boundary if the dwelling: does not extend beyond an existing (i) building built on or within 0.2m of the boundary of the adjoining lot; or (ii) does not exceed a total length of 9m or one-third the length of the side boundary (whichever is the lesser).

The proposal does not meet with subclause A3(a) as the proposed extension would not be contained within the prescribed building envelope. As shown on the attached

Page 4

A3

elevation plans, the proposed addition on the upper level of the dwelling would not be contained within the envelope determined relative to the site's north-western and north-eastern boundaries. The proposed additions would also not achieve the 1.5m side boundary setback required by A3(b). The proposal therefore relies upon assessment against the performance criterion for the above clause, P3.

As shown in the attached shadow diagrams, the proposed development would overshadow the property to the south-west at 9am. This impact would conclude at midday, as by this time the attached diagrams indicate that the shadow cast by the development would not extend beyond the driveway adjacent to the site's southwestern boundary. Therefore, overshadowing impacts upon the adjoining lot to the south-west, including areas of private open space on the lot, would be limited to morning periods. The shadow diagrams also indicate that the development would not significantly increase the extent of overshadowing upon this lot.

The proposed development is unlikely to overshadow a window to a habitable room upon the adjoining lot to the south-west. While the attached shadow diagrams indicate that the shadow cast by the development would reach the dwelling upon this lot at 9am on 21 June, they do not take into account the difference in ground level between the site and this adjoining property. Given the topography of the site and adjoining land, the latter property is above the level of the site. Therefore, while the proposed development may cause some limited overshadowing of what appear to be windows to undercroft spaces within the dwelling on this adjoining property, it is unlikely to overshadow the windows to habitable rooms on the levels above.

The attached shadow diagrams indicate that the dwelling on the adjoining property to the south is likely to be overshadowed at midday and throughout the afternoon until 3pm on 21 June. However, given that there is already a two-storey element upon the part of the site closest to this adjoining property (i.e. the existing master bedroom suite and attached deck), it is unlikely that the proposed development would cause any additional significant overshadowing upon this property.

Therefore, the proposal is considered to comply with the above sub-clauses P3(a)(i) and P3(a)(ii) as it would not cause an unreasonable loss of amenity through a reduction in sunlight to a habitable room or overshadowing the private open space of a dwelling upon an adjoining lot. The site is not adjacent to a vacant lot, so sub-clause P3(a)(ii) is not relevant.

While the proposed upper level addition to the dwelling would be substantial, it is not considered likely to have an unreasonable visual impact when viewed from an adjoining lot. As noted earlier, the dwellings surrounding the site are substantial two storey buildings. The proposal would result in a building on the site that is consistent with, and similar to, the apparent scale, bulk, and proportions of the surrounding buildings. The proposed development is therefore considered to be consistent with the character of the area, which would reduce its perceived visual impact.

The proposed addition would be largely screened from view from the adjoining lot to the south by the existing upper level component of the building. It is noted that the addition would partly replace a section of the existing dwelling that while only single storey, has a raised roof height to allow for large clerestory windows. It is also noted that the dwellings on the lots to the north-west and south of the site largely address the water views available to east and north-east. These dwellings therefore have only a few windows that face the site. Therefore, the proposal is considered to meet the above sub-clause P3(a)(iv) as it would not cause an unreasonable loss of amenity as a result of its visual impact.

The proposal would not reduce the separation between dwellings on adjoining properties, so is considered to comply with sub-clause P3(b). Therefore, the proposal is considered to comply with the above performance criterion P3.

12.4.3 Site coverage and private open space for all dwellings			
A1		P1	
Dwe	ellings must have:	Dwellings must have:	
(a)	a site coverage of not more than 25% (excluding eaves up to 0.6m); and	(a) private open space that is of a size and dimensions that are	
(b)	a site area of which at least 25% of the site area is free from impervious surfaces;	appropriate for the size of the dwelling and is able to accommodate:	
(c)	for multiple dwellings, a total area of private open space of not less than 60 m² associated with each dwelling.	<ul> <li>(i) outdoor recreational space consistent with the projected requirements of the occupants; and</li> </ul>	
	y part of a site east of the Lower Sandy Scarpment Line shall not be included	<ul><li>(ii) operational needs, such as clothes drying and storage; and</li></ul>	
in cale	the site area for the purpose of culating the site coverage under sub- use (a).	(b) have reasonable space for the planting of gardens and landscaping.	
		(c) not be out of character with the pattern of development in the surrounding area; and	
		(d) not result in an unreasonable loss of natural or landscape values.	

The proposal does not meet A1(a) as a site coverage of approximately 71% is proposed. It is noted that the existing site coverage of approximately 58% also encroaches beyond this standard. The proposal also encroaches A1(b) as less than 25% of the site area would remain free from impervious surfaces. Approximately 18.35% of the site would remain free from impervious surfaces should the proposed development proceed. A1(c) is not relevant as multiple dwellings are not proposed. Given that the proposal would not meet A1(a) or A1(b) it requires assessment against the performance criterion P1.

The dwelling would be provided with a substantial area of private open space by the deck proposed on the upper level. This area would allow for outdoor recreational activities such as outdoor dining and relaxation. The operational needs of the dwelling are considered likely to be met by areas such as the unroofed area proposed adjacent to the site's south-western boundary.

While the proposal would result in the loss of some existing garden area, the substantial areas between the dwelling and the site's north-eastern boundary and its southern boundary would be retained. Therefore, it is considered that reasonable space for planting of gardens and landscaping would be provided.

As noted above, the proposal is considered to be consisted with the character of the area and its established pattern of development. There are several nearby examples where a similar site coverage to that proposed is found, including on the adjoining property to the south of the site.

The proposal would not result in a loss of natural of landscape values. Therefore, the proposal is considered to comply with the above performance criterion P1.

A2	P2	
A dwelling must have an area of private open space that:	N/A	
(a) is in one location and is at least:		

### (i) 24 m<sup>2</sup>; or

- (ii) 12 m<sup>2</sup>, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8 m above the finished ground level (excluding a garage, carport or entry foyer); and
- (b) has a minimum horizontal dimension of:

(i) 4 m; or

- (ii) 2 m, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8 m above the finished ground level (excluding a garage, carport or entry foyer); and
- (c) is directly accessible from, and adjacent to, a habitable room (other than a bedroom); and
- (d) is not located to the south, south-east or south-west of the dwelling, unless the area receives at least 3 hours of sunlight to 50% of the area between 9.00am and 3.00pm on the 21st June; and
- (e) is located between the dwelling and the frontage, only if the frontage is orientated between 30 degrees west of north and 30 degrees east of north, excluding any dwelling located behind another on the same site; and
- (f) has a gradient not steeper than 1 in 10; and
- (g) is not used for vehicle access or parking.

The proposal complies with A1 as the dwelling would be provided with the required area of private open space (POS). The deck proposed on the upper level would provide a total area of  $68m^2$ , of which approximately  $39m^2$  would have a minimum dimension of 4m. This area would be directly accessible from the proposed living areas and would not be to the south, south-east, or south-west of the dwelling. The proposed POS would be behind the building line established on the site and would be level.

12.4.4 Sunlight and overshadowing for all dwellings	
A1	P1
A dwelling must have at least one habitable room (other than a bedroom) in which there is a window that faces between 30 degrees west of north and 30 degrees east of north (see Diagram 10.4.4A).	N/A

The proposal complies with A1 as the existing conservatory/sunroom at the northern corner of the dwelling would be retained as a gym. This room has north facing glazed walls. The standards at A2/P2 and A3/P3 are not relevant as multiple dwellings are not proposed.

12.4.5 Width of openings for garages and carports for all dwellings	
A1	P1
A garage or carport within 12 m of a primary frontage (whether the garage carport is free-standing or part of the dwelling) must have a total width openings facing the primary frontage of not more than 6 m or half the wide of the frontage (whichever is the lesser).	of

This clause is not relevant as a garage or carport is not proposed.

12.4.6 Privacy for all dwellings			
A1	P1		
A balcony, deck, roof terrace, parking space, or carport (whether freestanding or part of the dwelling), that has a finished surface or floor level more than 1 m above natural ground level must have a permanently fixed screen to a height of at least 1.7 m above the finished surface or floor level, with a uniform transparency of no more than 25%, along the sides facing a:	A balcony, deck, roof terrace, parking space or carport (whether freestanding or part of the dwelling) that has a finished surface or floor level more than 1 m above natural ground level, must be screened, or otherwise designed, to minimise overlooking of: (a) a dwelling on an adjoining lot or its private open space; or		
(a) side boundary, unless the balcony, deck, roof terrace, parking space, or carport has a setback of at least 3 m from the side boundary; and	<ul> <li>(b) another dwelling on the same site or its private open space; or</li> <li>(c) an adjoining vacant residential lot.</li> </ul>		
(b) rear boundary, unless the balcony, deck, roof terrace, parking space, or carport has a setback of at least 4 m from the rear boundary; and			
(c) dwelling on the same site, unless the balcony, deck, roof terrace, parking space, or carport is at least 6 m:			
<ul> <li>(i) a window or glazed door, to a habitable room of the other dwelling on the same site; or</li> </ul>			
(ii) from a balcony, deck, roof terrace or the private open space, of the other dwelling on the same site.			

The proposed deck on the upper level of the dwelling does not meet A1(a) as it would be less than 3m from the site's north-eastern boundary and would not have the required screening. This aspect of the proposal therefore relies upon the performance criterion P1. The proposed deck is considered to comply with P1(a) as it would not be adjacent to a dwelling on an adjoining lot or its private open space. The proposed deck would be separated from the closest dwelling (i.e. that on the property immediately to the north-west of the site) by the access road. Screening in accordance with A1 would also be provided along the north-western side of the deck. The land immediately to the north-east of the site is a landscaped area within the adjacent reserve. Neither P1(b) nor P1(c) are relevant as there is no other dwelling on the site and it is not adjacent to a vacant residential lot.

A2	P2
A window or glazed door, to a habitable room, of a dwelling, that has a floor level more than 1 m above the natural ground level, must be in accordance with (a), unless it is in accordance with (b):	
(a) The window or glazed door:	
(i) is to have a setback of at least 3 m from a side boundary; and	
(ii) is to have a setback of at least 4 m from a rear boundary; and	



- (iii) if the dwelling is a multiple dwelling, is to be at least 6 m from a window or glazed door, to a habitable room, of another dwelling on the same site; and
- (iv) if the dwelling is a multiple dwelling, is to be at least 6 m from the private open space of another dwelling on the same site.
- (b) The window or glazed door:
  - (i) is to be offset, in the horizontal plane, at least 1.5 m from the edge of a window or glazed door, to a habitable room of another dwelling; or
  - (ii) is to have a sill height of at least 1.7 m above the floor level or has fixed obscure glazing extending to a height of at least 1.7 m above the floor level; or
  - (iii) is to have a permanently fixed external screen for the full length of the window or glazed door, to a height of at least 1.7 m above floor level, with a uniform transparency of not more than 25%.

The kitchen window proposed within the north-eastern elevation on the upper level of the dwelling (labelled 12.-30G on the attached first floor plan) does not comply with A2(a). However, it meets A2(b) as it would be offset from windows to habitable rooms of another dwelling. As noted above, the land immediately to the north-east of the site is a landscaped area within the adjacent reserve.

The standard at A3/P3 for the above clause is not relevant as a shared driveway or car parking space is not proposed. The proposal does not include a fence within 4.5 m of the property frontage. Therefore, clause 12.4.7 does not apply. The standards for clauses 12.4.8 and 12.4.9 are also not relevant as multiple dwellings are not proposed. Clause 12.4.10 Siting buildings close to the Lower Sandy Bay Escarpment does not apply as the site is not within the Lower Sandy Bay Escarpment Line shown on the Local Overlay Maps.

### 3.2 Codes

While the site is not within any mapped overlays, the planning scheme's Parking and Access Code and the Stormwater Management Code apply to all development.

3.2.1 Parking and Access Code

### E6.6 Use Standards

The proposal is considered to meet the acceptable solution for clause *E6.6.1 Number of Car Parking Spaces* as a total of two onsite car parking spaces would be provided, in accordance with Table E6.1.

3.2.2 E6.7 Development Standards

E6.7.1 Number of Vehicular Accesses		
A1 The number of vehicle access points provided for each road frontage must be no more than 1 or the existing number of vehicle access points, whichever is the greater.	for each road frontage must be minimised, having regard to all of the	

	possible, whole car parking spaces between access points;
(b)	whether the additional access points can be provided without compromising any of the following:
(i)	pedestrian safety, amenity and convenience;
(ii)	traffic safety;
(iii)	residential amenity on adjoining land;
(iv)	streetscape;
(v)	cultural heritage values if the site is subject to the Local Historic Heritage Code;
(vi)	the enjoyment of any 'al fresco' dining or other outdoor activity in the vicinity.
	(i) (ii) (iii) (iv) (v)

The proposal does not meet the acceptable solution for the above clause as an additional vehicle access point is proposed. The proposal is considered to comply with the performance criterion for the clause as it would not result in the loss of existing onstreet car parking. It is noted that there is currently no opportunity for parking on the section of access road adjacent to the site. The access road would carry very low volumes of vehicular traffic at the point where the additional access would be created, as it provides only maintenance access to the adjacent reserve beyond this point. While the access road provides a link between Sandy Bay Road and the footpath along the coast with the reserve, this link is neither signposted nor obvious. Therefore, the access road is unlikely to carry significant volumes of pedestrian traffic.

The additional access point proposed would not be visible from adjoining residential land, so would not have a visual impact upon amenity. The access point would be adjacent to the existing access point to the garage on the site, so is unlikely to have a significant additional impact on amenity. Similarly, the proposed access point is unlikely to have a significant impact upon the streetscape. The site is not subject to the planning scheme's Historic Heritage Code and the proposal would not affect *al fresco* dining or other outdoor activity in the vicinity.

The proposal is considered to meet the acceptable solutions for the remaining relevant clauses within the Parking and Access Code. The proposed access has been designed by a suitably qualified engineer in accordance with the relevant Australian Standard (AS2890) and the proposed parking area would have a sealed surface treatment. The proposed access is considered to be in accordance with the requirements of the relevant road authority (Hobart City Council).

### 3.2.3 Stormwater Management Code

3.2.4 E7.7 Development Standards

E7.7.1 Stormwater Drainage and Disposal			
A1	P1		
Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure.	N/A		

The proposal complies with the above acceptable solution as stormwater from any new impervious surfaces would be disposed of by gravity to the existing connection to public stormwater infrastructure on the site.

A2	P2
A stormwater system for a new development must incorporate water sensitive urban design principles R1 for the treatment and disposal of stormwater if any of the following apply:	N/A
(a) the size of new impervious area is more than 600 m2;	
(b) new car parking is provided for more than 6 cars;	
(c) a subdivision is for more than 5 lots.	

The proposal complies with acceptable solution A2 as less than  $600m^2$  impervious area is proposed and new car parking would not be provided for more than 6 cars. A subdivision is also not proposed.

# A3 A minor stormwater drainage system must be designed to comply with all of the following: (a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed; (b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or upgraded public stormwater infrastructure.

The proposal is considered to comply with A3(b) as a rainwater detention tank would be provided in order to ensure that stormwater runoff from the site to public stormwater infrastructure will be no greater than pre-existing levels.

The standard at A4/P4 is not considered relevant as the proposal would not affect any major stormwater drainage system.

### 4. Summary

The proposal is for alterations and extensions to the existing dwelling on the property at 654A Sandy Bay Road, Sandy Bay. The proposal generates several discretions under the Development Standards for Buildings and Works in the planning scheme's Low Density Residential Zone. The proposal is considered to meet with the relevant performance criteria as it would not cause an unreasonable loss of amenity upon adjoining lots and the dwelling would be provided with adequate private open space.

The proposal also generates a discretion under the Parking and Access Code, however, its impact is considered to be acceptable given the low traffic environment around the site.

The proposal is recommended for approval. If Council requires any further information or clarification with respect to this application, please contact me on 6231 2555 or at asmee@jmg.net.au.

Yours faithfully JOHNSTONE McGEE & GANDY PTY LTD

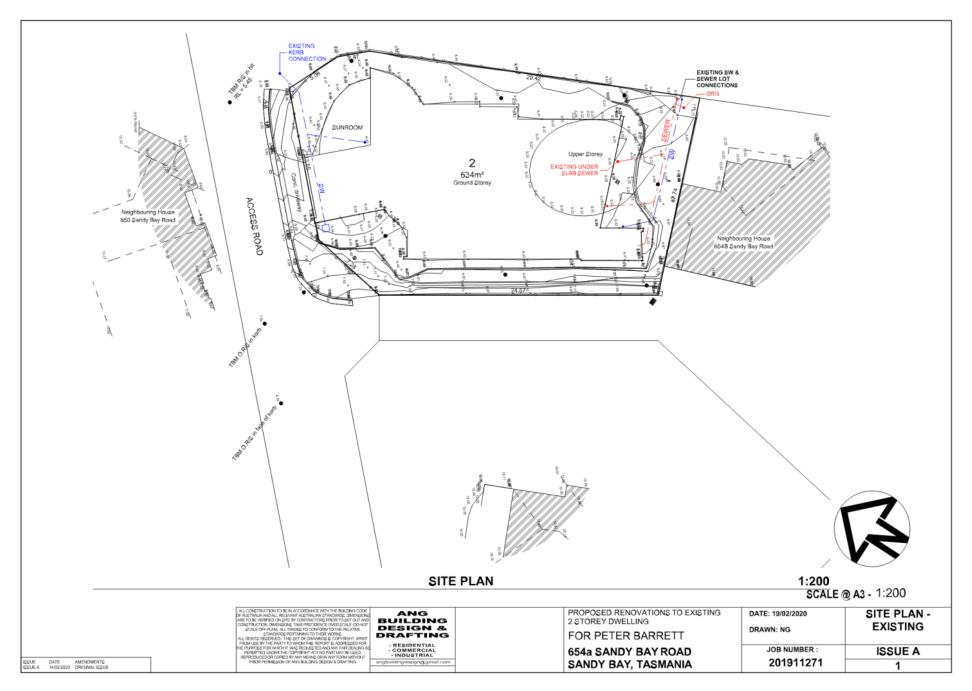
Adam Smee

Adam Smee SENIOR TOWN PLANNER

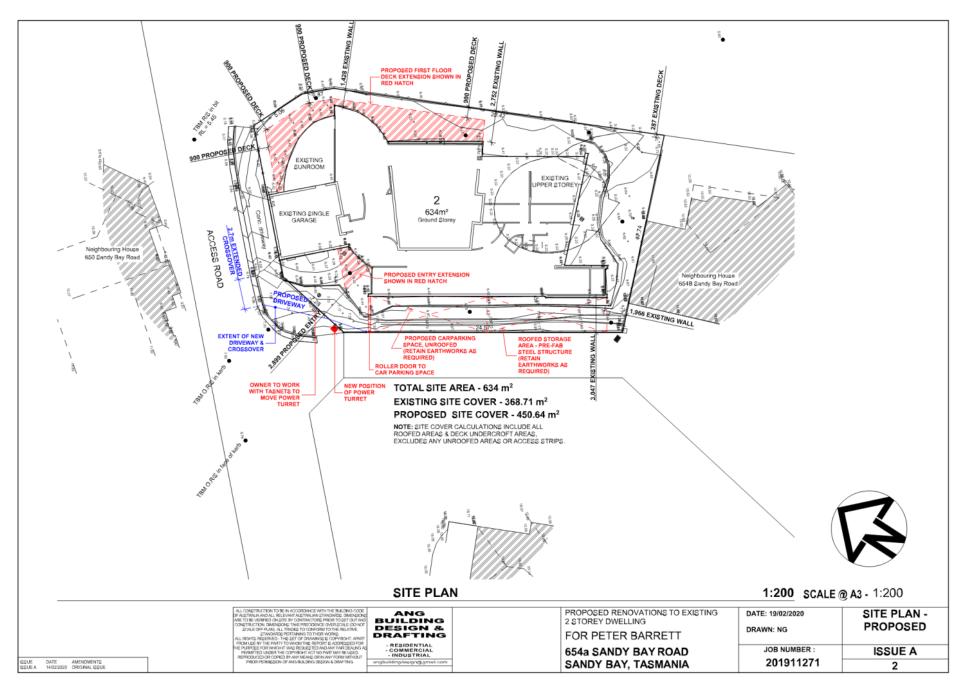
## **APPENDIX A**

Title Information

### Page 933 ATTACHMENT B

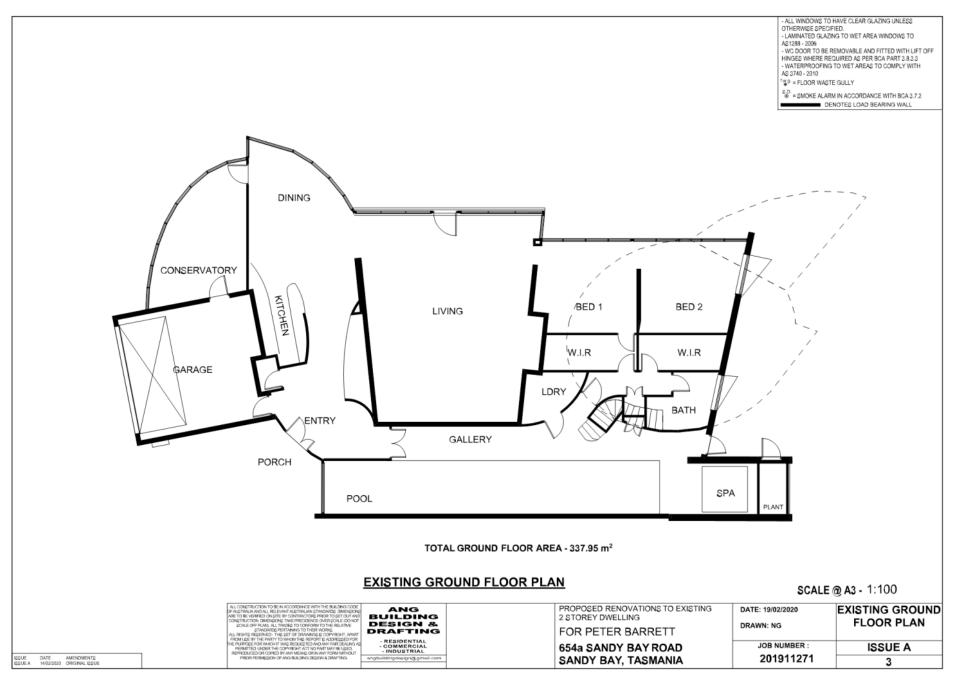


### Page 934 ATTACHMENT B

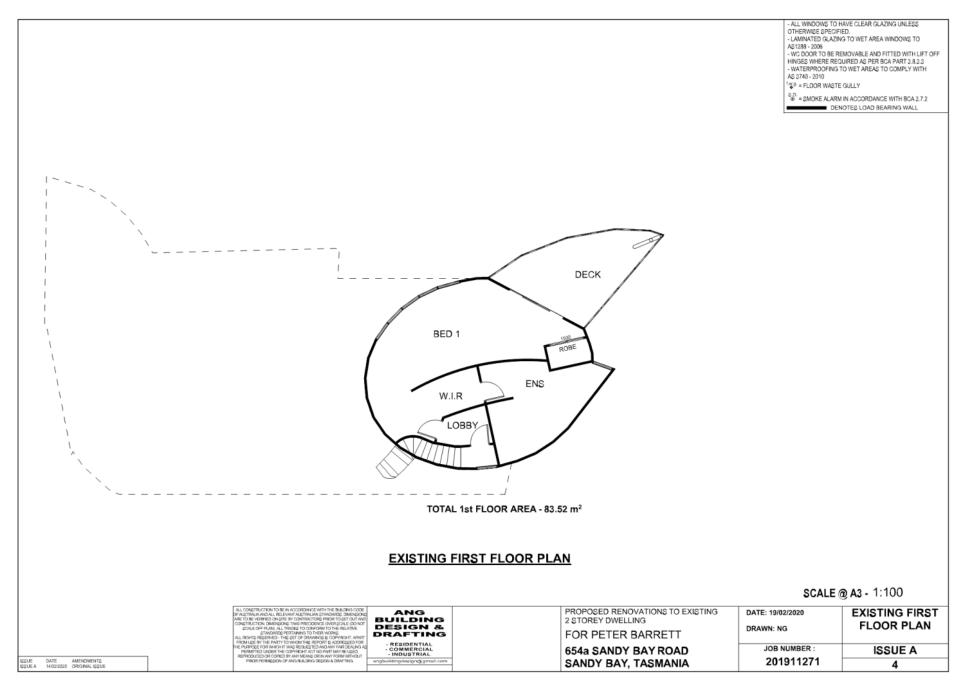


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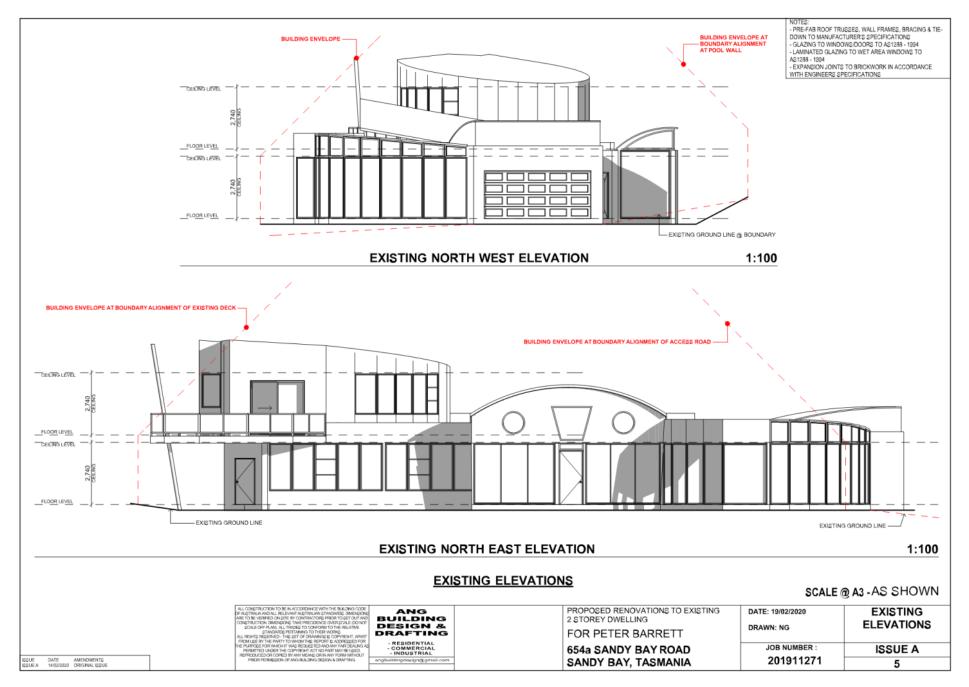




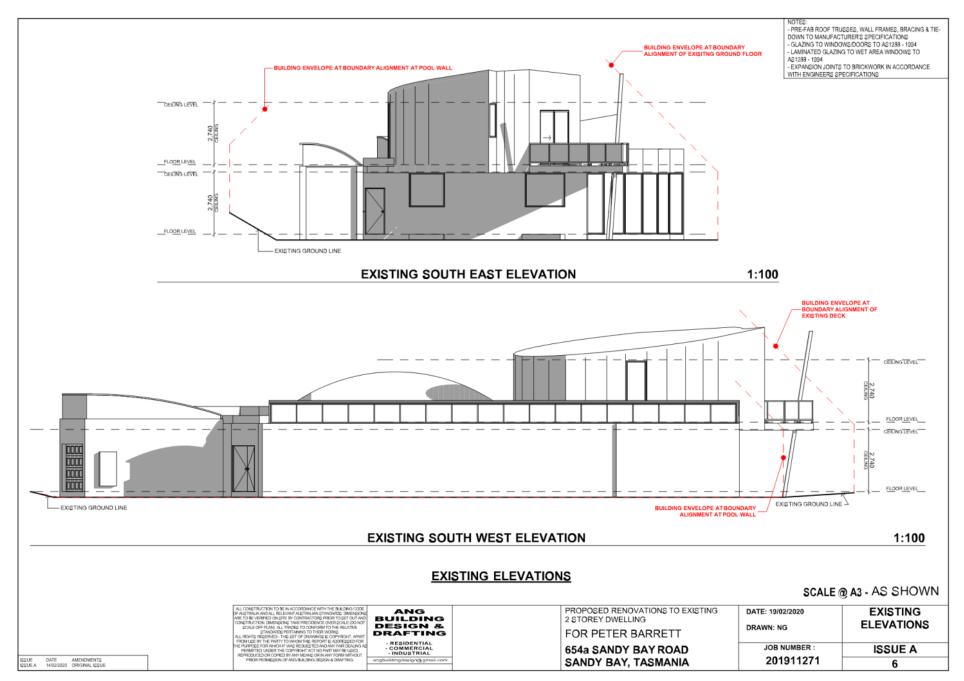
### Page 936 ATTACHMENT B



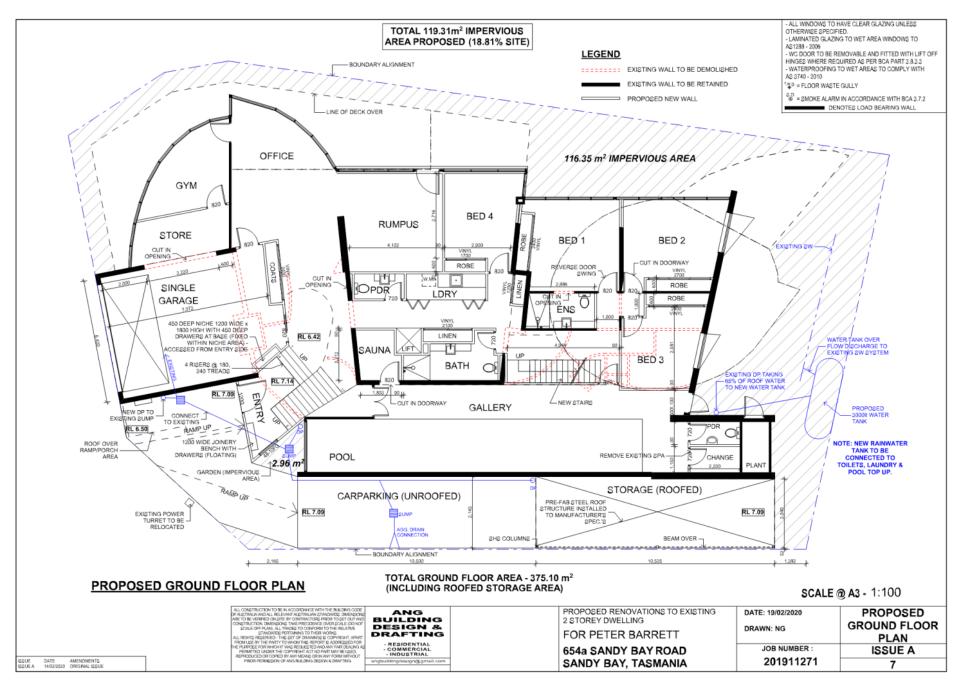
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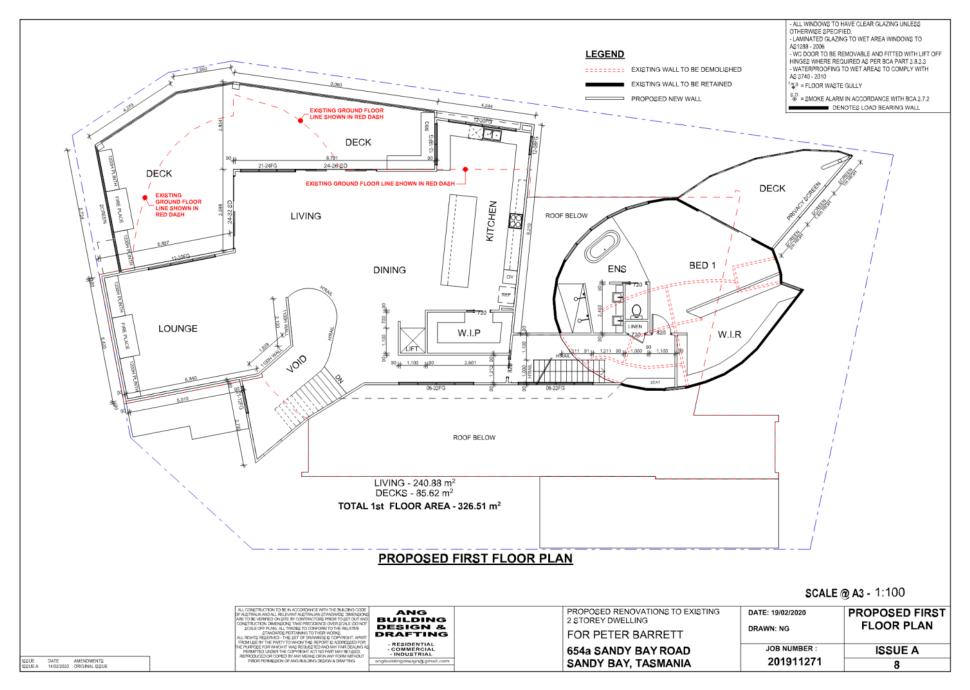


## Page 938 ATTACHMENT B



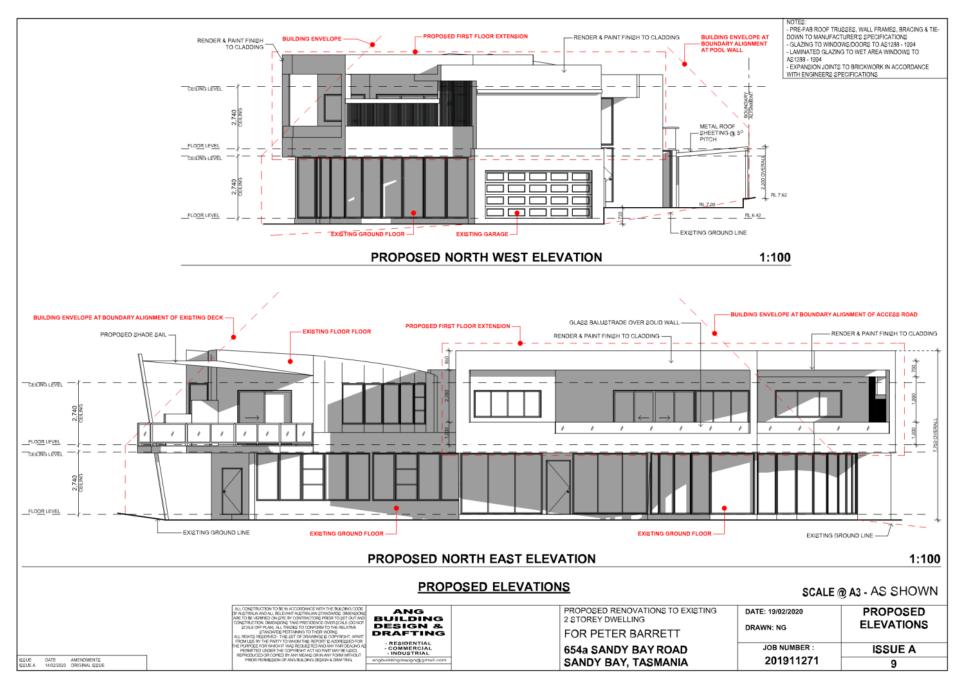
## Page 939 ATTACHMENT B





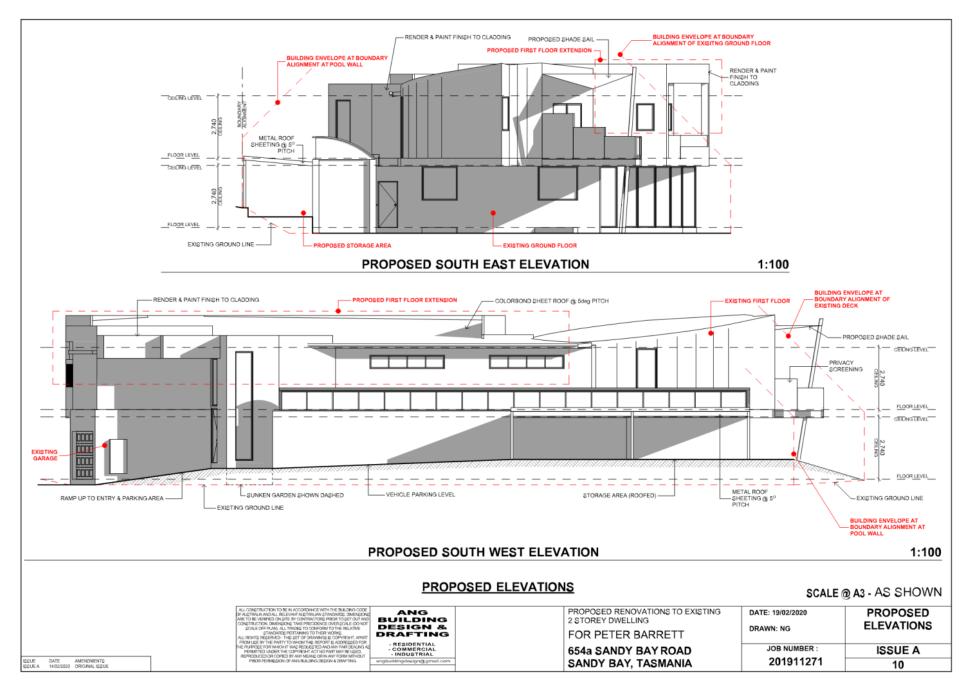
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## Page 941 ATTACHMENT B

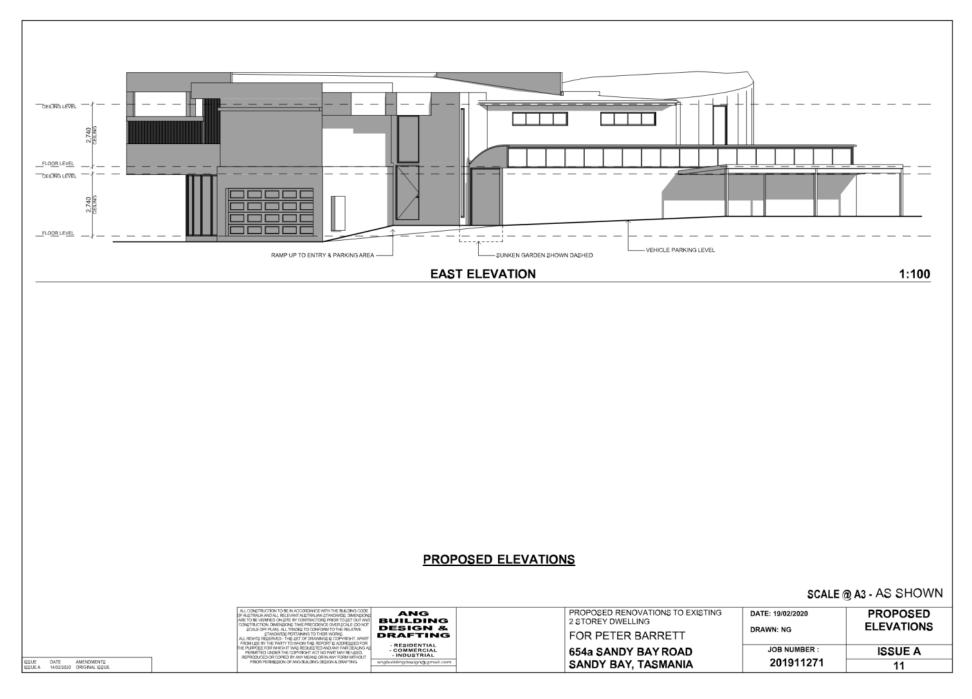


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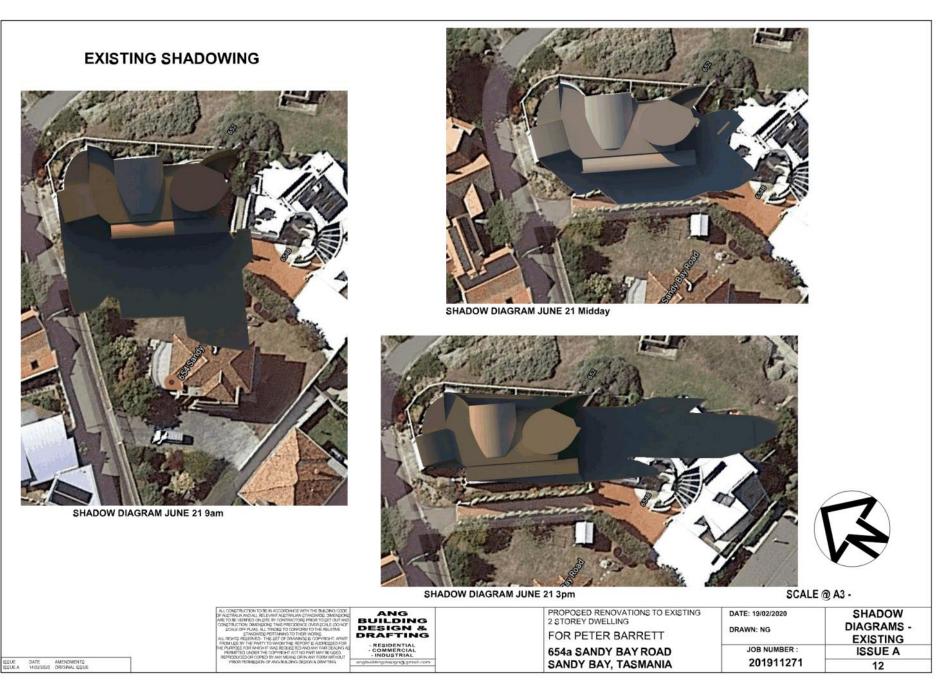
## Page 942 ATTACHMENT B



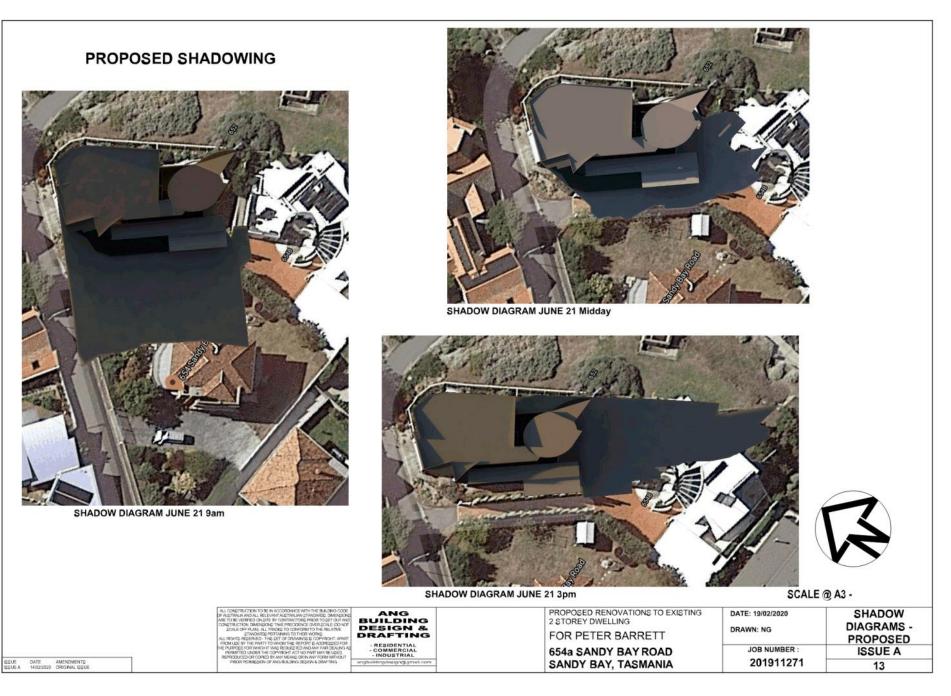
## Page 943 ATTACHMENT B



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## Page 946 ATTACHMENT B





JMG Ref: P203008

25 March 2020

General Manager

City of Hobart

Via online development services portal

Attn: Tristan Widdowson, Development Appraisal Unit

Dear Mr Heath,

DEVELOPMENT APPLICATION - ALTERATIONS AND EXTENSIONS - 654A SANDY BAY, SANDY BAY

On behalf of our client, Mrs Sheila Barrett, please find attached documents provided in response to Council's request for additional information regarding the above proposal, dated 12 March 2020. The documents include a letter and structural plans provided by Chris L Potter, consulting engineer, and address item PA2.1 of Council's request.

I trust that the information provided satisfies Council's request however, please contact me via either telephone 6231 2555 or at <a href="mailto:asmee@jmg.net.au">asmee@jmg.net.au</a> if further information is required.

Yours faithfully, JOHNSTONE McGEE & GANDY PTY LTD

Adam Sme

Adam Smee SENIOR TOWN PLANNER

117 Harrington Street Hobart 7000 Phone (03) 6231 2555 Fax (03) 6231 1535 infohbt@jmg.net.au

49-51 Elizabeth Street Launceston 7250 Phone (03) 6334 5548 Fax (03) 6331 2954 infoltn@jmg.net.au

Johnstone McGee & Gandy Pty Ltd ABN 76 473 834 852 ACN 009 547 139 as trustee for Johnstone McGee & Gandy Unit Trust

www.jmg.net.au

## APPENDIX A

# Consulting Engineer's Letter

Page 2

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## CHRIS L. POTTER M.I.E. AUST. C P Eng.

CONSULTING ENGINEER

9 Warwick Street Hobart TAS 7000 Phone (03) 6231 4143 Mobile 0407 794 292 Fax (03) 6234 3360 Email: potteng@iinet.net.au www.chrispotterengineering.com

Mr	Ρ	Barrett
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654a Sandy Bay Rd

SANDY BAY

7005

Dear Sir

654a Sandy Bay Rd

#### Access: Performance Solution

I refer to your request for information regarding a performance solution for the access in to the proposed parking space at your property at the above address.

Access is generally governed by the provisions of Australian Standard AS2890.1 2004 Parking Facilities, Part 1 Off Street Car Parking.

The Standard indicates that access to parking spaces should generally allow for a B85 vehicle to make a single turn, however in this particular circumstance the property is located at the end of a very narrow street with restricted on street parking both sides. The street is access to Blinking Billy Point Reserve (restricted) beyond this property and it only provides access to properties on one side.

The situation is akin to an access isle to a residential parking space.

The Standard allows the isle width to be reduced to 5.8m and at the location where the turn is to be made this width will be available.

Appendix B clause B4.8 discusses this concession and recognises that under these circumstances a three point turn may be necessary.

"This concession which is designed to be of assistance where space is limited, recognises that such developments will have low turnover and users generally prepared to accept some inconvenience when entering or leaving the parking space."

Given the infrequent use of the road by pedestrians and vehicles I do not see more than a minor inconvenience from this turning movement for the general public either.

I am happy to support to support this proposal based on the above information.

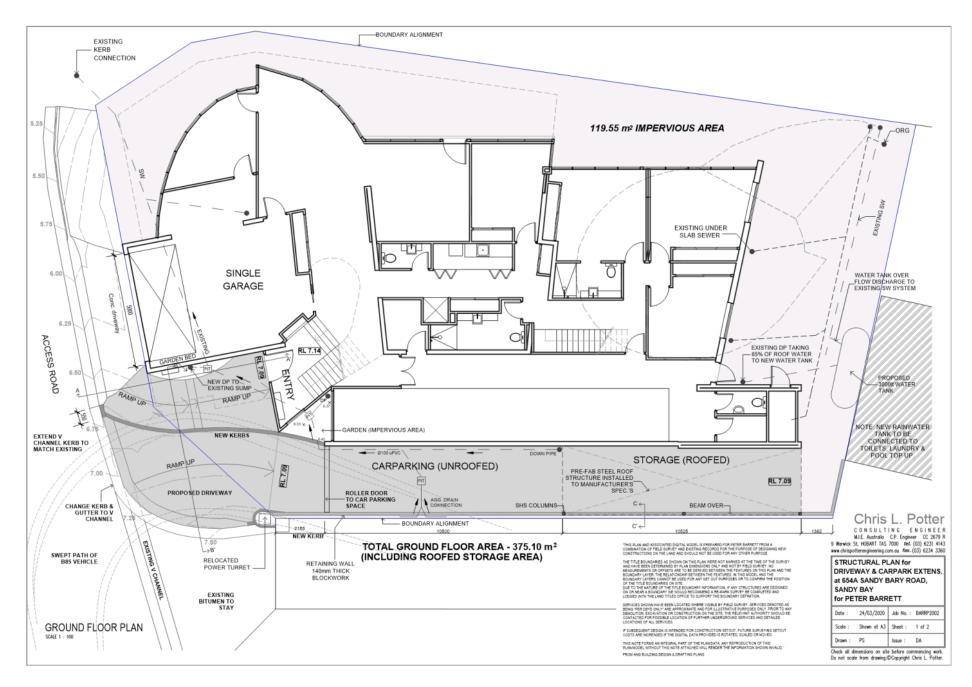
Yours Sincerely'

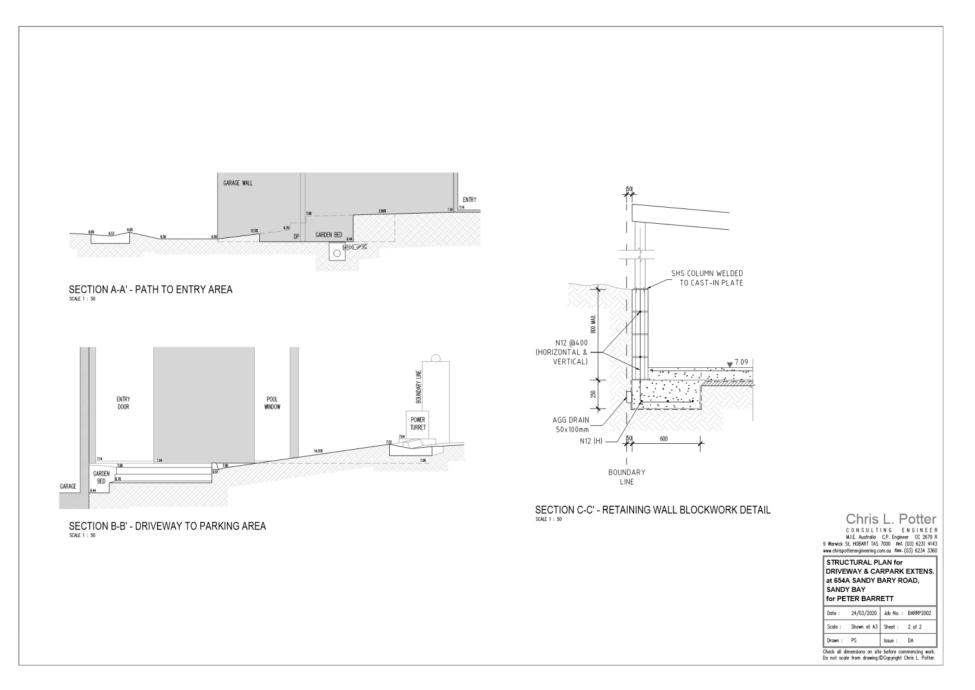
C. L. Potter MIEAust, CPEng 25/03/2020

# APPENDIX B

Structural Plans

Page 3









## **RESULT OF SEARCH**

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME	FOLIO
123964	2
EDITION	DATE OF ISSUE
3	05-Mar-2020

SEARCH DATE : 12-Mar-2020 SEARCH TIME : 02.04 PM

### DESCRIPTION OF LAND

City of HOBART Lot 2 on Sealed Plan 123964 Derivation : Part of 5A-1R-0Ps Gtd to A H Garth Prior CT 119602/1

#### SCHEDULE 1

M806627 TRANSFER to SHEILA ANN BARRETT Registered 05-Mar-2020 at 12.01 PM

#### SCHEDULE 2

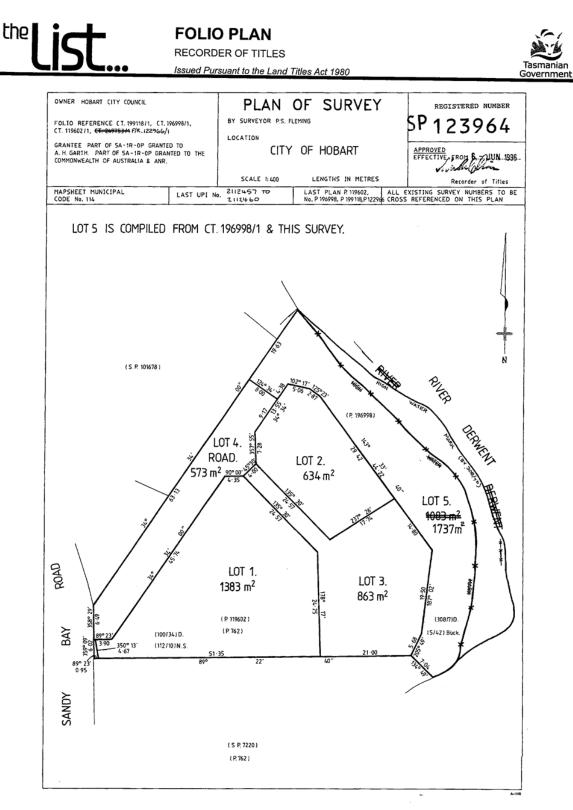
Reservations and conditions in the Crown Grant if any SP 123964 COVENANTS in Schedule of Easements SP 123964 FENCING COVENANT in Schedule of Easements SP 123964 SEWERAGE AND/OR DRAINAGE RESTRICTION E212020 MORTGAGE to Bank of Queensland Limited Registered 05-Mar-2020 at 12.02 PM

#### UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Department of Primary Industries, Parks, Water and Environment

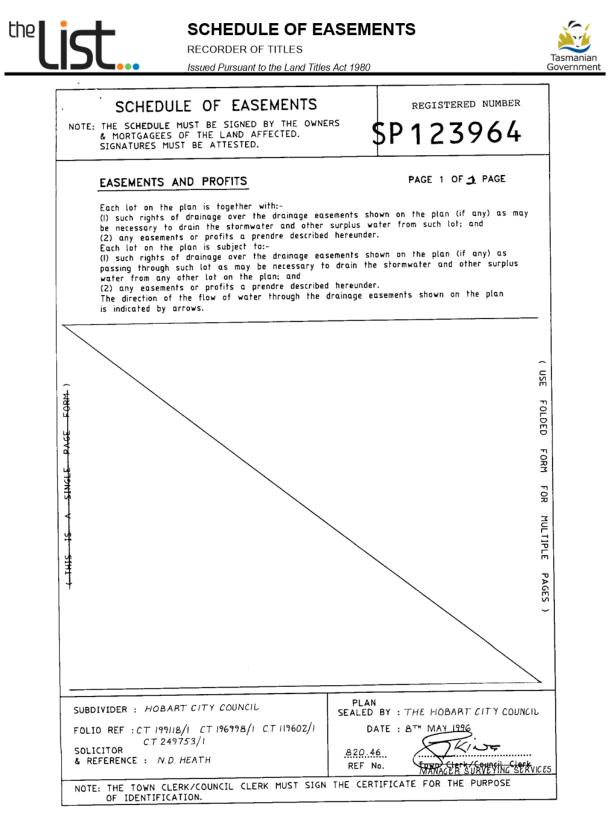
Page 1 of 1 www.thelist.tas.gov.au



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DATE		<i>Е</i> ІСНТН		day of	MAY	1996.
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