



Premise

HOUSING PLUS

Statement of Environmental Effects

IN SUPPORT OF A DEVELOPMENT APPLICATION

Report No: 222173_SEE_Albury_001B

Rev: 001A

26 July 2023

© Premise 2023

This report has been prepared by Premise Australia for Housing Plus; may only be used and relied on by Housing Plus; must not be copied to, used by, or relied on by any persons other than Housing Plus without the prior written consent of Premise. If Housing Plus wishes to provide this Report to a third party recipient to use and rely upon, the recipient agrees: to acknowledge that the basis on which this Report may be relied upon is consistent with the principles in this section of the Report; and to the maximum extent permitted by law, Premise shall not have, and the recipient forever releases Premise from, any liability to recipient for loss or damage howsoever in connection with, arising from or in the respect of this Report whether such liability arises in contract, tort including negligence.

DOCUMENT AUTHORISATION					
Revision	Revision Date	Report Details			
001A	25/07/23	Draft for review			
001B	26/07/23	Final for lodgement			
Prepared By		Reviewed By		Authorised By	
Hugh Shackcloth-Bertinetti		Mark Raikhman		Daniel Drum	

CONTENTS

1. INTRODUCTION.....	4
1.1 BACKGROUND TO THE CORE AND CLUSTER MODEL	4
1.2 ABOUT THE APPLICANT – HOUSING PLUS.....	5
2. THE SITE & ITS LOCALITY	6
2.1 THE LOCALITY	6
2.2 THE SITE	6
3. THE DEVELOPMENT	9
3.1 DEVELOPMENT DESCRIPTION	9
4. STATUTORY PLANNING FRAMEWORK	9
4.1 OBJECT OF THE EP&A ACT	9
4.2 SECTION 1.7.....	10
4.3 SUBORDINATE LEGISLATION	11
4.4 INTEGRATED DEVELOPMENT	12
4.5 PLANNING INSTRUMENTS.....	12
5. IMPACTS, SITE SUITABILITY & THE PUBLIC INTEREST	19
5.1 CONTEXT AND SETTING.....	19
5.2 ACCESS, TRANSPORT AND TRAFFIC	20
5.3 SERVICING.....	20
5.4 HERITAGE.....	21
5.5 OTHER LAND RESOURCES.....	21
5.6 STORMWATER AND FLOODING	21
5.7 AIR AND MICROCLIMATE	21
5.8 FLORA AND FAUNA	21
5.9 WASTE.....	21
5.10 NOISE & VIBRATION.....	22
5.11 NATURAL HAZARDS	22
5.12 SAFETY, SECURITY AND CRIME PREVENTION	22
5.13 SOCIAL IMPACT	22
5.14 ECONOMIC IMPACT.....	23
5.15 SITE DESIGN AND INTERNAL DESIGN	23
5.16 CONSTRUCTION IMPACTS	24
5.17 CUMULATIVE IMPACTS.....	24
6. CONCLUSION	24
6.1 SUITABILITY OF THE SITE	24
6.2 THE PUBLIC INTEREST	25

FIGURES

Figure 1 – The Site Locality.....	7
Figure 2 – The Subject Site	8

Figure 3 – ALEP 2010 Land Use Zoning Map 14

TABLES

Table 1 – Section 7.2 of the BC Act 10
Table 2 – ALEP 2010 Mapping..... 12
Table 3 – ALEP 2010 R1 General Residential Zone Objectives 13
Table 4 – ALEP 2010 Earthworks Considerations..... 15

APPENDICES

APPENDIX A PROJECT DRAWINGS
APPENDIX B DCP COMPLIANCE TABLE
APPENDIX C AHIMS SEARCH RESULT

1. INTRODUCTION

Premise has been commissioned by Housing Plus to prepare a Statement of Environmental Effects (SEE) to accompany a Development Application (DA) for the development of a group home and associated works at 271 Bernhardt Street, East Albury (Lot 1 DP38393).

The site is located in the Albury City Council (ACC) Local Government Area (LGA). Development for the purposes of a group home is permitted with consent in Zone R1 General Residential that applies to the site under clause 2.3 of the *Albury Local Environmental Plan 2010* (ALEP 2010).

Housing Plus is a Tier 1 community housing provider which provides affordable housing, homelessness services, domestic and family violence service, post-release services, home modifications, employment pathways and innovative services. The proposed group home forms part of the Housing Plus "Core and Cluster" domestic and family violence program, providing a safe haven for women and children escaping and recovering from domestic violence.

Other provisions applying under the ALEP 2010 include a minimum subdivision lot size of 450m² under clause 4.1, earthworks considerations under clause 7.1, and essential services considerations under clause 7.6.

This SEE has been prepared pursuant to the relevant provisions of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) and *Environmental Planning and Assessment Regulation 2021* (the EP&A Regulation) and is provided in the following format.

- **Section 2** of this report provides a description of the subject site and its locality.
- **Section 3** outlines the proposed development.
- **Section 4** details the planning framework applicable to the subject site and proposed development.
- **Section 5** identifies the impacts of the proposed development.
- **Section 6** provides a conclusion to the SEE.

1.1 Background to the Core and Cluster Model

Domestic Violence NSW, the peak body for specialist and family violence services in NSW, reports that 1 in 4 Australian Women (23%) have experienced physical or sexual violence by a current or former intimate partner since the age of 15¹.

While there are many other statistics which may be cited in relation to the prevalence and nature of domestic violence, the key message is that domestic violence has a serious impact on women's health, which contributes to a range of negative health outcomes, including poor mental health, problems during pregnancy and birth, alcohol and illicit drug use, suicide, injuries, and homicide².

In October 2021, the NSW Government announced funding of \$484.3 million to provide long term infrastructure to support women and children escaping domestic violence. Specifically, \$426.6 million is designated to support the Core and Cluster Program.

The Core and Cluster model is an accommodation model that seeks to improve the quality of accommodation available for women and children seeking refuge from domestic violence. Traditionally, accommodation has been provided in the form of share house environments which required residents to share all amenities and facilities other than bedrooms. The Core and Cluster model improves on the former share house model by

^{1,1} <https://www.dvns.org.au/domestic-family-and-sexual-violence-statistics/>

providing self-contained living quarters for each resident, including private kitchen and bathroom facilities. Notwithstanding, the Core and Cluster model continues to operate as a single household.

Under the Core and Cluster model, self-contained living quarters (the 'Cluster') are located in close proximity to communal facilities (the 'Core'), which provide access to services such as counselling, legal assistance, education and employment support as well shared spaces.

The fundamental principle of the Core and Cluster model is that the residents have direct access to critical support and assistance while also having the personal space and necessary amenities to effectively deal with personal issues and trauma.

It is relevant to acknowledge that the Victorian *Royal Commission into Family Violence 2016* (the 'Commission') has driven the implementation of the 'Core and Cluster' model across Australia³. Specifically, the Commission has stated the following:

The 'core and cluster' refuge model is preferable to the communal model because it provides self-contained facilities for families while maintaining the positive aspects of communal living, such as onsite support from workers and opportunities to spend time with other families who might have had similar experiences. With this configuration, women can have friends and family visit, have their teenage boys live with them, and have room for attendant carers and other supports. A further benefit is that the core and cluster model provides a base for services, such as legal services, to meet with residents, as well as ensuring that the physical environment has space for child and youth-sensitive facilities, with play areas, books, toys and private space for young people.⁴

Further, the Commission has highlighted that it is particularly concerned that the stress and anxiety some women experience in group living (i.e. a traditional share house) contributes to their decision to return home to an unsafe environment⁵.

1.2 About the Applicant – Housing Plus

Housing Plus is a Tier 1 community housing provider that specialises in homelessness, domestic and family violence services in regional areas of NSW, including Orange, Dubbo, Bathurst and Mudgee.

Housing Plus has a 30-year history of providing client-centred tenancy and property management services in the Central West and Western regions of NSW.

Critically, Housing Plus has been responsible for one of two trials of the 'Core and Cluster' model in NSW, being 'The Orchard' in Orange.

The Orchard is a purpose-built women and children's domestic and family violence centre. It consists of a 'core' building containing meeting rooms, communal facilities, a crèche and overnight accommodation for one member of staff; and a 'cluster' of three duplex buildings, each containing two two-bedroom villas (six units in total). These are fully enclosed and set in landscaped gardens. The development is built to a 7-star rating under the Nationwide House Energy Rating Scheme.

³ https://www.facs.nsw.gov.au/_data/assets/pdf_file/0007/831670/Core-and-Cluster-Discussion-Paper-May-2022.pdf

^{4,5} http://rcfv.archive.royalcommission.vic.gov.au/MediaLibraries/RCFamilyViolence/Reports/RCFV_Full_Report_Interactive.pdf

2. THE SITE & ITS LOCALITY

2.1 The Locality

As shown in **Figure 1**, the site consists of an L-shaped battle-axe lot within a street block formed by Bernhardt Street to the north, Jamieson Street to the west, Walsh Street to the south and Percy Street and Fletcher Street to the east.

Bernhardt Street connects to East Street to the east of the site via Walsh Street. East Street connects industrial (near Albury Airport) and residential land uses and the Albury Base Hospital to the Riverina Highway in the north and the Hume Highway to the south-west.

Development within the locality is predominately comprised of residential land uses characterised by single and two story detached dwellings and scattered multi dwelling housing. Established residential built form is characterised by brick and weatherboard construction and tiled roofs whilst more recent development is characterised by painted or rendered finish and metal roofs.

2.2 The Site

As shown in **Figure 1**, the site consists of an L-shaped battle-axe lot with an area of 3,916.15m² and a street frontage of 15.24 metres to Bernhardt Street to the north. Land on the northern side of Bernhardt Street is occupied by single storey detached dwelling houses.

The 44.2 metre-long access handle runs between 269 Bernhardt Street to the east and 464 Jamieson Street to the west. The former is occupied by a single storey detached dwelling whilst the latter is occupied by a multi dwelling housing development comprising seven dwellings.

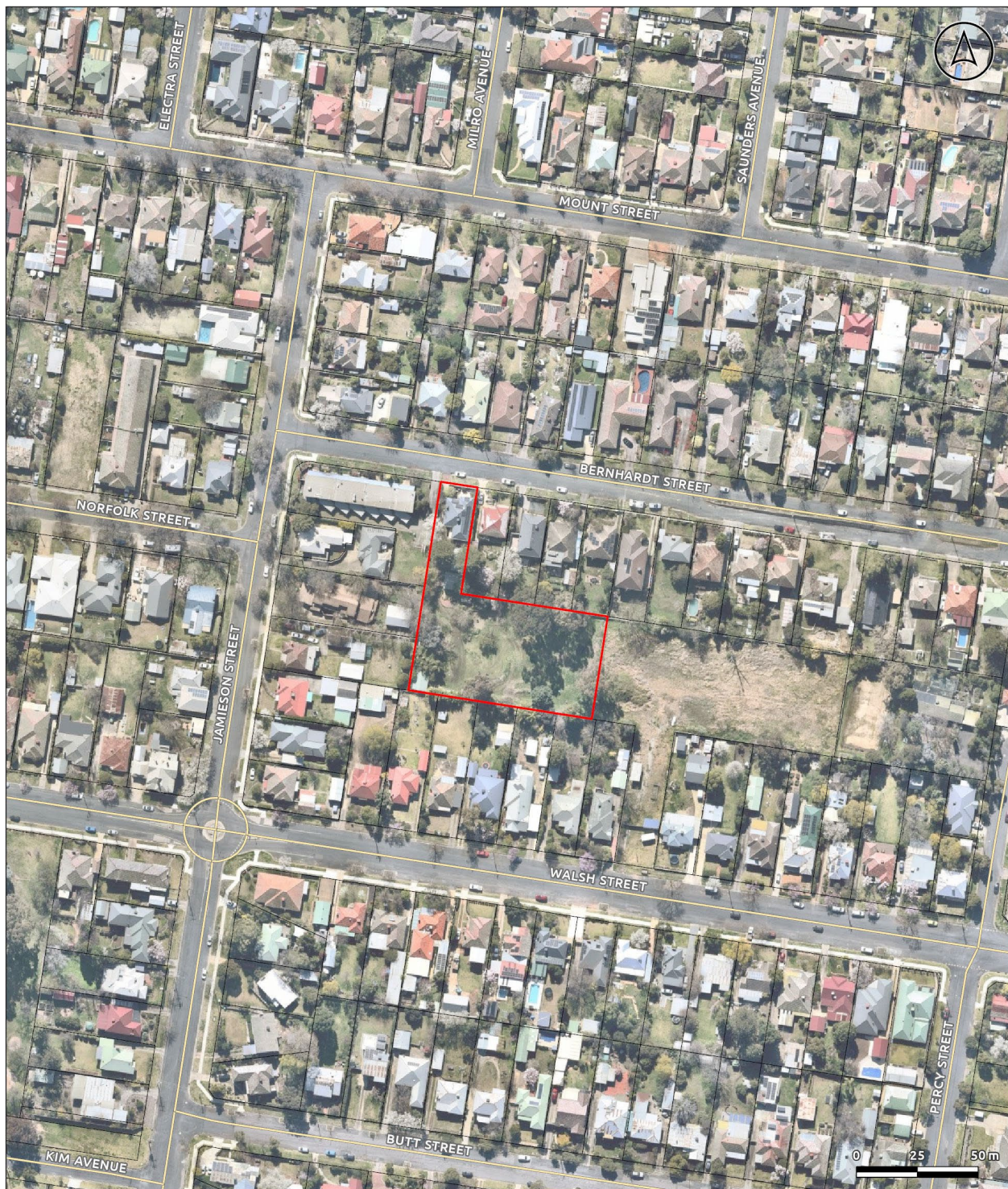
The remainder of the 86.68 metre-long western boundary adjoins two residential lots whilst the northern boundary has a length of 60.96 metres shared with four residential lots and the southern boundary has a length of approximately 76.24 metres shared with five residential lots. All of the residential lots are occupied by single storey detached dwelling houses, with the exception of one of the lots adjoining the western boundary (456 Jamieson Street) that is occupied by a single storey attached dual occupancy.

The eastern boundary has a length of 42.61 metres and is shared with 254 Walsh Street. 254 Walsh Street is also a battle-axe lot and is presently vacant. A review of ACC's DA tracker identified that the development of 254 Walsh Street may benefit from an approval enabling the development of 16 two storey houses. It is unknown if the approval remains current.

The site slopes downwards from both its northern, Bernhardt Street frontage and its eastern boundary that adjoins 254 Walsh Street to the south-western corner. It is currently occupied by a single storey detached dwelling house near the Bernhardt Street frontage, driveway, several detached outbuildings and scattered trees.

A six-metre-wide stormwater drainage easement runs along the southern boundary of the site before turning north-west to the back of 452 and 456 Jamieson Street.

Figure 1 – The Site Locality



Sources: © State of NSW, Department of Customer Service, Spatial Services 2023
Nearmap 2023

GDA2020 MGA Zone 55 File: 222173_01_MASTER.aprx Prepared By: adam.davis Date: 07/02/2023

Legend

-  Site
-  Cadastre
-  Road

Figure 2 – The Subject Site



Legend

- Site
- Cadastre
- Road

Sources: © State of NSW, Department of Customer Service, Spatial Services 2023
Nearmap 2023

GDA2020 MGA Zone 55 File: 222173_01_MASTER.aprx Prepared By: adam.davis Date: 07/02/2023

3. THE DEVELOPMENT

3.1 Development Description

As detailed in the architectural plans prepared by Housing Plus (refer to **Appendix A**), the proposed development involves demolition of existing structures and removal of vegetation to enable construction of a group home consistent with the Housing Plus "Core and Cluster" model, described in **Section 1.1** of this SEE.

Vehicular access is to be provided via a driveway extending from Bernhardt Street which runs southwards, past a bin area, storage and the "Core" to an at-grade parking area providing parking for nine vehicles. The Core comprises two single building, one accommodating reception/check-in, accessible bathroom, two consultation rooms, office and lunch room, the other accommodating communal kitchen, lounge, dining, accessible bathroom, children's space and study nooks.

The "Cluster", located east of the Core, comprises seven units positioned around a common open space. Each of the dwellings is provided with open plan kitchen, living and dining which overlook the common open space to create opportunities for casual surveillance. Four of the seven units are provided with one bedroom, two are provided with two bedrooms and one is provided with three bedrooms. All are provided with rear private open space.

The central common open space includes landscaped area, children's playground and seating area, and provides access to the communal rooms of the Core building and the dwellings that comprise the "Cluster". A yarning circle is to be located south of the communal building.

Each dwelling is to be provided with rainwater tanks for on-site stormwater reuse. Any runoff that isn't detained on-site is to drain offsite via underground drainage infrastructure in the existing six metre-wide drainage easement along the south boundary of the site.

4. STATUTORY PLANNING FRAMEWORK

4.1 Object of the EP&A Act

In New South Wales (NSW), the relevant planning legislation is the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EP&A Act instituted a system of environmental planning and assessment in NSW and is administered by the Department of Planning, Industry & Environment (DPIE). In 2017, the Act was amended to provide a range of updated objects. The objects of the EP&A Act are:

- (a) *To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*
- (b) *To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
- (c) *To promote the orderly and economic use and development of land,*
- (d) *To promote the delivery and maintenance of affordable housing,*

- (e) *To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
- (f) *To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
- (g) *To promote good design and amenity of the built environment,*
- (h) *To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*
- (i) *To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,*
- (j) *To provide increased opportunity for community participation in environmental planning and assessment.*

The proposed development is not considered to be antipathetic to the above objects.

4.2 Section 1.7

Section 1.7 of the EP&A Act provides that the EP&A Act has effect subject to the provisions of Part 7 of the *Biodiversity Conservation Act 2016* (the BC Act) and Part 7A of the *Fisheries Management Act 1994* (the Fisheries Act).

Part 7 of the BC Act relates to biodiversity assessment and approvals under the EP&A Act. Under Section 7.2 of the BC Act, there are three triggers for development or activities to be considered as “likely to significantly affect threatened species”. Under Section 7.7(2) of the BC Act, the development application is required to be accompanied by a biodiversity development assessment report (BDAR) if it meets one or more of conditions for “likely to significantly affect threatened species”.

The proposed development is considered against the three triggers in **Table 1** below.

Table 1 – Section 7.2 of the BC Act

Development or an activity is likely to significantly affect threatened species if:		Comment:
(a)	<i>it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or</i>	The site has scattered vegetation throughout but concentrated in the central portion mostly in form of small trees. The site is in highly disturbed urban context. Removal of the existing vegetation on site is highly unlikely to affect threatened species or ecological communities or their habitats, according to the test in section 7.3
(b)	<i>the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or</i>	Section 7.4 of the BC Act provides that development exceeds the biodiversity offsets scheme threshold if it involves the clearing of native vegetation declared in the <i>Biodiversity Conservation Regulation 2017</i> (the BC Regulation). Section 7.1 of the BC Regulation provides that

		development exceeds the threshold if is or involves the clearing of native vegetation: 1. Of an area declared by Section 7.2 of the BC Regulation as exceeding the threshold; or 2. On land included on the Biodiversity Values Map. With respect to the first item, Section 7.2 of the BC Regulation provides clearing thresholds depending on the minimum lot size applying to the land under an environmental planning instrument (or the actual size of the land where no minimum lot size applies). The applicable clearing threshold is 0.25 hectares as the minimum lot size under the ALEP 2010 is 450m². Proposed native vegetation removal is unlikely to exceed 0.25 hectares as all grasses are exotic and a number of the trees are fruit trees, etc. (Northern Tree Care 2023; refer to Appendix B). With respect to the second item, the site is not included on the Biodiversity Values Map. For the reasons set out above, the proposed development does not exceed the biodiversity offsets scheme threshold and a BDAR is not required.
(c)	<i>it is carried out in a declared area of outstanding biodiversity value.</i>	The site is not located within a declared area of outstanding biodiversity value. Accordingly, a BDAR is not required.

4.3 Subordinate Legislation

The EP&A Act facilitates the preparation of subordinate legislation, consisting of:

- Environmental Planning Instruments (EPIs) (including State Environmental Planning Policies (SEPP), Local Environmental Plans (LEP), and deemed EPIs; and
- Development Control Plans (DCP).

In relation to the proposed development, the relevant subordinate legislation includes:

- Albury Local Environmental Plan 2010 (the ALEP 2010);
- State Environmental Planning Policy (Biodiversity and Conservation) 2021 (the Biodiversity SEPP);
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (the BASIX SEPP); and
- State Environmental Planning Policy Resilience and Hazards) 2021 (the Hazards SEPP); and
- Albury Development Control Plan 2010.

The requirements of these are discussed in **Section 4.5** of this Statement.

4.4 Integrated Development

Section 4.46 of the EP&A Act states that development requiring consent and approval under legislation set out under that section is "integrated development". The proposed development does not require approvals under any of the legislation listed under Section 4.46. Accordingly, the development is not integrated development.

4.5 Planning Instruments

4.5.1 LOCAL ENVIRONMENTAL PLAN

4.5.1.1 Introduction

The *Albury Local Environmental Plan 2010 (LEP)* is the applicable local planning instrument applying to the land. The aims of the LEP are:

(aa) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts,

(a) to give effect to the desired outcomes, principles and actions contained in the Council's adopted strategies and policy documents, and

(b) to promote sustainable urban development by providing for efficient management of urban growth and resource utilisation, and

(c) to promote a city for the people, with a high level of social and physical amenity and a diversity of activities and uses, and

(d) to maintain or improve biodiversity across Albury, and to avoid significant impacts on matters of environmental significance.

The proposed development is not antipathetic to the aims of the plan and is specifically consistent with the aim (c).

4.5.1.2 Mapping

A review mapping via the NSW Planning Portal identifies the following applicable mapped constraints:

Table 2 – ALEP 2010 Mapping

Constraint	Applicability	Section addressed
Land Application Map	Applies	N/A
Land Zoning Map	R1 General Residential	4.5.1.3
Lot Size Map	Minimum Lot Size – 450 m ²	Subdivision not proposed
Heritage Map	N/A	N/A
Height of Buildings Map	N/A	N/A
Floor Space Ratio Map	N/A	N/A
Urban Release Area Map	N/A	N/A

Constraint	Applicability	Section addressed
Land Reservation Acquisition Map	N/A	N/A
Natural Resources Sensitivity – Water Map	N/A	N/A
Landfill Buffer Map	N/A	N/A
Land Reclassification Map	N/A	N/A
Additional Permitted Uses Map	N/A	N/A

The above matters, together with other relevant LEP clauses, are discussed in the following sections.

4.5.1.3 Land Use Zoning

As shown in **Figure 3**, the site is located within land to which the R1 General Residential zone applies under clause 2.3 of the ALEP 2010.

The proposed land use of group homes is permitted with consent in the R1 General Residential zone. The proposed development is consistent with the objectives of the control as demonstrated in **Table 3**.

Table 3 – ALEP 2010 R1 General Residential Zone Objectives

Objective:	Comment:	
<i>To provide for the housing needs of the community.</i>	The proposed development provides for the housing needs of the community by providing eight dwellings and associated facilities to support the victims of domestic violence and their dependents.	✓
<i>To provide for a variety of housing types and densities.</i>	Each of the independent living units is provided with open plan kitchen, living and dining area which generally overlook the common open space to create opportunities for casual surveillance. Two of seven dwellings are provided with two bedrooms; two dwellings are studio apartments; and the remainder are provided with a single bedroom. One of the single bedroom dwellings is accessible unit.	✓
<i>To enable other land uses that provide facilities or services to meet the day to day needs of residents.</i>	The proposed development provides for the day to day needs of domestic violence victims and their dependents.	✓

Figure 3 – ALEP 2010 Land Use Zoning Map



Sources: © State of NSW, Department of Customer Service, Spatial Services 2023
State of NSW, Department of Planning and Environment 2023

GDA2020 MGA Zone 55 File: 222173_01_MASTER.aprx Prepared By: adam.davis Date: 23/05/2023

Legend

-  Site
-  Cadastre
-  Road
- Land Zoning (LZN)**
-  R1
-  RE1

4.5.1.4 Earthworks

Clause 7.1(2) of the ALEP 2010 provides that development consent is required for earthworks unless the work does not alter the existing ground level by more than 600 millimetres, is exempt under the ALEP 2010 or another EPI, or ancillary to other development for which consent has been given. If consent is required, the consent authority is required to consider the matters in clause 7.2(3) before granting consent.

Earthworks associated with the proposed development are not exempt under the ALEP 2010 or another EPI or ancillary to development for which consent has been given. Accordingly, the proposed earthworks are considered in the context of the matters for consideration in clause 7.1(3) in **Table 4**.

Table 4 – ALEP 2010 Earthworks Considerations

	Matters for Consideration	Comment	
(a)	<i>the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,</i>	Earthworks associated with the proposed development are unlikely to impact: • Soil stability in the locality due to the site's gentle slope; and Drainage patterns in the locality as the existing drainage easement running along the site's southern boundary is to be retained.	✓
(b)	<i>the effect of the proposed development on the likely future use or redevelopment of the land,</i>	The site is unlikely to be used for any other purposes in the short, medium or long term.	✓
(c)	<i>the quality of the fill or the soil to be excavated, or both,</i>	It is anticipated that the majority of excavated soils will be able to be re-used on-site. Any soils that are to be removed from or imported into the site will comply with ACC standards.	✓
(d)	<i>the effect of the proposed development on the existing and likely amenity of adjoining properties,</i>	Earthworks associated with the proposed development do not result in any amenity impacts to adjoining properties.	✓
(e)	<i>the source of any fill material and the destination of any excavated material,</i>	It is anticipated that the majority of excavated soils will be able to be re-used on-site. The source of any soils to be removed from or imported into the site will comply with ACC standards.	✓
(f)	<i>the likelihood of disturbing relics,</i>	Refer to Section 5.3 .	✓
(g)	<i>the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.</i>	The site is not mapped as intersecting with any mapped watercourse, nor it is mapped as being located within a mapped drinking water catchment or environmentally sensitive area.	✓

4.5.1.5 Essential services

Clause 7.6(2) of the ALEP 2010 provides that development consent must not be granted unless the council is satisfied that services essential for the proposed development are available or that arrangements have been made to make them available when required. Essential services include the supply of water and electricity, disposal and management of sewage, stormwater drainage or on-site conservation and suitable road access.

Servicing is considered in **Section 5.3**. Suitable access will be provided from Bernhardt Street, as will electricity, telecommunications and potable water. Stormwater that isn't infiltrated in the substantial landscaped areas or re-used in rainwater tanks will drain to ACC infrastructure in accordance with the civil plans (Tricend 2023; refer to **Appendix A**). Sewer will also be connected to ACC infrastructure in accordance with the civil plans (Tricend 2023; refer to **Appendix A**).

It is anticipated that these networks can be augmented to accommodate any additional demand generated by the development.

4.5.2 STATE ENVIRONMENTAL PLANNING POLICY

4.5.2.1 State Environmental Planning Policy (Biodiversity and Conservation) 2021

Section 2.3 of the Biodiversity SEPP provides that Chapter 2 of the Biodiversity SEPP applies to non-rural areas of the State by reference to LGAs and land use zones. Where the Chapter applies, Section 2.6 of the Biodiversity SEPP prevents clearing of:

- Vegetation in a non-rural area of the State to which Part 2.3 of the Biodiversity SEPP applies without the authority conferred by a permit granted by Council; or
- Native vegetation in a non-rural area of the State that exceeds the biodiversity offsets scheme threshold without approval by the Native Vegetation Panel under Part 2.4 of the Biodiversity SEPP.

With respect to the first point, Section 2.9 of the Biodiversity SEPP provides that a development control plan may declare any vegetation in any non-rural of the State as vegetation to which Part 2.3 applies by reference to the species, size or location of vegetation or presence of vegetation in an ecological community or in the habitat of a threatened species.

Part 5 of the *Albury Development Control Plan 2010* (the ADCP 2010) declares the following vegetation for the purposes of Chapter 2 of the Biodiversity SEPP:

- a) a tree 3 metres or more in height and with a trunk circumference of 300mm or more at 1.3 metres above ground level;*
- b) native vegetation in specified areas or identified on the Extant Vegetation DCP Map;*
- c) located within 100 metres of the Murray River or within 40 metres of the Murray River on R5 – Large Lot Residential zone or urban release areas; or*
- d) listed on the Significant Tree Register.*

Development consent for the removal of several trees with a height of three or more metres and a trunk circumference of 300mm at 1.3 metres above ground level is sought as part of this DA. However:

- None of these trees are identified on the Extant Vegetation DCP Map;
- None are located within 100 metres of the Murray River;

- None are identified Significant Tree Register (could be identified on ACC's website at the time of preparation of this SEE);
- A significant proportion are fruit trees, etc. (Northern Tree Care 2023; refer to **Appendix B**); and
- Substantial planting of native vegetation is proposed as part of this development, ensuring that it will result in a significant improvement in canopy cover for the benefit of both future residents and biodiversity.

With respect to the second point, the development does not exceed the biodiversity offsets scheme threshold as discussed in **Section 4.2**. Accordingly, approval by the Native Vegetation Panel is not required.

4.5.2.1 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

Section 6 of the BASIX SEPP provides that the BASIX SEPP applies to proposed BASIX affected development and proposed BASIX optional development. Under the dictionary attached to the EP&A Regulation:

- Is not BASIX excluded development, being development for the purposes of a garage, storeroom, carport, gazebo, verandah or awning, alteration to a building listed on the State Heritage Register, alteration of a building resulting in a space that cannot be fully enclosed or any other BASIX excluded development declared by the Planning Secretary; and
- Involves the erection of (not relocation), change of use to or alteration exceeding \$50,000 to a BASIX building (a building containing at least one dwelling, not including hotel or motel accommodation or boarding house, hostel or co-housing accommodation more than 12 residents or with a gross floor area exceeding 300m²) or a swimming pool and/or spa servicing with a combined capacity of 40,000L or more servicing only one dwelling.

As the development subject of this application is not BASIX excluded development and seeks consent for the erection of a BASIX building, the development is BASIX affected development. Accordingly, a BASIX certificate issued no earlier than three months before the day on which the application is lodged is provided as part of the application in accordance with clause 27 of the EP&A Regulation.

4.5.2.2 State Environmental Planning Policy (Housing) 2021

Chapter 3, Part 2 of the Housing SEPP relates to group homes. Section 61 in Chapter 3, Part 2 provides that development for the purposes of a group home may be carried out without consent if it does not contain more than ten bedrooms within one or more group homes on a site and if it is carried out by or on behalf of a public authority. Alternatively, it must be carried out without consent via either a DA or complying development certificate (CDC) application.

Section 62 provides that a consent authority must not refuse consent to development for the purpose of a group home unless it has made an assessment of the community need for the group home. It also must not impose a condition on a consent granted for a group home only because the development is for the purposes of a group home.

Whilst the proposed development is carried out on behalf of a not-for-profit organisation, it is not carried out on behalf of a public authority. Accordingly, a DA is required. ACC may be satisfied that there is a clear community need for the group home the subject of this application as it will provide accommodation and associated services to survivors of domestic violence, an increasingly important issue nation-wide as well as in Albury (refer to **Section 1.1**).

4.5.2.3 State Environmental Planning Policy (Resilience and Hazards) 2021

Section 4.4 of the Hazards SEPP provides that Chapter 4 applies to the whole of the State. Under Section 4.6(1) of the Hazards SEPP, the consent authority is prevented from granting consent unless it has considered whether the land is contaminated and, if contaminated, whether the land is suitable in its contaminated or will be suitable after remediation for the purpose for which the development is proposed to be carried out. If the land requires remediation to be made suitable, the consent authority must be satisfied that the land will be remediated before the land is used for the purpose for which the development is proposed to be carried out.

The site is unlikely to be contaminated due to being substantially separated from the four sites recorded on the NSW EPA Contaminated Land Record (viewed 23 May 2023) in the Albury LGA, including:

- Xpress Service Station at 616/624 Young Street, approximately 1.2 km north-west of the site.
- Former Gasworks and surrounding commercial land at 441 Kiewa Street, approximately 1.8 km west of the site.
- Former Thales Australia site at 161 Fallon Street, approximately 1.8 km north of the site.
- Bp Border Service Station at the corner of Ebdon Street and Wodonga Street, approximately 2.1 km west of the site.

4.5.3 DEVELOPMENT CONTROL PLANS

4.5.3.1 Albury Development Control Plan 2010

The Albury Development Control Plan 2010 (DCP) applies to the site. **Appendix B** provides a summary of relevant matters raised via the DCP together with an assessment of project specific compliance.

As outlined at **Appendix B**, the development is compliant with all relevant provisions of the Development Control Plan with the exception of those relating to the separation from other multi dwelling housing development and solar access to private open space.

Each of the non-compliances are addressed in the following sections.

4.5.3.1.1 Separation from other multi dwelling housing development

The site adjoins an existing multi dwelling housing development at 464 Jamieson Street, non-compliant with Division E, cl. 3(a)(i) which requires that multi dwelling housing and/or residential flat building sites are located at least one lot apart in existing urban areas.

Whilst the proposed development is for the purposes of a group home (not multi dwelling housing), the outcome is acceptable as it remains consistent with the applicable Performance Criteria, namely:

- It enables the provision of a variety of housing stock that provides accommodation and associated services to survivors of domestic violence, an increasingly important issue nation-wide as well as in Albury (refer to **Section 1.1**); and
- It remains compatible with the streetscape and character of the locality due to being located down a 44.2 metre-long access handle within a battle-axe lot, ensuring it will not be viewed in the same context as the existing multi dwelling housing development at 464 Jamieson Street.

4.5.3.1.2 Solar access to private open space

Whilst windows associated with living spaces in each of the units in the proposed development will receive at least three hours of solar access between 9am and 3pm on the winter solstice, only the northern units (Units 1, 2, 3 and 4) will receive three hours of solar access to the private open space. The non-compliance with

Division E, cl. 3(e)(i) with respect to solar access to private open space associated with the southern units (Units 5, 6 and 7) is acceptable as:

- Units forming part of the group home would be used on a temporary, short term basis, ensuring that private open space does not need to have the same level of amenity as would a dwelling in multi dwelling housing development;
- Residents would have access to a central common open space (including landscaped area, seating areas and children's playground) with an area of 222.99m², exceeding the minimum 110m² required under Division E, cl. 3(e)(vii);
- Enforcing compliance would require the relocation of the private open space associated with Units 5, 6 and 7 to the northern side of the dwellings, compromising their privacy when viewed from the central common open space; and
- The development remains consistent with the applicable Performance Criteria in that sunlight access to primary indoor living areas and private open space is optimised to the extent possible without compromising privacy of the private open space (refer above) and reliance on artificial heating in winter is minimised through the provision of north-facing windows.

4.5.3.1.3 Area of private open space

Each unit in the proposed development is to be provided with less than 24m² of private open space, non-compliant with Division E, cl. 3(e)(v). The non-compliance is acceptable as:

- Units forming part of the group home would be used on a temporary, short term basis, ensuring that private open space does not need to have the same level of amenity as would a dwelling in multi dwelling housing development;
- Residents would have access to a central common open space (including landscaped area, seating areas and children's playground) with an area of 222.99m², exceeding the minimum 110m² required under Division E, cl. 3(e)(vii); and
- The development remains consistent with the applicable Performance Criteria in that each private open space has sufficient area to accommodate outdoor leisure and dining, gardening, landscaping and clothes drying appropriate to the size of the unit (one, two or three bedroom) and the nature of the use (temporary, short term basis).

5. IMPACTS, SITE SUITABILITY & THE PUBLIC INTEREST

5.1 Context and Setting

The immediate vicinity of the proposed development is characterised by residential lots occupied by detached dwelling houses and scattered multi dwelling housing. Regardless of land use, residential development is characterised by brick or weatherboard construction with pitched roofs of tiled or metal finish.

The proposed development is consistent with its context and setting, comprising five single storey buildings. The dimensions of the building envelopes are generally consistent with that of existing residential development in the locality, as is their materiality. External walls in all buildings are to be constructed of brick whilst roofs are to be pitched with metal finish.

The impact of the proposed development on the context and setting is further mitigated by being located down a 44.2 metre-long access handle in a battle-axe lot where it will have minimal visibility from surrounding

streets. Landscaping throughout the site, to be detailed following DA approval, will also soften the appearance of the proposed development from neighbouring properties and the public domain.

The proposed development is considered unlikely to result in any privacy impacts to neighbouring properties due to the single storey building height and boundary setbacks exceeding the minimum required. These factors also ensure that there will not be any overshadowing of neighbouring properties.

5.2 Access, Transport and Traffic

The proposed development will result in traffic during the construction phase associated with construction staff coming to and from the site in light vehicles, construction materials and equipment being delivered to and taken from the site in heavy vehicles and excess soils, vegetation and other waste being taken away from the site in heavy vehicles. However, these impacts are expected to be short-lived and manageable through construction in accordance with a construction management plan, to be provided following DA approval.

Once operational, vehicular access to the site is to continue to be via the site's frontage to Bernhardt Street. The access location has good sightlines along Bernhardt Street, which is expected to experience relatively low levels of traffic due to being located within a predominantly low density residential area. The vehicular access is to lead to the proposed at-grade parking, accommodating parking for nine vehicles including one disabled spaces, compliant with the minimum required under ADCP 2010.

Vehicles accessing the site will generate additional traffic in the surrounding network. The impacts of the additional traffic is expected to be acceptable as:

- In the Housing Plus experience in operating other domestic and family violence accommodation elsewhere in NSW, a significant proportion of residents will arrive at the site by taxi or will be dropped by a trusted family member or friend;
- Once prospective residents accepted to reside in the facility, it is anticipated that they will undertake far fewer trips to and from the site than residents of a typical dwelling house as a high proportion of services are delivered to the site or performed by staff (e.g. bulk grocery deliveries);
- Vehicle movements are expected to be limited to light vehicles and occasional vans and small trucks, resulting in far less traffic impacts to the surrounding road network and far less noise and vibration impacts to residential dwellings than the heavy vehicle movements associated with the former industrial use of the site; and
- The site benefits a high level of accessibility via public transport, being less than a 200 metre walk to the nearest bus stop along Jamieson Street, an approximate 1.1km walk to Albury Train station. The East Albury bus service, route 'EA', notably provides access to a collection of shops and commercial services located in the centre of Albury along Dean Street approximately 1.4km to the east of the site. The timetable for EA is operational:
 - Monday to Friday with 8 services between 7:20AM and 5:45PM and
 - Saturdays with 3 services between 9:30 AM-12:30PM

5.3 Servicing

Suitable access will be provided from Bernhardt Street, as will electricity, telecommunications and potable water. Stormwater that isn't infiltrated in the substantial landscaped areas or re-used in rainwater tanks will drain to ACC infrastructure in accordance with the civil plans (Tricend 2023; refer to **Appendix A**). Sewer will also be connected to ACC infrastructure in accordance with the civil plans (Tricend 2023; refer to **Appendix A**).

It is anticipated that these networks can be augmented to accommodate any additional demand generated by the development.

5.4 Heritage

The site is not identified as being or adjoining items of heritage significance or within a heritage conservation area under the ALEP 2010. It is unlikely to contain Aboriginal sites or places as it is located within a disturbed, urban setting. This is supported by the results of the Aboriginal Heritage Information Management System (AHIMS) search on 22 May 2023 which did not identify any Aboriginal sites or places within a 50 metre buffer of the site (refer to **Appendix C**).

5.5 Other Land Resources

The proposed development will not have any impact on other land resources due to being for a permitted use within a residential zone in an urbanised area.

5.6 Stormwater and Flooding

The site does not contain any mapped watercourses, nor is it located within 40 metres of the top of bank of any mapped watercourses. It is not identified as being within the flood planning area under Albury Flood Planning Map in the ADCP 2010.

Stormwater that isn't infiltrated in the substantial landscaped areas or re-used in rainwater tanks will drain to ACC infrastructure in accordance with the civil plans (Tricend 2023; refer to **Appendix A**).

5.7 Air and Microclimate

The proposed development will result in negligible air and microclimate impacts during construction. However, these are expected to be short-lived and manageable through construction in accordance with a construction management plan, to be provided following DA approval.

Once operational, the proposed development will not result in any air and microclimate impacts.

5.8 Flora and Fauna

The proposed development is unlikely to have a significant impact on fauna given the site's urbanised setting. It will have minimal impact on fauna as all grasses are exotic and a number of the trees are fruit trees (Northern Tree Care 2023; refer to **Appendix B**).

Substantial planting of native vegetation is proposed as part of this development, ensuring that it will result in a significant improvement in canopy cover for the benefit of both future residents and biodiversity.

5.9 Waste

The proposed development will result in waste impacts during construction associated with demolition of built form and removal of vegetation. Any excavated material will be reused on-site to the maximum extent possible. Any surplus excavated material and cleared vegetation will be deposited at an approved waste facility in accordance with ACC requirements.

Once operational, the proposed development will generate low levels of household and office waste that will be stored in a bin area near the street frontage. The location of the bin storage enables ease of access by the council standard waste vehicles or contracted waste vehicles.

5.10 Noise & Vibration

The proposed development will result in noise and vibration impacts during the construction phase associated with construction activities and construction vehicles and equipment being delivered to and from the site, construction staff coming to and from the site, construction materials being delivered to the site, excess soils, vegetation and other waste being taken away from the site (refer to **Section 5.9**). However, these are expected to be short-lived and manageable through construction in accordance with a construction management plan, to be provided following DA approval.

Once operational, the proposed development will not result in any vibration impacts and noise impacts are expected to be consistent with seven typical dwelling houses.

5.11 Natural Hazards

The site does not contain any land identified on the Bush Fire Prone Land Map. The closest mapped Bush Fire Prone Land, a vegetation buffer for category 1 bushfire prone land, is located approximately 220 m north-east of the site boundary.

5.12 Safety, Security and Crime Prevention

The guidelines prepared by the NSW Department of Urban Affairs and Planning (DUAP 2001) identify four (4) Crime Prevention Through Environmental Design (CPTED) principles to be considered in a Development Application to ensure developments do not create or exacerbate crime risk. The four key principles of the guidelines include surveillance, access control, territorial reinforcement, and space management.

The proposed development will rely on closed-circuit television (CCTV) to monitor access points, the boundaries of the site and internal areas. Windows from the Core building enable views to the driveway and at-grade carpark, the central communal area and entries to individual units. Similarly, windows associated with living rooms in the units enable casual surveillance of the central communal area, as well as entries to other dwellings.

The proposed development ensures access control and territorial reinforcement through the provision of 1.8 metre-high fencing around the facility that clearly delineates the site boundary from the public domain and neighbouring properties. This is combined with gates and doors throughout to ensure that persons are unable to access various zones in the facility without first being granted access by staff.

The proposed development will ensure space management through the employment of maintenance staff that will maintain the facility in a tidy condition.

5.13 Social Impact

As defined by the NSW Government Office on Social Policy, social impacts are significant events experienced by people as changes in one or more of the following are experienced:

- peoples' way of life (how they live, work or play and interact with one another on a day-to-day basis);
- their culture (shared beliefs, customs and values); or
- their community (its cohesion, stability, character, services and facilities).

Family, domestic and sexual violence is a major and, unfortunately, rapidly growing health and welfare issue in Australia. Domestic Violence NSW, the peak body for specialist and family violence services in NSW, reports that 1 in 4 Australian Women (23%) have experienced physical or sexual violence by a current or former intimate partner since the age of 15 .

Those suffering from domestic and family violence require acute and long-term assistance. As the epidemic of domestic and family violence grows, established facilities are facing increased pressure, especially in regional areas.

The proposed development will have a positive social impact, going some way towards meeting demand for emergency accommodation and professional services for victims. This includes legal, health and employment assistance, as well as other professional services. The significant public benefit provided by the development will far exceed any potential minimal impacts associated with the development as discussed in the preceding sections of this report.

5.14 Economic Impact

Housing Plus is a not-for-profit organisation providing crisis accommodation for victims of domestic and family violence.

The proposed development will have a positive economic impact during the construction phase, creating opportunities for a local construction contractor, equipment hire services and materials suppliers. At the operational phase, employment opportunities would include reception staff, social workers, groundskeepers, and security personnel. The proposed development will also create opportunities for local professionals such as legal, health and employment assistance professionals.

There is no evidence to suggest that development of accommodations for victims of domestic and family violence having a negative effect on property values of adjoining or nearby properties, especially where the accommodation is provided in a high quality facility delivered by a Tier-1 community housing provider.

5.15 Site Design and Internal Design

The proposed development has been designed with reference to the publicly available Design Guide: Specialist Domestic Violence Accommodation, prepared by Housing Plus and Custance Architects. The guideline establishes the following design standards for domestic and family violence accommodation (2022, pp. 38, 39):

- **Safety:** Good design supports a safety centred approach where clients, staff, and stakeholders feel safe. The physical building design will promote and ensure a safe and secure environment. Safety includes physical safety, as well as mental and emotional safety.
- **Privacy & Dignity:** Good design provides private spaces, as well as space for families to interact and be together without creating a sense of isolation. The built form provides good aesthetics both internal and external, that promotes a sense of self-worth and wellbeing.
- **Operational:** Good Design considers and integrates all operational requirements relevant to each provider. Building maintenance policy and strategies, facilities management and performance management will need to be considered. It should be easy to maintain, robust and liveable. The design should ensure maximum end value and future alternative use options.
- **Trauma Focused Design:** Good design means creating calm spaces that promote relaxation, health and recovery through light, texture, colour, space and the careful consideration of sensory factors relating to design. Spaces are welcoming, predictable and clients can have control of their environment.

- **Flexibility & Adaptability:** Good design means the accommodation can meet the needs of many different family structures and levels of independence. The building form is adaptable to meet different family sizes or accessibility needs.
- **Children Inclusive:** Good design is designed for children from newborns to teenagers. Children need to live, play and recover from trauma in a safe and secure environment. They need robust design and furnishings and a place of their own.
- **Culturally Appropriate Design:** Good design considers what people value as culture needs to enable them to feel immediately 'at home' and should consider the cultural, religious and familial demographic of the location.
- **Fit for Purpose:** Good design should consider the built form, urban context and streetscape, and through sympathetic material selection and well considered passive design integration, meet the clients' expectations and objectives and comply with the relevant codes for construction.

5.16 Construction Impacts

Construction impacts would be short-lived and manageable. The following standard construction management measures would be implemented to ensure impacts to the locality are minimised:

- Standard construction hours (7 am to 6 pm Monday to Friday and 8 am to 1 pm Saturday and at no times on Public holidays) would be implemented;
- Avoiding dust generating activities during windy and dry conditions; and
- Maintaining all equipment in good working condition such that the construction contractor and site manager ensure the prevention of the release of smoke by construction equipment, which would be in contravention of Section 124 of the *Protection of the Environment Operations Act 1997* and Clause 16 of the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

5.17 Cumulative Impacts

It is not anticipated that the development would result in any cumulative impacts including:

- individual impacts so close in time that the effects of one are not dissipated before the next (time crowded effects);
- individual impacts so close in space that the effects overlap (space crowded effects);
- repetitive, often minor impacts eroding environmental conditions (nibbling effects); or
- different types of disturbances interacting to produce an effect which is greater or different than the sum of the separate effects (synergistic effects).

There are no known major projects being undertaken in proximity to the site that would result in cumulative impacts during either the construction or operation phase of the proposed development.

6. CONCLUSION

6.1 Suitability of the site

The site is suitable for the proposed development because:

- It is located in highly disturbed urban context surrounded by residential properties;

- It has existing connections to essential services, understood to be capable of being augmented to accommodate any increase in demand generated by the proposed development (refer to **Section 5.3**);
- It is generally level, ensuring that minimal earthworks are required to enable the proposed development (refer to **Section 4.5.1.4**);
- The land has been historically used as a residential development and is unlikely to be contaminated;
- It is unlikely to contain Aboriginal sites or places due to being significantly disturbed (refer to **Section 5.4**);

6.2 The Public Interest

The proposed development is considered to be in the public interest for the following reasons:

- It is permitted with consent in and consistent with the objectives of Zone R1 General Residential in which the proposed development is to occur, as well as compliant and consistent with all other relevant development standards and provisions under the ALEP 2010;
- The development is generally compliant with other applicable development controls under the ADCP 2010. Non-compliances with the DCP are considered to be acceptable on merit in the circumstances of the unique features of the site and/or proposed development;
- The proposed development will have minimal environmental, social and economic impacts. On balance, it is anticipated that the proposed development will have a positive impact to the benefit of the wider community; and
- The site is suitable to the proposed development.

For the reasons set out above, the proposed development is supported subject to ACC's standard conditions of consent.



APPENDIX A

PROJECT DRAWINGS



APPENDIX B

ARBORIST REPORT



Arborcultural Impact Assessment Report

271 Bernhardt St Albury

Client

Housing Plus



Northern Tree Care
ABN 73 674 526 681
6 Abalone Place, Ballina. NSW 2478

File 2323
Version Draft
1 Nov 2023

Contents

1.	Introduction	3
2.	Scope	3
3.	Method	4
4.	Observations	5
5.	Tree Significance	6
6.	Tree Retention Values	6
7.	Discussion	7
8.	Recommendations	15
9.	Tree Protection	16
10.	References	18
11.	About The Author	19
12.	Attachment 1 Location	20
13.	Attachment 2 Aerial Photo	21
14.	Attachment 3 Survey	22
15.	Attachment 4 New Building	23
16.	Attachment 5. Significance of Trees	24
17.	Attachment 6. Photos	25

1. Introduction

1.1 Peter Gray has compiled this report on request from Housing Plus who are managing the construction of new housing on the site.

1.2 There are a number of trees growing on and adjacent to the site that may potentially be affected by the proposed development.

1.3 Following a Request for Further Information by Albury Council, this report has been amended to address the various issues raised in the RFI.

2. Scope

2.1 This report is an Arboricultural Impact Assessment Report. The trees planned to be retained in the development and some trees growing adjacent to the property are described in this report. The retention value of the trees is assessed. Where it is considered appropriate, recommendations for the management of the trees is made. Where trees are retained in the development recommendations for their protection during construction are made.

2.2 There are a number of existing trees growing on the site that are proposed to be removed to allow construction of the development. These trees are growing in the footprint of the development and ancillary infrastructure. They have not been considered in this report.

3. Method

3.1 The tree was assessed visually from the ground. The diameter at breast height (DBH) was measured at 1.4 m above the ground. The height of the tree was measured using a hypsometer or estimated where the view of the trees was partially obstructed. The conventions and methods recommended in the Australian Standard AS 4970-2009 Protection of trees on development sites was used to assess the tree.

3.2 The health and condition of the tree was assessed using the Visual Tree Assessment method (Mattheck & Breloer 2003). This is a method of assessing trees using the body language or shape and features of the tree to indicate their condition. These tree shapes or body language are a reliable indicator of the underlying condition of that part of the tree. The tree was identified using the signs and features present at the time of inspection.

3.3 The tree were inspected by Peter Gray of Northern Tree Care on 6th June 2023. This report is compiled from information gathered during the inspection and from plans and documents supplied by Housing Plus. The plans and documents include:

- *Proposed Albury Group Home*. Housing Plus. 14/05/2023.
- *Arborist Site Assessment*. Micks tree height reduction and shaping services.. May 2023

3.4 The *Arborist Site Assessment* was checked to verify trees growing on the site. It is not considered to be sufficient to use as part of the DA application.

4. Observations

4.1 The property subject of this report is described as 271 Bernhardt St East Albury. Lot 1 in DP 38393. The land is zoned R1. General Residential.

4.2 The property is bounded by Bernhardt St to the north, private residences and vacant land to the east and private residences to the south and west. The land is slopes down from Bernhardt Street. The soil is clay loam.

4.3 The land has a battle axe shape with a narrow strip running down from Bernhard Street to the main section of the property.

4.4 There are a number of existing trees growing on the land. Many of these are trees fruit trees and small shrubs. These trees are all planned to be removed for the development. They are also a number of substantial trees growing around the outside of the property. The trees proposed to be retained have been described in detail in Table One. Tree Data.

Table 1. Tree Data

Tree #	Name	Age	Health	Height m	DBH mm	Crown m	TPZ m	SRZ m
1	Ash <i>Fraxinus</i> sp	Mature	Good	5-10	200	6	2.4	1.7
2	Norfolk Island Pine <i>Araucaria heterophylla</i>	Mature	Good	10-15	800	10	9.6	3.1
3	Lemon Scented Gum <i>Corymbia citriodora</i>	Mature	Good	15-20	870	12	10.4	3.2
4	Gum <i>Eucalyptus</i> species	Mature	Good	10-15	800	8	9.6	3.1
5	Lemon Scented Gum <i>Corymbia citriodora</i>	Mature	Good	15-20	480	10	5.8	2.5
6	Lemon Scented Gum <i>Corymbia citriodora</i>	Mature	Good	15-20	860	8	10.4	3.2
7	Gum <i>Eucalyptus</i> sp.	Mature	Good	15-20	820	14	9.8	3.1
8	Cypress <i>Chamaecyparis</i> sp	Mature	Good	5-10	550	8	6.6	2.7
9	Ironbark <i>Eucalyptus sideroxylon</i>	Mature	Good1	10-15	700	10	8.4	3.2

5. Tree Significance

5.1 When considering the retention value of trees, two major issues were considered. They are the significance of the tree and its estimated life expectancy.

5.2 When assigning a value to the significance of the tree, a number of factors should be considered (Moreton 2003). The significant outcomes have been determined in **Attachment 4. Significance of Trees in the Landscape.**

6. Tree Retention Values

Landscape Significant Rating								
Est. Life Expectancy years		Significant	Very High	High	Moderate	Low	Very Low	Insignificant
		High Retention Value			Moderate Retention Value		Low Retention Value	Very Low Retention Value
	> 40				# 1, 2, 3, 4, 5, 6, 7, 8, 9			
	15-40							
	5-15							
	<5							
	Dead							

Ref: Modified from Couston, Howden (2001) Tree Retention Values Table. Footprint Green Pty Ltd, Sydney Australia.

6.1 Where trees have a high retention value they should be retained if possible. Where the development is considered to be more important than the trees they may be removed (Barrell 2006).

7. Discussion

7.1 There are three trees subject of this report that are growing on the property. The other six trees described in this report are growing on adjacent properties.

7.2 Tree # 1 is a street tree growing on the council controlled nature strip for Bernhardt Street. This tree will not be affected by the proposed development.

7.4 Tree # 2 is a large Norfolk Island pine growing on the adjacent property to the east. The original design had some car parking close to this tree. The location of the car parking has been modified to ensure that it does not encroach into the structural root zone (SRZ) of this tree.

7.5 Trees number 3, 4, 5 and 6 are growing on the adjoining property. The building is currently designed encroaches into the tree protection zones of all of these trees. The encroachments are major encroachment as defined by the Australian Standard *AS 4970–2009 Protection of trees on development sites*. An individual assessment of the encroachment into the trees TPZ has been carried out taking into account the recommendations of the Standard Section 3.3.4 Encroachment.

7.6 Trees 7, 8 and 9 are all growing on the subject property. The development as currently designed encroaches into the tree protection zone of all of these trees. The encroachments are major encroachments. An individual assessment of the encroachments have been made.

7.7 An assessment of the considerations for major encroachments show that none of the seven trees with major encroachments will become unviable as a result of the development. All of the trees are in good condition and are hardy species tolerant of root loss. The roots lost during construction will be replaced by the growth of new roots. The new roots will have completely replaced the lost roots within 2 years of the roots being cut (Struve 1990) (Hamilton 1988). Studies have shown a better root regrowth response when the tree roots are broken rather than cut cleanly and a significant root replacement occurs after only 1 year (Gray 2023).

7.8 There is a foot path proposed to be located close to trees # 8 and 9. The footpath will be constructed with minimal excavation so it has not been included in the assessment for TPZ encroachment. Tree # 8 will require some pruning of the lower branches in order to allow pedestrian traffic on the path.

7.9 Tree roots may have an effect on buildings. There a two ways this may happen. Firstly in clay soil, roots may dry the soil out resulting in soil heaving due to soil moistening and drying (Scali et al. 2010). As the presence of the infrastructure reduces the amount of air and moisture in the soil, the growth of roots under the buildings it reduced or eliminated making it unlikely that soil heaving due to the presence of tree roots will occur.

The second way that roots can damage infrastructure is by the pressure they exert radially as they grow. This pressure is limited to about 800 kPa (Biddle 1979). If the infrastructure is not capable of withstanding that pressure the roots can damage it (for example footpaths). If the infrastructure is capable of withstanding that amount of pressure, then the roots will flatten and be pressed into the soil. This is what occurs with properly designed buildings and retaining walls.

Table 2. Tree # 2 Encroachment Considerations

Tree # 2. Norfolk Pine. TPZ 9.6 m. Encroachment 22%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Norfolk Pine trees have a root system that tends to grow downward rather than outwards (Pers. Obs. 2016).
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and landing is calculated to be 22%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There is an established driveway in the TPZ of the tree.
h	Design factors	The design of the landing area and retaining wall has been modified to take it out of the SRZ of the tree.

Table 3. Tree # 3 Encroachment Considerations

Tree # 3. Lemon Scented Gum. TPZ 10.4 m. Encroachment 27%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Lemon Scented Gum trees have a structural root system that extends less than 3 m from the base of the tree (Hamilton 1988).
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 27%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There is an existing boundary fence close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

Table 4. Tree # 4 Encroachment Considerations

Tree # 4. Gum. TPZ 9.6m. Encroachment 27%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Gum trees have a structural root system that extends less than 3 m from the base of the tree (Hamilton 1988).
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 23%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There is an existing boundary fence close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

Table 5. Tree # 6 Encroachment Considerations

Tree # 6. Lemon Scented Gum. TPZ 10.4 m. Encroachment 28%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Gum trees have a structural root system that extends less than 3 m from the base of the tree (Hamilton 1988).
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 28%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There is an existing boundary fence close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

Table 6. Tree # 7 Encroachment Considerations

Tree # 7. Gum. TPZ 9.8 m. Encroachment 20%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Gum trees have a structural root system that extends less than 3 m from the base of the tree. (Hamilton 1988)
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 20%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There are no existing structures close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

Table 7. Tree # 8 Encroachment Considerations

Tree # 8. Cypress. TPZ 6.6 m. Encroachment 20%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree.
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 20%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There are no existing structures close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

Table 8. Tree # 9 Encroachment Considerations

Tree # 9. Ironbark. TPZ 8.4 m. Encroachment 22%		
AS 4970 Section 3.3.4 Encroachment considerations		Considerations for this tree
a	Location and distribution of roots to be determined through non destructive investigation methods.	Given that locating individual roots will not inform the assessment process, it is considered that root mapping is not appropriate or necessary to determine the viability of this tree. Gum trees have a structural root system that extends less than 3 m from the base of the tree (Hamilton 1988).
b	The potential loss of root mass resulting from the encroachment.	The theoretical encroachment into the TPZ of this tree of the retaining wall and building is calculated to be 22%. This is a major encroachment according to the Australian Standard AS 4970-2009 Protection of trees on development sites. A significant reduction in tree health was only found when tree roots were cut on 3 sides at a distance of 3 times trunk diameter (Smiley 2008). The loss of roots is less than 50% of the total root mass. Hamilton (1988) indicates that no reduction in tree growth occurs with root loss less than 50%.
c	Tree species and tolerance to root disturbance.	This species of tree is hardy and tolerant of root loss.
d	Age, vigour and size of the tree	The tree is a mature aged tree in good health and with good vigour.
e	Lean and stability of the tree	The tree has an upright form.
f	Soil characteristics	The soil is clay loam.
g	The presence of existing or past structures	There are no existing structures close to this tree.
h	Design factors	The design of the retaining wall is outside the SRZ of the tree.

8. Recommendations

8.1 It is recommended that the development be constructed as proposed. The planned development will not cause any of the trees subject of this report to become unviable. The trees # 1, 2, 3, 4, 5, 6, 7, 8 and 9 should be retained and protected during construction of the development. The tree protection measures are specified in 9. Tree Protection.

8.2 Tree # 8 will be required to be pruned to allow pedestrian access to the new foot path. The lower branches of the tree should be pruned to provide 2 m high clearance for pedestrian access. The branches pruned should be pruned off to the tree trunk. The work must be carried out in accordance with the Australian Standard *AS 4373-2007 Pruning of amenity trees* and be carried out by an Arborist qualified to a minimum of AQF 3 in Arboriculture.

9. Tree Protection

9.1 The trees retained on the site should be protected during construction in accordance with the recommendations of the Australian Standard AS 4970-2009 Protection of trees on development sites. The Standard sets out a Tree Protection Zone that is calculated to be an area around the tree with a radius of 12 x diameter at breast height (DBH). The TPZ has a minimum of 2 m and maximum of 15 m. The TPZ should be protected during construction as effectively as is practicable.

9.2 The Standard lists activities that are prohibited in the TPZ. They are:

- a. Machine excavation
- b. excavation for silt trenching
- c. cultivation
- d. storage
- e. preparation of chemicals, including preparation of cement products
- f. parking of vehicles and plant
- g. refuelling
- h. dumping of waste
- i. wash down and cleaning of equipment
- j. placement of fill
- k. lighting of fires
- l. soil level changes
- m. temporary or permanent installation of utilities and signs and
- n. physical damage to the tree.

9.3 The proposed construction of the development is planned to be undertaken within the TPZ of the trees subject of this report. In order to ensure that the trees remain viable it is important to protect them during construction as much as is practicable. Any of the activities detailed above should not be undertaken in the TPZ of the tree unless absolutely necessary.

9.4 Trees # 3, 4, 5 and 6 are growing on the adjacent property to the east. The temporary site wire mesh fencing used on construction sites will provide adequate protection for these trees.

9.5 A 1.8 m wire panel fence should be erected around tree # 1 which is growing on the road reserve. An example of a suitable fence is shown in Figure 1. The location of the fence is shown in Figure 2.

9.6 A 1.8 m wire panel fence should be erected around tree # 2, 7, 8 and 9. An example of a suitable fence is shown in Figure 1. The location of the fence is shown in Figure 2.

9.7 The protective fencing must be installed before commencement of works and not removed before the building works are completed.



Figure 1. Example of a suitable tree protection fence.

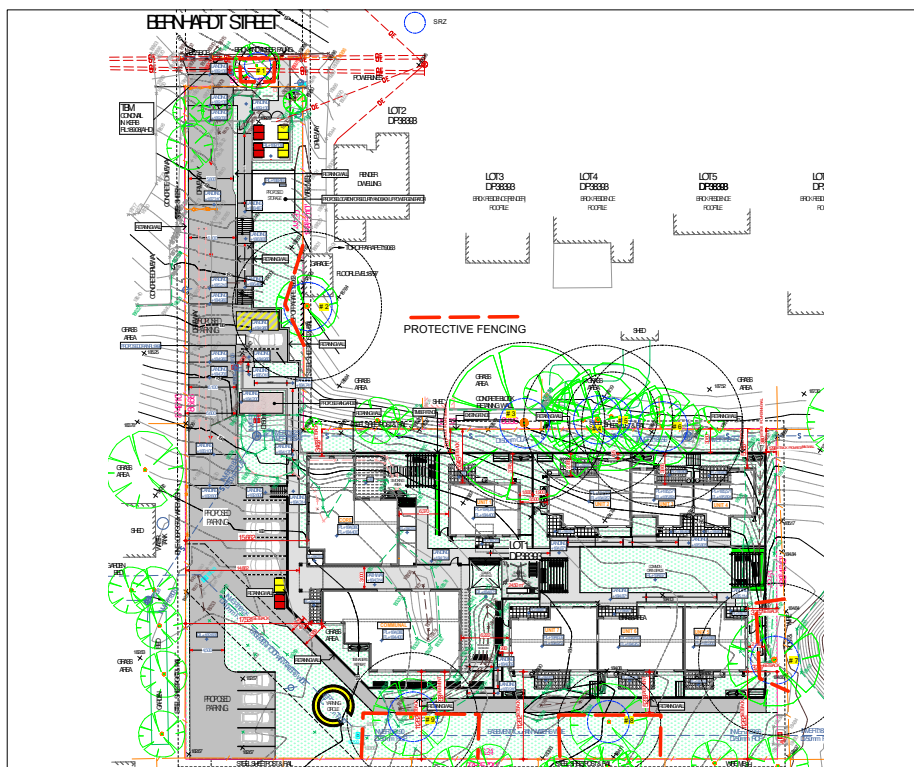


Figure 2. Location tree protection fence.

10. References

- Barrell J. 2006. *Workshop Manual Trees on Construction Sites*. Barrell Tree Consultancy. Brisbane.
- Biddle P. 1979. *Tree Root Damage to Buildings—An Arboriculturist's Experience*. Arboricultural Journal. 3:6. 397-412.
- Brooker M. Kleinig D. 1999. *Field Guide to Eucalypts*. Bloomings Books. Hawthorn.
- Clark J. R Gilpin, R Hauer, S Lilly, N Matheny, and E. Smiley 2021. *Why Definitions Matter: The Tree Protection Zone and the Critical Root Zone*. Arborist News. ISA.
- Gray P. 2016. *Personal Observations of Excavation Near Norfolk Island Pine Trees. Shirley St. Byron Bay*. Byron Bay.
- Gray P. 2023. *Tree Roots: Cut or Break?* Arbor Age. April/May 2023. Docklands.
- Hamilton W. 1988. *Significance of Root Severance on Performance of Established Trees*. Journal of Arboriculture 14(12). ISA.
- Mattheck C. Breloer H. 2003. *The Body Language of Trees*. TSO. London.
- Moreton A. 2003. *Criteria for Assessment of Landscape Significance*. 7th National Street Tree Symposium 2006.
- A. Satriani, A. Loperte, M. Proto, and M. Bavusi. 2010. *Building damage caused by tree roots: laboratory experiments of GPR and ERT surveys*. Advances in Geosciences. Tito Scalo.
- Smiley E. 2008. *Root Pruning and Stability of Young Willow Oak*. Arboriculture and Urban Forestry 34(2) March 2008. ISA
- Standards Australia. 2007. *AS 4373 Pruning of Amenity Trees*. Australian Standards. Sydney.
- Standards Australia. 2009. *AS 4970 Protection of Trees on Development Sites*. Australian Standards. Sydney.
- Struve D. 1990. *Root Regeneration in Transplanted Deciduous Nursery Stock*. Hortscience , Vol. 25(3). Columbus.



11. About The Author

10.1 This report was compiled by Peter Gray of Northern Tree Care. The author is an arborist who has been providing Arboricultural Reports for Local Government, State Government and private clients for over 20 years. His qualifications include:

Graduate Certificate of Arboriculture (AQF 8)

Diploma of Arboriculture (AQF 5)

Diploma of Horticulture (Arboriculture)

Quantified Tree Risk Assessment (QTRA)

Tree Risk Assessment Qualification (ISA)

VALID Tree Risk-Benefit Validator.

10.2 Peter Gray is an AQF level 8 Consulting Arborist general member No. 2344 with Arboriculture Australia. He is a trained and registered practitioner of Quantified Tree Risk Assessment (QTRA) Registered User number 980. In 2020 he was appointed as a director to the board of Arboriculture Australia.

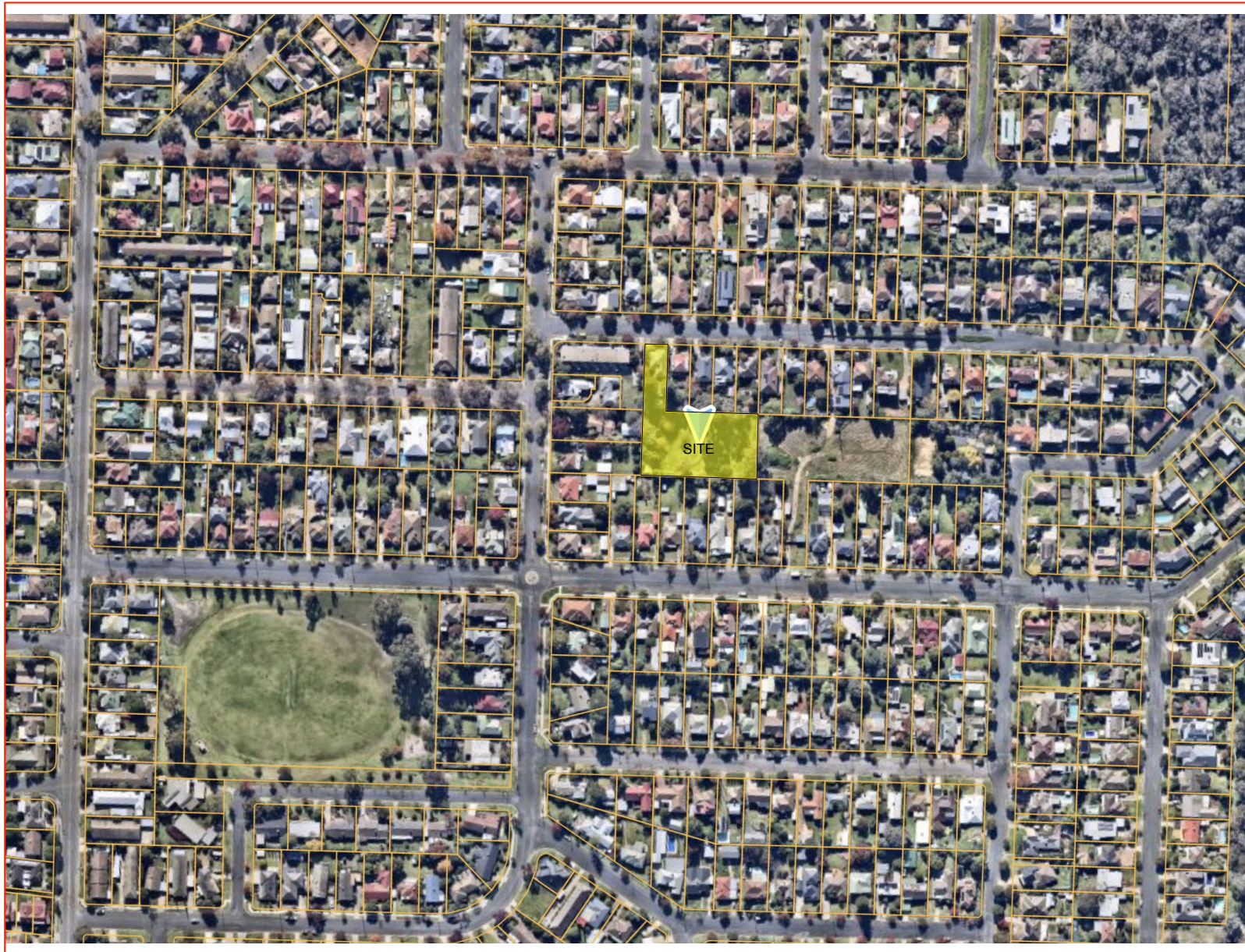
10.3 I declare that I have compiled this report impartially using best professional judgement. I have no financial interest in the outcome of the report.

Signed Peter Gray, Northern Tree Care

1 Nov 2023



**12.
Attachment 1
Location**





**13.
Attachment 2
Aerial Photo**





EXISTING TREE AND STRUCTURE TO BE
DEMOLISED DASHED IN RED





16. Attachment 5. Significance of Trees

Tree #	Name	Condition	Vigour	Protected	Environmental value	Amenity value	Significance
1	Ash <i>Fraxinus</i> sp	Good	Good	Yes	Low	Medium	Moderate
2	Norfolk Island Pine <i>Araucaria heterophylla</i>	Good	Good	Yes	Low	Medium	Moderate
3	Lemon Scented Gum <i>Corymbia citriodora</i>	Good	Good	Yes	Medium	Medium	Moderate
4	Gum <i>Eucalyptus</i> species	Good	Good	Yes	Medium	Medium	Moderate
5	Lemon Scented Gum <i>Corymbia citriodora</i>	Good	Good	Yes	Medium	Medium	Moderate
6	Lemon Scented Gum <i>Corymbia citriodora</i>	Good	Good	Yes	Medium	Medium	Moderate
7	Gum <i>Eucalyptus</i> sp.	Good	Good	Yes	Medium	Medium	Moderate
8	Cypress <i>Chamaecyparis</i> sp	Good	Good	Yes	Low	Low	Moderate
9	Ironbark <i>Eucalyptus sideroxylon</i>	Good	Good	Yes	Medium	Medium	Moderate

17. Attachment 6. Photos



Photo 1. Tree # 1. Ash Tree



Photo 2. Tree # 2. Norfolk
Pine



Photo 3. Tree # 3. Lemon
Scented Gum

Photos Continued



Photo 4. Tree # 4 Gum Tree



Photo 5. Tree # 5 Gum Pine



Photo 6. Tree # 6. Lemon
Scented Gum



Photos Continued



Photo 7. Tree # 7. Gum Tree



Photo 8. Tree # 8. Cypress



Photo 9. Tree # 9. Ironbark



APPENDIX C

DCP COMPLIANCE TABLE

Design elements	Guidelines	Performance Criteria	Comments	Compliance
Division E cl. 3 Multi dwelling housing (except terraces)				
a. Site planning.				
i. Location of multi dwelling housing (except terraces) in the R1 zone.	Multi dwelling housing and/or residential flat building sites are to be located: - In greenfield areas, at least 50m or 3 lots apart, whichever is the greater. The separation distance is measured between the closest point of each site along the street network. - In existing urban areas, at least 1 lot apart. Variation of this guideline may be considered when the proposed development is within 400m of a B1, B2, B3 or a B4 zone, measured along a street or streets, from the site to the closest point of the B1, B2, B3 or B4 zone:	A variety of housing stock is maintained in residential localities. Distribution of multi-dwelling housing and residential flat buildings is compatible with the streetscape and the character of the locality. Concentration of multidwelling housing is able to occur within a 400m walk of a B1, B2, B3 or a B4 zone.	The site adjoins an existing multi dwelling housing development at 464 Jamieson Street. Justification for the non-compliance is provided in Section 4.5.3.1.1.	Acceptable on merit
ii. Min. landscaped area. Min. width of landscaped areas (to count as part of min. landscaped area). Min. proportion of the primary street setback to be landscaped area. Refer to Figure 13 in the Schedule.	30% in R1 zone. 20% in R3 and B4 zones. 1m. 25%.	Adequate landscaped area is provided, to ensure: - Space for growing plants, including trees, - Absorption of rainwater into the ground, - Reasonable amenity for residents, - Lots are not overdeveloped with buildings, structures and paving, and	The proposed development retains 1,446.28m² of landscaped area (36.93% of site area) with a minimum dimension of one metre, compliant with the minimum 1,174.85m² (30% of site area) required. Landscaped area within the front setback is not considered relevant in the context of a battle-axe lot.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
		Paving and buildings do not dominate the streetscape.		
iii. Development on a battleaxe lot.	Development guided by this clause is not favoured on a battle-axe lot, unless: - The lot adjoins or has an outlook to public open space or another type of public reserve, or land in an environmental protection zone, and, - Access to the lot is suitable for the development.	Development on a battle-axe lot: - Provides reasonable amenity for occupants and neighbours, - Is compatible with the public domain and the character of the locality, - Addresses public open space or another type of public reserve, or land in an environmental protection zone, and - is provided suitable access.	The proposed development is not for the purposes of multi dwelling housing. Nevertheless, it has elements that are consistent with multi dwelling housing. It is suitable to a battle-axe lot because: - Each of the proposed units has outlook to private and communal open space within the development; and - Access to the lot, limited to a single driveway from Bernhardt Street, is suitable for the development as it contributes to the security of the sensitive use (refer to Section 5.12).	✓
iv. Max. basement area.	Within applicable building setbacks.	Basements do not impact the ability to maintain or plant vegetation on the lot.	No basements proposed.	N/A
b. Building height.				
i. Max no. of storeys.	2. Does not apply in R3 and B4 zones	Number of storeys is compatible with the	The site is located within the R1 General Residential zone.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
		streetscape and the character of the locality. Number of storeys reasonably maintains acceptable relationships with adjoining development, in terms of bulk and scale, and resident amenity.	The proposed development is limited to a single storey.	
ii. Max. no. of storeys in the rear 40% of a lot, measured as a percentage of the average length of the two side boundaries.	1. Does not apply in the R3 and B4 zones (except when the lot adjoins land in the R1 or R2 zones), or when the lot adjoins a rear lane, or is a corner lot, or is in a heritage conservation area.	Development in the rear of a lot maintains resident amenity and is compatible with local character.	The proposed development is limited to a single storey.	✓
iii. Earthworks, retaining walls & related structures. Refer to Figures 14 & 15 in the Schedule.	Development is to be stepped to align as closely as possible with the slope of the lot. Earthworks and related structures are not to result in finished ground levels that differ by more than 600mm from existing ground levels at any boundary with adjoining land. If the lot was benched when the land was subdivided, earthworks and related structures are not to further increase or decrease finished ground levels at any boundary with adjoining land. All earthworks and related structures are to be properly drained and not direct surface water onto adjoining land.	Adverse impacts of earthworks and related structures on adjoining land, resident-amenity, streetscape and the character of the locality are avoided, or acceptably minimised or mitigated.	The architectural plans include an earthworks plan that demonstrates that cut or fill is to occur within 600mm of the site boundaries.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	Structures related to earthworks that differ by more than 600mm from existing ground levels, including any retaining, drainage works or other works, are to be designed by a suitably qualified and experienced engineer.	Earthworks and related structures and infrastructure are properly designed.	The architectural plans indicate the location of retaining walls. The requirement that these be designed by a suitably qualified and experienced engineer can be complied with following DA approval.	✓
	Appropriate construction techniques, including minimising removal of vegetation where possible, are to be implemented to assist in erosion and sediment control during and post construction. An erosion and sediment control plan is to be submitted with a development application, except when development does not involve soil disturbance or when soil disturbance is insignificant.	Construction of earthworks and related structures does not adversely impact stormwater flows and the environment.	An erosion and sediment control plan forms part of the civil plans (Tricend 2023; refer to Appendix A).	✓
iv. Max. floor height above existing ground level of decks, patios and the like.	0.5m with < 2m setback. 2m with 2m – 3m setback. 3m with 3m – 6m setback.	Maintains acceptable built form and amenity relationships with neighbouring development.	All patios are located at least 3.4 metres from the nearest boundary. None have floor level exceeding three metres above existing ground floor level.	✓
c. Setbacks.				
i. Min. primary street setback. Refer to Figure 16 in the Schedule.	Average setback of the two dwellings closest to the site, in the same street and on the same side of the street. 4m when averaging as set out above is impractical.	Setbacks are compatible with the setback of neighbouring buildings.	Due to the site being a battle-axe lot, no built form other than minor ancillary structures are proposed within the access handle.	N/A

Design elements	Guidelines	Performance Criteria	Comments	Compliance
ii. Min. secondary street setback on a corner lot (does not apply to detached dwellings which face the second frontage).	50% of the primary street setback	Setbacks contribute to a consistent streetscape and character in the locality	The site is not a corner lot.	N/A
iii. Min. garage setback from a rear lane.	0m, provided there is adequate area for access into and egress from a garage. Entry to and exit from a garage is to be demonstrated by plans of swept paths of vehicles, if required.	Safe and practical entry to and exit from a garage off a rear lane is provided.	No garages are proposed as part of the development.	N/A
v. Min. side setback	0.9m, when building height closest to the boundary does not exceed 4.5m. 1.5m, when building height closest to the boundary exceeds 4.5m.	Adequate building separation is provided at side boundaries, for amenity, boundary fencing, access, safety, and maintenance.	The proposed development is setback from side boundaries as follows: • Eastern boundary: 3.8 metres • Northern boundary: 3.5 metres • Western boundary: 15.6 metres	✓
v. Min. rear setback.	3m, when building height closest to the boundary does not exceed 4.5m. 6m, when building height closest to the boundary exceeds 4.5m.	Adequate building separation is provided at rear boundaries, for access, safety, private open space, privacy and sunlight access.	The proposed development is setback from the southern boundary by approximately 11.26 metres.	✓
vi. Min. setback from the driveway.	1m.	Adequate separation is provided between the driveway and dwellings to protect resident-amenity.	The proposed development is setback over one metre from the driveway.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
vii. Min. setback between the main entrance of a dwelling and the main entrance of another dwelling which is visible via a direct line of sight.	8m.	Adequate separation is provided between the main entrance of a dwelling and another.	Over eight metres of separation is provided between facing unit entries in the proposed development.	✓
viii. Exceptions to the primary street setback.	In areas undergoing change in their character due to various circumstances (e.g. a change in zoning or land economics), a site and context analysis is to be carried out to establish an appropriate setback to the street, when an exception is sought to the primary street setback. Applicants are to consult with Council regarding the appropriate application of this guideline when preparing a development application.	The primary street setback is established in accordance with a site and context analysis, that has considered the area's character and specific circumstances related to the site and its development.	The site is not considered to be within an area undergoing significant change in character.	N/A
ix. Other exceptions to setbacks.	450mm is the minimum side or rear setback for any aerial, antenna, awning, eave, flue, chimney, pipe, cooling or heating appliance, any rainwater tank greater than 1.8m in height, or any other structure, installation or appliance associated with the provision of a utility service. Side or rear setbacks do not apply to fences, fascias, gutters, downpipes, light fittings, electricity or gas meters, driveways, open carports, paths or paving. Setbacks from streets and lanes do not apply to driveways, fences, paths, or retaining walls.	Services and utilities are able to be located within side and rear setbacks, without unreasonable adverse impacts on neighbours' amenity or access between the front and rear of the lot. Enables siting of ancillary works that must be located on, over or between lot boundaries and buildings.	The proposed development does not include any aerals, antennas, awnings, eaves, flues, chimneys, pipes, cooling or heating appliances, rainwater tanks greater than 1.8 metres in height, or any other structure, installation or appliance associated with the provision of a utility service less than 0.45 metres from a side or rear boundary.	✓
d. Character & the public domain.				

Design elements	Guidelines	Performance Criteria	Comments	Compliance
i. Character.	The building is designed to be compatible with the streetscape and character of the locality.	Development is of high architectural quality and contributes positively to local character and a safe public domain.	The proposed development :	✓
ii. Design, massing & articulation. Refer to Figure 17 in the Schedule.	Massing and articulation are to reduce apparent scale and bulk and create visually interesting buildings. Materials, textures and colours are to complement the massing and design of the building. Buildings are to be suitably articulated using harmonious architectural elements in the design, such as verandahs, porticos, awnings, bay windows, balconies or terraces Elements such as these may be forward of the primary street setback. Simple roof forms are to be designed to complement other building elements and minimise bulk and scale of the building. Roof forms are to be compatible with those of nearby buildings. Infrastructure and services are to be integrated into to the development's design or screened.	Design and choice of materials and colours are compatible with surrounding development and contribute to a pleasant and attractive public domain. The mass and form of development integrates with and promotes diversity in the locality through quality urban design.	Will have minimal impact on the streetscape and character of the locality due to being limited to a single storey and due to being located within a battle-axe lot, enclosed by private property on all boundaries except the access handle's frontage to Bernhardt Street; Will have minimal apparent scale and bulk due to being limited to a single storey in height; Is to have brick finish with pitched, metal roofs, consistent with surrounding residential development; Is to be suitably articulated with harmonious architectural elements in the design including patios and pergolas; Is to have skillion roof form, sympathetic to the predominantly pitched roofs of existing	

Design elements	Guidelines	Performance Criteria	Comments	Compliance
			development in the local context.	
iii. Community safety & surveillance.	Principal pedestrian entries are to address, be readily identifiable and directly accessible from the street. Principal pedestrian entries are not to be from a lane. When a building façade faces a reserve or other element of the public domain, that façade is to include windows and/or doors to address that reserve or other element of the public domain. Fencing and landscaping are not to unacceptably diminish informal surveillance of the public domain.	A safe method of access to and egress from development is provided. Development contributes to community safety and informal surveillance of the public domain.	Principal pedestrian entries cannot be made to address the street due to the site being a battle-axe lot. However, access is not provided from a lane. It also does not have frontage to a reserve or other element of public domain. 1.8 metre-high fencing is to be provided along the boundaries of the site that are shared with private properties to contribute to the safety of the occupants of the proposed development (refer to Section 5.12), without impacting opportunities for casual surveillance of the surrounding area.	N/A
e. Resident-amenity.				
i. Sunlight access. Refer to Figures 19 & 20 in the Schedule.	Windows and doors of habitable rooms (except bedrooms) and private open space of all dwellings are to be sited and oriented to receive at least 3 hours direct sunlight between 9am and 3pm on the winter solstice.	Sunlight access to primary indoor living areas and private open space is optimised. Sunlight access enables passive solar heating in winter and	Whilst windows associated with living spaces in each of the units in the proposed development will receive at least three hours of solar access between 9am and	Acceptable on merit

Design elements	Guidelines	Performance Criteria	Comments	Compliance
		provides a pleasant and healthy indoor environment.	3pm on the winter solstice, only the northern units (Units 1, 2, 3 and 4) will receive three hours of solar access to the private open space. The non-compliance with respect to solar access to private open space associated with the southern units (Units 5, 6 and 7) is justified in Section 4.5.3.1.2).	
ii. Overshadowing.	Proposed development must retain at least 3 hours of sunlight between 9am and 3pm on the winter solstice for existing neighbouring residential accommodation's: • Windows and doors of habitable rooms except bedrooms, • At least 50% of private open space, • Photovoltaic and solar hot water systems, and • Outdoor clothes drying facilities. If areas or utilities specified in the above paragraph of existing neighbouring residential accommodation receive less than 3 hours sunlight at the time a development application is lodged for adjoining land, the amount of sunlight received is not be reduced as a result of proposed development. When existing neighbouring residential accommodation may have its sunlight access impacted by proposed development, a shadow	Sunlight access to existing neighbouring residential accommodation is reasonably maintained.	The proposed development is limited to a single storey in height, ensuring that it will not result in solar access to habitable room windows, 50% of private open space, solar panels and hot water systems and outdoor clothes drying facilities being reduced to less than three hours between 9am and 3pm on the winter solstice.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	diagram is to be submitted with the application for the proposed development, based on the winter solstice, in hourly intervals from 9am to 3pm.			
iii. Climate management for west-facing residential accommodation. Refer to Figure 18 in the Schedule.	Where habitable rooms face west. (between north-west and south-west), architectural elements are to be used, such as: • Extended eaves, • Verandahs, • Shutters, or • Awnings. Architectural design elements may be complemented by landscaping.	Heat-gain is reduced to improve thermal performance and comfort for occupants of residential accommodation.	Habitable rooms in the proposed development have predominantly northern orientation.	✓
iv. Privacy. Refer to Figure 23 in the Schedule.	When privacy of occupants of proposed development or neighbours is likely to be affected, siting and design of proposed development is to maintain reasonable levels of privacy. Principal siting and design techniques to consider and use, include: • Building orientation, • Position of habitable rooms, • Window size and location, • Building separation and setbacks, • Avoiding or minimising direct lines of sight, and • Location of balconies and terraces • adjacent indoor living areas. When principal techniques may not maintain reasonable levels of privacy, supplementary techniques to consider and use include:	Reasonable privacy is maintained between occupants of the dwelling house and its outbuildings, with occupants of neighbouring dwellings.	The proposed development will have minimal privacy impacts due to being limited to a single storey in height, setbacks exceeding the minimum required under the ADCP 2010, provision of 1.8 metre-high fences along boundaries that are shared with neighbouring properties, retention of significant vegetation and provision of new plantings in accordance with a landscape plan, to be provided following DA approval.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	- Recessed balconies or vertical fins, - Solid or partially solid balustrades, - Bay or pop-out windows, - Planter boxes, - Privacy screens, - Sill heights, or - Opaque window glazing			
v. Private open space. Min. area. Min. length and width. Max. grade. When provided above ground, min. length and width to count towards min. private open space area. Refer to Figure 19 in the Schedule.	24m ² . 4m. 1:20. 2m	Private open space is sited and designed to accommodate various functions such as outdoor leisure and dining, gardening and landscaping, clothes drying, and bin storage.	Each unit in the proposed development is provided with private open space as follows: - Unit 1: 11.5m² - Unit 2: 22m² - Unit 3: 23m² - Unit 4: 16m² - Unit 5: 12m² - Unit 6: 16.5m² - Unit 7: 17m² Justification for non-compliance related to private open space is provided in Section 4.5.3.1.	Acceptable on merit
vi. Principal private open space. Min. area. Min. length and width.	Principal private open space is located adjacent to and directly accessible from a habitable room in a dwelling, other than a bedroom. 16m ² . 4m.	Principal private open space is located and designed to provide high amenity for dwelling occupants.	As above. All units in the proposed development are provided with private open space that	

Design elements	Guidelines	Performance Criteria	Comments	Compliance
Max. grade. Refer to Figure 19 in the Schedule.	1:50.		is directly accessible from a living room.	
vii. Communal open space. Min. number of dwellings that requires communal open space. Location. Min. area. Min. dimension. Orientation. Facilities. Amenity. Informal surveillance.	6. Central to the development, or reasonably accessible to all dwellings' occupants. 100m ² for 6 to 10 dwellings, plus 10m ² for each additional dwelling. 8m. 15 degrees either side of north. Facilities may include seating, BBQ facilities or children's play equipment, when 50% of dwellings have two or more bedrooms. Landscaping and screening are to be provided for the benefit of users and to reasonably protect resident-amenity. Informal surveillance is to be provided from dwellings' windows and/or doors being visible to and from the communal open space.	A useable and attractive communal open space is provided and sited to be easily accessible to each of the dwellings.	The proposed development comprising seven units, is provided with centrally located communal open space with an area of 222.99m ² with a minimum dimension of eight metres, compliant with the minimum 110m ² required. The communal open space is north-facing, includes seating and a children's playground and has good visibility from surrounding units. Landscaping is used around seating areas to reasonably protect amenity of users of the communal open space.	✓
viii. Landscape design.	A landscape concept plan is to be provided, prepared in accordance with Council's Engineering Guidelines Subdivisions and Development Standards.	Landscape planning and design is properly conducted for development.	A landscape plan is to be provided following DA approval.	✓
ix. Safer by design.	Development applications for multi dwelling housing (except terraces) of 6 or more dwellings	The risk of anti-social behaviour, criminal activity and	Refer to Section 5.12.	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	are to be accompanied by a safer by design (crime prevention through environmental design) assessment.	reduced public safety is avoided, minimised or mitigated. Development is liveable and safe for its occupants.		
x. Noise & air quality.	Development is to be sited and designed to acceptably reduce the impact of noise in the locality. When there is a risk development will be impacted by a nearby source of noise or offensive or hazardous emissions to the atmosphere, the development is to be designed and sited to acceptably reduce that risk. When deemed necessary by Council, a noise impact assessment is to be submitted with a development application and the development's design is to adopt the recommendations of that assessment.	Impacts of noise and air emissions are avoided or effectively mitigated and minimised.	Refer to Section 5.10 and Section 5.7.	✓
xi. Waste Management.	Provide bin storage in accordance with Council's kerbside requirements, in a readily accessible location for residents. Bins are not to be stored forward of the primary street setback, or in a location visible from the public domain. Construction and demolition waste are to be managed and disposed of in accordance with the requirements of Council or another authority, when applicable.	Waste storage meets residents' requirements, reasonably maintains resident-amenity and the qualities of the streetscape and the character of the locality. Waste from the development is effectively managed in accordance with applicable requirements.	Refer to Section 5.9	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
xii. Building materials.	Reflective building materials are not to be used.	Building materials do not unreasonably diminish neighbours' amenity.	Reflective building materials are not proposed.	✓
f. Boundary treatments (fences & walls).				
i. Max. height of a boundary treatment forward of the primary street setback. Refer to Figure 24 in the Schedule.	1.2m, or 1.8m, with at least 50% being see-through	Amenity is protected for residents without adverse impact on the streetscape. Informal surveillance is enabled, and the boundary treatment contributes positively to the streetscape.	The proposed development is to include a fence along the street boundary with a height of 1.8 metres that is at least 50% is visually permeable.	✓
ii. Max. height of a gate, forward of the primary street setback.	As above.	Gates are of the same height as and compatible in appearance with the remainder of front boundary treatments and maintain safety on the public road.	The proposed development is to include a gate along the street boundary with a height of 1.8 metres.	✓
iii. Max. height of side and rear boundary treatment behind the primary street setback.	1.8m.	Side and rear fencing enables privacy and security without being visually intrusive or dominant.	The proposed development is to include fences along boundaries that are with private properties with a height of 1.8 metres.	✓
v. Boundary treatment materials and colours.	To be consistent with the materials and colours of the development on the lot and compatible with the streetscape. On a lot adjoining semi-rural or rural land, or land in an Environmental zone, boundary treatments on that lot are to be compatible with the character of the land adjoining the lot. Post and rail or post and	Boundary treatments contribute positively to the streetscape and are compatible with the character of the locality.	The proposed development is to include a fence and gate along the street boundary that balances security to the facility with compatibility with the material and colour of fences and gates	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	wire fencing are examples of suitable fencing. Solid metal or timber fencing, or masonry walls are discouraged.		associated with established development in the surrounding area.	
g. Access & parking.				
i. Pedestrian access.	Pedestrian entries are to be clearly identifiable and visible from the street. Entries are to provide direct access to letter boxes. Entries and paths from the street are to be suitably lit at night. Pedestrian paths are to be separate from driveways, when possible, or shared ways design to minimise vehicle speed to walking speed (5 km/h).	Pedestrian entries to development are safe and provide amenity for and informal surveillance of the street.	Pedestrian entries cannot be made identifiable from the street due to the site being a battle-axe lot. Individual letter boxes cannot be provided due to the nature of the use, whereby residents would reside within the development for a short period of time until. Any mail addressed to residents would be received at the office and delivered to residents by staff or collected by residents from staff. Pedestrian paths within the development are separated from driveways. Lighting would be detailed following DA approval.	✓
ii. Min. no. parking spaces.	Specified by Part 17.	The number of on-site parking spaces is adequate and acceptably impacts parking supply on local streets.	The proposed development includes nine car parking spaces, exceeding the seven spaces required under Part 17 of the ADCP 2010 for a	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
			group home comprising seven units with no more than two bedrooms.	
iii. Internal access design. Refer to Figure 25 in the Schedule.	Internal access design is to consider and be based on a combination of these principles: • Varying the alignment of driveways to avoid a 'gun-barrel' effect'. • Setting back garages behind the predominant primary street setback to reduce their visibility from the street • Avoiding driveways running the length of the site. • Minimising the impact of driveways on streetscape. • Terminating vistas with trees, vegetation, open space or a dwelling, not garages or parking. • Using planting to soften driveway edges • Varying the driveway surface material to break it up into series of smaller spaces. • Limiting driveway widths on narrow sites to single vehicle width with passing bays when required.	Internal access design is safe, functional, visually appealing and contributes positively to the streetscape.	Access to the site is to be provided via a new driveway from the site's Bernhardt Street frontage, running through the access handle to at-grade parking spaces in the south-western portion of the site. The driveway will have minimal visual impact due to: • The slope of the site down from the street frontage to the southern boundary; • No garage parking being proposed; and • Landscape planting in accordance with a landscape plan, to be provided following DA approval.	✓
iv. Access standards	Refer to Part 17 of this DCP	Access to lots and associated road works are consistent with Council's Engineering Guidelines for Subdivisions and Development Standards.	The proposed development would comply with Council's Engineering Guidelines for Subdivisions and Development Standards to the extent applicable to	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
			group homes following DA approval.	
h. Utility Infrastructure				
i. Access to the development and associated road works.		Access to the development and associated road works are consistent with Council's Engineering Guidelines for Subdivisions and Development Standards. On bush fire prone land, access is provided in accordance with RFS guidelines.	Refer to Section 4.5.1.5. The site is not located within mapped bush fire prone land.	✓
ii. Water and sewer supply.		If required, arrangements are made with Council, the water and sewer authority, for provision of water and sewer services. Such arrangements are consistent with Council's Engineering Guidelines for Subdivisions and Development Standards. On bush fire prone land, water supply is provided in accordance with RFS guidelines.	Refer to Section 4.5.1.5. The site is not located within mapped bush fire prone land.	✓
iii. Stormwater management	A stormwater management concept plan is to be submitted with a development application.	Stormwater management is consistent with Council's Engineering Guidelines for	A stormwater management concept plan forms part of	✓

Design elements	Guidelines	Performance Criteria	Comments	Compliance
		Subdivisions and Development Standards.	the civil plans (Tricend 2023; refer to Appendix A).	
v. Electricity, gas and telecommunications services.		Evidence is provided to Council, that these services are available, before issue of an occupation certificate.	Refer to Section 4.5.1.5 .	✓
i. Master plans & concept development applications.				
i. Min. number of dwellings when a master plan is required.	20 dwellings.	Large developments are planned, designed and developed to make a positive and compatible contribution to Albury's urban environment.	The proposed development comprises less than 20 units.	N/A
ii. Guidelines to be considered in preparing a master plan. Refer to Figures 8, 9, 10 & 11 in the Schedule.	Matters relevant to the development of a site are to be considered, including: • An analysis of the site and locality's accessibility, functions, character and environmental conditions. • Means to improve accessibility of the site and the locality. • Integration with the existing street network and hierarchy, including consideration of street network design principles in cl. 2. e. i. Potential to connect new streets, footpaths, shared paths or cycleway with planned, approved or constructed streets on adjoining land, with reference to the Thurgoona Wirlinga Precinct Structure Plan or other strategic document, when applicable.	Master plans are prepared having considered all relevant environmental conditions and Albury's planning framework.	As above.	N/A

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	• Potential to extend and complement existing street, footpath and bicycle/shared path networks, in areas other than where the Thurgoona Wirlinga Precinct Structure Plan or other strategic document applies. • Preferred uses and built form based on the site and locality analysis. • Higher density lots and housing when the site is within an 'accessible area' in relation to a B1, B2, B3 or B4 zone. • The pattern of subdivision and built form, development complementing the character and functions of the locality. • Provision of public open space • identified in a Council-adopted structure plan or strategy. • Provision of public open space may • also be supported through analysis of • land proposed as open space, considering matters such as: – an analysis of existing supply and likely demand for open space in the locality, – accessibility – i.e. the open space is within a 400m walk for potential users, not restricted by barriers such as a major road (e.g. roads specified by Div. B cl. 2. e. iii.), a creek line, and the like. – area and dimensions of the land,			

Design elements	Guidelines	Performance Criteria	Comments	Compliance
	– the site's characteristics, including constraints such as flooding or steep slopes, and – addition to or integration with other open space (e.g. linear networks). • Where there is potential to dedicate land for environmental conservation, whether the land could also support recreational values and accessibility in the locality are to be considered. • When deemed appropriate, low-impact public access is to be provided, that is sensitive to the conservation values of the land. • Potential to retain any significant trees and other vegetation in the public domain, such as in street reserves and public open space. • Potential of the site to be impacted by any hazard, such as contamination, bush fire or flooding, and means of eliminating or reducing the risk posed by the hazard. • Stormwater management, including consistency with any Council drainage strategy. • The potential traffic impact of the site's development and means to avoid, minimise or mitigate those impacts.			



APPENDIX D

AHIMS SEARCH RESULT

Premise Australia Pty Ltd

Date: 24 August 2022

154 Peisley Street

Orange New South Wales 2800

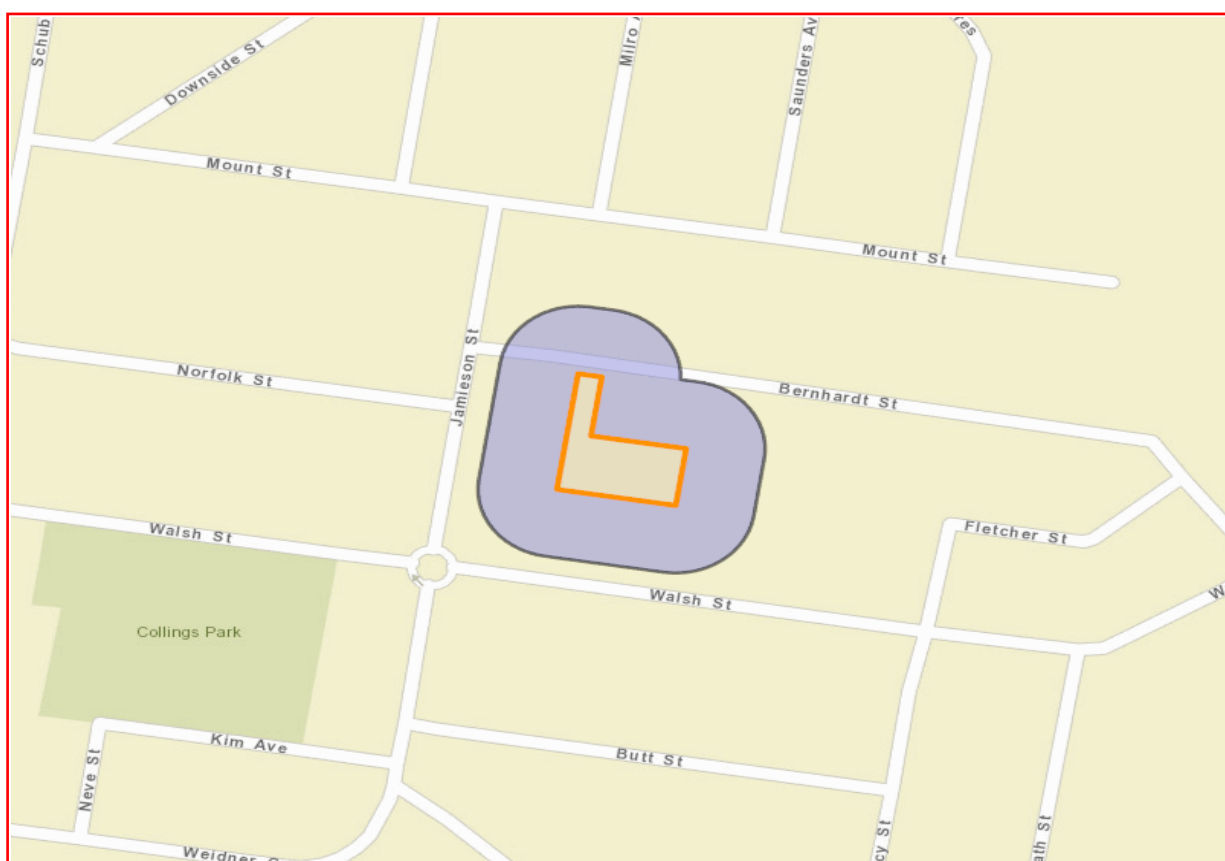
Attention: Mark Raikhman

Email: mark.raikhman@premise.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP38393, Section : - with a Buffer of 50 meters, conducted by Mark Raikhman on 24 August 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Premise

premise.com.au

BUILDING CODE OF AUSTRALIA 2022 COMPLIANCE REPORT

PROPOSED GROUP HOME DEVELOPMENT WITH SEVEN (7) UNIT RESIDENTIAL ACCOMMODATION, COMMUNAL UNIT AND CORE OFFICE FACILITY

**Lot 1 DP 38393
271 Bernhardt Street
EAST ALBURY NSW 2640**

Reference: 2023/09

Revision 2

26 July 2023

Project Contacts	
Client:	Darren Wooding C/- Housing Plus
Project Manager:	Nat Andrews
Building Surveying:	Nat Andrews

Contents

EXECUTIVE SUMMARY	4
1. INTRODUCTION	5
2. DEVELOPMENT DESCRIPTION AND COMPLIANCE	6
3. BUILDING CONDITION AND BCA REQUIREMENTS	8
4. CONCLUSIONS	11
5. REFERENCES	11
6. RECOMMENDATIONS	11
APPENDIX 1: BCA PROVISIONS	15
APPENDIX 2: FIRE RESISTANCE PROVISIONS	139
APPENDIX 3: PROPOSED ARCHITECTURAL PLANS	143

Quality System					
Job Number/Ref:	2023/09	Revision Number:	1	Issue Date:	11 June 2023
Checked By:	WAB	Author:	NLA		
Distribution:	For verification				

Quality System					
Job Number/Ref:	2023/09	Revision Number:	2	Issue Date:	26 July 2023
Checked By:	WAB	Author:	NLA		
Distribution:	For comment				

Revision History				
Rev No.	Date	Revision Details	Author	Verifier
1	27 June 2023	Revision for verification	NLA	WAB
2	26 July 2023	Revision for comment	NLA	WAB

EXECUTIVE SUMMARY

Certifiers2U Pty Ltd have been requested by Darren Wooding of Housing Plus to assess the proposed group home development with seven (7) accommodation units, communal unit and core office facility under the Building Code of Australia (BCA) 2022.

The proposed development will be assessed against the current requirements of the Building Code of Australia (BCA) 2022. The report will identify non-compliances with the deemed to satisfy requirements of the BCA and is to be submitted with the Construction Certificate (CC) application once all non-compliances of this report have been rectified.

The assessment is based on the proposed plans prepared by:

Housing Plus, Revision H, dated 15 June 2023.

Appendix 1 provides a clause-by-clause BCA Assessment of the proposed buildings and comments on their compliance.

Appendix 2 indicates that these buildings are considered as a type C construction type and an excerpt from the BCA for that type has been provided.

Appendix 3 provides a copy of the proposed plans, identifying the subject buildings.

A specification of recommendations to accompany the Construction Certificate (CC) application will be provided in the recommendations section of this report.

1. INTRODUCTION

The report is prepared based on a review of the proposed plans and documentation provided by the client and is intended for their use only.

REPORTING TEAM

The information contained within this report was prepared by Nat Andrews Registered Certifier (BPB1568, BPB3057) and verified by Wayne Bertram, Registered Certifier (BPB1569, BPB3363) from Certifiers2U.

CURRENT LEGISLATION

The applicable legislation governing the design of buildings is the *Environmental Planning and Assessment Act 1979*.

The provisions of Section 4.68 of this act require that the building be designed in accordance with the technical provisions of the State's building laws and, the Building Code of Australia 2019 (Amendment 1).

LIMITATIONS

This report has been prepared for the purposes and exclusive use of the stated client for the building works proposed and is not to be used for any other purpose or by any other person or Corporation. Certifiers2U Pty Ltd accepts no responsibility for any loss or damage suffered howsoever arising to any person or Corporation who may use or rely on this report in contravention of the terms of this clause. It is ultimately up to the registered certifier and PC to determine compliance with the Building Code of Australia (BCA) prior approving any building for construction via a complying development certificate, construction certificate and occupation certificate application.

Reporting is based on the information provided at the time of assessment and should this information be incorrect or amended in the future then this report will need to be revised. To the best of our knowledge this report does not contain any false, misleading, or incomplete information. The report is not to be used where combustible cladding is proposed as new works.

No access available to roof area, internal walls, and cavities.

This report does not constitute any form of development or building approval and is merely an assessment of Development and BCA compliance of the proposed works.

This report does not address the structural adequacy or structural integrity of the existing building. This report does not address termite protection or termite management systems of the existing building. This report does not address the performance of waterproofing in any wet areas. This report does not address energy efficiency. No inspection of the property has occurred.

2. DEVELOPMENT DESCRIPTION AND COMPLIANCE

THE PROJECT

Group home development with seven (7) accommodation units, communal unit and core office facility.

BUILDING DESCRIPTION

Office Core Building

Building Use:	Office Core Building
Class of Occupancy:	5
Levels Contained:	1
Rise in storeys:	1
Type of construction:	C
Total Floor Area:	133.59m ² , plus external breakout space 47.93m ² Total as defined under the BCA 181.52m ²

Communal Core Building

Building Use:	Communal Core Building
Class of Occupancy:	3
Levels Contained:	1
Rise in storeys:	1
Type of construction:	C
Total Floor Area:	149.06m ² , plus external breakout space 6.64m ² Total as defined under the BCA 155.7m ²

Residential Accommodation (1 bedroom accessible) Building – Unit 1

Building Use:	Residential Care (1 bedroom) Building – Unit 1
Class of Occupancy:	3
Levels Contained:	1
Rise in storeys:	1
Type of construction:	C
Total Floor Area:	64.15m ² , plus external breakout spaces 11.54m ² Total as defined under the BCA 75.69m ² .

Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 2, 3 and 4

Building Use:	Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 2, 3 and 4
Class of Occupancy:	3
Levels Contained:	1
Rise in storeys:	1
Type of construction:	C
Total Floor Area:	168.18m ² , plus external breakout space 43.31m ² Total as defined under the BCA 211.49m ² .

Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 5, 6 and 7

Building Use:	Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 5, 6 and 7
Class of Occupancy:	3
Levels Contained:	1
Rise in storeys:	1
Type of construction:	C
Total Floor Area:	239.81m ² , plus external breakout space 48.93m ² Total as defined under the BCA 288.74m ² .

3. BUILDING CONDITION AND BCA REQUIREMENTS

DOCUMENTATION ASSESSED & CERTIFICATION RELIED UPON

There are no approvals available on Albury City Council's Application Tracker relevant to this property.

ESSENTIAL FIRE & OTHER SAFETY MEASURES

Below is a list of **proposed essential fire safety services** that are to be installed within the buildings. All services are required to be inspected by a competent person for installation compliance to the relevant Australian Standard and the BCA and certified accordingly.

Building Code of Australia (BCA) 2022

Office Core Building

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
Exit signs	AS/NZS 2293.1 – 2018	E4D5, E4D8	☒
Portable fire extinguishers	AS 2444 – 2001	E1D14	☒
Fire blankets	AS 2444 – 2001	E1D14	☒
Fire hazard properties for floor, wall, and ceiling linings	AS1530.4 -2014 AS/ISO9239.1 - 2003	C2D11 Specification 7	☒

Communal Core Building

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
Exit signs	AS/NZS 2293.1 – 2018	E4D5, E4D8	☒
Portable fire extinguishers	AS 2444 – 2001	E1D14	☒
Fire blankets	AS 2444 – 2001	E1D14	☒
Fire hazard properties for floor, wall, and ceiling linings	AS1530.4 -2014 AS/ISO9239.1 - 2003	C2D11 Specification 7	☒
Lightweight construction - Fire separating wall between sole occupancy unit of communal building and multipurpose room to meet FRL 60/60/60 where there is no internal access to the remainder of the communal unit	AS1530.4-2014 AS4072.1-2005	C2D9 Specification 6 C3D9 Specification 5 C4D12	☒

Residential Accommodation (1 bedroom accessible) Building – Unit 1

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
Automatic Smoke Detection and alarm system - Smoke Alarm System (interconnected) Clause S20C3 of Specification 20	AS3786-2014 AS1670.1 - 2018	E2D8 Specification 20 Clause S20C3	☒

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
- Any other alarm deemed suitable in accordance with AS 1670.1 for kitchen and bathrooms - Building Occupant Warning System			

Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 2, 3 and 4

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
Automatic Smoke Detection and alarm system - Smoke Alarm System (interconnected) Clause S20C3 of Specification 20 - Any other alarm deemed suitable in accordance with AS 1670.1 for kitchen and bathrooms - Building Occupant Warning System	AS3786-2014 AS1670.1 - 2018	E2D8 Specification 20 Clause S20C3	☒
Lightweight construction - Fire separating wall between sole occupancy units 2, 3 and 4 to meet FRL 60/60/60. - Openings within fire rated construction	AS1530.4-2014 AS4072.1-2005	C2D9 Specification 6 C3D9 Specification 5 C4D12	☒
Protection of openings in fire resistant separated elements - Between sole occupancy units 2, 3 and 4 to meet	AS1530.4-2014 AS4072.1-2005	C4D13, C4D15 Specification 13	☒
Fire hazard properties for floor, wall, and ceiling linings	AS1530.4 -2014 AS/ISO9239.1 - 2003	C2D11 Specification 7	☒
Solid core door Self-closing tight fitting 35mm thick solid core door to units 3 and 4	AS2688-2017	C4D12	☒

Residential Accommodation Cluster (1 and 2 bedroom) Building – Units 5, 6 and 7

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
Automatic Smoke Detection and alarm system - Smoke Alarm System (interconnected) Clause S20C3 of Specification 20 - Any other alarm deemed suitable in accordance with AS 1670.1 for kitchen and bathrooms - Building Occupant Warning System	AS3786-2014 AS1670.1 - 2018	E2D8 Specification 20 Clause S20C3	☒
Solid core door - Self-closing tight fitting 35mm thick solid core door between units 5 and 6	AS2688-2017	C4D12	☒
Lightweight construction	AS1530.4-2014 AS4072.1-2005	C2D9 Specification 6	

Fire Safety Measure	Standard	BCA Clause(s)	Proposed Fire Safety Measures
- Fire separating wall between sole occupancy units 5,6 and 7 to meet FRL 60/60/60. - Openings within fire rated construction		C3D9 Specification 5 C4D12	☒
Protection of openings in fire resistant separated elements - Between units 1 and 2 (accessible)	AS1530.4-2014 AS4072.1-2005	C4D13, C4D15 Specification 13	☒
Fire hazard properties for floor, wall, and ceiling linings	AS1530.4 -2014 AS/ISO9239.1 - 2003	C2D11 Specification 7	☒

4. CONCLUSIONS

An assessment of the Building Code of Australia (BCA) 2022 has been conducted for the proposed group home development with seven (7) accommodation units, communal unit and core office facility.

As indicated in this report there are several areas of non-compliance with the deemed to satisfy requirements of the Building Code of Australia (BCA).

The assessment also requires the proposed design plans to be amended to comply with the deemed to satisfy requirements of the Building Code of Australia (BCA).

Compliance with the Building Code of Australia (BCA) is ultimately up to the Principal Certifier to determine. However, this report provides guidance advice for compliance with the requirements to the degree necessary for lodgement of the Construction Certificate (CC) application.

5. REFERENCES

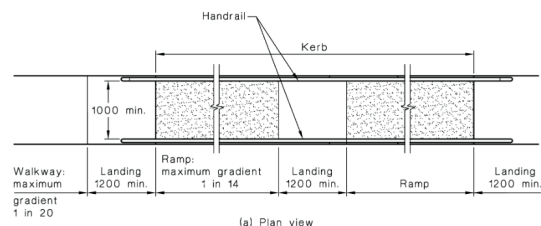
Australian Building Codes Board, 2022, National Construction Code, Volume One - Building Code of Australia Class 2-9 Buildings, accessed on 29 June 2023.

6. RECOMMENDATIONS

Building Code of Australia (BCA) Clauses

Clause	Recommendation
A5G3	Provide information on existing floor linings for any carpet and vinyl flooring. All floor linings must comply with fire safety requirements of AS/ISO9239.
A5G5	Provide details for any building elements required to be fire resisting.
A5G6	Provide information on proposed wall and floor lining finishes. Please note: • Floor finishes must be AS/ISO9239. • Wall and ceiling finishes must meet AS1530.4-2014. Fire test reports will be required for all proposed materials.
A6G4, A6G6	Please note that as there is no internal access in the communal building to the multipurpose room then this portion of the building will also be class 5 which will require fire separation to the class 3 communal unit. Please advise how you wish to proceed here?
B1D2, B1D3, B1D4	Structural engineering details required from engineer.
C2D9	Details required of any proposed lightweight construction for fire separation in the communal building to the multipurpose room and between units 2/3/4 and 5/6/7.

Clause	Recommendation
NSW C2D11	Provide an internal finishes schedule for all floor and wall linings, noting: • Floor finishes must be AS/ISO9239. • Wall and ceiling finishes must meet AS1530.4-2014. • Depending on proposed air conditioning system, any proposed ductwork must meet AS4254. Fire test reports will be required for all proposed materials.
C3D9, C4D3	Indicate on plans fire separating walls between class 3 units to achieve FRL 60/60/60 for units 2/3/4 and units 5/6/7. Please clarify Section 02 on sheet 10, as it appears that there is an opening in the fire separating wall between units 2 and 3.
C3D14	Indicate on plans where main switchboard is and provide details of separation to it.
NSW C4D12	Provide details of FRL 60/60/60 walls between units 2/3/4 and 5/6/7 and that any doorways between units are self-closing tight fitting 35mm thick solid core doors. Please relocate the intertenancy doors in units 3 and 4 as they interfere with the egress doors of units 3 and 4.
C4D13	Provide details where fire rated ceilings are proposed.
C4D15	Provide details of proposed location, type, and size of penetration protection to AS1530.4-2014.
C4D16	Provide details of construction joint compliance with this clause and location of all construction joints.
S5C3, S5C5, S5C6	The roof between the class 3 communal building and class 5 office core building must be non-combustible throughout its framing and roof material. It must have non-combustible columns or can be timber columns if the timber meets FRL 30/-/-.
S5C24	Provide details of fire resisting construction of building elements for walls including test reports once the material is specified and details of any proposed fire rated ceilings. Provide distance between core building western wall and eastern wall of existing shed.
S7C3, S7C4, S7C5	Details required for compliance with this Specification and Clause C2D11.
S13C3, S13C4, S13C5, S13C6, S13C7	Details required of any proposed tested systems.
D2D10	Please relocate the intertenancy doors in units 3 and 4 as they interfere with the egress doors of units 3 and 4 and diminish the path of travel to the exit in units 3 and 4.

Clause	Recommendation
D2D15	The accessible ramp with rails meeting AS1428.1 between unit 2 and 7 is to be redesigned so that the egress path to the main exit from units 3,4,5 and 6 is unimpeded.
D4D2, D4D3	Please provide entry dimensions to main entry of core building as it appears a clear opening of 850mm cannot be achieved. Please also provide a door schedule. Provide details on ramps complying with AS1428.1. See excerpt below. Dimensions in millimetres  (a) Plan view
D4D6	A performance solution for the accessible car space, shared space, is required as it does not meet AS2890.6. However, compliance with AS2890.6, will likely be more economically viable.
D4D9, S15C2, S15C3	Provide details of the location of tactile ground surface indicators near ramps as per AS1428.4.
S15C4	Provide details of the location of contrast.
S15C5	Provide details of the location of lighting.
S15C6	Provide details of the location of braille.
E1D14	Provide fire services plan indicating location of fire extinguishers.
E2D3, E2D8	Provide details of automatic smoke detection and alarm system from an Accredited Fire Safety Assessor (for Class 3 building only). The minimum requirement is a smoke alarm system to AS3786 with AS1670 alarms where false alarms can occur. However, it is recommended that a smoke detection and alarm system be installed for less maintenance. Provide details of building occupant warning system (BOWS).
E4D, NSW E4D6	Indicate location of exit signs in core building.
S20C2, S20C3	Smoke alarm system required to AS3786 and AS1670 in areas where false alarms may occur.
S20C7	Provide details of building occupant warning system (BOWS).
F1D3	Provide civil design for stormwater drainage.

Clause	Recommendation
F1D7	Provide details regarding use of high impact waterproof membranes.
F2D2, F2D4	Provide a cross section and details of proposed waterproofing substrate and membrane details of all wet areas.
F3D2, F3D3, F3D4, F3D5	Update notes on plans to comply with this clause.
F7D3, F7D4, F7D6, F7D7	Provide details of construction of separating walls and discontinuous construction.
F7D8	Provide details of sound isolation to pumps.
F8D2, F8D3, F8D4, F8D5	Provide details of how condensation management will be incorporated into the design.
S26C2, S26C3, S26C4, S26C5, S26C6	Provide details for wet area construction.
S28C2, S28C3, S28C4, S28C7	Provide details of method of sound insulation complying with this clause.
Parts J4, J5, J6, J7	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
Further issues	• Please update all notes on the plans to NCC 2022 provisions as they are mostly still referencing NCC 2019 provisions. • Provide structural engineering details for retaining walls and pergolas and any other class 10 structures.

Disclaimer

This report was prepared for the purposes and exclusive use of the stated client and is not to be used for any other purpose or by any other person or Corporation. Certifiers2U Pty Ltd accepts no responsibility for any loss or damage suffered howsoever arising to any person or Corporation who may use or rely on this report in contravention of the terms of this clause.

The report does not guarantee that works will or will not gain approval from Council. Suggestions and comments are based on the relevant Council records and information obtained at the time of and subsequent to the inspection of the premises.

Limited Liability by a scheme approved under the Professional Standards Legislation.

This report is protected by copyright.

APPENDIX 1: BCA PROVISIONS

The following is a clause-by-clause assessment of the deemed-to-satisfy provisions of the BCA 2022.

Notes:

	√	The building complies with this clause.
	X	The building does not comply with this clause.
	?	Works not yet completed to determine compliance.
	DS	Design statement (or notation on plans) required from appropriate persons that the building will comply with this clause at an approval stage.
	N/A	This clause is not applicable to this project / building.
	PS	Performance Solution required using Performance Requirements.
	Noted	This clause is for information.
	R	Recommended but not mandatory.

BUILDING CODE OF AUSTRALIA 2022 – VOLUME ONE

SECTION A – GOVERNING REQUIREMENTS

PART A1 – INTERPRETING THE NCC

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	A1G1	New for 2022	<u>Scope of NCC Volume One</u> NCC Volume One contains the requirements for: a) all Class 2 to 9 buildings; and b) access requirements for people with a disability in Class 1b and 10a buildings; and pools. Certain Class 10b structures including access requirements for people with a disability in Class 10b swimming pools.	Noted.
Noted	A1G2	New for 2022	<u>Scope of NCC Volume Two</u> Not applicable to this report.	Noted.
Noted	A1G3	New for 2022	<u>Scope of NCC Volume Three</u> Not applicable to this report.	Noted.
Noted	A1G4	A1.0	<u>Interpretation</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
PART A2 – COMPLIANCE WITH THE NCC				
Noted	A2G1	A2.0, A2.1	<u>Compliance</u> 1) Compliance with the NCC is achieved by complying with: a) the Governing Requirements of the NCC; and b) the Performance Requirements. 2) Performance Requirements are satisfied by one of the following, as shown in Figure A2G1: a) Performance Solution. b) Deemed-to-Satisfy Solution. A combination of (a) and (b).	Noted.
N/A	A2G2	A2.2	<u>Performance Solution</u>	Not applicable to these buildings.
Noted	A2G3	A2.3	<u>Deemed-to-Satisfy Solution</u> 1) A solution that complies with the Deemed-to-Satisfy Provisions is deemed to have met the Performance Requirements. 2) A Deemed-to-Satisfy Solution can show compliance with the Deemed-to-Satisfy Provisions through one or more of the following Assessment Methods: a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets a Deemed-to-Satisfy Provision. b) Expert Judgement.	Noted.
N/A	A2G4	A2.4	<u>A combination of solutions</u>	Not applicable to these buildings.
PART A3 – APPLICATION OF THE NCC IN STATES AND TERRITORIES				
Noted	A3G1	A3.0	<u>State and Territory compliance</u> 4) State and Territory variations, additions and deletions are contained in the following Schedules: c) Schedule 5: New South Wales. 5) State and Territory variations and deletions are identified throughout the NCC.	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
PART A4 – REFERENCED DOCUMENTS				
Noted	A4G1	A4.0	<u>Referenced documents</u>	Noted.
Noted	A4G2	A4.1	<u>Differences between referenced documents and the NCC</u> The NCC overrules any difference between the NCC (including the ABCB Housing Provisions) and a primary referenced document, including any secondary referenced document.	Noted.
Noted	A4G3	A4.2	<u>Adoption of referenced documents</u>	Noted.
PART A5 – DOCUMENTATION OF DESIGN AND CONSTRUCTION				
Noted	A5G1	A5.0	<u>Suitability</u>	Noted.
Noted	A5G2	A5.1	<u>Evidence of suitability – Volumes One, Two and Three</u> 1) The form of evidence used must be appropriate to the use of the material, product, plumbing product, form of construction or design to which it relates. 2) Any copy of documentary evidence submitted must be a complete copy of the original certificate, report or document.	Noted.
X	A5G3	A5.2	<u>Evidence of suitability – Volumes One and Two (BCA)</u> 1) Subject to A5G5, A5G6, A5G7 and A5G9, evidence to support that the use of a material, product, form of construction or design meets a Performance Requirement, or a Deemed-to-Satisfy Provision may be in the form of any one, or any combination of the following: a) A current CodeMark Australia or CodeMark Certificate of Conformity. b) A current Certificate of Accreditation. c) A current certificate, other than a certificate described in (a) and (b), issued by a certification body stating that the properties and performance of a material, product, form of construction or design fulfil specific requirements of the BCA.	Provide information on existing floor linings for any carpet and vinyl flooring. All floor linings must comply with fire safety requirements of AS/ISO9239.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			d) A report issued by an Accredited Testing Laboratory that: i) demonstrates that a material, product or form of construction fulfils specific requirements of the BCA; and ii) sets out the tests the material, product or form of construction has been subjected to and the results of those tests and any other relevant information that has been relied upon to demonstrate it fulfils specific requirements of the BCA. e) A certificate or report from a professional engineer or other appropriately qualified person that: i) certifies that a material, product, form of construction or design fulfils specific requirements of the BCA; and ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA. f) Another form of documentary evidence, such as but not limited to a Product Technical Statement, that: i) demonstrates that a material, product, form of construction or design fulfils specific requirements of the BCA; and ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA. 2) Evidence to support that a calculation method complies with an ABCB protocol may be in the form of any one, or any combination of the following:	

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) A certificate from a professional engineer or other appropriately qualified person that: i) certifies that the calculation method complies with a relevant ABCB protocol; and ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice and other publications have been relied upon. b) Another form of documentary evidence that correctly describes how the calculation method complies with a relevant ABCB protocol.	
Noted	A5G4	A5.3	<u>Evidence of suitability – Volume Three (PCA)</u> Not applicable to this report.	Noted.
X	A5G5	A5.4	<u>Fire-resistance of building elements</u> Where a Deemed-to-Satisfy Provision requires a building element to have an FRL, it must be determined in accordance with Specifications 1 and 2.	Provide details for any building elements required to be fire resisting.
X	A5G6	A5.5	<u>Fire hazard properties</u> Where a Deemed-to-Satisfy Provision requires a building component or assembly to have a fire hazard property it must be determined as follows: a) For average specific extinction area, critical radiant flux and Flammability Index, as defined in Specification 1. b) For Smoke-Developed Index and Spread-of-Flame Index, in accordance with Specification 3. c) For a material's group number or smoke growth rate index (SMOGRARC), in accordance with S7C4(2).	Provide information on proposed wall and floor lining finished. Please note: • Floor finishes must be AS/ISO9239. • Wall and ceiling finishes must meet AS1530.4-2014. Fire test reports will be required for all proposed materials.
Noted	A5G7	A5.6	<u>Resistance to the incipient spread of fire</u> A ceiling is deemed to have a resistance to the incipient spread of fire to the space above itself if: a) it is identical with a prototype that has been submitted to the Standard Fire Test and the resistance to the incipient spread of fire achieved by the prototype is confirmed in a report from an Accredited Testing Laboratory that:	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			i) describes the method and conditions of the test and form of construction of the tested prototype in full; and ii) certifies that the application of restraint to the prototype complies with the Standard Fire Test; or b) it differs in only a minor degree from a prototype tested under (a) and the (b)resistance to the incipient spread of fire attributed to the ceiling is confirmed in a report from an accredited testing laboratory that: i) certifies that the ceiling is capable of achieving the resistance to the incipient spread of fire despite the minor departures from the tested prototype; and ii) describes the materials, construction and conditions of restraint that are necessary to achieve the resistance to the incipient spread of fire.	
Noted	A5G8	A5.7	<u>Labelling of Aluminium Composite Panels</u> An Aluminium Composite Panel must be labelled in accordance with SA TS 5344.	Noted.
Noted	A5G9	New for 2022]	<u>NatHERS</u> Where house energy rating software is required to be used, evidence of the house energy rating software output must be in the form of a NatHERS certificate issued in accordance with the NatHERS scheme.	Noted.
<u>PART A6 – BUILDING CLASSIFICATION</u>				
Noted	A6G1	A6.0	<u>Determining a building classification</u>	Noted.
N/A	A6G2	A6.1	<u>Class 1 buildings</u> Not applicable to this report.	Not applicable to these buildings.
N/A	A6G3	A6.2	<u>Class 2 buildings</u> 1) A Class 2 building is a building containing two or more sole-occupancy units. 2) Each sole-occupancy unit in a Class 2 building must be a separate dwelling.	Not applicable to these buildings.
√	A6G4	A6.3	<u>Class 3 buildings</u>	Class 3 group home accommodation cluster buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			1) A Class 3 building is a residential building providing long-term or transient accommodation for a number of unrelated persons. 2) Class 3 buildings include the following: a) A boarding house, guest house, hostel, lodging house or backpacker accommodation. b) A residential part of a hotel or motel. c) A residential part of a school. d) Accommodation for the aged, children, or people with disability. e) A residential part of a health-care building which accommodates members of staff. f) A residential part of a detention centre. g) A residential care building.	Please note that as there is no internal access in the communal building to the multipurpose room then this portion of the building will also be class 5 which will require fire separation to the class 3 communal unit.
N/A	A6G5	A6.4	<u>Class 4 buildings</u> Class 4 is a dwelling in a Class 5, 6, 7, 8 or 9 building if it is the only dwelling in the building.	Not applicable to these buildings.
√	A6G6	A6.5	<u>Class 5 buildings</u> A Class 5 building is an office building used for professional or commercial purposes.	Class 5 communal / office core building. Please note that as there is no internal access in the communal building to the multipurpose room then this portion of the building will also be class 5 which will require fire separation to the class 3 communal unit.
N/A	NSW A6G7	NSW A6.6	<u>Class 6 buildings</u> A Class 6 building is a shop or other building for sale of goods by retail or the supply of services direct to the public, including: a) an eating room, I, restaurant, milk or soft drink bar; or b) a dining room, bar, shop or kiosk part of a hotel or motel; or c) a hairdresser's or barber's shop, public laundry, or undertaker's establishment; or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			d) market or sale room, showroom, or service station; or e) small live music or arts venue.	
N/A	A6G8	A6.7	<u>Class 7 buildings</u> 1) A Class 7 building is a storage-type building. 2) Class 7 includes the following sub-classifications: a) Class 7a — a carpark. b) Class 7b — a building that is used for storage or display of goods or produce for sale by wholesale.	Not applicable to these buildings.
N/A	A6G9	A6.8	<u>Class 8 buildings</u> 1) A Class 8 building is a process-type building. 2) Class 8 buildings include the following: a) A laboratory. b) A building in which the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce for sale takes place.	Not applicable to these buildings.
N/A	A6G10	A6.9	<u>Class 9 buildings</u> 1) A Class 9 building is a building of a public nature. 2) Class 9 includes the following sub-classifications: a) Class 9a — a health-care building including any parts of the building set aside as laboratories, and includes a health-care building used as a residential care building. b) Class 9b — an assembly building including a trade workshop or laboratory in a primary or secondary school. c) Class 9c — a residential care building.	Not applicable to these buildings.
√	A6G11	A6.10	<u>Class 10 buildings and structures</u> 1) A Class 10 building is a non-habitable building or structure. 2) Class 10 includes the following sub-classifications: a) Class 10a is a non-habitable building including a private garage, carport, shed or the like.	Pergolas, retaining walls class 10a and 10b. The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) Class 10b is a structure that is a fence, mast, antenna, retaining wall or free-standing wall or swimming pool or the like. c) Class 10c is a private bushfire shelter.	
N/A	A6G12	A6.11	<u>Multiple classifications</u> A building (or part of a building) may be designed, constructed or adapted for multiple purposes and have more than one classification.	Not applicable to these buildings.
<u>PART A7 – UNITED BUILDINGS</u>				
N/A	A7G1	A7.0	<u>United buildings</u> Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.	Not applicable to these buildings.
N/A	A7G2	A7.1	<u>Alterations in a united building</u>	Not applicable to these buildings.
<u>SPECIFICATION 1 – FIRE-RESISTANCE OF BUILDING ELEMENTS</u>				
Noted	S1C1	Sch. 5: 1	<u>Scope</u> This Specification sets out the procedures for determining the FRL of building elements.	Noted.
Noted	S1C2	Sch. 5: 2	<u>Rating</u>	Noted.
Noted	S1C3	Sch. 5: 3	<u>FRLs determined by calculation</u>	Noted.
Noted	S1C4	Sch. 5: 4	<u>Interchangeable materials</u>	Noted.
Noted	S1C5	Sch. 5: 5	<u>Columns covered with lightweight construction</u>	Noted.
Noted	S1C6	Sch. 5: 6	<u>Non-loadbearing elements</u>	Noted.
<u>SPECIFICATION 2 – DESCRIPTION OF ELEMENTS REFERRED TO IN SPECIFICATION 1</u>				
Noted	S2C1	New for 2022	<u>Scope</u> This Specification sets out the descriptions of elements referred to in Tables S1C2a, S1C2b, S1C2c, S1C2e, S1C2f, S1C2g, S1C2h, S1C2i, S1C2j, S1C2l and S1C2m of Specification 1.	Noted.
Noted	S2C2	Sch. 5 (Annex): 1.1	<u>Mortar for masonry</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	S2C3	Sch. 5 (Annex): 1.2	<u>Gypsum blocks</u>	Noted.
Noted	S2C4	Sch. 5 (Annex): 1.3	<u>Gypsum-sand mortar and plaster</u>	Noted.
Noted	S2C5	Sch. 5 (Annex): 1.4	<u>Gypsum-perlite and gypsum-vermiculite plaster</u>	Noted.
Noted	S2C6	Sch. 5 (Annex): 1.5	<u>Plaster of cement and sand or cement, lime and sand</u>	Noted.
Noted	S2C7	Sch. 5 (Annex): 1.6	<u>Plaster reinforcement</u>	Noted.
Noted	S2C8	Sch. 5 (Annex): 2	<u>Ashlar stone masonry</u>	Noted.
Noted	S2C9	Sch. 5 (Annex): 3	<u>Dimensions of masonry</u>	Noted.
Noted	S2C10	Sch. 5 (Annex): 3.1	<u>Solid units</u>	Noted.
Noted	S2C11	Sch. 5 (Annex): 3.2	<u>Hollow units</u>	Noted.
Noted	S2C12	Sch. 5 (Annex): 3.3	<u>Equivalent thickness</u>	Noted.
Noted	S2C13	Sch. 5 (Annex): 5	<u>Height-to-thickness ratio of certain walls</u>	Noted.
Noted	S2C14	Sch. 5 (Annex): 6.1	<u>Increase in thickness by plastering — walls</u>	Noted.
Noted	S2C15	Sch. 5 (Annex): 6.2	<u>Increase in thickness by plastering — columns</u>	Noted.
Noted	S2C16	Sch. 5 (Annex): 7.1	<u>Gypsum-perlite or gypsum-vermiculite plaster or metal lath — walls</u>	Noted.
Noted	S2C17	Sch. 5 (Annex): 7.2	<u>Gypsum-perlite or gypsum-vermiculite plaster or metal lath — columns</u>	Noted.
Noted	S2C18	Sch. 5 (Annex): 7.3	<u>Gypsum-perlite or gypsum-vermiculite plaster or metal lath — beams</u>	Noted.
Noted	S2C19	Sch. 5 (Annex): 8.1	<u>Exposure of columns</u>	Noted.
Noted	S2C20	Sch. 5 (Annex): 8.2	<u>Exposure of beams</u>	Noted.
Noted	S2C21	Sch. 5 (Annex): 9	<u>Filling of column spaces</u>	Noted.
Noted	S2C22	Sch. 5 (Annex): 10	<u>Hollow terracotta blocks</u>	Noted.
Noted	S2C23	Sch. 5 (Annex): 11.1	<u>Reinforcing for column and beam protection — masonry</u>	Noted.
Noted	S2C24	Sch. 5 (Annex): 11.2	<u>Reinforcing for column and beam protection — gypsum blocks and hollow terracotta blocks</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	S2C25	Sch. 5 (Annex): 11.3	<u>Reinforcing for column and beam protection — structural concrete and poured gypsum</u>	Noted.
Noted	S2C26	Sch. 5 (Annex): 11.4	<u>Reinforcing for column and beam protection — gypsum-perlite or gypsum-vermiculite plaster sprayed to contour</u>	Noted.
Noted	S2C27	Sch. 5 (Annex): 12.1	<u>Measurement of thickness of column and beam protection</u>	Noted.
<u>SPECIFICATION 3 – FIRE HAZARD PROPERTIES</u>				
Noted	S3C1	Sch. 6: 1	<u>Scope</u> This Specification sets out the procedures for determining the fire hazard properties of assemblies tested to AS/NZS 1530.3.	Noted.
Noted	S3C2	Sch. 6: 2.1	<u>General requirement</u>	Noted.
Noted	S3C3	Sch. 6: 2.2	<u>Form of test</u>	Noted.
Noted	S3C4	Sch. 6: 2.3	<u>Test specimens</u>	Noted.
Noted	S3C5	Sch. 6: 2.4	<u>Concession</u>	Noted.
Noted	S3C6	Sch. 6: 2.5	<u>Smaller specimen permitted</u>	Noted.
<u>SECTION B – STRUCTURE</u>				
<u>PART B1 – STRUCTURAL PROVISIONS</u>				
Noted	B1D1	B1.0	<u>Deemed-to-Satisfy Provisions</u>	Noted.
X	B1D2	B1.1	<u>Resistance to actions</u> The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where: a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and b) the resistance of a building or structure is determined in accordance with B1D4.	Structural engineering details required from engineer.
X	B1D3	B1.2	<u>Determination of individual actions</u>	Structural engineering details required from engineer.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			The magnitude of individual actions must be determined in accordance with the following: a) Permanent actions: b) Imposed actions: c) Wind, snow and ice and earthquake actions: d) Actions not covered in (a), (b) and (c) above: e) For the purposes of (d) the actions include but are not limited to: i) liquid pressure action; and ii) ground water action; and iii) rainwater action (including ponding action); and iv) earth pressure action; and v) differential movement; and vi) time dependent effects (including creep and shrinkage); and vii) thermal effects; and viii) ground movement caused by: A) swelling, shrinkage or freezing of the subsoil; and B) landslip or subsidence; and C) siteworks associated with the building or structure; and ix) construction activity actions.	
X	B1D4	B1.4	<u>Determination of structural resistance of materials and forms of construction</u> The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate: New materials and forms of construction are to be designed to the following Australian Standards as applicable: (a) Masonry AS 3700 (b) Concrete AS 3600, AS5146, AS5216 (c) Steel AS 4100, AS4600	Structural engineering details required from engineer.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			(d) Composite steel and concrete AS2327 (e) Aluminium AS1664, AS1664.2 (f) Timber AS1720, AS1684 (g) Piling AS2159 (h) Glazing AS1288, AS 2047 (i) Termite risk management AS3660.1 (j) Roof construction AS4597, AS2050, AS2908 AS1562 (k) Particleboard structural flooring AS1860, (l) Garage doors (Region C and D) AS1170, AS4505 Lifts Table B1D4 or Specification S6C11l(iii)	
N/A	B1D5	B1.5	<u>Structural software</u> (a) Structural software used. (b) Limitations (c) NA to AS1684 or NASH residential and low rise steel framing.	Not applicable to these buildings.
N/A	B1D6	B1.6	<u>Construction of buildings in flood hazard areas</u> 1) A building in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas. 2) The requirements of (1) only apply to a Class 2 or 3 building, Class 9a health-care building, Class 9c building or a Class 4 part of a building.	Not applicable to these buildings.
<u>SPECIFICATION - 4 DESIGN OF BUILDINGS IN CYCLONIC AREAS</u>				
N/A	S4C1	Spec B1.2: 1	<u>Scope</u> 1) This specification contains requirements for the design of buildings in cyclonic areas in addition to the requirements of AS/NZS 1170.2. 2) For the purposes of Specification 4, cyclonic areas are those determined as being located in wind regions C and Din accordance with AS/NZS 1170.2.	Not applicable to these buildings.
N/A	S4C2	Spec B1.2: 2	<u>Roof cladding</u>	Not applicable to these buildings.
<u>SECTION C FIRE RESISTANCE</u>				

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
PART C2 – FIRE RESISTANCE AND STABILITY				
Noted	C2D1	C1.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with: a) C2D2 to C2D15, C3D2 to C3D15 and C4D2 to C4D17 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
√	C2D2	C1.1	<u>Type of construction required</u> Type of Construction required is determined by the Table C2D2 Each building element must comply with Specification 5 as applicable.	Type C construction.
√	C2D3	C1.2	<u>Calculation of rise in storeys</u> 1) The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space: a) above the finished ground next to that part; or b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary. See the rest of the clause for other type and classes.	Group home with six (6) dwellings and community facility – 1.
√	C2D4	C1.3	<u>Buildings of multiple classification</u> 1) In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 on the basis that the classification applying to the top storey applies to all storeys, except for Class 4 portions.	Class 3 - communal building Class 5 - multi-purpose room in communal building.
N/A	C2D5	C1.4	<u>Mixed types of construction</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4.	
N/A	C2D6	C1.5	<u>Two storey Class 2, 3 or 9c buildings</u> A building having a rise in storeys of 2 may be of Type C construction if: a) it is a Class 2 or 3 building or a mixture of these classes and each sole-occupancy unit has: i) access to at least 2 exits; or its own direct access to a road or open space; or b) it is a Class 9c building protected throughout with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and complies with the maximum compartment size specified in Table C3D3 for Type C construction.	Not applicable to these buildings.
N/A	C2D7	C1.6	<u>Class 4 parts of buildings</u> For the Type of construction required by C2D4, a Class 4 part of a building requires the same FRL for building elements and the same construction separating the Class 4 part from the remainder of the building as a Class 2 part in the same Type of construction.	Not applicable to these buildings.
N/A	C2D8	C1.7	<u>Open spectator stands and indoor sports stadiums</u> 1) An open spectator stand or indoor sports stadium may be of Type C construction and need not comply with the other provisions of this Part if it contains not more than one tier of seating, is of non-combustible construction, and has only changing rooms, sanitary facilities or the like below the tiered seating. 2) In (1), one tier of seating means numerous rows of tiered seating incorporating cross-overs but within one viewing level.	Not applicable to these buildings.
X	C2D9	C1.8	<u>Lightweight construction</u> 1) Lightweight construction must comply with Specification 6.	Details required of any proposed lightweight construction for fire separation in the communal building to the multipurpose room and between units 2/3/4 and 5/6/7.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	C2D10	C1.9	<u>Non-combustible building elements</u> 1) In a building required to be of Type A or B construction several building elements and their components must be non-combustible. There are also several exclusions.	Not applicable to these buildings.
X	NSW C2D11	C1.10 and NSW C1.10	<u>Fire hazard properties</u> 1) The fire hazard properties of the following internal linings, materials and assemblies within a Class 2 to 9 building must comply with Specification 7. 2) Paint or fire-retardant coatings must not be used in order to make a material comply with a required fire hazard property, except in respect of a material referred to in NSW Specification 7, NSW Table S7C7 and to which Notes 4 and 5 are applicable. 3) The requirements of (1) do not apply to several materials or assemblies in this clause.	Provide an internal finishes schedule for all floor and wall linings, noting: - Floor finishes must be AS/ISO9239. - Wall and ceiling finishes must meet AS1530.4-2014. - Depending on proposed air conditioning system, any proposed ductwork must meet AS4254. Fire test reports will be required for all proposed materials.
N/A	C2D12	C1.11	<u>Performance of external walls in fire</u> Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification 8.	Not applicable to these buildings.
N/A	C2D13	C1.13	<u>Fire-protected timber: Concession</u> Fire-protected timber may be used wherever an element is required to be non-combustible in certain circumstances.	Not applicable to these buildings.
Noted	C2D14	C1.14	<u>Ancillary elements</u> An ancillary element must not be fixed, installed, attached to or supported by the concealed internal parts or external face of an external wall that is required to be non-combustible unless it is one of the exemptions in this clause.	Noted.
N/A	C2D15	New for 2022	<u>Fixing of bonded laminated cladding panels</u> 1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
PART C3 – COMPARTMENTATION AND SEPARATION				
Noted	C3D1	C2.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with: a) C2D2 to C2D15, C3D2 to C3D15 and C4D2 to C4D17; and 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
Noted	C3D2	C2.1	<u>Application of Part</u> 1) C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, an open-deck carpark or an open spectator stand. 2) C3D13(1)I does not apply to a Class 8 electricity network substation.	Noted.
√	C3D3	C2.2	<u>General floor area and volume limitations</u> 1) The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4. 2) A part of a building which contains only heating, ventilating, or lift equipment, water tanks, or similar service units is not counted in the floor area or volume of a fire compartment or atrium if it is situated at the top of the building. 3) In a building containing an atrium, the part of the atrium well bounded by the perimeter of the openings in the floors and extending from the level of the first floor above the atrium floor to the roof covering is not counted in the volume of the atrium for the purposes of this clause.	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	C3D4	C2.3	<u>Large isolated buildings</u> The size of a fire compartment in a building may exceed that specified in Table C3D3 where: a) the building does not exceed 18 000 m² in floor area nor exceed 108 000 m³ in volume, if: i) the building is Class 7 or 8 and: A) contains not more than 2 storeys; and B) is provided with open space complying with C3D5(1) not less than 18 m wide around the building; or ii) the building is Class 5, 6, 7, 8 or 9 and is: A) protected throughout with a sprinkler system complying with Specification 17; and B) provided with a perimeter vehicular access complying with C3D5(2); or b) the building is Class 5, 6, 7, 8 or 9 and exceeds 18 000 m² in floor area or 108 000 m³ in volume, if it is: i) protected throughout with a sprinkler system complying with Specification 17; and ii) provided with a perimeter vehicular access complying with C3D5(2); or c) there is more than one building on the allotment and: i) each building complies with (a) or (b); or ii) if the buildings are closer than 6 m to each other they are regarded as one building and collectively comply with (a) or (b).	Not applicable to these buildings.
N/A	C3D5	C2.4	<u>Requirements for open spaces and vehicular access</u> 1) An open space required by C3D4 must: a) be wholly within the allotment except that any road, river, or public place adjoining the allotment, but not the farthest 6 m of it may be included; and b) include vehicular access in accordance with (2); and c) not be used for the storage or processing of materials; and	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			d) not be built upon, except for guard houses and service structures (such as electricity substations and pump houses) which may encroach upon the width of the space if they do not unduly impede fire-fighting at any part of the perimeter of the allotment or unduly add to the risk of spread of fire to any building on an adjoining allotment. 2) Vehicular access required by this Part: a) must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and b) must have a minimum unobstructed width of 6 m with no part of its furthest boundary more than 18 m from the building and in no part of the 6 m width be built upon or used for any purpose other than vehicular or pedestrian movement; and c) must provide reasonable pedestrian access from the vehicular access to the building; and d) must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and e) must be wholly within the allotment except that a public road complying with (a), (b), (c) and (d) may serve as the vehicular access or part thereof.	
N/A	C3D6	C2.5	<u>Class 9 buildings</u> 1) A Class 9a health-care building must comply with the following: a) patient care areas must be divided into fire compartments not exceeding 2000 m². b) A fire compartment must be separated from the remainder of the building by fire walls and: i) in Type A construction—floors and roof or ceiling as required in Specification 5; and ii) in Type B construction—floors with an FRL of not less than 120/120/120 and with the openings in external walls bounding patient care areas being	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			vertically separated in accordance with the requirements of C3D7 as if the building were of Type A construction. 2) In a building containing a Class 9b early childhood centre: a) unless the Class 9b early childhood centre is the only use in the building, it must be separated from the remainder of the building by walls and/or floors with an FRL not less than that required for a fire wall; and each storey within the Class 9b early childhood centre must contain not less than 2 fire compartments. 3) A Class 9c building must comply with the following: A building must be divided into areas not more than 500 m² by smoke proof walls complying with all requirements of this clause.	
N/A	C3D7	C2.6	<u>Vertical separation of openings in external walls</u> Only applicable to a building of Type A Construction, that is not sprinkler-protected. – no requirement is applicable for spandrel separation of a Sprinkler protected building. If not, Sprinkler protected either 900mm vertical spandrel required, or 1m horizontal projecting spandrel – specific details in this clause of the BCA.	Not applicable to these buildings.
N/A	C3D8	C2.7	<u>Separation by fire walls</u> 1) Construction — A fire wall must be constructed in accordance with the following: a) The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C19(3)I(i), S5C22(3)I(i) and S5C25(3)I(i) permit a lower FRL on the carpark side. b) Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			c) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire-resisting performance of the fire wall is maintained. 2) Separation of buildings — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with the requirements of this clause. 3) Separation of fire compartments — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of: a) a floor having an FRL required for a fire wall; or b) the roof covering.	
X	C3D9	C2.8	<u>Separation of classifications in the same storey</u> 1) If a building has parts of different classifications located alongside one another in the same storey: a) each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or b) the parts must be separated in that storey by a fire wall. 2) A fire wall required by (1)(b) must have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned. 3) For the purposes of (2), the FRL in Specification 5 must be either: a) the higher FRL prescribed in Table S5C11d or S5C21d; or b) the FRL prescribed in Table S5C24c.	Indicate on plans fire separating walls between class 3 units to achieve FRL 60/60/60 for units 2/3/4 and units 5/6/7. Please clarify Section 02 on sheet 10, as it appears that there is an opening in the fire separating wall between units 2 and 3.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			4) For the purposes of (1), where one part is a carpark complying with S5C19, S5C22 or S5C25, the parts may be separated by a fire wall complying with S5C19(3)l, S5C22(3)l or S5C25(3)l as appropriate.	
N/A	C3D10	C2.9	<u>Separation of classifications in different storeys</u> The separating floors must have an FRL not less than that required for the lower storey use.	Not applicable to these buildings.
N/A	C3D11	C2.10	<u>Separation of lift shafts</u> The lift is to be enclosed in a fire-isolated shaft if it connects more than two storeys or three storeys if provided with a sprinkler system.	Not applicable to these buildings.
N/A	C3D12	C2.11	<u>Stairways and lifts in one shaft</u> A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.	Not applicable to these buildings.
N/A	C3D13	C2.12	<u>Separation of equipment</u> Equipment comprising lift motors and control plant, emergency generators or central smoke control plant; boilers or batteries are required to be separated.	Not applicable to these buildings.
X	C3D14	C2.13	<u>Electricity supply system</u> 1) An electricity substation located within a building must: a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. 2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must: a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.	Indicate on plans where main switchboard is and provide details of separation to it.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			5) Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear. 6) For the purposes of (5), emergency equipment includes but is not limited to the following: a) Fire hydrant booster pumps. b) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like. c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building. d) Air handling systems designed to exhaust and control the spread of fire and smoke. e) Emergency lifts. f) Control and indicating equipment. g) Emergency warning and intercom systems.	
N/A	C3D15	C2.14	<u>Public corridors in Class 2 and 3 buildings</u> In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with S11C2.	Not applicable to these buildings.
PART C4 – PROTECTION OF OPENINGS				
Noted	C4D1	C3.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with: a) C2D2 to C2D15, C3D2 to C3D15 and C4D2 to C4D17 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			determined in accordance with A2G2(3) and A2G4(3) as applicable.	
Noted	C4D2	C3.1	<u>Application of Part</u> 1) The Deemed-to-Satisfy Provisions of this Part do not apply to the following: a) Control joints, weep holes b) Non-combustible ventilators for subfloor or cavity ventilation, c) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like. d) In a carpark floor other than a floor that separates a part not used as a carpark, and subject to I, the following openings in a carpark floor: i) Service penetrations. ii) Openings formed by a vehicle ramp. e) The requirements of (d) only apply where the connected carpark levels comply as a single fire compartment for the purposes of all other requirements of the Deemed-to-Satisfy Provisions of Sections C, D and E.	Noted.
X	C4D3	C3.2	<u>Protection of openings in external walls</u> 1) Subject to (2), openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used, they must be located externally. 2) The requirements of (1) only apply if the distance between the opening and the fire-source feature to which it is exposed is less than: a) 3 m from a side or rear boundary of the allotment; or b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or	(There is 3m between the class 5 and class 3 – complies) Please clarify Section 02 on sheet 10, as it appears that there is an opening in the fire separating wall between units 2 and 3.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			c) 6 m from another building on the allotment that is not Class 10. 3) Openings required to be protected under (1), must not occupy more than 1/3 of the area of the external wall of the storey in which they are located unless they are in a Class 9b building used as an open spectator stand.	
N/A	C4D4	C3.3	<u>Separation of external walls and associated openings in different fire compartments</u> The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless: a) those parts of each wall have an FRL not less than 60/60/60; and b) any openings are protected in accordance with C4D5.	Not applicable to these buildings.
N/A	C4D5	C3.4	<u>Acceptable methods of protection</u> Where exposed to be protected by external or internal drenchers (side of protection specified by relevant clause that calls up protection), fire doors, windows, or shutters. Fire doors, fire windows and fire shutters must comply with Specification 12.	Not applicable to these buildings.
N/A	C4D6	C3.5	<u>Doorways in fire walls</u> 1) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed ½ of the length of the fire wall, and each doorway must be protected by: a) 2 fire doors or fire shutters, one on each side of the doorway, each of which has an FRL of not less than ½ that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30; or b) a fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (a); or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			c) a single fire door or fire shutter which has an FRL of not less than that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30. 2) A fire door or fire shutter required by (1)(a), (b) or (c) must be self-closing, or automatic closing in accordance with (3) and (4). 3) The automatic closing operation required by (2) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located on each side of the fire wall not more than 1.5 m horizontal distance from the opening. 4) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation.	
N/A	C4D7	C3.6	<u>Sliding fire doors</u> If utilised must fail safe in the closed position, be suitably signposted with an audible alarm, signage, and directional arrow to indicate direction to slide door to open when in the closed position.	Not applicable to these buildings.
N/A	C4D8	C3.7	<u>Protection of doorways in horizontal exits</u> To be suitably protected by fire doors with FRL of not less than that required for the fire wall and be self-closing or automatic-closing. And must swing in the direction of travel.	Not applicable to these buildings.
N/A	C4D9	C3.8	<u>Openings in fire-isolated exits</u> 1) Doorways that open to fire-isolated stairways, fire-isolated passageways or fire-isolated ramps, and are not doorways opening to a road or open space, must be protected by –/60/30 fire doors that are self-closing, or automatic closing in accordance with (2) and (3).	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) The automatic-closing operation required by (1) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway. 3) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the automatic-closing operation. 4) A window in an external wall of a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp must be protected in accordance with C4D5 if it is within 6 m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure.	
N/A	C4D10	C3.9	<u>Service penetrations in fire-isolated exits</u> Fire-isolated exits must not be penetrated by any services other than: a) electrical wiring permitted by D3D8(6) to be installed within the exit; or b) ducting associated with a pressurisation system if it: i) is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and ii) does not open into any other part of the building; or c) for fire services, water supply and test drain pipes.	Not applicable to these buildings.
N/A	C4D11	C3.10	<u>Openings in fire-isolated lift shafts</u> 1) Doorways — If a lift shaft is required to be fire-isolated, an entrance doorway to that shaft must be protected by –/60/– fire doors that: a) comply with AS 1735.11; and	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) are set to remain closed except when discharging or receiving passengers, goods or vehicles. 2) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than – /60/60 if it exceeds 35 000 mm² in area.	
X	NSW C4D12	C3.11	<u>Bounding construction: Class 2 and 3 buildings and Class 4 parts</u> Doorway to each SOU to be protected. • -/60/30 in Type A construction • Self-closing, tight fitting, solid core door, not less than 35mm thick in Type B or C construction	Provide details of FRL 60/60/60 walls between units 2/3/4 and 5/6/7 and that any doorways between units are self-closing tight fitting 35mm thick solid core doors. Please relocate the intertenancy doors in units 3 and 4 as they interfere with the egress doors of units 3 and 4.
X	C4D13	C3.12	<u>Openings in floors and ceilings for services</u> 1) Where a service passes through: - a floor that is required to have an FRL with respect to integrity and insulation; or - a ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with (2). 2) A service must be protected: - in a building of Type A construction, by a shaft complying with Specification 5; or - in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or - in accordance with C4D15. 3) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.	Provide details where fire rated ceilings are proposed.
N/A	C4D14	C3.13	<u>Openings in shafts</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			Openings in ventilating, pipe, garbage, or other service shaft to be protected by: • /60/30 fire doors / hoppers / access panel.	
X	C4D15	C3.15	<u>Openings for service installations</u> Electrical, plumbing mechanical ventilation shafts etc not to impair the FRL of rated members and tested in accordance with AS 4072.1 and AS 1530.4 If the service is an electrical switch, outlet, or the like, and it is installed in accordance with Specification 13.	Provide details of proposed location, type, and size of penetration protection to AS1530.4-2014.
X	C4D16	C3.16	<u>Construction joints</u> 1) Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner: a) identical with a prototype tested in accordance with AS 4072.1 and AS 1530.4 to achieve the required FRL; or b) that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL.	Provide details of construction joint compliance with this clause and location of all construction joints.
N/A	C4D17	C3.17	<u>Columns protected with lightweight construction to achieve an FRL</u> A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire.	Not applicable to these buildings.
<u>SPECIFICATION 5 – FIRE-RESISTING CONSTRUCTION</u>				
Noted	S5C1	Spec C1.1: 1	<u>Scope</u> This Specification contains requirements for the fire-resisting construction of building elements.	Noted.
Noted	S5C2	Spec C1.1: 2.1	<u>Exposure to fire-source features</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	S5C3	Spec C1.1: 2.2	<u>Fire protection for a support of another part</u>	The roof between the class 3 communal building and class 5 office core building must be non-combustible throughout its framing and roof material. It must have non-combustible columns or can be timber columns if the timber meets FRL 30/-/-.
Noted	S5C4	Spec C1.1: 2.3	<u>Lintels</u>	Noted.
X	S5C5	Spec C1.1: 2.4	<u>Method of attachment not to reduce the fire-resistance of building elements</u>	The roof between the class 3 communal building and class 5 office core building must be non-combustible throughout its framing and roof material. It must have non-combustible columns or can be timber columns if the timber meets FRL 30/-/-.
X	S5C6	Spec C1.1: 2.5	<u>General concessions</u>	The roof between the class 3 communal building and class 5 office core building must be non-combustible throughout its framing and roof material. It must have non-combustible columns or can be timber columns if the timber meets FRL 30/-/-.
Noted	S5C7	Spec C1.1: 2.6	<u>Mezzanine floors: Concession</u>	Noted.
Noted	S5C8	Spec C1.1: 2.7	<u>Enclosure of shafts</u>	Noted.
Noted	S5C9	Spec C1.1: 2.8	<u>Carparks in Class 2 and 3 buildings</u>	Noted.
Noted	S5C10	Spec C1.1: 2.9	<u>Residential care building: Concession</u>	Noted.
N/A	S5C11	Spec C1.1: 3.1 and Table 3	<u>Type A fire-resisting construction — fire-resistance of building elements</u>	Not applicable to these buildings.
N/A	S5C12	Spec C1.1: 3.2	<u>Type A fire-resisting construction — concessions for floors</u>	Not applicable to these buildings.
N/A	S5C13	Spec C1.1: 3.3	<u>Type A fire-resisting construction — floor loading of Class 5 and 9b buildings: Concession</u>	Not applicable to these buildings.
N/A	S5C14	Spec C1.1: 3.4	<u>Type A fire-resisting construction — roof superimposed on concrete slab: Concession</u>	Not applicable to these buildings.
N/A	S5C15	Spec C1.1: 3.5	<u>Type A fire-resisting construction — roof: Concession</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S5C16	Spec C1.1: 3.6	<u>Type A fire-resisting construction — roof lights</u>	Not applicable to these buildings.
N/A	S5C17	Spec C1.1:3.7	<u>Type A fire-resisting construction — internal columns and walls: Concession</u>	Not applicable to these buildings.
N/A	S5C18	Spec C1.1: 3.8	<u>Type A fire-resisting construction — open spectator stands and indoor sports stadiums: Concession</u>	Not applicable to these buildings.
N/A	S5C19	Spec C1.1: 3.9 and Table 3.9	<u>Type A fire-resisting construction — carparks</u>	Not applicable to these buildings.
N/A	S5C20	Spec C1.1: 3.10	<u>Type A fire-resisting construction — Class 2 and 3 buildings: Concession</u>	Not applicable to these buildings.
N/A	S5C21	Spec C1.1: 4.1 and Table 4	<u>Type B fire-resisting construction — fire-resistance of building elements</u>	Not applicable to these buildings.
N/A	S5C22	Spec C1.1: 4.2 and Table 4.2	<u>Type B fire-resisting construction — carparks</u>	Not applicable to these buildings.
N/A	S5C23	Spec C1.1: 4.3	<u>Type B fire-resisting construction — Class 2 and 3 buildings: Concession</u>	Not applicable to these buildings.
X	S5C24	Spec C1.1: 5.1 and Table 5	<u>Type C fire-resisting construction — fire-resistance of building elements</u>	Provide details of fire resisting construction of building elements for walls including test reports once the material is specified and details of any proposed fire rated ceilings. Provide distance between core building western wall and eastern wall of existing shed.
Noted	S5C25	Spec C1.1: 5.2 and Table 5.2	<u>Type C fire-resisting construction — carparks</u>	Noted.
SPECIFICATION 6 – STRUCTURAL TESTS FOR LIGHTWEIGHT CONSTRUCTION				
Noted	S6C1	Spec C1.8: 1	<u>Scope</u> This Specification describes tests to be applied to and criteria to be satisfied by a wall system of lightweight construction.	Noted.
Noted	S6C2	Spec C1.8: 2	<u>Application</u>	Noted.
Noted	S6C3	Spec C1.8: 3.1	<u>Walls of certain Class 9b buildings</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	S6C4	Spec C1.8: 3.2	<u>Walls of shafts and fire-isolated exits generally</u>	Noted.
Noted	S6C5	Spec C1.8: 3.3	<u>Additional requirements for lift shafts</u>	Noted.
Noted	S6C6	Spec C1.8: 3.4	<u>Walls generally</u>	Noted.
Noted	S6C7	Spec C1.8: 4.1	<u>General requirements for testing</u>	Noted.
Noted	S6C8	Spec C1.8: 4.2	<u>Testing in-situ</u>	Noted.
Noted	S6C9	Spec C1.8: 4.3	<u>Testing of specimens</u>	Noted.
Noted	S6C10	Spec C1.8: 5	<u>Test methods</u>	Noted.
Noted	S6C11	Spec C1.8: 6	<u>Criteria for compliance</u>	Noted.
<u>SPECIFICATION 7 – FIRE HAZARD PROPERTIES</u>				
Noted	S7C1	Spec C1.10: 1	<u>Scope</u> This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.	Noted.
Noted	S7C2	Spec C1.10: 2	<u>Application</u>	Noted.
X	S7C3	Spec C1.10: 3	<u>Floor linings and floor coverings</u>	Details required for compliance with this Specification and Clause C2D11.
X	S7C4	Spec C1.10: 4	<u>Wall and ceiling linings</u>	Details required for compliance with this Specification and Clause C2D11.
X	S7C5	Spec C1.10: 5	<u>Air-handling ductwork</u>	Details required for compliance with this Specification and Clause C2D11.
N/A	S7C6	Spec C1.10: 6	<u>Lift cars</u>	Not applicable to these buildings.
N/A	S7C7	Spec C1.10: 7]	<u>Other materials</u>	Not applicable to these buildings.
<u>SPECIFICATION 8 – PERFORMANCE OF EXTERNAL WALLS IN FIRE</u>				
N/A	S8C1	Spec C1.11: 1	<u>Scope</u> This Specification contains measures to minimise, in the event of fire, the likelihood of external walls covered by S8C2 collapsing outwards as complete panels and the likelihood of panels separating from supporting members.	Not applicable to these buildings.
N/A	S8C2	Spec C1.11: 2	<u>Application</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S8C3	Spec C1.11: 3	<u>General requirements for external wall panels</u>	Not applicable to these buildings.
N/A	S8C4	Spec C1.11: 4	<u>Additional requirements for vertically spanning external wall panels adjacent to columns</u>	Not applicable to these buildings.
SPECIFICATION 9 CAVITY BARRIERS FOR FIRE-PROTECTED TIMBER				
N/A	S9C1	Spec C1.13:	<u>Scope</u> This Specification sets out requirements for cavity barriers in fire-protected timber construction.	Not applicable to these buildings.
N/A	S9C2	Spec C1.13: 2	<u>Requirements</u>	Not applicable to these buildings.
SPECIFICATION 10 – FIRE-PROTECTED TIMBER				
N/A	S10C1	Spec C1.13a: 1	<u>Scope</u> This Specification contains requirements for fire-protected timber and procedures for determining the time at which the temperature at the interface between the protection system and the timber is exceeded.	Not applicable to these buildings.
N/A	S10C2	Spec C1.13a: 2.1	<u>General requirements</u>	Not applicable to these buildings.
N/A	S10C3	Spec C1.13a: 2.2	<u>Massive timber</u>	Not applicable to these buildings.
N/A	S10C4	Spec C1.13a: 3.1	<u>Form of test</u>	Not applicable to these buildings.
N/A	S10C5	Spec C1.13a: 3.2	<u>Smaller specimen permitted</u>	Not applicable to these buildings.
N/A	S10C6	Spec C1.13a: 3.3	<u>Acceptance criteria</u>	Not applicable to these buildings.
SPECIFICATION 11 – SMOKE-PROOF WALLS IN HEALTH-CARE AND RESIDENTIAL CARE BUILDINGS				
N/A	S11C1	Spec C2.5: 1	<u>Scope</u> 1) This Specification sets out requirements for the construction of smoke-proof walls in Class 9a health-care buildings and Class 9c buildings. 2) Smoke proof walls required to have an FRL are to be in accordance with A5G5.	Not applicable to these buildings.
N/A	S11C2	Spec C2.5: 2	<u>Class 9a health-care buildings</u>	Not applicable to these buildings.
N/A	S11C3	Spec C2.5: 3	<u>Class 9c building</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S11C4	Spec C2.5: 4	<u>Doorways in smoke-proof walls</u>	Not applicable to these buildings.
<u>SPECIFICATION 12 – FIRE DOORS, SMOKE DOORS, FIRE WINDOWS AND SHUTTERS</u>				
N/A	S12C1	Spec C3.4: 1	<u>Scope</u> This Specification sets out requirements for the construction of fire doors, smoke doors, fire windows and fire shutters.	Not applicable to these buildings.
N/A	S12C2	Spec C3.4: 2	<u>Fire doors</u>	Not applicable to these buildings.
N/A	S12C3	Spec C3.4: 3.1	<u>General requirements for smoke doors</u>	Not applicable to these buildings.
N/A	S12C4	Spec C3.4: 3.2	<u>Construction Deemed-to-Satisfy for smoke doors</u>	Not applicable to these buildings.
N/A	S12C5	Spec C3.4: 4	<u>Fire shutters</u>	Not applicable to these buildings.
N/A	S12C6	Spec C3.4: 5	<u>Fire windows</u>	Not applicable to these buildings.
<u>SPECIFICATION 13 – PENETRATION OF WALLS, FLOORS AND CEILINGS BY SERVICES</u>				
Noted	S13C1	Spec C3.15: 1	<u>Scope</u> This Specification prescribes materials and methods of installation for services that penetrate walls, floors and ceilings required to have an FRL.	Noted.
Noted	S13C2	Spec C3.15: 2	<u>Application</u>	Noted.
X	S13C3	Spec C3.15: 3	<u>Metal pipe systems</u>	Details required of any proposed tested systems.
X	S13C4	Spec C3.15: 4	<u>Pipes penetrating sanitary compartments</u>	Details required of any proposed tested systems.
X	S13C5	Spec C3.15: 5	<u>Wires and cables</u>	Details required of any proposed tested systems.
X	S13C6	Spec C3.15: 6	<u>Electrical switches and outlets</u>	Details required of any proposed tested systems.
X	S13C7	Spec C3.15: 7	<u>Fire-stopping</u>	Details required of any proposed tested systems.
<u>SECTION D ACCESS AND EGRESS</u>				
<u>PART D2 – PROVISION FOR ESCAPE</u>				

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	D2D1	D1.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with: a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. 3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.	Noted.
Noted	D2D2	D1.1	The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.	Noted.
√	D2D3	D1.2	<u>Number of exits required</u> 1) All buildings — Every building must have at least one exit from each storey. 2) Class 2 to 8 buildings: a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: i) Each storey if the building has an effective height of more than 25 m. ii) A Class 2 or 3 building subject to C2D6. b) The requirements of (a)(i) do not apply to a part of a storey that: i) is provided with direct egress to a road or open space; and ii) satisfies D2D5 by the provision of 1 exit. 3) Basements — In addition to any horizontal exit, not less than 2 exits must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5 m, unless: a) the floor area of the storey is not more than 50 m²; and	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) the distance of travel from any point on the floor to a single exit is not more than 20 m. 4) Class 9 buildings: a) In addition to any horizontal exit, not less than 2 exits must be provided. b) The requirements of (a) do not apply to a part of a storey that: i) is a plant room, machinery room, storeroom, lift-machine room or the like; and ii) is provided with direct egress to a road, open space or a fire-isolated exit complying with D2D12(2); and iii) satisfies D2D5 by the provision of 1 exit. 5) Exits from Class 9c buildings and patient care areas in Class 9a health-care buildings — In a Class 9a health-care building and a Class 9c building, at least one exit must be provided from every part of a storey which has been divided into fire compartments in accordance with C3D3 or C3D6. 6) Exits in open spectator stands — In an open spectator stand containing more than one tier of seating, every tier must have not less than 2 stairways or ramps, each forming part of the path of travel to not less than 2 exits. 7) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to: a) an exit; or b) at least 2 exits if 2 or more exits are required.	
N/A	D2D4	D1.3	<u>When fire-isolated stairways and ramps are required</u> 1) Class 2 and 3 buildings — The following applies: a) Subject to (b), every stairway or ramp serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than: i) 3 consecutive storeys in a Class 2 building; or ii) 2 consecutive storeys in a Class 3 building.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) Notwithstanding (a), one extra storey of any classification may be included if: i) it is only for the accommodation of motor vehicles or for other ancillary purposes; or ii) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or iii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having: A) an FRL of –/60/60, if non-loadbearing; and B) an FRL of 90/90/90, if loadbearing; and C) no opening that could permit the passage of fire or smoke. 2) Class 5, 6, 7, 8 or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless: a) in a Class 9a health-care building — it connects, or passes through or passes by not more than 2 consecutive storeys in areas other than patient care areas; or b) it is part of an open spectator stand; or c) in any other case, except in a Class 9b early childhood centre or a Class 9c building, it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if: i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or ii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having: A) an FRL of –/60/60, if non-loadbearing; and	

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if loadbearing; and C) no opening that could permit the passage of fire or smoke.	
√	D2D5	D1.4	<u>Exit travel distances</u> 1) Class 2 and 3 buildings: a) The entrance doorway of any sole-occupancy unit must be not more than: i) 6m from an exit or from a point from which travel in different directions to 2 exits is available; or ii) 20 m from a single exit serving the storey at the level of egress to a road or open space; and b) no point on the floor of a room which is not in a sole-occupancy unit must be more than 20 m from an exit or from a point at which travel in different directions to 2 exits is available. 2) Class 4 parts of a building — The entrance doorway to any Class 4 part of a building must be not more than 6 m from an exit or a point from which travel in different directions to 2 exits is available. 3) Class 5, 6, 7, 8 or 9 buildings — Subject to (4), (5) and (6): a) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and b) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30m. 4) Class 9a buildings — In a patient care area in a Class 9a building: a) no point on the floor must be more than 12 m from a point from which travel in different directions to 2 of the required exits is available; and	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) the maximum distance to one of those exits must not be more than 30 m from the starting point. 5) Open spectator stands 6) Assembly buildings	
√	D2D6	D1.5	<u>Distance between alternative exits</u> Exits that are required as alternative means of egress must be: a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and b) not less than 9 m apart; and c) not more than: i) in a Class 2 or 3 building — 45 m apart; or ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or iii) in all other cases — 60 m apart; and d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.	The buildings comply with this clause.
√	D2D7	D1.6(a)	<u>Height of exits, paths of travel to exits and doorways</u> In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.	The buildings comply with this clause.
√	D2D8	D1.6(b), (c), (d) and I	<u>Width of exits and paths of travel to exits</u> 1) The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than: a) 1 m; or	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area; and c) in a public corridor in a Class 9c aged care building, notwithstanding (2) and (3): i) 1.5 m; and ii) 1.8 m for the full width of the doorway, providing access into a sole-occupancy unit or communal bathroom. 2) If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than: a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area. 3) If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than: a) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or b) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200. 4) In an open spectator stand which accommodates more than 2000 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600. 5) In a Class 9b building used as an entertainment venue:	

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) the aggregate width must be not less than 2 m plus 500 mm for every 50 persons or part in excess of 200; and b) D2D8(1), (2) and (3) do not apply; and c) where one or more paths of travel merge, the width of the combined path of travel must be not less than the sum of the required widths of those paths of travel; and d) the required widths of those paths of travel connecting the exits from the building to a public road or open space must comply with I; or	
√	NSW D2D9	D1.6, NSW D1.6(f)(vi)	<u>Width of doorways in exits or paths of travel to exits</u> 1. height – minimum 2m: doorways 1980mm 2. width 1m minimum 3. (c);(d) Width change based upon populations – generally for populations up to 100 persons require 1m of egress, up to 200 2m and then varies according to use over 200 person per floor / storey. 4. (f) door width minimum 850mm [AS 1428] 5. (g) not to diminish in direction of travel.	The buildings comply with this clause.
X	D2D10	D1.6(g)	<u>Exit width not to diminish in direction of travel</u> The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	Please relocate the intertenancy doors in units 3 and 4 as they interfere with the egress doors of units 3 and 4 and diminish the path of travel to the exit in units 3 and 4.
√	D2D11	D1.6(h) and (i)	<u>Determination and measurement of exits and paths of travel to exits</u> For the purposes of D2D7 to D2D10 the following apply: a) The required width of a stairway or ramp in a required exit or path of travel to an exit must: i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and ii) extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			above a line along the nosings of the treads or the floor surface of the ramp or landing. b) To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	
N/A	D2D12	D1.7	<u>Travel via fire-isolated exits</u> Must provide independent egress and discharge to road or open space or complying covered area.	Not applicable to these buildings.
N/A	D2D13	D1.8	<u>External stairways or ramps in lieu of fire-isolated exits</u> External stairs or ramps may be used in lieu of a fire-isolated stair or ramp to a building under 25m in effective height.	Not applicable to these buildings.
N/A	D2D14	D1.9	<u>Travel by non-fire-isolated stairways or ramps</u> Travel by Non-Fire Isolated Stairs: I The distance from any point on the floor to a point of egress not to exceed 80m. I The stairway not to discharge at a point more than: (i) 20m to an exit (ii) 40m to one of 2 exits.	Not applicable to these buildings.
X	D2D15	D1.10	<u>Discharge from exits</u> 1) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it. 2) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than: a) the minimum width of the required exit; or b) 1 m, whichever is the greater. 3) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by: a) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14	The accessible ramp with rails meeting AS1428.1 between unit 2 and 7 is to be redesigned so that the egress path to the main exit from units 3,4,5 and 6 is unimpeded.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			if required by the Deemed-to-Satisfy Provisions of Part D4; or b) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the NCC. 4) The discharge point of alternative exits must be located as far apart as practical. 5) In a Class 9b building which is an open spectator stand that accommodates more than 500 persons, a required stairway or required ramp must not discharge to the ground in front of the stand. 6) In a Class 9b building used as an entertainment venue, at least half of the required number of exits from each storey or mezzanine, and at least half of the aggregate width of such exits must discharge otherwise than through the main entrance, or the area immediately adjacent to the main entrance to the building. 7) The number of persons accommodated must be calculated according to D2D18.	
N/A	D2D16	D1.11	<u>Horizontal exits</u> May be counted as required exits if the path of travel from a fire compartment leads by one or more horizontal exits directly into another fire compartments which has at least one required exit which is not a horizontal exit. Cannot be utilised in some classes or areas of buildings details to be assessed to ensure compliance with specific clause.	Not applicable to these buildings.
N/A	D2D17	D1.12	<u>Non-required stairways, ramps or escalators</u> An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp: a) must not be used between storeys in: i) a patient care area in a Class 9a health-care building; or ii) a resident use area in a Class 9c building; and b) may connect any number of storeys if it is:	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			i) in an open spectator stand or indoor sports stadium; or ii) in a carpark or an atrium; or iii) outside a building; or iv) in a Class 5 or 6 building that is sprinklered throughout, where the escalator, walkway, stairway or ramp complies with Specification 14; and c) except where permitted in (b) must not connect more than: i) 3 storeys if: A) each of those storeys is provided with a sprinkler system (other than a FPAA101D system) complying with Specification 17 throughout; and B) at least one of those storeys is situated at a level at which there is a direct egress to a road or open space; or ii) 2 storeys, provided that those storeys are consecutive, and one of the storeys is situated at a level at which there is direct egress to a road or open space; and d) except where permitted in (b) or (c), must not connect, directly or indirectly, more than 2 storeys at any level in a Class 5, 6, 7, 8 or 9 building and those storeys must be consecutive.	
√	D2D18	D1.13	<u>Number of persons accommodated</u> For the purposes of the Deemed-to-Satisfy Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by: a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for:	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and ii) service ducts and the like, sanitary compartments or other ancillary uses; or b) reference to the seating capacity in an assembly building or room; or c) any other suitable means of assessing its capacity.	
√	D2D19	D1.14	<u>Measurement of distances</u>	The buildings comply with this clause.
√	D2D20	D1.15	<u>Method of measurement</u>	The buildings comply with this clause.
N/A	D2D21	D1.16	<u>Plant rooms, lift machine rooms and electricity network substations: Concession</u> 1) A ladder may be used in lieu of a stairway to provide egress from: a) a plant room with a floor area of not more than 100 m ² ; or b) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m ² .	Not applicable to these buildings.
N/A	D2D22	D1.17	<u>Access to lift pits</u> a) where the pit depth is not more than 3 m, be through the lowest landing doors and among other requirements AS1657	Not applicable to these buildings.
N/A	D2D23	D1.18	<u>Egress from primary schools</u> 1) Every part of a Class 9b primary school must be wholly within a storey that provides direct egress to a road or open space. 2) The requirements of (1) do not apply to a building with a rise in storeys of 4 or less, where the primary school is the only use in that building.	Not applicable to these buildings.
<u>PART D3 – CONSTRUCTION OF EXITS</u>				
Noted	D3D1	D2.0	<u>Deemed-to-Satisfy Provisions</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with: a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and 2) Where a Performance Solution is proposed the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. 3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.	
N/A	NSW D3D2	NSW D2.11	<u>Application of Part</u> 1) Except for: a) D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D26 and D3D29, the (a)Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 3 building; and b) D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D23 and D3D29, the (b)Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building. 2) In a Class 9b building used as an entertainment venue: a) Clauses NSW D3D14(1)(i), (j), and (k), NSW D3D16(d), NSW D3D18(1)(d), and NSW D3D24(2)I apply to only those parts of the building used by the public; and b) the general requirements of Part D3 apply to all other parts of the building.	Not applicable to these buildings.
N/A	D3D3	D2.2	<u>Fire-isolated stairways and ramps</u> A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed: a) of non-combustible materials; and	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.	
N/A	D3D4	D2.3	<u>Non-fire-isolated stairways and ramps</u> In a building having a rise in storeys of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire-resisting shaft, must be constructed according to D3D3, or only of: a) reinforced or prestressed concrete; or b) steel in no part less than 6 mm thick; or c) timber that: i) has a finished thickness of not less than 44 mm; and ii) has an average density of not less than 800 kg/m³ at a moisture content of 12%; and iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.	Not applicable to these buildings.
N/A	D3D5	D2.4	<u>Separation of rising and descending stair flights</u> If a stairway serving as an exit is required to be fire-isolated: a) there must be no direct connection between: i) a flight rising from a storey below the lowest level of access to a road or open space; and ii) a flight descending from a storey above that level; and b) any construction that separates or is common to the rising and descending flights must be: i) non-combustible; and ii) smoke proof in accordance with S11C2.	Not applicable to these buildings.
N/A	D3D6	D2.5	<u>Open access ramps and balconies</u> Where an open access ramp or balcony is provided to meet the smoke hazard management requirements of E2D4 to E2D13.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	D3D7	D2.6	<u>Smoke lobbies</u> A smoke lobby required by D2D12 must: - have a floor area not less than 6 m²; and - be separated from the occupied areas in the storey by walls which are impervious to smoke,	Not applicable to these buildings.
N/A	D3D8	D2.7	<u>Installations in exits and paths of travel</u> - Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp. - An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit. - Gas or other fuel services must not be installed in a required exit. - Except for in a fire-isolated exit specified in (1), services or equipment enclosed in accordance with (5) may be installed in a required exit, or in any corridor, hallway, lobby or the like leading to a required exit, where that service or equipment comprises: - electricity meters, distribution boards or ducts; or - central telecommunications distribution boards or equipment; or - electrical motors or other motors serving equipment in the building. - An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be: - non-combustible construction; or - a fire-protective covering. - Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with:	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) a lighting, detection, or pressurisation system serving the exit; or b) a security, surveillance or management system serving the exit; or c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or d) the monitoring of hydrant or sprinkler isolating valves.	
N/A	D3D9	D2.8	<u>Enclosure of space under stairs and ramps</u> 1) Fire-isolated stairways and ramps — If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space. 2) Non fire-isolated stairways and ramps — The space below a required non fire-isolated stairway (including an external stairway) or non fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless: a) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and b) any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.	Not applicable to these buildings.
N/A	D3D10	D2.9	<u>Width of required stairways and ramps</u> A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.	Not applicable to these buildings.
N/A	D3D11	D2.10	<u>Pedestrian ramps</u> 1) A fire-isolated ramp may be substituted for a fire-isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire-isolated stairway. 2) A ramp serving as a required exit must: a) where the ramp is also serving as an accessible ramp under Part D4, be in accordance with AS 1428.1; or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) in any other case, have a gradient not steeper than 1:8. 3) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.	
N/A	D3D12	D2.11	<u>Fire-isolated passageways</u> 1) The enclosing construction of a fire-isolated passageway must have an FRL when tested for a fire outside the passageway in another part of the building of: a) if the passageway discharges from a fire-isolated stairway or ramp — not less than that required for the stairway or ramp shaft; or b) in any other case — not less than 60/60/60.	Not applicable to these buildings.
N/A	D3D13	D2.12	<u>Roof as open space</u> If an exit discharges to a roof of a building, the roof must: a) have an FRL of not less than 120/120/120; and b) not have any roof lights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space.	Not applicable to these buildings.
N/A	D3D14	D2.13	<u>Goings and risers</u> 1) A stairway must have: (a) minimum 2 risers / maximum 18 in each flight (b) risers 115mm min 190 mm max – going 250mm min 355mm max – 2R+G 550mm min 700mm max. I goings and risers to be constant. (d) risers not to permit 125mm sphere to pass through I treads to be non slip (h) no stepped quarter landings	Not applicable to these buildings.
N/A	D3D15	D2.14	<u>Landings</u> Maximum gradient not to exceed 1:50 and be a minimum 750 long measured from the inside edge of the landing.	Not applicable to these buildings.
N/A	NSW D3D16	D2.15, NSW D2.15(d), I	<u>Thresholds</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			No step or ramp at any point closer to the door than the width of the door leaf. Generally, doors opening to outside are able to be provided with a maximum 190mm step or 50mm if Class 9b entertainment venues.	
N/A	D3D17	D2.16(a), (b) and (c)	<u>Barriers to prevent falls</u> 1) A continuous barrier must be provided along the side of: a) a roof to which general access is provided; and b) a stairway or ramp; and c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and d) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. 2) The requirements of (1) do not apply to: a) the perimeter of a stage, rigging loft, loading dock or the like; or b) areas referred to in D3D23; or c) a retaining wall, unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or d) a barrier provided to an openable window covered by D3D29. 3) A barrier required by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.	Not applicable to these buildings.
N/A	D3D18	Table D2.16a	<u>Height of barriers</u> 1) The height of a barrier required by D3D17 must be not less than the following: a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm. c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building: i) 1 m; or ii) 700 mm where the horizontal projection extends not less than 1 m outwards from the top of the barrier; or iii) in a Class 9b building used as an entertainment venue, the height prescribed for guardrails in NSW I4D41 or NSW I5D9. d) In a Class 9b building used as an entertainment venue, for stairways and ramps and the floor of any access path, balcony, landing or the like: i) 1 m when provided inside the building; and ii) 1200 mm when provided externally to the building. e) For all other locations — 1 m. 2) For a barrier provided under (1): a) barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and b) a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.	
N/A	D3D19	Table D2.16a	<u>Openings in barriers</u> 1) Except where allowed by (2), openings in a required barrier must not allow a 125 mm sphere to pass through. 2) In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes, openings in a required barrier: a) must not allow a 300 mm sphere to pass through; or	Not applicable to these buildings.

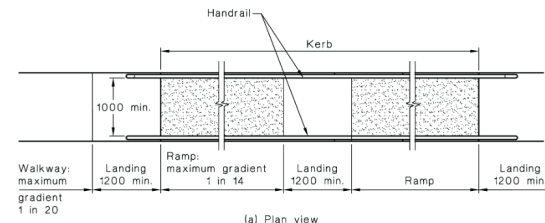
ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) where rails are used: i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and ii) the opening between rails must not be more than 460 mm. 3) In Class 7 (other than carparks) and Class 8 buildings, openings in a required barrier: a) must not allow a 300 mm sphere to pass through; or b) where rails are used: i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and ii) the opening between the rails must not be more than 460 mm. 4) The requirements of (2) do not apply to external stairways, external ramps, or fire-isolated stairways or fire-isolated ramps serving Class 9b early childhood centres. 5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non fire-isolated stairway, is measured above the nosing line of the stair treads. 6) Where a required barrier is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40 mm. 7) For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier	
N/A	D3D20	Table D2.16a	<u>Barrier climbability</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			1) A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor. 2) The requirements of (1) do not apply to: a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than: i) external stairways; and ii) external ramps; and b) Class 7 (other than carparks) and Class 8 buildings.	
N/A	D3D21	D2.16(d)	<u>Wire barriers</u> Where a required barrier is constructed of wire, it is deemed to meet the requirements of D3D19(1).	Not applicable to these buildings.
N/A	D3D22	D2.17	<u>Handrails</u> Required along one side and on both sides of stairs over 2m in width, 865mm above nosings and be continuous.	Not applicable to these buildings.
N/A	D3D23	D2.18	<u>Fixed platforms, walkways, stairways and ladders</u> A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS 1657 in lieu of D3D14, D3D15, D3D17, D3D18, D3D19, D3D20, D3D21 and D3D22 if it only serves: a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building.	Not applicable to these buildings.
N/A	D3D24	D2.19	<u>Doorways and doors</u> 1) A doorway in a resident use area of a Class 9c building must not be fitted with: a) a sliding fire door; or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) a sliding smoke door; or c) a revolving door; or d) a roller shutter door; or e) a tilt-up door.	
N/A	D3D25	D2.20	<u>Swinging doors</u> 1) A swinging door in a required exit or forming part of a required exit: a) must not encroach: i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and ii) when fully open, by more than 100 mm on the required width of the required exit; and b) must swing in the direction of egress unless: i) it serves a building or part with a floor area not more than 200 m², it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); and c) must not otherwise impede the path or direction of egress. 2) The measurement of encroachment referred to in (1)(a) in each case is to include door handles or other furniture or attachments to the door.	Not applicable to these buildings.
N/A	D3D26	D2.21	<u>Operation of latch</u> To be located 900mm to 1100mm above the floor and be openable with a single-handed downward action. Fail safe unlock is permitted as long as linked to the base building fire alarm system.	Not applicable to these buildings.
N/A	D3D27	D2.22	<u>Re-entry from fire-isolated exits</u> Every door in a fire stair must not be locked from inside the fire- isolated stairway to prevent re-entry to the storey or room	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			it services for any stair that serves a storey over 25m in height.	
N/A	D3D28	D2.23	<u>Signs on doors</u> To fire doors signage required to alert persons that blockage, obstruction or being chocked open is not allowable.	Not applicable to these buildings.
N/A	D3D29	D2.24	<u>Protection of openable windows</u> 1) A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in: a) a bedroom in a Class 2 or 3 building or Class 4 part of a building; or b) a Class 9b early childhood centre. 2) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (1) must comply with the following: a) The openable portion of the window must be protected with: i) a device capable of restricting the window opening; or ii) a screen with secure fittings. b) A device or screen required by (a) must: i) not permit a 125 mm sphere to pass through the window opening or screen; and ii) resist an outward horizontal action of 250 N against the: A) window restrained by a device; or B) screen protecting the opening; and iii) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. 3) A barrier with a height not less than 865 mm above the floor is required to an openable window: a) in addition to window protection, when a child resistant release mechanism is required by (2)(b)(iii); and	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (1). 4) A barrier covered by (3) except for (5) must not: a) permit a 125 mm sphere to pass through it; and b) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing. 5) A barrier required by (3) to an openable window in: a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and b) Class 7 (other than car parks) and Class 8 buildings and parts of buildings containing those classes, must not permit a 300 mm sphere to pass through it.	
N/A	D3D30	D2.25	<u>Timber stairways: Concession</u> 1) Notwithstanding D3D3(a), timber treads, risers, landings and associated supporting framework within a required fire-isolated stairway or fire-isolated passageway may be constructed from fire-protected timber in accordance with C2D13.	Not applicable to these buildings.
N/A	NSW D3D31	NSW D2.101	<u>Doors in paths of travel to an entertainment venue</u> In a Class 9b building used as an entertainment venue, a doorway in a path of travel must comply with NSW D3D24(2)l.	Not applicable to these buildings.
<u>PART D4 – ACCESS FOR PEOPLE WITH A DISABILITY</u>				
Noted	D4D1	D3.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with: a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13.	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. 3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.	
X	D4D2	D3.1, Table D3.1	<u>General building access requirements</u> 1) Buildings and parts of buildings must be accessible as required by this clause, unless exempted by D4D5.	Please provide entry dimensions to main entry of core building as it appears a clear opening of 850mm cannot be achieved. Please also provide a door schedule.
X	D4D3	D3.2	<u>Access to buildings</u> 1) An accessway must be provided to a building required to be accessible: a) from the main points of a pedestrian entry at the allotment boundary; and b) from another accessible building connected by a pedestrian link; and c) from any required accessible carparking space on the allotment.	Please provide entry dimensions to main entry of core building as it appears a clear opening of 850mm cannot be achieved. Please also provide a door schedule. Provide details on ramps complying with AS1428.1. See excerpt below. Dimensions in millimetres  (a) Plan view
√	D4D4	D3.3	<u>Parts of buildings to be accessible</u> In a building required to be accessible: a) every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with: i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and	Internal circulation space appears to comply.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and b) every passenger lift must comply with E3D7 and E3D8; and c) accessways must have: i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and ii) turning spaces complying with AS 1428.1: A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and B) at maximum 20 m intervals along the accessway; and d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and e) a passing space may serve as a turning space; and f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building: i) containing not more than 3 storeys; and ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m²; and g) clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and h) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.	
Noted	D4D5	D3.4	<u>Exemptions</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			The following areas are not required to be accessible: a) An area where access would be inappropriate because of the particular purpose for which the area is used. b) An area that would pose a health or safety risk for people with a disability. c) Any path of travel providing access only to an area exempted by (a) or (b).	
X	D4D6	D3.5, Table D3.5	<u>Accessible carparking</u> 1) Accessible carparking spaces: a) subject to (b), must be provided in accordance with (2) in: i) a Class 7a building required to be accessible; and ii) a carparking area on the same allotment as a building required to be accessible; and b) need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and c) subject to (d), must comply with AS/NZS 2890.6; and d) need not be identified with signage where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability. 2) For each class of building to which the carpark or carparking area is associated, the number of accessible carparking spaces required is as follows: a) Class 1b and 3 buildings: i) For a boarding house, guest house, hostel, lodging house, backpackers' accommodation or the residential part of a hotel or motel, the number of accessible carparking spaces required is to be calculated by multiplying the total number of carparking spaces by the percentage of:	A performance solution for the accessible car space, shared space, is required as it does not meet AS2890.6.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			A) accessible sole-occupancy units to the total number of sole-occupancy units; or B) accessible bedrooms to the total number of bedrooms. ii) For the purposes of (i), the calculated number is taken to the next whole figure. iii) For a residential part of a school, accommodation for the aged, disabled or children, residential part of a health-care building which accommodates members of staff or the residential part of a detention centre — 1 accessible space for every 100 carparking spaces or part thereof. b) Class 5, 7, 8 or 9c buildings — 1 accessible space for every 100 carparking spaces or part thereof. c) Class 6 buildings: i) with up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and ii) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space. d) Class 9a buildings: i) For a hospital (non-outpatient area) — 1 accessible space for every 100 carparking spaces or part thereof. ii) For a hospital (outpatient area): A) with up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and B) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space. iii) For a nursing home — 1 accessible space for every 100 carparking spaces or part thereof.	

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			iv) For a clinic or day surgery not forming part of a hospital — 1 accessible space for every 50 carparking spaces or part thereof. e) Class 9b buildings: i) For a school — 1 accessible space for every 100 carparking spaces or part thereof. ii) For other assembly buildings: A) with up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and B) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space.	
Noted	D4D7	D3.6	<u>Signage</u> 1) In a building required to be accessible: a) braille and tactile signage complying with Specification 15 must also meet AS1428.1.	Noted.
N/A	D4D8	D3.7	<u>Hearing augmentation</u> Where an inbuilt amplification system other than an EWIS is provided a hearing augmentation system is to be provided.	Not applicable to these buildings.
X	D4D9	D3.8	<u>Tactile indicators</u> 1) For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching: a) a stairway, other than a fire-isolated stairway; and b) an escalator; and c) a passenger conveyor or moving walk; and d) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; In accordance with AS1428.4.	Provide details of the location of tactile ground surface indicators near ramps as per AS1428.4.
N/A	D4D10	D3.9	<u>Wheelchair seating spaces in Class 9b assembly buildings</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces must comply with AS 1428.1	
N/A	D4D11	D3.10	<u>Swimming pools</u> 1) Not less than 1 means of accessible water entry/exit in accordance with Specification 16 must be provided for each swimming pool required by D4D2 to be accessible. 2) An accessible entry/exit must be by means of: a) a fixed or movable ramp and an aquatic wheelchair; or b) a zero depth entry and an aquatic wheelchair; or c) a platform swimming pool lift and an aquatic wheelchair; or d) a sling-style swimming pool lift. 3) Where a swimming pool has a perimeter of more than 70 m, at least one accessible water entry/exit must be provided by a means specified in (2)(a), (b) or (c). 4) Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1.	Not applicable to these buildings.
N/A	D4D12	D3.11	<u>Ramps</u> On an accessway: a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.	Not applicable to these buildings.
N/A	D4D13	D3.12	<u>Glazing on an accessway</u> On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Not applicable to these buildings.
<u>SPECIFICATION 14 – NON-REQUIRED STAIRWAYS, RAMPS AND ESCALATORS</u>				
N/A	S14C1	Spec D1.12: 1	<u>Scope</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			1) This Specification contains the requirements to allow non-required stairways, ramps or escalators to connect any number of storeys in a Class 5 or 6 building. 2) The requirements do not apply in an atrium or outside a building.	
N/A	S14C2	Spec D1.12: 2	<u>Requirements</u>	Not applicable to these buildings.
SPECIFICATION 15 – BRAILLE AND TACTILE SIGNS				
Noted	S15C1	Spec D3.6: 1	<u>Scope</u> This Specification sets out the requirements for the design and installation of braille and tactile signage as required by D3D26, D4D7 and Specification 27.	Noted.
X	S15C2	Spec D3.6: 2	<u>Location of braille and tactile signs</u>	Provide details of the location of tactile ground surface indicators near ramps as per AS1428.4.
X	S15C3	Spec D3.6: 3	<u>Braille and tactile sign specification</u>	Provide details of the location of tactile ground surface indicators near ramps as per AS1428.4.
X	S15C4	Spec D3.6: 4	<u>Luminance contrast</u>	Provide details of the location of contrast.
X	S15C5	Spec D3.6: 5	<u>Lighting</u>	Provide details of the location of lighting.
X	S15C6	Spec D3.6: 6	<u>Braille</u>	Provide details of the location of braille.
SPECIFICATION 16 – ACCESSIBLE WATER ENTRY/EXIT FOR SWIMMING POOLS				
N/A	S16C1	Spec D3.10: 1	<u>Scope</u> This Specification sets out the requirements for types of accessible water entry/exit for swimming pools.	Not applicable to these buildings.
N/A	S16C2	Spec D3.10: 2	<u>Fixed or moveable ramp</u>	Not applicable to these buildings.
N/A	S16C3	Spec D3.10: 3	<u>Zero depth entry</u>	Not applicable to these buildings.
N/A	S16C4	Spec D3.10: 4	<u>Platform swimming pool lift</u>	Not applicable to these buildings.
N/A	S16C5	Spec D3.10: 5	<u>Sling-style swimming pool lift</u>	Not applicable to these buildings.
N/A	S16C6	Spec D3.10: 6	<u>Aquatic wheelchair</u>	Not applicable to these buildings.
SECTION E SERVICES AND EQUIPMENT				
PART E1 – FIRE FIGHTING EQUIPMENT				

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	E1D1	E1.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E1P1 to E1P6 are satisfied by complying with: a) E1D2 to E1D17; etc 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
N/A	E1D2	E1.3	<u>Fire hydrants</u> 1) A fire hydrant system must be provided to serve a building: a) having a total floor area greater than 500 m2; and b) where a fire brigade station is: i) no more than 50 km from the building as measured along roads; and ii) equipped with equipment capable of utilising a fire hydrant. 2) The fire hydrant system must be installed in accordance with AS 2419.1. 3) Notwithstanding (2), a Class 8 electricity network substation need not comply with clause 4.2 of AS 2419.1 if: a) it cannot be connected to a town main supply; and b) one hour water storage is provided for fire-fighting. 4) Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole-occupancy unit: a) in a Class 2 or 3 building or Class 4 part of a building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit; or b) of not more than 2 storeys in a Class 5, 6, 7, 8 or 9 building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit provided the fire hydrant can provide coverage to the whole of the sole-occupancy unit.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	E1D3	E1.4	<u>Fire hose reels</u> 1) E1D3 does not apply to: a) a Class 2, 3 or 5 building or Class 4 part of a building; or b) a Class 8 electricity network substation; or c) a Class 9c building; or d) classrooms and associated corridors in a primary or secondary school. 2) A fire hose reel system must be provided: a) to serve the whole building where one or more internal fire hydrants are installed; or b) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m². 3) The fire hose reel system must: a) have fire hose reels installed in accordance with AS 2441; and	Not applicable to these buildings.
N/A	E1D4	E1.5	<u>Sprinklers</u> A sprinkler system must: a) be installed in a building or part of a building when required by E1D5 to E1D13 as applicable; and b) comply with Specification 17 and Specification 18 as applicable.	Not applicable to these buildings.
N/A	E1D5	Table E1.5	<u>Where sprinklers are required: all classifications</u> Sprinklers are required throughout the whole building if any part of the building has an effective height of more than 25 m: a) including an open-deck carpark within a multi-classified building; but b) excluding: i) an open-deck carpark being a separate building; and ii) a Class 8 electricity network substation, with a floor area not more than 200 m², located within a multi-classified building.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	E1D6	Table E1.5	<u>Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings</u> 1) In a Class 2 or 3 building, or any multi-classified building containing a Class 2 or 3 part, sprinklers are required throughout the whole building if any part of the building has: a) a rise in storeys of 4 or more; and b) an effective height of not more than 25 m. 2) The requirements of (1) do not apply to a residential care building.	Not applicable to these buildings.
N/A	E1D7	Table E1.5	<u>Where sprinklers are required: Class 3 building used as a residential care building</u> Sprinklers are required throughout a building containing: a) a Class 3 building used as a residential care building; and b) any fire compartment containing a Class 3 part used for residential care.	Not applicable to these buildings.
N/A	E1D8	Table E1.5	<u>Where sprinklers are required: Class 6 building</u> In a Class 6 building, sprinklers are required in fire compartments where either of the following apply: a) A floor area of more than 3 500 m². b) A volume of more than 21 000 m³.	Not applicable to these buildings.
N/A	E1D9	Table E1.5	<u>Where sprinklers are required: Class 7a building, other than an open-deck carpark</u> In a Class 7a building, other than an open-deck carpark, sprinklers are required in fire compartments where more than 40 vehicles are accommodated.	Not applicable to these buildings.
N/A	E1D10	Table E1.5	<u>Where sprinklers are required: Class 9a health-care building used as a residential care building and Class 9c buildings</u> 1) In a Class 9a health-care building used as a residential care building, sprinklers are required throughout the building and in any fire compartment containing a Class 9a part used for residential care.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) In a Class 9c building, sprinklers are required throughout the building and in any fire compartment containing a Class 9c part.	
N/A	E1D11	Table E1.5	<u>Where sprinklers are required: Class 9b buildings</u> 1) In a Class 9b building, other than an early childhood centre, see Part I1. 2) In a Class 9b early childhood centre and in a building containing a Class 9b early childhood centre, sprinklers are required throughout the whole building, including any part of another class.	Not applicable to these buildings.
N/A	E1D12	Table E1.5	<u>Where sprinklers are required: additional requirements</u> 1) For sprinkler requirements for atriums, see Part G3. 2) For sprinkler requirements for large isolated buildings, see C3D4.	Not applicable to these buildings.
N/A	E1D13	Table E1.5 (Note 4)	<u>Where sprinklers are required: occupancies of excessive hazard</u> 1) In occupancies of excessive hazard, sprinklers are required in fire compartments where either of the following apply: a) A floor area of more than 2 000 m². b) A volume of more than 12 000 m³.	Not applicable to these buildings.
X	E1D14	E1.6 and Table E1.6	<u>Portable fire extinguishers</u> 1) Portable fire extinguishers must be: selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. 2) Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be: a) an ABE type fire extinguisher; and b) a minimum size of 2.5 kg; and c) distributed outside a sole-occupancy unit: i) to serve only the storey at which they are located; and ii) so that the travel distance from the entrance doorway of any sole-occupancy unit to the	Provide fire services plan indicating location of fire extinguishers.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			nearest fire extinguisher is not more than 10 m. 3) In Class 2 to 9 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows: a) To cover Class AE or E fire risks associated with emergency services switchboards. b) To cover Class F fire risks involving cooking oils and fats in kitchens. c) To cover Class B fire risks in locations where flammable liquids in excess of 50 litres are stored or used (not including that held in fuel tanks of vehicles). (d) To cover Class A fire risks in normally occupied fire compartments less than 500 m² not provided with fire hose reels (excluding open-deck carparks). e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels. f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building.	
N/A	E1D15	E1.8	<u>Fire control centres</u>	Not applicable to these buildings.
Noted	E1D16	E1.9	<u>Fire precautions during construction</u> In a building under construction: a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and b) after the building has reached an effective height of 12 m: i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and ii) any required booster connections must be installed.	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	E1D17	E1.10	<u>Provision for special hazards</u>	Not applicable to these buildings.
PART E2 – SMOKE HAZARD MANAGEMENT				
Noted	E2D1	E2.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E2P1 and E2P2 are satisfied by complying with: a) E2D2 to E2D21; and 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
Noted	E2D2	E2.1	<u>Application of part</u> 1) The Deemed-to-Satisfy Provisions of this Part do not apply to: a) an open-deck carpark; or b) an open spectator stand; or c) a Class 8 electricity network substation with a floor area not more than 200 m ² , located within a multi-classified building	Noted.
X	E2D3	E2.2	<u>General requirements</u> 1) An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed: a) to operate as a smoke control system in accordance with AS 1668.1; or b) such that it: i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and	Provide details of automatic smoke detection and alarm system from an Accredited Fire Safety Assessor (for Class 3 building only). The minimum requirement is a smoke alarm system to AS3786 with AS1670 alarms where false alarms can occur. However, it is recommended that a smoke detection and alarm system be installed for less maintenance. Provide details of building occupant warning system (BOWS).

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			ii) is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. 2) For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment. 3) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard. 4) A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits.	
N/A	E2D4	Table E2.2a	<u>Fire-isolated exit</u> 1) A part of a building listed in (2) must be provided with: a) an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or b) open access ramps or balconies in accordance with D3D6. 2) The requirements of (1) apply to: a) a required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp serving: i) any storey above an effective height of 25 m; or ii) more than 2 below ground storeys, not counted in the rise in storeys in accordance with C2D3; or iii) an atrium to which Part G3 applies; or iv) a Class 9a building with a rise in storeys of more than 2; or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			v) a Class 9c building with a rise in storeys of more than 2; or vi) a Class 3 building used as a residential care building with a rise in storeys of more than 2; and b) a required fire-isolated passageway or fire-isolated ramp with a length of travel more than 60 m to a road or open space. 3) An automatic air pressurisation system for a fire-isolated exit must serve the entire exit.	
N/A	E2D5	Table E2.2a	<u>Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building</u>	Not applicable to these buildings.
N/A	E2D6	Table E2.2a	<u>Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings</u>	Not applicable to these buildings.
N/A	E2D7	Table E2.2a	<u>Buildings more than 25 m in effective height: Class 9a buildings</u>	Not applicable to these buildings.
X	E2D8	Table E2.2a	<u>Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building</u> In a Class 2 and 3 building or part of a building, or Class 4 part of a building, if the building is not more than 25 m in effective height: a) it must be provided with an automatic smoke detection and alarm system complying with Specification 20; and b) where a required fire-isolated stairway serving the Class 2 or 3 parts also serves one or more storeys of Class 5, 6, 7 (other than an open-deck carpark), 8 or 9b parts: i) the fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, must be provided with an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or ii) the Class 5, 6, 7 (other than an open-deck carpark), 8 and 9b parts must be provided with: A) an automatic smoke detection and alarm system complying with Specification 20; or	Provide details of automatic smoke detection and alarm system from an Accredited Fire Safety Assessor (for Class 3 building only). The minimum requirement is a smoke alarm system to AS3786 with AS1670 alarms where false alarms can occur. However, it is recommended that a smoke detection and alarm system be installed for less maintenance. Provide details of building occupant warning system (BOWS).

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			B) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17;and c) where a required fire-isolated stairway serving the Class 4 part also serves one or more storeys of Class 5, 6, 7(other than an open-deck carpark), 8 or 9b parts: i) a system complying with (b)(i) or (b)(ii) must be installed; or ii) a smoke alarm or detector system complying with Specification 20 must be provided except that alarms or detectors need only be installed adjacent to each doorway into each fire-isolated stairway (set back horizontally from the doorway by a distance of not more than 1.5 m) to initiate a building occupant warning system for the Class 4 part.	
N/A	E2D9	Table E2.2a	<u>Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings</u> 1) A building not more than 25 m in effective height that: a) is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or b) is a Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or c) has a rise in storeys of more than 2 and contains: i) a Class 5 or 9b school part; and ii) a Class 6, 7b, 8 or 9b (other than a school) part, must meet the requirements of (2). 2) A building referred to in (1) must be provided with: a) in each required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or b) a zone pressurisation system between vertically separated fire compartments in accordance with	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			AS 1668.1, if the building has more than one fire compartment; or c) an automatic smoke detection and alarm system complying with Specification 20; or d) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. 3) For the purposes of (2), vertically separated fire compartments are fire compartments above and below each other, and not fire compartments within the same storey.	
N/A	NSW E2D10	NSW Table E2.2a	<u>Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4</u>	Not applicable to these buildings.
N/A	E2D11	Table E2.2a	<u>Buildings not more than 25 m in effective height: Class 9a and 9c buildings</u>	Not applicable to these buildings.
N/A	E2D12	Table E2.2a	<u>Class 7a buildings</u> A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	Not applicable to these buildings.
N/A	E2D13	Table E2.2a	<u>Basements (other than Class 7a buildings)</u>	Not applicable to these buildings.
N/A	E2D14	Table E2.2b	<u>Class 6 buildings – in fire compartments more than 2000 m²: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)</u>	Not applicable to these buildings.
N/A	E2D15	Table E2.2b	<u>Class 6 buildings – in fire compartments more than 2000 m²: Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)</u>	Not applicable to these buildings.
N/A	NSW E2D16	NSW Table E2.2b	<u>Class 9b – assembly buildings: all</u>	Not applicable to these buildings.
N/A	NSW E2D17	NSW Table E2.2b	<u>Class 9b – assembly buildings: night clubs, discotheques and the like</u>	Not applicable to these buildings.
N/A	NSW E2D18	NSW Table E2.2b	<u>Class 9b – assembly buildings: exhibition halls, museums and art galleries</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	NSW E2D19	NSW Table E2.2b	<u>Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)</u>	Not applicable to these buildings.
N/A	NSW E2D20	NSW Table E2.2b	<u>Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)</u>	Not applicable to these buildings.
N/A	E2D21	E2.3	<u>Provision for special hazards</u>	Not applicable to these buildings.
<u>PART E3 – LIFT INSTALLATIONS</u>				
N/A	E3D1	E3.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E3P1 to E3P4 are satisfied by complying with: a) E3D2 to E3D12; and 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Not applicable to these buildings.
N/A	E3D2	E3.1	<u>Lift installations</u> An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24.	Not applicable to these buildings.
N/A	E3D3	E3.2	<u>Stretcher facility in lifts</u>	Not applicable to these buildings.
N/A	E3D4	E3.3	<u>Warning against use of lifts in fire</u> 1) A warning sign must be displayed where it can be readily seen near every call button for a passenger lift or group of lifts throughout a building. 2) The requirements of (1) do not apply to a small lift such as a dumb-waiter or the like that is for the transport of goods only. 3) Each warning sign required by (1) must comply with the details and dimensions of Figure E3D4 and consist of: a) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or b) letters incised or inlaid directly into the surface of the material forming the wall.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	E3D5	E3.4	<u>Emergency lifts</u>	Not applicable to these buildings.
N/A	E3D6	E3.5	<u>Landings</u> Access and egress to and from lift well landings must comply with Parts D2, D3 and D4.	Not applicable to these buildings.
N/A	E3D7	E3.6, Table E3.6a, Table E3.6b	<u>Passenger lift types and their limitations</u> 1) In an accessible building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type: a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts. 2) A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.	Not applicable to these buildings.
N/A	E3D8	Table E3.6a, Table E3.6b	<u>Accessible features required for passenger lifts</u> In an accessible building, every passenger lift must have the following features where applicable: a) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except: i) a stairway platform lift; and ii) a low-rise platform lift.	Not applicable to these buildings.
N/A	E3D9	E3.7	<u>Fire service controls</u> Where lifts serve any storey above an effective height of 12 m, the following must be provided: a) A fire service recall control switch complying with E3D11 for: i) a group of lifts; or ii) a single lift not in a group that serves the storey. b) A lift car fire service drive control switch complying with E3D12 for every lift.	Not applicable to these buildings.
N/A	E3D10	E3.8	<u>Residential care buildings</u> 1) Where residents in a Class 9c residential care building are on levels which do not have direct access to a road	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			or open space, the building must be provided with either: a) at least one lift to accommodate a stretcher in accordance with E3D3(2); or b) a ramp in accordance with AS 1428.1. 2) The lift or ramp required by (1) must discharge at a level providing direct access to a road or open space.	
N/A	E3D11	E3.9	<u>Fire service recall control switch</u> 1) Each group of lifts must be provided with one fire service recall control switch required by E3D9 that activates the fire service recall operation at (6).	Not applicable to these buildings.
N/A	E3D12	E3.10	<u>Lift car fire service drive control switch</u> 1) The lift car fire service drive control switch required by E3D9 must be activated from within the lift car.	Not applicable to these buildings.
PART E4 – VISIBILITY IN AN EMERGENCY, EXIT SIGNS AND WARNING SYSTEMS				
Noted	E4D1	E4.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E4P1 to E4P3 are satisfied by complying with: a) E4D2 to E4D9; and 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
N/A	E4D2	E4.2	<u>Emergency lighting requirements</u> An emergency lighting system must be installed: a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300 m²: i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and ii) in any room having a floor area more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or open space; and	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			iii) in any room having a floor area more than 300 m²; and c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to: i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or ii) an external stairway serving instead of a fire-isolated stairway under D2D13; or iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or iv) a road or open space; and d) in every required non-fire-isolated stairway; and e) in a sole-occupancy unit in a Class 5, 6 or 9 building if: i) the floor area of the unit is more than 300 m²; and ii) an exit from the unit does not open to a road or open space or to an external stairway, passageway, balcony or ramp, leading directly to a road or open space; and f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if: i) the floor area in that storey is more than 300 m²; or ii) any point on the floor of that storey is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or open space; or iii) egress from that storey involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the storey concerned does not admit sufficient light; or iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting; and g) in a Class 9a health-care building:	

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			i) in every passageway, corridor, hallway, or the like, serving a treatment area or a ward area; and ii) in every room having a floor area of more than 120 m ² in a patient care area; and h) in every Class 9c building excluding within sole-occupancy units; and in every required fire control centre.	
N/A	E4D3	E4.3	<u>Measurement of distance</u> Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Not applicable to these buildings.
N/A	E4D4	E4.4	<u>Design and operation of emergency lighting</u> Every required emergency lighting system must comply with AS/NZS 2293.1.	Not applicable to these buildings.
X	E4D5	E4.5	<u>Exit signs</u> An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each: a) door providing direct egress from a storey to: i) an enclosed stairway, passageway or ramp serving as a required exit; and ii) an external stairway, passageway or ramp serving as a required exit; and iii) an external access balcony leading to a required exit; and b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and c) horizontal exit; and d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.	Indicate location of exit signs in core building.
X	NSW E4D6	NSW E4.6	<u>Direction signs</u> If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed:	Indicate location of exit signs in core building.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit; and b) in a Class 9b building used as an entertainment venue — in any external egress path to a road where the exit does not open directly onto a road.	
Noted	E4D7	E4.7	<u>Class 2 and 3 buildings and Class 4 parts: exemptions</u> E4D5 does not apply to: a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the exit or balcony: i) with the word “EXIT” in capital letters 25 mm high in a colour contrasting with that of the background; or ii) by some other suitable method; and b) an entrance door of a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building.	Noted.
Noted	E4D8	E4.8	<u>Design and operation of exit signs</u> Every required exit sign must: a) comply with: i) AS/NZS 2293.1; or ii) for a photoluminescent exit sign, Specification 25; and c) be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	Noted.
N/A	E4D9	E4.9	<u>Emergency warning and intercom systems</u> An emergency warning and intercom system complying, where applicable, with AS 1670.4 must be installed: a) in a building with an effective height of more than 25 m; and b) in a Class 3 building having a rise in storeys of more than 2 and used as: i) the residential part of a primary or secondary school; or	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			ii) accommodation for the aged, children or people with a disability; and c) in a Class 3 building used as a residential care building, except that the system: i) must be arranged to provide a warning for occupants; and ii) in areas used by the residents, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of residents.	
SPECIFICATION 17 – FIRE SPRINKLER SYSTEM				
N/A	S17C1	Spec E1.5: 1	<u>Scope</u> This Specification sets out requirements for the design and installation of fire sprinkler systems.	Not applicable to these buildings.
N/A	S17C2	Spec E1.5: 2	<u>Application of automatic fire sprinkler standards</u>	Not applicable to these buildings.
N/A	S17C3	Spec E1.5: 3	<u>Separation of sprinklered and non-sprinklered areas</u>	Not applicable to these buildings.
N/A	S17C4	Spec E1.5: 4	<u>Protection of openings</u>	Not applicable to these buildings.
N/A	S17C5	Spec E1.5: 5	<u>Quick response sprinklers</u>	Not applicable to these buildings.
N/A	S17C6	Spec E1.5: 6	<u>Sprinkler valve enclosures</u>	Not applicable to these buildings.
N/A	S17C7	Spec E1.5: 7	<u>Water supply</u>	Not applicable to these buildings.
N/A	S17C8	Spec E1.5: 8	<u>Building occupant warning system</u>	Not applicable to these buildings.
N/A	S17C9	Spec E1.5: 9	<u>Connection to other systems</u>	Not applicable to these buildings.
N/A	S17C10	Spec E1.5: 10	<u>Anti-tamper devices</u>	Not applicable to these buildings.
N/A	S17C11	Spec E1.5: 11	<u>Sprinkler systems in carparks</u>	Not applicable to these buildings.
N/A	S17C12	Spec E1.5: 12	<u>Residential care buildings</u>	Not applicable to these buildings.
N/A	S17C13	Spec E1.5: 13	<u>Sprinkler systems in lift installations</u>	Not applicable to these buildings.
N/A	S17C14	New for 2022	<u>Early childhood centres</u>	Not applicable to these buildings.
SPECIFICATION 18 – CLASS 2 AND 3 BUILDINGS NOT MORE THAN 25M IN EFFECTIVE HEIGHT				
N/A	S18C1	Spec E1.5a: 1	<u>Scope</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			This Specification sets out requirements for the design and installation of fire sprinkler systems, and concessions for Class 2 and 3 buildings not more than 25 m in effective height with a rise in storeys of 4 or more.	
N/A	S18C2	Spec E1.5a: 1	<u>Application</u>	Not applicable to these buildings.
N/A	S18C3	Spec E1.5a: 2	<u>System requirements</u>	Not applicable to these buildings.
N/A	S18C4	Spec E1.5a: 3	<u>Permitted concessions</u>	Not applicable to these buildings.
<u>SPECIFICATION 19 – FIRE CONTROL CENTRES</u>				
N/A	S19C1	Spec E1.8: 1	<u>Scope</u> 1) This Specification describes the construction and content of required fire control centres and rooms. 2) A fire control room is a fire control centre in a dedicated room with additional specific requirements.	Not applicable to these buildings.
N/A	S19C2	Spec E1.8: 1	<u>Application</u>	Not applicable to these buildings.
N/A	S19C3	Spec E1.8: 2	<u>Purpose and content of fire control centre</u>	Not applicable to these buildings.
N/A	S19C4	Spec E1.8: 3	<u>Location of fire control centre</u>	Not applicable to these buildings.
N/A	S19C5	Spec E1.8: 4	<u>Equipment not permitted within a fire control centre</u>	Not applicable to these buildings.
N/A	S19C6	Spec E1.8: 5	<u>Ambient sound level for a fire control centre</u>	Not applicable to these buildings.
N/A	S19C7	Spec E1.8: 6	<u>Construction of a fire control room</u>	Not applicable to these buildings.
N/A	S19C8	Spec E1.8: 7	<u>Protection of openings in a fire control room</u>	Not applicable to these buildings.
N/A	S19C9	Spec E1.8: 8	<u>Doors to a fire control room</u>	Not applicable to these buildings.
N/A	S19C10	Spec E1.8: 9	<u>Size and contents of a fire control room</u>	Not applicable to these buildings.
N/A	S19C11	Spec E1.8: 10	<u>Ventilation and power supply for a fire control room</u>	Not applicable to these buildings.
N/A	S19C12	Spec E1.8: 11	<u>Sign for a fire control room</u>	Not applicable to these buildings.
N/A	S19C13	Spec E1.8: 12	<u>Lighting for a fire control room</u>	Not applicable to these buildings.
<u>SPECIFICATION 20 – SMOKE DETECTION AND ALARM SYSTEMS</u>				
Noted	S20C1	Spec E2.2a: 1	<u>Scope</u> This Specification describes the installation and operation of automatic smoke detection and alarm systems.	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	S20C2	Spec E2.2a: 2	<u>Type of system</u>	Smoke alarm system required to AS3786 and AS1670 in areas where false alarms may occur.
X	S20C3	Spec E2.2a: 3	<u>Smoke alarm system</u>	Smoke alarm system required to AS3786 and AS1670 in areas where false alarms may occur.
N/A	S20C4	Spec E2.2a: 4	<u>Smoke detection system</u>	Not applicable to these buildings.
N/A	S20C5	Spec E2.2a: 5	<u>Combined smoke alarm and smoke detection system</u>	Not applicable to these buildings.
N/A	S20C6	Spec E2.2a: 6	<u>Smoke detection for smoke control systems</u>	Not applicable to these buildings.
X	S20C7	Spec E2.2a: 7	<u>Building occupant warning system</u>	Provide details of building occupant warning system (BOWS).
N/A	NSW S20C8	NSW Spec E2.2a: 8	<u>System monitoring</u>	Not applicable to these buildings.
<u>SPECIFICATION 21 – SMOKE EXHAUST SYSTEMS</u>				
N/A	S21C1	Spec E2.2b: 1	<u>Scope</u> This Specification describes the requirements for mechanical smoke exhaust systems.	Not applicable to these buildings.
N/A	S21C2	Spec E2.2b: 2	<u>Smoke exhaust capacity</u>	Not applicable to these buildings.
N/A	S21C3	Spec E2.2b: 3	<u>Smoke exhaust fans</u>	Not applicable to these buildings.
N/A	S21C4	Spec E2.2b: 4	<u>Smoke reservoirs</u>	Not applicable to these buildings.
N/A	S21C5	Spec E2.2b: 5	<u>Smoke exhaust fan and vent location</u>	Not applicable to these buildings.
N/A	S21C6	Spec E2.2b: 6	<u>Make-up air</u>	Not applicable to these buildings.
N/A	S21C7	Spec E2.2b: 7	<u>Smoke exhaust system control</u>	Not applicable to these buildings.
N/A	S21C8	Spec E2.2b: 8	<u>Smoke detection</u>	Not applicable to these buildings.
<u>SPECIFICATION 22 – SMOKE-AND-HEAT VENTS</u>				
N/A	S22C1	New for 2022	<u>Scope</u> This Specification contains requirements for automatic smoke-and-heat vents.	Not applicable to these buildings.
N/A	S22C2	Spec E2.2c: 1	<u>Adoption of AS 2665</u>	Not applicable to these buildings.
N/A	S22C3	Spec E2.2c: 2	<u>Controls</u>	Not applicable to these buildings.
<u>SPECIFICATION 23 – RESIDENTIAL FIRE SAFETY SYSTEMS</u>				

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S23C1	Spec E2.2d: 1	<u>Scope</u> This Specification describes the requirements for residential fire safety systems referenced in Specification 18.	Not applicable to these buildings.
N/A	S23C2	Spec E2.2d: 1	<u>Application</u>	Not applicable to these buildings.
N/A	S23C3	Spec E2.2d: 2(a)	<u>General requirements</u>	Not applicable to these buildings.
N/A	S23C4	Spec E2.2d: 2(b)	<u>Local fire indicator panel</u>	Not applicable to these buildings.
N/A	S23C5	Spec E2.2d: 2l	<u>Smoke alarms</u>	Not applicable to these buildings.
N/A	S23C6	Spec E2.2d: 2(d)	<u>Signal isolation interface units</u>	Not applicable to these buildings.
N/A	S23C7	Spec E2.2d: 2l	<u>Wiring</u>	Not applicable to these buildings.
N/A	S23C8	Spec E2.2d: 3(a)	<u>Connection to monitoring service</u>	Not applicable to these buildings.
N/A	S23C9	Spec E2.2d: 3(b)	<u>Indication at the fire indicator panel</u>	Not applicable to these buildings.
SPECIFICATION 24 – LIFT INSTALLATIONS				
N/A	S24C1	Spec E3.1: 1	<u>Scope</u> This Specification contains requirements for electric passenger lift installations and electrohydraulic passenger lift installations.	Not applicable to these buildings.
N/A	S24C2	Spec E3.1: 2	<u>Lift cars exposed to solar radiation</u>	Not applicable to these buildings.
N/A	S24C3	Spec E3.1: 3	<u>Lift car emergency lighting</u>	Not applicable to these buildings.
N/A	S24C4	Spec E3.1: 4	<u>Cooling of lift shaft</u>	Not applicable to these buildings.
N/A	S24C5	Spec E3.1: 5	<u>Lift foyer access</u>	Not applicable to these buildings.
N/A	S24C6	Spec E3.1: 6	<u>Emergency access doors in a single enclosed lift shaft</u>	Not applicable to these buildings.
SPECIFICATION 25 – PHOTOLUMINESCENT EXIT SIGNS				
N/A	S25C1	Spec E4.8: 1	<u>Scope</u> This Specification contains requirements for photoluminescent exit signs.	Not applicable to these buildings.
N/A	S25C2	Spec E4.8: 2	<u>Application</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S25C3	Spec E4.8: 3	<u>Illumination</u>	Not applicable to these buildings.
N/A	S25C4	Spec E4.8: 4	<u>Pictorial elements</u>	Not applicable to these buildings.
N/A	S25C5	Spec E4.8: 5	<u>Viewing distance</u>	Not applicable to these buildings.
N/A	S25C6	Spec E4.8: 6	<u>Smoke control systems</u>	Not applicable to these buildings.
<u>SECTION F HEALTH AND AMENITY</u>				
<u>PART F1 – SURFACE WATER MANAGEMENT RISING DAMP AND EXTERNAL WATERPROOFING</u>				
Noted	F1D1	F1.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
Noted	F1D2	New for 2022	<u>Application of Part</u> 1) F1D4 and F1D5 do not apply to a roof with a covering complying with F3D2(a) to (d). 2) F1D3 to F1D5 do not apply to a balcony, podium or similar horizontal surface part of a building: a) where the flooring is of timber decking or other perforated flooring; or b) which is located directly above ground.	Noted.
X	F1D3	F1.1	<u>Stormwater drainage</u> Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3.	Provide civil design for stormwater drainage.
N/A	F1D4	New for 2022	<u>Exposed joints</u> Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must: a) be protected in accordance with Section 2.9 of AS 4654.2; and b) not be located beneath or run through a planter box, water feature or similar part of the building.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	F1D5	F1.4	<u>External waterproofing membranes</u> A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane: a) consisting of materials complying with AS 4654.1; and b) designed and installed in accordance with AS 4654.2.	Not applicable to these buildings.
N/A	F1D6	F1.9	<u>Damp-proofing</u> Damp-proofing where required to be installed in accordance with AS/NZS 2904 or AS 3660.1	Not applicable to these buildings.
X	F1D7	F1.10	<u>Damp-proofing of floors on the ground</u> Damp-proofing where required to be installed in accordance with AS 2870	Provide details regarding use of high impact waterproof membranes.
N/A	F1D8	F1.12	<u>Subfloor ventilation</u> 1) Subfloor spaces must: a) be provided with openings in external walls and internal subfloor walls in accordance with Table F1D8 for the climatic zones given in Figure F1D8; and b) have clearance between the ground surface and the underside of the lowest horizontal member in the subflooring in accordance with Table F1D8.	Not applicable to these buildings.
<u>PART F2 – WET AREAS AND OVERFLOW PROTECTION</u>				
Noted	F2D1	New for 2022	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
X	F2D2	F1.7(a) and (b)	<u>Wet area construction</u> 1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must:	Provide a cross section and details of proposed waterproofing substrate and membrane details of all wet areas.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) be water resistant or waterproof in accordance with Specification 26; and b) comply with AS 3740. 2) In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must: a) be water resistant or waterproof in accordance with Specification 26; and b) comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.	
N/A	F2D3	F1.7I, (d) and I	<u>Rooms containing urinals</u>	Not applicable to these buildings.
X	F2D4	F1.11	<u>Floor wastes</u> 1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste. 2) Where a floor waste is installed: a) the minimum continuous fall of a floor plane to the waste must be 1:80; and b) the maximum continuous fall of a floor plane to the waste must be 1:50.	Provide a cross section and details of proposed waterproofing substrate and membrane details of all wet areas.
<u>PART F3 – ROOF AND WALL CLADDING</u>				
Noted	F3D1	New for 2022	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5. 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
X	F3D2	F1.5	<u>Roof coverings</u> A roof must be covered with: a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or b) metal sheet roofing complying with AS 1562.1; or	Update notes on plans to comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or e) an external waterproofing membrane complying with F1D5.	
X	F3D3	F1.6	<u>Sarking</u> Sarking-type material used for weatherproofing of roofs and walls must comply with AS 4200.1 and AS 4200.2.	Update notes on plans to comply with this clause.
X	F3D4	F1.13	<u>Glazed assemblies</u> 1) Glazed assemblies in an external wall, must comply with AS 2047	Update notes on plans to comply with this clause.
X	F3D5	New for 2022	<u>Wall cladding</u> 1) External wall cladding must comply with one or a combination of the following: a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. b) Autoclaved aerated concrete: AS 5146.3. c) Metal wall cladding: AS 1562.1. 2) The following buildings need not comply with (1): a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of another part of the building that is required to be weatherproofed. An open spectator stand or open deck carpark.	Update notes on plans to comply with this clause.
PART F4 – SANITARY AND OTHER FACILITIES				
Noted	F4D1	F2.0	<u>Deemed-to-Satisfy Provisions</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F4P1 to F4P6 are satisfied by complying with: a) F4D2 to F4D12; 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	
√	F4D2	F2.1	<u>Facilities in residential buildings</u> 1) For facilities in Class 2 buildings, the following applies: a) Within each sole-occupancy unit, provide: i) a kitchen sink and facilities for the preparation and cooking of food; and ii) a bath or shower; and iii) a closet pan; and iv) a washbasin. And laundry facilities	The buildings comply with this clause.
√	F4D3	F2.2	<u>Calculation of number of occupants and facilities</u> 1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means. 2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. 3) In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) may be counted once for each sex. 4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.	The buildings comply with this clause.
√	F4D4	F2.3	<u>Facilities in Class 3 to 9 buildings</u> 1) Except where permitted by (3), (4), (7), F4D5(a), F4D5(b) and F4D12(1), separate sanitary facilities for	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l, as appropriate.	
√	F4D5	F2.4	<u>Accessible sanitary facilities</u> In a building required to be accessible: a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D6; and b) accessible unisex showers must be provided in accordance with F4D7; and AS1428.	The buildings comply with this clause.
√	F4D6	Table F2.4a	<u>Accessible unisex sanitary compartments</u> 1) Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is to comply with this clause.	The buildings comply with this clause.
N/A	F4D7	Table F2.4b	<u>Accessible unisex showers</u> 1) Where required by F4D5(b), the minimum number of accessible unisex showers for each class of building is to comply with this clause.	Not applicable to these buildings.
√	F4D8	F2.5	<u>Construction of sanitary compartments</u> 1) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend: a) from floor level to the ceiling in the case of a unisex facility; or b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or c) 1.8 m above the floor in all other cases. 2) Unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway, the door to a fully enclosed sanitary compartment must: a) open outwards; or	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			b) slide; or c) be readily removable from the outside of the sanitary compartment. 3) In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.	
N/A	F4D9	F2.6	<u>Interpretation: urinals and washbasins</u> 1) A urinal may be: a) an individual stall or wall-hung urinal; or b) each 600 mm length of a continuous urinal trough; or c) a closet pan used in place of a urinal. 2) A washbasin may be: a) an individual basin; or b) a part of a hand washing trough served by a single water tap.	Not applicable to these buildings.
Noted	NSW F4D10	F2.7	<u>Microbial (legionella) control</u> This clause has deliberately been left blank. F4D10 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010.	Noted.
Noted	F4D11	F2.8	<u>Waste management</u> Class 9a and 9c buildings.	Noted.
Noted	F4D12	F2.9	<u>Accessible adult change facilities</u>	Noted.
<u>PART F5 – ROOM HEIGHTS</u>				
√	F5D1	F3.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F5P1 is satisfied by complying with:	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) F5D2; etc 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	
√	F5D2	F3.1	<u>Height of rooms and other spaces</u> 1) The height of rooms and other spaces in a Class 2 or 3 building or Class 4 part of a building must be not less than: a) for a kitchen, laundry, or the like — 2.1 m; and b) for a corridor, passageway or the like — 2.1 m; and c) for a habitable room excluding a kitchen — 2.4 m; and d) in a habitable room, or space within a habitable room, with a sloping ceiling or projections below the ceiling line: i) in an attic — a height of not less than 2.2 m for not less than two-thirds of the floor area of the room or space; and ii) in other rooms — a height of not less than 2.4 m for not less than two-thirds of the floor area of the room or space; and	The buildings comply with this clause.
<u>PART F6 – LIGHT AND VENTILATION</u>				
Noted	F6D1	F4.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F6P1 to F6P5 are satisfied by complying with: a) F6D2 to F6D12; and b) for a building containing an occupiable outdoor area, Part G6; and c) for farm buildings and farm sheds, Part I3. 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
√	F6D2	F4.1	<u>Provision of natural light</u> Natural light must be provided in: a) A Class 2 building and a Class 4 part of a building — to all habitable rooms. b) A Class 3 building — to all bedrooms and dormitories. c) Class 9a and 9c buildings — to all rooms used for sleeping purposes. d) A Class 9b building — to all general purpose classrooms in primary or secondary schools and all playrooms or the like for the use of children in an early childhood centre.	The buildings comply with this clause.
√	F6D3	F4.2	<u>Methods and extent of natural light</u> 1) Required natural light must be provided by: a) windows, excluding roof lights, that: - or b) roof lights, - or c) a proportional combination of windows and roof lights required by (a) and (b).	The buildings comply with this clause.
√	F6D4	F4.3	<u>Natural light borrowed from adjoining room</u> 1) Natural light to a room in a Class 2 building or Class 4 part of a building or in a sole-occupancy unit of a Class 3 building, may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if: a) both rooms are within the same sole-occupancy unit or the enclosed verandah is on common property; and b) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and c) the adjoining room has: i) windows, excluding roof lights, that:	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			A) have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or ii) roof lights, that: A) have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and B) are open to the sky; or iii) a proportional combination of windows and roof lights required by (i) and (ii). 2) The areas specified in (1)(b) and (c) may be reduced as appropriate if direct natural light is provided from another source.	
√	F6D5	F4.4	<u>Artificial lighting</u> 1) Artificial lighting must be provided: a) in required stairways, passageways, and ramps; and b) if natural light of a standard equivalent to that required by F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in: i) a Class 4 part of a building — to sanitary compartments, bathrooms, shower rooms, airlocks and laundries; and ii) a Class 2 building — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and iii) Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			corridors, lobbies, internal stairways, other circulation spaces and paths of egress. 2) The artificial lighting system must comply with AS/NZS 1680.0. 3) The system may provide a lesser level of illumination to the following spaces during times when the level of lighting would be inappropriate for the use: a) A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting required by Part I1. b) A museum, gallery or the like, where sensitive displays require low lighting levels. c) A discotheque, nightclub or the like, where to create an ambience and character for the space, low lighting levels are used.	
√	NSW F6D6	NSW F4.5(b)	<u>Ventilation of rooms</u> A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have: a) natural ventilation complying with F6D7; or b) a mechanical ventilation or air-conditioning system complying with AS 1668.2.	The buildings comply with this clause.
√	F6D7	F4.6	<u>Natural ventilation</u> 1) Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened: a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and b) open to: i) a suitably sized court, or space open to the sky; or ii) an open verandah, carport, or the like; or iii) an adjoining room in accordance with F6D8.	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) The requirements of (1)(a) do not apply to a Class 8 electricity network substation.	
√	F6D8	F4.7	<u>Ventilation borrowed from adjoining room</u> Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property.	The buildings comply with this clause.
√	F6D9	F4.8	<u>Restriction on location of sanitary compartments</u> A sanitary compartment must not open directly into: a) a kitchen or pantry; or b) a public dining room or restaurant; or c) a dormitory in a Class 3 building; or d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or e) a workplace normally occupied by more than one person.	The buildings comply with this clause.
√	F6D10	F4.9	<u>Airlocks</u> If a sanitary compartment is prohibited under F6D9 from opening directly to another room: a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building: i) access must be by an airlock, hallway or other room; or ii) the sanitary compartment must be provided with mechanical exhaust ventilation; b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator stand): i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m² and fitted with self-closing doors at all access doorways; or	The buildings comply with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.	
N/A	F6D11	F4.11	<u>Carparks</u> Every storey of a carpark, except an open-deck carpark, must have: a) a system of mechanical ventilation complying with AS 1668.2; or b) a system of natural ventilation complying with Section 4 of AS 1668.4.	Not applicable to these buildings.
N/A	F6D12	F4.12	<u>Kitchen local exhaust ventilation</u> A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where: a) any cooking apparatus has: i) a total maximum electrical power input exceeding 8 kW; or ii) a total gas power input exceeding 29 MJ/hour; or b) the total maximum power input to more than one apparatus exceeds, per m2 of floor area of the room or enclosure: i) 0.5 kW electrical power; or ii) 1.8 MJ/hour gas.	Not applicable to these buildings.
<u>PART F7 - SOUND TRANSMISSION AND INSULATION</u>				
Noted	F7D1	F5.0	<u>Deemed-to-Satisfy Provisions</u> 1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F7P1 to F7P4 are satisfied by complying with F7D2 to F7D8. 2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted.
Noted	F7D2	F5.1	<u>Application of Part</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			The Deemed-to-Satisfy Provisions of this Part apply to Class 2 and 3 buildings and Class 9c buildings.	
X	F7D3	F5.2	<u>Determination of airborne sound insulation ratings</u> A form of construction required to have an airborne sound insulation rating must: a) have the required value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term (R_w + C_{tr}) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or b) comply with Specification 28.	Provide details of construction of separating walls and discontinuous construction.
X	F7D4	F5.3	<u>Determination of impact sound insulation ratings</u> 1) A floor in a building required to have an impact sound insulation rating must: a) have the required value for weighted normalised impact sound pressure level (L_{n,w}) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or b) comply with Specification 28. 2) A wall in a building required to have an impact sound insulation rating must: a) for a Class 2 or 3 building be of discontinuous construction	Provide details of construction of separating walls and discontinuous construction.
N/A	F7D5	F5.4	<u>Sound insulation rating of floors</u> 1) A floor in a Class 2 or 3 building must have an R_w + C_{tr} (airborne) not less than 50 and an L_{n,w} (impact) not more than 62 if it separates: a) sole-occupancy units; or b) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification. 2) A floor in a Class 9c building separating sole-occupancy units must have an R_w not less than 45.	Not applicable to these buildings.
X	F7D6	F5.5	<u>Sound insulation rating of walls</u> 1) A wall in a Class 2 or 3 building must:	Provide details of construction of separating walls and discontinuous construction.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and b) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and c) comply with F7D4(2) if it separates: i) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or ii) a sole-occupancy unit from a plant room or lift shaft. 2) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30. 3) A wall in a Class 9c building must have an R_w not less than 45 if it separates: a) sole-occupancy units; or b) a sole-occupancy unit from a kitchen, bathroom, sanitary compartment (not being an associated ensuite), laundry, plant room or utilities room.	
X	F7D7	F5.6	<u>Sound insulation rating of internal services</u> 1) If a duct or soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than: a) 40 if the adjacent room is a habitable room (other than a kitchen); or b) 25 if the adjacent room is a kitchen or non-habitable room.	Provide details of construction of separating services and discontinuous construction.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) If a stormwater pipe passes through a sole-occupancy unit, it must be separated in accordance with (1)(a) and (b).	
X	F7D8	F5.7	<u>Sound isolation of pumps</u> A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.	Provide details of sound isolation to pumps.
PART F8 – CONDENSATION MANAGEMENT				
Noted	F8D1	F6.0	<u>Deemed-to-Satisfy Provisions.</u>	Noted.
X	F8D2	F6.1	<u>Application of Part</u> The Deemed-to-Satisfy Provisions of this Part only apply to a sole-occupancy unit of a Class 2 building and a Class 4 part of a building.	Provide details of how condensation management will be incorporated into the design.
X	F8D3	F6.2	<u>External wall construction</u> 1) Where a pliable building membrane is installed in an external wall, it must: a) comply with AS 4200.1; and b) be installed in accordance with AS 4200.2; and c) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building.	Provide details of how condensation management will be incorporated into the design.
X	F8D4	F6.3	<u>Exhaust systems</u> 1) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of: a) 25 L/s for a bathroom or sanitary compartment; and b) 40 L/s for a kitchen or laundry. 2) Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air. 3) Where space for a clothes drying appliance is provided in accordance with F4D2(1)(b), space must also be	Provide details of how condensation management will be incorporated into the design.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			provided for ducting from the clothes drying appliance to outdoor air.	
X	F8D5	F6.4	<u>Ventilation of roof spaces</u> 1) In climate zones 6, 7 and 8, a roof must have a roof space that: a) is located: i) immediately above the primary insulation layer; or ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or iii) immediately above ceiling insulation which meets the requirements of J3D7(3) and J3D7(4); and b) has a height of not less than 20 mm; and c) is either: i) ventilated to outdoor air through evenly distributed openings in accordance with Table F8D5; or ii) located immediately underneath roof tiles of an unsarked tiled roof. 2) The requirements of (1) do not apply to a: a) concrete roof; or b) roof that is made of structural insulated panels; or c) roof that is subject to Bushfire Attack Level FZ requirements in accordance with AS 3959.	Provide details of how condensation management will be incorporated into the design.
SPECIFICATION 26 - WATERPROOFING AND WATER RESISTANCE REQUIREMENTS FOR BUILDING ELEMENTS IN WET AREAS				
Noted	S26C1	Table F1.7	<u>Scope</u> This Specification sets out requirements for building elements in wet areas that are required to be: a) water resistant; or b) waterproof.	Noted.
X	S26C2	Table F1.7	<u>Application</u>	Provide details for wet area construction.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	S26C3	Table F1.7	<u>Shower area (enclosed and unenclosed)</u>	Provide details for wet area construction.
X	S26C4	Table F1.7	<u>Area outside shower area</u>	Provide details for wet area construction.
X	S26C5	Table F1.7	<u>Areas adjacent to baths and spas without showers</u>	Provide details for wet area construction.
X	S26C6	Table F1.7	<u>Other areas</u>	Provide details for wet area construction.
<u>SPECIFICATION 27 - ACCESIBLE ADULT CHANGE FACILITIES</u>				
N/A	S27C1	Spec F2.9: 1	<u>Scope</u> This Specification contains the requirements for accessible adult change facilities.	Not applicable to these buildings.
N/A	S27C2	Spec F2.9: 2	<u>General requirements</u>	Not applicable to these buildings.
N/A	S27C3	Spec F2.9: 3	<u>Hoist</u>	Not applicable to these buildings.
N/A	S27C4	Spec F2.9: 4	<u>Toilet pan, seat, backrest and grabrails</u>	Not applicable to these buildings.
N/A	S27C5	Spec F2.9: 5	<u>Washbasin and tap</u>	Not applicable to these buildings.
N/A	S27C6	Spec F2.9: 6	<u>Fixtures and fittings</u>	Not applicable to these buildings.
N/A	S27C7	Spec F2.9: 7	<u>Change table</u>	Not applicable to these buildings.
N/A	S27C8	Spec F2.9: 8	<u>Changing rails</u>	Not applicable to these buildings.
N/A	S27C9	Spec F2.9: 9	<u>Door and door controls</u>	Not applicable to these buildings.
N/A	S27C10	Spec F2.9: 10	<u>Signage</u>	Not applicable to these buildings.
N/A	S27C11	Spec F2.9: 11	<u>Operating instructions</u>	Not applicable to these buildings.
<u>SPECIFICATION 28 - SOUND INSULATION FOR BUILDING ELEMENTS</u>				
Noted	S28C1	Spec F5.2: 1(a)	<u>Scope</u> This Specification lists the weighted sound reduction index RW for some common forms of construction.	Noted.
X	S28C2	Spec F5.2: 1(b)	<u>Discontinuous construction</u>	Provide details of method of sound insulation complying with this clause.
X	S28C3	Spec F5.2: 2	<u>Construction Deemed-to-Satisfy</u>	Provide details of method of sound insulation complying with this clause.
X	S28C4	Spec F5.2: Table 2	<u>Acceptable forms of construction for walls — masonry</u>	Provide details of method of sound insulation complying with this clause.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S28C5	Spec F5.2: Table 2	<u>Acceptable forms of construction for walls — concrete</u>	Not applicable to these buildings.
N/A	S28C6	Spec F5.2: Table 2	<u>Acceptable forms of construction for walls — autoclaved aerated concrete</u>	Not applicable to these buildings.
X	S28C7	Spec F5.2: Table 2	<u>Acceptable forms of construction for walls — timber and steel framing</u>	Provide details of method of sound insulation complying with this clause.
N/A	S28C8	Spec F5.2: Table 3	<u>Acceptable forms of construction for floors — concrete</u>	Not applicable to these buildings.
N/A	S28C9	Spec F5.2: Table 3	<u>Acceptable forms of construction for floors — autoclaved aerated concrete</u>	Not applicable to these buildings.
N/A	S28C10	Spec F5.2: Table 3	<u>Acceptable forms of construction for floors — timber</u>	Not applicable to these buildings.
<u>SPECIFICATION 29 - IMPACT SOUND-TEST OF EQUIVALENCE</u>				
Noted	S29C1	Spec F5.5: 1	<u>Scope</u> This Specification describes a method of test to determine the comparative resistance of walls to the transmission of impact sound.	Noted.
Noted	S29C2	Spec F5.5: 2	<u>Construction to be tested</u>	Noted.
Noted	S29C3	Spec F5.5: 3	<u>Method</u>	Noted.
<u>SECTION G ANCILLARY PROVISIONS</u>				
<u>PART G1 - MINOR STRUCTURES AND COMPONENTS</u>				
N/A	G1D1	G1.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	NSW G1D2	NSW G1.1	<u>Swimming pools</u> 1) NSW G1D2(2) applies to the technical construction requirements for barriers to restrict access to swimming pools, subject to: a) out-of-ground pool walls and the walls of above ground pools, including inflatable pools, not being considered to be effective barriers; and b) the reference in clause 2.3.1 of AS 1926.1 to a barrier within a property including a boundary barrier.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			2) A swimming pool with a depth of water more than 300 mm and which is associated with a Class 2 or 3 building or Class 4 part of a building, must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with: a) AS 1926.1 and AS 1926.2; or b) if the swimming pool is a spa pool: i) the requirements of (a); or ii) clause 9 of the Swimming Pools Regulation 2018. 3) A water recirculation system in a swimming pool with a depth of water more than 300 mm must comply with AS1926.3.	
N/A	G1D3	G1.2	<u>Refrigerated chambers, strong-rooms and vaults</u>	Not applicable to these buildings.
N/A	G1D4	G1.3	<u>Outdoor play spaces</u>	Not applicable to these buildings.
N/A	NSW G1D5	NSW G1.101	<u>Provision for cleaning windows</u> 1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.	Not applicable to these buildings.
<u>PART G2 - BOILERS, PRESSURE VESSELS, HEATING APPLIANCES, FIREPLACES, CHIMNEYS AND FLUES</u>				
N/A	G2D1	G2.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	G2D2	G2.2	<u>Installation of appliances</u> The installation of a stove, heater or similar appliance in a building must comply with: a) Domestic solid-fuel burning appliances — installation: AS/NZS 2918. b) For boilers and pressure vessels: Specification 30.	Not applicable to these buildings.
N/A	G2D3	G2.3	<u>Open fireplaces</u>	Not applicable to these buildings.
N/A	G2D4	G2.4	<u>Incinerator rooms</u>	Not applicable to these buildings.
<u>PART G3 - ATRIUM CONSTRUCTION</u>				
N/A	G3D1	G3.1	<u>Application of Part</u> This Part does not apply to an atrium which:	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			a) connects only 2 storeys; or b) connects only 3 storeys if: i) each storey is provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 throughout; and ii) one of those storeys is situated at a level at which there is direct egress to a road or open space.	
N/A	G3D2	G3.2	<u>Dimensions of atrium well</u> An atrium well must have a width throughout the well that is able to contain a cylinder having a horizontal diameter of not less than 6 m.	Not applicable to these buildings.
N/A	G3D3	G3.3	<u>Separation of atrium by bounding walls</u>	Not applicable to these buildings.
N/A	G3D4	G3.4	<u>Construction of bounding walls</u>	Not applicable to these buildings.
N/A	G3D5	G3.5	<u>Construction at balconies</u>	Not applicable to these buildings.
N/A	G3D6	G3.6	<u>Separation at roof</u>	Not applicable to these buildings.
N/A	G3D7	G3.7	<u>Means of egress</u>	Not applicable to these buildings.
N/A	G3D8	G3.8	<u>Fire and smoke control systems</u>	Not applicable to these buildings.
PART G4 - CONSTRUCTION IN ALPINE AREAS				
N/A	G4D1	G4.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	G4D2	G4.1	<u>Application of Part</u>	Not applicable to these buildings.
N/A	G4D3	G4.3	<u>External doors</u>	Not applicable to these buildings.
N/A	G4D4	G4.4	<u>Emergency lighting</u>	Not applicable to these buildings.
N/A	G4D5	G4.5	<u>External trafficable structures</u>	Not applicable to these buildings.
N/A	G4D6	G4.6	<u>Clear space around buildings</u>	Not applicable to these buildings.
N/A	G4D7	G4.8	<u>Fire-fighting services and equipment</u>	Not applicable to these buildings.
N/A	G4D8	G4.9	<u>Fire orders</u>	Not applicable to these buildings.
PART G5 - CONSTRUCTION IN BUSHFIRE PRONE AREAS				
Noted	G5D1	G5.0	<u>Deemed-to-Satisfy Provisions</u>	Noted.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
Noted	NSW G5D2	NSW G5.1	<u>Application of Part</u> The Deemed-to-Satisfy Provisions of this Part apply in a designated bushfire prone area to: a) a Class 2 or 3 building; or b) a Class 4 part of a building; or c) a Class 9 building that is a special fire protection purpose located in an area subject to a Bushfire Attack Level (BAL) not exceeding BAL—12.5, determined in accordance with Planning for Bush Fire Protection; or d) a Class 10a building or deck immediately adjacent or connected to a building or part of a type in (a), (b) or (c).	Noted. .
N/A	NSW G5D3	NSW G5.2	<u>Protection</u> In a designated bushfire prone area, a Class 2 building, a Class 3 building, a Class 4 part of a building or a Class 10a building or deck immediately adjacent or connected to such a building or part, must comply with the following: a) AS 3959 except: i) as amended by Planning for Bush Fire Protection; and ii) or Section 9 Construction for Bushfire Attack Level FZ (BAL-FZ), buildings subject to BAL-FZ must comply with specific conditions of development consent for construction at this level; or b) the requirements of (a) above as modified by the development consent following consultation with the NSW Rural Fire Service under section 4.14 of the Environmental Planning and Assessment Act 1979 if required; or c) the requirements of (a) above as modified by development consent with a bushfire safety authority issued under section 100B of the Rural Fires Act 1997 for the purposes of integrated development.	Not applicable to these buildings.
N/A	NSW G5D4	New for 2022	<u>Protection – Class 9 buildings used as a special fire protection purpose</u> In a designated bushfire prone area, a Class 9 building that is a special fire protection purpose or a Class 10a building	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
			or deck immediately adjacent or connected to a such a building or part, must comply with: a) For a Class 9 building that is special fire protection purpose, Specification 43 except as amended by Planning for Bush Fire Protection; or b) for a Class 10a building or deck immediately adjacent or connected to a Class 9 building that is a special fire protected purpose: i) AS 3959 except as amended by Planning for Bush Fire Protection; and ii) S43C13; or c) the requirements of (a) or (b) above as modified by the development consent with a bushfire safety authority issued under section 100B of the Rural Fires Act 1997 for the purposes of integrated development.	
PART G6 - OCCUPIABLE OUTDOOR AREAS				
N/A	G6D1	G6.1	<u>Application of Part</u> 1) The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of NCC Volume One. 2) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. 3) Except for G6D2, the Deemed-to-Satisfy Provisions of this Part do not apply to: a) an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4 part of a building; or b) an occupiable outdoor area with an area less than 10m².	Not applicable to these buildings.
N/A	G6D2	G6.2	<u>Fire hazard properties</u>	Not applicable to these buildings.
N/A	G6D3	G6.3	<u>Fire separation</u>	Not applicable to these buildings.
N/A	G6D4	G6.4	<u>Provision for escape</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	G6D5	G6.5	<u>Construction of exits</u>	Not applicable to these buildings.
N/A	G6D6	G6.6	<u>Fire fighting equipment</u>	Not applicable to these buildings.
N/A	G6D7	G6.7	<u>Lift installations</u>	Not applicable to these buildings.
N/A	G6D8	G6.8	<u>Visibility in an emergency, exit signs and warning systems</u>	Not applicable to these buildings.
N/A	G6D9	G6.9	<u>Light and ventilation</u>	Not applicable to these buildings.
N/A	G6D10	G6.10	<u>Fire orders</u>	Not applicable to these buildings.
PART G7 - LIVABLE HOUSING DESIGN				
N/A	G7D1	New for 2022	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	G7D2	New for 2022	<u>Livable housing design</u>	Not applicable to these buildings.
SPECIFICATION 30 - INSTALLATION OF BOILERS AND PRESSURE VESSELS				
N/A	S30C1	Spec G2.2: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S30C2	Spec G2.2: 2.1	<u>Explosion relief</u>	Not applicable to these buildings.
N/A	S30C3	Spec G2.2: 2.2	<u>Floors and drainage</u>	Not applicable to these buildings.
N/A	S30C4	Spec G2.2: 2.3	<u>Protection from heat</u>	Not applicable to these buildings.
SPECIFICATION 31 - FIRE AND SMOKE CONTROL SYSTEMS IN BUILDINGS CONTAINING ATRIUMS				
N/A	S31C1	Spec G3.8: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S31C2	Spec G3.8: 2.1	<u>General requirement — automatic fire sprinkler system</u>	Not applicable to these buildings.
N/A	S31C3	Spec G3.8: 2.2	<u>Roof protection</u>	Not applicable to these buildings.
N/A	S31C4	Spec G3.8: 2.3	<u>Atrium floor protection</u>	Not applicable to these buildings.
N/A	S31C5	Spec G3.8: 2.4.1 – 2.4.5	<u>Sprinkler systems to glazed walls</u>	Not applicable to these buildings.
N/A	S31C6	Spec G3.8: 2.5	<u>Stop valves</u>	Not applicable to these buildings.
N/A	S31C7	Spec G3.8: 3.1	<u>General requirements — smoke control system</u>	Not applicable to these buildings.
N/A	S31C8	Spec G3.8: 3.2	<u>Operation of atrium mechanical air-handling systems</u>	Not applicable to these buildings.
N/A	S31C9	Spec G3.8: 3.3	<u>Activation of smoke control system</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S31C10	Spec G3.8: 3.4	<u>Smoke exhaust system</u>	Not applicable to these buildings.
N/A	S31C11	Spec G3.8: 3.5	<u>Upward air velocity</u>	Not applicable to these buildings.
N/A	S31C12	Spec G3.8: 3.6	<u>Exhaust fans</u>	Not applicable to these buildings.
N/A	S31C13	Spec G3.8: 3.7	<u>Smoke-and-heat vents</u>	Not applicable to these buildings.
N/A	S31C14	Spec G3.8: 3.8	<u>Make-up air supply</u>	Not applicable to these buildings.
N/A	S31C15	Spec G3.8: 4.1	<u>General requirements—fire detection and alarm system</u>	Not applicable to these buildings.
N/A	S31C16	Spec G3.8: 4.2	<u>Smoke detection system</u>	Not applicable to these buildings.
N/A	S31C17	Spec G3.8: 4.3	<u>Smoke detection in spaces separated from the atrium by bounding walls</u>	Not applicable to these buildings.
N/A	S31C18	Spec G3.8: 4.4	<u>Alarm systems</u>	Not applicable to these buildings.
N/A	S31C19	Spec G3.8: 5	<u>Emergency warning and intercom systems</u>	Not applicable to these buildings.
N/A	S31C20	Spec G3.8: 6	<u>Standby power system</u>	Not applicable to these buildings.
N/A	S31C21	Spec G3.8: 7	<u>System for excluding smoke from fire-isolated exits</u>	Not applicable to these buildings.
SPECIFICATION 43 - BUSHFIRE PROTECTION FOR CERTAIN CLASS 9 BUILDINGS				
N/A	S43C1	New for 2022	<u>Scope</u> 1) This Specification sets out bushfire protection measures for buildings described in G5D4. 2) Compliance with this Specification does not guarantee the safety of building occupants or the maintenance of tenable conditions within a building during a bushfire event.	Not applicable to these buildings.
N/A	NSW S43C2	New for 2022	<u>Separation from classified vegetation</u>	Not applicable to these buildings.
N/A	S43C3	New for 2022	<u>Separation between buildings</u>	Not applicable to these buildings.
N/A	S43C4	New for 2022	<u>Separation from allotment boundaries and carparking areas</u>	Not applicable to these buildings.
N/A	S43C5	New for 2022	<u>Separation from hazards</u>	Not applicable to these buildings.
N/A	S43C6	New for 2022	<u>Non-combustible path around building</u>	Not applicable to these buildings.
N/A	S43C7	New for 2022	<u>Access pathways</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S43C8	New for 2022	<u>Exposed external areas</u>	Not applicable to these buildings.
N/A	S43C9	New for 2022	<u>Internal tenability</u>	Not applicable to these buildings.
N/A	S43C10	New for 2022	<u>Building envelope</u>	Not applicable to these buildings.
N/A	NSW S43C11	New for 2022	<u>Supply of water for fire-fighting purposes</u>	Not applicable to these buildings.
N/A	S43C12	New for 2022	<u>Emergency power supply</u>	Not applicable to these buildings.
N/A	S43C13	New for 2022	<u>Signage</u>	Not applicable to these buildings.
N/A	S43C14	New for 2022	<u>Vehicular access</u>	Not applicable to these buildings.
SECTION I SPECIAL USE BUILDINGS				
PART I1 - CLASS 9b BUILDINGS				
N/A	NSW I1D1	NSW H1.1	<u>Application of Part</u> 1) For a Class 9b building or part of a building that is not an entertainment venue: a) the Deemed-to-Satisfy Provisions of Part I1 apply to every enclosed Class 9b building or part of a building which: i) is a school assembly, church or community hall with a stage and any backstage area with a total floor area of more than 300 m ² ; or ii) otherwise, has a stage and any backstage area with a total floor area of more than 200 m ² ; or iii) has a stage with an associated rigging loft; and b) notwithstanding (1)(a): i) I1D4 applies to every open or enclosed Class 9b building; and ii) I1D7 applies to every enclosed Class 9b building. 2) For a Class 9b building that is an entertainment venue, NSW Part I4 applies in replacement of Part I1.	Not applicable to these buildings.
N/A	I1D2	H1.2	<u>Separation</u>	Not applicable to these buildings.
N/A	I1D3	H1.3	<u>Proscenium wall construction</u> A proscenium wall must comply with Specification 32.	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I1D4	H1.4	<u>Seating area</u>	Not applicable to these buildings.
N/A	I1D5	H1.5	<u>Exits from stages</u>	Not applicable to these buildings.
N/A	I1D6	H1.6	<u>Access to platforms and lofts</u> A stairway that provides access to a service platform, rigging loft, or the like, must comply with AS 1657.	Not applicable to these buildings.
N/A	I1D7	H1.7	<u>Aisle lights</u>	Not applicable to these buildings.
<u>PART I2 - PUBLIC TRANSPORT BUILDINGS</u>				
N/A	I2D1	H2.1	<u>Application of Part</u> 1) The Deemed-to-Satisfy Provisions of this Part apply to the passenger use areas of a Class 9b or Class 10 building used for public transport. 2) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Parts D4, E3 and F4. 3) For an airport that does not accept regular public transport services, as defined in the Disability Standards for Accessible Public Transport 2002, only I2D8, I2D9, I2D10, I2D11, and I2D13 of this Part apply. 4) Exemption (1) to A6G1(1) does not apply to this Part.	Not applicable to these buildings.
N/A	I2D2	H2.2	<u>Accessways</u>	Not applicable to these buildings.
N/A	I2D3	H2.3	<u>Ramps</u>	Not applicable to these buildings.
N/A	I2D4	H2.4	<u>Handrails and grabrails</u>	Not applicable to these buildings.
N/A	I2D5	H2.5	<u>Doorways and doors</u>	Not applicable to these buildings.
N/A	I2D6	H2.6	<u>Lifts.</u>	Not applicable to these buildings.
N/A	I2D7	H2.7	<u>Stairways</u>	Not applicable to these buildings.
N/A	I2D8	H2.8	<u>Unisex accessible toilet</u>	Not applicable to these buildings.
N/A	I2D9	H2.9	<u>Location of accessible toilets</u>	Not applicable to these buildings.
N/A	I2D10	H2.10	<u>Symbols and signs</u>	Not applicable to these buildings.
N/A	I2D11	H2.11	<u>Tactile ground surface indicators</u>	Not applicable to these buildings.
N/A	I2D12	H2.12	<u>Lighting</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I2D13	H2.13	<u>Hearing augmentation</u>	Not applicable to these buildings.
N/A	I2D14	H2.14	<u>Emergency warning systems</u>	Not applicable to these buildings.
N/A	I2D15	H2.15	<u>Controls</u>	Not applicable to these buildings.
<u>PART I3 - FARM BUILDINGS AND FARM SHEDS</u>				
N/A	I3D1	H3.1	<u>Application of Part</u> 1) The Deemed-to-Satisfy Provisions of this Part apply to farm buildings and farm sheds. 2) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, and F. 3) I3D1 to I3D5, I3D8 and I3D11 to I3D18 apply to a farm shed. 4) I3D1, I3D3, I3D5 to I3D7, I3D9 to I3D12, I3D14, I3D15 and I3D18 apply to a farm building.	Not applicable to these buildings.
N/A	I3D2	H3.2	<u>Fire resistance and separation</u>	Not applicable to these buildings.
N/A	I3D3	H3.3	<u>Provision for escape</u>	Not applicable to these buildings.
N/A	I3D4	H3.4	<u>Construction of exits</u>	Not applicable to these buildings.
N/A	I3D5	H3.5	<u>Fixed platforms, walkways, stairways and ladders</u>	Not applicable to these buildings.
N/A	I3D6	H3.6	<u>Thresholds</u>	Not applicable to these buildings.
N/A	I3D7	H3.7	<u>Swinging doors</u>	Not applicable to these buildings.
N/A	I3D8	H3.8	<u>Fire fighting equipment</u>	Not applicable to these buildings.
N/A	I3D9	H3.9	<u>Fire hydrants and water supplies</u>	Not applicable to these buildings.
N/A	I3D10	H3.10	<u>Fire hose reels</u>	Not applicable to these buildings.
N/A	I3D11	H3.11	<u>Portable fire extinguishers</u>	Not applicable to these buildings.
N/A	I3D12	H3.12	<u>Emergency lighting requirements</u>	Not applicable to these buildings.
N/A	I3D13	H3.13	<u>Exit signs</u>	Not applicable to these buildings.
N/A	I3D14	H3.14	<u>Direction signs</u>	Not applicable to these buildings.
N/A	I3D15	H3.15	<u>Design and operation of exit signs</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I3D16	H3.16	<u>Sanitary facilities</u> F4D4 does not apply to a farm shed.	Not applicable to these buildings.
N/A	I3D17	H3.17	<u>Height of rooms and other spaces</u> F5D2 does not apply to a farm shed which has ceiling heights not less than: a) in a room, corridor, passageway or the like — 2.1 m; b) in a room or space with a sloping ceiling or projections — a height of not less than 2.1 m for at least two-thirds of the floor area of the room or space, and when calculating the floor area of the room or space, any part that has a ceiling height of less than 1.5 m is not included; and c) in a stairway, ramp, landing or the like — 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.	Not applicable to these buildings.
N/A	I3D18	H3.18	<u>Artificial lighting</u>	Not applicable to these buildings.
NSW PART I4 - ENTERTAINMENT VENUES OTHER THAN TEMPORARY STRUCTURES AND DRIVE-IN THEATRES				
N/A	I4D1	NSW H101.1	<u>Application of Part</u> This Part applies to every entertainment venue as described in the <i>Environmental Planning and Assessment Regulation 2021</i> .	Not applicable to these buildings.
N/A	I4D2	NSW H101.2	<u>Fire separation</u>	Not applicable to these buildings.
N/A	I4D3	NSW H101.3	<u>Foyer space</u>	Not applicable to these buildings.
N/A	I4D4	NSW H101.4	<u>Sprinkler systems for common foyers</u>	Not applicable to these buildings.
N/A	I4D5	NSW H101.5	<u>Conventional stages: application</u>	Not applicable to these buildings.
N/A	I4D6	NSW H101.5.1	<u>Conventional stages: extent of stage area</u>	Not applicable to these buildings.
N/A	I4D7	NSW H101.5.2	<u>Conventional stages: small stages</u>	Not applicable to these buildings.
N/A	I4D8	NSW H101.5.3	<u>Conventional stages: large stages</u>	Not applicable to these buildings.
N/A	I4D9	NSW H101.5.4	<u>Conventional stages: fire separation of stages</u>	Not applicable to these buildings.
N/A	I4D10	NSW H101.6	<u>Non-conventional stages: application</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I4D11	NSW H101.6.1	<u>Non-conventional stages: small stages</u>	Not applicable to these buildings.
N/A	I4D12	NSW H101.6.2	<u>Non-conventional stages: large stages</u>	Not applicable to these buildings.
N/A	I4D13	NSW H101.7	<u>Flying scenery</u>	Not applicable to these buildings.
N/A	I4D14	NSW H101.8	<u>Load notice</u>	Not applicable to these buildings.
N/A	I4D15	NSW H101.10	<u>Safety curtains</u>	Not applicable to these buildings.
N/A	I4D16	NSW H101.10.1	<u>Safety curtains — additional requirements</u>	Not applicable to these buildings.
N/A	I4D17	NSW H101.11	<u>Seating in rows: application</u>	Not applicable to these buildings.
N/A	I4D18	NSW H101.11.1	<u>Seating in rows: number of seats</u>	Not applicable to these buildings.
N/A	I4D19	NSW H101.11.2	<u>Seating in rows: chairs used for seating</u>	Not applicable to these buildings.
N/A	I4D20	NSW H101.11.3	<u>Seating in rows: chairs in auditoriums — level floors</u>	Not applicable to these buildings.
N/A	I4D21	NSW H101.11.4	<u>Seating in rows: chairs in auditoriums — sloping floors</u>	Not applicable to these buildings.
N/A	I4D22	NSW H101.11.5	<u>Seating in rows: radiating aisles in seating areas</u>	Not applicable to these buildings.
N/A	I4D23	NSW H101.11.6	<u>Seating in rows: aisles and cross-overs</u>	Not applicable to these buildings.
N/A	I4D24	NSW H101.11.7	<u>Seating in rows: platforms and steps</u>	Not applicable to these buildings.
N/A	I4D25	H101.11.8	<u>Seating in rows: stepped platforms</u>	Not applicable to these buildings.
N/A	I4D26	NSW H101.12	<u>Continental seating: application</u>	Not applicable to these buildings.
N/A	I4D27	NSW H101.12.1	<u>Continental seating: seating to be fastened</u>	Not applicable to these buildings.
N/A	I4D28	NSW H101.12.2	<u>Continental seating: maximum seats per row</u>	Not applicable to these buildings.
N/A	I4D29	NSW H101.12.3	<u>Continental seating: depth of seating</u>	Not applicable to these buildings.
N/A	I4D30	NSW H101.12.4	<u>Continental seating: clearance between rows</u>	Not applicable to these buildings.
N/A	I4D31	NSW H101.12.5	<u>Continental seating: chairs used for seating</u>	Not applicable to these buildings.
N/A	I4D32	NSW H101.12.6	<u>Continental seating: egress doorways</u>	Not applicable to these buildings.
N/A	I4D33	NSW H101.12.7	<u>Continental seating: clear areas</u>	Not applicable to these buildings.
N/A	I4D34	NSW H101.12.8	<u>Continental seating: minimum clear space</u>	Not applicable to these buildings.
N/A	I4D35	NSW H101.12.9	<u>Continental seating: doors</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I4D36	NSW H101.13.1	<u>Provision of guardrails: location</u>	Not applicable to these buildings.
N/A	I4D37	NSW H101.13.2	<u>Provision of guardrails: fixed back seats</u>	Not applicable to these buildings.
N/A	I4D38	NSW H101.13.3	<u>Provision of guardrails: steps between platforms</u>	Not applicable to these buildings.
N/A	I4D39	NSW H101.14	<u>Guardrails for seating areas: application</u>	Not applicable to these buildings.
N/A	I4D40	NSW H101.14.1	<u>Guardrails for seating areas: continental seating</u>	Not applicable to these buildings.
N/A	I4D41	NSW H101.14.2	<u>Guardrails for seating areas: balconies and boxes</u>	Not applicable to these buildings.
N/A	I4D42	NSW H101.14.3	<u>Guardrails for seating areas: cross-overs</u>	Not applicable to these buildings.
N/A	I4D43	NSW H101.15	<u>Dressing rooms</u>	Not applicable to these buildings.
N/A	I4D44	NSW H101.16	<u>Storerooms</u>	Not applicable to these buildings.
N/A	I4D45	NSW H101.17	<u>Projection suites: Application</u>	Not applicable to these buildings.
N/A	I4D46	NSW H101.17.1	<u>Projection suites: rooms to be provided</u>	Not applicable to these buildings.
N/A	I4D47	NSW H101.17.2	<u>Projection suites: fire separation</u>	Not applicable to these buildings.
N/A	I4D48	NSW H101.17.3	<u>Projection suites: concession for protection of some openings</u>	Not applicable to these buildings.
N/A	I4D49	NSW H101.18	<u>Basement storeys</u>	Not applicable to these buildings.
N/A	I4D50	NSW H101.18.1	<u>Basement storeys: more than two</u>	Not applicable to these buildings.
N/A	I4D51	NSW H101.19.1	<u>Electric mains installation: main switchboard</u>	Not applicable to these buildings.
N/A	I4D52	NSW H101.19.2	<u>Electric mains installation: circuit protection</u>	Not applicable to these buildings.
N/A	I4D53	NSW H101.19.3	<u>Electric mains installation: separate sub-mains</u>	Not applicable to these buildings.
N/A	I4D54	NSW H101.20.1	<u>Lighting: lighting switches</u>	Not applicable to these buildings.
N/A	I4D55	NSW H101.20.2	<u>Lighting: lighting levels</u>	Not applicable to these buildings.
N/A	I4D56	NSW H101.20.3	<u>Lighting: provision of aisle lighting</u>	Not applicable to these buildings.
N/A	I4D57	NSW H101.20.4	<u>Lighting: aisle lighting power supply</u>	Not applicable to these buildings.
N/A	I4D58	NSW H101.20.5	<u>Lighting: aisle lighting alternative lighting supply</u>	Not applicable to these buildings.
N/A	I4D59	NSW H101.22	<u>Automatic smoke-and-heat vents for stages</u>	Not applicable to these buildings.
N/A	I4D60	NSW H101.23	<u>Solid fuel burning stoves and open fire places</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I4D61	NSW H101.24.1	<u>Fuel gas cylinders: general</u>	Not applicable to these buildings.
N/A	I4D62	NSW H101.24.2	<u>Fuel gas cylinders: enclosures</u>	Not applicable to these buildings.
PART I5 – TEMPORARY STRUCTURES				
N/A	I5D1	NSW H102.1	<u>Application of Part</u>	Not applicable to these buildings.
N/A	I5D2	NSW H102.2	<u>Exits — exclusions</u>	Not applicable to these buildings.
N/A	I5D3	NSW H102.3	<u>Location of exits</u>	Not applicable to these buildings.
N/A	I5D4	NSW H102.4	<u>Exits to be provided</u>	Not applicable to these buildings.
N/A	I5D5	NSW H102.5	<u>Vertical clearance for exits</u>	Not applicable to these buildings.
N/A	I5D6	NSW H102.6	<u>Curtains across exits</u>	Not applicable to these buildings.
N/A	I5D7	NSW H102.7	<u>Curtains and blinds</u>	Not applicable to these buildings.
N/A	I5D8	NSW H102.8	<u>Fabrics</u>	Not applicable to these buildings.
N/A	I5D9	NSW H102.9	<u>Guardrails</u>	Not applicable to these buildings.
N/A	I5D10	NSW H102.10	<u>Seating</u>	Not applicable to these buildings.
N/A	I5D11	NSW H102.11	<u>Sanitary accommodation</u>	Not applicable to these buildings.
N/A	I5D12	NSW H102.12	<u>Projection suites</u>	Not applicable to these buildings.
N/A	I5D13	NSW H102.13	<u>Fireplaces and heating</u>	Not applicable to these buildings.
N/A	I5D14	NSW H102.14	<u>Electrical services</u>	Not applicable to these buildings.
N/A	I5D15	NSW H102.15	<u>Artificial lighting: general</u>	Not applicable to these buildings.
N/A	I5D16	NSW H102.15.1	<u>Emergency lighting</u>	Not applicable to these buildings.
N/A	I5D17	NSW H102.15.2	<u>Emergency lighting power supply</u>	Not applicable to these buildings.
N/A	I5D18	NSW H102.16	<u>Exit signs</u>	Not applicable to these buildings.
N/A	I5D19	NSW H102.17	<u>Fire-fighting services</u>	Not applicable to these buildings.
PART I6 – DRIVE-IN THEATRES				
N/A	I6D1	NSW H103.1	<u>Application of Part</u>	Not applicable to these buildings.
N/A	I6D2	NSW H103.2	<u>Speaker standards</u>	Not applicable to these buildings.
N/A	I6D3	NSW H103.2.1	<u>Lines of speaker standards</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	I6D4	NSW H103.3	<u>Electrical services</u>	Not applicable to these buildings.
N/A	I6D5	NSW H103.4	<u>Vehicular entrances</u>	Not applicable to these buildings.
N/A	I6D6	NSW H103.5	<u>Lighting</u>	Not applicable to these buildings.
<u>SPECIFICATION 32 – CONSTRUCTION OF PROSCENIUM WALLS</u>				
N/A	S32C1	Spec H1.3: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S32C2	Spec H1.3: 2	<u>Separation of stage areas, etc</u>	Not applicable to these buildings.
N/A	S32C3	Spec H1.3: 3	<u>Proscenium wall construction</u>	Not applicable to these buildings.
N/A	S32C4	Spec H1.3: 4	<u>Combustible materials not to cross proscenium wall</u>	Not applicable to these buildings.
N/A	S32C5	Spec H1.3: 5	<u>Protection of openings in proscenium wall</u>	Not applicable to these buildings.
N/A	S32C6	Spec H1.3: 6	<u>Proscenium curtains</u>	Not applicable to these buildings.
<u>SECTION J – ENERGY EFFICIENCY</u>				
<u>PART J1 – ENERGY EFFICIENCY PERFORMANCE REQUIREMENTS</u>				
N/A	J1P1	JP1	<u>Energy use</u>	Not applicable to these buildings.
N/A	J1P2	New for 2022	<u>Thermal performance of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</u>	Not applicable to these buildings.
N/A	J1P3	New for 2022	<u>Energy usage of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</u>	Not applicable to these buildings.
N/A	J1P4	New for 2022	<u>Renewable energy and electric vehicle charging</u>	Not applicable to these buildings.
<u>PART J2 – ENERGY EFFICIENCY</u>				
N/A	J2D1	J0.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	NSW J2D2	J0.1	<u>Application of Section J</u>	Not applicable to these buildings.
<u>PART J3 - ELEMENTAL PROVISIONS FOR A SOLE-OCCUPANCY UNIT OF A CLASS 2 BUILDING OR A CLASS 4 PART OF A BUILDING</u>				
N/A	J3D1	New for 2022	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	NSW J3D2	New for 2022	<u>Application of Part</u>	Not applicable to these buildings.
N/A	NSW J3D3	J0.2	<u>Reducing heating and cooling loads of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building using house energy rating software</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	NSW J3D4	J0.3	<u><i>Ceiling fans in a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D5	J0.4	<u><i>Roof thermal breaks of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D6	J0.5	<u><i>Wall thermal breaks of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D7	New for 2022	<u><i>Roofs and ceilings of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D8	New for 2022	<u><i>External walls of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D9	New for 2022	<u><i>Wall-glazing construction of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D10	New for 2022	<u><i>Floors of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D11	New for 2022	<u><i>External winter glazing of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D12	New for 2022	<u><i>External summer glazing of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D13	New for 2022	<u><i>Shading of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSW J3D14	New for 2022	<u><i>Net equivalent energy usage of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building</i></u>	Not applicable to these buildings.
N/A	NSWJ3D15	New for 2022	<u><i>Net equivalent energy usage for a sole-occupancy unit of a Class 2 building or Class 4 part of building – home energy rating software</i></u>	Not applicable to these buildings.
PART J4 - BUILDING FABRIC				
X	J4D1	J1.0	<u><i>Deemed-to-Satisfy Provisions</i></u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J4D2	J1.1	<u><i>Application of Part</i></u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J4D3	J1.2	<u><i>Thermal construction — general</i></u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	J4D4	J1.3	<u>Roof and ceiling construction</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J4D5	J1.4	<u>Roof lights</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J4D6	J1.5	<u>Walls and glazing</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J4D7	J1.6	<u>Floors</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
<u>PART J5 – BUILDING SEALING</u>				
X	J45D1	J3.0	<u>Deemed-to-Satisfy Provisions</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J5D2	J3.1	<u>Application of Part</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J5D3	J3.2	<u>Chimneys and flues</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J5D4	J3.3	<u>Roof lights</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J5D5	J3.4	<u>Windows and doors</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J5D6	J3.5	<u>Exhaust fans</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J5D7	J3.6	<u>Construction of ceilings, walls and floors</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J5D8	J3.7	<u>Evaporative coolers</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
<u>PART J6- AIR-CONDITIONING AND VENTILATION</u>				
X	J6D1	J5.0	<u>Deemed-to-Satisfy Provisions</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J6D2	J5.1	<u>Application of Part</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	J6D3	J5.2	<u>Air-conditioning system control</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D4	J5.3	<u>Mechanical ventilation system control</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D5	J5.4	<u>Fans and duct systems</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D6	J5.5	<u>Ductwork insulation</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D7	J5.6	<u>Ductwork sealing</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D8	J5.7	<u>Pump systems</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D9	J5.8	<u>Pipework insulation</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D10	J5.9	<u>Space heating</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D11	J5.10	<u>Refrigerant chillers</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D12	J5.11	<u>Unitary air-conditioning equipment</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J6D13	J5.12	<u>Heat rejection equipment</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
PART J7 – ARTIFICIAL LIGHTING AND POWER				
X	J7D1	J6.0	<u>Deemed-to-Satisfy Provisions</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	NSW J7D2	J6.1	<u>Application of Part</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D3	J6.2	<u>Artificial lighting</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D4	J6.3	<u>Interior artificial lighting and power control</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
X	J7D5	J6.4	<u>Interior decorative and display lighting</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D6	J6.5	<u>Exterior artificial lighting</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D7	J6.6	<u>Boiling water and chilled water storage units</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D8	J6.7	<u>Lifts</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
X	J7D9	J6.8	<u>Escalators and moving walkways</u>	Provide Section J Report to Building Code of Australia (BCA) 2019 (Amendment 1).
PART J8 – HEATED WATER SUPPLY AND SWIMMING POOL AND SPA POOL PLANT				
N/A	J8D1	J7.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	J8D2	J7.2	<u>Heated water supply</u>	Not applicable to these buildings.
N/A	NSW J8D3	J7.3	<u>Swimming pool heating and pumping</u>	Not applicable to these buildings.
N/A	NSW J8D4	J7.4	<u>Spa pool heating and pumping</u>	Not applicable to these buildings.
PART J9 – ENERGY MONITORING AND ON-SITE DISTRIBUTED ENERGY RESOURCES				
N/A	J9D1	J8.0	<u>Deemed-to-Satisfy Provisions</u>	Not applicable to these buildings.
N/A	J9D2	J8.1	<u>Application of Part</u>	Not applicable to these buildings.
N/A	J9D3	J8.3	<u>Facilities for energy monitoring</u>	Not applicable to these buildings.
N/A	J9D4	New for 2022	<u>Facilities for electric vehicle charging equipment</u>	Not applicable to these buildings.
N/A	J9D5	New for 2022	<u>Facilities for solar photovoltaic and battery systems</u>	Not applicable to these buildings.
SPECIFICATION 33 – ADDITIONAL REQUIREMENTS				
N/A	S33C1	Spec JVa: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S33C2	Spec JVa: 2	<u>Additional requirements — general</u>	Not applicable to these buildings.
N/A	S33C3	Spec JVa: 4	<u>Additional requirements — Green Star</u>	Not applicable to these buildings.
SPECIFICATION 34 – MODELLING PARAMETERS FOR J1V3				
N/A	S34C1	Spec JVb: 1	<u>Scope</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S34C2	Spec JVb: 2	<u>Reference building</u>	Not applicable to these buildings.
N/A	S34C3	Spec JVb: 3	<u>Proposed building and reference building</u>	Not applicable to these buildings.
N/A	S34C4	Spec JVb: 4	<u>Services — proposed and reference building</u>	Not applicable to these buildings.
<u>SPECIFICATION 35 – MODELLING PROFILES FOR J1V3</u>				
N/A	S35C1	Spec JVc: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S35C2	Spec JVc: 2	<u>Modelling profiles</u>	Not applicable to these buildings.
<u>SPECIFICATION 36 – MATERIAL PROPERTIES</u>				
N/A	S36C1	Spec J1.2: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S36C2	Spec J1.2: 2	<u>Construction Deemed-to-Satisfy</u>	Not applicable to these buildings.
<u>SPECIFICATION 37 – CALCULATION OF U-VALUE AND SOLAR ADMITTANCE</u>				
N/A	S37C1	Spec J1.5a: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S37C2	Spec J1.5a: 2	<u>General</u>	Not applicable to these buildings.
N/A	S37C3	Spec J1.5a: 3	<u>U-Value — Method 1 (Single Aspect)</u>	Not applicable to these buildings.
N/A	S37C4	Spec J1.5a: 4	<u>U-Value — Method 2 (Multiple Aspects)</u>	Not applicable to these buildings.
N/A	S37C5	Spec J1.5a: 5	<u>Solar admittance — Method 1 (Single Aspect)</u>	Not applicable to these buildings.
N/A	S37C6	Spec J1.5a: 6	<u>Solar admittance — Method 2 (Multiple Aspects)</u>	Not applicable to these buildings.
N/A	S37C7	Spec J1.5a: 7	<u>Shading</u>	Not applicable to these buildings.
<u>SPECIFICATION 38 – SPANDREL PANEL THERMAL PERFORMANCE</u>				
N/A	S38C1	Spec J1.5b: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S38C2	Spec J1.5b: 2	<u>Spandrel panel R-Value: Calculation method 1</u>	Not applicable to these buildings.
N/A	S38C3	Spec J1.5b: 3	<u>Spandrel panel R-Value: Calculation method 2</u>	Not applicable to these buildings.
<u>SPECIFICATION 39 – SUB-FLOOR AND SOIL THERMAL PERFORMANCE</u>				
ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S39C1	Spec J1.6: 1	<u>Scope</u>	Not applicable to these buildings.

ICON	CLAUSE		REFERENCE	COMMENT
	BCA 2022	BCA 2019		
N/A	S39C2	Spec J1.6: 2	<u>Sub-floor space and soil thermal performance</u>	Not applicable to these buildings.
SPECIFICATION 40 – LIGHTING AND POWER CONTROL DEVICES				
N/A	S40C1	Spec J6: 1	<u>Scope</u>	Not applicable to these buildings.
N/A	S40C2	Spec J6: 2	<u>Lighting timers</u>	Not applicable to these buildings.
N/A	S40C3	Spec J6: 3	<u>Time switch</u>	Not applicable to these buildings.
N/A	S40C4	Spec J6: 4	<u>Motion detectors</u>	Not applicable to these buildings.
N/A	S40C5	Spec J6: 5	<u>Daylight sensor and dynamic lighting control device</u>	Not applicable to these buildings.
SPECIFICATION 44 – CALCULATION OF HEATING LOAD LIMIT, COOLING LOAD LIMIT, AND THERMAL ENERGY LOAD LIMIT				
N/A	S44C1	New for 2022	<u>Scope</u>	Not applicable to these buildings.
N/A	S44C2	New for 2022	<u>Heating load limit</u>	Not applicable to these buildings.
N/A	S44C3	New for 2022	<u>Cooling load limit</u>	Not applicable to these buildings.
N/A	S44C4	New for 2022	<u>Thermal energy load limit</u>	Not applicable to these buildings.
SPECIFICATION 45 – MODELLING PROFILES FOR J1V5				
N/A	S45C1	New for 2022	<u>Scope</u>	Not applicable to these buildings.
N/A	S45C2	New for 2022	<u>Reference building sole-occupancy unit</u>	Not applicable to these buildings.
N/A	S45C3	New for 2022	<u>Proposed building and reference building</u>	Not applicable to these buildings.

APPENDIX 2: FIRE RESISTANCE PROVISIONS

Specification 5- Fire-resisting construction

General Requirements

S5C2 Exposure to fire-source features

- 1) A part of a building element is exposed to a **fire-source feature** if any of the horizontal straight lines between that part and the **fire-source feature**, or vertical projection of the feature, is not obstructed by another part of the building that:
 - a) has an FRL of not less than 30/—/—; and
 - b) is neither transparent nor translucent.
- 2) A part of a building element is not exposed to a **fire-source feature** if the **fire-source feature** is:
 - a) an **external wall** of another building that stands on the allotment and the part concerned is more than 15 m above the highest part of that **external wall**; or
 - b) a side or rear boundary of the allotment and the part concerned is below the level of the finished ground at every relevant part of the boundary concerned.
- 3) If various distances apply for different parts of a building element:
 - a) the entire element must have the FRL applicable to that part having the least distance between itself and the relevant **fire-source feature**; or
 - b) each part of the element must have the FRL applicable according to its individual distance from the relevant **fire-source feature**.
- 4) The requirements of (3) do not override or permit any exemption from S5C3.

S5C3 Fire protection for a support of another part

- 1) Where a part of a building **required** to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (2), must:
 - a) have an FRL not less than that **required** by other provisions of this Specification; and
 - b) if located within the same **fire compartment** as the part it supports have an FRL in respect of **structural adequacy** the greater of that **required**:
 - i) for the supporting part itself; and
 - ii) for the part it supports; and
 - c) be **non-combustible**:
 - i) if **required** by other provisions of this Specification; or
 - ii) if the part it supports is **required** to be **non-combustible**.
- 2) The following building elements need not comply with (1)(b) and (1)(c)(ii):
 - a) An element providing lateral support to an **external wall** complying with S5C24(1)(b) or C2D12.
 - b) An element providing support within a **carpark** and complying with S5C19, S5C22 or S5C25.

S5C4 Lintels

- 1) A lintel must have the FRL **required** for the part of the building in which it is situated.
- 2) A lintel need not comply with (1) if it does not contribute to the support of a fire door, fire **window** or fire shutter, and:
 - a) it spans an opening in:
 - i) a wall of a building containing only one **storey**; or
 - ii) a **non-loadbearing** wall of a Class 2 or 3 building; or
 - b) it spans an opening in masonry which is not more than 150 mm thick and:
 - i) not more than 3 m wide if the masonry is **non-loadbearing**; or
 - ii) not more than 1.8 m wide if the masonry is **loadbearing** and part of a solid wall or one of the leaves of a cavity wall.

S5C5 Method of attachment not to reduce the fire-resistance of building elements

The method of attaching or installing a finish, lining, [ancillary element](#) or service installation to the building element must not reduce the fire-resistance of that element to below that [required](#).

S5C24 Type C fire-resisting construction — fire-resistance of building elements

- 1) In a building [required](#) to be of Type C construction:
 - a) a building element listed in [Tables S5C24a, S5C24b, S5C24c, S5C24d and S5C24e](#) and any beam or column incorporated in it, must have an FRL not less than that listed in those Tables for the particular Class of building concerned; and
 - b) an [external wall](#) that is [required](#) by [Table S5C24a](#) to have an FRL need only be tested from the outside to satisfy the requirement; and
 - c) a [fire wall](#) or an [internal wall](#) bounding a [sole-occupancy unit](#) or separating adjoining units must comply with [Specification 6](#) if it is of [lightweight construction](#) and is [required](#) to have an FRL; and
 - d) in a Class 2 or 3 building, an [internal wall](#) which is [required](#) by [Table S5C24c](#) or [S5C24d](#) to have an FRL must extend:
 - i) to the underside of the floor next above if that floor has an FRL of at least 30/30/30 or a [fire-protective covering on the underside of the floor](#), or
 - ii) to the underside of a ceiling having a [resistance to the incipient spread of fire](#) to the space above itself of not less than 60 minutes; or
 - iii) to the underside of the roof covering if it is [non-combustible](#), and except for roof battens with dimensions of 75 mm x 50 mm or less or [sarking-type material](#), must not be crossed by timber or other [combustible](#) building elements; or
 - iv) 450 mm above the roof covering if it is [combustible](#); and
 - e) in a Class 2 or 3 building, except where within the one [sole-occupancy unit](#), or a Class 9a [health-care building](#), or a Class 9b building, a floor separating [storeys](#), or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must:
 - i) have an FRL of at least 30/30/30; or
 - ii) have a [fire-protective covering](#) on the underside of the floor including beams incorporated in it and around the column, if the floor or column is [combustible](#) or of metal; and
 - f) in a Class 9c building a floor above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must:
 - i) have an FRL of at least 30/30/30; or
 - ii) have a [fire-protective covering](#) on the underside of the floor including beams incorporated in it and around the column, if the floor or column is [combustible](#) or of metal.
- 2) For the purposes of [Table S5C24a](#) and [Table S5C24b](#), [external wall](#) includes any column and other building element incorporated within it or other external building element.

Table S5C24a: Type C construction: FRL of parts of external walls

Distance from a <i>fire-source feature</i>	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	90/90/90	90/90/90	90/90/90
1.5 to less than 3 m	–/–/–	60/60/60	60/60/60	60/60/60
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C24b: Type C construction: FRL of external columns not incorporated into an external wall

Distance from a <i>fire-source feature</i>	FRL (in minutes): <i>structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/–/–	90/–/–	90/–/–	90/–/–
1.5 to less than 3 m	–/–/–	60/–/–	60/–/–	60/–/–
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C24c: Type C construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
<i>Loadbearing</i> or non-loadbearing	90/90/90	90/90/90	90/90/90	90/90/90

Table S5C24d: Type C construction: FRL of internal walls

Location	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Bounding <i>public corridors</i> , public lobbies and the like	60/60/60	–/–/–	–/–/–	–/–/–
Between or bounding <i>sole-occupancy units</i>	60/60/60	–/–/–	–/–/–	–/–/–
Bounding a stair if <i>required</i> to be rated	60/60/60	60/60/60	60/60/60	60/60/60

Table S5C24e: Type C construction: FRL of roof

Location	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

APPENDIX 3: PROPOSED ARCHITECTURAL PLANS

271 BERNHARDT STREET, EAST ALBURY NSW 2640

LOT 1 / DP38393
271 BERNHARDT STREET, EAST ALBURY
SITE AREA - 3,916.15m²

DWG No.	Drawing Name
1	COVER PAGE
2	GENERAL NOTES
3	PROPOSED DEMOLITION PLAN
4	PROPOSED SITE PLAN
5	PROPOSED EARTHWORKS PLAN
6	PROPOSED FLOOR PLAN
7	PROPOSED ROOF PLAN AND DRAINAGE SECTION
8	PROPOSED AREA CALCULATION
9	PROPOSED SITE ELEVATIONS
10	PROPOSED SITE ELEVATION AND SECTIONS
11	PROPOSED CORE BUILDING
12	PROPOSED COMMUNAL & UNIT 1 BUILDING
13	PROPOSED UNIT 2, 3 AND 4 BUILDING
14	PROPOSED UNIT 5, 6 AND 7 BUILDING

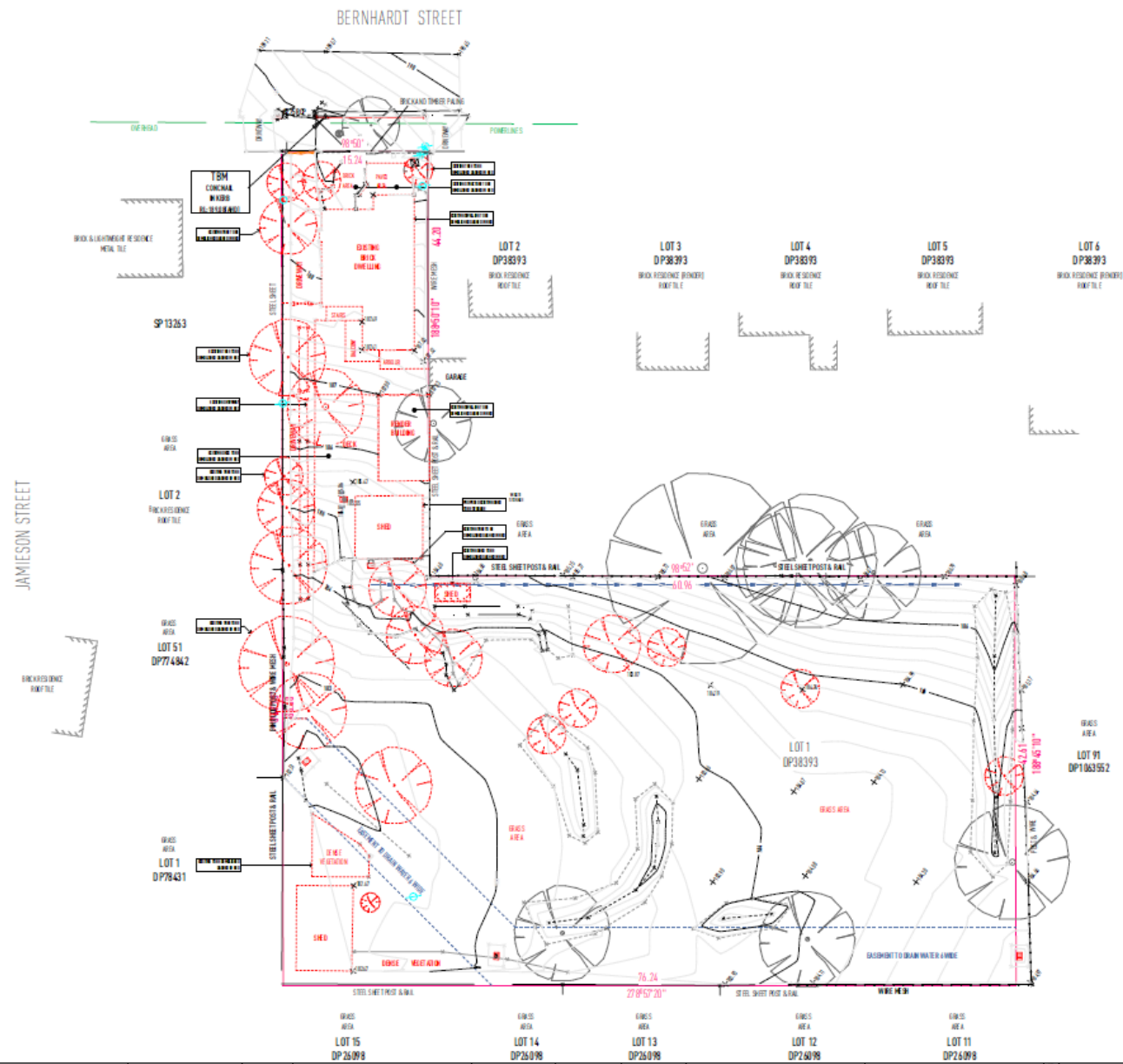
[illegible]

3D PERSPECTIVE



LOCATION PLAN

PROPERTY DESCRIPTION
 LOT 1 / DP38393
 271 BERNHARDT STREET, EAST ALBURY
 SITE AREA - 2,916.15m²
 EXISTING TREE AND STRUCTURE TO
 BE DEMOLISHED DASHED IN RED



</
--

PROPERTY DESCRIPTION
LOT 1 / DP38393
271 BERNHARDT STREET, EAST ALBURY
SITE AREA - 2,916.15m²

SITE NOTES

PROPOSED TO BE CONFORMED ON SITE. COPIES OF ALL WATER ASSESSMENT, PLOTS AND REPORTS TO SOILS AND SITE CONSTRUCTION. IT IS THE APPLICANT'S RESPONSIBILITY TO CHECK THE SITE INCLUDING BATTERS AND PROVIDE SEPARATION CONTROL AT 1/6 RAINFALL R.F. REQUIRED.

ALL STORMWATER AND DRAINAGE TO BE IN ACCORDANCE WITH CURRENT RECEIVING CODE OF ASSESSMENT. 3 SECTIONS IN ADDITION TO ASSESS. 20M.

PROPOSED 100mm IMPERMEABLE AGRICULTURAL DRAINAGE ARE PROVIDED TO THE BASE OF ALL CLUS AND B. DRAINING WALLS AND ARE CONNECTED TO THE STORMWATER SYSTEMS SCREENED SLOTTED PIPES AS REQUIRED.

LATERAL FLOW SERVICES SURROUNDING THE BUILDINGS MUST BE DESIGNED TO DRAIN AS WATER AWAY FROM THE BUILDINGS AND TO ADEQUATELY LESS THAN 100mm FROM THE FLOOR FINISH FROM THE BUILDING.

OPTION DRAINAGE SOUTH FROM TOILET OVERLAND SURFACE WATER AND NO BUILDING PAD.

THE HEIGHT OF OVERLAND FLOW SHALL BE SUCH AS TO DRAINAGE FLOW AND CONSIDERED MOST IN JAMMING OF 100mm BELOW THE LOWEST SANITARY FLOOR.

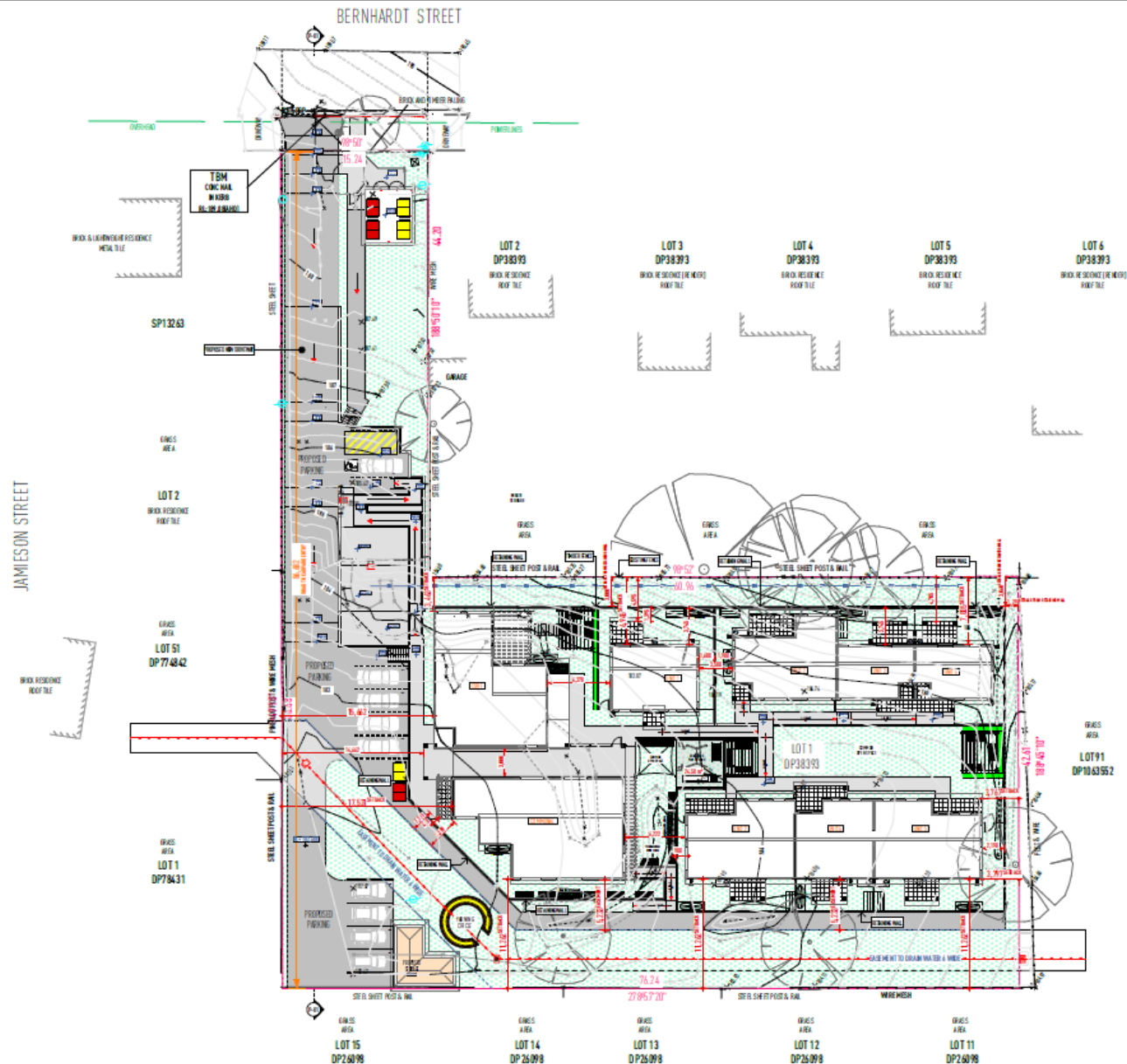
CONSTRUCT DRAINAGE TO LOCAL POINT OF DISCHARGE OR 100mm DRAINAGE LINE. STORMWATER PIPES TO BE A MINIMUM FALL OF 1:100. DISCHARGE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.

DISCHARGE CONFORMANCE TO LOCAL AUTHORITY REQUIREMENTS.

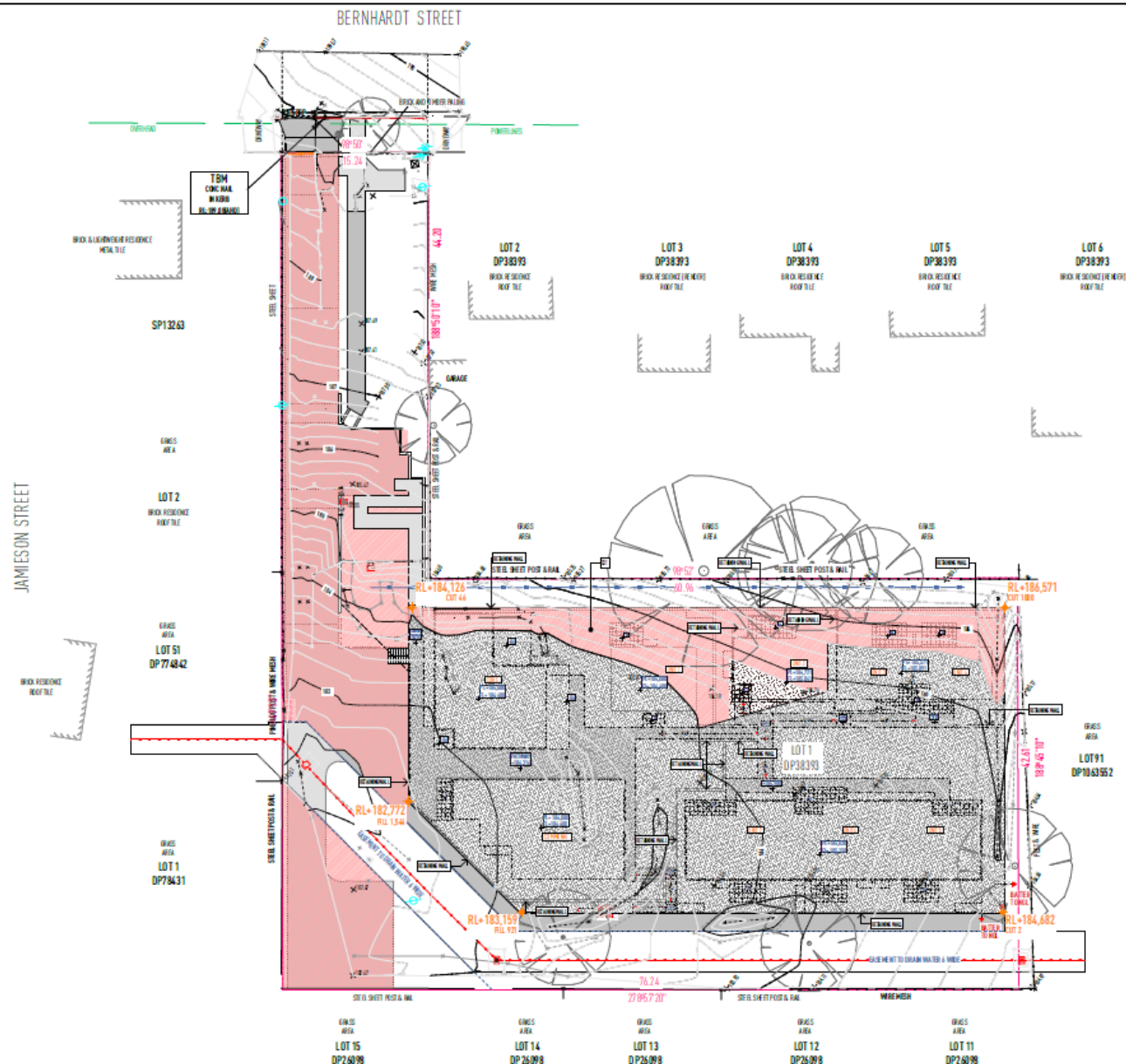
PROVIDE ADEQUATE SEPARATION BETWEEN LOTS AND ADJACENT LOTS TO PREVENT FLOODING.

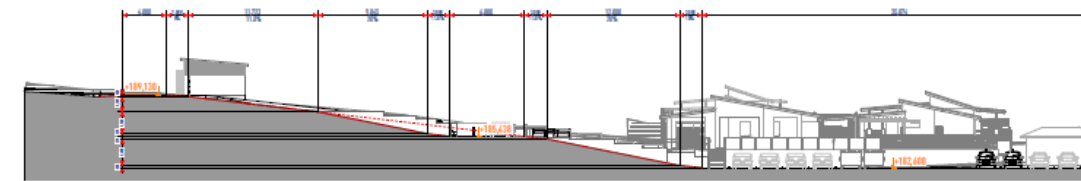
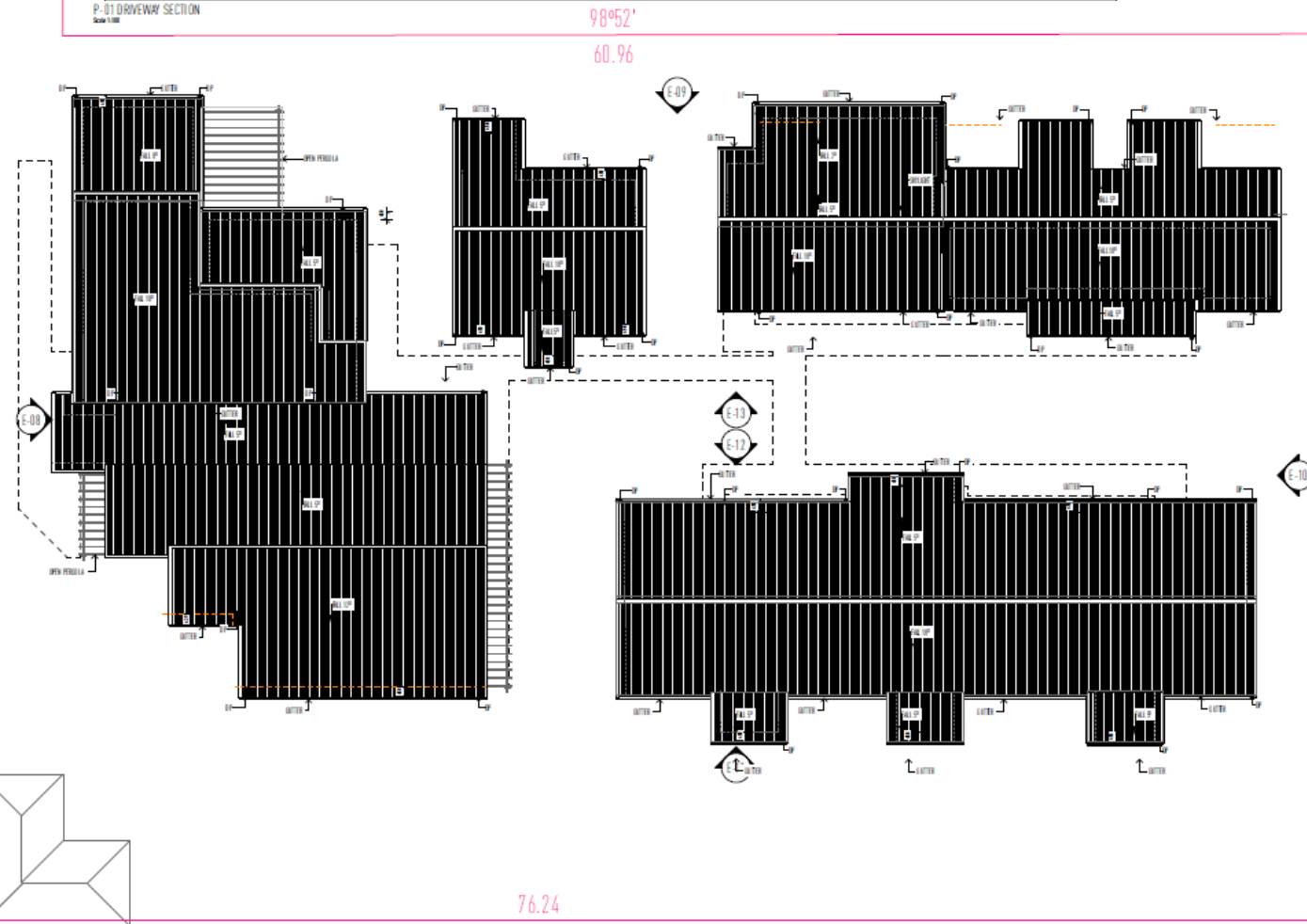
FULL SITE FLOODING BY 1:100 R.F. AS REQUIRED. PLOT 1: 1:100, LOT 1: 1:100, LOT 2: 1:100.

SEWAGE CONTROL BARRIERS AS REQUIRED FOR CONSTRUCTION PURPOSES ONLY.



Housing Plus 100% Satisfaction Guarantee Call 08 8333 3333 www.housingplus.com.au	271 BERNHARDT STREET, EAST ALBURY NSW 2640 DP 38393	PROPOSED 7 DWELLINGS WITH 7 DWELLINGS & COMMUNITY FACILITY	PROPOSED SITE PLAN	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]	DATE: 10/10/2023 DRAWN: [Name] CHECKED: [Name] APPROVED: [Name]
---	--	---	---------------------------	--	--	--	--	--	--	--	--

[illegible][illegible]

[illegible]

Housing Plus
 CONTACT: 0161 275 1111
 100, Victoria Road, Salford, Greater Manchester, M6 6PU



271 BERNHARDT STREET, EAST ALBURY NSW 2640
DP 38393

DESIGN LAYOUTS & ELEVATIONS DESIGNING FLOORS PLAN 10	PROJECT MANAGER PROJECT TEAM LEAD PLAN 10C
STRUCTURAL THEME AND CONSTRUCTION PLAN 12 2024	STRUCTURAL TEAM THEME AND CONSTRUCTION PLAN 12 2024

SOCIAL CONSULTANT MICHAEL KIDD PH: 5480 4400	PROJECT PROPOSED ALBURY GARDENS WITH 7 DWELLINGS &
LANDSCAPE CONSULTANT TDC PH: TDC	

GROUP HOME COMMUNITY FACILITY	DRAWING TITLE PROPOSED ROOF
----------------------------------	--------------------------------

[illegible]

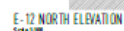
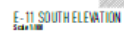
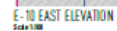
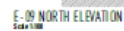
項目	1月	2月
1. 1月1日現在の資産	100	100
2. 1月1日現在負債	0	0
3. 1月1日現在純資産	100	100
4. 1月1日現在純資産の構成	100	100
5. 1月1日現在純資産の構成	100	100
6. 1月1日現在純資産の構成	100	100
7. 1月1日現在純資産の構成	100	100
8. 1月1日現在純資産の構成	100	100
9. 1月1日現在純資産の構成	100	100
10. 1月1日現在純資産の構成	100	100

1	2	3	4	5
IN - PENDING				
D No 007	REVISION 8	COUNT E E-REQ 1,200, 1,600		
MN CCH	PRINT DATE 15/NOV/2023	DRAWING No. 7 of 14		

LOT 1 / DP38393
271 BERNHARDT STREET, EAST ALBURY
SITE AREA - 3,916.15m²

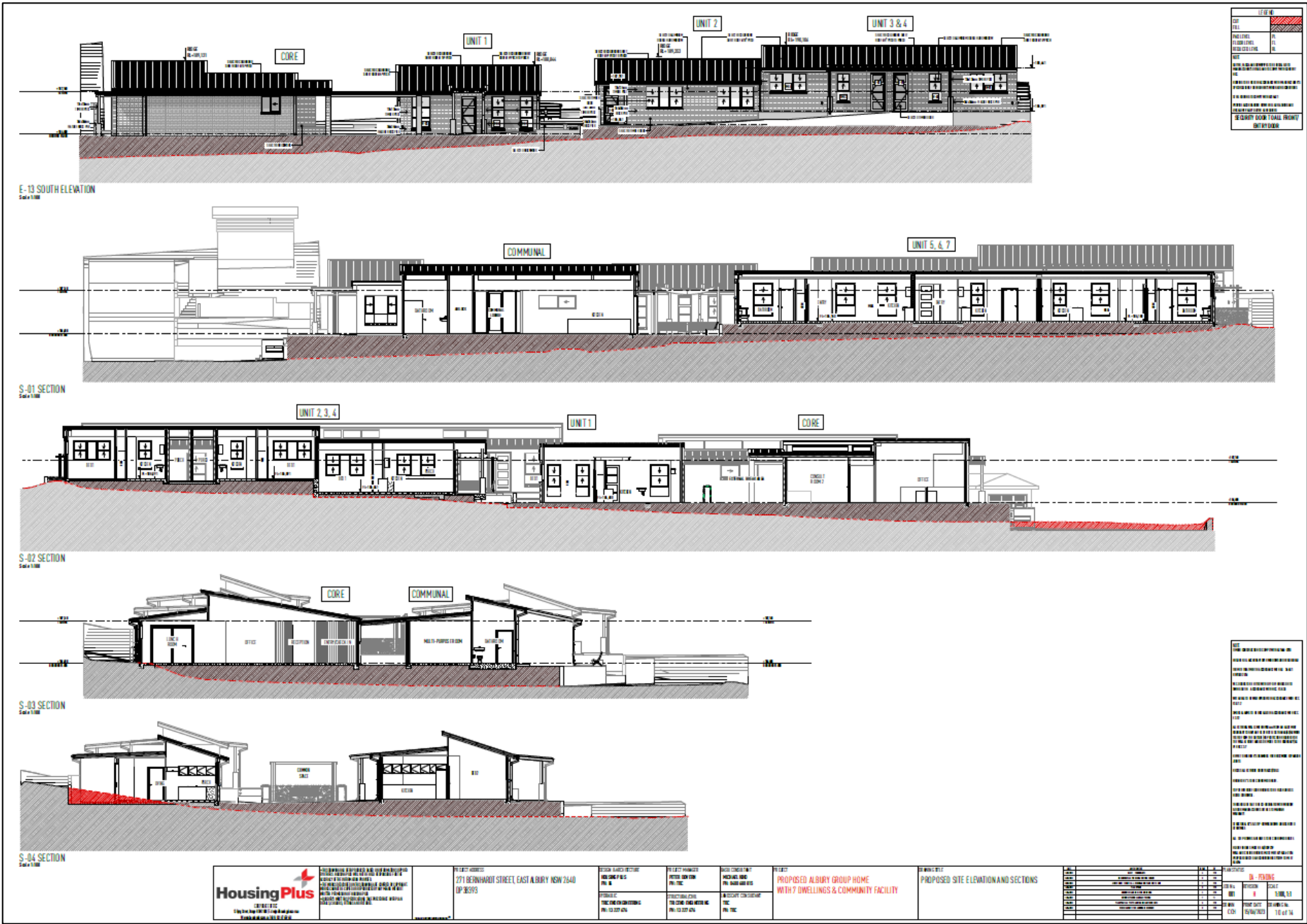
[illegible]

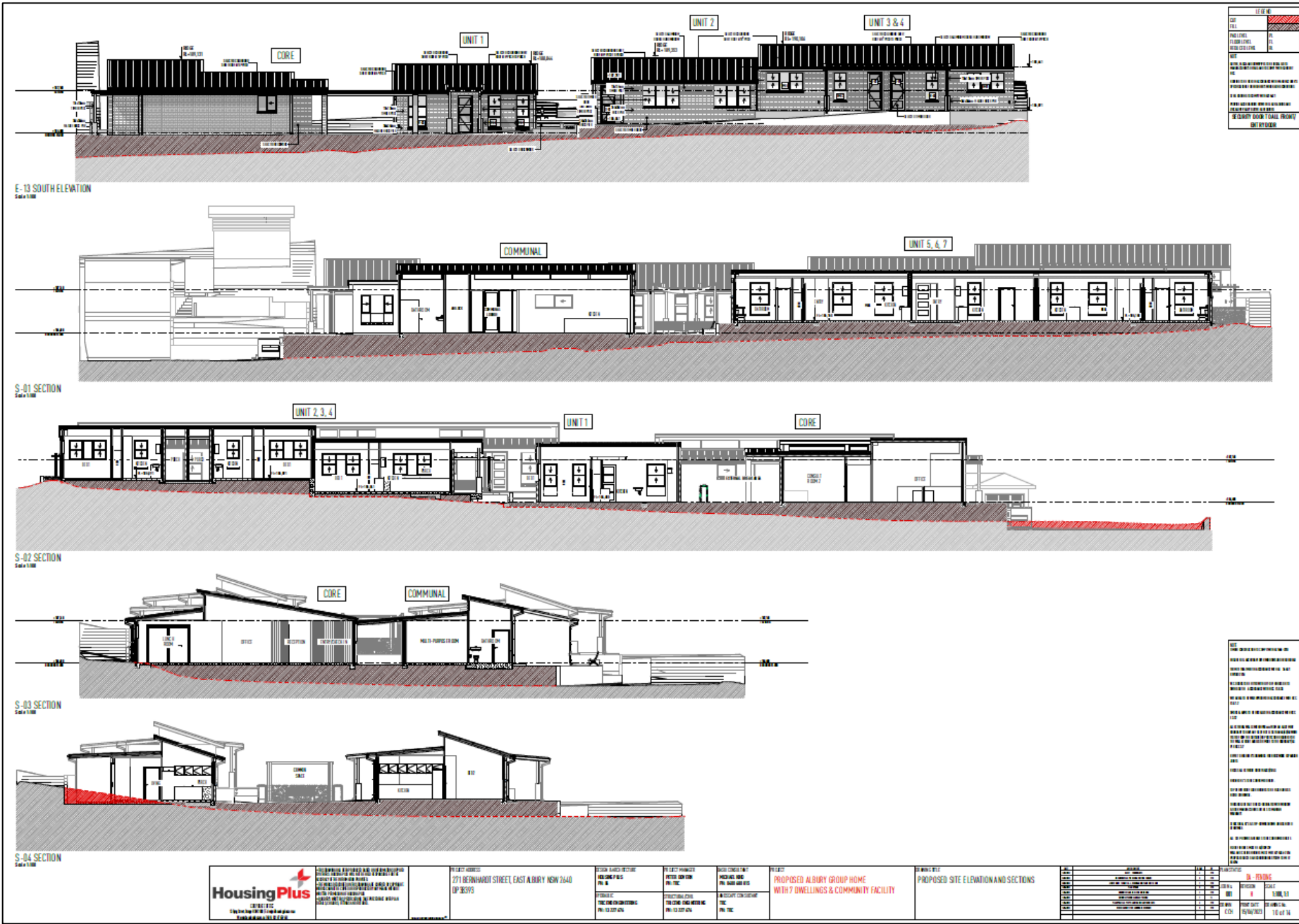
 HousingPlus Sustainable Housing Solutions		PROJECT ADDRESS: 371 BURNHAM STREET, EAST ALBURY NSW 2640 PC 16293	DEVELOPER/DESIGNER: ALBURY PLUS PO BOX 16	PLANNING MANAGER: PATRICIA DUNN PO BOX 16 PC 16293	PLANNING CONSULTANT: MICHAEL ADAMS PO BOX 16293 PC 16293	PROJECT: PROPOSED ABBEY GROUP HOME WITH 7 DWELLINGS & COMMUNITY FACILITY	PROJECT TITLE: PROPOSED AREA CALCULATION	AREA CALCULATION			
								LAND: 1.0000	ROAD: 0.0000	WATER: 0.0000	TOTAL: 1.0000

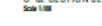
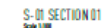
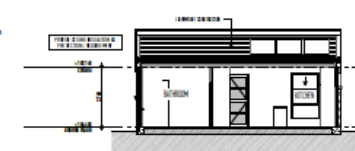
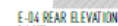
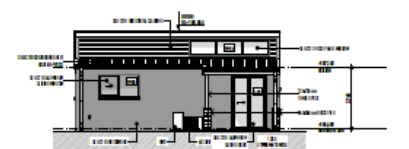
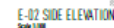
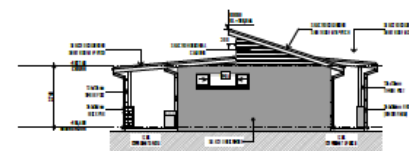
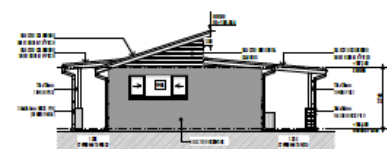
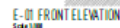
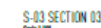
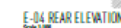
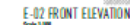
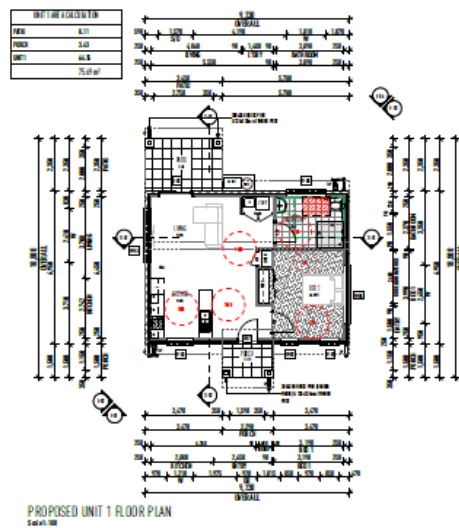
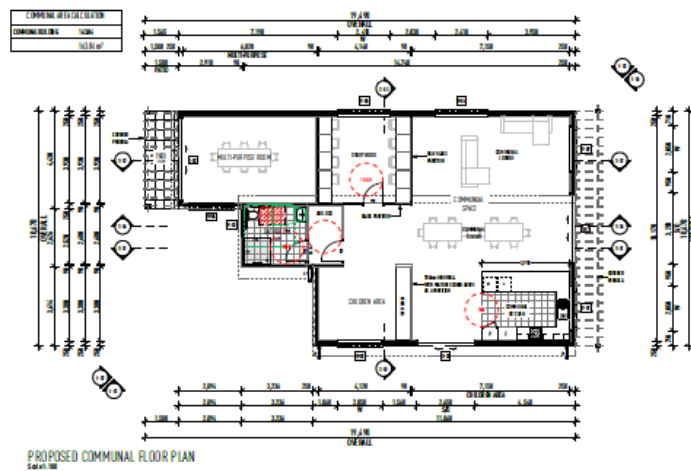


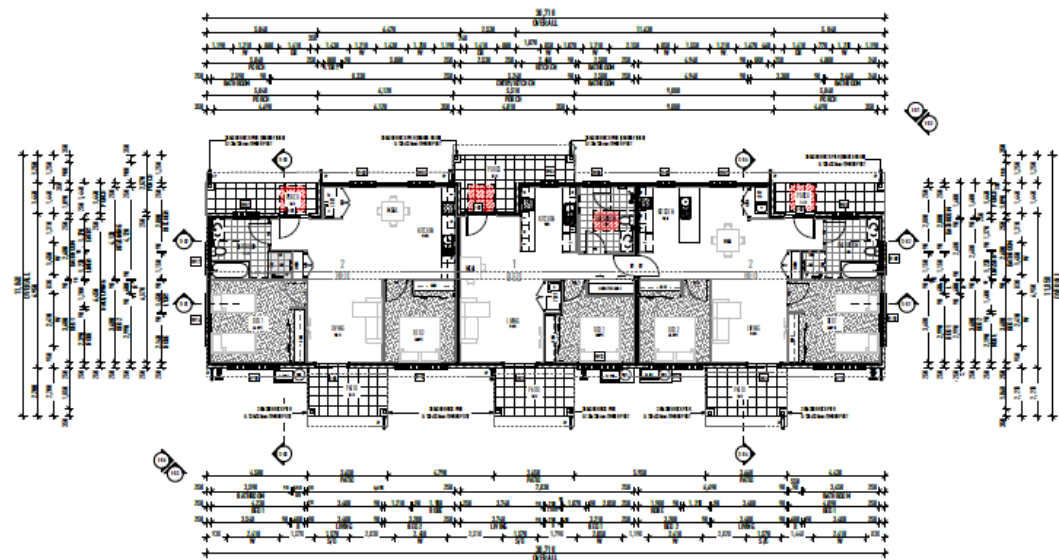
1. 行政事項	
◎ 行政事項	
◎ 財政事項	財政
◎ 社會福利事項	福利
◎ 衛生事項	衛生
◎ 教育事項	教育
◎ 文化、藝術、體育、康樂事項	文化、藝術、體育、康樂
◎ 宗教、慈善、社會服務事項	宗教、慈善、社會服務
◎ 勞工、僱員、勞工福利事項	勞工、僱員、勞工福利
◎ 房屋、地產、地產管理事項	房屋、地產、地產管理
◎ 交通、運輸、運輸管理事項	交通、運輸、運輸管理
◎ 環境衛生、環境保護、環境管理事項	環境衛生、環境保護、環境管理
◎ 治安、警務、警務管理事項	治安、警務、警務管理
◎ 消防、消防管理事項	消防、消防管理
◎ 電力、電力管理事項	電力、電力管理
◎ 水務、水務管理事項	水務、水務管理
◎ 氣象、氣象管理事項	氣象、氣象管理
◎ 漁業、漁業管理事項	漁業、漁業管理
◎ 農業、農業管理事項	農業、農業管理
◎ 林業、林業管理事項	林業、林業管理
◎ 礦業、礦業管理事項	礦業、礦業管理
◎ 能源、能源管理事項	能源、能源管理
◎ 資訊科技、資訊科技管理事項	資訊科技、資訊科技管理
◎ 其他事項	其他

[illegible]





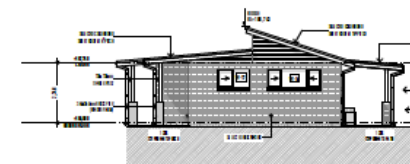
[illegible]



UNIT 5 AREA CALCULATION	
POWER	7204
UNIT 5	8200
	194.35 m ²

UNIT 6 AREA CALCULATION	
POWER	10176
UNIT 6	10279
	198.67 m ²

UNIT 7 AREA CALCULATION	
POWER	8883
POWER	7204
UNIT 7	10643
	199.71 m ²

[illegible][illegible]

Site Preparation & Demolitions, Environmental Clean Up, Concrete Crushing

- Asbestos Removal NSW/Vic
- Float Hire • Tippers, Excavators & Plant Hire • EPA Licenced

Directors: Jarrod & Thomas Walker

59 Catherine Crescent,
Lavington NSW 2641
P.O. Box 337,
Lavington NSW 2641

Phone: 02 6040 1010
Mobile: 0432 678 943
0432 678 933

Email: jarrod@alburydemolitions.com
tom@alburydemolitions.com

Methodology for Demolition and Removal of Domestic Dwelling located at 271 Bernhardt Street, East Albury NSW 2640

Allow for the following procedures to be undertaken for the safe deconstruction and demolition of the domestic dwelling located at 271 Bernhardt Street, East Albury including the removal of the footprint of the structure. The domestic dwelling is a single storey, residential structure.

Albury Demolitions Pty Ltd understands that this project will require a full-time supervisor, and at certain stages an asbestos removal supervisor, which we have made allowance for.

The Project Manager will liaise primarily with the client and will also be responsible for organizing Demolition and Asbestos Removal employees, preparing and scrutinizing Safe Work Methods (SWM's) and Asbestos Removal Control Plans (ARCP's), making sure that employees comply with the SWMS's documents and any noted environmental requirements, as well as the general day to day operations during the project.

Albury Demolitions Project Manager will participate in site meetings between the client & Albury Demolitions as required.

The Albury Demolitions Environmental Policy will be complied with as a minimum standard on this project and will include the development of a waste management plan for this site – if requested prior to the commencement of works by the client.

All works on this project will be carried out under SWM's and ARCP's. All workers on site will have a "white/blue card" and current site specific inductions (if required) as a minimum. Safe Work Methods will be required by all subcontractors with a toolbox talks to be completed for any variances from the SWMS's.

Quality will be ensured by our Project Manager.

Site Preparation & Demolitions, Environmental Clean Up, Concrete Crushing

- Asbestos Removal NSW/Vic
- Float Hire • Tippers, Excavators & Plant Hire • EPA Licenced

Phone: 02 6040 1010
Mobile: 0432 678 943
0432 678 933

Email: jarrod@alburydemolitions.com
tom@alburydemolitions.com

Site Specifics:

- ALL workers and Sub-subcontractors must have a current inductions. Employees that do not hold a current required induction will need to undertake the entire induction process prior to commencing on site.
- ALL Sub-subcontractors must provide a copy of their relevant insurances, including:
 - Public Liability Insurance
 - WorkSafe Insurance
- All deliveries and removals must be coordinated with the Albury Demolition's Project Manager.
- Risk assessments for all plant shall be up to date, kept on site and incorporated into Safe Work Method Statements.
- ALL Safe Work Method Statements shall be site and project specific and shall be reviewed each day prior to works commencing in order to identify additional hazards and nominate controls.
- NO SMOKING anywhere on site

Preliminaries:

- Allow for full time Site Supervisor / Project Manager
- Allow for Asbestos Removal Supervisor as required
- Allow for employees to undertake inductions as required
- Allow for ALL relevant insurances for the duration of the project
- Provision of Safe Work Method's and Asbestos Removal Control Plans (as requested) for review prior to works commencing
- Provision of plant risk assessments and log books
- Provision of relevant Material Safety Data Sheets for relevant materials – as requested
- Delivery and hire of site amenities as required
- Allow for temporary connection of services to site amenities – as required
- Delivery, erection, dismantle and return of temporary fencing and barricades – if required
- Allow for removal of waste as required, including sorting, recycling and hazardous waste

Site Preparation & Demolitions, Enironmental Clean Up, Concrete Crushing

- Asbestos Removal NSW/Vic
- Float Hire • Tippers, Excavators & Plant Hire • EPA Licenced

Directors: Jarrod & Thomas Walker

59 Catherine Crescent,
Lavington NSW 2641
P.O. Box 337,
Lavington NSW 2641

Phone: 02 6040 1010

Mobile: 0432 678 943
0432 678 933

Email: jarrod@alburydemolitions.com
tom@alburydemolitions.com

Asbestos Removal

- Give notification to WorkSafe Victoria for asbestos removal work.
- Set up exclusion zones and signage prior to undertaking asbestos removal works
- Set up temporary hoardings and barricades as required
- Disconnect existing services – to be arrange by Albury Demolitions - as required prior to asbestos removal.
- Take delivery of access equipment required to carry out works
- Ensure plant risk assessment and log books have been completed.
- Ensure works are carried out in accordance with:
 - Occupational Health and Safety Regulations 2017.
 - Compliance Code - Removing Asbestos in Workplaces 2018.
 - [NOHSC:2002(2005)]
 - Approved 'Site Specific' Asbestos Removal Control Plan
- Remove all hazardous materials as known about during pricing stages.
- Transportation and disposal of hazardous waste and prescribed industrial waste in EPA approved and permitted vehicles, by certified drivers, to an EPA licensed landfill
- Allowance to clean down all remaining structure prior to removal.

Site Preparation & Demolitions, Enironmental Clean Up, Concrete Crushing

- Asbestos Removal NSW/Vic
- Float Hire • Tippers, Excavators & Plant Hire • EPA Licenced

Phone: 02 6040 1010
Mobile: 0432 678 943
0432 678 933

Email: jarrod@alburydemolitions.com
tom@alburydemolitions.com

Demolition

- Allow to work in a single stage as the project requires
- Allow to protect adjoining environment and neighboring structures
- Supply Safe Work Method to client for review and comment
- Discuss appropriate access and egress locations and timings of vehicles in regards to the property.
- Disconnect existing services and make good at disconnection point, as required prior to demolition to be undertaken by trained subcontractors – to be arranged by client.
- Ensure signage for Demolition is erected during works
- Take delivery of equipment, plant and machinery required to carry out works
- Ensure plant risk assessment and log books have been completed.
- Allow to demolish structures as per the below included methodology steps.
- Ensure demolition is carried out in accordance with:
 - National - Occupational Health & Safety Act 2018.
 - National - Occupational Health & Safety Regulation 2018.
 - State - Occupational Health & Safety Regulation 2017.
 - AS 2601 2001 Section 2.2 The Demolition of a Structures.
 - Approved 'Site Specific' Asbestos Removal Control Plan
- Transportation and disposal of all non-hazardous debris to required depots, including the recycling of any suitable demolished materials
- Backfill with crushed material – provided on site - to finished heights to match existing levels as best as possible.

Defects Liability Period

- Albury Demolitions can see no need for allowance to manage DLP

Site Preparation & Demolitions, Enironmental Clean Up, Concrete Crushing

- Asbestos Removal NSW/Vic
- Float Hire • Tippers, Excavators & Plant Hire • EPA Licenced

Phone: 02 6040 1010
Mobile: 0432 678 943
0432 678 933

Email: jarrod@alburydemolitions.com
tom@alburydemolitions.com

Domestic Dwelling Removal:

- Ensure Safe Work Method Statements are on site prior to commencement of works.
- Undertake Toolbox Talk with all employees on site to discuss methodology, demolition processes and any findings from Pre-Start documentation.
- Obtain permit from licensed subcontractors to state that all services have been disconnected.
- Once obtained, begin works.
- Mobilize labourer's to site to commence internal strip out and salvage works.
- Notify WorkSafe Victoria a minimum of 5 days prior to asbestos works commencing.
- Ensure all neighbours within the required zone are notified a minimum of 24 hours prior to the commencement of asbestos removal works.
- Mobilize equipment and asbestos removalists to site to remove asbestos materials from the eaves and wet areas of the dwelling.
- Allow for these works to be under taken under the Asbestos Removal Control Plan conditions.
- Do not proceed with further demolition works until a clearance certificate has been undertaken by a licensed asbestos assessor
- Ensure that all asbestos materials are transported, using the correct EPA Waste Tracking system to a licensed waste management facility.
- Mobilize equipment to site – 13-tonne or 22-tonne excavator, platform ladders, hand tools
- Continue with salvage and pre-mechanical demolition works including, removing plaster from walls and ceilings, removing flooring materials, joinery, etc.
- Utilize ladders to remove roofing materials – if salvageable load directly onto waiting truck to be transported to Lavington for reuse / recycling.
- Use the Excavator to begin mechanical demolition works.
- Progress through pulling down the dwelling and loading materials into waiting trucks for transport to a licensed waste management facility.
- Continue with the removal of any outbuildings, gardens beds and associated garden paths on the lot.
- Allow to remove the driveway and marked trees.
- Track over site to level to the best of our ability.
- Ensure workspace is clean and tidy and that no demolition debris remains.
- Undertake site inspection with client to ensure works are completed as planned.
- De-mobilize excavator and any remaining equipment from site.

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

Project Name:	Bernhardt Street	Principal Contractor:	Housing Plus	Job No:	
Project Address:	271 Bernhardt Street, East Albury NSW 2640			Date:	20.06.2023

1. HIGH RISK WORK ACTIVITY

Work activity:	Demolition Works to the above mentioned residential dwelling and outbuildings.					
High risk construction work involved in the work activity based on a site-specific assessment (use number 1-18 in section 4 to identify HRCW category)	1	☐ Risk of falls from greater than 2 metres	10	☐ Work on or near chemical, fuel or refrigerant lines		
	2	☐ Work on a telecommunications tower	11	☐ Work on or near energised electrical installations or services		
	3	☐ Demolition of a load-bearing structure	12	☐ Work in an area with contaminated or flammable atmosphere		
	4	☐ Likely to involve disturbing asbestos	13	☐ Work with tilt up or pre-cast concrete		
	5	☐ Temporary load-bearing support structures	14	☐ Work on, in or adjacent to road, rail shipping or other major traffic corridor		
	6	☐ Work in confined spaces	15	☒ Work in an area with movement of powered mobile plant		
	7	☐ Work in or near shaft/trench with an excavated depth greater than 1.5m or a in tunnel	16	☐ Work in or areas with artificial extremes of temperature		
	8	☐ Work involving use of explosives	17	☐ Work in or near a drowning risk		
	9	☐ Work on or near pressurised gas pipes or mains	18	☐ Diving work		
Supervisor responsible for ensuring compliance with SWMS:				Date SWMS provided to PC:		
Person responsible for reviewing SWMS:		Jarrod Walker, Thomas Walker and / or Gavin Hoare		Last SWMS review date:	20.06.2023	
SWMS will be monitored by:		☒ Supervision ☒ Regular inspection ☒ Hazard assessments		Supervisor's signature:		

2. TRAINING AND COMPETENCY

Major subcontractors must provide a skills & competency record for each employee engaged on the project. (refer to section 5)
Minor subcontractors shall provide skills & competency details below or submit a register

Employee Name	Tasks on this project	High Risk Work Licence, Competencies & VOC (Tickets, qualifications, trade, years' experience)	HRW Licence No	Date of Issue

3. ACTIVITY GENERAL REQUIREMENTS

PPE Identify PPE to be used for this activity:	Mandatory:	☒ Hard hat 	☒ Safety Boots 	☒ Hi-vis vest 	☒ Glove & Clip 	☐					
	Task specific:	☒ Hearing Protection 	☐ Face Shield 	☐ Respirator 	☐ Safety Harness 	☐					
WORK PERMITS Identify work permits required for this activity:	☒ Hot work	☐ Confined space	☒ Isolation	☒ Excavation	☐ Coring	☐					
	☒ Demolition	☒ Roof access	☒ Plant Setup	☐ Road closure	☐	☐					
ENGINEERING INSPECTIONS Identify mandatory inspections required for this activity:	☐ Formwork	☐ Structure Loading	☐ Concrete pre-pour	☐ Precast/Tilt-up	☐	☐					
SCAFFOLDING Identify requirements for this activity	☐ Scaff tag	☐ Certification	☐ Alteration only by competent person	☐	☐	☐					
SAFETY EQUIPMENT Identify the equipment required	☒ Signage	☒ Barricading	☒ Fire Extinguisher	☐ Fan	☐ Stop/slow bat	☐ Pump					
	☐ Task lighting	☐ Lanyard	☐ Safety Harness	☐ Static Line	☐	☐					
PLANT & EQUIPMENT List major plant & equipment to be used for this activity			Checked by			HAZARDOUS MATERIALS List hazardous materials to be used for this activity			Checked by		
			A	B	C				D	E	F
			☐	☐	☐				☐	☐	☐
			☐	☐	☐				☐	☐	☐
			☐	☐	☐				☐	☐	☐
			☐	☐	☐				☐	☐	☐
			☐	☐	☐				☐	☐	☐
			☐	☐	☐				☐	☐	☐
A: Safety verification complete			B: Lifting gear certified			C: Operator competence records OK			D: Product labelled		
									E: SDS supplied & less than 5 y/o		
									F: Controls as per SDS		

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
1. Provide training instruction & supervision for high risk work tasks to be undertaken	Lack of training & instruction for high risk tasks		Workers not competent for task	2	- All Workers to undertake required induction programs - Persons undertaking these activities must be competent to undertake in all aspects of the job and trained in all safe practices - Consult with workers involved in the task who are likely to be affect by the controls implemented – (Pre-Start and Toolbox meetings)	1	Project Manager Site Supervisor
2. Arrival on Site – Structural stability and engineering details	Structural collapse / building integrity	Plant	Risk of injury to workers / public	2	- Albury Demolitions will ensure that the Principal Contractor is using the services of a qualified Structural Engineer for arranging an Engineering review, a dilapidation survey and report of adjoining properties. - Make sure that this SWMS is reviewed and monitored by a responsible and competent person.	1	Project Manager Site Supervisor

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
3. Public Protection	Falling Objects Struck by moving Plant	Plant	Risk of injury to workers / public	2	Albury Demolitions will provide the following: - Signs installed at various locations on the barricades denoting: "Demolition in Progress – Keep Out" - Ensure security fences are always erect and in place preventing the public from entry - Access gates (where required) will be interlocked (after hours and on weekends) with Albury Demolitions own access key and the client Construction Key. Plant Movement: - Albury Demolitions will establish a work exclusion zone - All vehicles will not exceed specified speed limits. - All vehicles will ensure the flashing light / beeper is on. - High visibility PPE is worn at all times. - Albury Demolitions will check the work area for other plant before commencing work / movement. - Materials are to be secured at the end of each day to prevent movement with no one on site i.e., to prevent sheets of iron being blown around, etc. - Any open excavation is to be secured or covered in at the end of each day to prevent injury to personnel and livestock that will remain within the working area. Protection – Neighbouring Structure - Ensure that security fencing is in place prior to commencing the removal of the garage / carport structure. - Ensure that a spotter is in place whilst this wall / structure is removed to ensure that no damage occurs to neighbouring building. - As soon as possible, realign temporary security fencing with the boundary fencing to limit the time impeding on the neighbours property.	1	Project Manager Site Supervisor All Workers

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
4. Services	Electrocution Fire Exposure to Gases	Contaminated / Atmosphere	Risk to workers if live services are encountered	3	Before any Demolition work commences, Albury Demolitions will make sure that the Principal Contractor has located and terminated all services or has arranged for identification and disconnection of the services. Works will not be allowed to commence until it is confirmed that disconnection has been carried out. Wherever possible, written confirmation should be obtained. Albury Demolitions will ensure appropriate practices are in place for working under and near high voltage transformers as required for portions of the project.	2	Project Manager Site Supervisor
5. Managing and Co-Ordination	Procedure non-compliance resulting in injury / litigation		Injury to Works Failure to meet regulations / requirements	2	A competent person is to be present on-site during demolitions work to oversee and co-ordinate work activities.	1	Project Manager Site Supervisor

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
6. Personal Protective Equipment (PPE)	General Safety Issues		Injury to workers caused by failing to wear PPE correctly.	2	Albury Demolitions will ensure that all workers accessing the site are wearing safety footwear, high visibility clothing and head wear. This is mandatory. - Hearing protection will be used during works creating excessive noise i.e., Demo Saw and / or Jack Hammer - Hand Protection during handling / cutting materials. When not in use hand protection will be stored on workers with the correct clip. - Eye Protection during cutting, chipping, jack hammer and demolition saw works. - Safety harness when working at heights where work platforms and / or edge protection is not practically possible. - Respiratory devices for dust work environment including but not limited to ACM sheet and SMF removal (if applicable) - Necessary protective clothing.	1	Project Manager Site Supervisor All Workers
7. Manual Handling	Strains Musculoskeletal Injuries		Injury to Workers by undertaking activities in an incorrect manner	2	Albury Demolitions will make sure all work activities involving manual handling utilises assistance such as hand-held concrete crushing tools, wheelbarrows, etc. Anything that workers feel is too heavy, difficulty or awkward must be assessed and alternative methods of moving implemented. This may include team lifting or mechanical assistance. All workers undertake frequent manual handling training and refresher instruction.	1	Site Supervisor All Workers

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
8. Housekeeping	Slips, trips and falls	Contaminated / atmosphere	Injury to workers due to an unmaintained worksite	2	All demolished materials will be removed by workers from site daily and in a control manner so as not to limit access to work areas. At no time will demolition materials, or equipment impede on egress ways, stairways or emergency exits. Environmental protections must be in place, especially when undertaking demolition works near waterways. Silt fencing and erosion control must be used to ensure no run off washes into waterways.	1	Site Supervisor All Workers
9. Noise – Neighbouring Properties / Site Workers	Potential hearing problems Noise Pollution	Contaminated / atmosphere	Damage to workers hearing Complaints due to noise pollution	2	Work hours will be restricted to comply with Regulatory Authority such as Council, Government, or Site Instructions, etc. When using excessive noise generating activities such as excavators, rock breakers, jack hammers or the like, all workers will be provided with the appropriate PPE and the supervisor will enforce the correct wearing of this PPE.	1	Site Supervisor All Workers
10. Strip Out of Fixtures and Fittings	Working at heights Fall hazard for people and objects Manual Handling		Injury to Workers and the Public Damage to other building(s) / equipment	2	The use of hand removal techniques for salvaging fixtures and fittings – using hand held tools and equipment. During this initial work phase, no load bearing components of the structure will be demolished. Restrict public access at all times where required.	1	Site Supervisor Float Operator

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
 ABN: 88 195 989 073
 PHONE: 02 6040 1010
 EMAIL: demos@alburydemolitions.com
 ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
11. Working at Heights	Falling persons and objects		Risk of injury to workers	3	Ensure that No Go zones are set up around machinery and demolition worksite In situations where a worker could fall a distance of 2metres or more, make sure that workers are using one or more of the following precautions: - An approved EWP, Scissor lift, mobile scaffold, etc. - A fall prevention device for travel restraint such as a safety harness, length restriction lanyard with anchorage to the structure. - Correct use of platform ladders.	2	Site Supervisor All Workers

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
12. Roof system removal (Sheeting, trusses, timbers) See also: Working at Heights	Work at heights Falling people and objects	Plant Demolition of Load Bearing Structure	Risk of injury to workers	3	Wherever possible, mechanical demolition of building structures will be the first option to be utilised. Should this not be possible, the following processes will be implemented, after a Risk Assessment has been undertaken on the buildings and a more accurate process is determined for each individual structure - Prevent fall of workers by using Travel Restrain Systems to structural beams. - Follow strictly all procedures for Working at Heights. - Roof sheeting to be removed by hand and then passed down through the roof structure and hand stacked and banded for later removal from site. - Roof timbers are to be removed by hand and passed to floor level for immediate loading onto trucks for removal from site. - Ceiling materials are to be knocked to floor level from above, working off the ceiling joists and planks. The ceiling materials are to be cleaned up by hand and loaded into tippers for removal off site. Use dust control measures (water mist spray) to reduce dust. Suitable dust masks or half face respirators are to be worn by person undertaking this task. Albury Demolitions Rescue and Retrieval Plan must be completed and shared with all employees on site should Working at Heights activities be undertaken.	2	Project Manager Site Supervisor All Workers

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
13. Dust	Inhalation of Dust	Contaminated / atmosphere	Long – term Injury / Sickness to workers	2	Establish No Go Zones around machinery and demolition worksite area Albury Demolitions will implement dust control measures, such as water & mist spray when dusty conditions occur. Wearing of dust mask or half face respirator by persons undertaking this task.	1	Site Supervisor All Workers
14. Plant and Equipment	Operating of Plant Loading of Trucks Removal of Demolition Debris off site.	Plant	Injury to Workers Injury to Public	3	Albury Demolitions will make sure all plant and equipment used are maintained in proper working conditions in accordance with the specifications of the manufacturer and relevant Australian standards. Maintain service records for all major items of plant. Use excavators for mechanical demolition techniques. Load demolition debris into tip trucks for removal off site. All demolition materials will be removed from site and trucks will have their loads covered before entering onto public roads. All demolition materials are to be transported to a licenced disposal facility or recyclers. Waste disposal records are to be maintained. Only workers with the correctly documented training will used to operate machinery / drive trucks for these techniques.	2	Site Supervisor All Workers Machine Operator Truck Drivers

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
15. Unexpected hazardous finds – including but not limited to Asbestos Containing Materials (ACM)	Exposure to Hazardous Materials	Contaminated / Atmosphere	Long-term illness / Sickness to workers / public	3	Should hazardous materials be located – works will be stopped immediately Works will be isolated, and signage erected notify all on site of potential for contamination. All workers within the vicinity will be verbally notified of the find and given any further direction to avoid contamination whilst others are notified. Site Representative to be notified as soon as area is secured and safe. Representative will liaise with client for direction in order to proceed. Additional Risk Assessment documents or alterations to SWMS may be needed prior to commencing removal works.	2	Site Supervisor All Workers Machine Operator

• EMERGENCY RESPONSE PROCEDURES:

Police Ambulance Fire Brigade

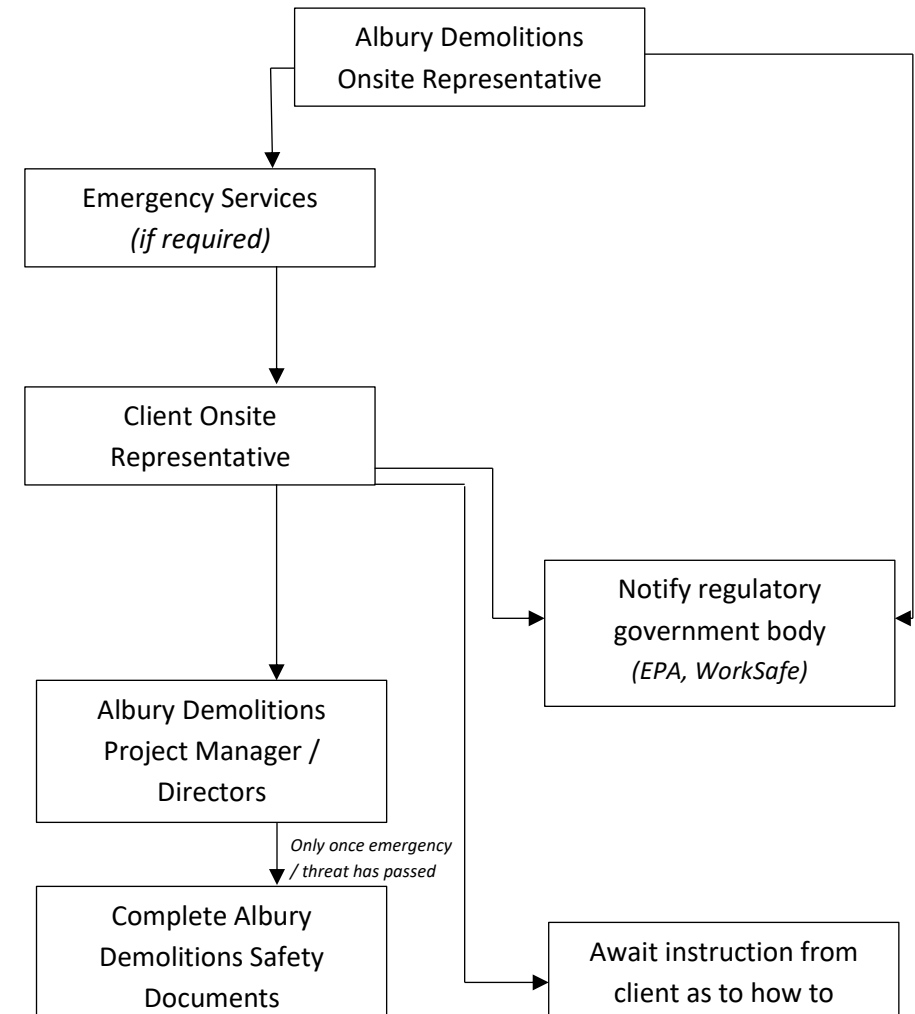
000

Police – Non Emergency	Ph: 02 6049 2600	
Albury Base Hospital	Ph: 02 6051 7111	
Poisons Information Centre	Ph: 13 11 26	
SES	Ph: 13 25 00	Floods + Storms
Roads & Maritime	Ph: 13 11 70	Traffic Incidents
Albury City Council	Ph: 02 6022 9300	Business & After Hours

Albury Demolitions Contact Numbers

Site Office	Ph: 02 6040 1010	
Jarrod Walker	Ph: 0432678 943	Tom Walker Ph: 0432 678 933

Neighbouring Businesses (Connected Boundaries) *if applicable*



Fire – Building or Machinery	• Call 000 for emergency services and follow advice. • Shut down all plant and machinery immediately (if safe to do so) • Activate the fire alarm. • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite Representative, only when safe to do so. • If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. • Extinguish the fire (only if safe to do so). • Remove additional fuel sources including plant and machinery from the path of the fire (only if safe to do so) • If appropriate, follow the procedure for on-site evacuation. • Evacuate to the nominate location, if exiting from an internal location and it is safe to do so, close all doors and windows as you pass them. • Check that all Albury Demolitions and sub-contractors who may have been on site are accounted for. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions
Bushfire	• Call 000 for emergency services and follow advice. • Shut down all plant and machinery immediately (if safe to do so) • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite Representative, only when safe to do so. • Determine appropriate response strategy in consultation with emergency services, if possible. • If evacuation is required and time permits before you leave (where applicable) • Make sure you close all doors and windows • Turn off power and gas. • Take portable and additional fuel sources with you – if possible in a timely fashion and safe to do so. • Check that all Albury Demolitions and sub-contractors who may have been on site are accounted for. • Listen to TV or local radio on battery-powered sets or mobile phone devices for bushfire/weather warnings and advice. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions

Major external emissions/spill (includes gas leaks)	• Call 000 for emergency services and follow advice – if deemed necessary • Shut down all plant and machinery immediately (if safe to do so) • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite Representative, only when safe to do so. • If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. • If required, notify EPA of the incident and follow their instructions for reporting. • Turn off gas supply – if able to do so safely • If possible notify the provider • If appropriate, follow the procedure for on-site evacuation, noting that this may need to be an off-site evacuation • If evacuating, confirm that all Albury Demolitions staff and sub-contractors are accounted for. • Await 'all clear' advice from emergency services or further advice from a onsite Representative before resuming normal activities. • Consult with onsite Representative to determine if a Risk Assessment needs to be undertaken or further control measures need to be put in place under the Safe Work Method Statements to reduce the risk of the same incident occurring for the duration of the project. • A Toolbox Talk should be held as soon as possible to discuss the emergency, how it occurred, how to prevent a repeat occurrence and any additional information and control measures determined by the Albury Demolitions representative and the onsite Representative. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions
Bomb or substance threat	• Should the threat be thought to have merit contact 000 for emergency services and seek and follow advice. • Ensure that all persons are away from immediate danger • Report the emergency immediately to the onsite Representative, only when safe to do so. • If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. • If required, notify EPA of the incident and follow their instructions for reporting. • Do not touch any suspicious objects found. • If a suspicious object is found or if the threat specifically identified a given area, then evacuation must be considered: • If appropriate under the circumstances, clear the area immediately within the vicinity of the object of all employees, contractors and associated on site personnel. • Ensure that during the evacuation no one is directed past the object or location in question

	• Ensure staff that have been evacuated are moved to a safe, designated location and all Albury Demolitions employees and sub-contractors are accounted for at the evacuation point. • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received by telephone: • Do not hang up. • If possible, fill out the bomb threat checklist while you are on the phone to the caller – <i>document provided with Albury Demolitions onsite documents</i> • Keep the person talking for as long as possible and obtain as much information as possible. • Have a co-worker call 000 for emergency services on a separate phone without alerting the caller. • Report the threat immediately to the onsite Representative, only when safe to do so and only if possible without alerting the caller to your actions. • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received by mail: • Place the letter in a clear bag or sleeve. • Avoid any further handling of the letter or envelope or object. • Call 000 for emergency services and seek and follow advice. • Report the threat immediately to the onsite Representative, only when safe to do so • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received electronically: • Do not delete the message • Call 000 for emergency services and seek and follow advice • Report the threat immediately to the onsite Representative, only when safe to do so • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions
Internal emission or spill	• Call 000 for emergency services and seek and follow advice. • Ensure that all persons are away from immediate danger. • Report the threat immediately to the onsite Representative, only when safe to do so • If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting.

	• If required, notify EPA of the incident and follow their instructions for reporting. • Move employees, sub-contractors and associated onsite personnel away from the spill to a safe area and isolate the affected area with barricades and signage – only as safe to do so. • Seek advice in regards to clean up requirements, and if safe to do so, the spill can be cleaned up by staff. Personal Protective Equipment should be worn as per the requirements of the Material Safety Data Sheet and Safety Work Procedure. • Confirm if there is a need to notify WorkSafe Victoria / SafeWork NSW or an environmental body depending on the nature and severity of the spill • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions
Severe Weather event	Sudden event during operational hours: • If required, call 000 if emergency services are needed and follow advice. • Consider contacting the Wodonga SES for assistance if emergency services can be spared. • Report the threat immediately to the onsite Representative, only when safe to do so • If possible, prior to the approaching storm hitting the worksite, store or secure loose items external to the building, such as demolition debris (if possible), cover loaded trucks with tarps / covers to avoid loose materials flying out, shut down and lock up and machinery or plant on site. • Disconnect electrical equipment – cover and/or move this equipment away from windows. Secure in trucks or vehicles that are on site if no secure internal location exists. • Ensure that building structures – if any remain – are as secure as possible. If it is deemed possible that severe weather may cause structures to fall ensure that no people, equipment, plant or machinery are stored nearby to avoid additional damage. • If waterproofing / weatherproofing materials are on site, secure to the best of your ability and determine if additional supports or tiedowns are required to attempt to keep it intact and in place throughout the coming weather. • Instigate an evacuation of site if required, alternatively ensure that all employees, subcontractors and associated onsite personnel have somewhere secure to avoid the impacts of the approaching weather. Remembering that depending on the condition and safety of the demolition site, the safest location may be within the cab of a truck or vehicle parked on site. During the severe storm: • Remain in the building or vehicle and keep doors and windows closed at all times. • Restrict the use of telephone landlines to emergency calls only, particularly during a thunderstorm. • Report any safety matter immediately to the onsite Representative, only when safe to do so – this may be once the storm has passed.

	- Listen to TV or local radio on battery-powered sets or mobile phone devices for weather warnings and advice. Forecast imminent event (e.g. cyclone, floods) - If weather warnings and advice from the State Emergency Warning Applications indicate that the location will be impacted by a severe weather event, the onsite representative, and / or Albury Demolitions Representative will follow the decision-making process to determine if the worksite needs to be temporarily shut down. - Should temporary closure be the safest option for all involved, all employees, sub-contractors and associated onsite personnel will be informed immediately. - After the weather event, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place – should they differ from those already in place – in order to proceed with works safely. - A toolbox talk will be held at the earliest moment to discuss the results of the risk assessment and additional control measures in place prior to works continuing - Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment. - If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. - If required, notify EPA of the incident and follow their instructions for reporting.
Earthquake	- Should they be required, call 000 for emergency services and seek and follow advice. - Consider contacting the Wodonga SES for assistance if emergency services can be spared. - Ensure that all persons are out of immediate danger - Report the threat immediately to the onsite Representative, only when safe to do so - Evacuate to notified assembly area/s – if determined to be necessary. - If evacuation takes place ensure that all employees and sub-contractors are accounted for. - Await ‘all clear’ advice from emergency services or further advice before resuming normal activities. - After the event, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place – should they differ from those already in place – in order to proceed with works safely. - Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment.

Structural Collapse	- Account for all onsite personnel, should anyone be missing, assume they have been caught under the structural collapse and will require medical attention. - Should they be required, call 000 for emergency services and seek and follow advice. - Shut down plant and machinery immediately. - Ensure that all persons are out of immediate danger - Report the emergency immediately to the onsite Representative, only when safe to do so - If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. - If safe to do so, secure the site to ensure no other harm comes to employees or onsite personnel. - Evacuate to notified assembly area/s – if determined to be necessary. - Await 'all clear' advice from emergency services and / or onsite Representative or further advice before resuming normal activities. - After the emergency, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place to prevent a repeat incident – should they differ from those already in place – in order to proceed with works safely. - Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment.
Injury from Plant and Equipment	- Shut down plant and equipment immediately. - Determine severity of injury sustained. - If required, Call 000 for emergency services and seek and follow advice. - Ensure that all persons are out of immediate danger - Report the emergency immediately to the onsite Representative, only when safe to do so - If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. - If required, administer First Aid – Complete as possible the Albury Demolitions Injury / Illness Form and First Aid Report - <i>document provided with Albury Demolitions onsite documents</i> - If required, allow for transportation to nearest medical facility. - After the emergency, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine if a change to procedures is required – should they differ from those already in place – in order to proceed with works safely and avoid a repeat incident.

	Once it is safe to do so, notify a Director of Albury Demolitions of the emergency and finalise any paperwork.
Unexpected Hazardous Materials – including but not limited to Asbestos Containing Materials.	- Stop work immediately - Shut down plant and equipment - Ensure that all persons are out of immediate danger - Report the findings immediately to the onsite Representative, only when safe to do so - If required, notify WorkSafe Victoria / SafeWork NSW of the incident and follow their instructions for reporting. - If required, notify EPA of the incident and follow their instructions. - If safe to do so, secure the area with barricades and signage to ensure no further contamination can take place. - Verbally inform all Albury Demolitions employees, subcontractors and associated onsite personnel of the contaminated and the protection measure currently in place. - If contamination is believed to have taken place, begin decontamination of people, plant and equipment. - Ensure correct PPE is available on site and issued to all those that require it. - Notify and Albury Demolitions Director of the find and what proceedings have taken place since the findings. - Await further instruction from onsite Representative regarding procedures for moving forward. - If required, undertake a Risk Assessment, and complete updated ARCP documents and / or SWMS to cover changes to removal process for the unexpected finds. - Ensure that all safety documentation is in place and PPE is provided to personnel prior to commencing any removal works involving hazardous materials.

5. PERSONAL PROTECTIVE EQUIPMENT

Foot Protection	Hearing Protection	Protective Clothing	Head Protection	Eye Protection	Hand Protection	Sun Protection	Safety Harness
							

PPE Notes:

The above PPE Requirements are the minimum requirements for all personnel involved in each relevant task to be undertaken. Be sure to conduct a Risk Assessment for other factors that may influence the work environment such as Temperatures – Hot/Cold, Working in the Sun, Night Work etc. Be sure that all PPE meets Australian Standard Requirements.

References include, but are not limited to:

WH&S Act 1995, WH&S Regulation 2017; Model WHS Act 2011
Workers Compensation and Rehabilitation and other Legislation Amendment Regulation (No.1) 2005.Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace (2018); Code of Practice: First Aid in the Workplace (2018); Code of Practice: Hazardous Manual Tasks (2016); Code of Practice: How to Manage and Control Asbestos in the Workplace (2016); Code of Practice: How to Manage Work Health and Safety Risks (2018); Code of Practice: Labelling of Workplace Hazardous Chemicals (2015); Code of Practice: Managing Risks of Plant in the Workplace (2018); Code of Practice: Managing the Risk of Falls at Workplace (2015).

6. RISK ASSESSMENT

Step 1: Determine Likelihood – What is the possibility that the effect will occur?			Step 2: Determine Consequences – Expected Consequences				
	Likelihood	Definition	Level of Consequence	Examples			
Almost Certain	Expected to happen in most circumstances	A common and very possible result	Insignificant / Acceptable	No consequence – so minor that the consequence is manageable			
Likely	Will probably occur in most circumstances	Known to have occurred and has happened before	Minor	First aid treatment only; manageable and contained			
Possible	Might occur at some time	Could occur and is likely it has happened before	Moderate	Medical treatment; manageable with 3 rd party assistance			
Unlikely	Could occur at some time	Not likely to occur	Major	Serious injuries; Down time and loss of productivity			
Rare	May occur only in exceptional circumstances	Very unlikely	Catastrophic	Death; Very serious consequences			
Step 3: Determine the Risk Score			Step 4: Record Risk Score – Risk scores are only estimated and should not be solely relied upon				
LIKELIHOOD	CONSEQUENCE						
	Insignificant	Minor	Moderate	Major	Catastrophic	Score	Action
Almost Certain	3 – High	3 – High	4 – Acute	4 - Acute	4 – Acute	4 A: Acute	URGENT – Act on and lower the risks immediately. Demands immediate attention.
Likely	2 – Medium	3 – High	3- High	4 – Acute	4 – Acute	3 H: High	Decisions required urgently by Management
Possible	1 – Low	2 – Medium	3 – High	4 – Acute	4 - Acute	2 M: Moderate	Follow instructions given by Management
Unlikely	1 – Low	1 – Low	2 – Medium	3 – High	4 – Acute	1 L:Low	Manageable. Review regularly, and if any conditions of work change.
Rare	1 – Low	1 – Low	2 – Medium	3 – High	3 - High		



High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

7. WORKER CONSULTATION & SIGN-OFF

This SWMS has been developed following a review of the high risk tasks through consultation with our employees and has been read and understood by the undersigned employees undertaking the task. Instruction and training has been provided in the work activities and controls described in this SWMS

[illegible]

8. SWMS REVISION: WORKER CONSULTATION & SIGN-OFF

The control measures for activities identified and marked with the revision number below has been revised due to the following reasons:

☐ control measure is not effective in controlling the risk ☐ a change in the workplace that identified different safety risks ☐ a new hazard has been identified

☐ control measure is not effective in controlling the risk ☐ a change in the workplace that identified different safety risks ☐ a new hazard has been identified



High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

☐ the results of consultation require amended controls ☐ a health and safety representative has requested a review

This SWMS has been amended following a review of the high risk tasks through consultation with our employees and has been read and understood by the undersigned employees undertaking the task. Instruction and training has been provided in the work activities and controls described in this SWMS

[illegible]

Review No:	Revision A	Revision B	Revision C	Revision D
Date:				

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

Project Name:	Bernhardt Street	Principal Contractor:	Housing Plus	Job No:	
Project Address:	271 Bernhardt Street, East Albury NSW			Date:	20.06.2023

1. HIGH RISK WORK ACTIVITY

Work activity:	Asbestos Removal to the above mentioned address					
High risk construction work involved in the work activity based on a site-specific assessment (use number 1-18 in section 4 to identify HRCW category)	1	☐ Risk of falls from greater than 2 metres	10	☐ Work on or near chemical, fuel or refrigerant lines		
	2	☐ Work on a telecommunications tower	11	☐ Work on or near energised electrical installations or services		
	3	☐ Demolition of a load-bearing structure	12	☐ Work in an area with contaminated or flammable atmosphere		
	4	☒ Likely to involve disturbing asbestos	13	☐ Work with tilt up or pre-cast concrete		
	5	☐ Temporary load-bearing support structures	14	☐ Work on, in or adjacent to road, rail shipping or other major traffic corridor		
	6	☐ Work in confined spaces	15	☐ Work in an area with movement of powered mobile plant		
	7	☐ Work in or near shaft/trench with an excavated depth greater than 1.5m or a in tunnel	16	☐ Work in or areas with artificial extremes of temperature		
	8	☐ Work involving use of explosives	17	☐ Work in or near a drowning risk		
	9	☐ Work on or near pressurised gas pipes or mains	18	☐ Diving work		
Supervisor responsible for ensuring compliance with SWMS:				Date SWMS provided to PC:		
Person responsible for reviewing SWMS:		Jarrod Walker / Thomas Walker and / or Gavin Hoare		Last SWMS review date:	20.06.2023	
SWMS will be monitored by:		☒ Supervision ☒ Regular inspection ☒ Hazard assessments		Supervisor's signature:		

2. TRAINING AND COMPETENCY

Major subcontractors must provide a skills & competency record for each employee engaged on the project. (refer to section 5)
Minor subcontractors shall provide skills & competency details below or submit a register

Employee Name	Tasks on this project	High Risk Work Licence, Competencies & VOC (Tickets, qualifications, trade, years' experience)	HRW Licence No	Date of Issue
Gavin Hoare	Asbestos Supervisor	Asbestos trained – 10+ years' experience		
Jarrod Walker / Thomas Walker	Asbestos Supervisor	Asbestos trained – 5+ years' experience		
Raymond Kennedy	Asbestos Removalist	Asbestos trained – 15+ years' experience		
Jason Scammell, Alan Butterworth, Josh Stevens, Scott O'Brien	Asbestos Removalist	Asbestos trained		

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

3. ACTIVITY GENERAL REQUIREMENTS

PPE Identify PPE to be used for this activity:	Mandatory:	☒ Hard hat 	☒ Safety Boots 	☐ Hi-vis vest 	☒ Gloves 	☒ P2 Mask 
	Task specific:	☐ Hearing Protection 	☐ Face Shield 	☒ Respirator 	☐ Safety Harness 	☒ Coveralls with hood 
WORK PERMITS Identify work permits required for this activity:	☐ Hot work	☐ Confined space	☐ Isolation	☐ Excavation	☐ Coring	☐
	☐ Demolition	☐ Roof access	☐ Plant Setup	☐ Road closure	☒ Disruption of Asbestos Containing Materials	☐
ENGINEERING INSPECTIONS Identify mandatory inspections required for this activity:	☐ Formwork	☐ Structure Loading	☐ Concrete pre-pour	☐ Precast/Tilt-up	☐	☐
SCAFFOLDING Identify requirements for this activity	☐ Scaff tag	☐ Certification	☐ Alteration only by competent person		☐	☐
SAFETY EQUIPMENT Identify the equipment required	☒ Signage	☒ Barricading	☒ Fire Extinguisher	☐ Fan	☐ Stop/slow bat	☐ Pump
	☐ Task lighting	☐ Lanyard	☐ Safety Harness	☐ Static Line	☒ Asbestos approved PPE	☐

PLANT & EQUIPMENT List major plant & equipment to be used for this activity	Checked by			HAZARDOUS MATERIALS List hazardous materials to be used for this activity	Checked by		
	A	B	C		D	E	F
Class H Vacuum Cleaner	☐	☐	☐	PVA Glue	☐	☐	☐
	☐	☐	☐	Little Ones Fragrance Free Wet Wipes	☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐
	☐	☐	☐		☐	☐	☐

A: Safety verification complete
B: Lifting gear certified
C: Operator competence records OK
D: Product labelled
E: SDS supplied & less than 5 y/o
F: Controls as per SDS

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
1. Provide training instruction & supervision for high risk work tasks to be undertaken	Lack of training & instruction for high risk tasks		Workers not competent for task	2	- Provide training, instruction & supervision specific to the work methods used in removal of asbestos – ensure workers have undertaken accredited training. - Consult with workers involved in the task who are likely to be affected by the controls implemented. (Pre-start & Toolbox meetings). - A competent person must be present on site during asbestos removal works to oversee and co-ordinate work activities.	1	Project Manager Site Supervisor Asbestos Supervisor
2. Identification of asbestos containing material, gathering of samples for analysis (if required)	Personnel unaware of asbestos materials present within site.	Contaminated / atmosphere	Exposure of persons / equipment to asbestos dust or debris. Asbestos contamination of personnel and / or work area.	2	- Use P2 rated mask or half face respirator that meets regulation requirements and contains a correctly fitted and working filter. - Use of a spray bottle of application to apply PVA solution to prevent fibres from being released into the work area. - Use of water to keep larger area damp during works that may see ACM disturbed. - Wet-wipe, clean tools and exposed skin upon completion of any works that may have disturbed asbestos materials.	1	Project Manager Site Supervisor Asbestos Supervisor

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
3. Preparation of Work Areas	Injury to personnel. Exposure to asbestos containing materials.	Contaminated / atmosphere	Cuts, abrasions, slips, trips or falls. Exposure to asbestos fibres and / or debris.	2	- Wear gloves for protection at all times whilst on the work site. - Use correct methods of entering and exiting the trench containing the asbestos piping to avoid slips, trips and falls. - Ensure to spray any unsealed / exposed asbestos materials with the correctly mixed PVA solution. - Ensure that a competent person / supervisor has inspected and assessed the work area for specific conditions and recorded them during a Toolbox Talk meeting with all workers. - Ensure that the work area / trench is secured with barricade tape and the appropriate warning signs and intervals along with work area. - Ensure that a waste load out area is determined. Once established, do not permit access to any personnel not wearing the correct PPE.	1	Project Manager Site Supervisor Asbestos Supervisor Asbestos Removalists
4. Air Monitoring	Exposure to asbestos containing materials. Exposure spreading to adjoining properties.	Contaminated / atmosphere	Exposure to asbestos dust and / or debris		- Air Monitoring systems must be set up, in place and working prior to the commencement of any removal works. - Air monitoring is to be arranged and undertaken by a third party licensed asbestos assessor with no connection to the removalist undertaking the works. - Air monitoring is set up and analysed by		N/A

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
5. PPE & Respiratory Equipment	Exposure to asbestos dust, fibres or debris. Injury to personnel Ill fitting or incorrect PPE for the required work task	Contaminated / atmosphere	Serious Injury Exposure to asbestos dust, fibres and or debris	2	- Always ensure that the equipment being used is correctly rated for the required task. - Inspect all equipment including respirators prior to commencing any works to check for proper damage and correct operation controls. - Always use correctly rated disposable coveralls for all removal works. - Use a minimum P2 rated mask or respirator with correct filter at all times and higher rated equipment for task specific works – if required. - Ensure that laces on boots are covered during asbestos removal works to ensure no dust or fibres become trapped within the boots. Always ensure that steel capped boots are worn on the work site. - Always wear safety glasses and gloves whilst undertaking works. - Irrespective of asbestos removal works, it is a minimum standard that all personnel on site shall wear safety footwear and head wear with additions made should conditions call for it i.e. - hearing protection for excessive noise - hand protection for handling / cutting materials - eye protection for cutting, chipping and jack hammering - safety harness for working at heights where work platforms and / or edge protection is not practical - protective clothing as required (e.g. leather aprons for hot works.)	1	Project Manager Site Supervisor Asbestos Supervisor Asbestos Removalist

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
6.Establishment of Boundaries	Exposure to asbestos dust, fibres or debris. Injury to personnel Falling hazards into open trenches Injury from plant / equipment in operation during asbestos removal works.	Contaminated / atmosphere	Serious Injury Death Exposure to asbestos dust, fibres and or debris.	2	- Prior to the commencement of any works that a likely to disturb asbestos containing materials erect asbestos removal signage at the entrances and exits of the barricaded work area. - Ensure that further signage and / or barricades are erected as required and as determined within the Toolbox Talk meetings. - Make sure that adequate signage is always present, and barricades are used at all access and egress points. - Ensure that all onsite workers – including those not working for the company – are aware that asbestos removal works are taking place. - Ensure all exclusions zones are clearly marked and that no unauthorised personnel can gain access to these zones whilst asbestos removal works are being undertaken.	1	Project Manager Site Supervisor Asbestos Supervisor

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
7. Emergency Exit Plan	Decontamination unable to be undertaken due to immediate emergency on site Unexpected emergency on site resulting in stop works and / or evacuation of work area	Contaminated / atmosphere	Serious injury. Death Exposure to asbestos dust, fibres or debris.	3	- Ensure that a decontamination plan is in place and that all personnel undertaking removal works are aware and notified of this during Toolbox Talk meetings. - Ensure an understanding of what emergencies will constitute a need for decontamination plans to be ignored for the immediate safety of personnel. - Discuss and record site specific planning and safety concerns including what emergencies may present during Toolbox Talk meetings. - Ensure that a plan is in place for decontamination once all personnel have moved a safe distance from the emergency, are deemed to be a safe space or the emergency has passed – this plan should ensure steps to minimise exposure to other site personnel and limit the possibility of asbestos dust or debris being exposed to others. - When entering any open trenches ensure that you have a partner or a spotter that can see you at all times to allow for open communication should an emergency present. - When entering an open trench ensure that exit points are well known should an emergency requiring quick departure from the trench be required.	2	Site Supervisor Asbestos Supervisor All Workers
8. Removal Work	Potential to suffer illness from working within an asbestos suit for longer than the conditions allow for	Contaminated / atmosphere	Dehydration Dizziness Nausea Heat Exhaustion	2	Ensure that all employees are allowed regular breaks. Toolbox Talk meetings should be used to determine that day's conditions (hot / cold / rain/ etc.) and daily breaks should be representative of these conditions	1	Site Supervisor Asbestos Supervisor Asbestos Removalist

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
9. Establish adequate essential services prior to start of works	Exposure to asbestos dust, fibres or debris.	Contaminated / atmosphere	Contamination due to breakdown of services – both persons and environment	2	Do not start work until checks have been made to ensure that services are determined to be adequate for the works required.	1	Project Manager Site Supervisor

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
10. Removal of Asbestos Containing Material Sheeting	Exposure to asbestos dust / fibres / debris	Contaminated / atmosphere	Serious injury Long term health side effects Contamination of both personnel and equipment	3	- Ensure that area is isolated and secure prior to the commencement of any ACM removal works. - Ensure that essential services have been established and deemed adequate for the works about to be undertaken. - Ensure that a transport vehicle is located close to the work area as possible without causing a safety concern. Ensure that this vehicle is off and no one is inside the cab during removal works. - Ensure truck is double wrapped with plastic before loading material into truck, alternatively double wrap the material in the asbestos zone and clean bag / plastic before transporting to the truck. - Ensure that all workers are wearing and using correctly the right PPE for the task at hand. - Ensure that when removing sheets it is done in a way that minimising any breakages, therefore minimising the chance for dust and / or fibres to be released into the atmosphere / work area. - Ensure that all exposed edges and / or cracks within the sheets are sealed with a PVA solution spray. - Once removal of the sheets has been completed, ensure that the material is wrapped up in protective 200um plastic sheets, sealed effectively and disposed of at a licensed waste management facility as contaminated / hazardous waste. - If required – ensure that the area is vacuumed with a HEPA approved vacuum. - Ensure hygienist inspection is before decontamination process starts to address any issues. - Ensure that any remaining framework is sprayed with the PVA solution prior to decontamination processes starting.	2	Site Supervisor Asbestos Supervisor Asbestos Removalists

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

11. Decontamination	Exposure to asbestos dust, fibres or debris.	Contaminated / atmosphere	Exposure to asbestos dust, fibres or debris. Serious Injury	3	- Ensure all waste is bagged, sealed and made safe at the end of each day. - Ensure that appropriate PPE is worn at all times. - An assessment of the asbestos removal work to be performed needs to be undertaken by a competent person to determine the correct method of decontamination – the chosen method needs to be delivered to all employees on site during pre-start / Toolbox Talk meetings. Decontamination of the work area: - Pay particular attention to walls, ledges, fittings and furnishings where ACM debris may accumulate Wet Decontamination – involves the use of damp rags / wet wipes to collect settled ACM from smooth surfaces and equipment. - Wherever practical a DUST Class H Vacuum cleaner needs to be used in conjunction with the wet decontamination - Wet wiping may be used in an area that is isolated where persons are wearing appropriate PPE and bigger pieces of debris have been picked up and placed in asbestos waste containers. - Ensure no wet decontamination occurs near electrical hazards - NEVER re-soak a rag contaminated with ACM. Dry Decontamination – should only be used where wet methods are not suitable or pose a risk because of other hazards such as electricity or slipping. - Involves carefully rolling or folding up plastic sheeting and / or vacuuming the asbestos removal area with a Dust Class H vacuum cleaner. - Vacuuming may be used in an area that is isolated and where persons are wearing appropriate PPE. Decontaminating Equipment: - All equipment must be decontaminated before leaving the asbestos removal work area or placed in a sealed container. The exterior of the sealed container must be decontaminated prior to leaving the asbestos removal work area - If tools and equipment cannot be decontaminated in the asbestos removal area and are to be re-used at another asbestos removal area, they need to be:	2	Site Supervisor Asbestos Supervisor Asbestos Removalists
---------------------	--	---------------------------	--	---	---	---	--

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

					▪ Be tagged to indicate asbestos contamination ▪ Be double bagged in clearly labelled asbestos bags with an appropriate warning statement (the exterior of the sealed container must be decontaminated before being removed from the asbestos removal area) ▪ Remain sealed until they have been decontaminated or the commencement of the next asbestos removal / maintenance task (where the equipment can be taken into the asbestos removal area and re-used under controlled conditions. ○ PPE needs to be worn when opening any sealed container containing asbestos contaminated equipment to clean or re-use the equipment or tools and decontamination can only be performed in a controlled environment. ○ In some circumstances it may be more practical to dispose of contaminated tools and equipment depending on the level of contaminations, difficulty of decontamination and the ease of replacement. • Personal decontamination: ○ The type of personal decontamination will depend on the quantity and condition of the ACM being removed, difficulty and access issues raised during the removal process, potential level of airborne ACM fibres, the method used and the duration of the task. ○ All asbestos removalists will be informed and trained in the proper decontamination method ○ Personal decontamination needs to be undertaken each time a person leaves the asbestos removal area. Personal decontamination must take place within the asbestos removal area. ○ Personal protective clothing (PPE) that is likely to be contaminated with asbestos must not be removed from the asbestos removal area unless it is decontaminated or contained before removal ○ Before personal protective clothing and footwear work during asbestos removal work are removed, they need to be decontaminated to the point where the generation of airborne dust from the subsequent handling of the clothing and footwear is minimised.		
--	--	--	--	--	--	--	--

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
					○ A Dust Class H vacuum cleaner to remove any asbestos fibres is the best, method of decontamination ○ Alternatively, if this is not possible, wet decontamination, with the use of wet wipes or the application of a fine water mist spray may be undertaken. ○ All footwear is to be wet wiped. ○ All respirators are to be wet wiped. ○ All P2 masks, coveralls, gloves, and associated PPE used during the asbestos removal process are to be bagged, in clearly label hazardous material bags, sealed and disposed off as ACM. ○ PPE used during asbestos removal works should NEVER be re-used in any circumstance (excluding respirators)		
12. Client Inspection	Exposure to asbestos dust, fibres or debris.		Exposure to asbestos dust, fibres or debris.	2	• Should they request to – the client is entitled to inspect the PPE including the respirators that the asbestos removalist will wear during the removal works.	1	Project Manager Site Supervisor Asbestos Supervisor

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
13. Waste Disposal	Breach or Break in plastic pod. Incorrect loading into vehicle for transportation Exposure to wider community due to incorrect transportation methods.	Contaminated / atmosphere Plant	Contamination of both personnel and equipment Contamination of environment Exposure to asbestos dust, fibres or debris.	3	- Ensure that the sealed pod is inspected thoroughly to ensure that it is properly wrapped and sealed prior to transport. - Ensure that EPA registered vehicles and requirements are met – including acknowledgement that these rules can change depending on the state you are in. - If required – ensure materials are transported by a PIW trained driver – depending on the state requirements. - When dealing with asbestos piping, wherever possible ensure to remove pip sections from trench in an intact position. - Ensure that the removed asbestos materials are kept wet and containerise waste materials as you go. - If dealing with a variety of hazardous materials ensure that A, B and / or C materials are identified, separated as required, and stockpiled in the designated load out area ready for loading and transporting. - Ensure that appropriate and adequate PPE is worn at all times. - Use adequate wetting agents as required	2	Site Supervisor Asbestos Supervisor Asbestos Removalists Truck Driver
14. Dust	Inhalation of Dust Disruption to operation / visibility of work area	Contaminated / atmosphere	Long Term Health Concerns Injury	2	Implement dust control measures such as water to limit the amount of dust entering the environment and impacting on the immediate area.	1	Site Supervisor Asbestos Supervisor Asbestos Removalist

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

4. HAZARD IDENTIFICATION HRCW ASSESSMENT & CONTROLS

Activity	Hazards	HRCW	Risk	RB	Hazard Controls	RA	Responsible Officer
15. Noise	Noise Pollution	Contaminated / atmosphere	Long Term Health Concerns – Hearing Concerns Injury	2	Ensure that hours of work comply with the Regulatory Authority (council, government, etc.)	1	Site Supervisor Asbestos Supervisor
16. Housekeeping	Slips, Trips and Falls	Contaminated / atmosphere	Serious Injury	2	Remove all waste materials generated by workers from the site and / or control it in a manner so as to not limit access to work areas and / or access and egress points.	1	Site Supervisor Asbestos Supervisor
17. Manual Handling	Strains Muscle Injury		Serious Injury	2	In the proposed method of work activities, manual handling is the be undertaken along with mechanical assistance such as excavators. Where this is not practical, workers will initiate team work to undertake more strenuous lifts and / or activities.	1	Site Supervisor Asbestos Supervisor All Workers

• EMERGENCY RESPONSE PROCEDURES:

**Police
Ambulance
Fire Brigade**

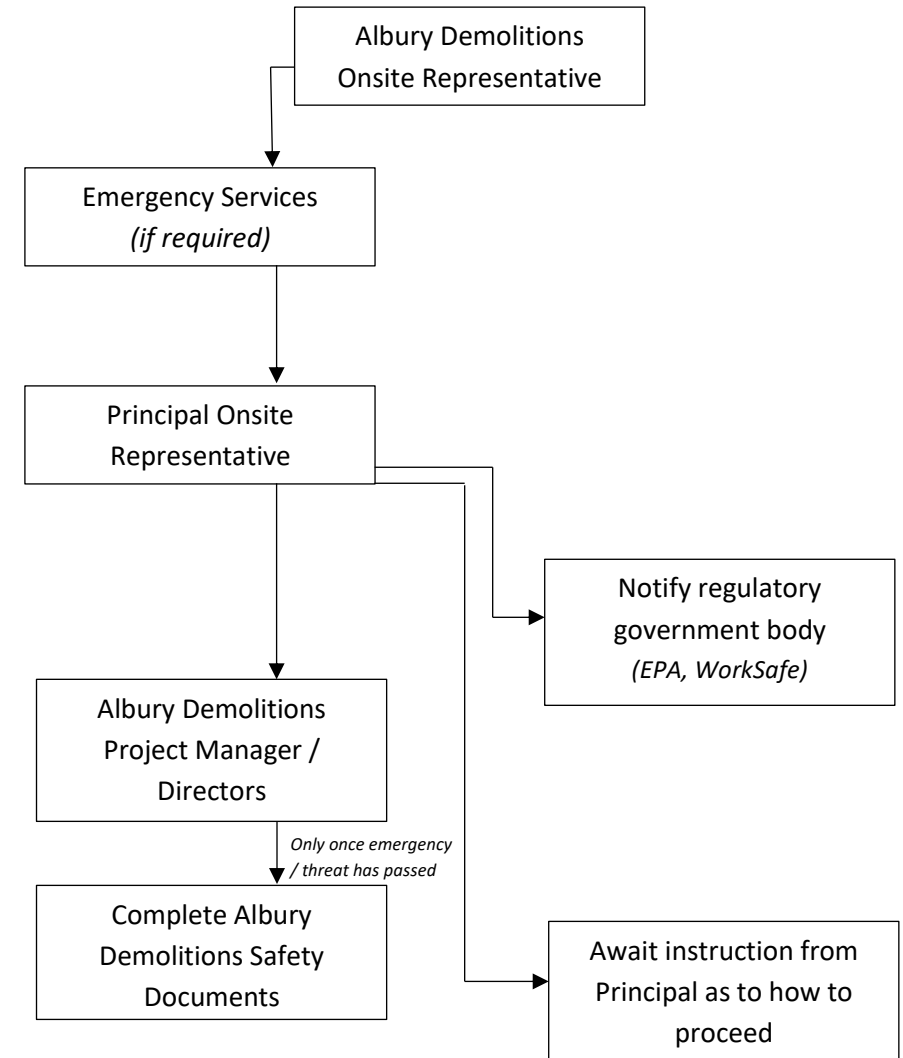
000

Police – Non Emergency	Ph: 02 6049 2600	
Albury Base Hospital	Ph: 02 6051 7111	
Poisons Information Centre	Ph: 13 11 26	
SES	Ph: 13 25 00	Floods + Storms
Roads & Maritime	Ph: 13 11 70	Traffic Incidents
Albury City Council	Ph: 02 6022 9300	Business & After Hours

Albury Demolitions Contact Numbers

Site Office	Ph: 02 6040 1010	
Jarrod Walker	Ph: 0432678 943	Tom Walker Ph: 0432 678 933

Neighbouring Businesses (Connected Boundaries) if applicable



High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

Fire – Building or Machinery	• Call 000 for emergency services and follow advice. • Shut down all plant and machinery immediately (if safe to do so) • Activate the fire alarm. • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite • If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. • Extinguish the fire (only if safe to do so). • Remove additional fuel sources including plant and machinery from the path of the fire (only if safe to do so) • If appropriate, follow the procedure for on-site evacuation. • Evacuate to the nominate location, if exiting from an internal location and it is safe to do so, close all doors and windows as you pass them. • Check that all Albury Demolitions and sub-contractors who may have been on site are accounted for. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions
Bushfire	• Call 000 for emergency services and follow advice. • Shut down all plant and machinery immediately (if safe to do so) • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite Representative • Determine appropriate response strategy in consultation with emergency services, if possible. • If evacuation is required and time permits before you leave (where applicable) • Make sure you close all doors and windows • Turn off power and gas. • Take portable and additional fuel sources with you – if possible in a timely fashion and safe to do so. • Check that all Albury Demolitions and sub-contractors who may have been on site are accounted for. • Listen to TV or local radio on battery-powered sets or mobile phone devices for bushfire/weather warnings and advice. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

Major external emissions/spill (includes gas leaks)	• Call 000 for emergency services and follow advice – if deemed necessary • Shut down all plant and machinery immediately (if safe to do so) • Ensure that all persons are out of immediate danger. • Report the emergency immediately to the onsite Representative • If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. • If required, notify EPA Victoria of the incident and follow their instructions for reporting. • Turn off gas supply – if able to do so safely • If possible notify the provider • If appropriate, follow the procedure for on-site evacuation, noting that this may need to be an off-site evacuation • If evacuating, confirm that all Albury Demolitions staff and sub-contractors are accounted for. • Await 'all clear' advice from emergency services or further advice from a Representative before resuming normal activities. • Consult with onsite Representative to determine if a Risk Assessment needs to be undertaken or further control measures need to be put in place under the Safe Work Method Statements to reduce the risk of the same incident occurring for the duration of the project. • A Toolbox Talk should be held as soon as possible to discuss the emergency, how it occurred, how to prevent a repeat occurrence and any additional information and control measures determined by the Albury Demolitions representative and the onsite Representative. • Once safe to do so, complete a Hazard Report Form and notify a Director of Albury Demolitions
Bomb or substance threat	• Should the threat be thought to have merit contact 000 for emergency services and seek and follow advice. • Ensure that all persons are away from immediate danger • Report the emergency immediately to the onsite Representative • If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. • If required, notify EPA Victoria of the incident and follow their instructions for reporting. • Do not touch any suspicious objects found. • If a suspicious object is found or if the threat specifically identified a given area, then evacuation must be considered: • If appropriate under the circumstances, clear the area immediately within the vicinity of the object of all employees, contractors and associated on site personnel. • Ensure that during the evacuation no one is directed past the object or location in question

High Risk Construction Work SAFE WORK METHOD STATEMENT

	• Ensure staff that have been evacuated are moved to a safe, designated location and all Albury Demolitions employees and sub-contractors are accounted for at the evacuation point. • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received by telephone: • Do not hang up. • If possible, fill out the bomb threat checklist while you are on the phone to the caller – <i>document provided with Albury Demolitions onsite documents</i> • Keep the person talking for as long as possible and obtain as much information as possible. • Have a co-worker call 000 for emergency services on a separate phone without alerting the caller. • Report the threat immediately to the onsite Representative • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received by mail: • Place the letter in a clear bag or sleeve. • Avoid any further handling of the letter or envelope or object. • Call 000 for emergency services and seek and follow advice. • Report the threat immediately to the onsite Representative • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions If a bomb/substance threat is received electronically: • Do not delete the message • Call 000 for emergency services and seek and follow advice • Report the threat immediately to the onsite Representative • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions
Internal emission or spill	• Call 000 for emergency services and seek and follow advice. • Ensure that all persons are away from immediate danger. • Report the threat immediately to the onsite Representative • If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting.

High Risk Construction Work SAFE WORK METHOD STATEMENT

	• If required, notify EPA Victoria of the incident and follow their instructions for reporting. • Move employees, sub-contractors and associated onsite personnel away from the spill to a safe area and isolate the affected area with barricades and signage – only as safe to do so. • Seek advice in regards to clean up requirements, and if safe to do so, the spill can be cleaned up by staff. Personal Protective Equipment should be worn as per the requirements of the Material Safety Data Sheet and Safety Work Procedure. • Confirm if there is a need to notify WorkSafe Victoria or an environmental body depending on the nature and severity of the spill • Once the threat has been eliminated and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions
Severe Weather event	Sudden event during operational hours: • If required, call 000 if emergency services are needed and follow advice. • Consider contacting the Wodonga SES for assistance if emergency services can be spared. • Report the threat immediately to the onsite Representative • If possible, prior to the approaching storm hitting the worksite, store or secure loose items external to the building, such as demolition debris (if possible), cover loaded trucks with tarps / covers to avoid loose materials flying out, shut down and lock up and machinery or plant on site. • Disconnect electrical equipment – cover and/or move this equipment away from windows. Secure in trucks or vehicles that are on site if no secure internal location exists. • Ensure that building structures – if any remain – are as secure as possible. If it is deemed possible that severe weather may cause structures to fall ensure that no people, equipment, plant or machinery are stored nearby to avoid additional damage. • If waterproofing / weatherproofing materials are on site, secure to the best of your ability and determine if additional supports or tiedowns are required to attempt to keep it intact and in place throughout the coming weather. • Instigate an evacuation of site if required, alternatively ensure that all employees, subcontractors and associated onsite personnel have somewhere secure to avoid the impacts of the approaching weather. Remembering that depending on the condition and safety of the demolition site, the safest location may be within the cab of a truck or vehicle parked on site. During the severe storm: • Remain in the building or vehicle and keep doors and windows closed at all times. • Restrict the use of telephone landlines to emergency calls only, particularly during a thunderstorm. • Report any safety matter immediately to the onsite Representative

High Risk Construction Work SAFE WORK METHOD STATEMENT

	- Listen to TV or local radio on battery-powered sets or mobile phone devices for weather warnings and advice. Forecast imminent event (e.g. cyclone, floods) - If weather warnings and advice from the State Emergency Warning Applications indicate that the location will be impacted by a severe weather event, the onsite representative, and an Albury Demolitions Representative will follow the decision-making process to determine if the worksite needs to be temporarily shut down. - Should temporary closure be the safest option for all involved, all employees, sub-contractors and associated onsite personnel will be informed immediately. - After the weather event, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place – should they differ from those already in place – in order to proceed with works safely. - A toolbox talk will be held at the earliest moment to discuss the results of the risk assessment and additional control measures in place prior to works continuing - Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment. - If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. - If required, notify EPA Victoria of the incident and follow their instructions for reporting.
Earthquake	- Should they be required, call 000 for emergency services and seek and follow advice. - Consider contacting the Wodonga SES for assistance if emergency services can be spared. - Ensure that all persons are out of immediate danger - Report the threat immediately to the onsite Representative - Evacuate to notified assembly area/s – if determined to be necessary. - If evacuation takes place ensure that all employees and sub-contractors are accounted for. - Await ‘all clear’ advice from emergency services or further advice before resuming normal activities. - After the event, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place – should they differ from those already in place – in order to proceed with works safely.

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

	Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment.
Structural Collapse	- Account for all onsite personnel, should anyone be missing, assume they have been caught under the structural collapse and will require medical attention. - Should they be required, call 000 for emergency services and seek and follow advice. - Shut down plant and machinery immediately. - Ensure that all persons are out of immediate danger - Report the emergency immediately to the onsite Representative - If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. - If safe to do so, secure the site to ensure no other harm comes to employees or onsite personnel. - Evacuate to notified assembly area/s – if determined to be necessary. - Await 'all clear' advice from emergency services and / or onsite Representative or further advice before resuming normal activities. - After the emergency, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine the damage if any, and what risk controls need to be put in place to prevent a repeat incident – should they differ from those already in place – in order to proceed with works safely. - Once the threat has passed and it is safe to do, complete a Hazard Report Form and notify a Director of Albury Demolitions of any damages or concerns on site and the results of the Risk Assessment.
Injury from Plant and Equipment	- Shut down plant and equipment immediately. - Determine severity of injury sustained. - If required, Call 000 for emergency services and seek and follow advice. - Ensure that all persons are out of immediate danger - Report the emergency immediately to the onsite Representative - If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. - If required, administer First Aid – Complete as possible the Albury Demolitions Injury / Illness Form and First Aid Report - <i>document provided with Albury Demolitions onsite documents</i> - If required, allow for transportation to nearest medical facility.

High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

	- After the emergency, the onsite Representative and Albury Demolitions Representative will undertake a Risk Assessment to determine if a change to procedures is required – should they differ from those already in place – in order to proceed with works safely and avoid a repeat incident. - Once it is safe to do so, notify a Director of Albury Demolitions of the emergency and finalise any paperwork.
Unexpected Hazardous Materials – including but not limited to Asbestos Containing Materials.	- Stop work immediately - Shut down plant and equipment - Ensure that all persons are out of immediate danger - Report the findings immediately to the onsite Representative - If required, notify WorkSafe Victoria of the incident and follow their instructions for reporting. - If required, notify EPA Victoria of the incident and follow their instructions. - If safe to do so, secure the area with barricades and signage to ensure no further contamination can take place. - Verbally inform all Albury Demolitions employees, subcontractors and associated onsite personnel of the contaminated and the protection measure currently in place. - If contamination is believed to have taken place, begin decontamination of people, plant and equipment. - Ensure correct PPE is available on site and issued to all those that require it. - Notify and Albury Demolitions Director of the find and what proceedings have taken place since the findings. - Await further instruction from onsite Representative regarding procedures for moving forward. - If required, undertake a Risk Assessment, and complete updated ARCP documents and / or SWMS to cover changes to removal process for the unexpected finds. - Ensure that all safety documentation is in place and PPE is provided to personnel prior to commencing any removal works involving hazardous materials.

5. PERSONAL PROTECTIVE EQUIPMENT

Foot Protection	Hearing Protection	Protective Clothing	Head Protection	Eye Protection	Hand Protection	Sun Protection	Safety Harness
							

PPE Notes:

The above PPE Requirements are the minimum requirements for all personnel involved in each relevant task to be undertaken. Be sure to conduct a Risk Assessment for other factors that may influence the work environment such as Temperatures – Hot/Cold, Working in the Sun, Night Work etc. Be sure that all PPE meets Australian Standard Requirements.

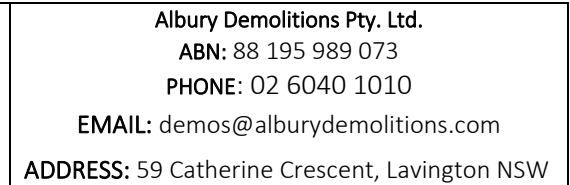
References include, but are not limited to:

WH&S Act 1995, WH&S Regulation 2017; Model WHS Act 2011
Workers Compensation and Rehabilitation and other Legislation Amendment Regulation (No.1) 2005. Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace (2018); Code of Practice: First Aid in the Workplace (2018); Code of Practice: Hazardous Manual Tasks (2016); Code of Practice: How to Manage and Control Asbestos in the Workplace (2016); Code of Practice: How to Manage Work Health and Safety Risks (2018); Code of Practice: Labelling of Workplace Hazardous Chemicals (2015); Code of Practice: Managing Risks of Plant in the Workplace (2018); Code of Practice: Managing the Risk of Falls at Workplace (2015).

High Risk Construction Work SAFE WORK METHOD STATEMENT

6. RISK ASSESSMENT

Step 1: Determine Likelihood – What is the possibility that the effect will occur?			Step 2: Determine Consequences – Expected Consequences				
	Likelihood	Definition	Level of Consequence		Examples		
Almost Certain	Expected to happen in most circumstances	A common and very possible result	Insignificant / Acceptable		No consequence – so minor that the consequence is manageable		
Likely	Will probably occur in most circumstances	Known to have occurred and has happened before	Minor		First aid treatment only; manageable and contained		
Possible	Might occur at some time	Could occur and is likely it has happened before	Moderate		Medical treatment; manageable with 3 rd party assistance		
Unlikely	Could occur at some time	Not likely to occur	Major		Serious injuries; Down time and loss of productivity		
Rare	May occur only in exceptional circumstances	Very unlikely	Catastrophic		Death; Very serious consequences		
Step 3: Determine the Risk Score			Step 4: Record Risk Score – Risk scores are only estimated and should not be solely relied upon				
	CONSEQUENCE						
LIKELIHOOD	Insignificant	Minor	Moderate	Major	Catastrophic	Score	Action
Almost Certain	3 – High	3 – High	4 – Acute	4 - Acute	4 – Acute	4 A: Acute	URGENT – Act on and lower the risks immediately. Demands immediate attention.
Likely	2 – Medium	3 – High	3- High	4 – Acute	4 – Acute	3 H: High	Decisions required urgently by Management
Possible	1 – Low	2 – Medium	3 – High	4 – Acute	4 - Acute	2 M: Moderate	Follow instructions given by Management
Unlikely	1 – Low	1 – Low	2 – Medium	3 – High	4 – Acute	1 L:Low	Manageable. Review regularly, and if any conditions of work change.
Rare	1 – Low	1 – Low	2 – Medium	3 – High	3 - High		



High Risk Construction Work SAFE WORK METHOD STATEMENT

Albury Demolitions Pty. Ltd.
ABN: 88 195 989 073
PHONE: 02 6040 1010
EMAIL: demos@alburydemolitions.com
ADDRESS: 59 Catherine Crescent, Lavington NSW

8. SWMS REVISION: WORKER CONSULTATION & SIGN-OFF

The control measures for activities identified and marked with the revision number below has been revised due to the following reasons:

- ☐ control measure is not effective in controlling the risk
 ☐ a change in the workplace that identified different safety risks
 ☐ a new hazard has been identified
☐ the results of consultation require amended controls
 ☐ a health and safety representative has requested a review

This SWMS has been amended following a review of the high risk tasks through consultation with our employees and has been read and understood by the undersigned employees undertaking the task. Instruction and training has been provided in the work activities and controls described in this SWMS

Employee Name	Employer	Signature	Date	Trade
Review No:	Revision A	Revision B	Revision C	Revision D
Date:				

Waste Management Information Guide for Owners, Property Managers and Occupants Address:

271 Bernhardt Street, East Albury

The following is information about how this development has been designed to accommodate separation of waste, waste storage and waste management.

Internal Bin Storage:

A waste cupboard is available in the kitchen for two to six bins between 2 litre and 20 litres size, so that you can separate and store 1-2 days of:

- Compostable food scraps for green lid waste bin kerbside collection
- Return and Earn containers
- Other recyclable containers and paper for yellow lid bin kerbside collection
- Batteries, mobile phones, smoke detectors, CDs and light globes for recycling through Council's services
- Bottles of used cooking oil for recycling through Council's services
- Plastic wrap and film for recycling through supermarkets
- Residual garbage for red (or black) lid kerbside collection

Route from your unit to the external bin storage:

To empty your household containers of recycling, food and garden and residual garbage waste into the mobile garbage bins in the waste storage area:

- The shared bin storage area is located to the lower end of the carpark area for daily use.
- A hose and external tap will be located to the top bin storage area, for the washing of bins with the intention of the water to run onto the grassed area.
- The shared waste storage area closest to you should be used for your waste.
- There is a waste storage cupboard and/or waste chute for food waste and/or recycling and/or residual garbage on your floor.
- A ramp is available to access the shared bin storage area located to the driveway.

External Bin Storage (or Shared Waste Storage Area):

Location:

- Bin storage area is located behind the front fence to the left hand side of driveway, which is hidden away from all lines of sight. This storage area will hold 2 RED and 2 YELLOW 1100 litre bins. The area will be fully enclosed with 2 gates to the front and a roof. A hose and external tap will be located on the privacy fence to bin storage, for the washing of bins, with the intention of the water to run onto the grassed area
- There will be a RED and Yellow bin stored to the carpark in front of the communal building for daily dumping of rubbish. The facility manager will be in charge of replacing the full bin with an empty bin from the top storage area.

Separate your waste accurately, as per signage, otherwise the bins may not be able to be emptied or sent for recycling/composting. Yellow lid is for comingled recycling, lime green lid for food and garden waste, and red for residual garbage.

Bins can be washed out using the tap in the waste storage area (or your own outside tap).

Please shut the gate/door to ensure vermin (and odours) are kept out. Please close bin lids to keep flies and other vermin out, minimise odours and ensure rain blowing under the eaves does not fill bins with water.

Bulk waste – used furniture, whitegoods, electronic waste, large furniture, and mattresses:

- Bulk waste should be stored in a safe location until the maintenance team is able to collect and dispose of appropriately

Placing bins out for collection:

Red lid general waste bins will be picked up on Tuesdays between 11:00am and 1:00PM

Yellow lid recycle waste bins will be picked up on Tuesdays between 11:00AM and 1:00Pm, fortnightly

Green lid green waste bins are to be put out on Sunday night, fortnightly

- Onsite manager is responsible for placing the bins for emptying in the top storage area

Bin collections:

On bin collection day, residents and visitors must not park in front of the bin storage (or in the loading zone). Please be patient and drive carefully while the waste collection staff/vehicle is collecting bins within the property.

Other Notes:

An onsite compost bin is available for use. Please do not include paper, meat, fish, bones, eggs, citrus peel or corn cobs in this compost bin. Please place these in the green lid kerbside bin.

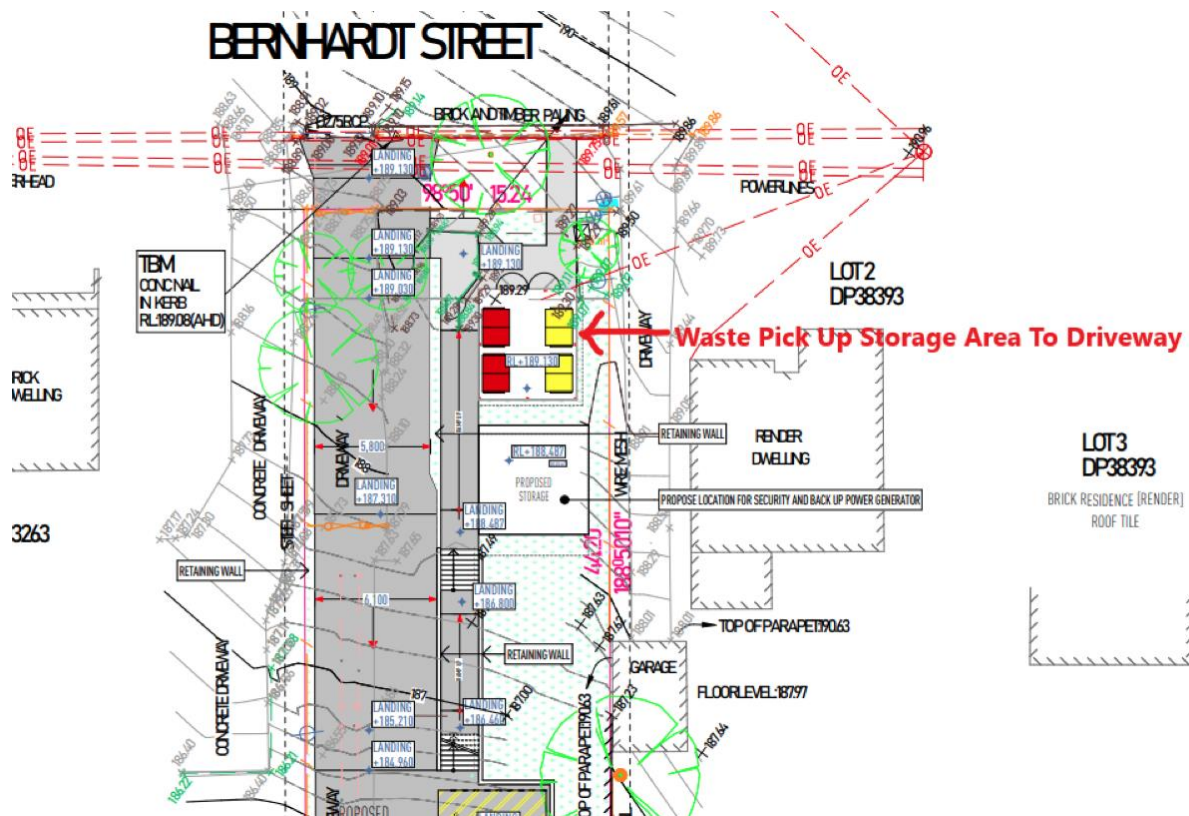
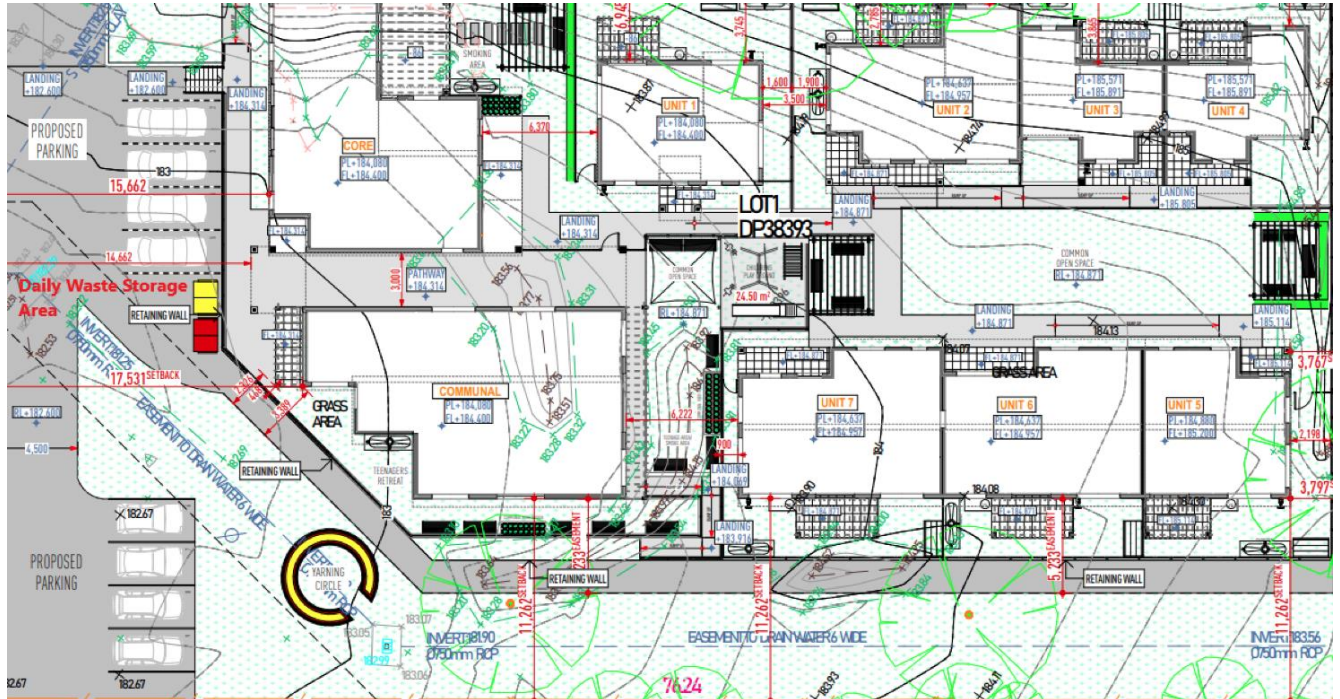
Sharps and medical waste must be kept separate and disposed of through the correct storage containers/bins/waste service.

Expanded polystyrene, printer cartridges and clean timber can also be separated for recycling. Bins and a bag are available in the waste storage room for these wastes.

Chemicals must be stored on the shelves in the bunded area and be fully sealed and contained to prevent leaks.

Domestic and Family Violence Accommodation Housing Plus Waste Management Guide for Occupants And Onsite Manager

Location of onsite bin storage area:



[illegible]

D. Bin size, numbers and colour

1. Waste					2. Recycling				
Bin Size	Bin No.	Bin Colour			Bin Size	Bin No.	Bin Colour		
120L					120L				
240L					240L				
660L					660L				
1100L	3	Red			1100L	3	Red		
3. Green Waste									
Bin Size	Bin No.	Bin Colour							
120L									
240L	2	Green							
660L									
1100L									

E. WASTE SYSTEMS

1. Details internal storage space, within each dwelling to enable the separation of waste and recyclables	Each Unit contains a pull out cupboard with two (20 Litre) waste bins. 1 is for general waste and the second is recyclable's
2. Consideration of and inclusion of details chute and in-chute compaction equipment	N/A
3. Details of on-site food waste recycling services	N/A
4. Details of whether a building manager, or equivalent, will be required to assist in the management of waste and resource recovery	The onsite manager is in charge of managing all waste enquiries
5. Other - innovative technologies or additional waste	

F. ADDITIONAL WASTE SERVICES

1. Name of e-waste recycling contractor	N/A
2. Name of Charity Bin operator	N/A

G. BIN COLLECTION

Collection Details	Collection contractors	Collection Frequency	Height and Length of collection vehicle
1. Name of waste collection contractor	JJ's Waste & Recycling	Weekly	3m high 10.5m long
2. Name of recycling collection contractor	JJ's Waste & Recycling	Fortnightly	3m high 10.5m long
3. Description of security and access arrangements to the service area	Contractor will be given access to site and waste storage area via FOB to access waste bins	As above	N/A

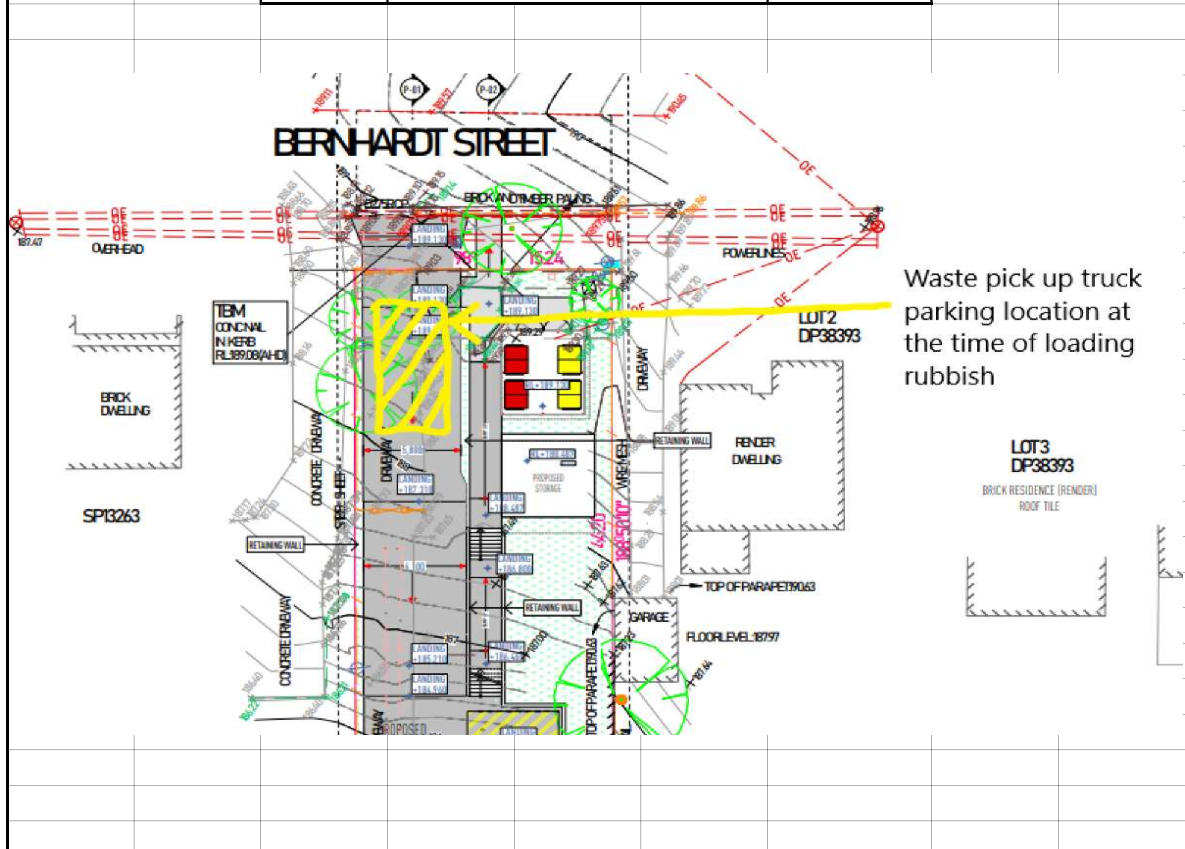
F. SIGNAGE AND EDUCATION PLAN	
Please provide a description of how the following will be communicated to tenants of the proposed development	
1. Information about how to access and use the waste and resource recovery service	Waste management guides will be located in each unit for occupants to read and follow
2. Location of the bin room/area, waste and recycling chutes (if Applicable), and how to use them	Waste management guides will be located in each unit for occupants to read and follow
H. WASTE SYSTEM MANAGEMENT	
1. Outline whether waste management will be the responsibility of individual occupiers or an appointed building manager or representative of the Owners Corporation.	The individual occupants will be responsible for their own waste and the disposal into collection bins
I. SITE ACCESS ARRANGEMENTS	
1. For on-site collections, describe site access arrangements and ensure these are aligned with a traffic impact assessment for the proposed development. The traffic impact assessment should consider the surrounding network of roads, junctions, intersections and other transport related infrastructure where extra traffic (such as waste collection services) could pose a problem.	The pick up truck will enter the site through the security gate. It will park at the top of the driveway and the driver will bring out each bin to be emptied. The driver will empty the bins and re store the bins in the bin storage area. The drive will then open the security gates and back out onto the roadway and continue on.
J. BIN STORAGE AREAS	
1. Describe bin storage areas with regards to amenity (screening, odour, noise), cleaning accessibility and bin manoeuvrability. Outline the location of, and access to, bin storage areas. Particularly, outline whether bins are to be stored in individual dwellings or in a communal area, as well as the capacity and size of bin storage areas	Bin storage area is located behind the front fence to the left hand side of driveway, which is hidden away from all lines of sight. This storage area will hold 2 RED and 2 YELLOW 1100 litre bins. The area will be fully enclosed with 2 gates to the front and a roof. A hose and external tap will be located on the privacy fence to bin storage, for the washing of bins, with the intention of the water to run onto the grassed area.
K. BIN COLLECTION AREA	
1. Describe on-site and on-street bin collection area/s. Document potential encumbrances or hazards and show on marked-up drawing/s and provide detail on how these will be mitigated or managed	Onsite storage areas have concrete paving for all access. A detailed management guide has been established for the off-street collection area. There will be a RED and Yellow bin stored to the carpark in front of the communal building for daily dumping of rubbish. The facility manager will be in charge of replacing the full bin with an empty bin from the top storage area. This will be achieved by the motorised tug which will be stored to the top bin storage area. The bin tug will be stored in this enclosure.

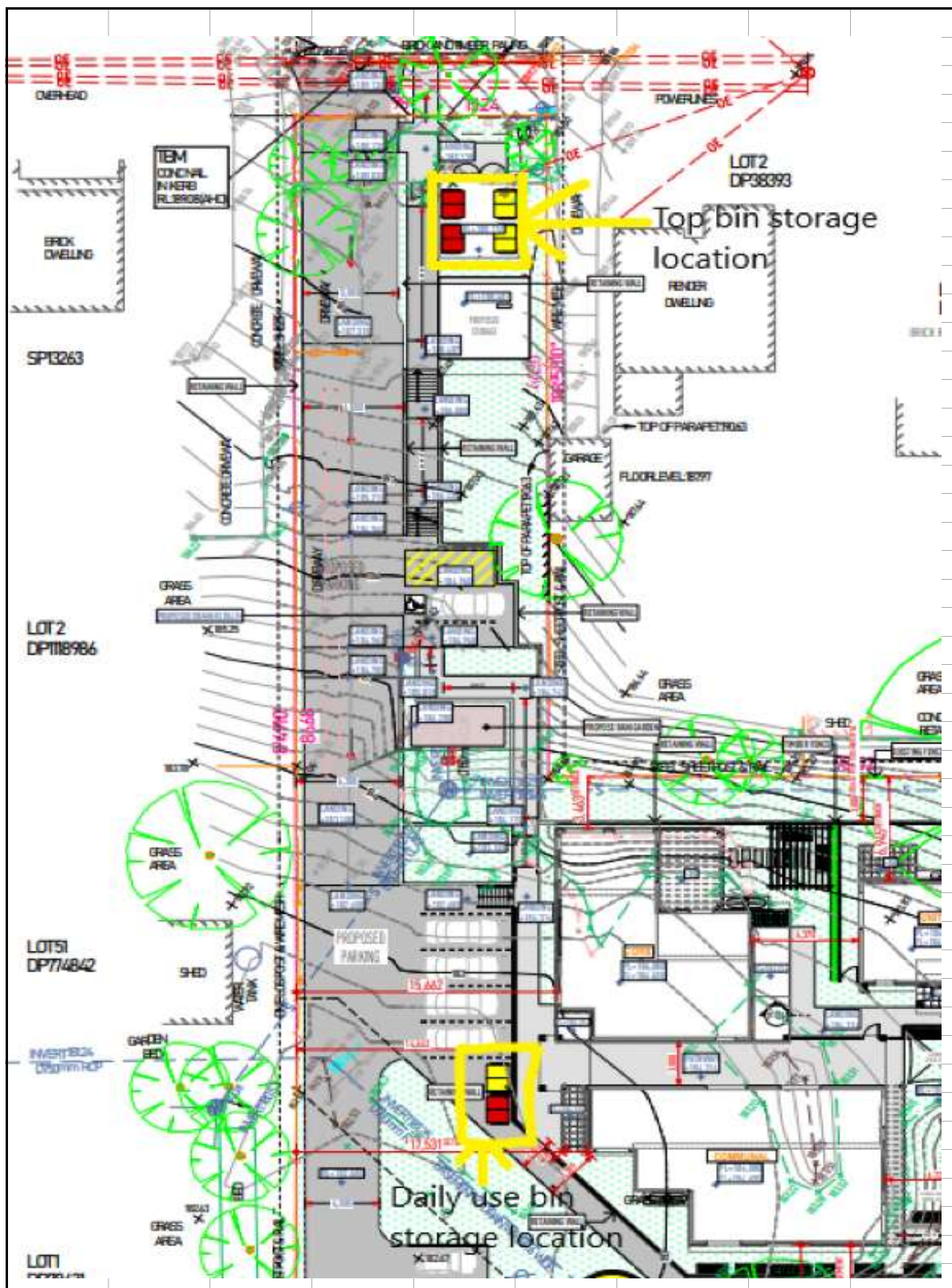
2. Demonstrate that waste collection areas provide adequate space to accommodate the number of bins proposed by illustrating the areas on marked-up drawing/s.	Please see attached plans
--	---------------------------

L. BIN TRANSFER FROM STORAGE AREA TO COLLECTION POINT

1. Outline whether the transfer of bins from bin storage area/s to waste collection area/s will be the responsibility of an appointed manager or individual occupiers.	The onsite manager will be the responsible person for the transfer of waste bins to and from the top storage area for pick up
2. Describe strategy for transfer of bins from bin storage area/s to waste collection area/s, including access routes for bin transfer and gradients of transfer paths and show on marked-up drawing/s.	There will be 2 RED and 2 YELLOW 1100 litre bins stored to the top bin enclosure. There will be 1 RED and 1 YELLOW 1100 litre bin stored to the allocated area below the carpark, these bins will be for daily use. There will be a tug device stored onsite to the top bin storage area which the facility manager will use to manoeuvre the full bins to the top storage area, and bring down the empty bins to the allocated area in the carpark.

No	Details	Person Responsible	Date
1	First Issue	Prepared By Darren Wooding	18/07/2023
		Approved by	





REFER TO OTHER PLANS BY TRICEND ENG.
FOR DETAILS OF STORMWATER, CARPARK
AND DRIVEWAY DESIGNS.

LEGEND



PROPOSED
SURFACE DRAIN
(GRASS SWALE)

PROPOSED
STORMWATER PIPE

GENERAL NOTES

- FLOOD COMPATIBLE FENCE SHALL ALLOW FOR PASSAGE OF OVERLAND FLOW DURING STORM EVENTS. CLEAR OPENING FROM GROUND LEVEL TO UNDERSIDE OF FENCE SHALL BE MIN. 300mm.

PROPOSED SURFACE DRAIN
TO BE CONNECTED TO
DRAINAGE NETWORK.

GRASS SWALE SURFACE
DRAIN. SEE STORMWATER
PLANS BY TRICEND ENG.
FOR DETAILS.

SURFACE DRAIN TO
DISCHARGE INTO
DRAINAGE EASEMENT
WITH SCOUR
PROTECTION.

BOUNDARY FENCE
TO BE FLOOD
COMPATIBLE FOR
6m (SEE NOTE 1).

EXIST. STW PIT
RL 184.73
IL 183.57 (IN)
IL 183.56 (OUT)

POROUS PAVING FOR
CAR PARKING BAYS

150mm THK
CONCRETE
PAVEMENT WITHIN
EASEMENT

BOUNDARY FENCE
TO BE FLOOD
COMPATIBLE FOR
9m (SEE NOTE 1).

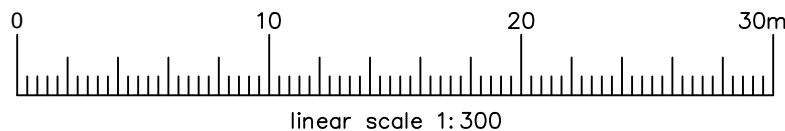
EXIST. STW PIT
RL 182.38
IL 181.25 (IN)
IL 181.24 (OUT)

EXIST. 750Ø RCP
@ 2.34% GRADE.

BITUMEN
PAVEMENT

POROUS PAVING
FOR CAR BAYS

DEVELOPMENT APPLICATION - CORE AND CLUSTER HOUSING



OVERLAND FLOW MANAGEMENT

DRAINAGE EASEMENT

LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

Revisions

rev	zone	description	date
a			
b			
c			
d			
e			

Client: HOUSING PLUS
DWG no.: **OVL-02**

Scale: **1:300**

Drawn: **JS**

Checked: **AK**

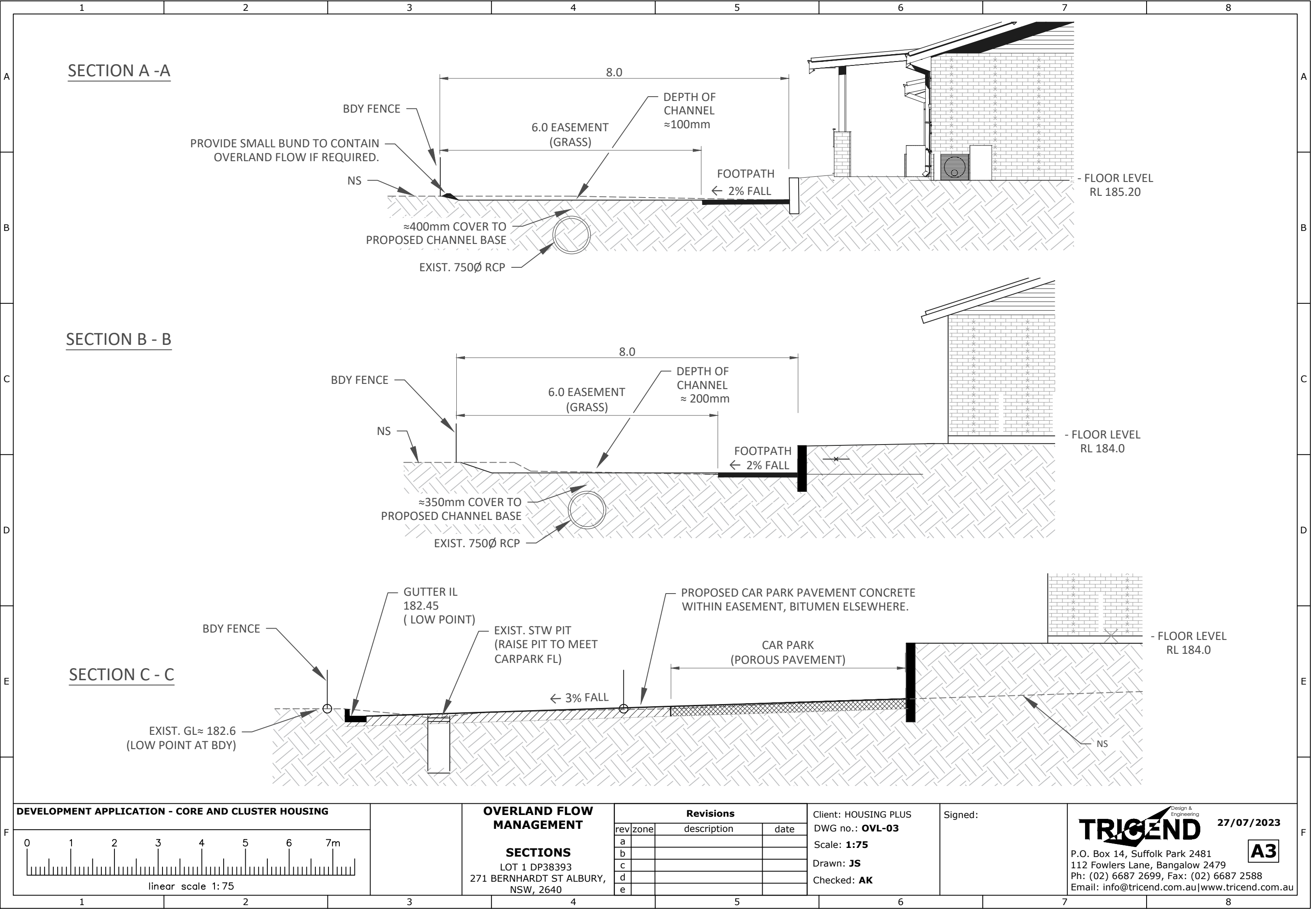
Signed:

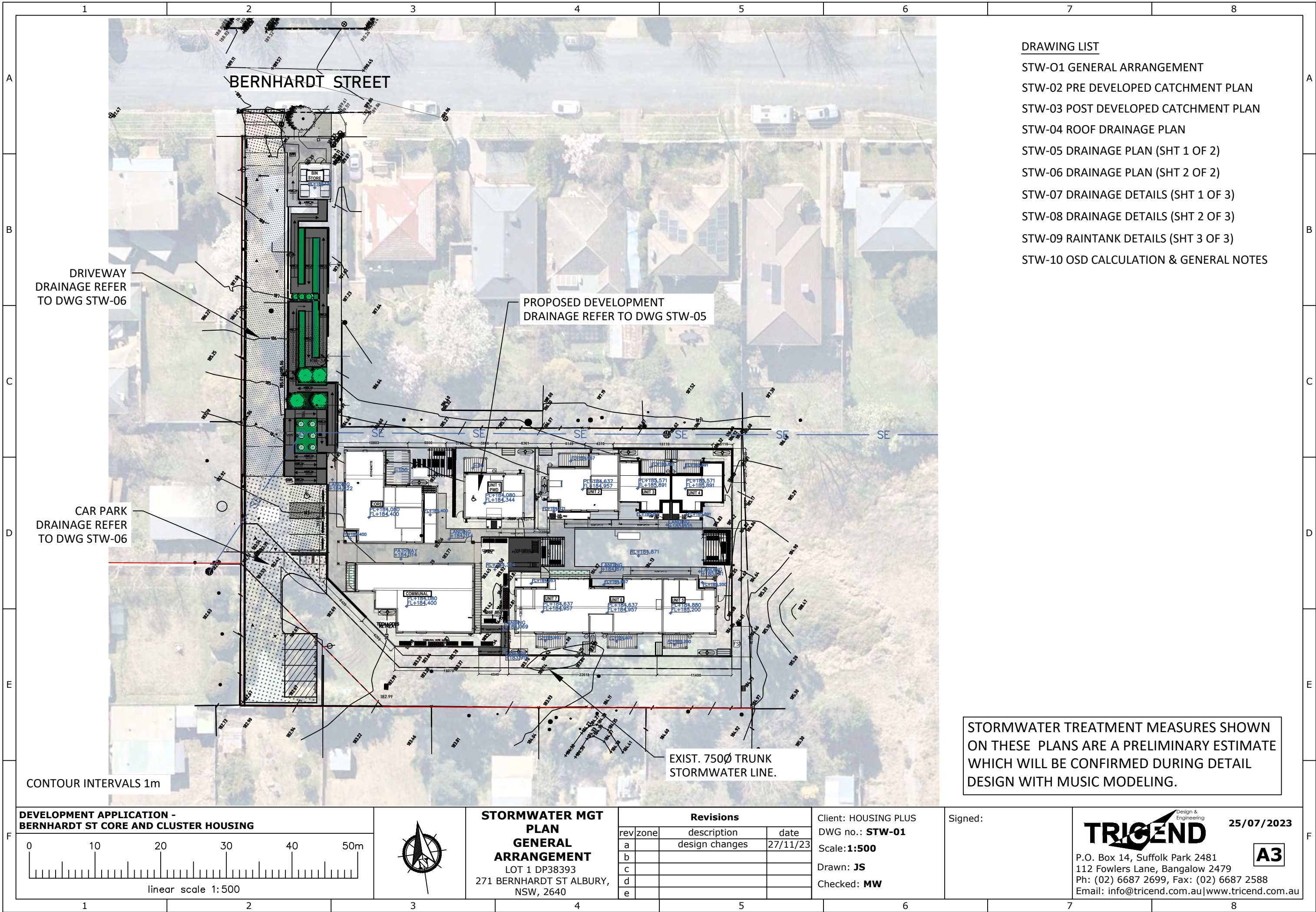
TRICEND
Design &
Engineering

27/07/2023

A3

P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au|www.tricend.com.au





BERNHARDT STREET

LEGEND

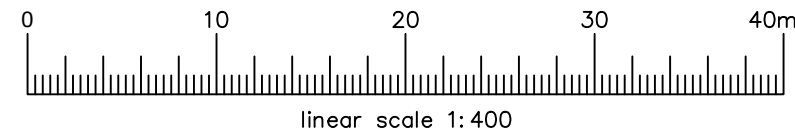
- EXISTING STORMWATER PIPE
- EXISTING SEWER
- 1m SURVEY CONTOUR

PRE DEVELOPED IMPERVIOUS AREAS

LOCATION	AREA (m ²)
R1	150.6
R2	47.4
R3	46.0
R4	7.0
R5	51.6
DRIVEWAY	132.8
TOTAL	435.0

CONTOUR INTERVALS 1m

DEVELOPMENT APPLICATION -
BERNHARDT ST CORE AND CLUSTER HOUSING



STORMWATER MGT
PLAN
CATCHMENT PLAN
PRE DEVELOP

LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

Revisions

rev	zone	description	date
a			
b			
c			
d			
e			

Client: HOUSING PLUS
DWG no.: **STW-02**

Scale: **1:400**

Drawn: **JS**

Checked: **MW**

Signed:

TRICEND
Design & Engineering

25/07/2023

A3

P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au|www.tricend.com.au

STORMWATER TREATMENT MEASURES SHOWN
ON THESE PLANS ARE A PRELIMINARY ESTIMATE
WHICH WILL BE CONFIRMED DURING DETAIL
DESIGN WITH MUSIC MODELING.

LEGEND

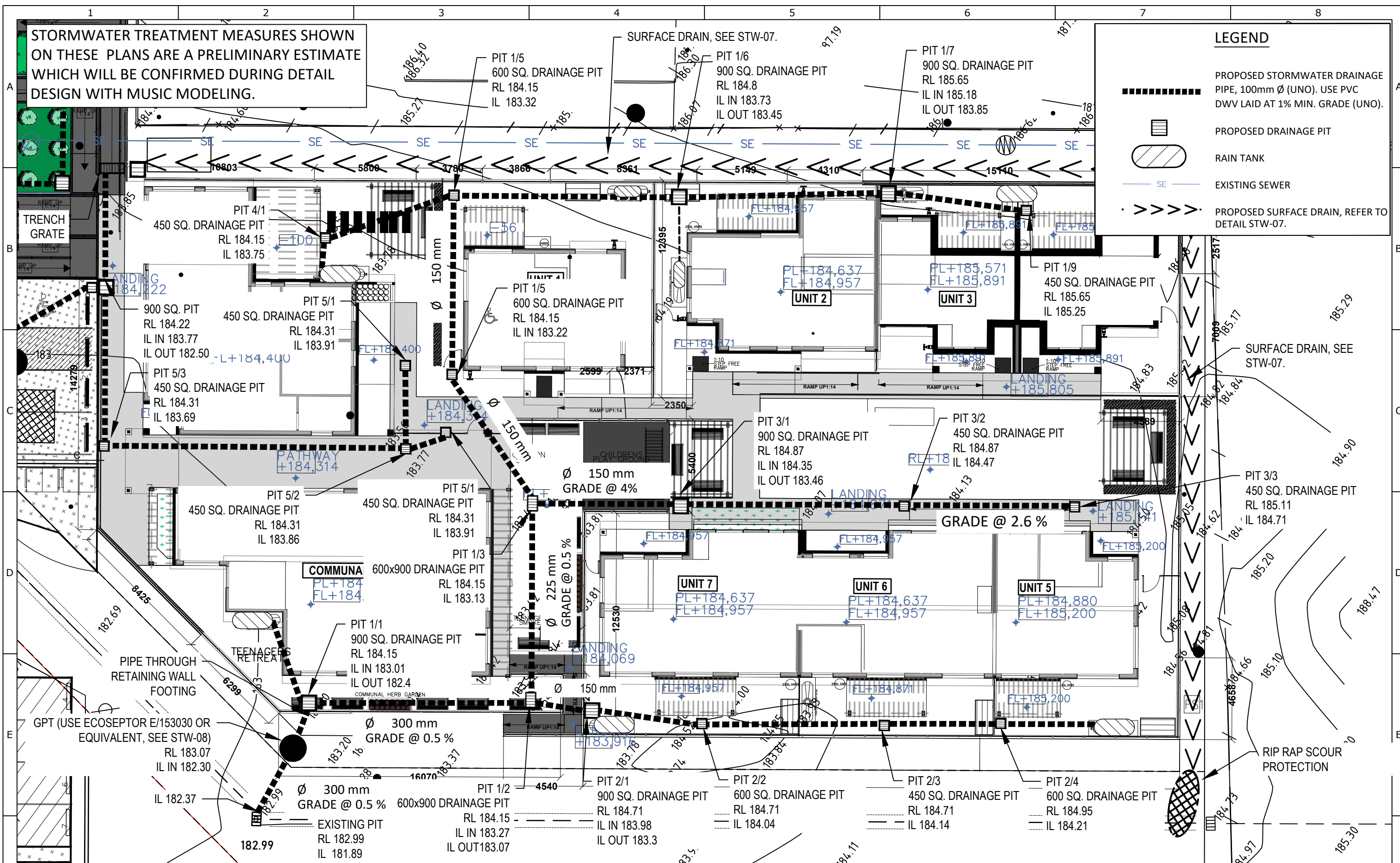
PROPOSED STORMWATER DRAINAGE
PIPE, 100mm Ø (UNO). USE PVC
DWV LAID AT 1% MIN. GRADE (UNO).

PROPOSED DRAINAGE PIT

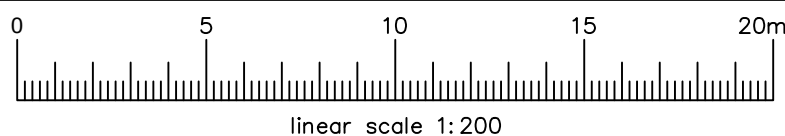
RAIN TANK

EXISTING SEWER

PROPOSED SURFACE DRAIN, REFER TO
DETAIL STW-07.



**DEVELOPMENT APPLICATION -
BERNHARDT ST CORE AND CLUSTER HOUSING**



**STORMWATER MGT
PLAN
DRAINAGE PLAN
(SHT 1 OF 2)**

LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

Revisions

rev	zone	description	date
a	E2	change IL's	2/8/202
b	B2	drainage amended	27/11/2
c			
d			
e			

Client: HOUSING PLUS
DWG no.: **STW-05**

3 Scale: **1:200**

Drawn: **JS**

Checked: **MW**

Signed:

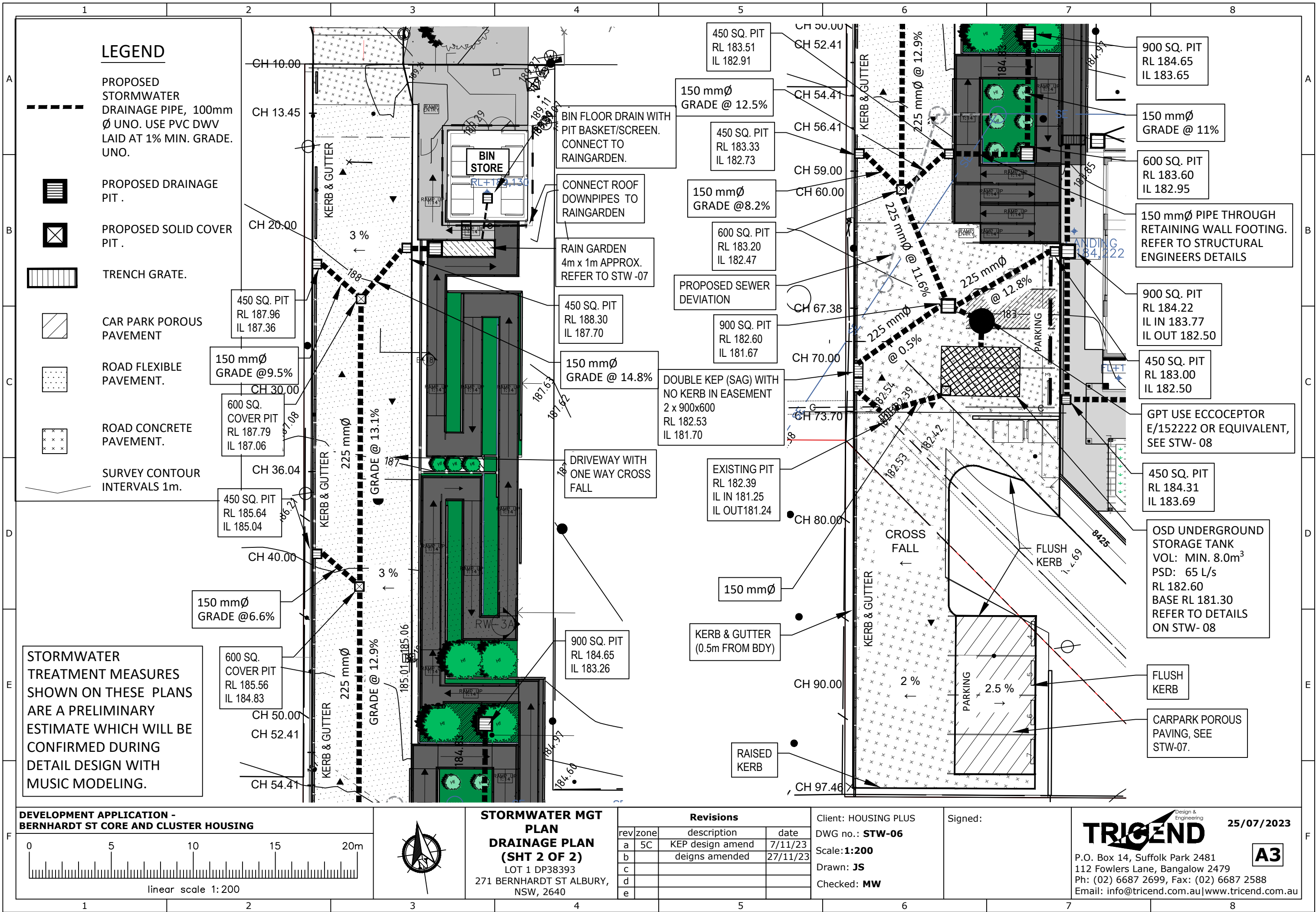
Design & Engineering

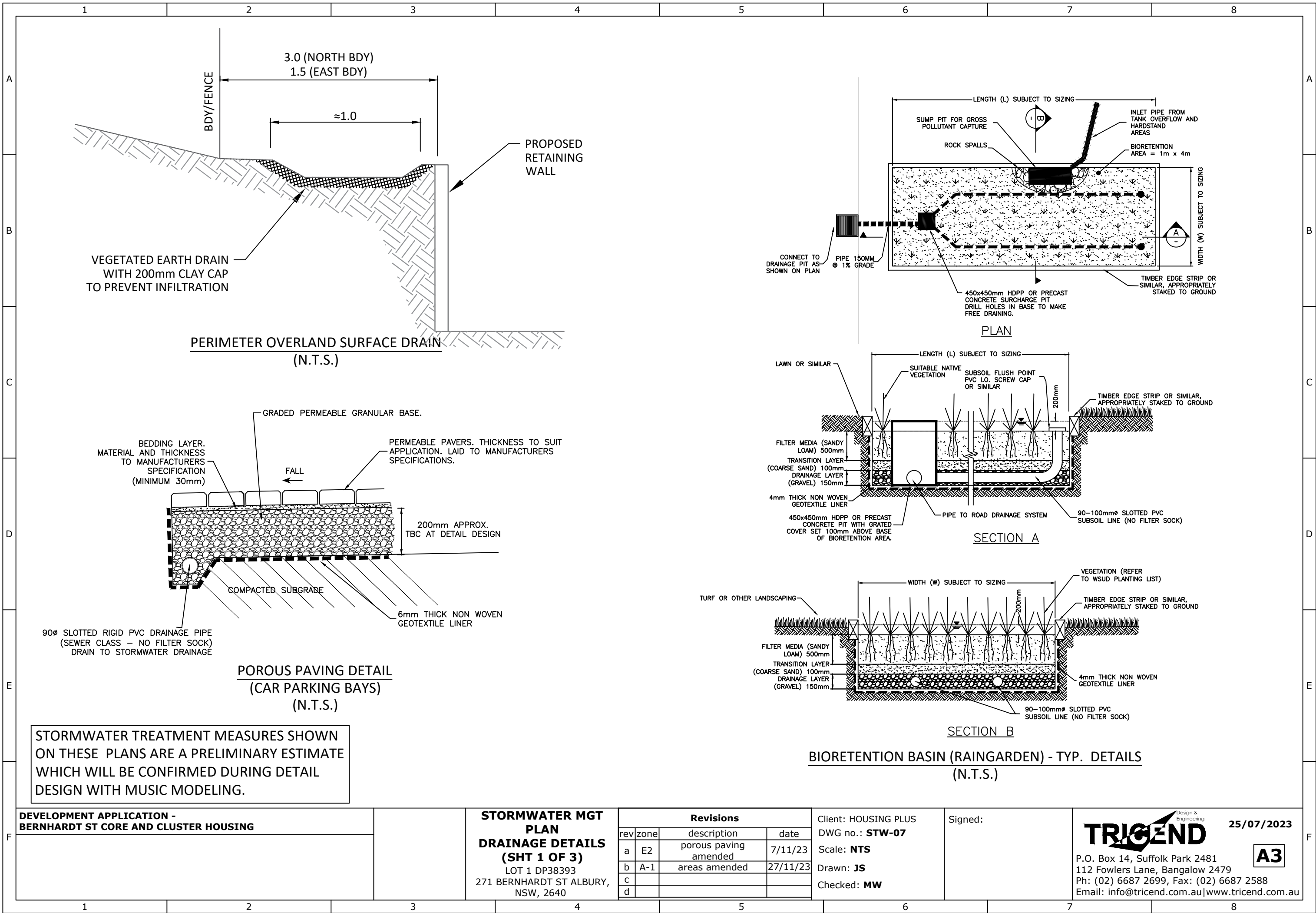
TRIGEND

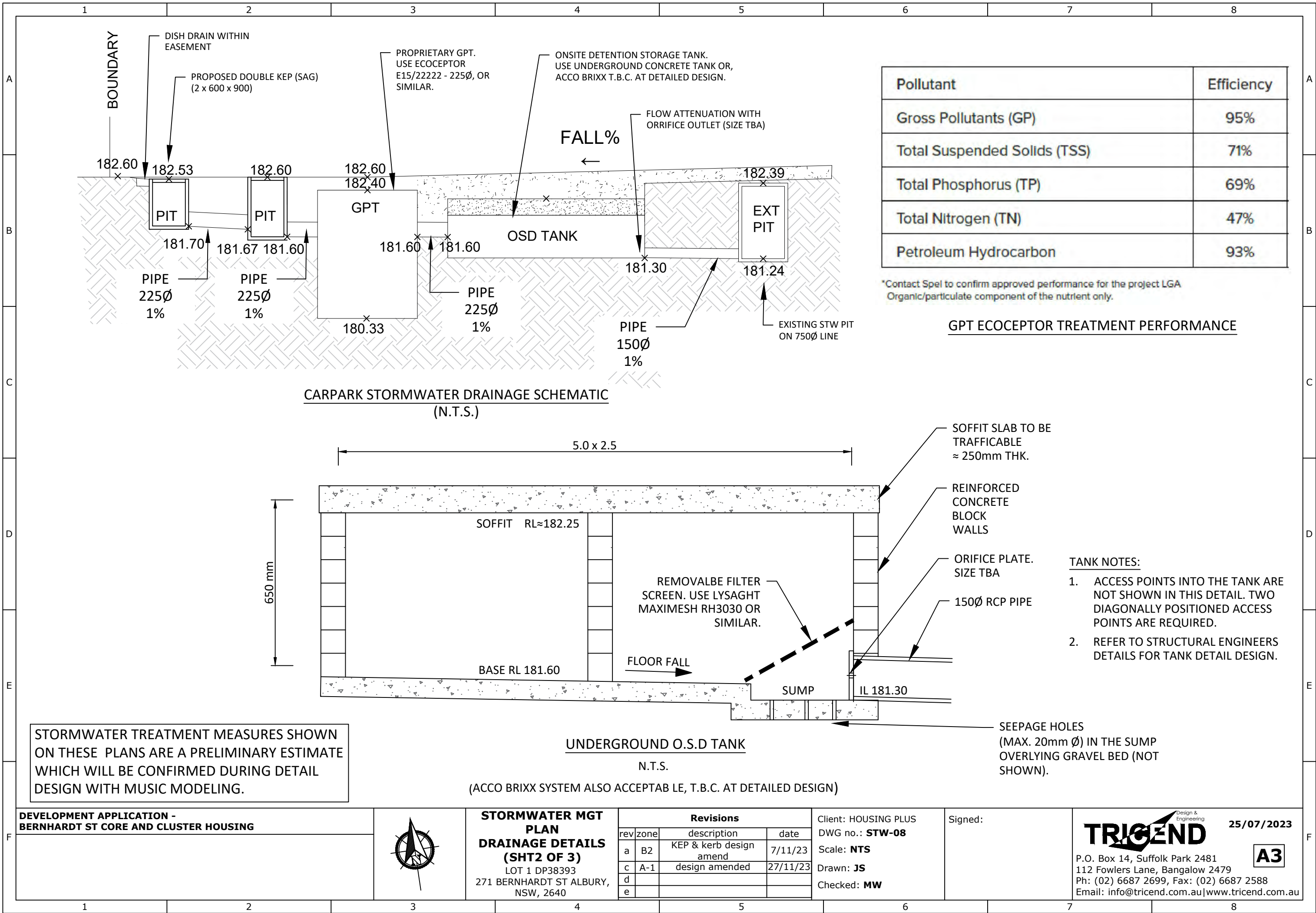
25/07/2023

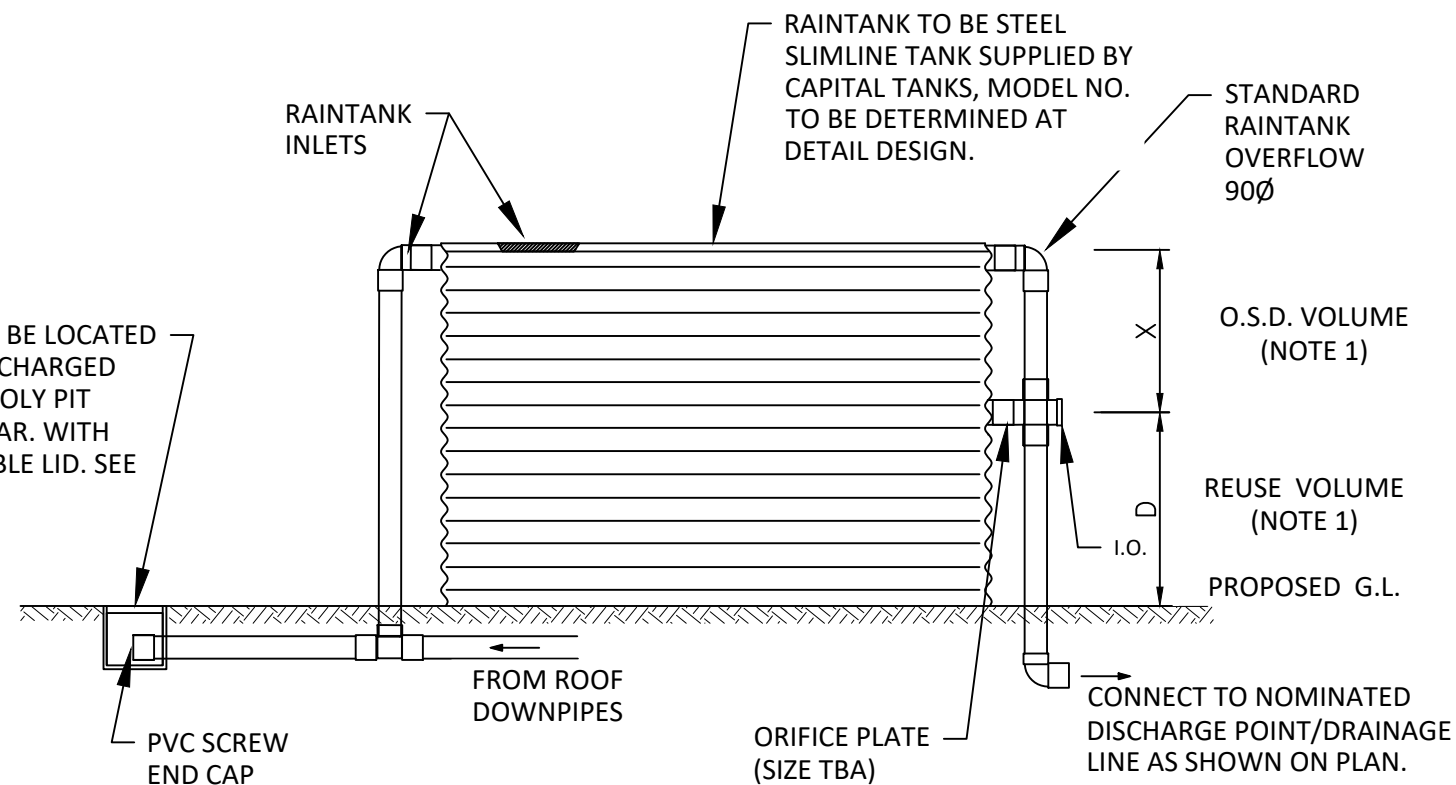
A3

P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au | www.tricend.com.au

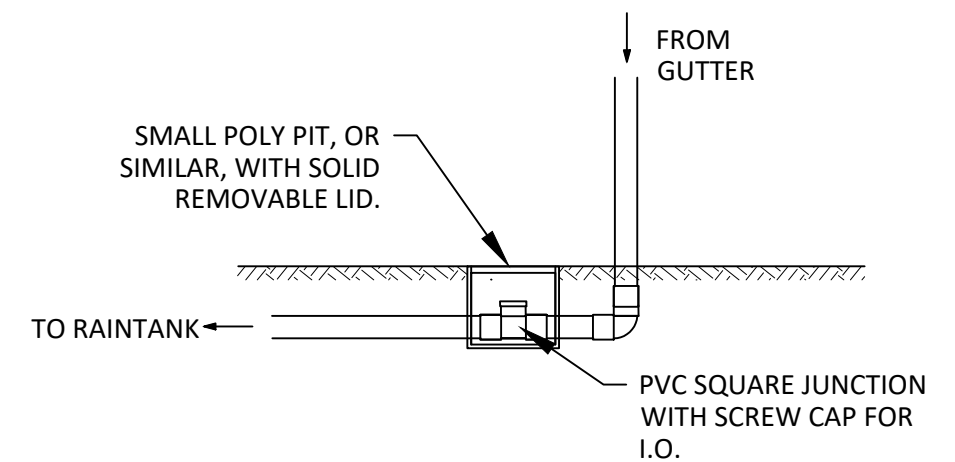








**RAINWATER TANK & FLUSHING PIT DETAIL
(N.T.S.)**



I.O. & FLUSHING POINT (N.T.S.)

TO BE PROVIDED ON ALL CHARGED LINES TO ALLOW FOR FLUSHING OF THE PIPES.

RAIN TANK	(NOTE 2)			(NOTE 1)		
	BUILDING NAME	ROOF AREA	ROOMS	REUSE VOL (L)	OSD req'd (L)	TmL size (L)
RWT1	CORE	185.2	-	4500	1226	5726
RWT2	UNIT 1	82.56	1 BED	2500	547	3047
RWT3	UNIT 2	108.2	2 BED	3000	717	3717
RWT4	UNIT 3 & 4	132.7	2 BED	5000	879	5879
RWT5	UNIT 5	81.15	1 BED	2500	537	3037
RWT6	UNIT 6 & 7	226.38	4 BED	6000	1499	7499
RWT7	COMMUNAL	254.44	COMMUNAL KITCHEN	5000	1685	6685
				TOTAL	7090	

GENERAL NOTES.

1. RAINWATER TANK MODEL/SUPPLIER AND ORIFICE HEIGHT ARE TO BE PROVIDED AT DETAIL DESIGN.
2. RAINWATER REUSE IS FOR TOILET FLUSHING AND OUTDOOR USE (1 OUT DOOR TAP PER RAINWATER TANK IS REQUIRED)

**DEVELOPMENT APPLICATION -
BERNHARDT ST CORE AND CLUSTER HOUSING**



**STORMWATER MGT
PLAN
RAINTANK DETAILS
(SHT 3 OF 3)**
LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

Revisions		
rev	description	date
a	chart amended	27/11/23
b		
c		
d		
e		

Client: HOUSING PLUS
DWG no.: **STW-09**
Scale: **NTS**
Drawn: **JS**
Checked: **MW**

Signed:

TRICEND Design & Engineering
25/07/2023
A3
P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au | www.tricend.com.au

	1	2	3	4	5	6	7	8
A	DRAINAGE CERTIFICATE			Date: 27/11/2023				
	PROPERTY ADDRESS :		Bernhardt St. NSW					
	PROJECT DESCRIPTION :		PROPOSED CORE & CLUSTER DEVELOPMENT					
	Predevelop - Total Site Area S		= 3916.2 sqm					
	Predeveloped Runoff							
	Exist Roof Surfaces R		= 302.61 sqm					
	Exist Paved Surfaces P		= 132.84 sqm					
	Exist Porous Surfaces		= 0 sqm					
	Exist Vegetated Surfaces		= 3481 sqm					
	Critical Storm		= 5 minute duration 1 in 10 years					
B	Intensity		= 112 mm/hr					
	Runoff Coefficients		C(roof) = 1.0					
			C(paved) = 0.9					
			C(porous) = 0.65					
			C(vegetated) = 0.48					
	RUNOFF (5 min storm in 10 year)							
	Runoff rate (roof)		= 33892 = 9.4 l/sec					
	Runoff rate (paved)		= 3600 = 3.7 l/sec					
	Runoff rate (porous)		= 0 = 0.0 l/sec					
	Runoff rate (vegetated)		= 187122 = 52.0 l/sec					
C			3600					
			PSD (Q _s) = 65.1 l/sec					
	SAY		PSD (Q _s) = 65 l/sec					
	Post developed Runoff							
	Roofed Areas		= 1155.05 sqm					
	Paved areas		= 1109.97 sqm					
	Porous Areas		= 47.12 sqm					
	Landscape areas		= 1604 sqm					
	Total		3916.2 sqm					
	Critical Storm		= 5 minute duration 1 in 20 years					
D	Intensity		= 134 mm/hr					
	Runoff Coefficients		C(roof) = 1.0					
			C(paved) = 0.95					
			C(porous) = 0.8					
			C(vegetated) = 0.50					
	RUNOFF (5 min storm in 20 year)							
	Runoff rate (roof)		= 154777 = 43.0 l/sec					
	Runoff rate (paving)		= 3600 = 39.2 l/sec					
	Runoff rate (semi-porous)		= 5051 = 1.4 l/sec					
	Runoff rate (landscape)		= 108328 = 30.1 l/sec					
E			3600					
			Total runoff (Q ₂₀) = 113.7 l/sec					
	Total runoff rate to be detained		48.6 l/sec or 14,588 litres					
			SAY 15,000 litres					
	Matt Wierzbicki BE (Civil)							
	I E Aust No. : 587163							
	DEVELOPMENT APPLICATION - BERNHARDT ST CORE AND CLUSTER HOUSING							
F								

1

2

3

4

5

6

7

8

STORMWATER NOTES

1. ALL STORMWATER DRAINAGE IS TO BE INSTALLED IN ACCORDANCE WITH AS3500.3.

2. THE DOWNPIPES AND STORMWATER DRAINAGE LAYOUT SHOWN ON THE PLANS IS DIAGRAMMATIC ONLY AND MAY NOT REPRESENT ACTUAL LOCATION.

3. PROVIDE RAINWATER TANKS FOR ALL ROOF AREAS. REFER TO RAINWATER TANK SIZING SHOWN ON THESE PLANS. 100% OF ROOF AREAS TO BE CONNECTED TO THE RAIN TANKS.

4. PROVIDE A FIRST FLUSH DEVICE ON ALL DOWNPIPES THAT DRAIN TO A RAIN TANK.

5. PROVIDE LEAF GUARDS ON ALL GUTTERS.

6. ALL STORMWATER DRAINAGE TO BE NON-PRESSURE PVC-U STORMWATER PIPE, SOLVENT JOINT IN MIN. 100MM DIA. PIPE SIZES.

7. ALL PIPEWORK SHALL BE PVC DWV GRADE WITH SCJ, WITH MIN. SN8 FOR CHARGED LINES.

8. MINIMUM PIPE GRADIENTS ARE 1% U.N.O ON THE PLANS..

9. PIPES SHALL BE MIN 100mm DIA. AND THEN TRANSITION TO 150mm U.N.O.

10. FLUSHING POINTS ARE TO BE PROVIDED ON ALL CHARGED LINES TO PERMIT CLEANING OF THE LINES. ADOPT DETAIL SHOWN BELOW OR SIMILAR.

11. ALL CHARGED LINES ARE TO HAVE A CLEAN OUT PIT TO ALLOW THE CHARGED LINE TO DRAIN WHEN IT IS FLUSHED DURING CLEANING/MAINTENANCE. PIT IS TO BE LOCATED AT THE LOWEST POINT ON THE CHARGED LINE AND SHALL BE 450 X 450mm WITH GRATED LID. LOCATE CLEAN OUT PITS TO ENSURE THEY DO NOT CAUSE SCOUR OR STRUCTURAL DAMAGE WHEN PIPES ARE FLUSHED OUT.

12. PROVIDE A WATERTIGHT SCREW CAP TO CHARGED LINES IN THE 450 x 450 CLEAN OUT PIT.

13. ALL PRESSURISED JOINTS ON CHARGED LINES ARE TO USE PRESSURE RATED SOLVENT.

14. PROVIDE INSPECTION OPENINGS AND RODDING POINTS AT ALL BENDS.

15. 90 DEG. BENDS ARE NOT TO BE USED, RATHER USE 45 DEG. ANGLES WITH 2 x 22.5 DEG. BENDS.

16. PIPES IN GROUNDS ARE TO HAVE MIN. COVER OF 300mm IN LANDSCAPING AND 450mm IN TRAFFICABLE AREAS.

1

2

3

4

5

6

7

8

STORMWATER MGT PLAN

OSD CALCS & NOTES

LOT 1 DP38393

271 BERNHARDT ST ALBURY, NSW, 2640

Revisions

rev

zone

description

date

a

chart amended

27/11/23

b

c

d

e

Client: HOUSING PLUS

DWG no.: STW-10

Scale: NTS

Drawn: JS

Checked: MW

Signed:

25/07/2023

A3

TRICEND

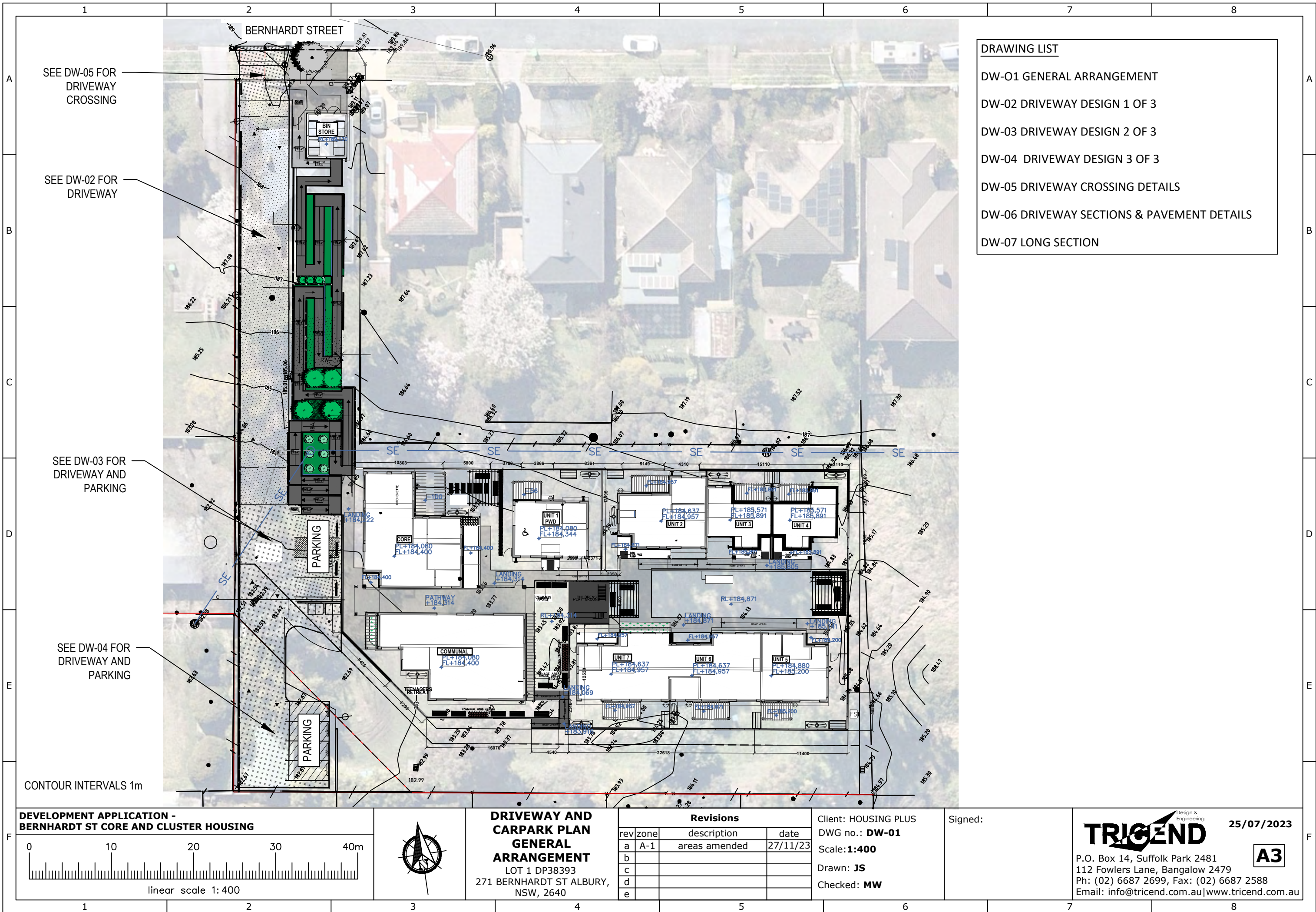
Design & Engineering

P.O. Box 14, Suffolk Park 2481

112 Fowlers Lane, Bangalow 2479

Ph: (02) 6687 2699, Fax: (02) 6687 2588

Email: info@tricend.com.au|www.tricend.com.au



DRAWING LIST

DW-01 GENERAL ARRANGEMENT

DW-02 DRIVEWAY DESIGN 1 OF 3

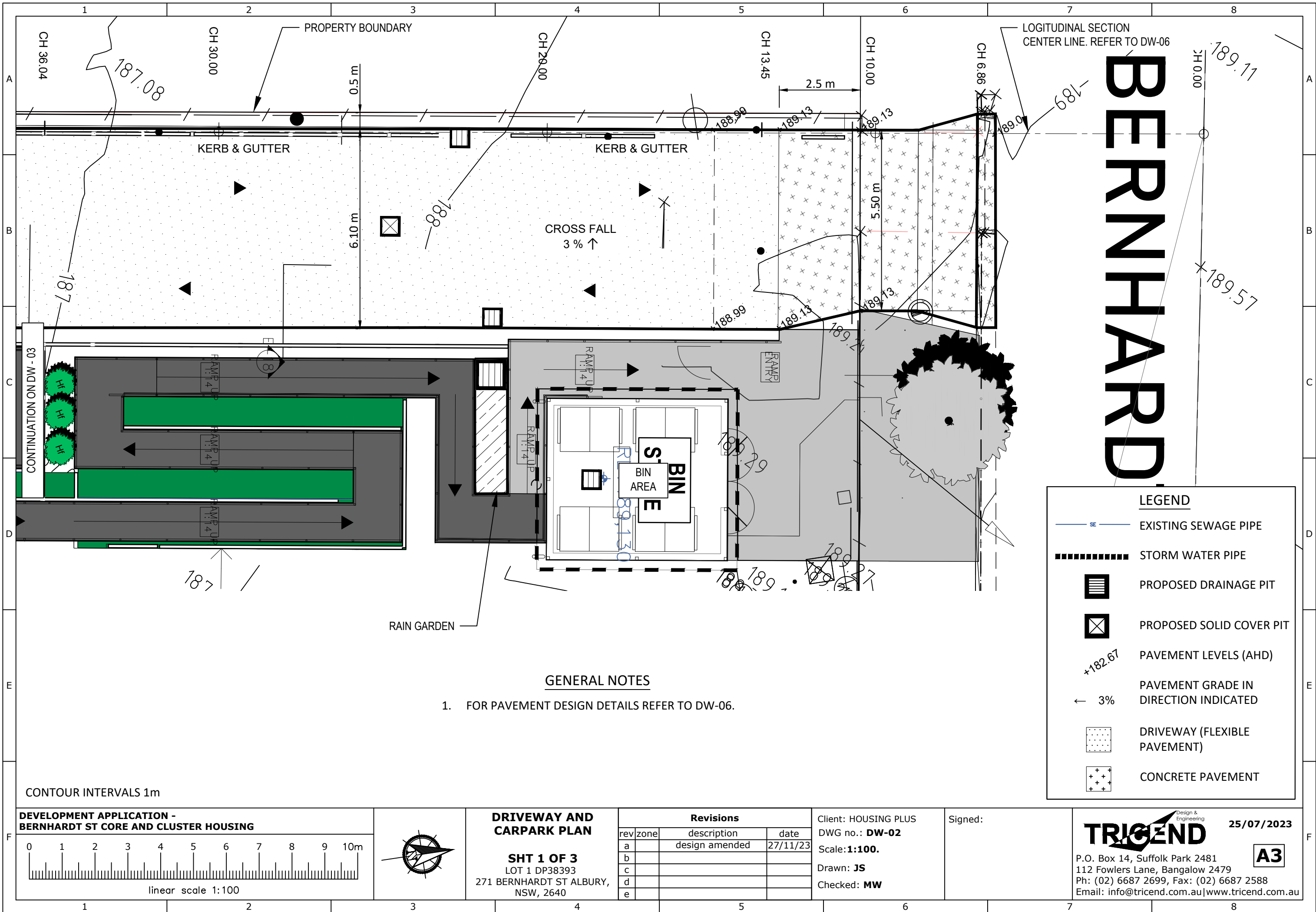
DW-03 DRIVEWAY DESIGN 2 OF 3

DW-04 DRIVEWAY DESIGN 3 OF 3

DW-05 DRIVEWAY CROSSING DETAILS

DW-06 DRIVEWAY SECTIONS & PAVEMENT DETAILS

DW-07 LONG SECTION



GENERAL NOTES

1. FOR PAVEMENT DESIGN DETAILS REFER TO DW-06.

LEGEND

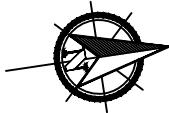
- SE — EXISTING SEWAGE PIPE
- STORM WATER PIPE
- PROPOSED DRAINAGE PIT
- ⊠ PROPOSED SOLID COVER PIT
- +182.67 PAVEMENT LEVELS (AHD)
- ← 3% PAVEMENT GRADE IN DIRECTION INDICATED
- DRIVEWAY (FLEXIBLE PAVEMENT)
- + + + + CONCRETE PAVEMENT

CONTOUR INTERVALS 1m

**DEVELOPMENT APPLICATION -
BERNHARDT ST CORE AND CLUSTER HOUSING**

0 1 2 3 4 5 6 7 8 9 10m

linear scale 1:100



**DRIVEWAY AND
CARPARK PLAN**

SHT 1 OF 3
LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

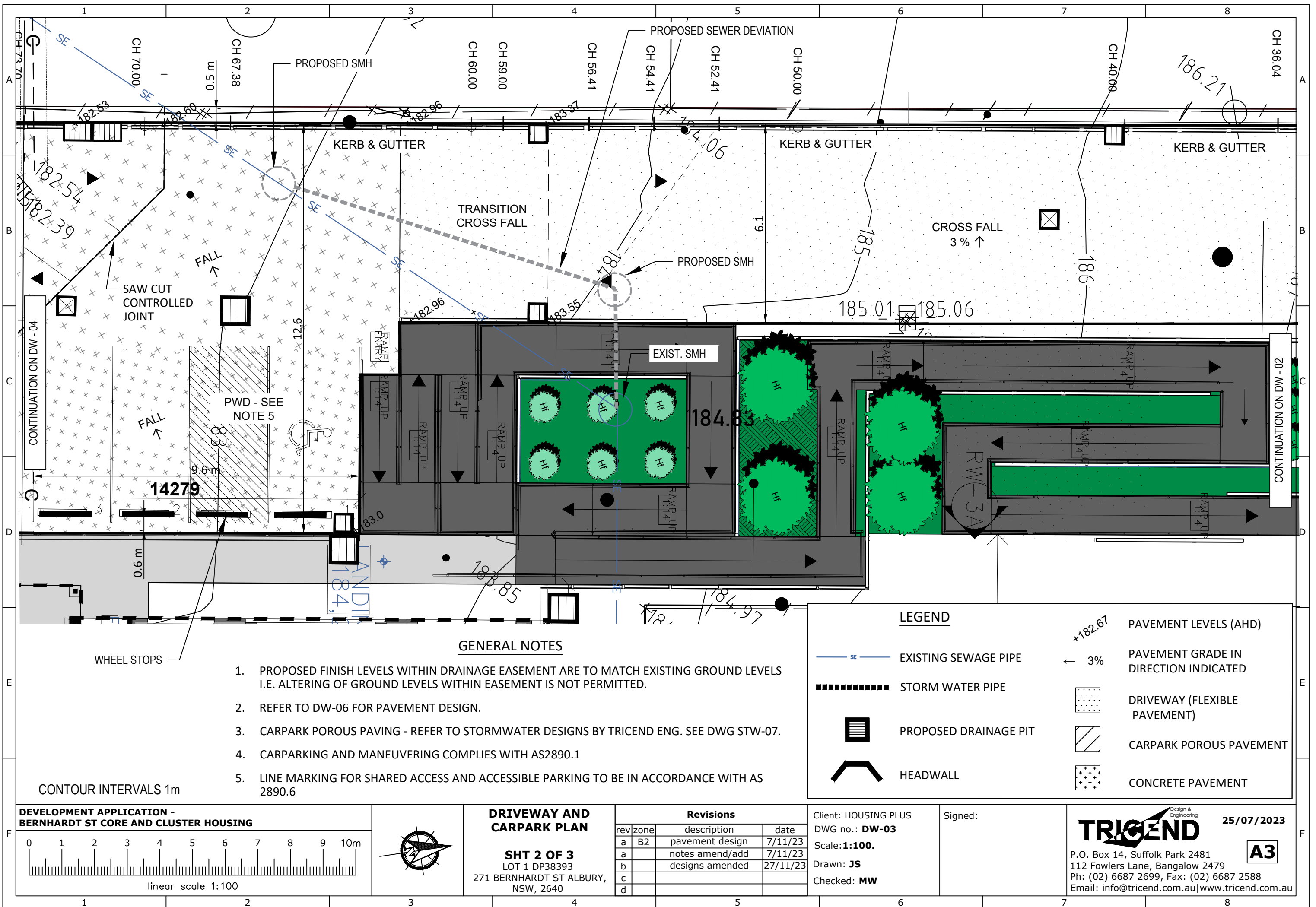
Revisions		
rev	zone	description
a		design amended
b		
c		
d		
e		

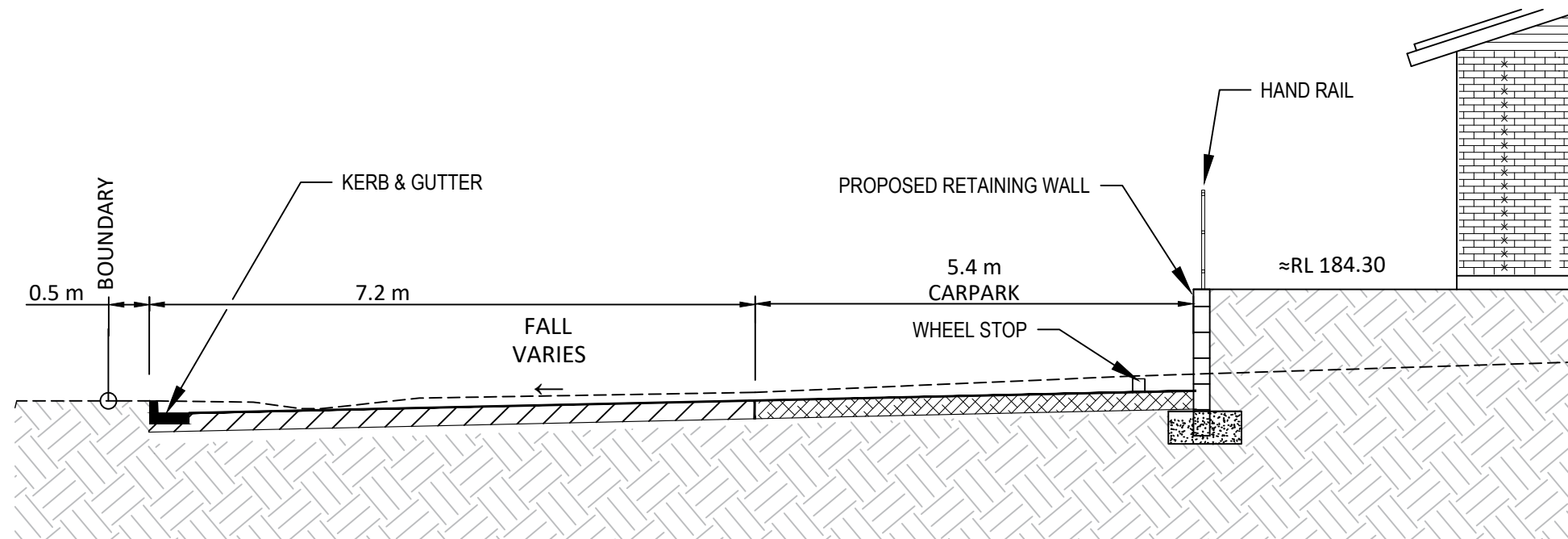
Client: HOUSING PLUS
DWG no.: **DW-02**
Scale: **1:100.**
Drawn: **JS**
Checked: **MW**

Signed: _____

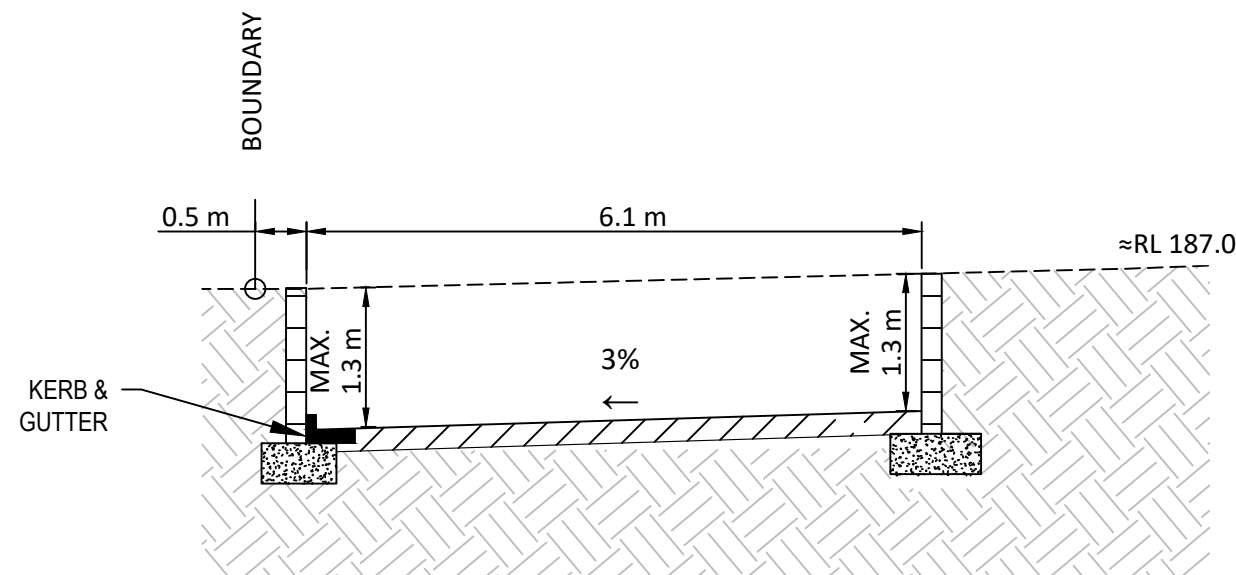
TRICEND Design & Engineering
25/07/2023
P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au|www.tricend.com.au

A3





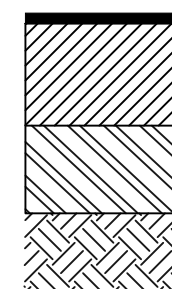
DRIVEWAY & CARPARK - TYPICAL SECTION
(N.T.S.)



DRIVEWAY SECTION - TYPICAL CH 15-63
(N.T.S.)

NOTES

1. DRIVEWAY WIDTH TO BE MIN. 6.1m WIDE WHERE RETAINING WALL IS LOCATED ON EACH SIDE (IN ACCORDANCE WITH AS2890.1 - SECTION 2.5.2).



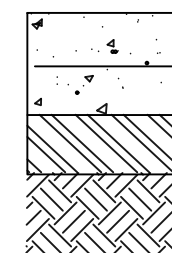
30mm AC10 WITH 7mm PRIMER SEAL

150mm BASE - DGB20

150mm SUBBASE - DGS40

SUBGRADE - REMOVE UNSUITABLE AND REPLACE WITH ROCK BRIDGING AND/OR SELECT MATERIAL (ASSUME $\approx$ 300mm THK, SEE NOTE 2)

FLEXIBLE PAVEMENT DESIGN



150mm CONCRETE (N25) WITH SL82 MESH

100mm SUBBASE - CRUSHED ROCK

SUBGRADE - MAY REQUIRE IMPROVEMENT (SEE NOTE 2)

RIGID PAVEMENT DESIGN

NOTES

1. PAVEMENT DESIGN IS FOR 20YR DESIGN LIFE, $ESA 5 \times 10^3$ AND ASSUMED CBR 3% IN INACCORDANCE WITH ALBURY ENGINEERING GUIDELINES AND AUSTRROADS PAVEMENT DESIGN FOR LIGHT TRAFFIC.
2. ACCORDING TO GEOTECHNICAL REPORT (REGIONAL GEOTECH SOLUTIONS, FEB 2023), UPPER SOIL PROFILE SUBGRADE IMPROVEMENT WILL LIKELY TO BE REQUIRED WHICH IS TO BE CONFIRMED AFTER CBR TESTING AND PROOF ROLLING.
3. RECYCLED ROAD BASE AND GRANULAR PRODUCTS ARE ACCEPTABLE SUBJECT TO APPROVAL BY SUPERVISING ENGINEER.

DEVELOPMENT APPLICATION -
BERNHARDT ST CORE AND CLUSTER HOUSING

**DRIVEWAY AND
CARPARK PLAN
SECTIONS & PAVEMENT
DESIGN**

LOT 1 DP38393
271 BERNHARDT ST ALBURY,
NSW, 2640

Revisions			
rev	zone	description	date
a	D7	pavement design added	7/11/23
b		designs amended	27/11/23
b		pavement det. added	27/11/23
c			

Client: HOUSING PLUS
DWG no.: **DW-06**

Scale:

Drawn: **JS**

Checked: **MW**

Signed:

TRICEND
Design & Engineering

25/07/2023

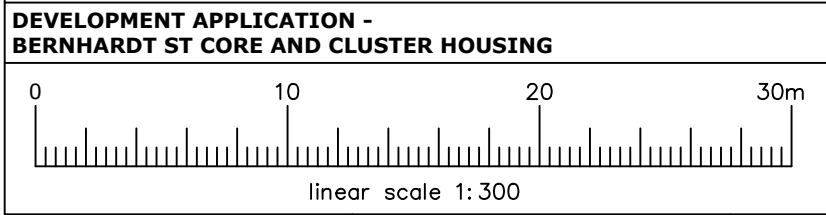
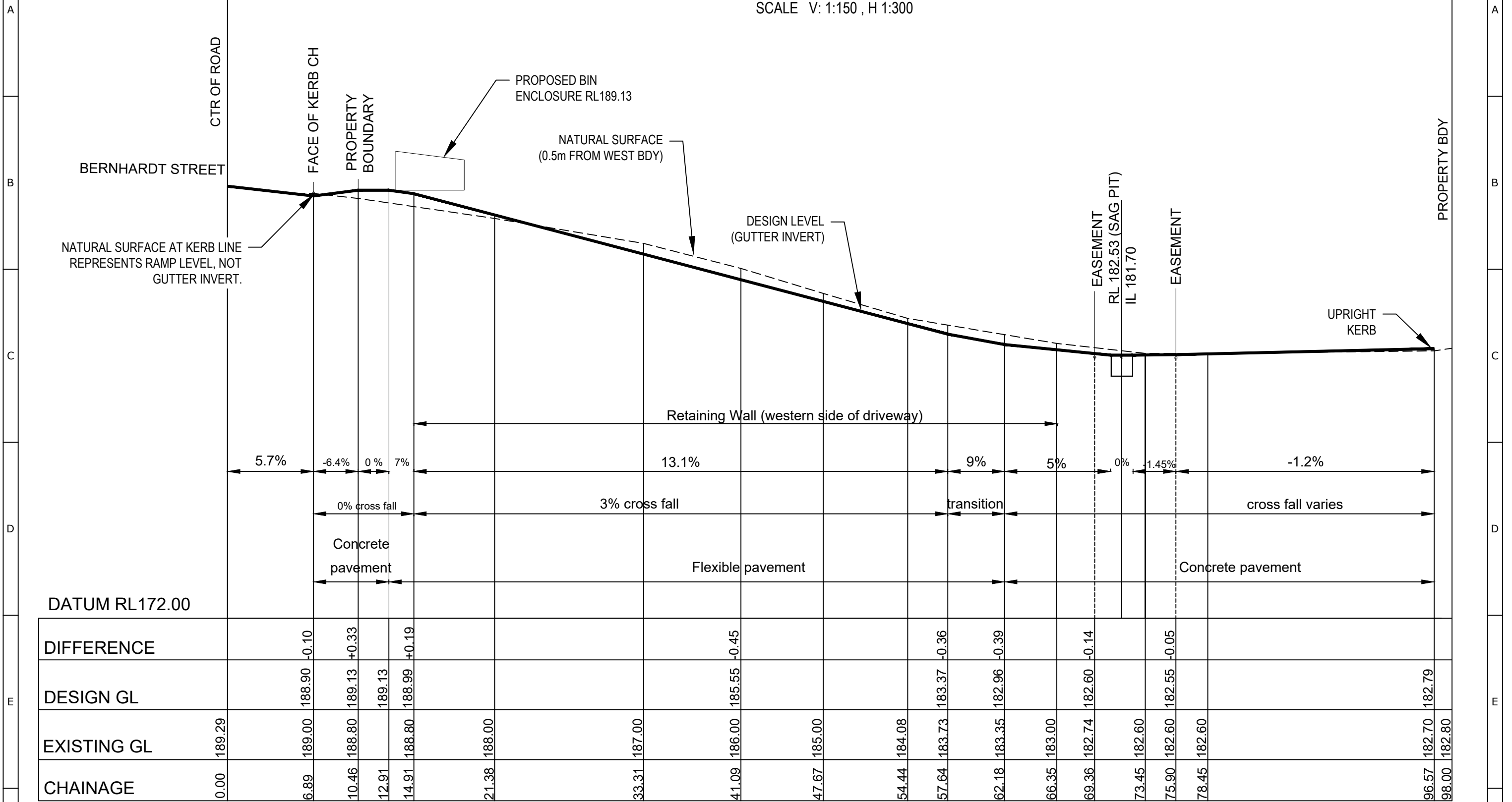
A3

P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au|www.tricend.com.au

DRIVEWAY AND CARPARK LONGITUDINAL SECTION

(FACE OF KERB OR RETAINING WALL ON WESTERN SIDE OF ROAD)

SCALE V: 1:150 , H 1:300



Revisions			
rev	zone	description	date
a	c6	amend sag pit	7/11/23
a		amend design levels	7/11/23
b		design amended	27/11/23
c			

Client: HOUSING PLUS
DWG no.: **DW-07**
Scale: **SEE DRAWING**
Drawn: **JS**
Checked: **MW**

Signed:

TRICEND Design & Engineering
25/07/2023
P.O. Box 14, Suffolk Park 2481
112 Fowlers Lane, Bangalow 2479
Ph: (02) 6687 2699, Fax: (02) 6687 2588
Email: info@tricend.com.au|www.tricend.com.au

A3



STORMWATER MANAGEMENT REPORT

271 BERNHARDT STREET, EAST ALBURY
JUNE 2023

PREPARED FOR HOUSING PLUS

This report has been prepared by the office of Spiire
445 Townsend Street PO Box 3400 **Albury NSW** 2640

Issue Date	Rev No	Authors	Checked	Approved
21-06-2023	A	T. Staats	P. McLachlan	P. McLachlan

Spiire Job Number: 320952

Citation: Spiire 2023, STORMWATER MANAGEMENT REPORT for HOUSING PLUS
Authors: T. Staats Spiire Australia Pty Ltd. Project Number 320952

Cover photo on site, Thomas Staats, 8-06-2023

© Spiire

The information contained in this document is intended solely for the use of the client named for the purpose for which it has been prepared and no representation is made or is to be implied as being made to any third party. Other than for the exclusive use of the named client, no part of this report may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Spiire.

TABLE OF CONTENTS

1. INTRODUCTION.....	4
1.1 REPORT PURPOSE AND SCOPE	4
1.2 SITE DESCRIPTION.....	4
1.3 PROPOSED DEVELOPMENT	5
2. HYDROLOGICAL ANALYSIS.....	6
2.1 OVERVIEW AND APPROACH	6
2.2 EXISTING CATCHMENT DELINEATION AND OUTFALL CONDITIONS.....	6
3. Hydraulic Analysis	8
3.1 MINOR DRAINAGE NETWORK.....	8
3.2 MAJOR DRAINAGE NETWORK	9
4. LIMITATIONS	10
5. SUMMARY AND Recommendations	10
6. REFERENCES.....	11
Appendix A – EXISTING CONDITIONS SURVEY.....	12
Appendix B – PROPOSED DEVELOPMENT	13
Appendix C – CATCHMENT PLANS, RATIONAL ESTIMATION CALCULATIONS	14
Appendix D – PC CONVEY SECTIONS	15

1. INTRODUCTION

Spiire have been engaged by Housing Plus to prepare this Stormwater Management Report for the proposed development works at 271 Bernhardt Street, East Albury. This document supports the planning permit application to AlburyCity and will form the basis of drainage design as the development proceeds to further planning phases.

1.1 REPORT PURPOSE AND SCOPE

The overall purpose of this document is to provide a strategy and framework with respect to drainage to inform the future development. To provide this, the specific scope of this assessment is to:

- ▶ Understand the existing site and proposed conditions,
- ▶ Undertake a hydrological assessment to represent the site catchment and flows,
- ▶ Determine pre-development minor and major drainage flow paths and runoff
- ▶ Provide commentary around the capacity for stormwater to flow through the site given the existing conditions and proposed development.

1.2 SITE DESCRIPTION

The ~4000 m² lot uniquely includes a portion of rear-of-lot underdeveloped land which has a low point where the existing overland flow path conveys the developed flow for the catchment upstream through the site. An existing DN750 pipe and a 6m drainage easement runs through the site east to west, which has been nominated by Council to convey the overall catchment runoff down into Norfolk Street.

Refer to Figure 1 for the existing site conditions.

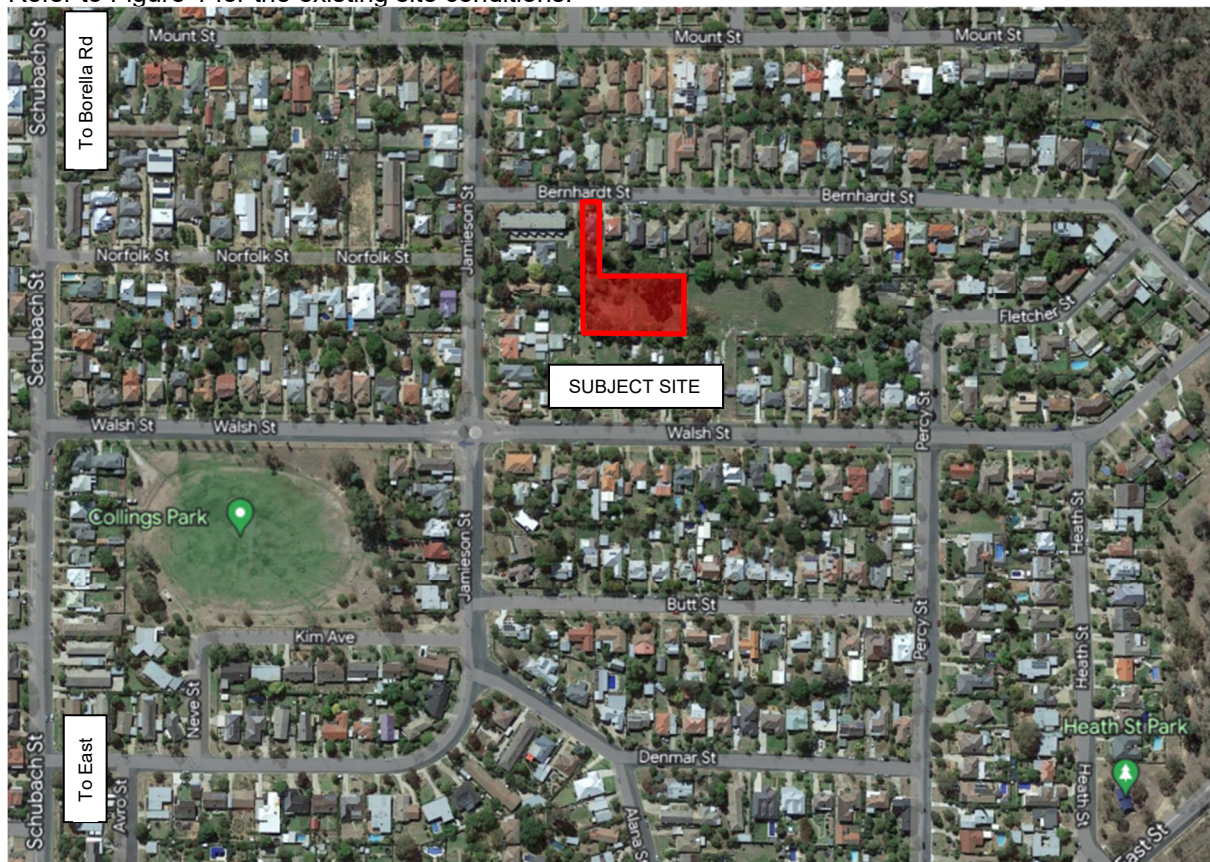


Figure 1: Existing site conditions (Google Earth, 2023)

1.3 PROPOSED DEVELOPMENT

This infill development is zoned R1 General Residential and situated in East Albury, where Housing Plus propose to develop the rear of lot land area into multiple residential units with a carpark, outdoor and communal spaces as below in figure 2.

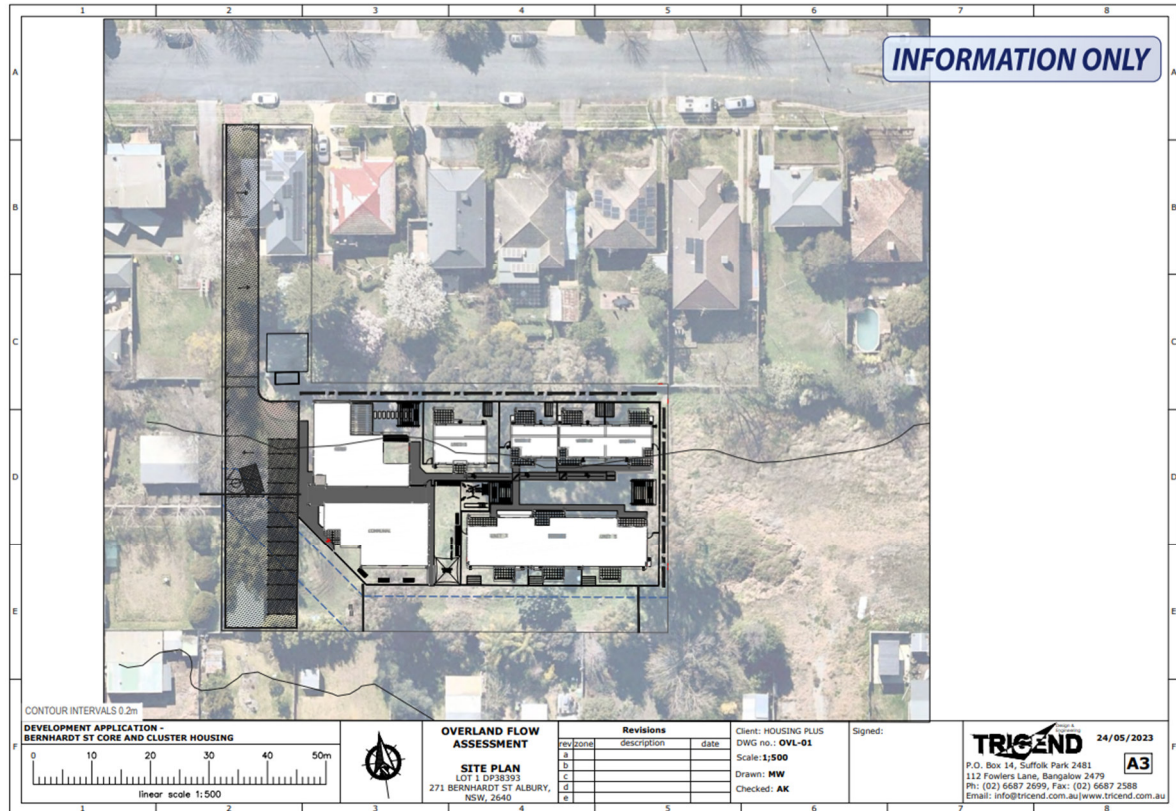


Figure 2: Development layout excerpt for Housing Plus – TRICEND 2023

2. HYDROLOGICAL ANALYSIS

2.1 OVERVIEW AND APPROACH

The hydrologic analysis involves estimating peak flows for the minor and major flow conveyance systems at critical locations in the existing network. Flows defined by AlburyCity's Stormwater design guidelines are as follows:

- ▶ Minor flows are considered as those up to the 10% AEP storm event. These flows are typically conveyed via the underground drainage network.
- ▶ Major flows are considered to be the 1% AEP storm event. Major flows are collected and conveyed via the local road network, spilling into the designated receiving drainage infrastructure.

For the purposes of this report, major and minor flows were estimated using the Rational Method for Estimation, with Australian Rainfall & Runoff 2019 rainfall data. (See Appendix C).

2.2 EXISTING CATCHMENT DELINEATION AND OUTFALL CONDITIONS

To determine the flows through the subject site, catchment analysis was performed using a high-resolution LiDAR derived DTM with 100 mm contours (ELVIS, 2023), as well as a site visit which was conducted during heavy rain on Thursday, 8 June, 2023 (Figure 3).

The site was evaluated as a single catchment with a single outfall located at the downstream end of the subject site, as can be seen in the provided catchment plan in Appendix C.

Table 1: Catchments and outfall conditions

Catchments	Description
A (10% AEP)	Existing developed catchment area determined by all overland flow paths and pipe flows
B1 (1% AEP)	Existing developed catchment area determined by overland flow paths only. A portion of this catchment has been shown to bypass the subject site.
B2 (1% AEP)	Additional 5.9 Ha area estimated to contribute pipe flows only to the outfall (*up to 10% AEP flows)

*Conservative estimate due to site factors such as blockage, undersized pipes or aged assets affected by tree roots as seen in Figure 3 below.

A summary of the flow results based on the catchment areas, are provided in Table 2. Refer to Appendix C for the calculation summary.

Table 2: Proposed Catchments

Catchment	Area (Ha)	Velocity (m/s)	Tc (Mins)	Ave. Fraction Impervious	1% AEP flow (m ³ /s)	10% AEP flow (m ³ /s)
A	19.5	2.5	9.8	0.40	-	2.39
B1	13.7	1.5	11.8	0.39	2.74	-
B2	5.9	2.5	7.7	0.43	0.82	-
B Total					3.56	



Figure 3. Site visit images from 08-06-2023 showing debris and lengths of flat kerb, causing flows to breach the existing kerb and flow across the one-way cross-fall roads, out of subject site's overland flow catchment.

3. HYDRAULIC ANALYSIS

This section of the report will check the capacity of the existing DN750 drainage network and provide insight into the potential size of drainage channels required to convey the overland flows calculated in above in section 2.

3.1 MINOR DRAINAGE NETWORK

Manning's Pipe Capacity calculations have been conducted to assess the capacity of the existing drainage network as shown in figure 4.

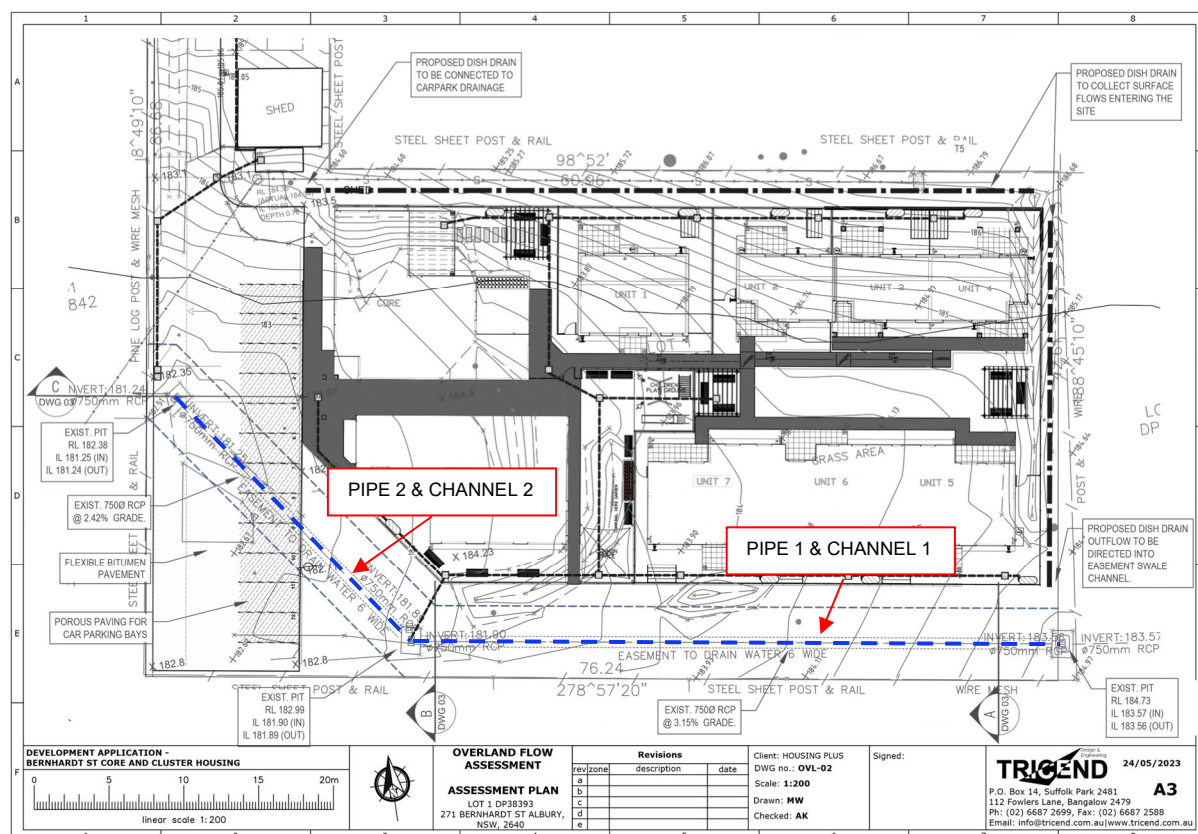


Figure 4. Development layout excerpt for Housing Plus – TRICEND 2023

A summary of the indicated pipe capacity is provided in Table 3

Table 3: Pipe Capacity

Pipe	Pipe Diameter (mm)	Slope (%)	Q _{capacity} (m ³ /s)	Pipe Velocity (m/s)	Q _{10%} (m ³ /s)	Gap Flows (m ³ /s)
1	DN750	3.15	1.98	4.47	2.39	0.41
2	DN750	2.42	1.73	3.92	2.39	0.66

Refer to Appendix C for the catchment areas and for more detail on these calculations.

As can be seen by Table 3 above, both pipes 1 & 2 have a capacity that is less than the calculated 10% AEP minor storm flows, as such both produce a theoretical gap flow— where an approximate 660L/s overland flow would occur during a 10% AEP for pipe 2.

3.2 MAJOR DRAINAGE NETWORK

In a major storm event, the pipe network will convey the calculated capacity identified in section 3.1, and the remaining flow (gap flow) will be expected to be conveyed via the 6m drainage easement overland. Since the overland flow path has been moved from the existing low point with the placement of the development, channel sections were explored to identify suitable sizing to convey the flow as per Appendix D.

A channel profile was selected for each of the two sections to determine which section may be critical. A channel to fit the 6m wide drainage easement was used with 1:4 batters up to a 200mm channel depth, capacity was checked for both overland channels, based on the current topography, being Channel 1 at 1:31 grade and Channel 2 at 1:49 grade.

To represent the catchments for the site fairly, care was taken to evaluate the overland flow paths for the 1% AEP event for the 13.7ha area, while adding the 10% AEP flows for the 5.9ha area to a total of **3.56 m³/s**.

Table 4: Major storm event gap flow calculation

Pipe	Q _{1%} (m ³ /s)	Pipe Flows (m ³ /s)	Gap Flows (m ³ /s)
1	3.56	1.98	1.58
2	3.56	1.73	1.83

Table 5: Channel capacity flow check

Channel	Grade	Q _{capacity} (m ³ /s)	Velocity (m/s)
1	1 in 31	2.89	2.78
2	1 in 49	2.30	2.21

Table 6: Channel capacity flow check

Combined Pipe & Channel	Capacity Q _{Total} (m ³ /s)	Q _{1%} (m ³ /s)	Surplus capacity
1	4.87	3.56	1.31
2	4.03	3.56	0.47

As shown above, both combinations of pipe and channel can effectively convey the 1% AEP storm event flows with surplus capacity.

Spiire recommends that in designing the overland stormwater conveyance through the site, given the low cover on the existing 750mm pipe, the construction of an earth berm or retaining walls may be required to achieve the same channel section, grade and hence capacity above the existing pipe, within the 6m drainage reserve.

The freeboard amount of 150mm above the 1% AEP levels for Finished Floor Levels is recommended. Depending on the channel cross section adopted, the important criteria is that the channel capacity is sufficient to carry the above flows, with sufficient freeboard to protect proposed new buildings, as well as neighbouring properties.

4. LIMITATIONS

Limitations exist with respect to the above report, with the following to be considered:

- ▶ A Staging plan is to be finalised to enable a strategy for temporary works, as such the catchments are likely to change, but the general concept will be adopted, and;
- ▶ Cultural heritage, fauna and flora, and geotechnical information was not available
- ▶ Existing pipe capacity outside of subject site not available, conservative assumptions in place to mitigate

5. SUMMARY AND RECOMMENDATIONS

This Report was carried out for Housing Plus to demonstrate that the proposed development is viable when considering the hydraulic & hydrological, and authority requirements.

The existing site conditions were assessed including the DN750 pipe capacity and the existing catchment flows in minor and major storm events. In a minor storm event, the system may yield some overland flow, and in a major storm event, there is enough combined capacity in the existing pipe and a proposed 6m wide channel to convey the flows with some surplus, as summarised below;

- ▶ Hydrological analysis found the minor storm event flows (10% AEP) of the existing catchment through the subject site generates gap flows of up to 660L/s.
- ▶ The major storm event flows (1% AEP) can be conveyed and catered for by the existing DN750 pipe and a 6m wide channel with up to 470L/s additional capacity in the critical section.
- ▶ It is recommended that the adopted channel cross section be assessed to ensure adequate freeboard above the 1% AEP level to proposed buildings.

6. REFERENCES

1. AlburyCity Council, 2009, Subdivision and development standards – Part 3 – Guidelines for stormwater drainage design
2. ELVIS, 2023, Elevation and Depth – Foundation Spatial Data, viewed 1 June 2023
<<https://elevation.fsdf.org.au/>>

APPENDIX A – EXISTING CONDITIONS SURVEY



Notations

- Date of survey: 30/09/2022 & 04/10/2022
- Lengths shown are in metres
- Coordinates are to Map Grid Australia 2020 (MGA2020) vide PM10942 and SSM9260
- Levels are to Australian Height Datum vide PM10942 and SSM9260
- Contour interval is 0.2 metres
- Depth Limitation does not apply

Features and Levels shown on this plan are for general design works only - any critical dimensions required should be requested independently of this plan. Prior to any demolition, excavation or construction on this site the relevant Authorities should be contacted to ascertain detailed locations of all existing services and the possible locations of future services.

For site dimensions and easement details please refer to the relevant Certificate of Title.

Date of Aerial Imagery: 26/08/2022
Aerial Imagery source: Nearmap

Legend

- × EXISTING SURFACE
- ⊗ TREE TRUNK
- ▢ GRATED PIT
- ⊥ INVERT
- ⊥ COMMUNICATIONS PIT
- ⊥ COMMUNICATIONS MARKER POST
- ⊥ GAS METER
- ⊥ FIRE HYDRANT
- ⊥ WATER METER
- ⊥ WATER TAP
- ⊥ UNCLASSIFIED PIT
- ⊥ GATE
- ⊥ SEWER PIT LID
- ⊥ SEWER INSPECT SHAFT
- FENCE
- DRAIN
- CENTRELINE OF BITUMEN
- EDGE OF CONCRETE
- DRIVEWAY
- EDGE OF FORMATION
- BACK OF KERB
- INVERT OF KERB
- LIP OF KERB
- AWNING
- BUILDING
- HOUSE
- WOOD RETAINING WALL
- SHED
- TOE OF BANK
- TOP OF BANK
- VEGETATION
- OVERHEAD POWERLINES
- SEWER MAINS
- EXISTING DRAINAGE

Feature & Level Survey

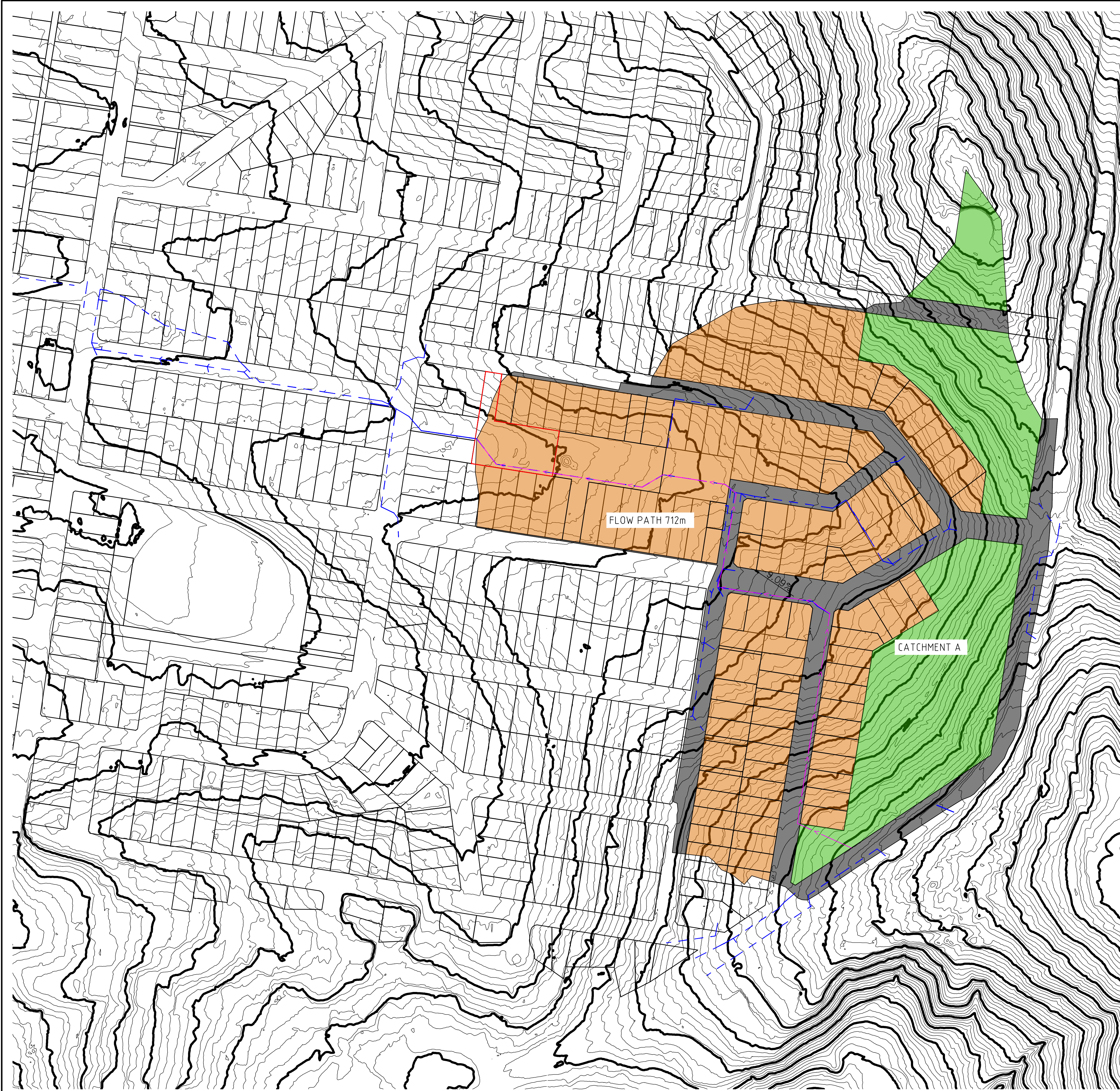
Lot 1 DP38393
271 Bernhardt Street, East Albury

Co-ordinate Datum	MGA 2020 Zone 55	Scale A1	1 : 250	2.5	0	2.5	5	7.5
Date	20/01/2023	Sheet	1	of	1			
Drawing No.	310719P03	Version	1					
CAD Ref.	G:\32\320952\000\CIVIL\ACAD\XREF							
Drawn By	HMW	Checked By	NDR					
REV	AMENDMENT			APPROVED		DATE		

APPENDIX B – PROPOSED DEVELOPMENT

APPENDIX C – CATCHMENT PLANS, RATIONAL ESTIMATION CALCULATIONS

file name: 320952-000CD500.dwg layout name: CD500 plotted by: Thomas Stahls
file location: G:\320952\000\CD500\CD500.dwg plot date: 15/06/2023 4:07 PM Sheet: 5 of 7 Sheets



- LEGEND**
- SUBJECT SITE
 - FLOW PATH
 - EXISTING DRAINAGE
 - 1m CONTOUR EXISTING
 - ROAD RESERVE
 - RESIDENTIAL
 - OPEN RESERVE

DRAINAGE INFORMATION 10% AEP FRACTION IMPERVIOUS		
CATCHMENT TYPE	AREA (HA)	FRACTION IMPERVIOUS
ROAD RESERVE	4.12	0.85
RESIDENTIAL (NORMAL HOUSE BLOCK)	10.44	0.42
OPEN SPACE	4.98	0.00
TOTAL	19.54	0.40

10% AEP CATCHMENT A:
AREA: 19.5
FRACTION IMPERVIOUS: 0.40
Tc: 9.8 MIN
I: 93.2mm/Hr
Q: 2.39 m³/s

Rev	Amendments	Approved	Date

Scale

NOT TO SCALE

System Certified

© Spiire Australia Pty Ltd All Rights Reserved

This document is produced by Spiire Australia Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

445 TOWNSEND STREET ALBURY
NSW 2640 AUSTRALIA T 61 2 6051 1300
spiire.com.au ABN 55 050 029 635

Designed	Checked
Authorised	Date

**271 BERNHARDT STREET EAST ALBURY
STORMWATER DRAINAGE ANALYSIS**

10% AEP MINOR DRAINAGE CATCHMENT PLANS - SHEET 1
ALBURY CITY COUNCIL
HOUSING PLUS

PRELIMINARY Dwg No **320952-000CD500-** Rev



Project:	Bernhardt Street	Designed:	T.STAATS
Reference No:	320952	Checked:	P.MCLACHLAN

Annual Exceedance Probability (%)

AEP Coefficients	63.20%	50%	20%	10%	5%	2%	1%
C0	0.5336493	0.65351	0.959046	1.125124	1.265775	1.427604	1.5369381
C1	0.7152455	0.71055	0.705713	0.707086	0.696599	0.63906592	0.60090464
C2	0.1134747	0.11591	0.112303	0.104596	0.112178	0.17426366	0.2147623
C3	-0.08413	-0.0834	-0.07671	-0.070271	-0.07111	-0.094737001	-0.1098243
C4	0.0166005	0.01603	0.013599	0.011661	0.01133	0.015369797	0.017880289
C5	-0.001388	-0.0013	-0.00098	-0.000743	-0.00067	-0.000988714	-0.001179687
C6	4.22E-05	3.81E-05	2.40E-05	1.39E-05	1.01E-05	1.96E-05	2.50E-05

AEP to ARI Conversion

AEP %	ARI
63.20%	1
50%	1.44
20%	4.48
10%	10
5%	20
2%	50
1%	100

Copyright Commonwealth of Australia 2016 Bureau of Meteorology (ABN 92 637 533 532)

IFD Design Rainfall Coefficients

Issued: 8-Jun-23

Location Label:

Requested c Latitude -36.0851 Longitud 146.932913

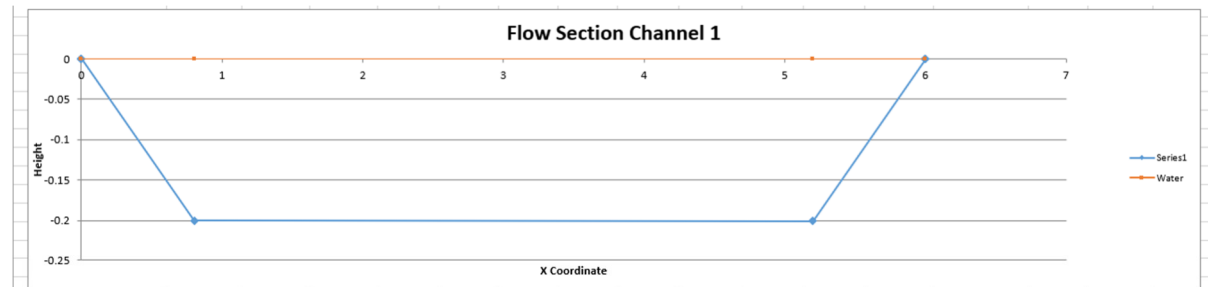
Nearest grid Latitude 36.0875 (S) Longitud 146.9375 (E)

1% AEP URBAN ARI Drainage Calculations

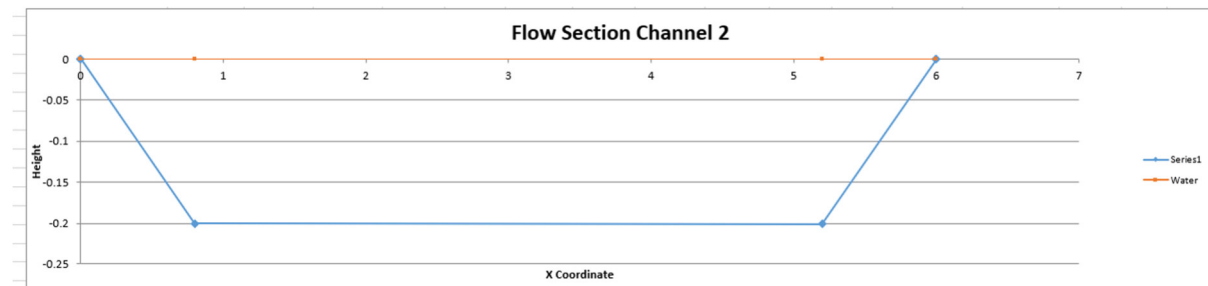
DEVELOPED CATCHMENT

Catchment	Street	Area (ha)	Σ A (ha)	C 1%	C 10%	Ae 1% (ha)	Σ Ae 1% (ha)	Ae 10% (ha)	Σ Ae 10% (ha)	Flow Length (m)	Velocity 1% (m/s)	Velocity 10% (m/s)	Tc 1% (mins)	Tc 10% (mins)	Int 1% (mm/hr)	Int 10% (mm/hr)	Q 1% m3/s	Qpipe m3/s	Qgap m3/s	Comments
Q10 Catchment A		19.5	19.5		0.47			9.21	9.21	712		2.5		9.75				2.386		Q10 Catchment A
Q100 Catchment B1		13.7	13.7	0.56		7.63	7.63			616	1.5		11.84		129.37		2.742		0.356	Q100 Catchment B1
Q10 Catchment B2		5.9	5.9	0.59	0.49	3.42	3.42	2.85	2.85	400	1.5	2.5	9.44	7.67	143.31	103.40	1.363	0.820	0.544	Difference area calc for Q10
																	3.561	1.730	1.831	Modified Q100 area to add Q10 5.9ha

APPENDIX D – PC CONVEY SECTIONS



	1 in 50	1 in 200	1 in 300	1 in 800	Channel 1 Pipe 1	Total	Q100	Q10 Pipe	Overland Gap
Grade	0.02	0.005	0.0033333	0.00125	0.032258	750			
Slope	0.02	0.02	0.02	0.02	0.02				
n	0	0	0	0	0				
RL	1.041	1.041	1.041	1.041	1.041				
Area	6.049	6.049	6.049	6.049	6.049				
Wetted Perimeter	0.172	0.172	0.172	0.172	0.172				
Hydraulic Radius									
Velocity	2.19 m/s	1.09 m/s	0.89 m/s	0.55 m/s	2.78 m/s	4.47 m/s	1.50 m/s	2.50 m/s	
Flow	2.28 m ³ /s	1.14 m ³ /s	0.93 m ³ /s	0.57 m ³ /s	2.89 m ³ /s	1.98 m ³ /s	3.56 m ³ /s	1.98 m ³ /s	1.58 m ³ /s



	1 in 50	1 in 200	1 in 300	1 in 800	Channel 2 Pipe 2	Total	Q100	Q10 Pipe	Overland Gap
Grade	0.02	0.005	0.0033333	0.00125	0.0204082	750			
Slope	0.02	0.02	0.02	0.02	0.02				
n	0	0	0	0	0				
RL	1.041	1.041	1.041	1.041	1.041				
Area	6.049	6.049	6.049	6.049	6.049				
Wetted Perimeter	0.172	0.172	0.172	0.172	0.172				
Hydraulic Radius									
Velocity	2.19 m/s	1.09 m/s	0.89 m/s	0.55 m/s	2.21 m/s	4.47 m/s	1.50 m/s	2.50 m/s	
Flow	2.28 m ³ /s	1.14 m ³ /s	0.93 m ³ /s	0.57 m ³ /s	2.30 m ³ /s	1.73 m ³ /s	3.56 m ³ /s	1.73 m ³ /s	1.83 m ³ /s

RGS33442.1 – AI

9 February 2023

Housing Plus
PO Box 968
ORANGE NSW 2800
Email to: beno@housingplus.com.au

Attention: Ben Ogilvie

Dear Ben,

**RE: Proposed Housing Projects – 271 Bernhardt Street Albury NSW
Geotechnical Site Classification**

1 INTRODUCTION

Regional Geotechnical Solutions Pty Ltd (RGS) has undertaken geotechnical investigations and assessment at 271 Bernhardt Street Albury NSW for a proposed residential housing project. This report presents the results of the assessment.

Concept plans provided indicate the development will consist of eight individual buildings with a 'common open space between. The buildings are expected to be single storey slab on ground. The property is a battle-axe block and will be accessed via Bernhardt Street to the north. Cut to fill earthworks are likely to be required given the sloping nature of the site to achieve level building platforms. It is assumed that the performance expectations of AS2870-2011 are acceptable.

The purpose of the geotechnical assessment is to provide a site classification in accordance with AS2870-2011 *Residential Slabs and Footings*, to assist in the design of foundations for the proposed buildings.

In addition to the geotechnical assessment a preliminary visual appraisal for potential site contamination was undertaken. A detailed site contamination assessment including site history, soil sampling and analysis was outside the scope of works.

2 FIELD WORK

Field work for the assessment was undertaken by a Geotechnical Engineer from RGS and included the following:

- Observation of site features and surrounding features relevant to the geotechnical conditions of the site.
- Excavation of three boreholes to depths of up to 1.8m.
- Dynamic Cone Penetration (DCP) testing adjacent to some of the boreholes.
- Hand Penetrometer testing was undertaken on recovered soil to assess the soil strength.



- Samples were collected for laboratory testing.

Engineering logs of the boreholes are attached. Test locations are shown on the attached Figure 1 which were obtained by measurements to prominent site features and boundaries.

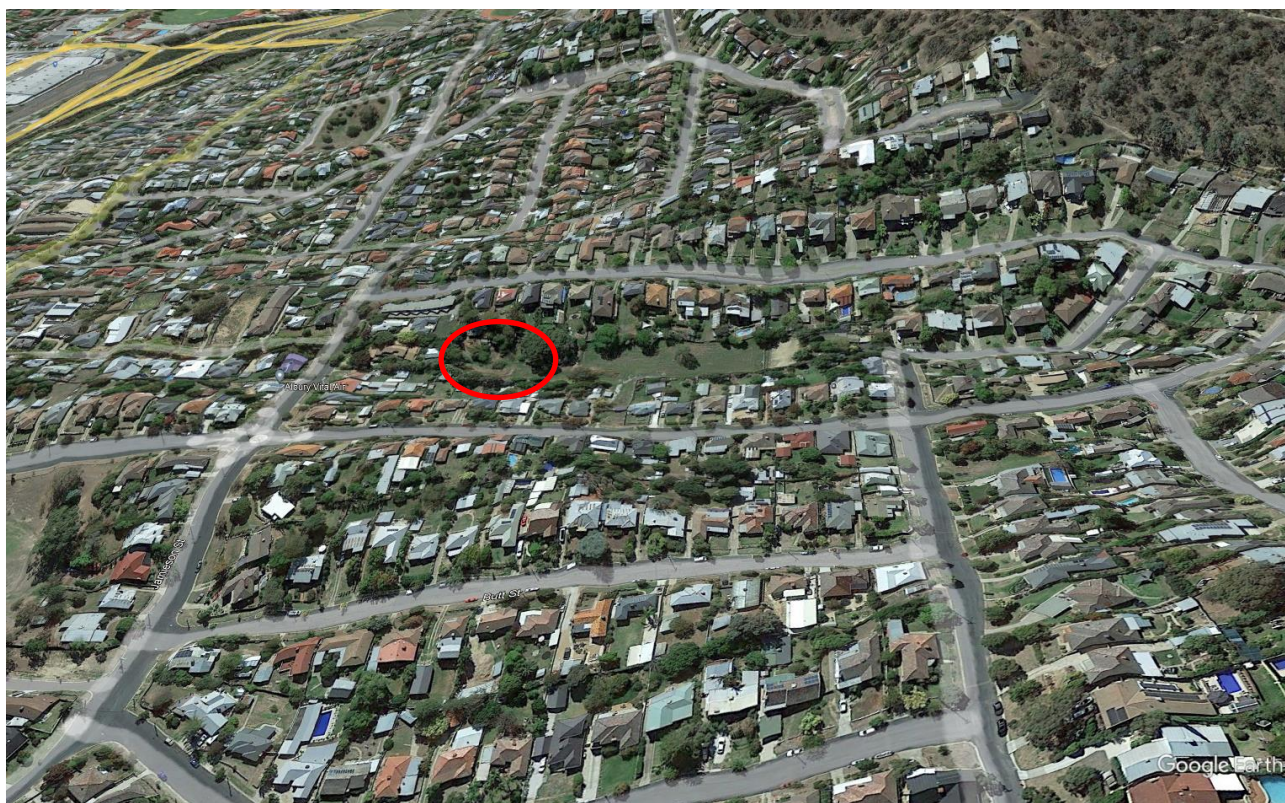
3 SITE CONDITIONS

3.1 Surface Conditions

The area is characterised by moderately to steeply sloping residual topography. The site is situated within an east to west flowing gully formation that falls to the west at about 1 to 2°. The slopes to the north rise at 3 to 4° and to the south at 1 to 3°.

A Google Earth image that illustrates the site location and site setting is reproduced below.

Diagram 1: Site Location and Setting



The site is grassed with numerous shrubs and medium to large trees. The area has been modified with minor site regarding and construction of earth fill diversion mounds.

There is a garden shed / garage workshop area in the south western corner and a small timber garden shed along the northern boundary. There are abandoned garden beds along the northern boundary adjacent to the garden shed.

The investigations were undertaken shortly after a significant rainfall event. The site was not trafficable and there was ponded surface water and minor flows along the southern portion.

There were several soil piles and burn piles around the site.

To the north, south and west is residential housing and to the east is vacant land.



Site photographs illustrating site features are provided below in Plate 1.

Plate 1: Site Photographs



Looking west across the site. Showing long grass cover, shrubs and trees and sheds / garage rear of photograph.



Surface water flowing along southern side of site.



Shed / Garage in south-western corner.



Garden shed and gardens along western portion of northern boundary.

3.2 Subsurface Conditions

The 1:250 000 Wangaratta geology map indicates the site is underlain by metamorphic schist, spotted schist, phyllite.

A summary of the subsurface profiles encountered in the boreholes is presented in Table 1.



Table 1: Summary of Subsurface Conditions

Material Name	Material Description	Depth to Base of Material Layer (m)		
		BHA1	BHA2	BHA3
Fill / Topsoil	Silty Clay, Clayey Silt and Sandy Silt	0.3	0.1	0.1
Colluvial	Clayey Silt and sandy silt, low to medium plasticity, firm to hard / friable.	--	0.6	0.8
Residual Soil	Silty Clay medium to high plasticity, stiff to very stiff and friable.	≥1.8	≥1.8	≥1.2

Note: ≥ Indicates base of material unit not encountered.

-- Indicates material not encountered.

The DCP tests generally indicate an increase in strength with depth. The DCP values increase significantly from depths of around 1.3 to 1.6m which is inferred to be in the upper extremely weathered rock profile.

Groundwater seepage was encountered during the drilling of BH2 at a depth of 1.0m. Seepage was encountered at the surface in BH1 which is associated with surface water inflows. No seepage was encountered in BH3. It is noted the investigations were undertaken shortly after a period of heavy rainfall. The site contained ponded surface water and minor surface water flows at the time of the site assessment.

3.3 Laboratory Test Results

Atterberg limits and linear shrinkage testing was undertaken on a sample of silty clay recovered from BHA1. The results of the testing are summarised in Table 2.

Table 2: Results of Laboratory Testing

Sample Location	Depth	Material Description	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Linear Shrinkage (%)
BHA1	0.4 to 0.5	Silty Clay, Medium Plasticity	40	16	24	7.0

4 GEOTECHNICAL CONSIDERATION

The site is situated within a gully formation that is poorly drained. The site assessment was undertaken shortly after a period of heavy rainfall and was untrafficable with areas of ponded water and minor surface water flows. The upper profile had significantly softened as a result of the rainfall.

Site regrading is likely to be required to achieve proposed finished floor levels. Site filling will also be desirable to elevate building and pavement areas above surrounding site levels. The upper profile includes colluvial soils and high plasticity residual clays. Based on the assessment undertaken the following geotechnical considerations are highlighted:



- Site Drainage - During the investigations significant surface water and groundwater seepage was observed. This could be attributable to recent rainfall and may not necessarily be an ongoing issue, however it should be considered during the design and construction stages. Site earthworks may be hindered by poor site drainage if not appropriately managed. Surface water and seepage into excavations could be controlled by construction of upslope drainage swales and bunds, construction and maintenance of appropriate cross falls and gravity drainage to sumps or downslope outlets.
- Filling – the site will likely require filling. Given the poor site drainage conditions and firm colluvial and high plasticity upper soil profile subgrade improvement will likely be required. This could include the removal of the upper 300 to 500mm and replacement with select fill and / or rock bridging. This will be required to provide a suitable foundation upon which to place fill.

Further advice pertaining to the above and other issues is provided in the following sections.

5 SITE CLASSIFICATION

The site classification presented herein is provided on the basis that the performance expectations of AS2870-2011 are acceptable for the proposed structures.

The site classification in its current state is based on the following:

- Depth of design suction change of $H_s = 1.8\text{m}$;
- Crack depth multiplication factor of 0.5;
- Change in suction at design surface level of $\Delta u = 1.2$;
- A shrink-swell index of 2.0% for the residual clay based on the results of Atterberg limit testing; and
- Groups of trees located within a distance of their mature height from the proposed buildings.

Due to the presence of trees and poor site drainage conditions (abnormal moisture conditions) in accordance AS2870-2011 the site is classified Class P and footings designed on the basis of engineering principals.

Based on the above, a characteristic surface movement (y_s) of up to 40mm is predicted for the site in its existing condition when assessed in accordance with AS2870-2011 (equivalent to that of a Class M classification).

Shrink-swell related movements can be affected by alterations to the soil profile by cutting and filling, and by the suction related effects of trees close to the building area. The effects of any such cutting, filling or tree planting should be considered when selecting design values for differential movement across the slab.

Site maintenance must comply with the recommendations and advice provided in CSIRO Sheet BTF18 "*Foundation Maintenance and Footing Performance: A Homeowners Guide*" a copy of which can be obtained from www.csiro.au.

6 SITE PREPARATION AND EARTHWORKS

Details of proposed site works are unknown but will likely require site regrading to achieve level building platforms. The following general comments and recommendation are provided regarding site works:



- Strip and remove all vegetation, root affected soils, topsoil, and any existing fill to expose the underlying natural soils. Stripped topsoil materials should be stockpiled for landscaping purposes only.
- Following stripping, the exposed subgrade materials must be proof rolled to identify any wet or excessively deflecting material. Any such areas should be over excavated and backfilled with an approved select material. It is expected that the upper profile will perform poorly and will therefore require some form of subgrade improvement. This could entail the over excavation of the upper 300 to 500mm of the exposed subgrade and placement of rock bridging and / or select material.
- Proposed fill should comply with the requirements as defined in AS 3798-2007 *Guidelines on Earthworks for Residential and Commercial Developments*. The fill should be a well graded granular material with a PI of less than 15% and a maximum particle size of 100mm. Clay fill should not be used. The material should be assessed by a geotechnical testing authority prior to use.
- Fill should not be placed on slopes greater than 10H:1V. For slopes in excess of this subgrade should be benched.
- Fill should be overconstructed and cut back to the compacted profile.
- Fill batters should no steeper than 3H:1V for heights up to 1m and should be topsoiled and vegetated immediately on completion to reduce the potential for scour and erosion.
- Approved fill beneath structures should be placed in layers not exceeding 300mm loose thickness and compacted to a minimum of 95% Standard Compaction and within $\pm 2\%$ of Optimum Moisture Content (OMC);
- All fill for the support of structures should be placed and compacted in accordance with the recommendations outlined in AS3798-2007 *Guidelines on Earthworks for Residential and Commercial Developments*, under Level 1 supervision.

7 FOOTINGS

The investigations encountered a variable subgrade which will be significantly regraded to create level building pads. It is anticipated the buildings will be constructed on fill. Provided the fill is placed in accordance with the recommendations herein the footings can be designed based on the following:

- Shallow footings comprising raft slab, waffle pod, strip or pad footings founded within the fill (Level 1) could be adopted.
- Shallow footings founded entirely within controlled fill can be designed based on an allowable base bearing pressure of 100kPa.
- Provided the fill is placed in accordance with the comments and recommendations in this report footings can be designed in consideration of potential shrink swell movement of up to 40mm.
- All footings should be entirely founded on similar material and outside or below all zones of influence resulting from existing or future service trenches.

Prior to the placement of concrete, we recommend that footings be observed and assessed by an experienced Geotechnical Engineer to assess that the correct founding material has been achieved. Concrete should be placed immediately after the excavation and assessment of the footings.



8 SITE CONTAMINATION

A detailed site contamination assessment was outside the scope of works for this project. The assessment was limited to a visual appraisal during the geotechnical site assessment. The assessment included:

- Observation of site surface features to assess possible signs / evidence of potential gross contamination such as soils staining, building debris (including potential asbestos containing material (ACM)), fill.
- Assessment of material recovered from the boreholes for obvious signs of potential contamination such as soil staining and odours or potential contaminating materials such as ACM.
- Brief review of historical online images to assess possible contaminating activities such as previously demolished houses (ACM) or earthworks activities or soil stockpiling / dumping.

The following points are noted regarding site contamination:

- No obvious signs of potential gross contamination such as soil staining or odours were observed during the site assessment.
- Some site regarding and fill mounds are located around the site. The origins and make up of these fill mounds is unknown.
- There is a garage and workshop in the south western corner and a garden shed adjacent to gardens along the northern boundary. These building may contain or may have previously contained chemicals such as fuel, oils, herbicides and pesticides. These may have been spilt or leaked causing localised contamination.
- Historical images indicate the site has been vacant and undeveloped from as far back as the early 1960s.

No gross contamination was identified during the brief assessment. No potential ACM was observed. While the potential for gross contamination being encountered is considered low given presence of fill mounds, garage / workshop areas and gardens there is potential for minor contamination such as ACM, heavy metals, petroleum products, herbicide / pesticide etc, to be encountered during site works.

9 LIMITATIONS

This report comprises the results of an investigation carried out for a specific purpose and client as defined in the document. The report should not be used by other parties or for purposes or projects other than those assumed and stated within the report, as it may not contain adequate or appropriate information for applications other than those assumed or advised at the time of its preparation. The contents of the report are for the sole use of the client and no responsibility or liability will be accepted to any third party. The report should not be reproduced either in part or in full, without the express permission of Regional Geotechnical Solutions Pty Ltd.

Geotechnical site investigation is based on data collection, judgment, experience, and opinion. By its nature, it is less exact than other engineering disciplines. The findings presented in this report and used as the basis for the recommendations presented herein were obtained using normal, industry accepted geotechnical design practises and standards. To our knowledge, they represent



a reasonable interpretation of the general condition of the site. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points.

The recommended depth and properties of any soil, rock, groundwater, or other material referred to in this report is an engineering estimate based on the information available at the time of its writing. The estimate is influenced and limited by the fieldwork method and testing carried out in the site investigation, and other relevant information as has been made available. In cases where information has been provided to Regional Geotechnical Solutions for the purposes of preparing this report it has been assumed that the information is accurate and appropriate for such use. No responsibility is accepted by Regional Geotechnical Solutions for inaccuracies within any data supplied by others.

If site conditions encountered during construction vary significantly from those discussed in this report, Regional Geotechnical Solutions Pty Ltd should be contacted for further advice.

This report alone should not be used by contractors as the basis for preparation of tender documents or project estimates. Contractors using this report as a basis for preparation of tender documents should avail themselves of all relevant background information regarding the site before deciding on selection of construction materials and equipment.

If you have any questions regarding this project, or require any additional consultations, please contact the undersigned.

For and on behalf of **Regional Geotechnical Solutions Pty Ltd**

Prepared by

Joel Babbage

Geotechnical Engineer

Reviewed by

Adam Holzhauser

Principal Geotechnical Engineer

Attachments: Borehole Location Plan
 Borehole Logs
 Laboratory Test Results



**REGIONAL
GEOTECHNICAL
SOLUTIONS**

Client:	Housing Plus	Job No.	RGS33442.1
Project:	Proposed Residential Development	Drawn By:	AH
	271 Bernhardt Street Albury	Scale:	NTS
Title:	Test Location Plan	Date:	13-Feb-23
		Drawing No.	Figure 1



ENGINEERING LOG - BOREHOLE

BOREHOLE NO: **BH1**

CLIENT: Housing Plus
PROJECT NAME: Proposed Residential Development
SITE LOCATION: 271 Bernhardt Street, Albury
TEST LOCATION: Refer to Figure 1

PAGE: 1 of 1
JOB NO: RGS33442.1
LOGGED BY: AH
DATE: 28/10/22

DRILL TYPE: Hand Auger
BOREHOLE DIAMETER: 100 mm
INCLINATION: 90°
EASTING:
NORTHING:
SURFACE RL: AHD
DATUM:

Drilling and Sampling					Material description and profile information					Field Test		Structure and additional observations									
METHOD	WATER	SAMPLES	RL (Not measured)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, plasticity/particle characteristics, colour, minor components	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result										
HA	▶	SPTLS 0.10m		0.2		CI-CH	FILL: Silty CLAY, medium to high plasticity, brown and orange-brown, with trace fine grained gravel, dark brown layer 75mm thick a 0.2m depth	M > w _p	S / F	DCP (0.00-1.80m)	0	FILL: LONG GRASS SURFACE WATER									
		0.30m				1															
						0															
		0.50m				CI-CH	Silty CLAY: Medium to high plasticity, orange-brown mottled dark orange-brown				St	1	RESIDUAL								
		D				2															
						0.70m					2										
						3															
						3															
						4															
						5															
						5															
						6															
						7															
						8															
						8															
						8															
						12															
						12															
		Hole Terminated at 1.80 m																			
LEGEND:			Notes, Samples and Tests					Consistency		UCS (kPa)		Moisture Condition									
Water								VS Very Soft		<25		D Dry									
Water Level (Date and time shown)			U ₅₀ 50mm Diameter tube sample					S Soft		25 - 50		M Moist									
Water Inflow			CBR Bulk sample for CBR testing					F Firm		50 - 100		W Wet									
Water Outflow			E Environmental sample					St Stiff		100 - 200		W _p Plastic Limit									
Strata Changes			ASS Acid Sulfate Soil Sample					VSt Very Stiff		200 - 400		W _L Liquid Limit									
			B Bulk Sample					H Hard		>400											
								Fb Friable													
								Density		V Very Loose		Density Index <15%									
								L Loose				Density Index 15 - 35%									
								MD Medium Dense				Density Index 35 - 65%									
								D Dense				Density Index 65 - 85%									
								VD Very Dense				Density Index 85 - 100%									



ENGINEERING LOG - BOREHOLE

BOREHOLE NO: **BH2**

CLIENT: Housing Plus

PAGE: 1 of 1

PROJECT NAME: Proposed Residential Development

JOB NO: RGS33442.1

SITE LOCATION: 271 Bernhardt Street, Albury

LOGGED BY: AH

TEST LOCATION: Refer to Figure 1

DATE: 28/10/22

DRILL TYPE: Hand Auger

EASTING:

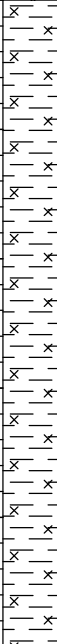
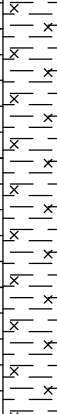
SURFACE RL:

BOREHOLE DIAMETER: 100 mm

INCLINATION: 90°

NORTHING:

DATUM: AHD

Drilling and Sampling					Material description and profile information					Field Test		Structure and additional observations
METHOD	WATER	SAMPLES	RL (Not measured)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION: Soil type, plasticity/particle characteristics, colour, minor components	MOISTURE CONDITION	CONSISTENCY DENSITY	Test Type	Result	
HA				0.2 0.4 0.6		ML	TOPSOIL: Clayey SILT, low plasticity, brown, with rootlets and fine grained sand	M > w _p	S / F			FILL:DENSE LONG GRASS
						ML	Clayey SILT: Low to medium plasticity, red-brown, trace fine grained sand		F			COLLUVIAL/SLOPEWASH
						CI-CH	Silty CLAY: Medium to high plasticity, red-brown, with a trace of fine to medium grained sand and gravel		St / Fr			RESIDUAL
				1.0 1.2 1.4 1.6			Colour change to orange-brown from 1.0m					
				1.8			Hole Terminated at 1.60 m					

LEGEND:		Notes, Samples and Tests		Consistency		UCS (kPa)		Moisture Condition	
Water		U ₅₀ 50mm Diameter tube sample		VS	Very Soft	<25		D	Dry
Water Level (Date and time shown)		CBR Bulk sample for CBR testing		S	Soft	25 - 50		M	Moist
Water Inflow		E Environmental sample		F	Firm	50 - 100		W	Wet
Water Outflow		ASS Acid Sulfate Soil Sample		St	Stiff	100 - 200		W _p	Plastic Limit
Strata Changes		B Bulk Sample		VSt	Very Stiff	200 - 400		W _L	Liquid Limit
Gradational or transitional strata		Field Tests		H	Hard	>400			
Definitive or distinct strata change		PID Photoionisation detector reading (ppm)		Fb	Friable				
		DCP(x-y) Dynamic penetrometer test (test depth interval shown)		Density	V	Very Loose	Density Index <15%		
		HP Hand Penetrometer test (UCS kPa)			L	Loose	Density Index 15 - 35%		
					MD	Medium Dense	Density Index 35 - 65%		
					D	Dense	Density Index 65 - 85%		
					VD	Very Dense	Density Index 85 - 100%		

RG 2.00.3.1UB.GLB Log RG NON-CORED BOREHOLE - TEST PIT RGS33442.1 BH LOGS BERNHARDT ST ALBURY GPJ <<DrawingFile>> 30/11/2022 16:36 10.03.00.09 Daigal Lab and In Situ Test - DGD Lib. RG 2.00.3.2022-03-03 PJ RG 2.00.0.2021-05-30

Material Test Report

Report Number: RGS-512-1
Issue Number: 1
Date Issued: 14/02/2023
Client: Regional Geotechnical Solutions
14/25-27 Hurley Drive, Coffs Harbour NSW 2450
Contact: Adam Holzhauser
Project Number: RGS-512
Project Name: RGS33442.1 - Proposed Residential Development - Housing Plus
Project Location: Lithgow and Albury
Client Reference: RGS33442.1
Work Request: 5625
Sample Number: ACTS23-5625A
Date Sampled: 21/11/2022
Dates Tested: 10/02/2023 - 13/02/2023
Remarks: RGS33442.1
Sample Location: BH A1-0.4-0.5m



AC TESTING SERVICES
SOILS | AGGREGATES | CONCRETE

P 0438 857 377 E info@actestingservices.com.au ABN 41 634 083 793
Nambucca Valley Laboratory 6 West St, Macksville NSW 2447
Armidale Laboratory Shop 11/215 Mann St, Armidale NSW 2350

Nambucca Heads
6 West Street Macksville NSW 2447
Phone: 0438 857 377
Email: adam@actestingservices.com.au



Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Adam Crawford
Lab Manager

NATA Accredited Laboratory Number: 19604

Atterberg Limit (AS1289 3.1.1 & 3.2.1 & 3.3.1)		Min	Max
Sample History	Oven Dried		
Preparation Method	Dry Sieve		
Liquid Limit (%)	40		
Plastic Limit (%)	16		
Plasticity Index (%)	24		

Linear Shrinkage (AS1289 3.4.1)		Min	Max
Moisture Condition Determined By	AS 1289.3.1.1		
Linear Shrinkage (%)	7.0		
Cracking Crumbling Curling	None		

A guide to your stay



A welcome guide for women and children

Housing  **Plus**

the
Orchard 



contents

Welcome

Welcome to The Orchard
About The Orchard
Our role
We welcome your feedback
Contact us
About this guide

Your arrival

General resident information

Alcohol and illegal drugs
Baby cots
Children
First aid
Fob system
Healing room
Interpreters
Medications
Mobile phones
Noise
Parking
Personal belongings and valuables
Public transport
Refreshments
Rights and responsibilities
Smoking
Spirituality and religion
Transport support
Weapons and prohibited items
Wellness retreat
WiFi

4

Participation

Case plan
Consent for services
Education programs
Equal opportunities
House meetings
Participation agreement
Privacy
Wellbeing activities

8

9

Being a good neighbour

Living in your unit

Cleaning
Cooking appliances
Guest phone
Heating and cooling
Inspections
Laundry
Linen
Maintenance
Pets
Service fee
Smoking
TV and Netflix

Staying safe at The Orchard

BBQ
CCTV
Children

12

14

15

18



- Curfew
- Doors and windows
- Duress alarms
- Fire and emergency
- Hand hygiene
- Ovens and stove tops
- Risk assessments
- Safety plan
- Secret location
- Unsafe activities

Emergency procedures

20

Exiting The Orchard

21

- Check out time
- Exit questionnaire and interview
- Inspection
- Ongoing support
- Personal belongings and valuables
- Unit contents

Important contacts

22

- Emergency contacts
- Counselling
- Crisis accommodation
- Family services
- Financial
- Food and basic needs
- Health advice
- Housing services
- Legal services
- Mental health
- Pet welfare

Other useful contacts

24

- Banking
- Dentist
- Medical services
- Petrol stations
- Pharmacy
- Public transport
- Service centres
- Shopping
- Supermarkets
- Vet

Support us

27

- Donations
- Ways to donate
- Fundraising
- Volunteers



welcome

Housing Plus would like to begin by acknowledging the traditional owners of the land, the Wiradjuri people. Housing Plus also pays respect to Elders both past and present of the Wiradjuri Nation. We respect and honour Aboriginal and Torres Strait Islander Elders past, present and future. We acknowledge the stories, traditions and living cultures of the Traditional Custodians in this room and on this land and commit to building a brighter future together.

Welcome to The Orchard

Your safety and wellbeing are our main concern and our staff will do everything they can to make your stay with us as comfortable as possible. We understand that being away from home is difficult, so we are providing you with this information to help you during your stay.

Our aim at The Orchard is to create **warm, inclusive, homely and calm environments** for our residents. We know that privacy is important for healing and our independent units provide a **space for you to retreat for solitude and alone time with the family**. There are also a range of indoor and outdoor spaces that provide **serenity, calm and balance** so please take time to explore the grounds.

Being away from friends and loved ones can be lonely, so we encourage you to use the common areas to **socialise with other women** who can provide support during this difficult time. If you need help getting to know people, please speak with a staff member about joining one of the many **group activities** we have available.



...Your safety and wellbeing are our main concern...



...The Orchard provides 24-hour emergency accommodation and support for women and children...

About The Orchard

The Orchard provides **24-hour emergency accommodation and support for women and children** who are homeless because of domestic and family violence. It is a safe place where you can live temporarily with your children whilst you decide what you want to do next.

The Orchard has been purpose designed and built to provide **physical safety and improved mental, spiritual and emotional wellbeing**.

The grounds are **accessible for women and children with disabilities** and there is **one fully accessible unit**.

The Orchard accepts women and children from Central West NSW and further afield.



Rehousing



Privacy,
dignity and
independence



Community
engagement



Coordinated
community
response



Prevention
and early
intervention



Connections
with family,
friends and
community



Financial
freedom



Our role

Our staff are here to offer support, address any immediate safety needs, build your capacity to live independently and help you **set and achieve goals for the future**. We aim to provide you with the information and skills you need to build a **future free of violence** for you and your children. We will work with you to develop a case plan – and review this with you regularly during your stay.

Leaving a violent relationship can be a very difficult, lonely and often a very dangerous time. Reclaiming your life after leaving an abusive relationship is never going to be easy, but our staff are here to help you to build your independence.

All we ask of you in return is that you keep yourself and others around you safe by following the instructions contained within this guide.

We
welcome
your
feedback

We encourage comments, constructive suggestions and criticisms about the services The Orchard provides. **Your feedback, good and bad**, helps us to provide the best possible service to women and children.

If you have a concern or wish to discuss an issue, please **speak directly with a staff member** or ask for a **feedback form**.



1800 959 806



theorchard@
housingplus.com.au



Manager, The Orchard
PO Box 968
Orange NSW 2800



Contact us

Our staff are always available to answer any questions you may have during your stay. You can speak directly with a staff member or **call our reception using the guest phone provided** in your unit.

About this guide

This guide is divided into eight sections:

- 1 Your arrival
- 2 General resident information
- 3 Participation
- 4 Living in your unit
- 5 Staying safe at The Orchard
- 6 Exiting The Orchard
- 7 Important contacts
- 8 Other useful contacts

Each section is arranged alphabetically to make it easy for you to find the information you are looking for.



Your arrival

First day

On your first day, you will be asked to read through and sign your **participation agreement** and your CCTV consent form.

A staff member will assess your **level of threat** and work with you to decide what things you can do to **keep you and your children safe for the night**.

Other things will also be explained to you. For example, the emergency procedures, how to use your security fob, how to use the duress alarms and the **Charter of Rights and Responsibilities**.

Don't worry if you can't remember it all. Just ask any of the staff and they will answer any of your questions. This welcome guide also repeats a lot of the information you will be given so you can use this to help you too.

Induction

To help you to settle in, a staff member will:

- Give you a tour of The Orchard, including your room and the areas you will share with other women and children.
- Introduce you to the other people who are staying in and working at The Orchard.

- Make sure you have things to eat and drink for the first 24 hours of your stay, if necessary. After that, we can help you get any shopping you need and assist you in getting your personal belongings from your home if this is what you choose to do.

You will also be told who your case worker is. This staff member is the one who is mainly responsible for working with you on your case plan and any problems you might have. A time will be arranged with your consultation for your first appointment the following day.

The next day

Your case worker will assess if you are suitable to stay at The Orchard on a longer-term basis.

If you are accepted into one of our independent units, you will be told how much you have to pay. Your Centrelink payment, if you are eligible, will pay for your accommodation costs. **You should pay for your accommodation costs through Centrepay**, where possible. If you are working, you will be asked to pay by direct debit.

You will be handed your new security fob and given a guided tour of your unit.

If you are not suitable for one of our independent units, you will be supported to find alternative accommodation.

General resident information



Alcohol and illegal drugs

Alcohol, illegal drugs and drug paraphernalia are **prohibited** at The Orchard.

If you break these rules you will be asked to leave The Orchard immediately.



Baby cots

Baby cots are available on a **first come, first served** basis.

Please speak to a staff member if you need a baby cot.



Children

You are responsible for supervising your young children.

A crèche is available for children aged up to 10 years old. You are responsible for the supervision of your children at all times, unless your child is participating in an activity with workers.



First aid

Our staff are fully trained in first aid procedures. Please speak to a staff member if you need first aid.

You will find a basic first aid kit on top of the fridge inside your unit.



Fob system

The Orchard uses a **fob system to enter and access common areas** within the main building.

You were provided with a security fob when you first arrived, and you must always carry this on you.

Any lost security fobs will incur a \$20 charge.



Healing room

You can use the healing room for **cultural gatherings** or **individual support and healing**.



Interpreters

The Orchard offers a free telephone interpreter service. **This is available 24 hours a day, 7 days per week.**

If you need an interpreter service, please speak to your case worker.

Translating and Interpreting Service (TSl) National is the preferred telephone interpreter service at The Orchard.



Medications

You must keep all prescription medication in your unit **out of the reach of children**.

You are responsible for remembering to take your medication.

General resident information



Mobile phones

Mobile phones, tablets and other wireless devices can be used at The Orchard.

You must be **mindful of the volume of your conversation** if you are in a common area.



Noise

You are asked to respect the needs of other residents by **refraining from loud discussions, playing loud music or allowing doors to slam.**

You must show this courtesy to all residents staying at The Orchard.



Parking

Free parking is available at The Orchard for residents.

You are provided with **secure parking for one vehicle** with your unit.



Personal belongings and valuables

You are responsible for your personal belongings.

We advise that you **do not bring your valuables to The Orchard** as we are unable to accept responsibility for their security and safety. Please leave your valuables in the care of a trusted person.

Do not lend money or personal belongings to other residents at The Orchard.

To keep your personal belongings safe:

- Do not leave your personal items unattended whilst in the company of other residents.
- Keep your valuables in a safe place if you choose to bring them with you to The Orchard.
- Leave your wallet, mobile phone and/or laptop out of plain sight.
- Lock your doors and windows behind you when leaving your unit.

If you do not have space to store your personal belongings in your unit, you may use the **storage provided at The Orchard.** You will be asked to sign a Property Log Agreement Form to log receipt and return of your item/s.

If you need more information about storing personal items, please speak to a staff member.



Public transport

The closest bus stop is located on Boyd Street The train/ coach station is located on Havannah Street.

You can find local bus **timetables** on the Bathurst Buslines website, **www.buslinesgroup.com.au/bathurst/** or by telephoning **02 6331 2744.**

You can find **train and coach timetables** on the Transport for NSW website, **www.transportnsw.info**, or by telephoning **131 500.**

If you need more information about public transport, please speak to a worker.

General resident information



Refreshments

You will find **donated tea and coffee** making facilities in the common kitchen.

Donated pantry items are also available.



Rights and responsibilities

Your rights and responsibilities as a resident at The Orchard are set out in the **Charter of Rights and Responsibilities**.

A copy of this Charter was provided to you in writing as part of your Welcome Pack.



Smoking

For the health and safety of residents, children and staff, all buildings at The Orchard are **smoke free**.

If you smoke, please use the **designated smoking area**.



Spirituality and religion

You must respect the spiritual beliefs and religions of other residents. **Do not try to impose your beliefs or values on others.**

If you need support to connect with groups who offer spiritual and religious activities in the community, please speak to a staff member.



Transport support

The Orchard offers transport support for residents who do not have their own car and need help to get to medical and other appointments.

Transport must be pre-booked and is dependent on availability.

Residents must advise a staff member as soon as possible of their need for transport.



Weapons and prohibited items

Weapons and other items that may cause serious bodily injury are not allowed at The Orchard.

These items must be **checked in at the front desk** and you will be asked to sign a Property Log Agreement Form to log receipt and return of the item/s.

If you need more information, please speak to a staff member.



WiFi

You are given a username and password for **free WiFi** on your arrival.

If you have trouble accessing the WiFi, please speak to a staff member.

Participation



Case plan

The support you receive is based on **your needs and the type of support you want**. This is recorded in your case plan from the information you provided during your initial assessment.

You will agree actions with your case worker based on what you have told your case worker is important to you. Your case worker will meet with you regularly to discuss how things are going with your case plan and set new actions with you.

You can ask for a review of your case plan whenever you want to. Generally, we will carry out a review at regular intervals during your stay or when your circumstances change significantly.

It is important that you take an active role in your case plan.



Education programs

Our staff present a range of education sessions every week and **residents are required to attend**.

Your case worker will recommend education programs for you to attend. These will be recorded in your individual case plan.



Equal opportunities

The Orchard is committed to ensuring that everyone gets **fair and respectful treatment**.

We will not discriminate against anybody because of her ethnic origin, colour, gender, sexual orientation, disability, health status or for any other reason.

Harassment and/or discrimination at The Orchard is taken very seriously.

If you feel you have been unfairly discriminated against, please speak to a worker.



Consent for services

Your consent is needed before accessing services at The Orchard.

By accessing accommodation at the Orchard, you are giving **general agreement to engage in services** at The Orchard. You will be asked to sign a consent form after the need for a service has been explained to you.

You may change your mind at any time. However, if you no longer agree to participate in services at The Orchard, you may be asked to leave the accommodation.



House meetings

You are required to attend house meetings for the duration of your stay at The Orchard. House meetings are held **twice a week**.

House meetings are your opportunity to discuss day-to-day issues with other residents, and to suggest any changes to services you receive.

Participation



Participation agreement

Rules exist for the safety of residents and staff.

By signing the participation agreement, **you are agreeing to live by our rules.**

If you break the rules, a staff member will give you the opportunity to explain why this has happened. She might then give you a written warning.

In some circumstances, you will be asked to leave The Orchard immediately. You will still be able to receive support from our services but not at The Orchard.



Wellbeing activities

The Orchard is supported by a **team of local volunteers** who organise a range of activities for residents, including health and beauty sessions.

You are encouraged to participate in these activities.

Information about wellbeing activities will be provided in the daily house meetings. A timetable of activities is also available in the Wellness retreat.

If you have any **suggestions for activities you want us to organise**, please speak to a staff member.



Privacy

Your privacy and confidentiality are very important to us.

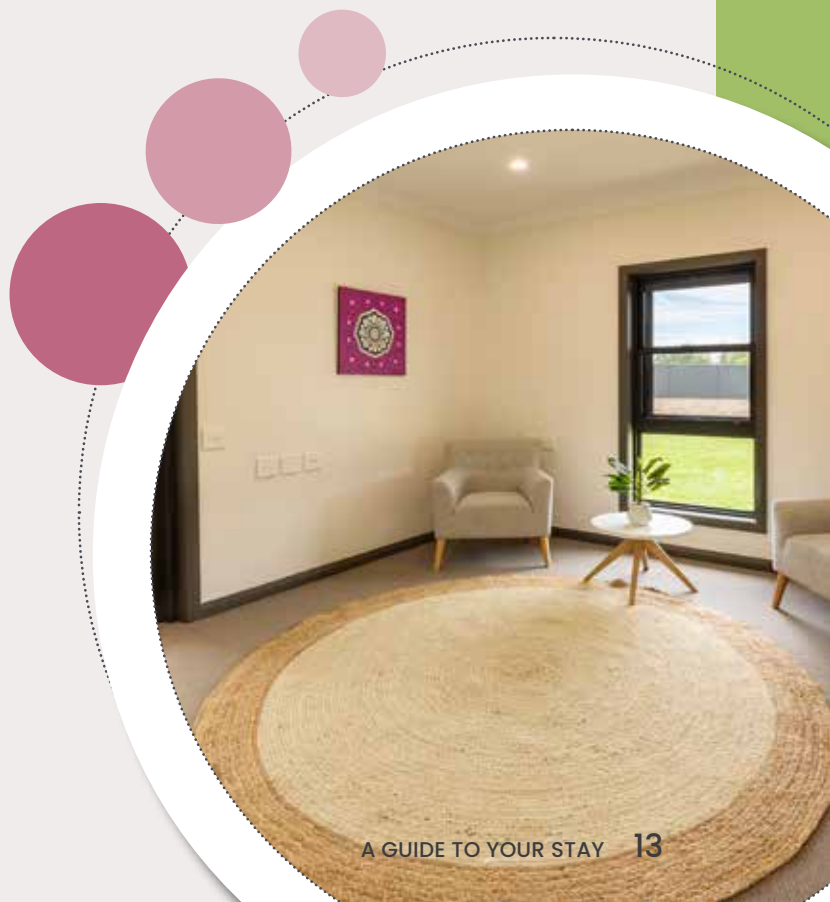
All personal information is securely held in paper and electronic format.

We may disclose this information to other service providers to enable appropriate support services to be provided to you, but only with your consent.

We may also disclose this information as a requirement by law.

By signing a consent form, you are agreeing to the collection, use and sharing of your personal information to **increase your safety or to improve our services.**

If you need more information about privacy and information sharing, please speak to a staff member.



Being a Good Neighbour



Keep the noise down

Turn the volume down on electronics, such as televisions, laptops and mobile phones.

If you want to play loud music, use headphones.

Ask children to play inside after 8pm.

Use the parking space reserved for your unit

Do not park your car on the road.

Be friendly

Say 'hello' or smile when you cross paths with other residents.

Be considerate of common areas

Leave common areas neat, clean and tidy after using them.

Respect the privacy of other residents

Allow your neighbours to have the level of privacy they want.

Don't tell people in the community about other residents.

Be a good pet owner

If you have a pet, clean up after it. Make sure your dog is on a leash when you are outside the boundaries of your own unit.



Living in your unit



Cleaning

You are responsible for **keeping your unit clean and tidy** during your stay at The Orchard.

You will find cleaning appliances and cleaning products in your unit.

In your laundry area, you will see MSDS signs that provide you with information for the cleaning products we provide. This indicates the safe usage of products.

If you need to replenish your cleaning products, please **bring your empty containers to a staff member**.



Cooking appliances

Instructions on how to use the cooking appliances are in the instruction manual in your unit.

This includes instructions on how to use the electric oven, cooktop and microwave.



Guest phone

Each unit has a guest phone for you to call reception.

This phone will only make calls to **local numbers**. You are unable to receive incoming phone calls from the guest phone.

In an emergency, call 000.



Heating and cooling

Living areas in all units are fitted with a heating and cooling system with **individual thermostat controls for your comfort**.

Please allow 20 minutes between adjustments for a change in temperature.

Remember to turn off the heating and cooling when you leave The Orchard or if you leave the unit for an extended period.

Instructions on how to use the heating and cooling system are in the instruction manual in your unit.

Living in your unit



Inspections

Regular inspections of your unit will take place to ensure you are keeping it clean and tidy and you are not in breach of your participation agreement.

At least 24 hours' notice will be given of these inspections.

Inspections will be conducted in the presence of **two staff members**.

Where the level of cleanliness is not acceptable, you will be told what steps you need to take to change this and given a date for re-inspection.

If inspections reveal a breach of your participation agreement, you will be given a reasonable opportunity to put things right.

If you fail to make the necessary changes after a matter has been drawn to your attention, or if the level of cleanliness is persistently not of an acceptable standard, we will pay for a cleaning service or other professional intervention and you will be charged for this and may be asked to leave the Orchard



Laundry

You are responsible for your own laundry during your stay at The Orchard.

Your unit has a **washing machine for your own private use**. Additional facilities are available in the common laundry.



Linen

You are provided with bedding and towels when you arrive at The Orchard.

If you require any additional bedding or towels, please speak to a staff member.



Maintenance

If you find anything in your unit that is not in working order, please call our **Report a Repair** hotline on 1300 435 144 or email facilities@housingplus.com.au



Pets

Small to medium sized, well trained and behaved pets are welcome at The Orchard.

All dogs must be **on a leash** when outside the boundaries of your unit.

All pets must be approved by The Orchard.



Service fee

You are required to pay a service fee each fortnight. This is to be paid through Centrepay or direct debit.

The amount you pay **is tailored to your circumstances**.



Smoking

Smoking is not allowed inside your unit.

Smoking is only allowed in the designated area.



TV

Instructions on how to use the TV are in the instruction manual in your unit. Please ensure that you log out of any subscription services like Netflix on your departure.



RESPECT

TRUST

Community

Growth

Kindness



Staying safe at The Orchard



BBQ

You must not use the BBQ without a staff member present.



CCTV

Common areas at The Orchard are monitored and recorded via CCTV cameras **24/7**.

By signing the CCTV consent form, you agree to Housing Plus using CCTV surveillance.



Children

Where a father has custody of children or visitation rights, **he is not allowed to collect children from The Orchard**.

You must find a safe meeting point away from The Orchard for the safety of other residents, children and staff.



Curfew

You must ensure that you and your children are inside your unit by **9pm** each night.

The security gate at the entrance to The Orchard is locked at 9pm each night.



Doors and windows

Always remember to **lock your doors and windows** when leaving your unit.



Duress alarms

To activate a duress alarm, **press the two red buttons on top of the box and hold for three seconds**.

This will make a high pitched sound that is also sounded in the office.

This will alert staff to the area in which the alarm has been sounded.



Fire and emergency

All buildings, including units, are fitted with **fire alarms and automatic sprinklers**.

You will also find a fire blanket in your kitchen inside your unit.

Our staff are fully trained in fire and emergency procedures.

In the unlikely event of a fire or emergency, you must:

- Find the nearest fire exit and evacuate the building.
- Make your way to the assembly point in the car park.
- Remain calm and wait for staff to tell you what to do.



Hand hygiene

Washing hands or using alcohol-based hand sanitiser **prevents the spread of germs**.

Hand sanitisers are located at each entrance to the main building.

Staying safe at The Orchard



Ovens and stove tops

Always remember to turn off your oven or stove top once you have finished using it.

No cooking is allowed in the common kitchen after 8pm.



Secret location

The location of The Orchard must not be disclosed to any person.

Never disclose the location of The Orchard to your (ex)partner or invite him to visit you.

If you leave the grounds, try to be aware of any person who may be watching you or following you back to The Orchard.



Risk assessments

A risk assessment is carried out so that we can calculate any potential **risks to you and your children** and ensure that we can meet your support needs.

This will happen when you first arrive at The Orchard and if your circumstances change.

Risk assessments are also carried out to calculate the risk to other residents, children and staff.



Unsafe activities

If you notice any unsafe activities happening in the grounds of The Orchard, please **report these activities to a staff member.**



Safety plan

You will work with your case worker to develop a safety plan to **keep you and your children safe:**

- During your stay at The Orchard.
- If you decide to leave The Orchard and return to the perpetrator.
- When you leave The Orchard and settle into your new home and community.





In Case of **FIRE**



Leave your personal belongings.
Take your security fob and gather
your children and pet/s.



Find the
nearest
FIRE EXIT
and evacuate
the building.



Move carefully to
the emergency
assembly point in
the car park.

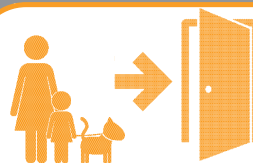


REMAIN CALM
and await further
instructions from
staff.

If you hear or sound the



DURESS ALARM



Gather your
children and pet/s
and enter the
nearest building.



If you are
already inside,
remain where
you are.



Lock all doors
and windows.
Close the blinds.



REMAIN CALM
and await further
instructions from
staff.

Exiting The Orchard



Check out time

All sleepover rooms and units must be vacated by **11am** on your day of departure, or as agreed with your case worker.



Exit questionnaire and interview

When you leave The Orchard, you will be asked to complete an exit questionnaire.

It asks for your comments on the services you've received, what you found helpful and how we can make improvements.

Please fill this in as honestly as possible as it helps us to make any changes needed. It will not affect you if you need to use our services again.

As well as the exit questionnaire, you will be asked to attend an exit interview.

Again, this gives you the chance to tell us how you have found your stay and will help us to make any improvements that are necessary.



Inspection

You will be expected to attend an inspection of your unit prior to leaving The Orchard.

During this inspection, any charges for cleaning or property damage that is **beyond reasonable wear and tear** will be explained to you.



Ongoing support

You will receive an exit plan as part of your case plan before you leave The Orchard.

If you do not have an exit plan, please speak to a staff member.

Your exit plan provides tailored information about the kind of support you will receive to help you transition to independent living.



Personal belongings and valuables

You are responsible for ensuring you take all personal belongings and valuables with you when you leave.

The Orchard is not responsible for lost personal belongings and valuables.

If you leave The Orchard without taking your belongings, you will be given notice that your **items will be disposed of after 14 days.**

Any personal items such as photographs, birth certificate, passport, driver's licence, bank statements, etc. will be disposed of after 90 days.



Unit contents

Except for linen, towels and toiletries, **all items must be left behind for the next person.**

You will be charged for any items you take that belong to The Orchard.

If you require items to furnish your new home, please speak to your case worker who can help you to find suitable items at an affordable price.

Important contacts



Emergency contacts

**In an emergency
CALL 000**



Police

Bathurst Police Station

139 Rankin Street

6332 8699



Fire

Kelso Fire Station

4 Pat O'Leary Drive

6339 8505

Bushfire Information

Call the NSW Rural Fire
Service

1800 679 737



Floods and Storms

Call the SES

132 500



Poison Control

Call the Poisons
Information Centre

131 126



Counselling

1800 RESPECT

1800 737 732

Domestic Violence

Line

1800 656463 (24/7)

Lifeline

13 11 14 (24/7)



Crisis accommodation

Link2Home

1800 152 152 (24/7)



Family services

Brighter Futures (Benevolent Society)

Phone: 1800 236 762

Relationships Australia

91 Seymour Street

1300 364 277

**NSW Department of Communities
and Justice**

6333 0000

Bathurst Family Support

205 Rankin Street

6331 7022



Financial

Lifeline Central West

253 Howick Street

1300 798 258



Food and basic needs

Salvation Army

96 Russell Street

0409 615 345

SalvosConnect Bathurst

86 Bentinck Street

1300 371 288

St Vincent de Paul, Bathurst

64 Keppel Street

02 9061 5398



Health advice

Health direct 1800 022 222 (24/7)

Important contacts



Housing services

Housing Plus 61 Boyd Street

Phone: 1800 603 300

NSW Department of Communities and Justice (Housing)

Level 1, 205 Howick Street, **6332 7777**



Legal services

Aboriginal Legal Service 282 Howick Street
6330 7900

Provides free legal advice, casework, advocacy and representation in mediations and court. Covers all aspects of family law including children issues, property settlements and child support.



Mental health

Bathurst Community Mental Health
(02) 6330 5850

Mental Health Information Support Service 24 hours 1800 011 511

Lifeline 131114

1800 RESPECT 1800 737 732



Pet welfare

RSPCA Safe Beds for Pets Program

9782 4408 or 9770 7555

(weekends and public holidays)

Provides temporary foster accommodation and/or emergency pet boarding, and financial assistance for veterinary treatment, impound fees and transport fees.

Other useful contacts



Banking

Commonwealth Bank of Australia

171 Howick Street

Westpac Bathurst

86-88 William Street

National Australia Bank

103 William Street

Greater Bank

161 Howick Street

ANZ

78 William Street

St George Bank

155 Howick Street



Medical services

Bathurst Health Service

361-365 Howick Street

6330 5000

George Street Medical Practice

115 George Street

6332 5355

Orche Medical Centre

Building 1470 Charles Sturt, University

Panorama Ave

6331 9444



Petrol stations

Crn Boyd Street and 68 Sydney Road



Pharmacy

Blooms The Chemist

39-41 William Street

6331 2599



Dentist

Bathurst Dental Care

154 Bentinck Street

6331 7877



Public transport

Bathurst Taxi	63250022
Taxi Cabs of Bathurst	131 008
Bathurst Buslines	63312744
Bathurst Community Transport Group	63313322
Transport of NSW	131 500

Other useful contacts



Service centres

Centrelink/Medicare

168 Russell Street

Services NSW

Mitchell Hwy



Shopping

Bathurst City Centre

210 Howick Street

A range of stores including Woolworths, Best and Lest and the Reject Shop



Supermarkets

ALDI

128 Russell Street

Coles

47 William Street

FoodWorks

Shop 8, 56 Boyd Street Kelso

IGA Trinity Heights

13 Marsden Lane Kelso

Woolworths Bathurst City Centre

210 Howick Street



Vet

Bathurst Central Animal Hospital

90 Rankin Street

6332 5800



NEWCASTLE PERMANENT
**CHARITABLE
FOUNDATION**

**HELPING
REWRITE
THE
FUTURE**

Now. And for generations to come.

charitablefoundation.com.au





Donations

Your donation will assist us to provide the best possible services to women and children experiencing domestic and family violence.

Donations over \$2.00 are fully tax-deductible and we will send you a receipt for this purpose.



Ways to donate

Mail: Send cheque/money order (payable to Housing Plus) to:
Housing Plus
PO Box 968
Orange NSW 2800

In person: Housing Plus
Suite 1, 113 Byng Street
Orange NSW 2800

Phone: We accept Mastercard or Visa credit cards. Telephone the Engagement and Volunteers Coordinator on 1800 603 300 or 0419 960 710.

Email: donations@housingplus.com.au



Fundraising

For information on organising and running a community fundraising event to support the work of The Orchard contact the Engagement and Volunteers Coordinator.

Phone: 1800 603 300 or
0419 960 710

Email: rochelle@housingplus.com.au

Volunteers

If you are interested in becoming a volunteer at The Orchard, please contact the Engagement and Volunteers Coordinator on 1800 603 300 or 0419 960 710.



 [HOUSINGPLUS.COM.AU](https://www.housingplus.com.au)

 1300 384 357

 theorchard@housingplus.com.au

 [@HousingPlusAU](https://twitter.com/HousingPlusAU)

 [housingplusau](https://www.instagram.com/housingplusau)

 [@HousingPlusAU](https://www.facebook.com/HousingPlusAU)

We acknowledge the stories, traditions and living cultures of the Traditional Custodians of this land and commit to building a brighter future together.