PENRITH
CITY COUNCIL

MAJOR ASSESSMENT REPORT

Application number:	DA19/0241
Proposed development:	Demolition of existing structures and construction of a Two (2) Storey Boarding House with Basement Parking Level and 21 Boarding Rooms
Property address:	159 Jamison Road, PENRITH NSW 2750
Property description:	Lot B DP 413314
Date received:	3 April 2019
Assessing officer	Lauren Van Etten
Zoning:	Zone R3 Medium Density Residential - LEP 2010
Class of building:	Class 3
Recommendations:	Refuse

Executive Summary

Council is in receipt of a development application for the demolition of existing structures and construction of a three storey boarding house containing 21 boarding rooms (including a manager's room) at 159 Jamison Road, Penrith.

The proposal is defined as a boarding house under Penrith Local Environmental Plan 2010 (LEP) and is a permissible form of development within the R3 High Density Residential zone, with consent. The proposal is also permissible within the zone under Division 3 Boarding Houses of State Environmental Planning Policy (Affordable Rental Housing) 2009 (SEPP ARH).

Key issues identified as part of the assessment of the proposed development include:

- Non-compliance with character, accommodation size, landscaped area, private open space, car bike and motorcycle parking controls as required under SEPP ARH.
- Non-compliance with Penrith LEP zone objectives.
- Non-compliance with tree preservation, water and waste management, traffic and access, built form, front setback, building envelope, retaining wall, character and amenity controls under Penrith Development Control Plan (DCP) 2014.
- Bulk, scale and density of the development does not adequately address the character of the area in the vicinity of the site, specifically the front and rear setback and landscape treatment of the site and hardstand area visible from Doonmore Street.
- Visual and acoustic amenity impacts.
- Site constraints due to the limited allotment depth/width, slope and its corner position.
- Inadequate front setback area treatment, particularly given proposed tree removal.
- Amenity impacts related to the scale of the building, the minimal side and rear boundary separation.

The application was notified to adjoining and nearby properties and advertised and exhibited between 12 April to 26 April 2019 in accordance with the relevant legislation. During this period 11 submissions were received in response, raising issues relating to traffic, parking and safety management. In this regard, as the submissions are considered unique, the application is referred to the Local Planning Panel for determination.

An assessment under Section 4.15 of the Environmental Planning and Assessment Act 1979 has been undertaken and the application is recommended for refusal.

Site & Surrounds

The subject site is located on the corner of Jamison Road and Doonmore Street, Penrith. The site is currently occupied by a single storey dwelling and vegetation with the subject site maintaining an area of 701m2. The site is on the northern side of Jamison Road and eastern side of Doonmore Street. Within the front setback along Doonmore Street there is a euclayptus moluccana (30m in height) which is in healthy condition.

Directly adjoining the site to both its east and north are single detached dwelling houses, and the area is under transition with multi-unit housing developing within the vicinity of the site. The site is in proximity of Nepean Hospital to the north-east and Penrith CBD and train station to the north-west.

Proposal

The proposed development originally compromised:

- Demolition of existing dwelling and removal of all vegetation;
- Construction of a 21 room boarding house (including manager's room) over three storeys;
- Basement car parking for 10 vehicles with access from Tornaros Ave; and
- Landscaping, including the removal of trees.
- Each boarding room is proposed to be provided with their own private kitchen and bathroom facilities. Plans indicate there are 15 single occupancy rooms and 5 double occupancy rooms.

A pre-lodgement meeting was held on 31 January 2019 (PL19/0001) however the matters raised are not considered to have been satisfactorily addressed within the development application. Given the issues relate to site constraints and cannot be resolved without substantial redesign and reduction in scale, the applicant was ask to withdraw the development application. Council records indicate that no request to withdraw the development application has been received.

Plans that apply

- Local Environmental Plan 2010 (Amendment 4)
- Development Control Plan 2014
- State Environmental Planning Policy (Affordable Rental Housing) 2009
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- State Environmental Planning Policy No 55—Remediation of Land
- Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

Planning Assessment

- ## Section 4.15 - Evaluation

  The proposal has been assessed in accordance with the matters for consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979*, and having regard to those matters, the following issues have been identified for further consideration:

Section 79C(1)(a)(i) The provisions of any environmental planning instrument

State Environmental Planning Policy (Affordable Rental Housing) 2009

An assessment of the development application has been undertaken with regard to the relevant provisions of SEPP ARH and the proposal is found to be non-compliant, as detailed in the table below:

State Environmental Planning Policy (Affordable Rental Housing) 2009 Division 3 Boarding Houses		
3Boarding Houses		
Requirement	***Comment***	***Compliance***

Clause 25 – Definition	Definition given for a 'communal living room'. The communal living space proposed appears to align with this definition.	Yes
Clause 26 – Land to which Division applies	This Division applies to land within any of the specified zones (or equivalent); including: (c) Zone R3 Medium Density Residential	Yes
Clause 28 – Development may be carried out with consent	Development to which this Division applies may be carried out with consent.	Yes
Clause 29 – Standards that cannot be used to refuse consent	(1) A consent authority must not refuse consent to development to which this Division applies on the grounds of density or scale if the density and scale of the buildings when expressed as a floor space ratio are not more than: (a) the existing maximum floor space ration for any form of residential accommodation permitted on the land. (2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds: (a) building height – if the building height of all proposed buildings is not more than the maximum building height permitted under another environmental planning instrument for any building on the land. (b) landscaped area – if the landscape treatment of the front setback is compatible with the streetscape in which the building is located. (c) solar access – where the development provides for one or more communal living rooms, if at least one of those rooms receives a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter. (d) private open space – if at least the following private open space areas are provided (other than the front setback area): (i) one area of at least 20 square metres with a minimum	(a) N/A, as there is no FSR requirement, as per LEP 2010, for the subject site or area. (a) Yes, the ridgeline of the roofline (of is no higher than 8.5m, which is the maximum height of buildings listed for the site in the Height of Building Map under PLEP. (b) **No**, the landscaped treatment of the front setback area is incompatible with the streetscape in which the building is located. The built form presentation is considered uncharacteristic of the area, and also reduces the amount of landscaping within the front setback, presenting a site frontage of predominantly hardstand area. Additionally, the proposal includes the removal of all vegetation on the site, which removes the ability for instant screening and softening of the built form from the healthy 30m high eucalyptus tree among others. (c) Complies (d)(i) **No**, the minimum private open space requirement is provided within the front setback area, contrary to the control.

	dimension of 3 metres is provided for the use of the lodgers. (e) parking if: (iia) - in the case of development not carried out by or on behalf of a social housing provider – at least 0.5 parking spaces are provided for each boarding room. (f) accommodation size – if each boarding room has a gross floor area (excluding any area used for the purposes of private kitchen or bathroom facilities) of at least: (i) 12 square metres in the case of a boarding room intended to be used by a single lodger, or (ii) 16 square metres in any other case.	(e)(iia) **No**, the proposed car parking for the site includes 10 x car parking spaces (including 2 x accessible parking space),however 11 spaces are required. (f)(i)&(ii) **No**. Insufficient documentation has been provided to allow an assessment of the size of each room. Floor plans are required which detail the area used to calculate room size to satisfy SEPP ARH requirements. The size of the rooms required is to exclude any area used for the purposes of private kitchen or bathroom facilities (an area to the front of the kitchen cabinet/bench area is to be excluded from the size calculations).In this regard, room sizes are not considered compliant.

Clause 30 – Standards for boarding houses	(1) A consent authority must not consent to development to which this Division applies unless it is satisfied of each of the following: (a) if a boarding house has 5 or more boarding rooms, at least one communal living room will be provided. (b) no boarding room will have a gross floor area (excluding any area use for the purposes of private kitchen or bathroom facilities) of more than 25 square metres. (c) no boarding room will be occupied by more than 2 adult lodgers. (d) adequate bathroom and kitchen facilities will be available within the boarding house for the use of each lodger. (e) if the boarding house has capacity to accommodate 20 or more lodgers, a boarding room or on-site dwelling will be provided for a boarding house manager. (f) (Repealed). (g) if the boarding house is on land zoned primarily for commercial purposes, no part of the ground floor of the boarding house that fronts a street will be used for residential purposes unless another environmental planning instrument permits such a use. (h) at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms.	 (a) Yes, communal space is provided on the ground floor. (b) Yes, each room is no more than 25m² in gross floor area. (c) Single and double rooms are proposed. (d) Yes, each room is provided with bathroom and kitchen facilities. A communal bathroom and kitchenette (within the communal area) is also provided. (e) Yes, a room for the manager has been provided given there are 20 rooms proposed. (g) N/A (h) **No**. While minimum parking requirement for motorcycles has been provided these spaces are located at the bottom of the ramp which are considered to create safety concerns for users of the spaces and the overall functionality of the basement. No room is allowed for an alternative location without detrimentally affecting deep soil zones and therefore this requirement is not satisfied.
30A – Character of local area	A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.	**No**, the character of the local area is defined by deep set landscaped front yards with remnant canopy tree planting. The area is expected to undergo a gradual shift to higher densities permissible within the R3 Medium Density Residential zone which includes multi dwelling housing, however this would not incorporate such narrow front setbacks nor an abundance of hard

		stand areas i.e. ramps, pathways, waste collection areas and on-site detention areas all within the front setback as is proposed. No vegetation is being retained on site to maintain local character and the excessive hard stand areas, narrow setbacks and bulky built form does not allow for an open and well landscaped frontage, nor side nor rear setbacks comparable or compatible with the character of the local area in the vicinity of the site. The location of hardstand areas within the Jamison Road front setback is not reflective of the existing character of the street or of the desired future character of the local area. Level 1 is only partially stepped which adds bulk and is not sufficiently integrated into the design. The built form does not complement existing built form qualities that are considered to define the character of the local area. The development proposal does not include adequate articulating elements along its side boundaries and the building's length and rectangular design are considered to add bulk to the structure. Little opportunity is provided for substantial landscaping around the development given the narrow setbacks, hard stand areas and facilities such as drainage and waste, which is considered to exacerbate the built forms bulk and scale. The density of the development is directly related to the inability of the design to adequately respond to the future desired character of the area in that the bulk, scale and building design is not compliant with the boarding house controls under Part D5 Other Land Uses, clause 5.11 Boarding Houses of the DCP.

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

A BASIX Certificate is required for Class 3 Boarding house developments. This requirement is confirmed by a recent NSW Land and Environment Court Judgement which confirmed that self contained boarding rooms capable of being occupied or used as a separate domicile are BASIX affected development. A BASIX certificate was submitted however the commitments to be shown on the DA plans were not all detailed. As this application is recommended for refusal for reasons as detailed elsewhere in this report, the refusal will also note the inadequacies in relation to the BASIX Commitments.

State Environmental Planning Policy No 55—Remediation of Land

An assessment has been undertaken of the development proposal against the relevant criteria within State Environmental Planning Policy No 55—Remediation of Land and the application is considered satisfactory. Given the prior residential use for the subject location and continued use of the land for residential purposes (which is not considered a potentially contaminating activity) as stated in the supporting documentation with the application, the site is considered suitable for the proposed use in regards to contamination. Conditions of consent may be applied with regard to contamination procedures, should unexpected finds be uncovered during construction as well as standard conditions related to asbestos removal. As the development application is recommended for refusal, the above mentioned conditions are not recommended to be included.

Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

An assessment has been undertaken of the proposed development against the relevant criteria within Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No. 2—1997) and although the development proposal is not in conflict with the Policy, the development application is recommended for refusal based on other matters as detailed elsewhere within this report.

Local Environmental Plan 2010 (Amendment 4)

Provision	Compliance
Clause 1.2 Aims of the plan	Does not comply - See discussion
Clause 2.3 Permissibility	Complies - See discussion
Clause 2.3 Zone objectives	Does not comply - See discussion
Clause 2.7 Demolition requires development consent	Complies
Clause 4.3 Height of buildings	Complies
Clause 4.4 Floor Space Ratio	N/A
Clause 7.4 Sustainable development	Does not comply - See discussion
Clause 7.6 Salinity	Complies
Clause 7.7 Servicing	Complies

Clause 1.2 Aims of the plan

The proposal does not comply with the following aims of PLEP:

(b) to promote development that is consistent with the Council's vision for Penrith, namely, one of a sustainable and prosperous region with harmony of urban and rural qualities and with a strong commitment to healthy and safe communities and environmental protection and enhancement

(h) to ensure that development incorporates the principles of sustainable development through the delivery of balanced social, economic and environmental outcomes, and that development is designed in a way that assists in reducing and adapting to the likely impacts of climate change

The development is inconsistent with the character envisioned for the Penrith area, in that the bulk and scale of the development is inappropriate for the site.

The adverse amenity impacts on neighbours, in regards to the visual and acoustic privacy of neighbouring dwellings, is not aligned with Council's vision for development in Penrith.

The proposal does not incorporate the principles of sustainable development into the design.

The provision of waste facilities and access arrangements are not sufficient to service the proposal.

Clause 2.3 Permissibility

Development for the purposes of a boarding house is permissible within the R3 Medium Density Residential zone under PLEP and is also permissible within the R3 zone under State Environmental Planning Policy (Affordable Rental Housing) 2009.

Clause 2.3 Zone objectives
The subject site is located within the R3 Medium Density Residential zone under the LEP. The proposal is inconsistent with the following objectives of the zone:

- *To enhance the essential character and identity of established residential areas.*
- *To ensure that a high level of residential amenity is achieved and maintained.*
- *To ensure that development reflects the desired future character and dwelling densities of the area.*

The design of the boarding house does not enhance the essential character and identity of the established residential area. The built form does not complement qualities of existing residential development that define the character of the area. The development's negative impacts on local character are further detailed under the SEPP ARH section of this report.

Inappropriate impacts on amenity can be directly linked to the density of rooms proposed and the inability of the site to accommodate the needs and minimal requirements of the development. The number of rooms proposed and associated hard stand from car parking, drainage and built form is related to negative impacts of bulk and scale, overbearing and visual and acoustic privacy. Minimal landscaped setbacks are resulting from the site coverage, basement extent and minimal rear and side setbacks proposed. The proposal does not include sufficient articulation elements along elevations to both the ground and first floor. The length and bulk of the building is not considered to represent, nor complement, residential development within the local area.

Landscaped elements are ineffective in ameliorating negative impacts on, or providing amenity to residents or neighbours of the development or on streetscape presentation. The existing mature eucalyptus tree within the street setback is proposed for removal despite its healthy condition and positive contribution to character and sustainability. The site's corner location with the primary frontage of 11m is not wide enough to accommodate the infrastructure required to service the development and therefore does not comply with the requirement for a 22m frontage as per the Penrith DCP, which will result in a poor street front presentation and landscaping outcome.

The development overall does not comply with key development controls of the Penrith DCP and as such, is not representative of the desired future character of the area.

The first floor footprint is predominantly equal to the ground floor layout in size and architectural elements. In addition the provision for flush walls between the ground and first floors are considered to accentuate the built forms scale to a prominent corner site.

Additionally, the development does not reflect the desired future character and dwelling densities of the area, in that the proposal is in conflict with the objectives and controls of Section D5, Clause 5.11 (Boarding houses) of the DCP. It is noted that these controls relate to local character, built form, scale, appearance, tenant amenity, safety, private, visual and acoustic amenity impacts.

Details of compliance with individual objectives and controls is discussed under the DCP and SEPP ARH sections of this report.
Clause 7.4 Sustainable development

Clause 7.4 of PLEP requires Council to have regard to the principles of sustainable development as they relate to the development based on a "whole of building" approach by considering each of the following:

(a) conserving energy and reducing carbon dioxide emissions,
(b) embodied energy in materials and building processes,
(c) building design and orientation,
(d) passive solar design and day lighting,
(e) natural ventilation,
(f) energy efficiency and conservation,
(g) water conservation and water reuse,
(h) waste minimisation and recycling,
(i) reduction of vehicle dependence,
(j) potential for adaptive reuse.

No sun shading is provided to the communal open space on the northern elevation. Further, while eaves are provided, insufficient landscaped widths mean there is no room for necessary planting to shield the building and reduce thermal loads in the summertime. Therefore the proposal is inconsistent with (c) and (d).

While each room is provided with at least one window, only 6 out of 20 rooms provide for natural cross ventilation. Therefore subclause (e) and (f) are not achieved either.

It is for the above reasoning that the development proposal is not considered to comply with clause 7.4 of PLEP 2010.

Section 79C(1)(a)(ii) The provisions of any draft environmental planning instrument

Draft Environment SEPP

The Draft Environment SEPP was exhibited from 31 October 2017 to 31 January 2018. This consolidated SEPP proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property.
Changes proposed include consolidating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 – Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 – Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.

The proposal is not inconsistent with the provisions of this Draft Instrument.

Draft Remediation of Land SEPP

The Department of Planning and Environment has announced a Draft Remediation of Land SEPP, which will repeal and replace the current State Environmental Planning Policy No 55—Remediation of Land.

The main changes proposed include the expansion of categories of remediation work which requires development consent, a greater involvement of principal certifying authorities particularly in relation to remediation works that can be carried out without development consent, more comprehensive guidelines for Councils and certifiers and the clarification of the contamination information to be included on Section 149 Planning Certificates.

Whilst the proposed SEPP will retain the key operational framework of SEPP 55, it will adopt a more modern approach to the management of contaminated land. The Draft SEPP will not alter or affect the findings in respect to contamination of the Site. Appropriate conditions are included in respect to any potential asbestos removal and an expected finds condition will ensure that if any traces of contamination is found appropriate measures in accordance with EPA requirements are implemented.

Section 79C(1)(a)(iii) The provisions of any development control plan

Development Control Plan 2014

Provision	Compliance
DCP Principles	Does not comply - see Appendix - Development Control Plan Compliance
C1 Site Planning and Design Principles	Does not comply - see Appendix - Development Control Plan Compliance
C2 Vegetation Management	Does not comply - see Appendix - Development Control Plan Compliance
C3 Water Management	Does not comply - see Appendix - Development Control Plan Compliance
C4 Land Management	Complies
C5 Waste Management	Does not comply - see Appendix - Development Control Plan Compliance
C6 Landscape Design	Does not comply - see Appendix - Development Control Plan Compliance
C7 Culture and Heritage	N/A
C8 Public Domain	N/A
C9 Advertising and Signage	N/A
C10 Transport, Access and Parking	Does not comply - see Appendix - Development Control Plan Compliance
C11 Subdivision	N/A
C12 Noise and Vibration	Complies
C13 Infrastructure and Services	Complies
D2.1 Single Dwellings	N/A
D2.2. Dual Occupancies	N/A
D2.4 Multi Dwelling Housing	Does not comply - see Appendix - Development Control Plan Compliance
D2.5 Residential Flat Buildings	N/A
D2.6 Non Residential Developments	N/A
D5.1. Application of Certification System	N/A
D5.2. Child Care Centres	N/A
D5.3. Health Consulting Rooms	N/A
D5.4. Educational Establishments	N/A
D5.5 Parent Friendly Amenities	N/A
D5.6. Places of Public Worship	N/A
D5.7. Vehicle Repair Stations	N/A
D5.8. Cemeteries, Crematoria and Funeral Homes	N/A
D5.9. Extractive Industries	N/A
D5.10 Telecommunication Facilities	N/A
D5.11 Boarding Houses	Does not comply - see Appendix - Development Control Plan Compliance

Section 79C(1)(a)(iv) The provisions of the regulations

The application was referred to Council's Building Surveyor for assessment. No objections were raised.

Compliance with Public Health Regulations could be included as conditions, however the application is recommended for refusal related to other matters as detailed in this report.

The development application has been notified, exhibited and advertised in accordance with the requirements of the Regulations.

Section 79C(1)(b)The likely impacts of the development

Likely impacts of the proposed development are discussed below:

Streetscape and Local Character

The proposal will have a negative impact on the existing streetscape and character of the local area. The development proposal is inconsistent with controls of Penrith Development Control Plan 2014 (PDCP) in particular those that relate to boarding house development, bulk, scale, design, as well as those related to local character, landscaping and setbacks. The design is also in contrast to comparable built form controls of the DCP, in that the bulk and scale of the development is not adequately mitigated by landscaping or articulating building design elements along its elevations. The design of the boarding house does not enhance the essential character and identity of established residential areas, in part due to the need to accommodate parking, turning, waste storage and drainage, which limits landscaping opportunities. The development proposal is not compliant with the controls of the SEPP ARH which are related to accomodation size, local character, private open space, landscaping and parking.

Privacy Impacts

The development proposal does not adequately demonstrate a package of measures to mitigate against negative privacy and amenity impacts. Side setbacks are minimal and inadequate area is provided for landscape screening or buffer separation. The resulting building form and the extent of the upper level will result in negative overbearing and overlooking impacts on neighbouring sites. The design provides for a large amount of openings to the side elevations which are positioned so as to directly overlook the neighbouring properties.

Traffic, Access and Manoeuvring

The development does not comply with the minimum number of parking spaces required by the State Environmental Planning Policy (Affordable Rental Housing) 2009. Impacts related to site coverage, landscaping, local character and overbearing are also considered in part a consequence of providing for the 0.5 car spaces per room. The parking shortfall indicates the proposal is not able to cater for all aspects of the development on this site.

The proposed vehicular access to the basement level car park is not in accordance with clause 10.5.2 of Part C10 of the DCP in that access to the site should provide safe entry to and exit from the site. The Traffic Report does not demonstrate the ability for drivers to see one another at the bottom of the ramp in the scenario where a vehicle is entering the basement and another vehicle exiting or parking, particularly with the bend in the ramp. A traffic signal system would be required with a waiting area in the basement free from inward manoeuvring requirements. Given there is no room within the basement without encroaching upon landscape setbacks, the basement layout does not provide a safe entry and exit to the site.

Sustainable Design

The building design and landscape concept do not respond to the site's orientation and insufficient shading is provided for the site as a result of the minimal width of landscaped areas proposed.

Waste Management

Amendments to the waste areas may have been sought in response to non-compliances. However, further room for waste storage would considerably encroach upon the front setback which is already considered to be inadequate in area and landscaping, thus once more indicating an overdevelopment of the site and an inability to provide the necessary landscaping and facilities in line with a proposal of this size.

Plan of Management

A stand alone boarding house Plan of Management was provided as required by Section D5.11 (6). However, Council's Public Health Officer noted that there was insufficient information provided. Given the inadequacy of the plan of management submitted, the management of the boarding house and satisfaction of security and safety and operational measures cannot be known with certainty.

Section 79C(1)(c)The suitability of the site for the development

The site is unsuitable for the proposed development for the following reasons:

- The density of the rooms proposed and the requirement to comply with the applicable car parking rates as set out under the SEPP ARH is resulting in excessive building bulk and site coverage.
- The design of the building, its presentation to the street and the proposed landscaping is not considered to be compatible with, nor complementary to, the character of the local area or the future desired character of the area; and
- The proposal does not adequately demonstrate that impacts related to minimum side and rear setbacks, local character, streetscape presentation, bulk, scale, privacy, noise, amenity, access and parking are adequately mitigated against nor addressed through the design of the development.

Section 79C(1)(d) Any Submissions

Community Consultation

In accordance with Appendix F4 of Penrith Development Control Plan 2014, the proposed development was notified to nearby and adjoining residents and was exhibited advertised between 9 November to 23 November 2018. Three submissions were received during this period.

Matters raised in the submissions have formed part of this assessment. A response to the matters raised is also provided below.

Issue	Comment
-Increase in traffic, insufficient on site parking, current on-street parking issues will be exacerbated and associated safety impacts. - Narrow driveway, inadequate car parking.	Council's Traffic Officer has reviewed the proposal and advised that the traffic generated by the development cannot be accommodated within the road network given the minimum number of car parking spaces has not been provided and on-street parking is not justified. The application has been recommended for refusal based on this matter, among others. An assessment of the proposal against the applicable car parking rates and manoeuvring areas is included within this report.
- Near misses turning into Jamison Road and parked cars obstructing views.	Existing traffic and parking issues can be reported to Council's Local Traffic Committee, Rangers or the Nepean Police LAC.
-Safety issues from transient nature and subpar vetting of boarders not appropriate for residential area. -Concerns stem from the anonymity of the boarders and the uncertainty of criminal history - particularly of the paedophilic variety. -Site proximity to schools, school children and Parks and related safety concerns.	Boarding houses have historically been an important source of low cost accommodation and this development would increase the availability of this affordable housing type. There is an emerging trend for boarding houses to be targeted at young professionals and students. This type of affordable housing may also appeal to other tenants unable to afford ordinary private market rental rather than be occupied by any one demographic. Council is unable to require that tenants undergo further scrutiny such as background checks. Notwithstanding, the application has been recommended for refusal, based on other planning matters.

Referrals

The application was referred to the following stakeholders and their comments have formed part of the assessment:

Referral Body	Comments Received
Building Surveyor	No objections - subject to conditions
Development Engineer	Not supported
Environmental - Environmental management	No objections - subject to conditions
Environmental - Waterways	No objections
Environmental - Public Health	No objections - subject to conditions
Waste Services	Not supported
Traffic Engineer	Not supported
Community Safety Officer	No objections - subject to conditions
Tree Management Officer	Not supported
Social Planning	No objections

Section 79C(1)(e)The public interest

The proposed development is contrary to the aims, and zone objectives, of the LEP. The proposed development does not comply with key clauses of Division 3 Boarding houses of SEPP ARH, including those related to compatibility with local character and development standards related to landscaped area, private open space, car bicycle, motorbike parking and accommodation size.

The proposal does not comply with the provisions of section 5.11 Boarding Houses of the DCP, in particular those requiring the design of the development to be compatible with the context of the site and to have regard to the site analysis. Further, the proposed setbacks, character and bulk and scale of the development are not compliant with the applicable built form and setback controls detailed under the section.

It is for the above reasoning that approval of the development application would not be in the public interest and would also set an undesirable precedent in the locality.

Conclusion

The development application has been assessed against the applicable planning control and policies including State Environmental Planning Policy (Affordable Rental Housing) 2009, Penrith Local Environmental Plan 2010 and Penrith Development Control Plan 2014, and the proposal does not satisfy the aims, objectives and provisions of these policies.

In its current form, the proposal would result in negative and unacceptable impacts on on-street parking, visual and acoustic privacy, the urban heat island effect, residential amenity and the surrounding character of the area. More specifically the bulk, scale and design of the development is not compatible with local character and is not representative of the future desired character of the area.

The development application was also submitted with insufficient information regarding waste infrastructure and management details.

Support of this application would set an undesirable precedent in the locality, particularly considering the incompatibility of the design with the boarding house controls from Penrith Development Control Plan 2014. The proposed building design is not site responsive and does not comply with the key development standards which are directly resulting in unacceptable negative impacts in the locality, and is not in the public interest.

As such, considering the above aspects, the subject application is recommended for refusal, with the reasons for refusal detailed below.

Recommendation

1. That DA19/0241 for the demolition of existing structures and construction of a boarding house at 159 Jamison Road, Penrith, be refused for the attached reasons; and
2. That those making submissions are notified of the determination.

CONDITIONS

Refusal

1 X Special 02 (Refusal under Section 79C(1)(a)(i) of EPA Act 1979)
The application is not satisfactory for the purpose of Section 4.15(1)(a)(i) of the *Environmental Planning and Assessment Act 1979* as the proposal is inconsistent with the provisions of Penrith Local Environmental Plan 2010 as follows:

(i) Clause 1.2 Aims of the Plan - The proposal is inconsistent with the Aims of the Plan in relation to the promotion of development consistent with Council's vision for Penrith and the safeguarding of residential amenity.

(ii) Clause 2.3 Zone Objectives - The proposal is inconsistent with the objectives of the R3 Medium Density Residential zone, specifically:
- the proposed boarding house is not considered to enhance the essential character and identity of an established residential area;
- the proposed boarding house does not ensure that a high level of residential amenity is achieved and maintained; and
- the proposed boarding house does not ensure that the development will reflect the desired future character of the area.

(iii) Clause 7.4 Sustainable Development - The proposal is inconsistent with the principles of sustainable design, particularly in relation to (c) (d) (e) and (f) of Clause 7.4 of the LEP.

2 X Special 03 (Refusal under Section 79C(1)(a)(ii) of EPA Act 1979)
The application is not satisfactory for the purpose of Section 4.15(1)(a)(i) of the *Environmental Planning and Assessment Act 1979* as the proposal is inconsistent with the provisions of:

- State Environmental Planning Policy (Affordable Rental Housing) 2009 as the development application does not comply with Part 2, Division 3, Clause 29 Standards that cannot be used to refuse consent (2)(b) landscaped area (d)(i) private open space, (e)(iia) car parking, (f) accommodation size, Clause 30 (h) bicycle and motorbike parking and Clause 30A Character of Local Area.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 as the BASIX Certificate commitments are not shown on the architectural plans as the Certificate requires.

3 X Special 04 (Refusal under Section 79C(1)(a)(iii) of EPA Act 1979)
The development application is not satisfactory for the purpose of Section 4.15(1)(a)(iii) of the *Environmental Planning and Assessment Act 1979,* as the proposal is inconsistent with the following provisions of Penrith Development Control Plan 2014 in that the application has not satisfied Council with respect to the requirements under:

- Part B - 'DCP Principles',
- Section C1 'Site Planning and Design Principles',
- Section C2 'Vegetation Management',
- Section C3 'Water Management',
- Section C5 'Waste Management',
- Section C6 'Landscape Management',
- Section C10 'Traffic, Access and Parking',
- Section D2.4 'Residential - Multi Dwelling Housing', and
- Section D5.11 'Boarding Houses'.

4 X Special 07 (Refusal under Section 79C(1)(b) of EPA Act 1979)
The development application is not satisfactory for the purpose of Section 4.15(1)(b) of the *Environmental Planning and Assessment Act 1979* in terms of the likely impacts of that development including those related to:

(i) negative streetscape and local character impacts;
(ii) privacy impacts;
(iii) the excessive hard stand, infrastructure and built form which reduces landscaping opportunities;
(iv) unsafe traffic, access and manoeuvring;
(v) inadequate provision of parking;
(vi) landscaped area and site coverage;
(vii) overlooking; and
(viii) waste management.

5 X Special 08 (Refusal under Section 79C(1)(c) of EPA Act 1979)
The application is not satisfactory for the purpose of Section 4.15(1)(c) of the *Environmental Planning and Assessment Act 1979* as the site is not suitable for the scale of the proposed development.

6 X Special 10 (Refusal under Section 79C(1)(e) of EPA Act 1979)
The application is not satisfactory for the purpose of Section 4.15(1)(e) of the *Environmental Planning and Assessment Act 1979,* as the proposal is not in the public interest.

7 X Special 9 (Refusal under Section 79C(1)(d) of EPA Act 1979)
Based on the above deficiencies and submissions received, approval of the proposed development would not be in the public interest (pursuant to Section 4.15(1)(d) of the *Environmental Planning and Assessment Act 1979*).

Appendix - Development Control Plan Compliance

Development Control Plan 2014

Part B - DCP Principles

The development proposal is considered to be contrary to the principles, commitments and objectives of the Penrith Development Control Plan 2014 (DCP) in particular, the proposal does not enable communities to minimise their ecological footprint or promote sustainable production and consumption through appropriate use of environmentally sound technologies and effective demand management.

The development does not adequately protect the occupants from the western heat with the private open space. Little opportunity is provided for natural cross flow ventilation or canopy trees for shading given the limited setback. Due to the orientation and height of the building, future occupants will be exposed to high levels of direct solar access and inadequate shade is provided to reduce the thermal loading, which will be retained in the summer months.

Individual air-conditioning units nominated for use are not indicated on the plans.

Part C - City-wide Controls

Section C1 Site Planning and Design Principles

Clause 1.2.2 Built form - Energy Efficiency and Conservation
This section of the DCP states that "*buildings should be designed on passive solar design principals which respond to orientation to maximise the northern aspect and solar access in the cooler periods; reduce overheating in summer and promote solar gain in winter; and ensure there is adequate cross flow of air by utilising natural ventilation, resulting in a reduction in the use of mechanical ventilation and/or air-conditioning systems".*

The design of the building does not facilitate opportunity for natural cross flow ventilation and is positioned and orientated such that the thermal load in summer will result in overheating of the private open space and the building generally given the lack of landscaping.

Clause 1.2.3 Building Form - Height, Bulk and Scale
The proposal fails to demonstrate how the development is consistent with the height, bulk and scale of adjacent development. It is acknowledged that the area is zoned R3 Medium Density Residential under PLEP and some growth in the density of the area is expected. However, the development proposal does not demonstrate an acceptable level of compliance with applicable built form controls under the DCP or objectives of the zone. The bulk and scale of the development is unacceptable in the location, particularly on the corner block which exacerbates the visual impact of the development.

Proposed setbacks, separation distances and landscaped elements do not adequately mitigate against negative and unacceptable amenity impacts such as visual privacy and impacts on local streetscape character.

Section C2 Vegetation Management

The eucalyptus tree within the site's front setback is considered significant to the character of the area and should be retained to soften the impact of the proposed development while also reducing the urban heat island effect of the proposal.

An Arborist Report was provided to attests to the health of this tree and any others within the property and recommends their removal. However, Council's Tree Officer noted that this tree is in good health indicating that if there was no development planned there would be no reason to support their removal.

The siting and layout of development has therefore not considered the location of trees and favored their retention as required under DCP Section C2.1(6)(a). The objectives of this section are to promote the benefits of trees and other vegetation, protect and enhance native vegetation, habitat for fauna and manage non-native vegetation in accordance with its cultural

and landscape significance. Trees and vegetation must also be retained where they form part of the landscape character of an area, however the proposal does not comply with this requirement under Section C2.1(6)(h).

Section C3 Water Management
Council's Development Engineer has reviewed the application and provided the following comments:

The application was accompanied by inadequate information to ensure the proposed stormwater runoff is consistent with Council's DCP Section C3.5, Penrith City Council's Stormwater Drainage Policy and mitigates adverse impacts upon adjoining properties or the street drainage system. The OSD storage shall have a minimum 1% fall to the outlet pit. The proposed sediment sump and relief drain shall be removed from the OSD discharge control pit. Further, the site is affected by local overland flow flooding. Council's adopted 1% AEP flood levels for the site vary from RL 45.4m AHD at the northern boundary to RL 44.9m AHD at the southern boundary based on Penrith CBD Detailed Overland Flow Flood Study, 2015. Floor levels for the proposed development have not been set 0.5m above Council's adopted 1% AEP flood levels however the required fill is excessive and therefore the application cannot meet the requirements of Council's Storwmater Policy, nor the objectives of the DCP which require development to demonstrate that any overland flow is maintained for the 1% AEP (100 year ARI) overland flow without adverse streetscape impacts from the fill required.

Section C5 Waste Management
Council's Waste Planning Officer has reviewed the application and provided the following comments:

- The waste and bulky waste storage areas do not meet the minimum dimensions required, nor provide suitable access to the kerb as per Section 2.4.1 and 2.4.2 of Council’s Waste Management Guidelines for Multi-Unit Housing. Further, the waste areas are not effectively integrated with the development’s built form and landscape design in accordance with clause 2.3.1 of Council’s Waste Management Guidelines for Multi-Unit Housing. Therefore, the proposal does not enhance street presentation and resident amenity or provide adequate facilities for waste management. Redesign would increase encroachments upon the front setback indicating the proposal is an overdevelopment of the existing site area.

Section C6 Landscape Design
Clause 6.1.3 Neighbourhood Amenity and Character
The amended design was not submitted with an amended landscape plan. The submitted design does not comply with the requirements of the DCP as follows:
- The landscape proposal does not enhance the amenity and visual quality of the site. The bulk and scale of the building is not moderated by the use of landscaped elements such as for screening or shade provision.
- The development does not make any contribution to the streetscape by way of the design of structures or landscaping.
- The design of landscaping works do not ensure that the development integrates into and enhances the existing landscape character through either setbacks, materials selection, architectural character or vegetation selection/placement.
- The driveway proposed within the rear setback prevents deep soil planting opportunities and the development of reasonable landscaped separation and flora/fauna corridors as per the objectives for landscaping.

Clause 6.1.4 Site Amenity
The DCP states that landscape design should seek to screen development, particularly from the sides and rear of an allotment and shrubs and small trees should be used to screen service areas and block unwanted views that reduce privacy. The proposal does not adequately demonstrate that an acceptable level of compliance is achievable. The proposed level of hardstand site coverage is excessive and areas of landscaping are minimal in width or poorly located such that planting in these locations would not be either sustainable or substantial enough to result in any meaningful contribution to amenity, local character or streetscape presence.

Section C10 Traffic, Access and Parking

Clause C10.5 Parking, Access and Driveways

Council's Traffic Engineer has reviewed the proposal and provided the following comments:

- The proposed vehicular access to the basement level car park is not in accordance with clause 10.5 of Part C10 of the DCP which requires all vehicles to enter and leave the site in a forward direction without the need to make more than a three-point turn. The swept path analysis provided in the report prepared by SafeWay Traffic Management Solutions indicates tight but acceptable manoeuvring.
- The proposed vehicular access to the basement level car park is not in accordance with clause 10.5.2 of Part C10 of the DCP in that access to the site should provide safe entry to and exit from the site. The Traffic Report does not demonstrate the ability for drivers to see one another at the bottom of the ramp in the scenario where a vehicle is entering the basement and another vehicle exiting or parking, particularly with the bend in the ramp. A traffic signal system would be required with a waiting area in the basement free from inward manoeuvring requirements. Given there is no room within the basement without encroaching upon landscape setbacks, the basement as is does not provide a safe entry and exit to the site.

Overall, in relation to the City Wide controls that apply, the proposal fails to demonstrate that site planning, access, parking, waste servicing and stormwater management arrangements are suitable for the proposed development.

D2 Residential Development

An assessment of the built form of the development has been undertaken having regard to comparative built form controls applying to multi dwelling housing development within the R3 Medium Density Residential zone, as is required by the boarding house objectives and controls of clause 5.11 (Boarding Houses) of Section D5 Other Land Uses.

The anticipated built form for the area within the vicinity of the site (applicable to boarding houses and multi dwelling housing developments) is detailed within this section of the DCP and includes controls requiring articulation of the built form and the inclusion of deep external side setbacks with an upper storey surrounded by a larger floor plan. The development proposal does not include characteristics of traditional suburban development where the building form is stepped with integrated landscaped elements.

Clause 2.4.4 Urban Form

The development proposal is in conflict with controls requiring external walls to be a maximum of 5m in length between distinct corners and does not provide a variety of roof forms representative or complementary to, traditional dwelling designs within the immediate area. Minimal eaves are provided to provide shadow or relief from the heat.

Clause 2.4.5 Front and Rear Setbacks

The Application does not comply with clause 2.4.5 of Part D2 of the DCP which specifies that front setbacks either average the setbacks of the immediate neighbours or provide a 5.5m minimum whichever is the greater dimension. In this case, the adjoining property front setback ranges from 11m to 9m, whereas the proposal is from 4.6m to 5m. The secondary street is similarly varied, with the adjoining property setback 9.5m to 12m and the proposed setback at 3m. It is noted that there is an established front building line along both Jamison Road and Doonmore Street with only slight encroachments to the predominant line. Therefore, both street setbacks proposed are inconsistent with the predominant pattern of setbacks in the vicinity and thus do not achieve the objective to match the neighbourhood character. This in turn creates a significantly large built form which visually is considered disproportionate to its immediate surrounds. This visual impact is also considered accentuated by the prominent nature of the corner subject site.

Clause 2.4.6 Building Envelope and side setbacks

The Application does not comply with clause 2.4.6 of Part D2 of the DCP in that the minimum side setback is 2m. The Application proposes a side setback of 1m. Further, the proposal does

not comply with the maximum cut and fill control of 500mm with up to 1m proposed. The proposed fill is considered contrary to the objectives that restrict earthworks in order to respond to the site and minimise alterations to the land, while also exacerbating the visual impacts of the bulk and scale.

Clause 2.4.8 Landscaped area
The Application does not meet the minimum landscaped area required by clause 2.4.8 in Part D2 of the DCP which is 40% of the Site area or 250m2 for the Site. The Application proposes 218m2 of communal open space, or 31% of the Site.

The development is inconsistent with clause 2.4.8 in Part D2 of the DCP in that the proposed landscape treatment is inadequate. Given the on-site detention system within the front setback restricts planting, as does the 1m northern and western setbacks and basement design, there is limited opportunity for deep soil planting or screening vegetation. This reduces the development proposal's ability to contribute to the canopy coverage and green networks in the vicinity. The development therefore does not contribute to the contextual fit of, or enhance the landscape quality of the area in the vicinity of the Site.

Clause 2.4.11 Corner lots
The application does not comply with clause 2.4.11 of Part D2 in the DCP in that frontages to a second street must have a minimum setback to dwellings and garage entrances of 5.5m. The application proposes a secondary frontage setback of 2.5m on the ground level and 3m on the upper level which is considered to exacerbate the visual impact of the built form.

Clause 2.4.12 Building Design
The proposed design is inconsistent with clause 2.4.12 of Part D2 of the DCP in that the building design emphasises, rather than minimises, the impact of the bulk and scale of the development. The eastern and northern facades accentuate the bulk and scale of the building and are contrary to clause 2.4.4 of Part D2 of the DCP which requires the upper storey to be surrounded by a larger ground floor plan in order to reduce the appearance of bulk. Further, a variety of materials including lightweight cladding and brickwork is not incorporated but rather extensive brickwork is proposed with symmetrical features, rather than variation in architectural features.

The building design does not provide features that are typical of housing in the established residential area in accordance with clause 2.4.12 of Part D2 of the DCP in that the existing housing stock in the vicinity is characterised by low scale articulated dwellings with consistent and generous landscaped setbacks, whereas the narrow setbacks propose excessive fill, excessive building dimensions, and a bulky design.

Clause 2.4.13 Energy Efficiency
The Application has not appropriately considered the principles of energy efficiency as specified in clause 2.4.13 of Part D2 of the DCP in that the building does not provide effective shading to the communal open space nor to the building given the limited landscaped area widths. Cross ventilation is only provided to 6 of the 21 rooms.

Clause 2.4.18 Fences and retaining walls
The Application is contrary to clause 2.4.18 of Part D2 of the DCP in that retaining walls are generally to be a maximum of 500mm. Retaining walls are proposed to a height of approximately 1m and this is facing the streetscape. The proposed 1m of fill and subsequent retaining walls are inappropriate as they do not respond to topography while also elevating the building more than is necessary adding to the bulk and scale and resulting in overlooking impacts to the eastern property. Further, the anticipated overlooking impacts will be exacerbated by the necessary flood planning level which requires the finished floor level to be raised by a further metre, once more indicative that the site is not suitable for the proposal due to the constraints of the site and likely impacts.

2.4.20 Safety and Security
The floor plan does not confirm that visibility into the building on approach is provided as required by Clause 2.4.20 (2) (a) of the DCP.

D5 Other Land Uses

Section 5.11 Boarding Houses

At its Policy Review Committee meeting on 10 December 2018, Council resolved to adopt amendments to Penrith Development Control Plan 2014. The amendments, which have been titled Amendment No. 5, include revised controls relating to Multi Dwelling Housing and new controls for Boarding Houses. Amendment No. 5 came into effect on 21 December 2018. The proposal has been assessed against the provisions of Section 5.11 of the DCP as follows:

Clause 5.11 B Objectives

The proposal does not comply with the following objectives listed under the clause which include:

(a) To ensure that boarding houses fit the local character or desired future local character of the area.
(b) To minimise negative impacts on neighbourhood amenity.
(c) To ensure boarding house premises are designed to be safe and accessible.
(d) To respond to increasing neighbourhood densities resulting from boarding house development.
(e) To ensure that boarding houses operate in a manner which maintains a high level of amenity, health and safety for residents.

The bulk and scale of the development does not adequately respond to the existing or desired future character of the area in the vicinity of the site, as discussed elsewhere within this report (refer SEPP ARH local character discussion). Proposed setbacks and landscaping will not ameliorate negative and unacceptable impacts on residential amenity due to the scale and bulk of the building, and its potential for thermal load in the summer months and the inability for landscaping to provide relief in this regard. The density of the development and the requirement under the SEPP ARH to provide 0.5 car parking spaces per bedroom will result in the basement excavation being excessive such that the amount of deep soil landscaping is negatively impacted.

The proposed building design is likely to adversely impact upon the amenity of the private open spaces of the adjoining developments to the north and east. Such impacts would likely include an increased sense of enclosure and additional perception of bulk in close proximity to the boundaries.

The location of the communal open space and its connection to the communal room via a footpath within the front setback is unsafe and contrary to the controls for private open space locations within the SEPP ARH. This would likely give rise to additional visual and acoustic privacy impacts to adjoining developments to the west of Jamison Road and also for future occupants of the proposed development along the ground floor.

The proposed configuration of Rooms 1.02 is likely to result in poor outcomes and compromised amenity for future occupants. There are no windows to the bedroom and living areas of this unit noting the position of the bathroom along the external wall.

Clause 5.11 C. Controls

The proposed development does not comply with clause 5.11(C)(1) which states that a neighbourhood analysis should be completed to identify the desired future character of the neighbourhood. While an analysis was submitted as part of the application, the conclusions reached are not supported in relation to the proposal physical impacts and the proposals appearance in harmony with the surrounding character.

As detailed elsewhere, there are adverse impacts on the surrounding sites with respect to parking and overlooking which are not acknowledged by the character analysis. Secondly, the relationship identified between buildings, setbacks and landscaping is inaccurate. More specifically, the claim that there are no established front, side and rear setbacks is inaccurate, as is the claim that the proposal provides a 40% landscaped area. Subsequently, the design of

the proposed boarding house is not considered to be compatible with the character of the local area, as required by Clause 30 of the Affordable Rental Housing SEPP 2009, for the following reasons:

- Residential accommodation in the local area is designed to have consistent and generous landscaped setbacks and low scale articulated dwellings. By contrast, submitted plans indicate excessive fill and retaining walls, encroachments upon the front and rear setbacks, tree removal and poor landscaping, excessive building dimensions, and a bulky design.

The proposed development does not comply with clause 5.11(C)(2)(c) which states that "boarding houses shall be designed to have a sympathetic relationship with adjoining development" as discussed above and under the SEPP ARH section of this report. Further, due to the bulk and scale and the minimal side setbacks proposed, the proposal does not comply with clause 5.11(C)(2)(d) which requires proposals to demonstrate that neighbourhood amenity will not be adversely impacted by factors such as privacy.

The proposal does not comply with clause 5.11(C)(2)(f) which states that a boarding house proposal of a scale similar to a multi dwelling housing development should comply with the controls and objectives for multi dwelling housing within this DCP, where they are not in conflict with the requirements of the SEPP ARH and the objectives of the zone. The design of the boarding house is not compliant with the controls for multi dwelling housing as detailed under Section D2 Residential Development of this report.

The proposal does not comply with the following controls of Clause 5.11(C)(3) Tenant Amenity, Safety and Privacy:
- Clause (a) which requires communal spaces to include laundry facilities
- Clause (c) which requires cross ventilation to be achieved to reduce reliance on air conditioning.
- Clause (d) requires fly screens on all windows. It is unclear if this is proposed.
- Clause (e) requires secure mailboxes to be incorporated within the foyer window of the property. No provision has been made for mailboxes in this area.

The proposal does not comply with the following controls of Clause 5.11(C)(4) Visual and Acoustic Amenity Impacts:
- Clause (a) bedrooms separate from significant noise sources. Room G.03 and G.04 have a window to the private open space.

The proposal does not comply with the following controls of Clause 5.11(C)(6) Plan of Management:

A stand alone boarding house Plan of Management was provided as required by Section D5.11 (6). However, Council's Public Health Officer noted that there was information missing, specifically:

"(a) plans outlining the occupancy rate for each sleeping room, room furnishings, provisions of communal areas and facilities, and access and facilities for people with a disability;
(b) waste minimisation, recycling and collection arrangements, including the servicing of 'sharps' and sanitary napkin receptacles;
(c) professional cleaning and pest and vermin control arrangements, which, at a minimum, should include the weekly professional cleaning of shared facilities such as kitchens and bathrooms;
(d) management of any communal kitchen including rules of use and cleaning and schedules.
(e) safety and security measures, including, but not limited to:

(i) perimeter lighting;
(ii) surveillance or security camera systems;
(iii) fencing and secure gates;
(iv) room and access key arrangements; and
(v) a landline telephone for residents to ring emergency services;
and internal signage, including:
(vi) a copy of the annual fire safety statement and current fire safety schedule; and

(vii) floor plans that will be permanently fixed to the inside of the door of each bedroom to indicate the available emergency egress routes from the respective bedroom.

(f) Records of rent receipts issued to borders and fees for residency

(g) A pest management plan that clearly indicates how pest prevention, monitoring, and eradication will be completed.

The pest management program shall include but not be limited to:

- *pest management program*
- *frequency of pest service*
- *maintenance and cleaning*
- *area of service*
- *time of service*
- *sighting of pests and a response plan*
- *reporting*
- *methods of treatment*
- *approved products and chemicals*

Specific consideration in the plan needs to be given to bed bugs particularly in regard to monitoring and a response plan should they be identified.

The plan shall clearly indicate how, and in what timeframe, pests can be eradicated and what measures will be put in place to prevent the further harbourage of pests.

(h) Minimum room furnishings. The Plan of Management should include a minimum room furnishing list and include detail on the condition of furnishing and process of replacing furnishing when required, such as how and when a resident can have a mattress replaced.

The list might include such things as:

- *bed and bed size*
- *wardrobe*
- *mirror*
- *table and chair*
- *night light*
- *waste container*
- *curtains or blinds;*
- *phone line*
- *microwave*
- *refrigerator etc…*

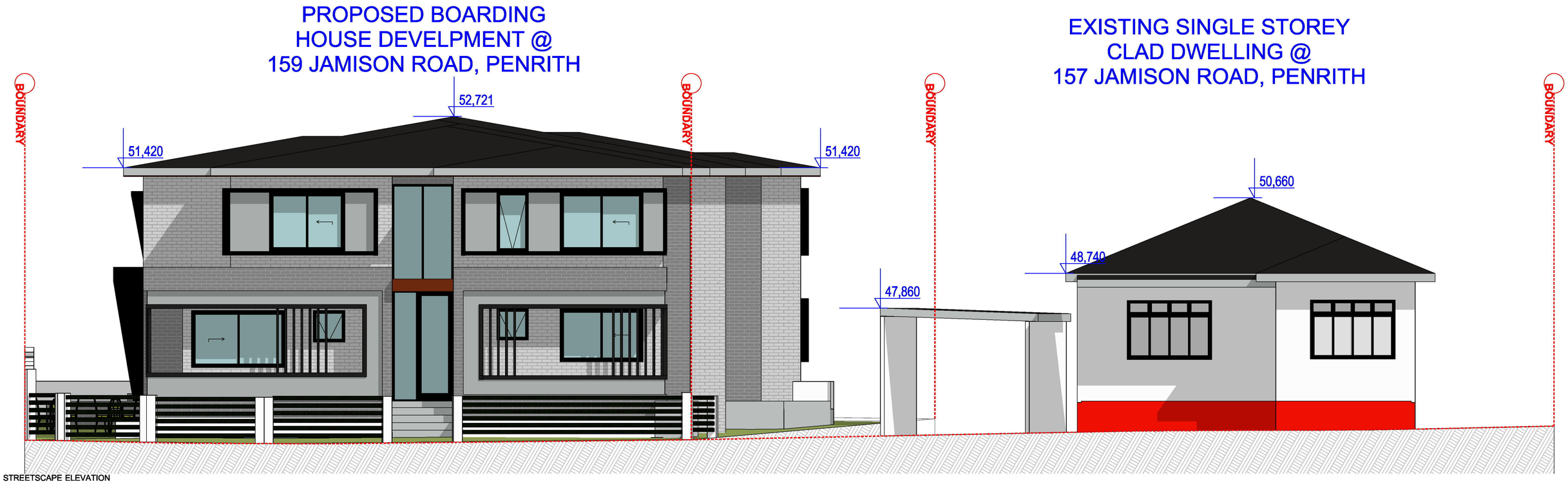
(i) A cleaning and sanitation program should be developed including written cleaning schedules and cleaning procedures.

The schedule and procedures shall cover all areas external to occupied resident's rooms but should include the room clean when a room is vacated.

The following shall also be addresses in the procedures:

- *how cleaning and sanitising is conducted,*
- *frequency of cleaning and sanitising,*
- *use of chemicals,*
- *cleaning chemical and sanitising solution strengths,*
- *Record keeping of cleaning and sanitising and signing off on cleaning and sanitising."*

Given the inadequacy of the plan of management submitted, the management of the boarding house and satisfaction of security and safety and operational measures cannot be considered as being satisfactorily considered.

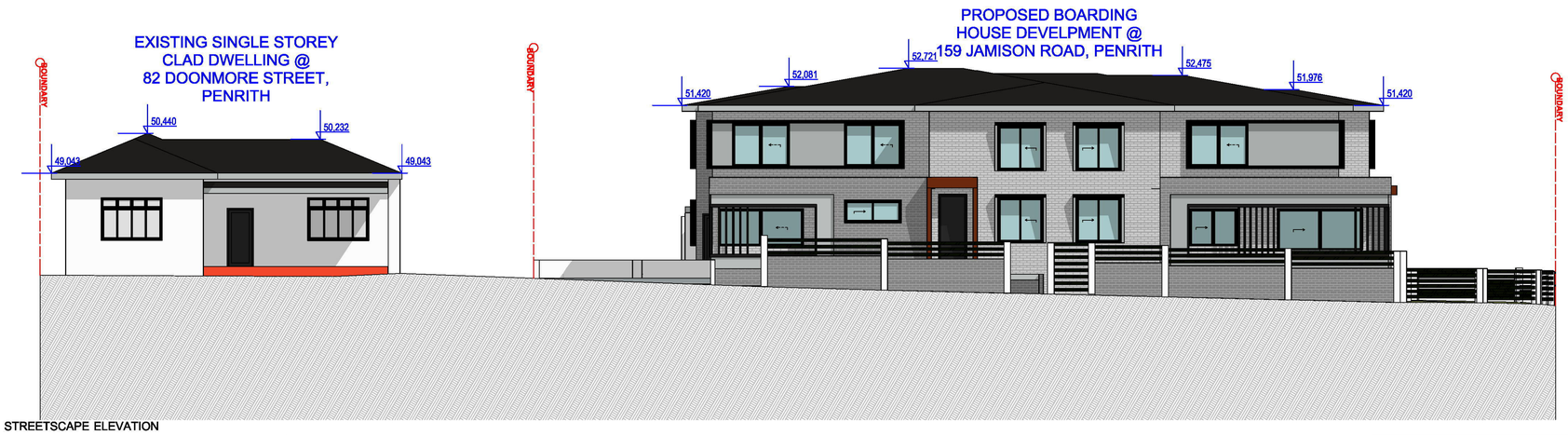


STREETSCAPE ELEVATION

19030 159 Jamison Road, Penrith - Amendment 05.pln

SCALE 1:50

VIEW ALONG JAMISON ROAD



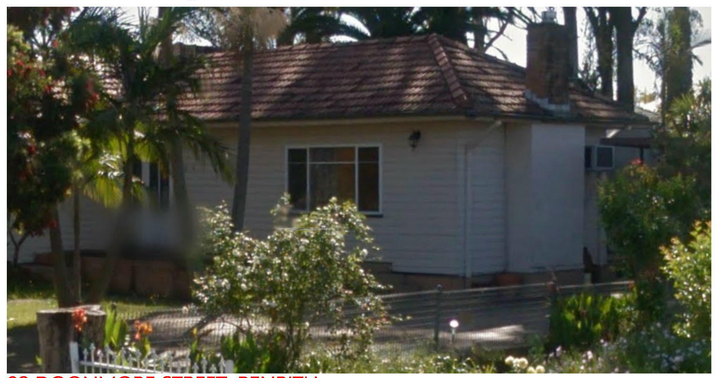
STREETSCAPE ELEVATION

19030 159 Jamison Road, Penrith - Amendment 05.pln

SCALE 1:100

VIEW ALONG DOONMORE STREET

157 JAMISON ROAD, PENRITH



82 DOONMORE STREET, PENRITH

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
B	ISSUE FOR INFORMATION	18-03-19			
C	DA SUBMISSION	20-03-19			
D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

3000 ELEVATIONS

STREETSCAPE

Designed
JC

Approved
JC

Project Number
18-030

Scale
AS SHOWN

Drawing Number
3002

Date of Issue
20/03/2019

DEVELOPMENT APPLICATION ISSUE C

PLATFORM 5
DESIGN

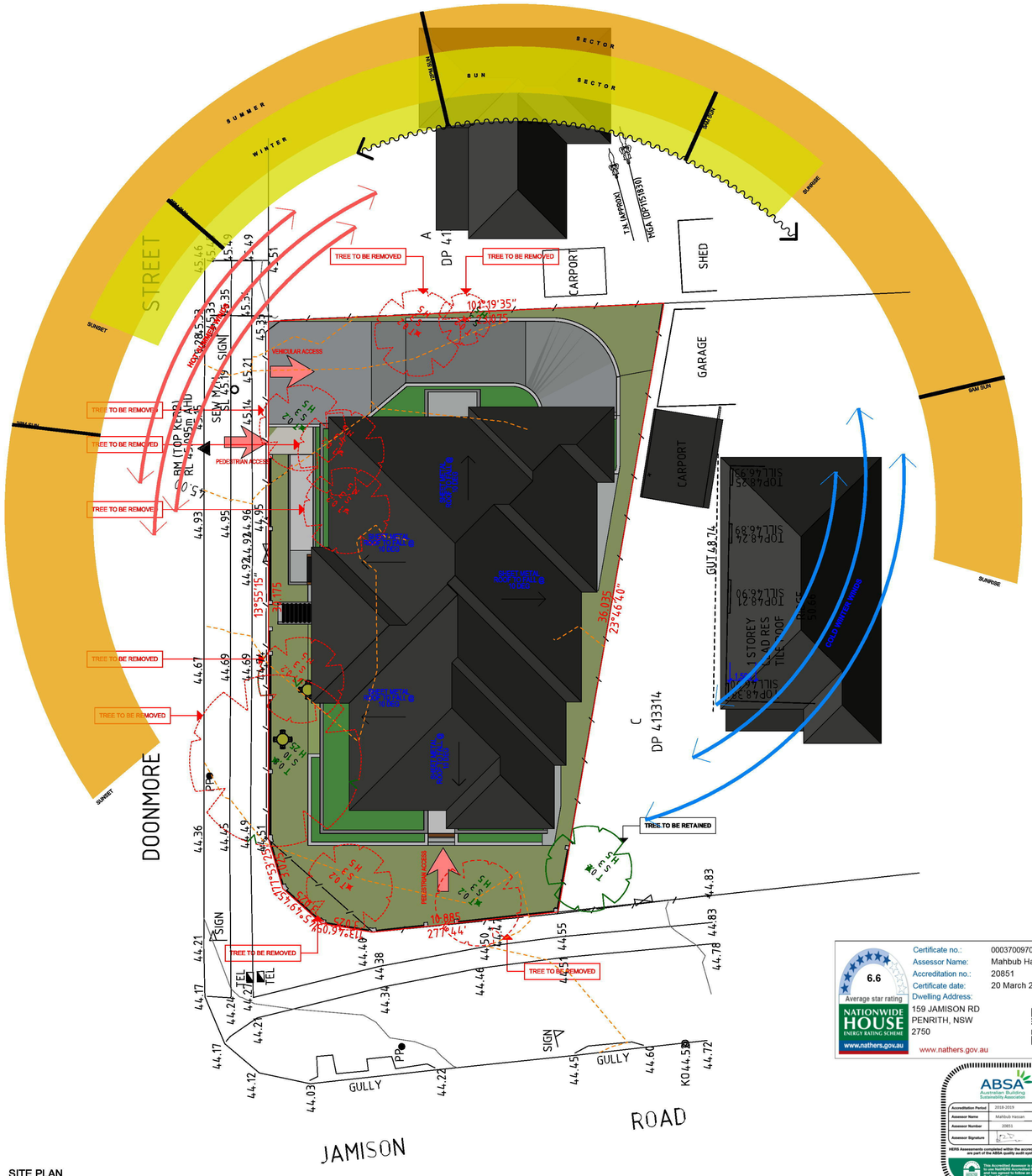
PRESENTS.....

159 JAMISON ROAD, PENRITH - BOARDING HOUSES

DEVELOPMENT APPLICATION 30/03/2019

PROPOSED BOARDING HOUSE DEVELOPMENT COMPRISING OF A 2 STOREY,

20 ROOMS + 1 MANAGER WITH ASSOCIATED BASEMENT PARKING @ 159 JAMISON RD, PENRITH FOR DEVELOPMENT APPLICATION



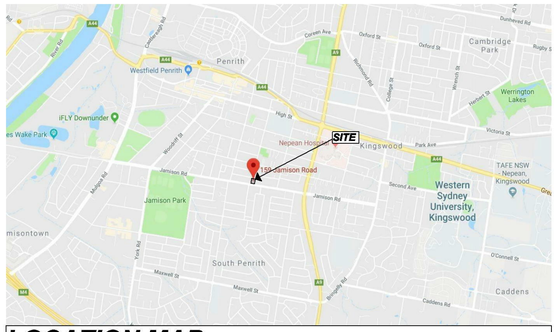
GFA CALCULATION		SITE AREA = 702.5 m²
FSR = N/A FA = 261.75m²	CALCULATION	
	GROUND	300m²
PROPOSED	LEVEL 1	284m²
FSR = 0.83 :1 608.00m²		
	TOTAL	584.00m²

TABLE OF COMPLIANCE	SITE AREA 447m²		
SEPP ITEMS	REQUIREMENT	PROPOSED	COMPLY
FSR	NA	0.83 : 1	YES
BUILDING HEIGHT	8.5m	8.0m	YES
COURTYARD MGR	2.5 X 2.5	2.5 X 2.5	YES
LANDSCAPE	40% OR 281	40% OR 281	YES

ROOM BREAKDOWN	SINGLE	DOUBLE	MGR	TOTAL
GROUND	5	4	1	10
FIRST	8	3	0	11
				21 TOTAL ROOMS

PARKING		PROV	RQD
0.5 SPACE PER ROOM 1 SPACE PER MGR	20 X 0.5 = 10 1 X 1 = 1	11	11

REFER TO TRAFFIC REPORT



LOCATION MAP

DEVELOPMENT APPLICATION
BOARDING HOUSE DEVELOPMENT
159 JAMISON RD, PENRITH

DRAWING INDEX

DA1001 - SITE ANALYSIS PLAN/ COVER

DA2001 - BASEMENT FLOOR
DA2002 - GROUND FLOOR
DA2003 - LEVEL 1
DA2004 - ROOF PLAN

DA3001 - ELEVATIONS
DA3002 - SECTIONS

DA4001 - SHADOWS

VIEW ALONG CORNER OF JAMISON ROAD & DOONMORE STREET

VIEW ALONG DOONMORE STREET

Average star rating 6.6
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.: 0003700970
Assessor Name: Mahbub Hassan
Accreditation no.: 20851
Certificate date: 20 March 2019
Dwelling Address:
159 JAMISON RD
PENRITH, NSW
2750

www.nathers.gov.au

ABSA Australian Building Sustainability Association
Accreditation Period 2018-2019
Assessor Name Mahbub Hassan
Assessor Number 20851
Assessor Signature
NatHERS Assessments completed within the accreditation period are part of the ABSA quality audit system
The Accredited Assessor is qualified to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Conduct

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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PLATFORM 5 DESIGN

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

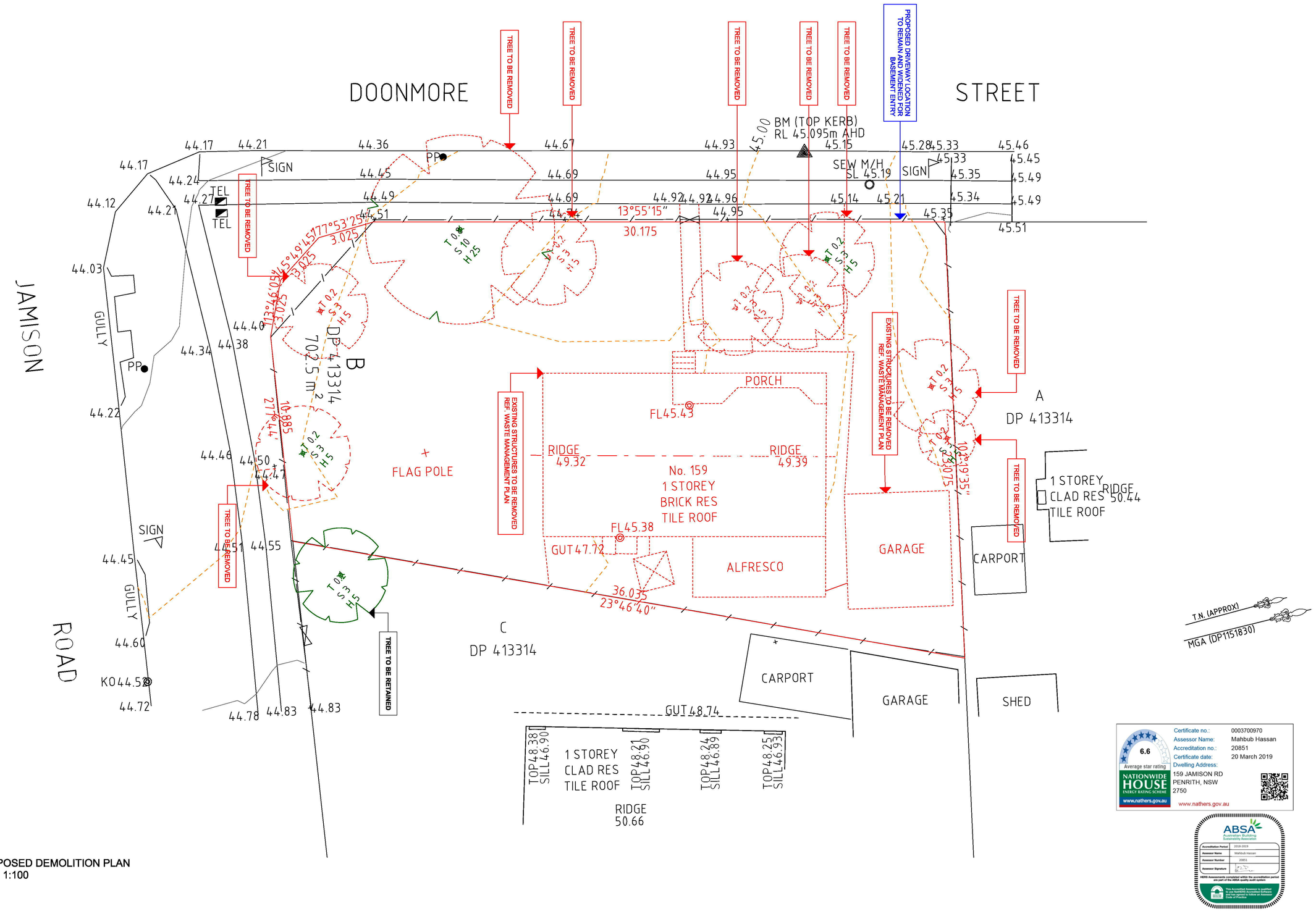
CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

1000 SITE PLAN
SITE ANALYSIS PLAN
Designed
JC
Approved
JC

Project Number
18-030
Scale
AS SHOWN
Drawing Number
1001
Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C



PROPOSED DEMOLITION PLAN
@ A1 1:100

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
B	ISSUE FOR INFORMATION	18-03-19			
C	DA SUBMISSION	20-03-19			
D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

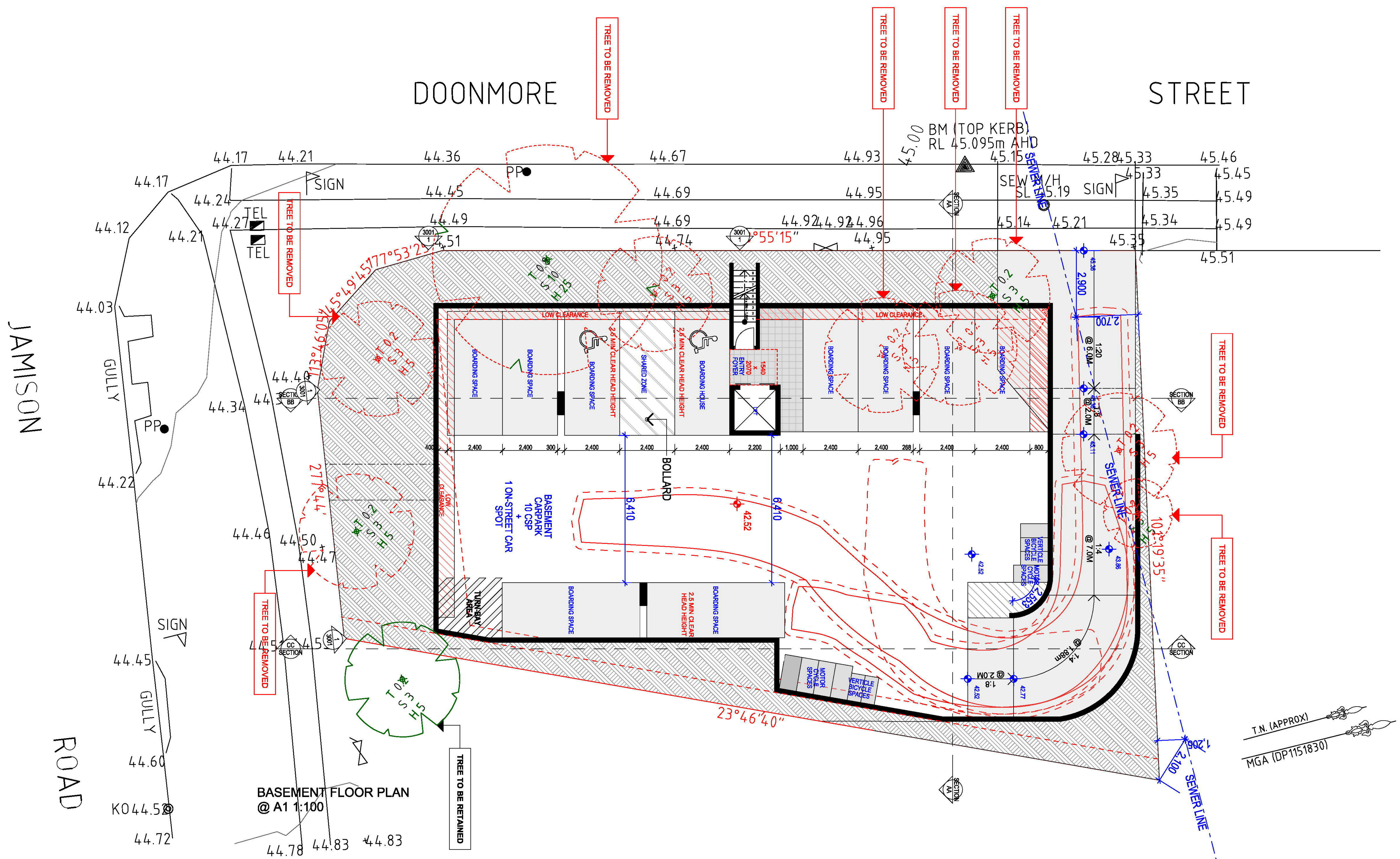
CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

1200 EXIST & DEMO PLANS
DEMOLITION PLAN
Designed
JC
Approved
JC

Project Number
18-030
Scale
AS SHOWN
Drawing Number
1202
Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C



BASEMENT 01 FLOOR PLAN
1:100 @ A1

Assessor Certificate

Issued in accordance with
BASIX Thermal Comfort Simulation Method.

Assessor No # 20851 Projects: PENRITH

Thermal performance specifications

Following specification must apply to all instances of that element for the whole project. If different construction elements are applied then the Assessor Certificate is no longer valid.

Certificate No:		**159 JAMISON RD**
External walls Construction		**Added Insulation**
Brick Veneer(First floor)		R2.0
Cavity Brick (Ground floor)		R1.5
Internal walls Construction		
Party wall on studs(between units)		R1.5
Single skin		R1.5
Roof Construction		
Metal Roof		Foil
Colour		Medium
Ceilings Construction		
Plaster board		R3.0
Floors Construction	**Covering**	
Concrete (above carpark)	As drawn	R1.0
Concrete (Floor between)	As drawn	Nil

Windows & Glazed door

All window and glazed door to be selected as per AFRC. Deviation is accepted ±5%. : This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated.

Area(M²)	Frame	Ext. cover	U Val	SHGC	Glazing
As drawn	Aluminium	As drawn	5.6	0.41	Single clear

Skylights

Area (M²)	Type	Glazing
As drawn	Nil	Nil

Fixed shading (eaves, pergolas, verandas , awnings)

All shade elements modelled as drawn	
Weather seals to windows and doors	Be provided
All down lights be sealed	Yes

1Thermal Spec_159 JAMISON RD1

6.6
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.: 0003700970
Assessor Name: Mahbub Hassan
Accreditation no.: 20851
Certificate date: 20 March 2019
Dwelling Address:
159 JAMISON RD
PENRITH, NSW
2750
www.nathers.gov.au

ABSA
Australian Building Sustainability Association

Accreditation Period	2018-2019
Assessor Name	Mahbub Hassan
Assessor Number	20851
Assessor Signature	

HERS Assessments completed within the accreditation period are part of the ABSA quality audit system

This Accredited Assessor is qualified to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

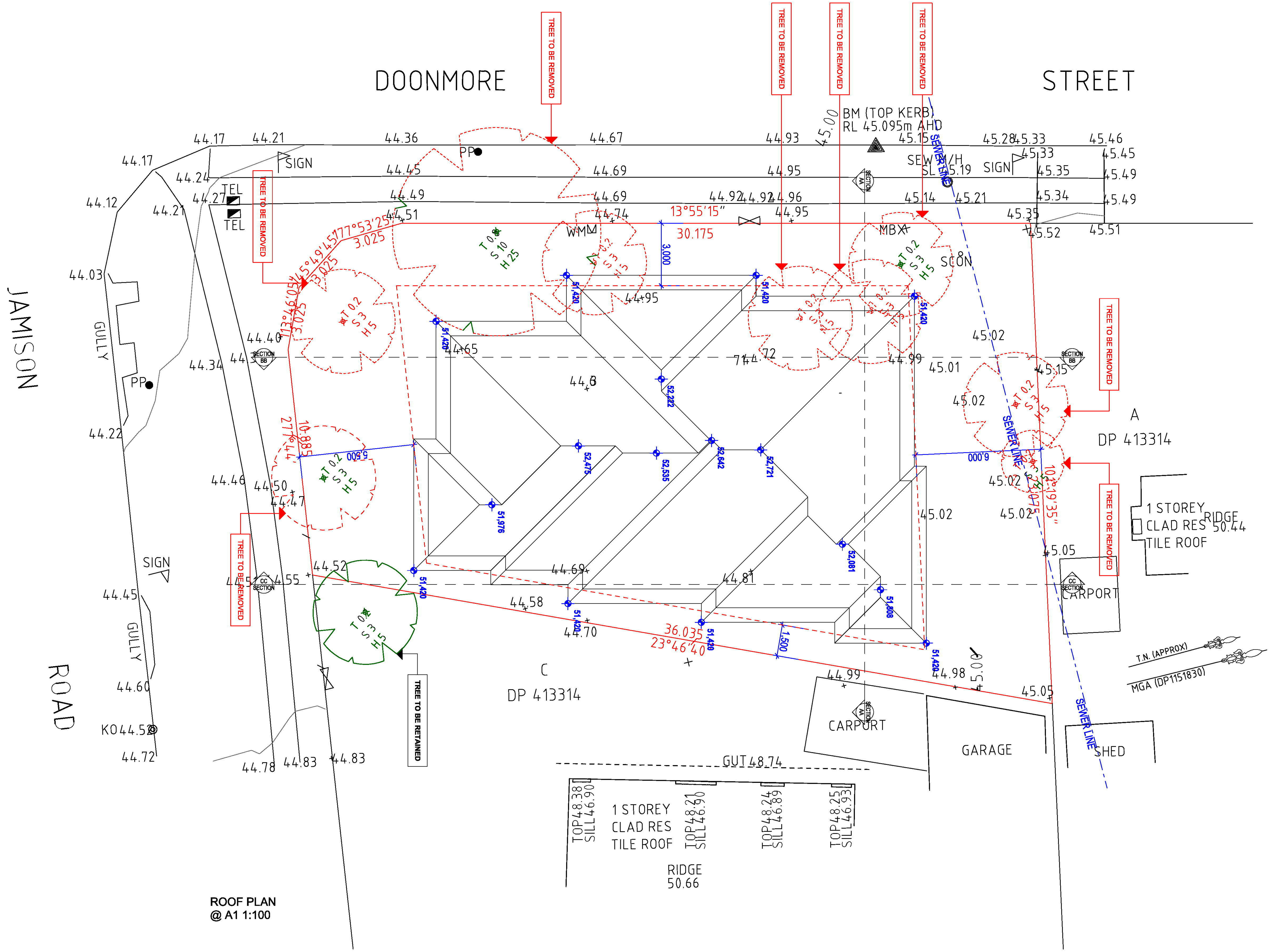
CLIENT:
ALPHA ENGINEERING & DEVELOPMENT

2000 FLOOR PLANS
BASEMENT PLAN
Designed JC
Approved JC

Project Number **18-030**
Scale **AS SHOWN**
Drawing Number **2001**
Date of Issue **30/03/2019**

DEVELOPMENT APPLICATION ISSUE C

Document Set ID: 8760134
Version: 1, Version Date: 04/07/2019



ROOF PLAN
@ A1 1:100

Assessor Certificate	
Issued in accordance with BASIX Thermal Comfort Simulation Method.	
Assessor No # 20851 Projects: PENRITH	
Thermal performance specifications	
Following specification must apply to all instances of that element for the whole project. If different construction elements are applied then the Assessor Certificate is no longer valid.	
Certificate No:	**159 JAMISON RD**
External walls Construction	**Added Insulation**
Brick Veneer(First floor)	R2.0
Cavity Brick (Ground floor)	R1.5
Internal walls Construction	
Party wall on studs(between units)	R1.5
Single skin	R1.5
Roof Construction	
Metal Roof	Foil
Colour	Medium
Ceilings Construction	
Plaster board	R3.0

Floors Construction	Covering	
Concrete (above carpark)	As drawn	R1.0
Concrete (Floor between)	As drawn	Nil

Windows & Glazed door

All window and glazed door to be selected as per AFRC. Deviation is accepted ±5%. : This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated.

Area(M^2)	Frame	Ext. cover	U Val	SHGC	Glazing
As drawn	Aluminium	As drawn	5.6	0.41	Single clear

Skylights

Area (M^2)	Type	Glazing
As drawn	Nil	Nil

Fixed shading (eaves, pergolas, verandas , awnings)

All shade elements modelled as drawn	
Weather seals to windows and doors	Be provided
All down lights be sealed	Yes

1Thermal Spec_159 JAMISON RD1

6.6
Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.: 0003700970
Assessor Name: Mahbub Hassan
Accreditation no.: 20851
Certificate date: 20 March 2019
Dwelling Address: 159 JAMISON RD PENRITH, NSW 2750
www.nathers.gov.au

ABSA

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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C	DA SUBMISSION	20-03-19			
D					
E					
F					

PLATFORM 5 DESIGN

- 159 JAMISON RD -
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:
ALPHA ENGINEERING & DEVELOPMENT

2100 ROOF PLANS
ROOF PLAN
Designed JC
Approved JC

Project Number 18-030
Scale AS SHOWN
Drawing Number 2004
Date of Issue 30/03/2019

DEVELOPMENT APPLICATION ISSUE C

PLATFORM FIVE
DESIGN PTY.LTD

North Elevation
SCALE 1:100

South Elevation
SCALE 1:100

West Elevation
SCALE 1:100

East Elevation
SCALE 1:100

Assessor Certificate

Issued in accordance with
BASIX Thermal Comfort Simulation Method.

Assessor No # 20851 Projects: PENRITH

Thermal performance specifications

Following specification must apply to all instances of that element for the whole project. If different construction elements are applied then the Assessor Certificate is no longer valid.

Certificate No:		**159 JAMISON RD**
External walls Construction		**Added Insulation**
Brick Veneer(First floor)		R2.0
Cavity Brick (Ground floor)		R1.5
Internal walls Construction		
Party wall on studs(between units)		R1.5
Single skin		R1.5
Roof Construction		
Metal Roof		Foil
Colour		Medium
Ceilings Construction		
Plaster board		R3.0
Floors Construction	**Covering**	
Concrete (above carpark)	As drawn	R1.0
Concrete (Floor between)	As drawn	Nil

Windows & Glazed door

All window and glazed door to be selected as per AFRC. Deviation is accepted ±5%. : This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the stated.

Area(M²)	Frame	Ext. cover	U Val	SHGC	Glazing
As drawn	Aluminium	As drawn	5.6	0.41	Single clear

Skylights		
Area (M²)	Type	Glazing
As drawn	Nil	Nil
Fixed shading (eaves, pergolas, verandas , awnings)		
All shade elements modelled as drawn		
Weather seals to windows and doors		Be provided
All down lights be sealed		Yes

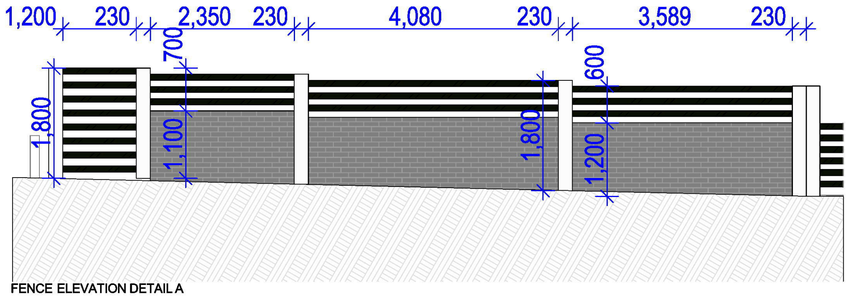
6.6 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au

Certificate no.: 0003700970
Assessor Name: Mahbub Hassan
Accreditation no.: 20851
Certificate date: 20 March 2019
Dwelling Address: 159 JAMISON RD PENRITH, NSW 2750

www.nathers.gov.au

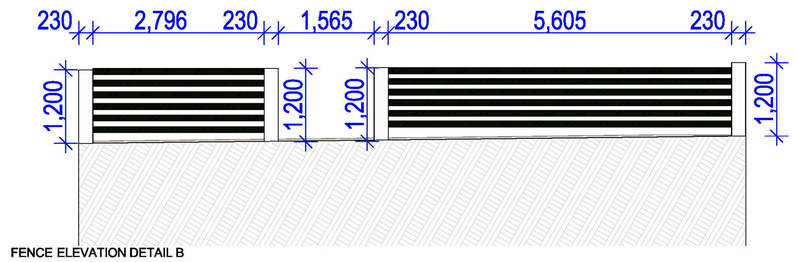
ABSA Australian Building Sustainability Association
Accreditation Period 2018-2019
Assessor Name Mahbub Hassan
Assessor Number 20851
Assessor Signature
HERS Assessments completed within the accreditation period are part of the ABSA quality audit system
This Accredited Assessor is qualified to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

1Thermal Spec_159 JAMISON RD1



FENCE ELEVATION DETAIL A
SCALE 1:50

DETAIL FENCE A - ALONG DOONMORE FOR PRIATE OPEN SPACE



FENCE ELEVATION DETAIL B
SCALE 1:50

DETAIL FENCE B - OPEN STYLE FENCE. ALONG OVERLAND FLOOR TO BE UNOBSTRUCTED

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

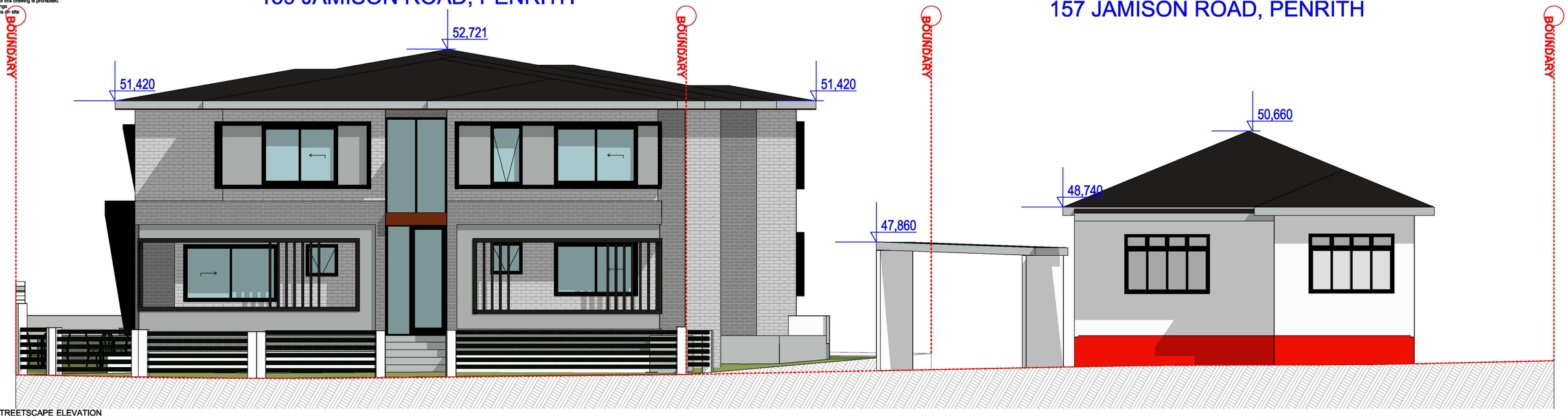
3000 ELEVATIONS
ELEVATIONS
Designed JC
Approved JC

Project Number **18-030**
Drawing Number **3001**
Scale **AS SHOWN**
Date of Issue **30/03/2019**

DEVELOPMENT APPLICATION ISSUE C

PROPOSED BOARDING
HOUSE DEVELPMENT @
159 JAMISON ROAD, PENRITH

EXISTING SINGLE STOREY
CLAD DWELLING @
157 JAMISON ROAD, PENRITH

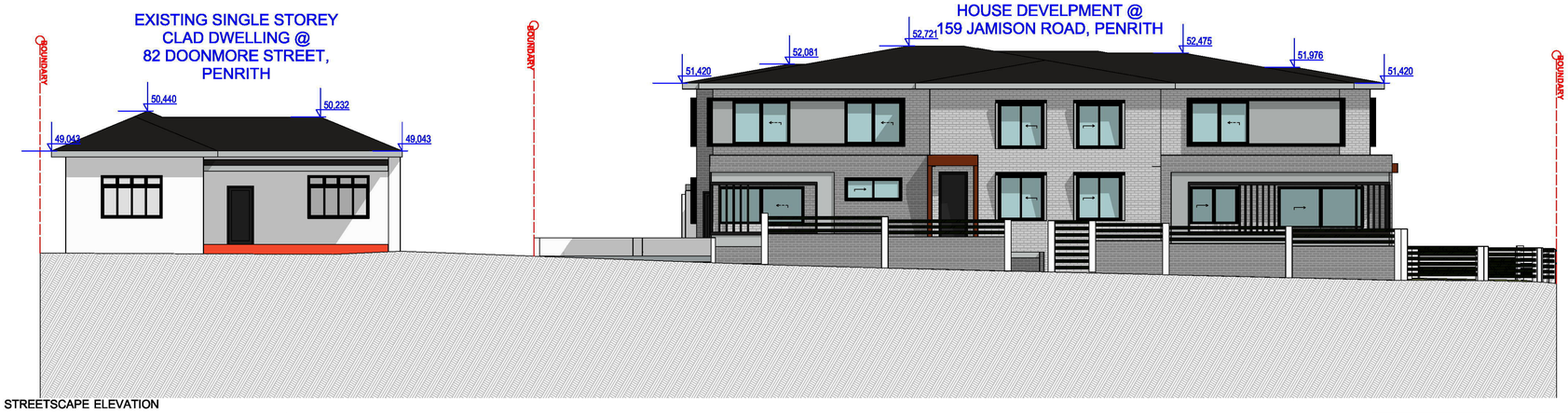


STREETSCAPE ELEVATION
19030 159 Jamison Road, Penrith - Amendment 05.pln
SCALE 1:50

VIEW ALONG JAMISON ROAD

EXISTING SINGLE STOREY
CLAD DWELLING @
82 DOONMORE STREET,
PENRITH

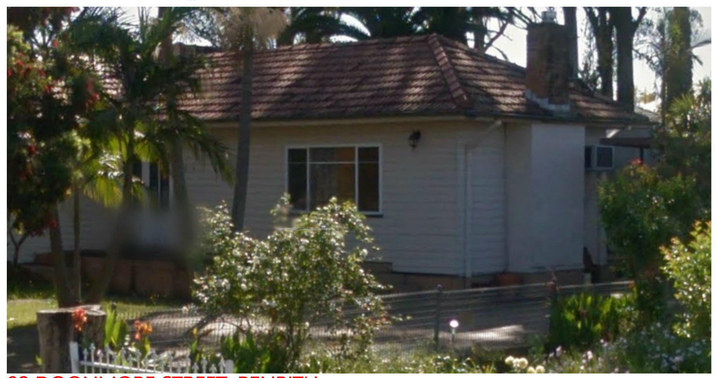
PROPOSED BOARDING
HOUSE DEVELPMENT @
159 JAMISON ROAD, PENRITH



STREETSCAPE ELEVATION
19030 159 Jamison Road, Penrith - Amendment 05.pln
SCALE 1:100

VIEW ALONG DOONMORE STREET

157 JAMISON ROAD, PENRITH



82 DOONMORE STREET, PENRITH

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

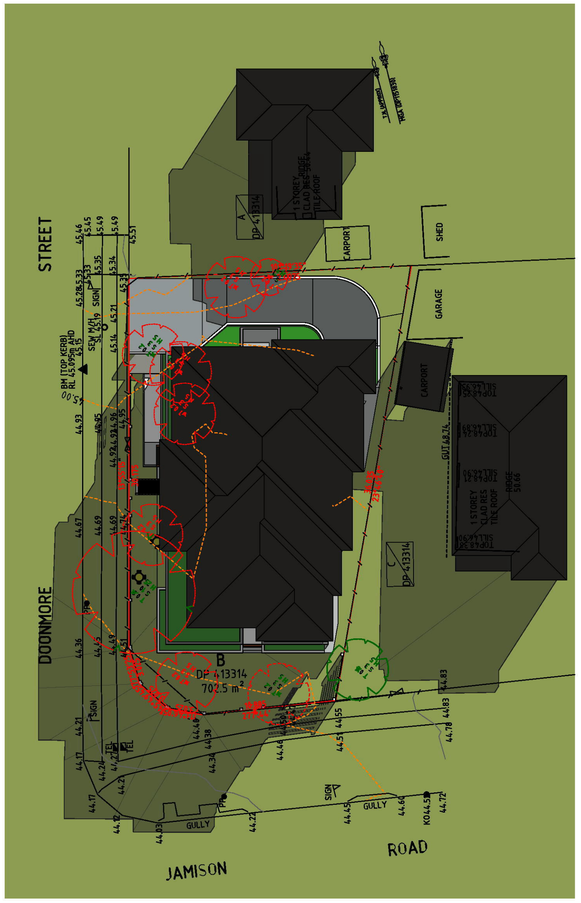
CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

3000 ELEVATIONS
STREETSCAPE
Designed
JC
Approved
JC

Project Number
18-030
Scale
AS SHOWN
Drawing Number
3002
Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C



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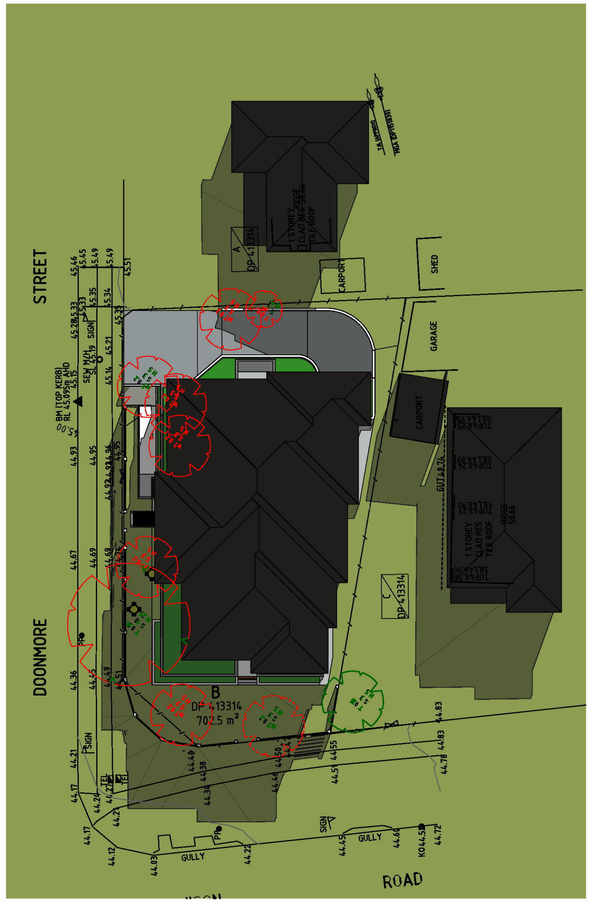

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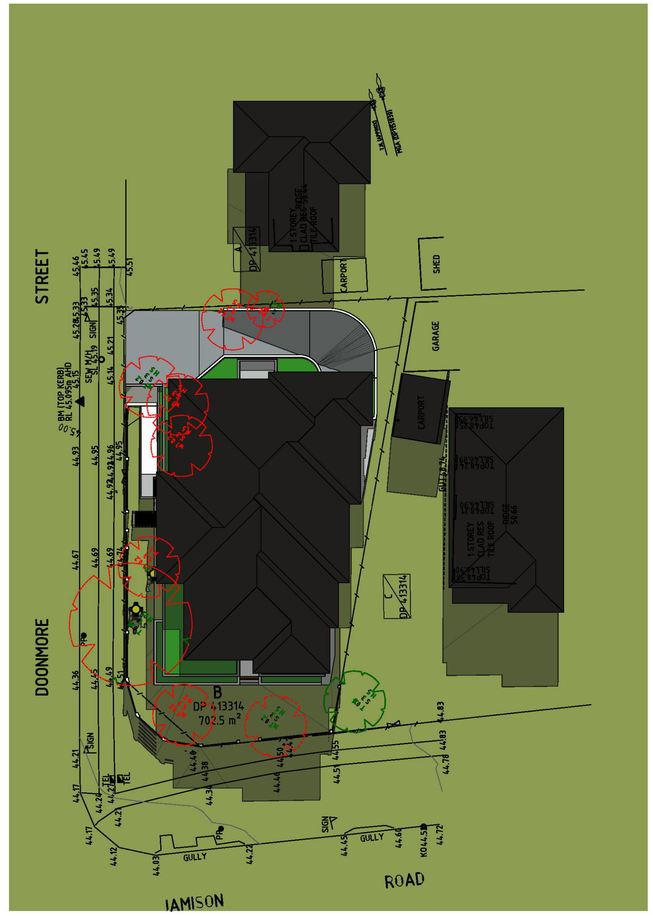

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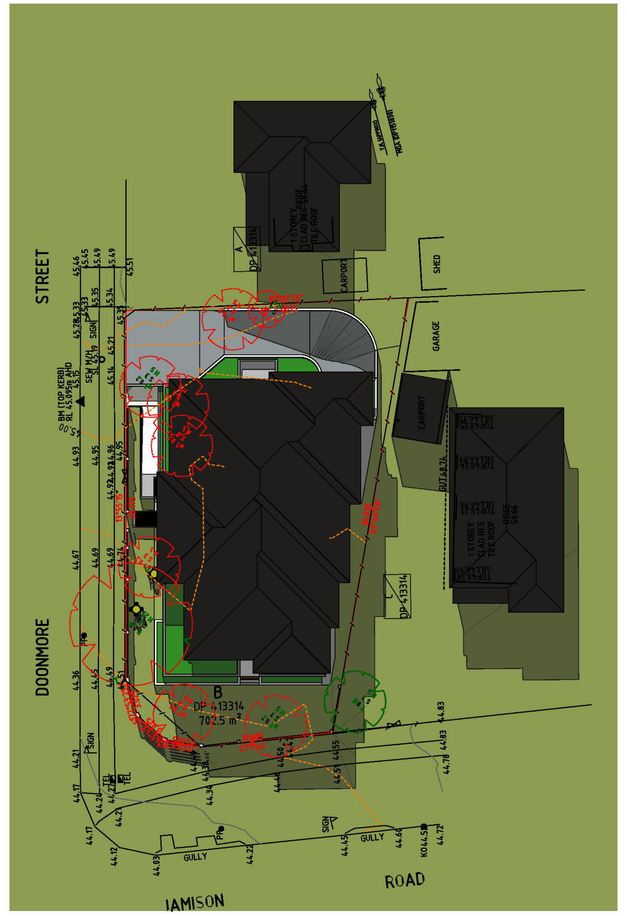

1 JUNE 21ST, 12PM 1:250

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
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- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

3200 SHADOW DIAGRAMS
JUNE EQUINOX

Designed
JC

Approved
JC

Project Number
18-030

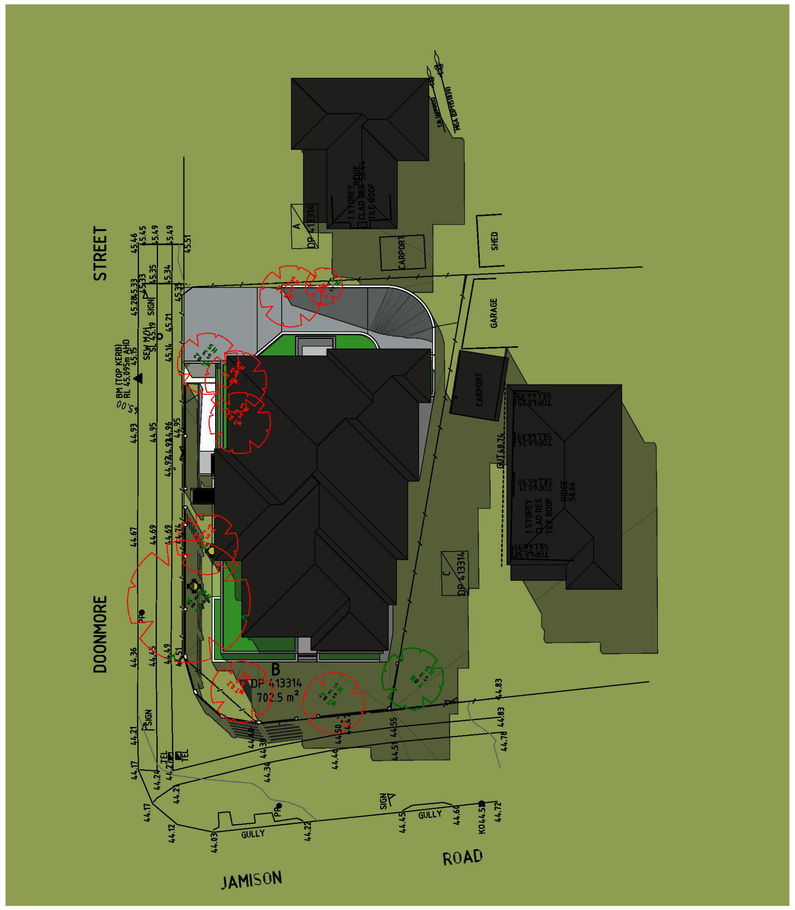
Scale
AS SHOWN

Drawing Number
4001

Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C

PLATFORM FIVE
DESIGN PTY.LTD



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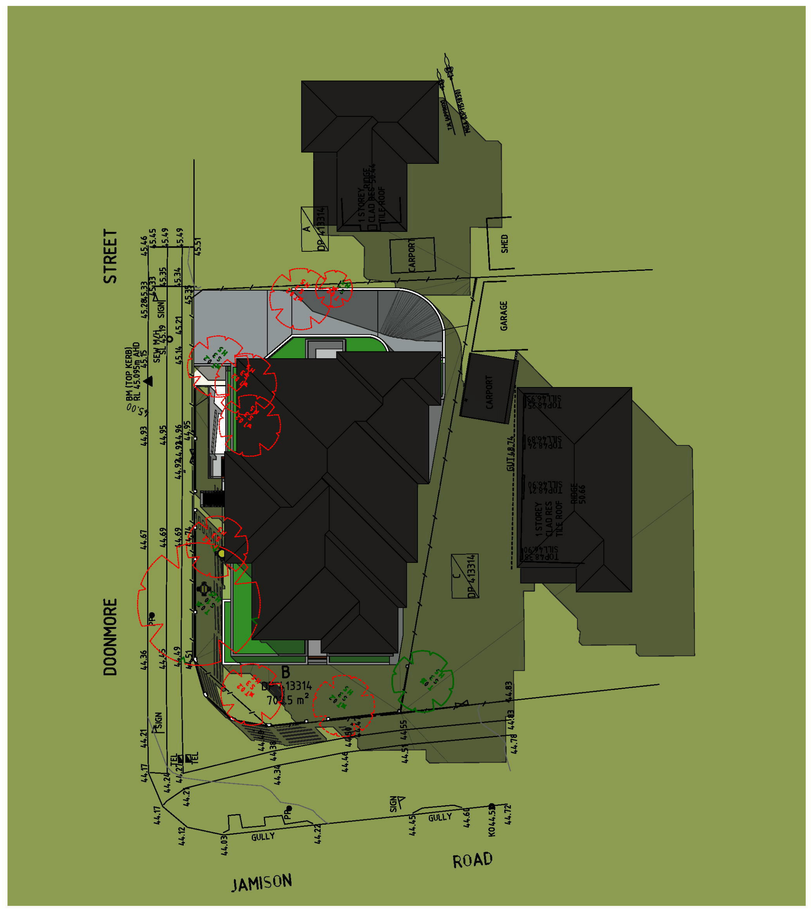

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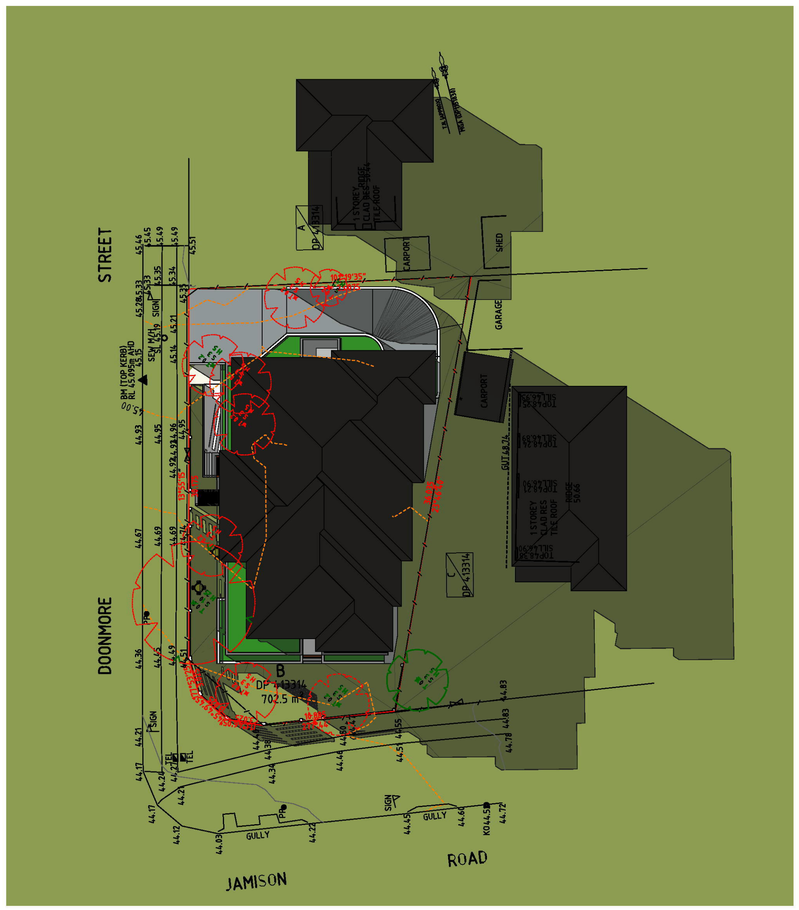

1 JUNE 21ST, 3PM 1:250

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
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- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

3200 SHADOW DIAGRAMS
JUNE EQUINOX
Designed JC
Approved JC

Project Number **18-030**
Scale **AS SHOWN**
Drawing Number **3201**
Date of Issue **30/03/2019**

DEVELOPMENT APPLICATION ISSUE C

PLATFORM FIVE
DESIGN PTY.LTD

SCHEDULE OF EXTERNAL FINISHES FOR PROPOSED BOARDING HOUSE DEVELOPMENT @ 159 JAMISON ROAD, PENRITH

COLOURS ARE INDICITATIVE ONLY AND MAY VARY DUE TO AVAILABILITY

ALL PAINT BY DULUX TO BE RENDERED AND PAINTED

PGH BRICKS
ALFRESCO - COCOA - **A**

RENDER AND PAINT
DULUX - RAKU **B**

RENDER & PAINT FINISH
DULUX - CELTIC SKY **C**

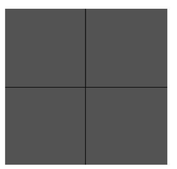
DULUX POWDERCOAT
MONUMENT GREY OR SIMILAR **D**

AS SEEN FROM CORNER OF JAMISON ROAD & DOONMORE STREET, PENRITH

BLACK FRAMED
SEMI TRANSPARENT
GLASS BALUSTRADE
OR SIMILAR **H**

ALUMINIUM FRAMED
WINDOWS & DOORS
STEGBAR CHARCOAL **G**

SHEET METAL ROOF
COLOURBOND
WOODLAND GREY **F**



FINISHED STENCILLED
CONCRETE OR SIMILIAR **E**

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
B	ISSUE FOR INFORMATION	18-03-19			
C	DA SUBMISSION	20-03-19			
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- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

6300 EXTERNAL FINISHES SCHEDULE

FINISHES SCHEDULE

Designed
JC

Approved
JC

Project Number
18-030

Scale
AS SHOWN

Drawing Number
6301

Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C

Document Set ID: 8760134
Version: 1, Version Date: 04/07/2019

PLATFORM FIVE
DESIGN PTY.LTD
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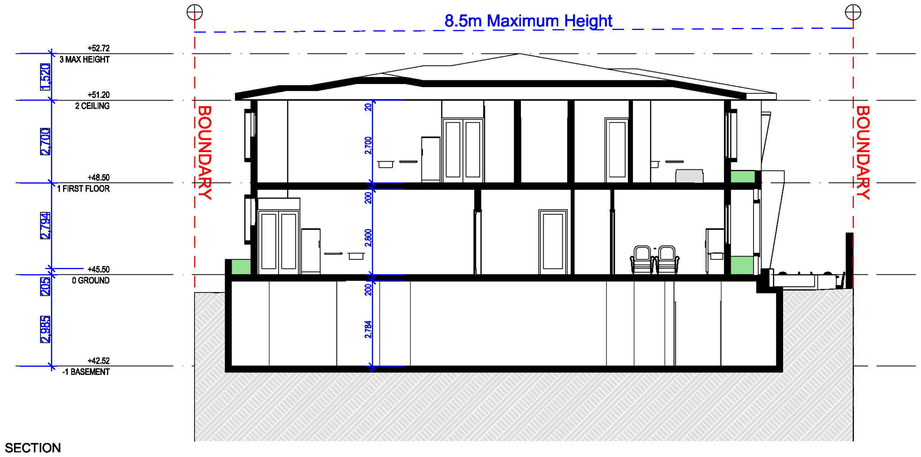
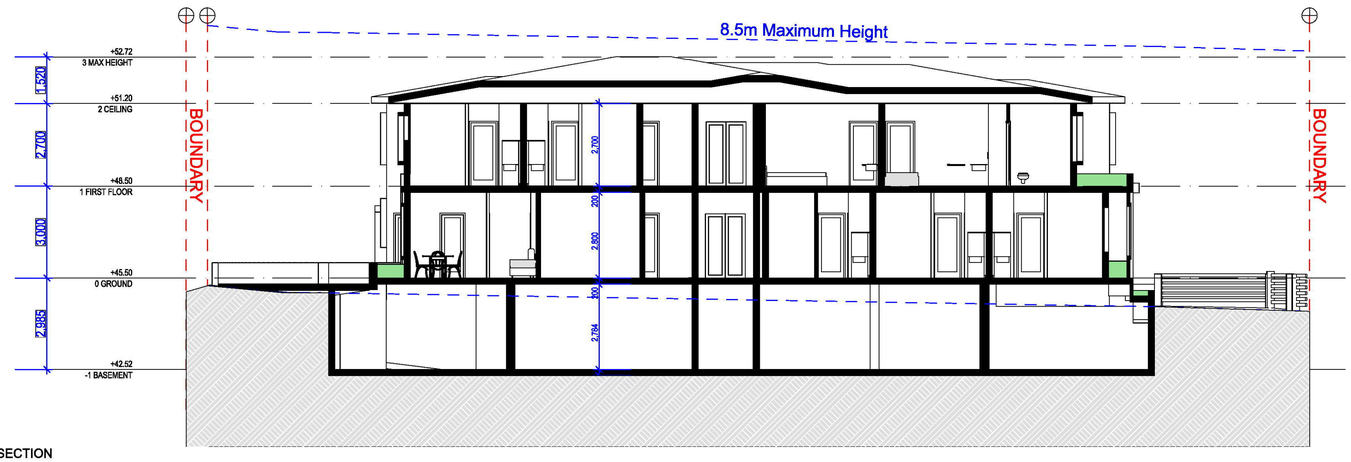
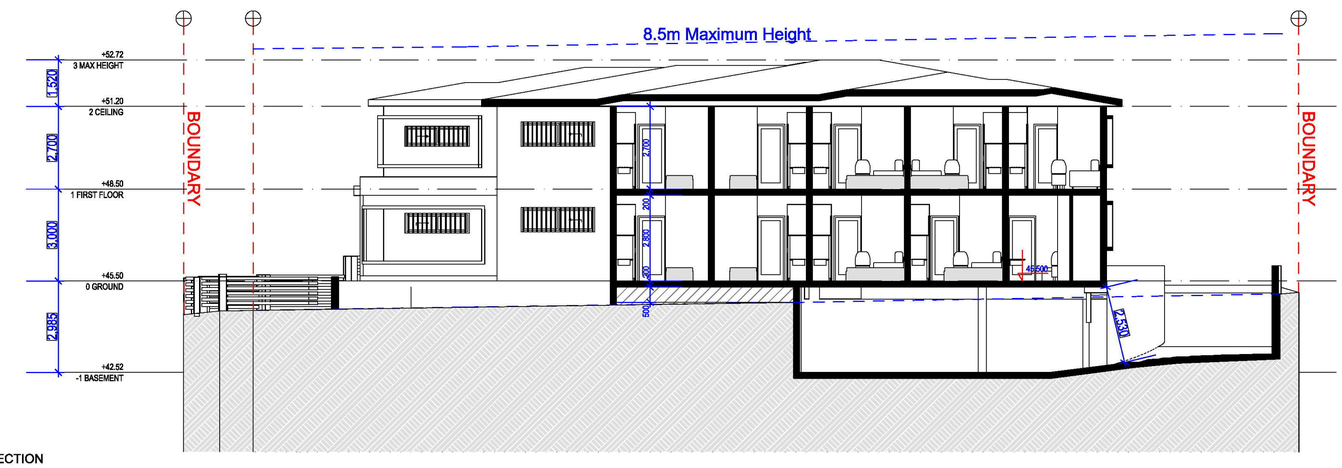


SECTION
SCALE 1:100



SECTION
SCALE 1:100



SECTION
SCALE 1:100

Certificate no.: 0003700970
Assessor Name: Mahbub Hassan
Accreditation no.: 20851
Certificate date: 20 March 2019
Dwelling Address:
159 JAMISON RD
PENRITH, NSW
2750
6.6 Average star rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
www.nathers.gov.au
www.nathers.gov.au

ABSA Australian Building Sustainability Association
Accreditation Period: 2018-2019
Assessor Name: Mahbub Hassan
Assessor Number: 20851
Assessor Signature:
HERS Assessments completed within the accreditation period are part of the ABSA quality audit system.
This Accredited Assessor is qualified to use NatHERS Accredited Software and has agreed to follow an Assessor Code of Practice

Assessor Certificate

Issued in accordance with
BASIX Thermal Comfort Simulation Method.

Assessor No # 20851 Projects: PENRITH

Thermal performance specifications

Following specification must apply to all instances of that element for the whole project. If different construction elements are applied then the Assessor Certificate is no longer valid.

Certificate No:		**159 JAMISON RD**
External walls Construction		**Added Insulation**
Brick Veneer(First floor)		R2.0
Cavity Brick (Ground floor)		R1.5
Internal walls Construction		
Party wall on studs(between units)		R1.5
Single skin		R1.5
Roof Construction		
Metal Roof		Foil
Colour		Medium
Ceilings Construction		
Plaster board		R3.0
Floors Construction	**Covering**	
Concrete (above carpark)	As drawn	R1.0
Concrete (Floor between)	As drawn	Nil

Windows & Glazed door

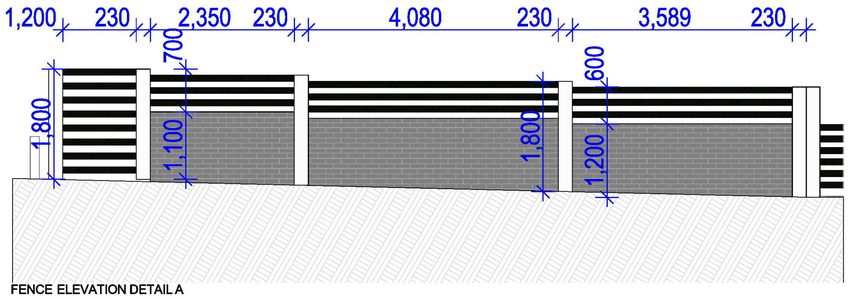
All window and glazed door to be selected as per AFRC. Deviation is accepted ±5%. : This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated.

Area(M^2)	Frame	Ext. cover	U Val	SHGC	Glazing
As drawn	Aluminium	As drawn	5.6	0.41	Single clear

Skylights		
Area (M^2)	Type	Glazing
As drawn	Nil	Nil

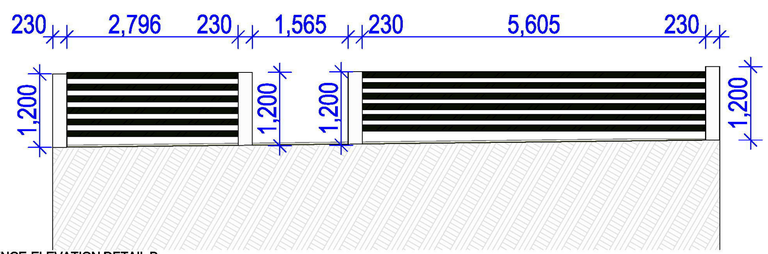
Fixed shading (eaves, pergolas, verandas , awnings)	
All shade elements modelled as drawn	
Weather seals to windows and doors	Be provided
All down lights be sealed	Yes

1Thermal Spec_159 JAMISON RD1



FENCE ELEVATION DETAIL A
SCALE 1:50

DETAIL FENCE A - ALONG DOONMORE FOR PRIATE OPEN SPACE



FENCE ELEVATION DETAIL B
SCALE 1:50

DETAIL FENCE B - OPEN STYLE FENCE. ALONG OVERLAND FLOOR TO BE UNOBSTRUCTED

PLATFORM 5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
B	ISSUE FOR INFORMATION	18-03-19			
C	DA SUBMISSION	20-03-19			
D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:
ALPHA ENGINEERING & DEVELOPMENT

3100 SECTIONS
SECTIONS
Designed
JC
Approved
JC

Project Number
18-030
Scale
AS SHOWN
Drawing Number
3001
Date of Issue
30/03/2019

DEVELOPMENT APPLICATION ISSUE C

PRAGMA
PLANNING

159 JAMISON ROAD, PENRITH

DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF 21 ROOM BOARDING HOUSE

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REVISION C | DATE 20 MARCH 2019

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Introduction

This report has been prepared in support of a Development Application for the demolition of existing structures, clearance of vegetation and the subsequent erection of a 2-storey Boarding House development comprising 21 rooms over basement parking and associated landscaping pursuant to the provisions of State Environmental Planning Policy (Affordable Rental Housing) 2009 ('SEPP ARH') at 159 Jamison Road, Penrith ("the Site").

The Site is located within an established residential area which is currently undergoing transition from low rise single storey residential dwellings to medium density residential uses generally in the form of multi dwelling housing. The Site is an irregular shaped lot of which fronts Jamison Road with a secondary frontage to Doonmore Street. The Site is zoned R3 Medium Density Residential under the provisions of the Penrith Local Environmental Plan 2010 ('PLEP 2010'). There are no heritage restrictions on the Site or within its immediate vicinity. Figures 1, 2, 3 and 4 and 5 demonstrate the site zoning and context of the site.

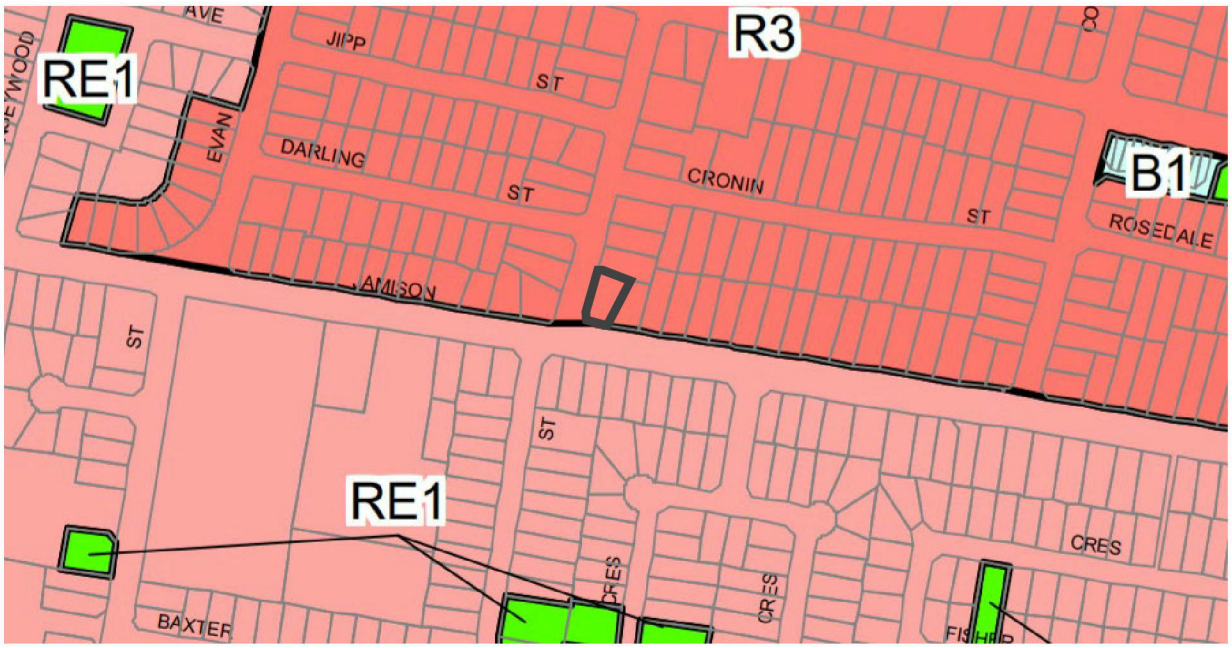


Figure 1. Zoning Map Extract –R3 Medium Density Residential - Penrith Local Environmental Plan 2010 (LZN_013)

Figure 2. Ariel Map of the Site (GoogleEarth)

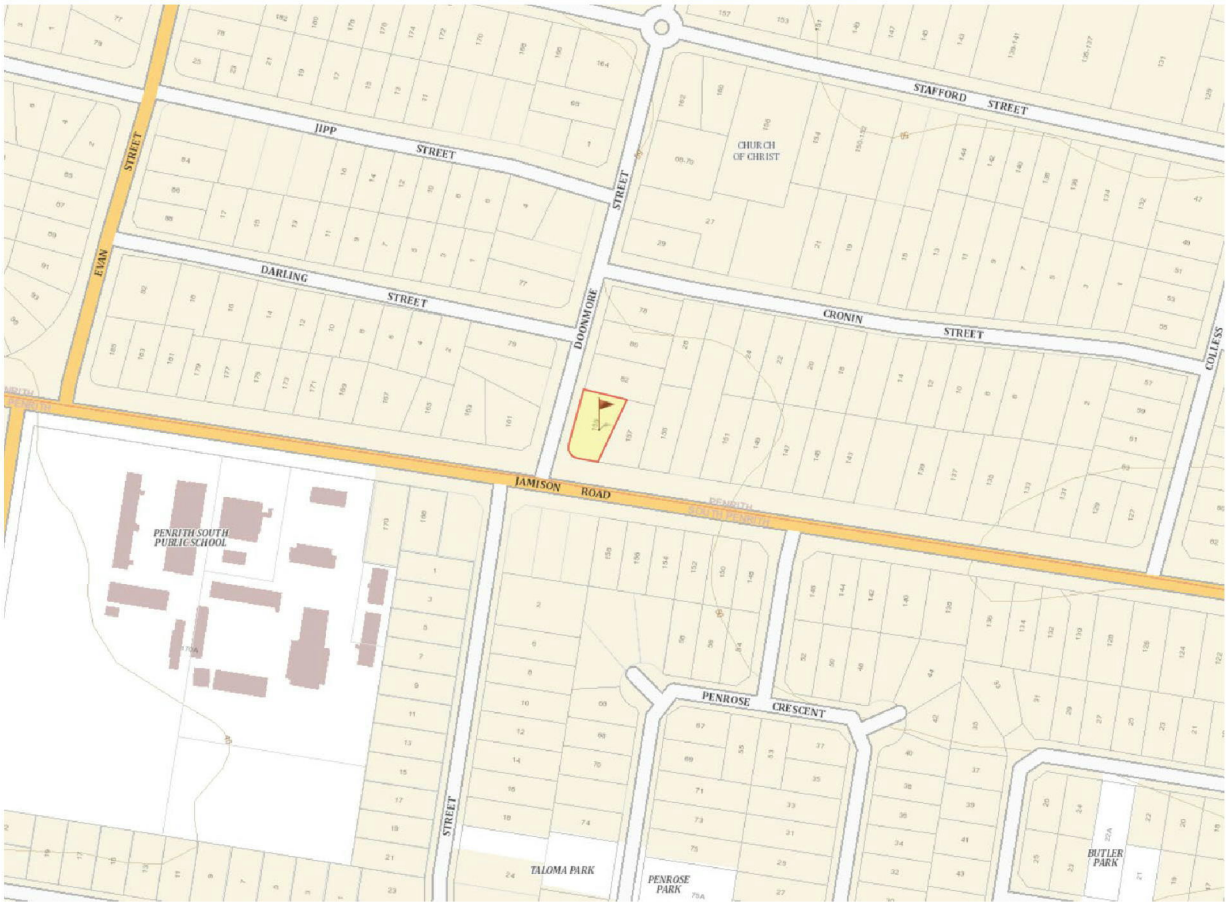


Figure 3. Road Map of Site (Six Maps)

Figure 4. View of the Site and Doonmore Street (Viewing North)

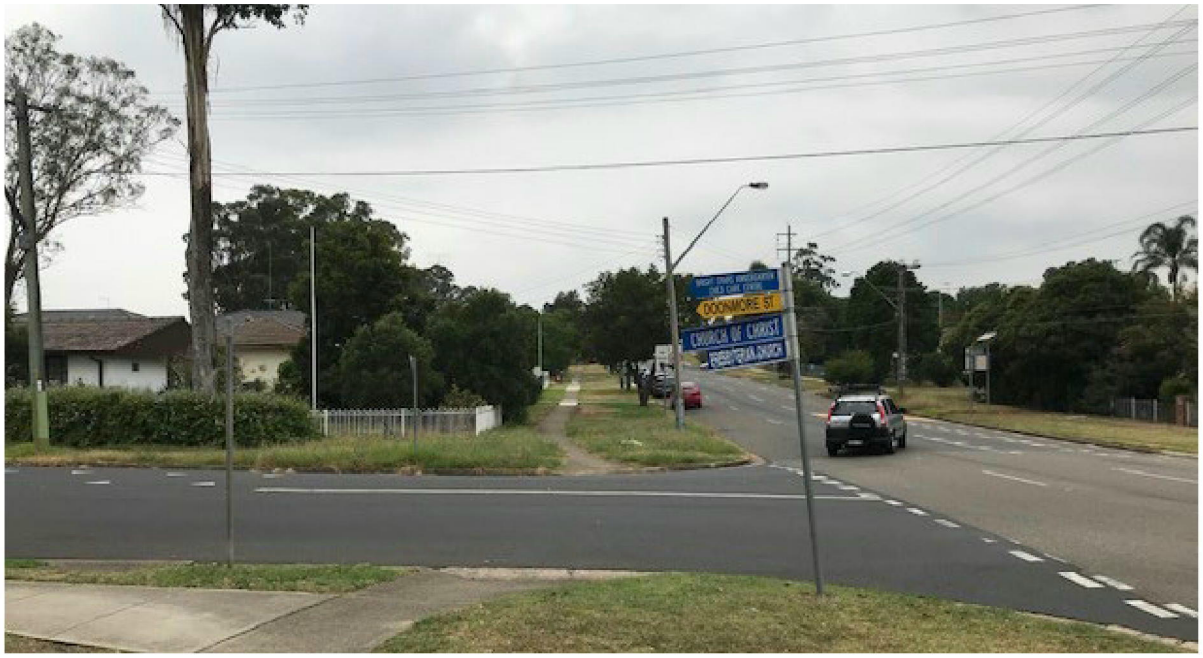


Figure 5. View of the Site and Jamison Road (Viewing West)

Site Context

The subject site is known as 159 Jamison Road, Penrith (Lot B in DP 413314). The subject site fronts Penrith. The lot is an irregular shape with a site area of 702.5m^2. The Site has a 11.6m frontage at boundary to Jamison Road and 30.175m to Doonmore Street. A single storey dwelling currently resides on the Site which is located in such a way that the primary private open space area is located within the front street setback. The Site is strategically located, being located in proximity to the below listed amenities and transport facilities:

- Penrith Town Centre, 900m

- Nepean Hospital, 800m
- Jamison Park, 800m
- Penrith Railway Station, 1.5km
- Six (6) bus stops for the 770, 791 and 794services being within 400m walking distance

Figure 6. View of the Site and Jamison Road (Viewing North)

Figure 7. View of the Site and Jamison Road (Viewing North) [Image from Google Street View]

No. 82 Doonmore Street and 157 Jamison Road each adjoin the Site and have a typical 'fibro' style home residing on the properties with a pitched tile roof (refer to Figures 6 and 7).

The greater locality is currently characterised by single storey dwellings but there is a relatively recent trend toward storey multi dwelling housing developments within the area zoned R3 Medium Density Residential which is exemplified by the below:

175-179 Jamison Road, Penrith

Located within 170m of the Site containing 7 townhouses presenting to the street as single storey with attics that have pronounced dormers oriented toward the streetscape. The dwellings that are oriented toward the streetscape provide a 4m setback.

Figure 8. View 175-179 Jamison Road (Viewing North-East) [Image from Google Street View]

153 Jamison Road 26 Cronin Street Penrith

Located within 40m of the Site containing 8 dwellings presenting to the street as double storey dwellings with pitched tile roof. The dwelling that is oriented toward the streetscape provides a 5.6m setback to Jamison Road.

Figure 9. View of 153 Jamison Road (Viewing North)

Proposal

The Development Application proposes the demolition of the existing dwelling and structures as well as the removal of all trees and vegetation with the exception of Tree 10 on Site in order to erect a 2 (two) storey Boarding House, comprising 21 (twenty-one) rooms over basement. The design of the Proposed Development incorporates contemporary architectural aesthetics that appropriately relate to existing adjoining properties and are sympathetic to the nature

and character of the area and streetscape as it transitions into medium density residential uses.

Table 1. Level by level breakdown of Proposed Boarding House

Level	Contents
Basement	▪ 10 x car spaces ▪ 4 x Motorcycle spaces ▪ 4 x Vertical bicycle spaces
Ground	▪ 10 x Boarding Rooms o 5 x single rooms o 4 x double rooms o 1 x Managers room with 8m^2 terrace and office area ▪ Waste Storage Room – 17m^2 ▪ Bulky Storage Area – 5m^2 ▪ Communal Room – 20m^2 o Bathroom associated with communal room (3m^2) ▪ 281m^2 of Landscape Area ▪ 20m^2 Private Open Space Area Additionally, clothes drying areas, landscaping and internal passageways including pathways, ramps and vehicular driveway is to be provided at ground level.
Level 1	▪ 11 x Boarding Rooms o 8 x single rooms ▪ 2 x accessible rooms o 3 x double rooms

This report should be read in conjunction with the below listed documents prepared by suitably qualified consultants:

- Architectural Plans prepared by Platform 5
- Acoustic Report prepared by Acoustics works
- Access Compliance Report prepared by Vista Access Architects
- Flood Study prepared by Alpha Engineering and Development
- Landscape Plans prepared by Vision Dynamics Pty Ltd
- Stormwater and Drainage Plans prepared by Alpha Engineering and Development
- Plan of Management (Appendix A) prepared by
- Traffic and Parking Assessment Report
- Waste Management Plan

Pre-Lodgement Meeting

A Pre-Lodgement Meeting was undertaken for the Site on the 22 January 2019. The Proposal has since been amended to address comments made by Council in its letter dated the 31 January 2019. Please see the below comments in relation to the comments made in the letter:

PLANNING:

•Any application received must provide necessary discussion in relation to the relevant Sections of the Penrith Development Control Plan 2014 in particular the objectives and controls for boarding houses within Section 5.11.

Comment: The objectives and controls of the Section 5.11 have been considered and addressed in a later section of this document.

Site Suitability

The nature of the site as a corner lot is considered to create constraints for any built form, given the need for two street frontages in addition to a rear setback and landscaped side setbacks.

Comment: The Proposal has been amended in such a way that that completements the Site characteristics with respect to the impacts to the adjoining properties and greater locality. The Proposal maintains an appropriate building separation to 157 Jamison Road and 82 Doonmore Street of which each property has a driveway along the common boundary. The proposal does not result in any undue shadow, acoustic or privacy impacts due to the siting and it is considered that given the statutory controls and recent developments nearby a two-storey residential building is suitable for the Site.

Character of Local Area

• The design of the proposed boarding house is not considered to be compatible with the character of the local area, as required by Clause 30 of the Affordable Rental Housing SEPP 2009, for the following reasons:

- *Residential accommodation in the local area is designed to have consistent landscaped setbacks, low scale articulated dwellings, and earthy tones. By contrast, submitted plans indicate excessive fill and retaining walls, encroachments upon the front and rear setbacks, tree removal and poor landscaping, excessive building dimensions, incompatible colours and a bulky design.*
- *In accordance with Section 5.11 of the DCP, a neighbourhood analysis should be completed to identify the desired future character of the neighbourhood*

Comment: A detailed analysis has been undertaken as part of the consideration Clause 30A of the SEPP ARH in a later section.

Front and Rear Setbacks

•The proposed street front setbacks are inconsistent with the predominant pattern of setbacks in the vicinity. In this regard, the proposal does not reflect the character of the established garden suburb nor provide for suitable landscaping treatment.

Comment: The Proposal maintains a compliant 6m rear setback to 82 Doonmore Street. The development adopts a minimum 5.5m from the primary building line to Jamison Road but increases to 6.5m to the eastern end of the Site due to the irregular shape of the allotment. The proposal as amended provides in excess of 97m^2 of landscaping forward of the front building line which is comparable to other medium density residential developments in the immediate locality, particularly 153 Jamison Road which provides 66m^2 of landscape area while having a total 108m^2 front setback area (DA16/0278). It is considered that the proposed front setback area will be in keeping with the recent multi-dwelling housing developments that represent the natural transition in the locality to medium density residential uses.

• The proposed rear setback, as an access way, does not allow for the development of flora and fauna corridors. Concern is raised regarding the balance of bulk and scale overall, coupled with a lack of deep soil and extensive hardstand areas.

Comment: The rear setback as an accessway which abuts the existing accessway for 82 Doonmore Street as well as ensuring an appropriate turning circle to enter and exit the site safely. The Site maintains a total of 281m^2 (40%) of landscaped area while also providing planting along first storey elements to soften the presentation of the proposal to the streetscape and ensuring consistency with the establish garden suburb character of Penrith.

•Consideration is to be given to a reduced number of rooms to provide for deep soil planting opportunities, a more amenable interface with adjoining properties and a compatible streetscape presentation.

Comment: The proposal has reduced the number of rooms since the Pre-Lodgement meeting from 22 rooms to 21 rooms as well reduced the overall floor area from 608m^2 to 585m^2. The proposal now adds planter areas along the western and northern elevation to increase the level of modulation and soften the presentation of the proposal so as to create an amenable interface with the streetscape.

Private Open Space

To comply with the Affordable Rental Housing SEPP 2009, at least 20m^2 of private open space (outdoor area) for communal use must be provided, in addition to the communal living room.

The usability of the manager's open space is questionable as the living area of the manager's room does not directly connect to the associated outdoor space.

Comment: The proposal provides a private outdoor open space area of 20m^2 located within the secondary street setback. The managers open space areas has been increased from 7m^2 to 8m^2 and directly adjoins the managers room so as to ensure ease of accessibility for the manager.

Built Form, Scale and Appearance

• The presentation of the proposal is considered bulky, lacking setbacks and poor articulation in either materials, finishes or window variation, nor any stepped component to soften the apparent bulk and scale.

Comment: The proposal as amended provides significant articulation through the utilisation of additional materials and colours akin to properties within the existing streetscape namely, 153 Jamison Road and 166 Jamison Road (Figure 10).

Figure 10. View of 166 Jamison Road (Viewing South)

The proposal now provides a distinguished step at the upper level which significantly increases the modulation of the proposal. Planter boxes have been added to the first storey along the southern and western elevation to soften the appearance of the proposal.

• Walls longer than 20m are both incompatible with the surrounding development and discouraged to avoid "gun-barrel" style developments with long rows of attached dwellings.

Comment: The proposal as amended does not include a wall that is longer than 20m. The proposal does not include any 'gun-barrel' rooms.

• The overuse of grey within the finishes does not blend with the earthy tones within the area.

Comment: The proposal as amended now appropriately provides increased variation in colour with prominent wooden entry features and earthy tones complimented by increased opportunity for first floor landscaping.

• The western elevation does not deploy traditional principles of orientation towards the street.

Comment: The western elevation has been amended so as to provide pedestrian access from Jamison Street allowing for a traditional orientation toward the streetscape**.**

• The proposed 1.5m of fill and subsequent retaining walls are inappropriate as they do not respond to topography while also elevating the building more than is necessary adding to the bulk and scale and resulting in overlooking impacts to the eastern property.

Comment: The fill of the Site has been reduced to within 1m so as to provide a minimum freeboard of 500mm for the habitable areas of the Site.

• Retaining walls shall be maximum of 500mm and be separated from fences, driveways, and landscape verges to allow adequate room for plant growth along the boundaries; they are not supported along the boundaries.

Comment: The proposal has deleted the planter boxes that were located along the boundary of the Site.

Existing vegetation

• The eucalyptus tree within the site's front setback is considered significant to the character of the area and should be retained to soften the impact of the proposed development while also reducing the urban heat island effect of the proposal.

An Arborist Report is required that attests to the health of this tree and any others within the property and makes recommendations for their retention or removal. The results of this report may inform design changes to accommodate the recommendations.

Comment: The proposal provides an Arborist Report prepared by a suitably qualified expert, the proposal follow its recommendations.

Solar Access

• Concern is raised regarding the solar access implications of the excessive building length. While there are no numeric requirements for boarding houses, solar amenity will be considered on a merit assessment basis. Subsequently minimum sunlight provisions for the proposed rooms are to be demonstrated, as well as to communal areas & adjoining properties.

Comment: Given the orientation of the Site (South-North) the eastern rooms will benefit from direct morning sunlight and the western rooms will benefit from afternoon sun as evident in the accompanying architectural plans. Moreover, the communal room benefits from a northern orientation.

Overlooking

•The elevated finished floor levels will result in overlooking of the neighbouring properties to the north and east

Comment: The Site is bound by a driveway toward its northern and western boundaries for each of the adjoining properties. The elevated finished floor areas are not anticipated to result in undue privacy impacts given the building separation (8.3m to 157 Jamison Road and 10.7m to 82 Doonmore Street) and location of the proposed windows.

Tenant Amenity, Safety and Privacy

• In accordance with Section 5.11 (3), if over 10 boarding rooms are supplied, 10% of the total number of dwellings (rounded up) must be accessible.

Comment: The proposal provides two accessible rooms (Room 1.01 and 1.02).

• Accessibility is questionable given the level difference between the natural ground level and the proposed finished floor level. It is also noted that a ramp within a front setback is not considered appropriate in the character of the surrounding area with such narrow setbacks proposed, nor is a chairlift deemed practical.

• If the setbacks were greater, a ramp could be considered with adequate landscape treatment. Alternatively, accessibility may be considered along Doonmore Street if the level difference is less.

Comment: This application is accompanied by an Access Report prepared by Vista Access Architects which demonstrates compliance with the relevant Australian Standards.

• In accordance with Section 5.11 (3), boarding houses are to maintain a high level of residential amenity, safety and privacy by ensuring cross ventilation is achievable such that reliance on air-conditioning is minimised. In addition, the location of any proposed air conditioners is to be shown on elevations in order to understand the likely visual impacts upon the facades.

Comment: Each of the rooms that are not cross-ventilated benefit from large openings which would provide opportunity for ventilation. All of the openings will be designed and constructed in accordance with the relevant provisions of '*Australian Standard - AS 1668.2-220 - The Use of Ventilation and Airconditioning in Buildings*'.

Accommodation size

•The minimum accommodation size for each boarding room is to exclude any area used for the purposes of private kitchen or bathroom facilities and this shall be demonstrated on the floor plans. At present, it appears some of the rooms are undersized and yet as the setbacks cannot be encroached further, the proposal is an overdevelopment.

Comment: The amended plans now clearly demonstrate the accommodation size of each boarding room with the exclusion of private kitchen and bathroom facilities.

SOCIAL PLANNING:

Design

•To appropriately address Crime Prevention Through Environmental Design (CPTED) principles, the main entrance should provide visibility into the building on approach.

Comment: This statement provides comment on the CPTED principles. The proposal now provides two clearly identifiable entrances which are differentiate the private and public realms.

•Secure mail boxes for each dwelling are needed.

Comment: A mailbox for each room is to be included.

Management

It is suggested that the Plan of Management include a process for conflict with neighbours and residents, to help to ensure negative impacts on residents and neighbours are addressed promptly. It is suggested that an incident register is kept and made available to Council, as this may assist Council in monitoring and managing the impacts of boarding houses in Penrith in the future.

Encouragement (or at a minimum, availability) of longer terms of rental (longer than 3 months) through the Plan of Management would help address concerns around transience.

The Plan of Management shall note that new residents will be provided with information to link to local support services, including Western Sydney Tenants' Service and South Penrith Neighbourhood Centre, to ensure residents have access to information and support.

ENVIRONMENTAL MANAGEMENT:

Plan of Management

An operating 'Plan of Management' is to be submitted with any development application to ensure that it operates with minimal impact on adjoining owners and maintains a high level of amenity for residents.

Comment: A Plan of Management which addresses the above has been included as part of this submission.

Noise Impacts

An acoustic assessment is required to be submitted as a part of the development application to demonstrate that the proposed boarding house will not have any impact on nearby sensitive receivers. This report is to be prepared by a suitably qualified acoustic consultant

Comment: An acoustic report prepared by Acoustic Works a suitably qualified acoustic consultant which has been included as part of this submission.

Contamination (SEPP 55)

The application is to address all relevant requirements under State Environmental Planning Policy 55 Remediation of Land (SEPP 55). Council cannot consent to any

development unless these requirements have been satisfied. The application is to demonstrate that the land is suitable for the proposed purpose.

Comment: Comment relating to the requirements of SEPP 55 has been included as part of this statement.

Waste Management

A Waste Management Plan is to be provided addressing waste produced during the demolition, construction and operational phases of the development. It should address waste quantities, storage locations and removal. Vehicular access for collection also needs to be addressed

Comment: A Waste Management Plan has been included as part of this submission.

State Environmental Planning Policy (Affordable Rental Housing) 2009

The Site is zoned R3 Medium Density Residential under the BLEP 2012 and is located within an accessible area, as such the provisions of the State Environmental Planning Policy (Affordable Rental Housing) 2009 (SEPP ARH) applies to the proposal. The relevant SEPP ARH provisions have been considered in the compliance table below.

Table 2. SEPP ARH Compliance Table

State Environmental Planning Policy (Affordable Rental Housing) 200		
Requirement	**Proposal**	**Complies**
Clause 26: Land to which Division applies		
This Division applies to land within any of the following land use zones or within a land use zone that is equivalent to any of those zones: (b) Zone R3 Medium Density Residential,	The Site is zoned R3 Medium Density residential under the provisions of PLEP 2010.	**YES**
Clause 27: Development to which Division applies		
(2) Despite subclause (1), this Division does not apply to development on land within Zone R3 Medium Density Residential or within a land use zone that is equivalent to that zone in the Sydney region unless the land is within an accessible area.	The Site is located within an accessible area as it is located within 400m walking distance of the 770, 791 and 794 bus services which ensure the Site is appropriately serviced between 06.00 and 21.00 Monday to Friday and between 08.00 and 18.00 on each Saturday and Sunday. The below image illustrates the bus stop locations in relation to the Site: 	**YES**
Clause 29: Standards that cannot be used to refuse consent		
(1) A consent authority must not refuse consent to development to which this Division applies on the grounds of density or scale if the density and scale of the buildings when expressed as a floor space ratio are not more than:	The Site is not prescribed an FSR under the PLEP 2010.	**YES**
(c) if the development is on land within a zone in which residential flat buildings are permitted and the land does not contain a heritage item that is identified in an environmental planning instrument or an interim heritage order or on the State Heritage Register—the existing maximum floor space ratio for any form of residential accommodation permitted on the land, plus:		**YES**

(i) 0.5:1, if the existing maximum floor space ratio is 2.5:1 or less, or		**YES**
(2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:	-	-
(a) Building Height **If the building height of all proposed buildings is not more than the maximum building height permitted under another EPI for any building on the land.**	The Proposal seeks a height of well within the 8.5m maximum height limit.	**YES**
(b) Landscaped Area **If the landscape treatment of the front setback area is compatible with the streetscape in which the building is located.**	It is considered that the proposed front setback provides substantial landscaping which enhances the existing streetscape by providing additional canopy trees with deep soil and soft landscaping.	**YES**
(c) Solar Access **Where the development provides for one or more communal living rooms, if at least one of those rooms receives a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.**	The common living room and private open space area have been located on the ground floor so as to benefit from more than three hours direct sunlight between 9.00am and 3.00pm during the mid-winter solstice.	**YES**
(d) Private Open Space **If at least the following private open space areas are provided (other than the front setback area):** **i) One area of at least 20sqm with a minimum dimension of 3 metres is provided for the use of the lodgers,** **ii) If accommodation is provided on site for a boarding house manager – one area of at least 8sqm with a minimum dimension of 2.5 metres is provided adjacent to that accommodation**	The common living room on the ground floor is proposed to be 20m^2 with a width of 3m. It is proposed that the boarding manager's room will be on ground floor (G.04) and will benefit from direct access to a court yard of 8m^2. The length of the court yard space is 2.85m and has a width of 2.5m.	**YES**
(e) Parking **(i) in the case of development in an accessible area—at least 0.5 parking spaces are provided for each boarding**	The Site is located within an accessible area and provides 10 car spaces, one of which will be dedicated to the boarding house manager. The Traffic Management Plan accompanying this submission addresses the shortfall of one space.	**Variation**

room, and **(iii) in the case of any development—not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site,**		
(f) Accommodation Size **i) If each boarding room has a gross floor area of at least:** **12sqm in the case of a boarding room intended to be used by a single lodger, or** **ii) 16sqm in any other case**	Each boarding room is to be appropriately sized with respect to the number of potential lodgers.	**YES**
(3) A boarding house may have private kitchen or bathroom facilities in each boarding room but is not required to have those facilities in any boarding room.	Each of the boarding rooms will have kitchen and bathroom facilities.	**YES**
30 Standards for boarding houses		
(1) A consent authority must not consent to development to which this Division applies unless it is satisfied of each of the following:	Note.	**-**
(a) if a boarding house has 5 or more boarding rooms, at least one communal living room will be provided,	The Proposal includes a common living room on the ground floor which is proposed to be 20m^2 embellished with kitchenette and toilet.	**YES**
(b) no boarding room will have a gross floor area (excluding any area used for the purposes of private kitchen or bathroom facilities) of more than 25 square metres,	The Proposed Development does not include any rooms which exceed 25m^2 in size when excluding the area of the private kitchen or bathroom facilities.	**YES**
(c) no boarding room will be occupied by more than 2 adult lodgers,	No room is proposed to be utilised by more than two adult lodgers.	**YES**
(d) adequate bathroom and kitchen facilities will be available within the boarding house for the use of each lodger,	The proposal includes kitchen facilities in every room. Each of the rooms will benefit from access to a private bathroom	**YES**
(e) if the boarding house has capacity to accommodate 20 or more lodgers, a boarding room or on site dwelling will be provided for a boarding house manager,	It is proposed that the boarding manager will have a dedicated boarding room on ground floor, with an appropriate courtyard area.	**YES**

(h) at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms.	The proposal includes provision for four (4) bicycles and four (4) motor cycles storage spaces within the basement.	**YES**

30A Character of local area

A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.

This clause requires that a Proposed Development that seeks to utilise the provisions of the SEPP ARH consider whether the design is compatible with the character of the local area. Project Venture Developments Pty Ltd v Pittwater Council [2005] NSWLEC 191 establishes the Land and Environment Court planning principle with respect to '*compatibility of proposal with surrounding development*'. This principle establishes that sameness and compatibility are different and that being compatible is to be '*capable of existing together in harmony*'. The planning principle establishes a test to establish compatibility by asking the below questions:

1. *Are the proposal's physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.*
2. *Is the proposal's appearance in harmony with the buildings around it and the character of the street?*

In regard to the first question, the proposal is not considered to result in any unreasonable or undue impacts on the surrounding sites with respect to noise, parking, overlooking, overshadowing or constraining development potential as the proposal provides sufficient building separation to the existing dwelling houses in the locality. Each of the adjoining properties will maintain sufficient solar access to their living and private open space areas and it is not considered that the form of the proposal will constrain the development potential of the surrounding allotments as such it is considered that the first part of the compatibility test is satisfied.

In order to evaluate compatibility with the local area with the character of the street and 'local area' (as described in Clause 30A), the built form is tested against the urban character of the locality and the relationship that is created by building height, setbacks and landscaping. In this regard, the visual catchment highlighted in Figure 11 is the perspective that this test will be undertaken having regard to the wider area and lesser weight to the one-off educational uses present.

Figure 11. Visual Catchment with Zoning Map Overlay (NSW Planning Portal)

The below table provides an assessment of the Proposal with respect to character of the street and local area:

Table 3. Character and Built Form Assessment of Local Area

Built Form Elements	Street Character	Response	Compatible
Building Form	The most common building form is 'fibro' single storey dwellings with pitched roofs generally and the more recent double storey contemporary dwellings (townhouses and dual occupancies).	The Proposal has been designed so as to present as a two-storey residential use, utilising contemporary aesthetics and a pitched roof to ensure compatibility with the more recent residential developments in the visual catchment, namely: ▪ 166 Jamison Road ▪ 153 Jamison Road ▪ 131 Jamison Road Moreover, Figure 12. illustrates medium-density residential building forms approved and constructed in the local area to which the proposal is consistent with.	YES
Building Height	Single and Double Storey	The Proposal is double storey and within the PLEP 2010 height limit.	YES
Front Setback	The local area does not have an established front setback, particularly to Jamison Road varying from 11.5m to 4m.	The proposed front setback varies from 5.5m to 6.5m and is compliant with the minimum front setback established in the PDCP 2014. The adjoining property to Jamison Road provides an approximate 8m front setback to Jamison Road, however, this is not consistent with more recent medium density development in the locality which provide setbacks as little as 4m to Jamison Road (175-179 Jamison Road). The proposed setback does not result in adverse impacts with respect to rhythm in the locality as	YES

		there is no established front setback nor does it result in adverse environmental impacts (solar, acoustic and privacy). Moreover, the front setback maintains and embellishes the landscaping within the front garden area retaining and adding canopy trees so as to reinforce the garden character of the suburb.	
Side and Rear Setback	Existing dwelling houses in the local area typically have a driveway and carport on one side of their allotment. There is great variation with respect to side and rear setbacks because of the irregular shaped allotments and transition to medium density uses.	The proposal is setback approximately 1.5m setback to it's western Side Boundary, 6m to its Northern rear boundary and 3m to its Eastern secondary street frontage. The proposal is considered to maintain adequate building separation while ensuring it does not result in any adverse physical impacts on the adjoining properties. The local area does not have an established rhythm with respect to the side setback or rear building alignment and as such it is considered that the proposed setbacks provided are generally in line with the overarching intentions of the statutory and non-statutory controls and objective as they do not result in undue solar, acoustic or visual impacts and do not impede on any future redevelopment of those sites.	YES
Materials and Finishes	Existing dwelling houses in the visual catchment are typical of the 'fibro style' with lined white panels and pitched roofs. The recent residential developments within the area utilise brick finishes with rendered features and earth tones.	The proposal will be utilising an earthy brick finish and rendered architectural features so as to create a contrast. The main and secondary pedestrian entries include a wood feature to contribute to the earthy tone. Black anodized framed windows and fencing slits as well as a black roof also assist in creating visual interest complementing the existing earthy tones.	YES
Landscaping	The front gardens of the locality vary greatly, with many allotments only having bare grass and paved driveway within their front setback. Other allotments provide large native canopy trees with	The proposal complies with the PDCP 2014 landscaped area (40%) greatly improving the presentation to the streetscape by providing three additional canopy trees within the front setback area. The proposal seeks to provide planter boxes along the northern and western elevations at the ground floor and level one so as to soften the presentation of the building to the streetscape and enhance the overall landscaping of the locality.	YES

	well-kept low shrub planting.		
Safety and Security	-	The proposal is generally consistent with the four common CPTED Principles. <u>Surveillance</u> The proposal ensures effective surveillance of the public domain and communal open space areas through the careful location of windows and openings so as to ensure there is passive surveillance to each of the street frontage. The proposal been designed so as to maintain adequate levels of passive surveillance on the ground floor within and out of the Site. The proposal provides two clearly identifiable pedestrian entries for the Site are oriented towards the streetscape and will include suitable lighting in accordance with the relevant Australian standards so to ensure a high degree of visibility throughout the publicly accessible areas. <u>Access Control</u> The Proposal clearly defines areas accessible to the public and occupants through the siting of doors, fences and electronic access control systems for basement access. The vehicle and pedestrian entries to the Site will be clearly identifiable from Jamison Road and Doonmore. <u>Territorial Reinforcement</u> The development is considered to clearly define what is public and private territory so as to manage the function of a space and the appropriate behaviour within a space. Territorial reinforcement is achieved through the careful location of landscaping, pedestrian/vehicle access ways and presentation that will enable occupants and the public to have an understanding of the area and proprietorship over it. It is considered that the casual observer will be able to easily differentiate between the public domain and private property along the Doonmore Street and Jamison Road. <u>Space Management</u> It is considered that the eventual building manager will ultimately be responsible for the maintenance of the Site with respect to the public domain and private spaces of the development.	YES
Social dimensions and housing affordability	-	The proposal seeks to utilise the provisions of SEPP ARH which were introduced by the NSW State Government so as to encourage affordable forms of residential accommodation within accessible locations.	YES

		The Proposed Development will contribute to the supply of housing accommodation so as to address the ongoing shortfall of housing currently experienced in Penrith and the Greater Sydney Region by providing a form of residential accommodation not readily accessible in the locality. The type of development assists in providing a low-cost accommodation option particularly suited to the Penrith where between 2011 and 2016 the largest increase in housing tenure was for rental options: Change in housing tenure, 2011 to 2016 Penrith City  **Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 and 2016 (Enumerated data). Compiled and presented in profile.id by .id, the population experts.** The Plan of Management associated with the proposal ensures any anti-social issues that could arise can be appropriately managed and regulated through its implementation.	

State Environmental Planning Policy No 55—Remediation of Land

Given that the current use of the Site and adjoining properties have been developed for residential purposes it is considered unlikely that that the Site was previously used for potential contaminating purposes as listed in Table 1 of the contaminated land planning guidelines. In this circumstance it would not appear that a preliminary contamination investigation is necessary for the assessment of the development application. If any contaminated or suspected contaminated material is unearthed during the construction process, then actions consistent with the legislative requirements and guideline documents will be undertaken.

Penrith Local Environmental Plan 2010

The subject site is zoned R3 Medium Density Residential under the provisions of the Penrith Local Environmental Plan 2010. The proposed development is defined as Boarding House' and is permissible with Council's development consent. Please see below definition of Boarding House under the PLEP 2010:

boarding house *means a building that:*

(a) is wholly or partly let in lodgings, and

(b) provides lodgers with a principal place of residence for 3 months or more, and

(c) may have shared facilities, such as a communal living room, bathroom, kitchen or laundry, and

(d) has rooms, some or all of which may have private kitchen and bathroom facilities, that accommodate one or more lodgers,

but does not include backpackers' accommodation, a group home, hotel or motel accommodation, seniors housing or a serviced apartment.

Note.

Boarding houses are a type of residential accommodation—see the definition of that term in this Dictionary.

The objectives of the zone are listed below:

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a concentration of housing with access to services and facilities.*
- *To enhance the essential character and identity of established residential areas.*
- *To ensure that a high level of residential amenity is achieved and maintained.*
- *To ensure that development reflects the desired future character and dwelling densities of the area.*

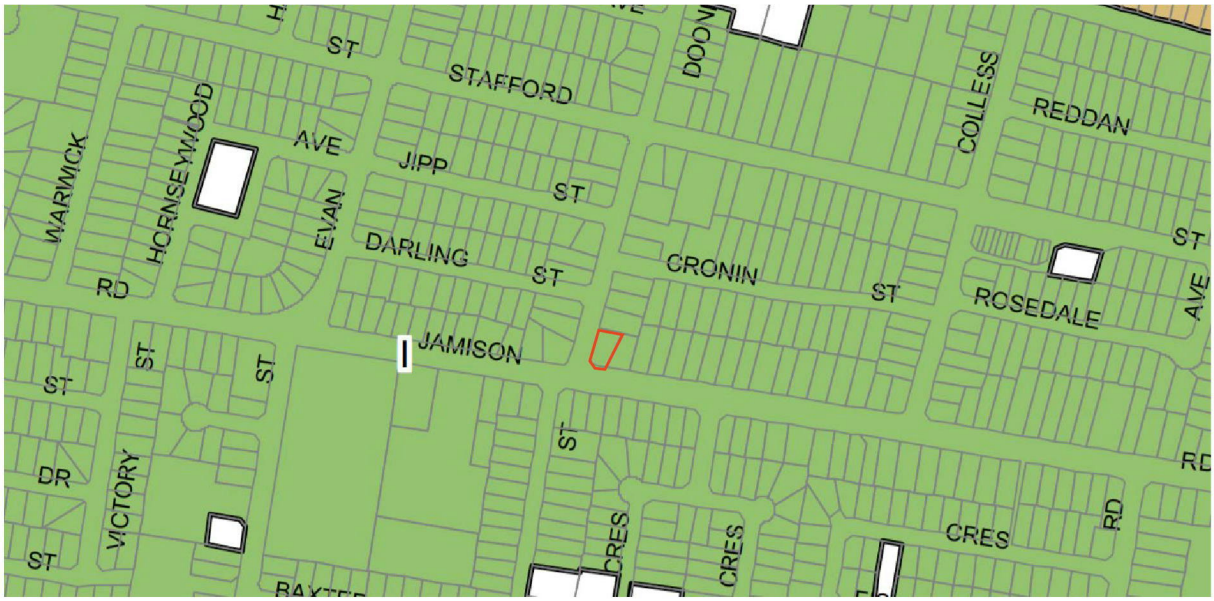


Figure 12. Height Map Extract – I, 8.5m - Penrith Local Environmental Plan 2010 (HOB_013)

The relevant LEP controls have been considered in the following compliance table.

Table 4. PLEP 2010 Compliance Table

Applicable Clause	Comment	Complies
Zoning – R3 – Medium Density Residential	Development for the purposes of '*Boarding House'* is identified as being permissible with Council consent in the R3 – Medium Density Residential zone.	YES
Zone Objectives and Land	The proposal is consistent with the zone objectives of the R3 – Medium Density Residential zone, in particularly the below listed: • *To provide for the housing needs of the community within a medium density residential environment.* • *To provide a variety of housing types within a medium density residential environment.* • *To provide for a concentration of housing with access to services and facilities.* • *To enhance the essential character and identity of established residential areas.* • *To ensure that a high level of residential amenity is achieved and maintained.* • *To ensure that development reflects the desired future character and dwelling densities of the area.*	YES
Part 2 Permitted or Prohibited Development		
2.7 – Demolition Requires Consent	Council consent is sought for the demolition of the existing structures on site.	YES
Part 4 Principal Development Standards		
4.3 – Height of Buildings	A maximum building height of 8.5m (I) is identified for the site under the Penrith Local Environmental Plan 2010 Height of Buildings Map Sheet HOB_013. No part of the proposal exceeds 8.5m in height and as such is compliant with this control. See attached plans for details.	YES
Part 5 Miscellaneous Provisions		
5.10 – Heritage Conservation	There are no heritage restrictions on the Site or within its immediate proximity.	YES
Part 7 Miscellaneous Provisions		

7.1 Earthworks	This application seeks Council consent for cut and fill works as per the accompanying plans. It is considered that the proposed works will have minimal adverse environmental or amenity impacts on the locality. The Proposal results in an appropriate outcome when considering the nature of the development and the unique characteristics of the Site. The proposal will not adversely affect or disrupt drainage, flood storage or soil stability in the area. Please refer to the attached drainage plans and Flood Impact Assessment Report accompanying this submission. The proposed excavation is consistent with the current and future use of the land and will ensure a quality open space amenity is provided.	YES
7.2 Flood Planning	This submission includes a Flood Impact Assessment Report prepared by Alpha Engineering and Development which details the flood management provisions detailed in the design.	YES

Penrith Development Control Plan 2014

The applicable controls which relate to Proposed Development in the Penrith Development Control Plan 2014 (PDCP 2014) are addressed in the following table:

Table 5. PDCP 2014 Compliance Table

C1. Site Planning and Design Principles
This submission includes a Site Analysis Plan prepared by Platform 5 Architects. The Proposed Development has been designed carefully considering the existing site conditions with respect to slope, allotment shape, drainage, flooding, existing vegetation and orientation in conjunction with potential impacts to the greater streetscape.
C2. Vegetation Management
The proposal seeks to remove all trees and vegetation on the Site with in the exception of Tree 10 a Bhonetsuckle Tree. This submission includes an Arboricultural Assessment Report prepared by Tree and Landscape Consultants, the recommendations of the report are consistent with the proposal. The report also lays out a protection methodology for Tree 10 which will ensure compliance with Australian Standard AS 4970-2009 and ensuring a Tree Protection Zone.
C3. Water Management
The western portion of the Site is affected by 100-year flood level. A Flood Impact Assessment Report and drainage plans have been prepared by Alpha Engineering and Development to address compliance with Clause 7.2 of the PLEP 2010. The proposal ensures a finished floor level of 45.90mm AHD with a free board of 500mm so as to certify the safety of future residents on the Site.

The Flood Impact Assessment Report lays out recommendations which have been incorporated into the Plan of Management for the Site.

C4. Land Management

The proposal includes an erosion and sediment control plan, demolition and drainage plans as well as a Flood Impact Assessment Report which provides measures to ensure that the Site does not adversely affect the locality during construction or occupation.

The Site has been used for residential purposes but if any contaminated material or suspected contaminated material is unearthed during the construction process, then actions consistent with the legislative requirements and guideline documents will be undertaken.

C5. Waste Management

The proposal provides a waste storage area which provides 16 x 240L bins near the ramp on the Doonmore Street frontage which allows for the easy collection. The area has been incorporated in the design of the boarding house so as to ensure no waste materials are allowed to enter the stormwater system or neighbouring properties.

The manager/caretaker of the building will be responsible for ensuring the wheeling of the bins to the collection location as per the plan of management, waste management plan and architectural plans.

C6. Landscaping

A landscape plan prepared by Vision Dynamics has been included as part of this submission and details the proposed trees and vegetation to be incorporated into the design along the ground floor and level one. The proposed landscaping on the Site will soften the presentation of the boarding house to the greater streetscape.

The proposed landscaping embellishes the existing streetscape by providing a range of indigenous vegetation and trees of varying heights and forms along the street setbacks as well as incorporated into the design of the boarding house itself.

C10. Parking, Access and Driveways

A traffic management plan has been included as part of this submission.

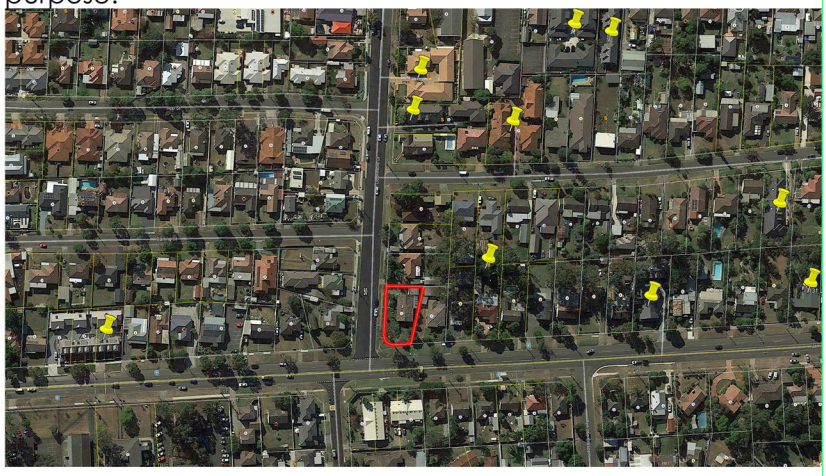
The proposal seeks to maintain the existing driveway access point in the rear of the allotment. The proposal provides provisions for 10 car spaces two of which will be accessible spaces. The proposal will also provide 4 (four) motorcycle and bicycle car spaces within the basement.

C12 Noise and Vibration

The building will be constructed in accordance with the recommendations made by the Acoustic Report prepared by Acoustic Works as well as the requirements of the AS1469 – Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors and the NSW EPA Industrial Noise Policy

Moreover, the accompanying plan of management also details house rules to ensure that the residents act in a manner that minimises acoustic impact on the adjoining residential dwellings.

Control	Proposed	Complies
PART D – Chapter 4.5 Two Storey Town House Development		
2.4 Multi Dwelling Housing		
Urban Form	The design and form of the proposal is considered to be appropriate for the Site given the context and zone. The proposal provides a two storey form in an locality where the	YES

	most recent trend is toward two storey residential developments. The locality is currently undergoing transition from low rise single storey residential dwellings to medium density residential uses which is exemplified in the below image where yellow pins represent each site that has either been approved or constructed for medium density residential purpose:  The design response to the adjoining properties ensures that the side and rear setbacks do not result in adverse acoustic, privacy or solar impacts on the adjoining properties due to the separation and location of existing vehicle access points. The Proposal includes a considerable front setback and landscaping amenity assisting in achieving the perception of a traditional garden pattern in the locality. The proposal has been designed to minimise bulk and scale by providing variations in terms of colour, materials and architectural features as well as through providing steps in the building to ensure that it does not have long expansive walls along its boundaries. The proposed vegetation incorporated into the façade soften its appearance and generally enhance the streetscape.	
Landscaped Area	The proposal includes pockets and verges of landscaped area within the setbacks and within the facade. The private open space area of the proposal has been landscaped as detailed in the landscape plan accompanying this submission prepared by Vision Dynamics. The design ensures that 40% of the site area will be landscaped area consistent with the numerical control of the section, the SEPP ARH Does not require a numerical control only that the landscaped area is compatible with the dominant character of the locality.	YES

Solar Access	As demonstrated in the shadow and solar plans accompanying this application the private open space and windows of adjoining living areas will maintain 3 hours of direct sun light during the winter solstice. The shadows cast by the proposal are generally fall the public domain toward Jamison Street and the driveway of 157 Jamison Road.	YES
Visual Privacy	The proposed windows are located in such a way that they do not result in unreasonable or undue impacts due to the proposed building separation (8.3m to 157 Jamison Road and 10.7m to 82 Doonmore Street). Each of the windows along the eastern elevation are to include privacy screening so as to prohibit direct overlooking into 157 Jamison Road. The upper level windows are also to be provide a sill height of 1.7m in accordance with the provisions of this section.	YES
Safety and Security	The proposal is capable of being constructed in accordance with the relevant Australian Standards standard related to access which have been addressed in the Access Report which accompanies this submission. The proposal is capable of providing finishes that meet the needs of an ageing population, the proposal will be completed in accordance with the relevant Australian Standards so as to ensure the accessibility of two rooms. The proposal is consistent with the provisions of this clause, as it ensures passive surveillance within the development and onto the streetscape providing openings that allow for passive surveillance. The proposal is not considered to provide hidden recesses and opportunities for the concealment of intruders.	YES
5.11 Boarding Houses		
1) Local Character		
a) Boarding house development applications shall be accompanied by detailed site analyses to assist with the determination of local character.	This report has provided an extensive breakdown of the character of the locality and the design responses to it in the section that responds to Clause 30A of SEPP ARH.	YES
b) A neighbourhood analysis should be completed to identify the desired future character of the neighbourhood. It is recommended that community consultation be undertaken as part		YES

of the analysis to determine aspirations for the future character.		
c) Key elements that contribute to consideration of local and neighbourhood character include: **- Surrounding land uses** **- Social and Historic Context** **- Scale** **- Built Form** **- Natural Environment** **- Density** **- Amenity** **- Safety and Security** **- Social dimensions and housing affordability** **- Aesthetics**		YES
2) Built form, Scale and Appearance	-	-
a) The entrance to the boarding house must be in a prominent position addressing the street.	The proposal provides two pedestrian entrances visible from the streetscape. An entrance accessible from Doonmore Street and Jamison Road. Each of the entrances are well articulated so as to be easily identifable from the streetscape.	YES
b) New boarding houses shall not adversely impact upon solar access of adjoining properties.	The Proposal has been designed in such a way that ensures that 157 Jamison Road, Penrith is not unduly impacted.	YES
c) Boarding houses shall be designed to have a sympathetic relationship with adjoining development.	It is considered that the proposal is sympathetic to the adjoining properties by maintaining adequate building separation and enhancing the streetscaping through embellished landscaping on the allotment. The proposal implements acoustic recommendations made in the accompanying acoustic report included with this submission.	YES
d) Proposals must demonstrate that neighbourhood amenity will not be adversely impacted by factors such as noise and privacy.		YES
f) A boarding house proposal of a scale similar to a multi dwelling housing development should	The scale of the proposal is generally comparable to that of a two storey multi dwelling house development, as such the previous section addressed the controls of Part D 2.4 of the PDCP 2014.	YES

comply with the controls and objectives for multi dwelling housing within this DCP, where they are not in conflict with the requirements of the SEPP and the objectives of the zone.		
3) Tenant Amenity, Safety and Privacy **Boarding houses are to maintain a high level of resident amenity, safety and privacy by ensuring:** **a) communal spaces including laundry, bathroom, waste facilities, private open space,** **kitchen and living areas are accessible to all lodgers;** **b) if over 10 boarding rooms are supplied, 10% of the total number of dwellings (rounded up) must be accessible;** **c) cross ventilation is achievable such that reliance on air-conditioning is minimised;** **d) all opening windows are to be provided with fly screens; and** **e) secure mailboxes should be incorporated within the foyer window of the property allowing resident only access from inside the foyer.**	The proposal ensures the amenity, privacy and safety of future residents by providing: ▪ Waste facilities at ground floor so as to be easily accessible ▪ Two (2) accessible rooms located within proximity to the lift ▪ Provisions to provide mailboxes ▪ Provisions to provide clothes drying ▪ Each of the bathrooms will benefit from a private toilet ▪ The communal room will benefit from a kitchenette and toilet ▪ Private open space within the secondary street setback to ensure that it does not result in adverse impacts for the adjoining properties ▪ Cross ventilation where possible, each of the rooms that are not cross-ventilated benefit from large openings which would provide opportunity for ventilation. ▪ Secured basement vehicle and bicycle parking	
4) Visual and Acoustic Amenity Impacts **Boarding houses are to provide:** **a) bedrooms separate from significant noise sources;** **b) sound insulation between bedrooms to provide reasonable amenity;**	Where a room is in proximity to the lift, the proposal ensures that it is adequately insulated to ensure that it does not impact upon the amenity of the boarding room. Each of the rooms will be insulated in accordance with the relevant Australian Standards and the recommendations made in the accompanying Acoustic Report. The communal open space and private open space have been located so as to ensure that they do not adversely impact upon the future residents of the Site as well as the existing residents of the locality. Each of these spaces will be	YES

c) communal areas and bedroom windows away from the main living area or bedroom windows of any adjacent buildings; and d) screen fencing, plantings, and acoustic barriers in appropriate locations.	acoustically treated in accordance with the recommendations made in the accompanying Acoustic Report.	
5) Location Boarding Houses shall not be located in cul-de-sacs.	The Site is not located within a cul-de-sac.	YES

Section 4.15 Evaluation – Matters for Consideration

Context and Setting

The subject site is located in the suburb of Penrith at 159 Jamison Road. The locality is characterised by residential uses with one-off educational uses within the local area. The Proposed Development is considered to be compatible with the existing and intended character of streetscape.

The two-storey built form will be of a scale that is consistent with the recent residential developments within the R2 and R3 zone of the locality, namely 153 and 166 Jamison Road, a dual occupancy and multi dwelling house development. The façade and presentation of the proposal is well articulated through the modulation of the built form as well as through the inclusion of landscaping within the façade. The proposal represents the introduction of an alternate residential use-built form that maintains compatibility with the context and setting of the local area.

Heritage Impacts

The Site is not within proximity to a heritage item or heritage conservation area. The Proposal is not considered to have an adverse impact on the heritage significance of any item as it maintains compatibility with the intended character of the locality.

Social, Environmental and Economic Impacts

The construction process will assist in stimulating the local economy by providing a variety of jobs within the locality. Moreover, the construction of boarding rooms will result in housing appropriately located to access retail and commercial amenities via public transportation within the locality. The proposal is considered likely to increase expenditure within the local economy over the longer term as well as providing an alternate affordable housing option.

The Proposal will also provide a safe development that is consistent with the Crime Prevention through Environmental Design principles of surveillance, space management access control and territorial reinforcement. Moreover, the proposal seeks to minimise

adverse environmental impacts while providing social benefits to the locality through providing affordable accommodation.

The Suitability of the Site for the Development

The Proposed Development is a permissible development under the relevant zoning and the proposal complies with the fundamental planning controls for the Site as detailed in this statement. The local area is undergoing a transition as an expected result of the R3 medium density zoning. The proposal is consistent with the zoning and general trend toward medium density residential uses. The proposal has been assessed under the provision of Clause 30A of the SEPP ARH and is considered to be compatible with the local area and it is considered that the proposal is suitable for the site.

Any submissions made in accordance with the Act

It is anticipated Penrith City Council will consider any submissions in its assessment of the proposal.

The Public Interest

As stated in this report, it is considered that the Proposed Development is consistent with the objectives of the public interest as it provides social, environmental and economic benefits and results in a proposal that enhances the streetscape and the greater locality.

The proposal will provide much needed affordable boarding accommodation in the locality and will improve the amenity of the Site and as such is consistent with Public Interest.

Conclusion and Recommendation

Following a review of the relevant planning controls, it is concluded that the Proposed Development is generally consistent with the objectives, planning strategies, public interest and detailed controls of the relevant environmental planning instruments.

Careful consideration has been given to the potential environmental and amenity impacts and in the absence of undue adverse impacts the application is submitted to Penrith City Council for its assessment.

Appendix A: Plan of Management – 159 Jamison Road, Penrith

Objective of this Plan

The primary purpose of this plan is to ensure the premises maintains a high level of amenity for residents, staff and the greater locality alike. The following matters have been addressed:

- Role of the House Manager
- Cleaning and maintenance of the premises
- Acoustic complaints
- Use of Outdoor and Communal Areas
- Safety and security of the premises
- Occupational Health and Safety
- Complaints register
- House rules

General Duties of the House Manager

A boarding house manager ('the manager') is to be appointed by the owner/boarding house operator. The manager is to maintain the below roles and responsibilities:

- Manager shall reside on the premises. His/her contact details will be made available to the boarders, neighbouring properties and relevant government authorities. These details will also be listed on a board within the lobby.
- Manage any staff and/or any contractors that may be required to work in the premises
- The manager is to ensure all necessary signage shall be displayed at all times including (but not limited to) the following information:
    - the name and contact number of the property caretaker or manager;
    - emergency contact numbers for essential services;
    - house rules;
- Ensure the cleaning and maintenance tasks are undertaken in order to maintain the premises
    - Ensure that the schedule of cleaning and maintenance times are displayed in an accessible location
- To enforce the House Rules. The manager is to control and mediate any unacceptable behaviour and on-site disputes between residents.
- Manage any noise and amenity impacts caused by boarders and staff and ensure appropriate measures are taken to resolve any potential issues.
- Act as a point of contact and assist during emergencies on the premises.

- Maintain a contacts list (include the manager) which is to be prominently displayed for the residents.
    - The Manager is to ensure details of the Western Sydney Tenants Services (WESTS) will be made available to residents to ensure that they able to obtain tenancy advice, referrals and other services if required.
    - The Manager is to ensure details of the South Penrith Neighbourhood Centre (3 Trent Street, South Penrith) will be made available to residents to ensure that they able to access the relevant Child, Parenting, Community Development and other social programs.
- Maintain a complaint register
- The manager shall be responsible for ensuring the private open space, common open space areas, lobby's, corridors and common rooms are well kept and clean. The caretaker/manager shall promptly address any issues should they arise.
  Note: Should the manager be away for an extended period the contact details of the nominated representative and/or owner who can be contacted at any time.

Cleaning and Maintenance

- The caretaker/manager may employ other person(s) to undertake any aspect of site cleaning, security and maintenance services.
- The boarding manager will be responsible for ensuring all waste bins are collected regularly and that they are well kept, placed out for collection services and returned to their storage positions after they have been emptied.
    - Waste bins are to be kept in the bin room except when being collected.
- The caretaker / manager will undertake periodic inspections of all rooms and the grounds to confirm the Site is maintained in accordance with this plan of management.
- The caretaker / manager is to ensure the maintenance and preservation of the landscaping and vegetation within the common areas
- Residents whom benefit from planters' boxes adjoining their rooms will be required to ensure their maintenance. The caretaker / manager is to be provided access in the to maintain the vegetation if required
- The caretaker / manager will ensure the periodic management of pests
- The caretaker / manager will ensure that a quarterly external clean and graffiti is undertaken to ensure the maintenance and appearance of the building

Point of Contact, Security and Safety

- The manager shall provide a "first point of call" service for residents needing assistance with the exception of matters that are of concern the emergency services such as police, fire, ambulance, etc.
- A Fire escape and Safety Plan including shall be kept in a prominent location on Site visible to the boarders and visitors alike.
- The manager shall ensure emergency evacuation procedures are implemented and made known to all occupants of the boarding house.
    - Ensure floor plans are permanently fixed to the inside of the door of each sleeping room which indicate the available emergency egress routes from the respective sleeping room
- The manager shall enforce a 'no smoking indoors' policy.
- Smoke detectors consistent with the relevant Australian Standards shall be maintained in good order in all rooms in the buildings.
- The Manager and any staff are to ensure that their roles and responsibilities under the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017.
- The following general safety practices are to be adhered to by the manager and any of his/her staff:
    - Any hazards (including but not limit to broken amenities and lights) should be removed, repaired or replaced in discussion with the Manager.
    - Ensure any dangerous chemicals (i.e. cleaning materials) carefully and stored in a secure area
    - All work areas, passageway and common open space areas are to be kept clean and tidy to ensure safe manoeuvrability
    - Materials or products are not to be stacked higher than what is considered to be safe;
    - All rubbish to be disposed of in the bins;
    - Ensure there is no excessive alcohol consumption
    - All drugs that are not prescribed by a doctor are forbidden on the premises
    - No smoking indoors

House and Communal Areas Policy

- The maximum occupancy, including the manager is to be in accordance with Council's conditions of consent
    - A copy of the conditions of consent are to be maintained on Site for reference

- Minor amendments may be made to this Plan of Management by the owner and/or manager, but only Council can consent to vary this plan in an extensive way.
- The manager and owner/operator shall maintain a 'House Policy and Rules', a copy of which shall be attached to the rear of the entrance door of each room, the house rules are to attach the emergency evacuation plan.
- The allowable time of use of the private open space and common room will be signposted to ensure that the space is not to be used between 10:00pm and 7:00am. Any use of these areas between 10:00pm and 7:00am may be reported to the manager.
- A complaints register is to be kept and maintained on Site, recording incidents and complaints by boarders and neighbours. The register is to record:
    - Date
    - Nature of the complaint
    - Name and contact details of complainant
    - Actions taken
    - Resolution/outcome of the matters
    - Further action required (if applicable)
- The complaint register is to be made available for inspection by Penrith City Council
- The manager will manage mail and place items in secure mailboxes near the entry. Residents will be provided with access to their mailbox.
- Any lodger failing to observe the rules or performing illegal acts on the premises will be dealt with by the manager and relevant authorities. The lodger may be vacated from the premises in justifiable circumstances including but not limited to theft, violence or harassment.

PROPOSED DEVELOPMENT
159 JAMISON ROAD, PENRITH
STORMWATER PLANS

GENERAL NOTES

G1. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS THAT MAY BE ISSUED.
G2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING FROM THE DRAWINGS. REFER ARCHITECTS DRAWINGS FOR ALL DIMENSIONS.
G3. REFER ANY DISCREPANCY TO THE ENGINEER/ARCHITECT.
G4. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE APPROPRIATE SAA SPECIFICATIONS OR CODE AND WITH THE REQUIREMENTS OF THE RELEVANT LOCAL AUTHORITY.
G5. THE ALIGNMENT AND LEVEL OF ALL SERVICES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
G6. NO WORKS ARE TO COMMENCE UNTIL THE REQUIRED TREE REMOVAL PERMITS HAVE BEEN GRANTED BY RELEVANT LOCAL AUTHORITY, AND THE APPROPRIATE NOTICE OF INTENTION TO COMMENCE GIVEN.
G7. ALL SERVICES, OR CONDUITS FOR SERVICING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.
G8. SUBSOIL DRAINAGE, COMPRISING 100 AGRICULTURE PIPE IN GEO-STOCKING TO BE PLACED AS SHOWN AND AS MAY BE DIRECTED BY THE SUPERINTENDENT. SUBSOIL DRAINAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
G9. NO WORK IS PERMITTED WITHIN ADJOINING PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE OWNERS OR RESPONSIBLE AUTHORITY.

DRAINAGE NOTES

D1. ALL DRAINAGE OUTLET LEVELS SHALL BE CONFIRMED ON SITE, PRIOR TO CONSTRUCTION COMMENCING.
D2. ALL PIPES WITHIN THE PROPERTY TO BE MIN. 100 DIA UPVC @ 1% MIN. GRADE, UNO.
D3. ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOK" OR APPROVED EQUIVALENT GRATES:
- LIGHT DUTY FOR LANDSCAPED AREAS
- HEAVY DUTY WHERE SUBJECTED TO VEHICULAR TRAFFIC
D4. PITS WITHIN THE PROPERTY MAY BE CONSTRUCTED AS:
1) PRECAST STORMWATER PITS
2) CAST INSITU MASS CONCRETE
3) CEMENT RENDERED 230mm BRICKWORK
SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
D5. ENSURE ALL GRATES TO PITS ARE SET BELOW FINISHED SURFACE LEVEL WITHIN THE PROPERTY. TOP OF PIT RL'S ARE APPROXIMATE ONLY AND MAY BE VARIED SUBJECT TO APPROVAL OF THE ENGINEER. ALL INVERT LEVELS ARE TO BE ACHIEVED.
D6. ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
D7. ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE.
D8. PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.
D9. TRENCH BACK FILL IN ROADWAYS SHALL COMPRISE SHARP, CLEAN GRANULAR BACK FILL IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION TO NON-TRAFFICABLE AREAS TO BE COMPACTED BY RODDING AND TAMPING USING A FLAT PLATE VIBRATOR.
D10. WHERE A HIGH EARLY DISCHARGE (HED) PIT IS PROVIDED ALL PIPES ARE TO BE CONNECTED TO THE HED PIT, UNO.
D11. DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.
D12. COLORBOND OR ZINCALUME STEEL BOX GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.
D13. EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL, UNO.
D14. SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.

EARTHWORKS NOTES

E1. THE EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT.
E2. THE SITE OF THE WORKS SHALL BE PREPARED BY STRIPPING ALL EXISTING TOPSOIL, FILL AND VEGETATION.
E3. SUBGRADE SHALL BE COMPACTED UNTIL A DRY DENSITY HAS BEEN ACHIEVED OF NOT LESS THAN 100% OF THE STANDARD MAXIMUM DRY DENSITY WHEN TESTED IN ACCORDANCE WITH AS 1289 TESTS E.1.1. OR E.1.2.
E4. THE EXPOSED SUBGRADE SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR WET AREAS WHICH SHOULD BE LOCALLY EXCAVATED AND BACK FILLED WITH SELECTED MATERIAL.
E5. THE BACK FILLING MATERIAL SHALL BE IMPORTED GRANULAR FILL OF LOW PLASTICITY, PREFERABLY CRUSHED SANDSTONE, AND TO BE PLACED IN LAYERS NOT EXCEEDING 150 LOOSE THICKNESS AND COMPACTED TO 98% OF STANDARD DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM.
E6. SITE WORKS ARE TO BE BATTERED TO ADJACENT PROPERTY LEVELS.
E7. STORMWATER MUST NOT BE CONCENTRATED ON TO AN ADJACENT PROPERTY.
E8. AT NO TIME DURING OR AFTER CONSTRUCTION IS STORMWATER TO BE PONDED ON ADJOINING PROPERTIES.
E9. THE SITE SHALL BE GRADED AND DRAINED SO THAT STORMWATER WILL BE DIRECTED AWAY FROM THE BUILDING PLATFORM.
E10. STORMWATER DRAINAGE SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION. ALL STORMWATER RUNOFF SHALL BE GRADED AWAY FROM THE SITE WORKS AND DISPOSED OF VIA SURFACE CATCHDRAINS AND STORMWATER COLLECTION PITS.
E11. ALL SURFACE CATCH DRAINS SHALL BE GRADED AT 1% (1 IN 100) MINIMUM. THE GROUND SHALL GRADE AWAY FROM ANY DWELLING AT 5% (1 IN 20) FOR THE FIRST METRE THEN AT 2.5% (1 IN 40).
E12. WHERE A CUT FILL PLATFORM IS USED THERE SHALL BE A MINIMUM BERM 1000 WIDE TO THE PERIMETER OF THE SITE WORKS WHICH SHALL BE SUPPORTED BY BATTERS OF 3:1 IN FILL.
E13. ANY VERTICAL OR NEAR VERTICAL PERMANENT EXCAVATION (CUT) DEEPER THAN 600 IN MATERIAL OTHER THAN ROCK SHALL BE ADEQUATELY RETAINED OR BATTERED AT A MINIMUM OF 3:1.
E14. WHERE BATTERS CANNOT BE PROVIDED TO SUPPORT THE CUT OR FILL, THEY SHALL BE ADEQUATELY RETAINED.
E15. RETAINING WALLS ARE TO BE CONSTRUCTED WITH ADEQUATE SUBSOIL DRAINAGE.

CONCRETE PAVEMENT

C1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
C2. PROVIDE JOINTING AT MINIMUM 6000 MAX. INTERVALS OR AS OTHERWISE SPECIFIED IN THE DRAWINGS.
C3. CONCRETE SHALL COMPRISE A MIN. COMPRESSIVE STRENGTH OF 32MPa AT 28 DAYS IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION, UNO.
C4. ANY SUB-BASE MATERIAL SHALL BE COMPACTED AS OUTLINED IN EARTHWORKS.
C5. CONCRETE KERB AND GUTTER SHALL COMPRISE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa, UNO.
C6. CONCRETE WORKS ARE TO BE CURED BY ONE OF THE FOLLOWING MEANS:
i) WETTING TWICE DAILY FOR THE FIRST THREE DAYS;
ii) USING AN APPROVED CURING COMPOUNDED FOR A MINIMUM OF 7 DAYS COMMENCING IMMEDIATELY AFTER POURING.

FLEXIBLE PAVEMENT NOTES

F1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
F2. PAVEMENT MATERIAL SHALL CONSIST OF APPROVED OR RIPPED SANDSTONE, NATURAL GRAVEL OR FINE CRUSH ROCK AS PER THE RELEVANT COUNCIL AUTHORITY SPECIFICATION.
F3. PAVEMENT MATERIALS SHALL BE SPREAD IN LAYERS NOT EXCEEDING 150 AND NOT LESS 75 COMPACTED THICKNESS.
F4. PAVEMENT MATERIALS SHALL BE SIZED AND OF A STANDARD OUTLINED IN AS1141.
F5. CRUSHED OR RIPPED SANDSTONE SHALL BE MINUS 75 NOMINAL SIZE DERIVED FROM SOUND, CLEAN SANDSTONE FREE FROM OVERBURDEN, CLAY SEAMS, SHALE AND OTHER DELETERIOUS MATERIAL.
F6. PAVEMENT MATERIALS SHALL BE COMPACTED BY SUITABLE MEANS TO SATISFY THE FOLLOWING MINIMUM SPECIFICATIONS (AS PER AS1289.2)

DESCRIPTION	MEDIUM DENSITY RATIO
SUB-BASE	98% MOD
BASE COURSE	98% MOD
ASPHALTIC CONCRETE	97% MOD

AND SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.

F7. TESTING FOR EACH LAYER SHALL BE UNDERTAKEN BY A N.A.T.A. REGISTERED LABORATORY IN ACCORDANCE WITH AS1289, AT NOT MORE THAN 50m INTERVALS AND A MINIMUM OF TWO PER LAYER. FURTHER FREQUENCY OF TESTING SHALL BE NO LESS THAN THAT REQUIRED BY AS3978.

PAVED AREAS NOTES

A1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
A2. ALL PAVERS ARE TO BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
A3. TRAFFICABLE AREAS:
SUB-BASE TO BE 150 COMPACTED THICKNESS DGS75.
SUB-BASE TO BE SUITABLY COMPACTED TO MEDIUM DENSITY 98% MOD.
SUB-BASE TO EXTEND AT LEAST 200 BEYOND PAVED SURFACE.
PAVERS TO BE 80 THICK INTERLOCKING PAVERS ON 50 SAND BEDDING.
A4. NON TRAFFICABLE AREAS:
SUB BASE AS PER TRAFFICABLE AREAS
PAVERS TO BE 60 INTERLOCKING PAVERS ON 50 SAND BEDDING (UNO).

EROSION AND SEDIMENT NOTES

B1. THIS PLAN TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS AS ATTACHED.
B2. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF THE RELEVANT LOCAL AUTHORITY PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT THE RELEVANT LOCAL AUTHORITY APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTIONS".
B3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL SHALL BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF.
B4. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES SUCH THAT MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
B5. LAY TURF STRIP (MIN 300 WIDE) ON 100 TOPSOIL BEHIND ALL KERB WITH 1000 LONG RETURNS EVERY 6000 AND AROUND STRUCTURES IMMEDIATELY AFTER BACKFILLING AS PER THE RELEVANT LOCAL AUTHORITY SPECIFICATION.
B6. THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING.
B7. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO NOMINATED STABILISED ACCESS POINTS.
B8. WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL THEY SHALL BE IN CLEAN AND STABLE CONDITION.
B9. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULAR WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
B10. PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED.
B11. REVEGETATE ALL TRENCHES IMMEDIATELY UPON COMPLETION OF BACKFILLING.
B12. ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL:
- DOWNPIPES CONNECTED
- PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER

EROSION AND SEDIMENT NOTES

MINIMUM PIPE COVER SHALL BE AS FOLLOWS

LOCATION	MINIMUM COVER
NO SUBJECT TO VEHICLE LOADING	100mm SINGLE RESIDENTAL
SUBJECT TO VEHICLE LOADING	450mm WHERE NOT IN A ROAD
UNDER A SEALED ROAD	600mm
UNSEALED ROAD	750mm
PAVED DRIVEWAY	100mm PLUS DEPTH OF CONCRETE

SEE AS2032 INSTALLATION OF UPVC PIPES FOR FURTHER INFORMATION.

CONCRETE PIPE COVER SHALL BE IN ACCORDANCE WITH AS3725-1989 LOADS ON BURIED CONCRETE PIPES, HOWEVER A MINIMUM COVER OF 450mm WILL APPLY.

WHERE INSUFFICIENT COVER IS PROVIDED, THE PIPE SHALL BE COVERED AT LEAST 50mm THICK OVERLAY AND SHALL BE PAVED WITH AT LEAST:
- 150mm REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICLE TRAFFIC
- 75mm THICKNESS OF BRICK OR 100mm OF CONCRETE PAVING WHERE SUBJECT TO LIGHT VEHICLE TRAFFIC; OR
- 50mm THICK BRICK OR CONCRETE PAVING WHERE NOT SUBJECT TO VEHICLE TRAFFIC.

PIT SIZES AND DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)
UP TO 450mm	450 x 450
450mm TO 600mm	600 x 600 U.N.O
600mm TO 900mm	600 x 900 U.N.O
FROM 900mm	900 x 900 (WITH STEP IRON)

SYMBOLS

DESCRIPTION	
	DENOTE ON-SITE DETENTION TANK OR PUMP OUT TANK
	DENOTE ON-SITE DETENTION BASIN
	DENOTE ABSORPTION TRENCH
DP	DENOTES DOWNPIPE
Ø100	DENOTES 100mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O
Ø150	DENOTES 150mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O
Ø225	DENOTES 225mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O
— s — s —	DENOTES AGG LINE
— s — s —	DENOTES SEDIMENT FENCE
IP	DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISH SURFACE LEVEL
	DENOTES CLEANING EYE
	STORMWATER PIT - GRATED INLET
	STORMWATER PIT - SOLID COVER
	MAINTENANCE PIT
	NON RETURN VALVE
FD	DENOTE ROUND FLOOR DRAINS
FD	DENOTE SQUARE FLOOR DRAINS
PB	DENOTE PLANTER BOX DRAINS
	DENOTE GRATED DRAIN
RL 6.20	PROPOSED FINISH FLOOR LEVEL
	DENOTE EXISTING OVERLAND FLOW PATH
	DENOTE RAINWATER TANK
O/F	DENOTE WATER OUTLET
RL	REDUCED LEVEL/SURFACE LEVELL
IL	INVERT LEVEL
TK	TOP OF KERB

SCHEDULE OF DRAWINGS

SHEET No	DESCRIPTION
COVER	GENERAL NOTES
SW01	SEDIMENT AND EROSION CONTROL PLAN
SW02	BASEMENT FLOOR DRAINAGE PLAN
SW03	GROUND FLOOR DRAINAGE PLAN
SW04	FIRST FLOOR AND ROOF DRAINAGE PLAN
SW05	STORMWATER SECTIONS AND DETAILS

ISSUE FOR DA

REVISION	AMENDMENT	ISSUE DATE
D	ISSUE FOR DA	19-03-2019
C	UPDATE LATEST ARCHITECTURAL PLANS	15-03-2019
B	ISSUED FOR COORDINATION	20-02-2019
A	ISSUED FOR COORDINATION	19-12-2018

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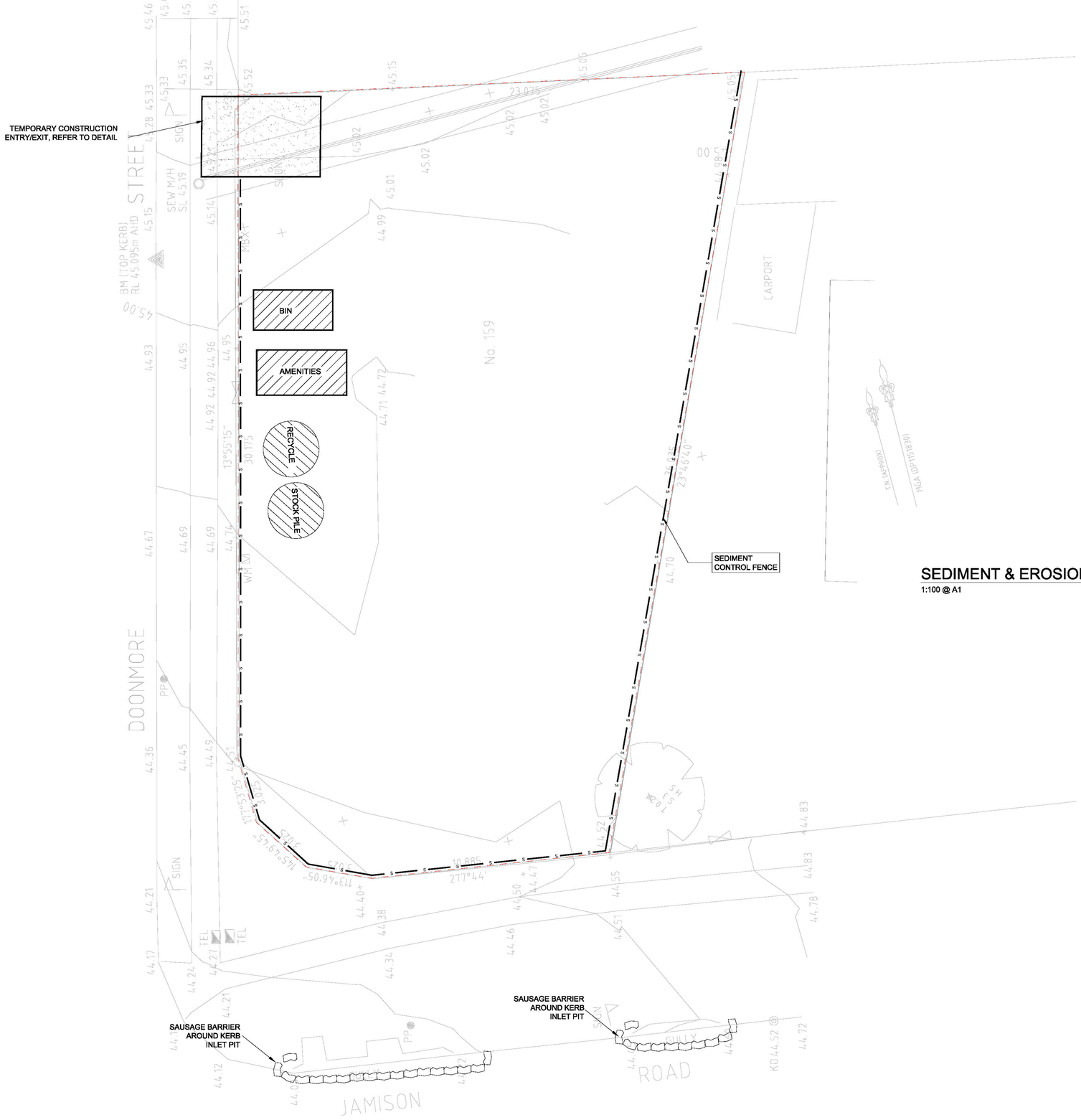
ARCHITECT
PLATFORM 5 DESIGN

PROJECT
PROPOSED DEVELOPMENT
159 JAMISON ROAD,
PENRITH

DRAWING TITLE
GENERAL NOTES

SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	SH
DRAWING NO.	APPROVED	REVISION
A8388 - COVER	JM	D



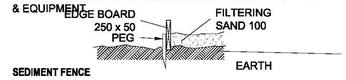
SEDIMENT & EROSION CONTROL PLAN

1:100 @ A1

SEDIMENT AND EROSION CONTROL NOTES

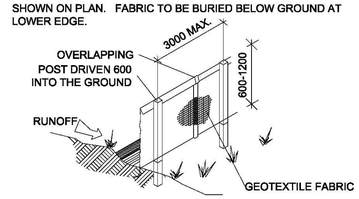
SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION.
A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.
THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCROACHES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.
THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.
SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.
ALL TOPSOIL STRIPPED FROM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.
SOIL CONSERVATION NOTE:
PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE,' 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE. MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP AFTER EACH STORM.
SEDIMENT TRAP
1000 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

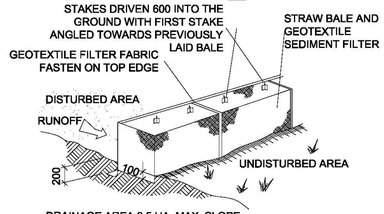
WASHOUT AREA
TO BE 1800 x 1800 ALLOCATED FOR THE WASHING OF TOOL & EQUIPMENT.



SEDIMENT FENCE

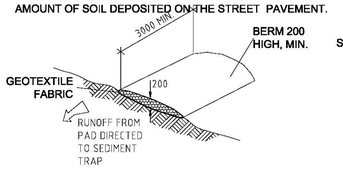
PROVIDE 'SEDIMENT FENCE ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN. FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.





VEHICLE ACCESS TO SITE

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.



GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE).

NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

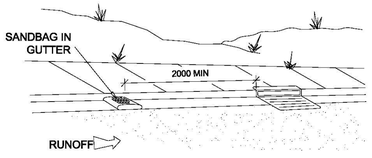
SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

BUILDING MATERIAL STOCKPILES

ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION.
THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.

SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.



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ISSUE FOR DA

REVISION	AMENDMENT	ISSUE DATE
D	ISSUE FOR DA	19-03-2019
C	UPDATE LATEST ARCHITECTURAL PLANS	15-03-2019
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A	ISSUED FOR COORDINATION	19-12-2018

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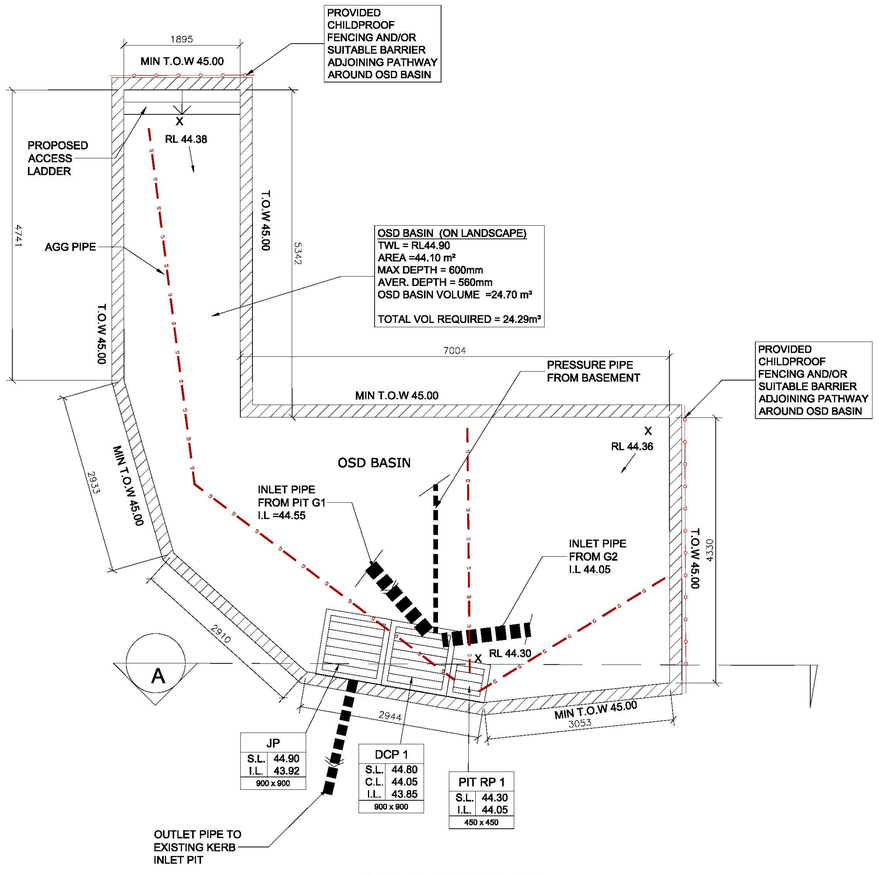
ARCHITECT
PLATFORM 5 DESIGN

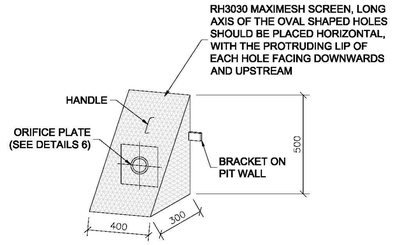
PROJECT
PROPOSED DEVELOPMENT
159 JAMISON ROAD,
PENRITH

DRAWING TITLE
SEDIMENT AND EROSION CONTROL PLAN

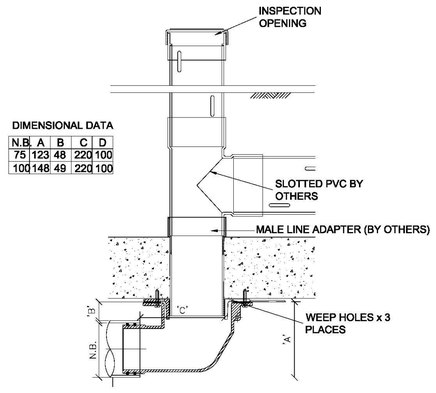
SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	SH
DRAWING NO.	APPROVED	REVISION
A8388 - SW01	JM	D



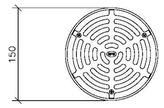
OSD BASIN PLAN
SCALE 1:50



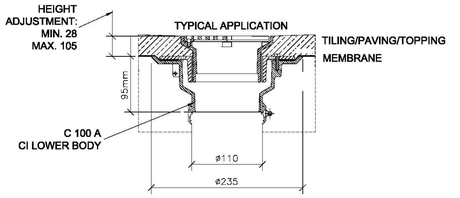
DETAIL - STANDARD TRASH SCREEN
1:20



SECTION - SPS TRUFLO 100SQ OR EQUIVALENT PLANTER BOX DRAIN
1:5
SPECIFICATION CODE:
C100/90 A 100mm SIDE OUTLET



PLAN



SECTION - SPS TRUFLO Ø150 OR EQUIVALENT FLOOR DRAIN (FD) INLET IN SUSPENDED SLAB
1:5 @ A1
SPECIFICATION CODE:
R150 G/C (BRONZE GRATE, CI LOWER BODY)
R150N/C (NICKEL - BRONZE GRATE, CI LOWER BODY)
R150 S/C (316 STAINLESS STEEL GRATE, CI LOWER BODY)

ALL WALLS FORMING THE DETENTION BASIN SHALL BE CONSTRUCTED WHOLLY WITHIN THE PROPERTY BOUNDARIES OF THE SITE BEING DEVELOPED.

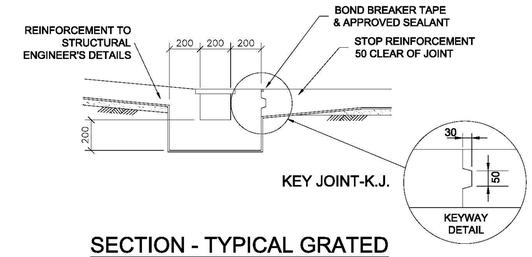
ANY LANDSCAPED AREAS WITHIN THE OSD BASIN ARE MULCHED WITH DECORATIVE ROCK MULCH (IE NON FLOATABLE)

Orifice Plate Discharge Calculation :

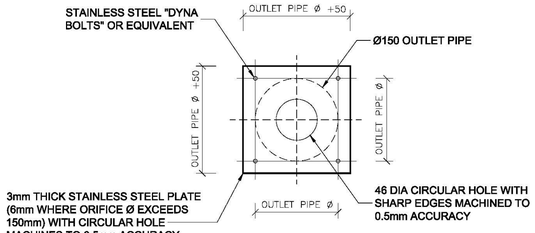
5 Year

Q_{max} = 0.0020 m3/s
h = 0.2 m
Cd= 0.61

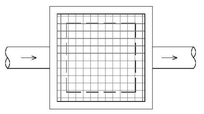
Orifice Diameter $D = \sqrt{\frac{0.471 \times Q}{h^{0.5}}} =$ **0.046** (m)



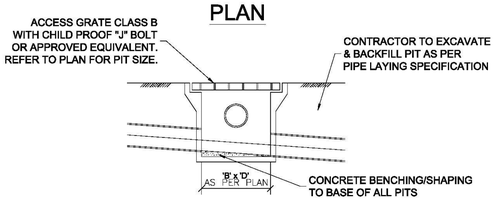
SECTION - TYPICAL GRATED DRAIN
1:20



TYPICAL DETAIL ORIFICE PLATE
1:10



PLAN



SECTION - TYPICAL SURFACE INLET PIT
1:5 @ A1
TYPICAL FOR ALL PITS IN NON-TRAFFIC AREAS

OSD WARNING SIGN
NTS

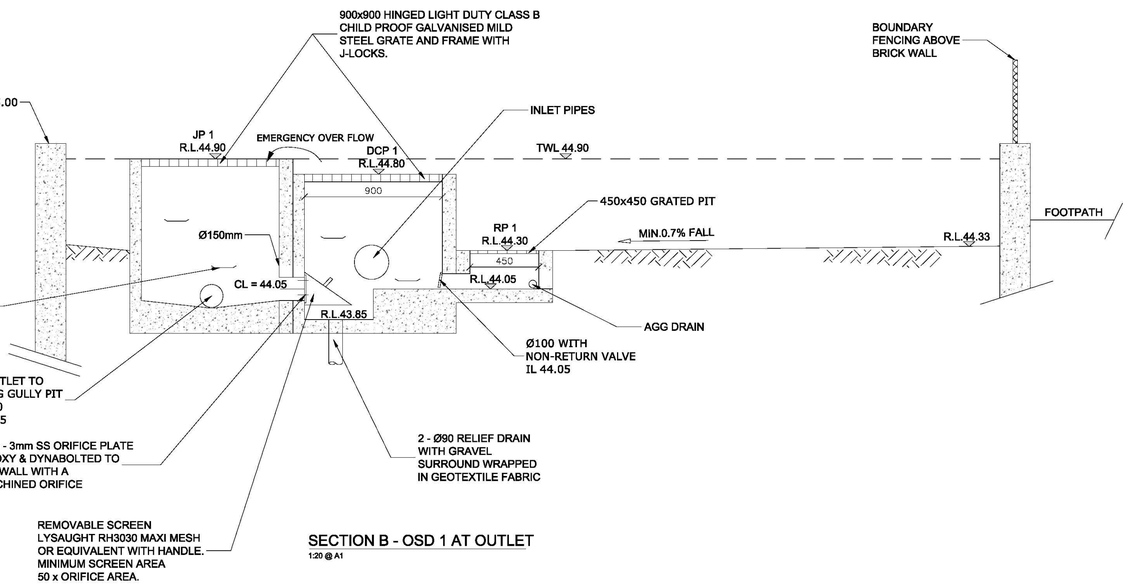
THIS IS AN
ON-SITE STORMWATER DETENTION SYSTEM
REQUIRED BY YOUR LOCAL COUNCIL

IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE TANK OR BASIN OR TO INTERFERE WITH THE ORIFICE PLATE THAT CONTROLS THE OUTFLOW

THE BASE OF THE OUTLET CONTROL PIT AND THE DEBRIS SCREEN MUST BE CLEANED OF DEBRIS AND SEDIMENT ON A REGULAR BASIS BY THE OWNER

THIS PLATE MUST NOT BE REMOVED

OSD SIGN
NTS



SECTION B - OSD 1 AT OUTLET
1:20 @ A1

www.dialbeforeyoudig.com.au
DIAL BEFORE YOU DIG

ISSUE FOR DA

REVISION	AMENDMENT	ISSUE DATE
D	ISSUE FOR DA	19-03-2019
C	UPDATE LATEST ARCHITECTURAL PLANS	15-03-2019
B	ISSUED FOR COORDINATION	20-02-2019
A	ISSUED FOR COORDINATION	19-12-2018

ALPHA ENGINEERING & DEVELOPMENT
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Website: www.alphaengineering.com.au

ARCHITECT
PLATFORM5 DESIGN

PROJECT
PROPOSED DEVELOPMENT
159 JAMISON ROAD,
PENRITH

DRAWING TITLE
STORMWATER DETAILS AND SECTIONS

SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	SH
DRAWING NO.	APPROVED	REVISION
A8388 - SW05	JM	D

SCHEDULE OF EXTERNAL FINISHES FOR PROPOSED BOARDING HOUSE DEVELOPMENT @ 159 JAMISON ROAD, PENRITH

COLOURS ARE INDICITATIVE ONLY AND MAY VARY DUE TO AVAILABILITY

ALL PAINT BY DULUX TO BE RENDERED AND PAINTED

PGH BRICKS
ALFRESCO - COCOA - **A**

RENDER AND PAINT
DULUX - RAKU **B**

RENDER & PAINT FINISH
DULUX - CELTIC SKY **C**

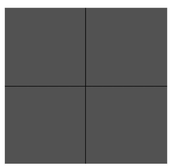
DULUX POWDERCOAT
MONUMENT GREY OR SIMILAR **D**

AS SEEN FROM CORNER OF JAMISON ROAD & DOONMORE STREET, PENRITH

BLACK FRAMED
SEMI TRANSPARENT
GLASS BALUSTRADE
OR SIMILAR **H**

ALUMINIUM FRAMED
WINDOWS & DOORS
STEGBAR CHARCOAL **G**

SHEET METAL ROOF
COLOURBOND
WOODLAND GREY **F**



FINISHED STENCILLED
CONCRETE OR SIMILIAR **E**

PLATFORM5 DESIGN

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-18			
B	ISSUE FOR INFORMATION	18-03-19			
C	DA SUBMISSION	20-03-19			
D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
- LOT B - - DP 413314 -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

CLIENT:

ALPHA ENGINEERING & DEVELOPMENT

6300 EXTERNAL FINISHES SCHEDULE

FINISHES SCHEDULE

Designed
JC

Approved
JC

Project Number
18-030

Scale
AS SHOWN

Drawing Number
6301

Date of Issue
21/03/2019

DEVELOPMENT APPLICATION ISSUE C

Arboricultural Assessment Report

TALC
TREE AND LANDSCAPE CONSULTANTS

Prepared 18th February, 2019

Site Location

159 Jamison Road,
Penrith NSW 2750

Client

Alpha Engineering & Development

DISCLAIMER

The author and Tree & Landscape Consultants take no responsibility for actions taken and their consequences, contrary to those expert and professional instructions given as recommendations pertaining to safety by way of exercising our responsibility to our client and the public as our duty of care commitment, to mitigate or prevent hazards from arising, from a failure moment in full or part, from a structurally deficient or unsound tree or a tree likely to be rendered thus by its retention and subsequent modification/s to its growing environment either above or below ground contrary to our advice.

Peter Richards
Tree & Landscape Consultants

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TREE & LANDSCAPE CONSULTANTS

Site Analysis, Arboricultural Assessments

INSTITUTE OF AUSTRALIAN CONSULTING ARBORICULTURISTS
IACA
MANAGING URBAN TREES ®

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18th February 2019

Alpha Engineering & Development
P.O. Box 178
Belfield NSW 2191

Our reference: 4720

Arboricultural Assessment Report:
159 Jamison Road,
Penrith NSW 2750

1. INTRODUCTION

This report has been prepared by Tree & Landscape Consultants for Alpha Engineering & Development. The site was inspected by the author and the subject trees and their general growing environment evaluated on the 15th February 2019.

The location of the trees is indicated in Appendix C and this report has relied upon the following plans as a point of reference:

Plan Set, Project Number-18-030 -Dated 18/12/2018 by , Platform 5 Design.

2.0 AIMS & OBJECTIVES

Aims

Detail the condition of the tree/s on the site or on adjoining sites where such tree/s may be affected by the proposed works, by assessment of individual specimens or stands, and indicate remedial works or protection measures for their retention in a safe and healthy condition, or a condition not less than that at the time of initial inspection for this report, or in a reduced but sustainable condition due to the impact of the development but ameliorated through tree protection measures able to be applied, and will consider the location and condition of the trees in relation to the proposed building works, or recommend removal and replacement where appropriate.

Provide as an outcome of the assessment, the following: a description of the tree/s, observations made, discussion of the effects the location of the proposed building works may have on the tree/s, and make recommendations required for remedial or other works to the trees, if and where appropriate.

Determine from the assessment a description of the works or measures required to ameliorate the impact upon the tree/s to be retained, by the proposed building works or future impacts the trees may have upon the new building works if and where appropriate, or the benefits of removal and replacement if appropriate for the medium to long term safety and amenity of the site.

Objectives

Assess the condition of the subject trees.

Determine impact of development on the subject trees.

Provide recommendations for removal or management of the subject trees.

3. METHODOLOGY

3.1 The method of assessment of tree/s is applied from the ongoing knowledge and development of the author and considers but is not confined to:

- Tree health and subsequent stability, both long and short term
- Sustainable Retention Index Value (S.R.I.V.)© IACA 2009)
- Amenity values
- Significance

3.2 This assessment is undertaken using a standard tree assessment criteria for each tree based on the values above and is implemented as a result of at least one comprehensive and detailed site inspection.

3.3 In this report the dimensions of the tree recorded by the author for the trunk *diameter at breast height* (DBH) measurement is calculated at 1.4m above ground from the base of the tree. Where a tree is trunkless or branches at or near ground such as a mallee formed tree, an average diameter is determined by recording the radial extent of the stem mass at its narrowest and widest dimensions, adding the two dimensions together and dividing them by 2 to record an average.

3.4 Crown spreads are expressed as length by breadth measurements to accurately record their dimensions. Where appropriate, *crown spread orientation* is described along the length of the crown spread e.g. North/South, or as *radial* if the crown is distributed at an approximately even radius from the trunk e.g. 6x6m.

3.5 The Australian Standard AS 4970-2009 “Protection of trees on development sites, where applicable is applied to trees to be retained in this report as a point of reference and guide for the recommended minimum clearances from the centre of tree trunks to development works and is applied as a generalised benchmark and the distances may be increased or decreased by the author as a result of other factors providing mitigating circumstances or constraints as indicated by but not restricted to the following:

- *Tolerance of individual species to disturbance,*
- *Geology e.g. physical barriers in soil, floaters, bedrock to surface*
- *Topography e.g. slope, drainage,*
- *Soil e.g. depth, drainage, fertility, structure,*
- *Microclimate e.g. due to landform, exposure to dominant wind,*
- *Engineering e.g. techniques to ameliorate impact on trees such as structural soil, lateral boring,*
- *Construction e.g. techniques to ameliorate impact on trees such as pier and beam, bridge footings, suspended slabs*
- *Arboriculture e.g. exploration trenches to map location of roots,*
- *Physical limitations - existing modifications to the environment and any impact to tree/s by development e.g. property boundaries, road reserves, previous impact by excavation in other directions, soil level changes by cutting or filling, existing landscaping works within close proximity, modified drainage patterns.*

4. TREE ASSESSMENTS

Table 1

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Condition G = Good F= Fair P= Poor D = Dead	Pest & Diseases	Branch Bark Included	Canopy Orientation Sy = Symmetrical N,S,E,W = North South East West	Trunk Diameter (1.4m above ground in mm)	Height (m)	Spread (m)	Tree Vigour L = Low G= Good A= Abnormal	Trunk Lean X = Straight or Slightly Leaning A = Acaulescent M = Moderate	SRIV (Age, Vigour, Condition, Index Rating)
1	**Eucalyptus moluccana**	M	P	No	No	Sy	800	30	8	G	X	MGVP6
	Grey box / Gum-topped box	Comments: Lower crown modified to raise crown and clear utility wires.										
2	**Callistemon viminalis**	M	F	No	No	Sy	100	3	2	G	A	MGVF9
	Bottlebrush	Comments: Smaller tree appearing free of insect predation or disease.										
3	**Duranta erecta**	M	P	No	No	Sy	100	3	1	G	A	MGVP6
	Golden Dewdrop	Comments: Urban weed species covered in extraneous vine growth.										
4	**Duranta erecta**	M	P	No	No	Sy	100	3	1	G	A	MGVP6
	Golden Dewdrop	Comments: Urban weed species covered in extraneous vine growth.										
5	**Duranta erecta**	M	P	No	No	Sy	100	3	1	G	A	MGVP6
	Golden Dewdrop	Comments: Urban weed species covered in extraneous vine growth.										
6	**Lagerstroemia indica**	M	F	No	No	Sy	200	4	4	G	A	MGVF9
	Crepe Myrtle	Comments: Smaller tree appearing free of insect predation or disease.										
7	**Eucalyptus saligna**	Y	F	No	No	Sy	200	3	1	G	X	YGVF8
	Sydney Blue Gum	Comments: Younger tree appearing free of insect predation or disease.										
8	**Callistemon viminalis**	M	F	No	No	Sy	300	4	4	G	X	MGVF9
	Bottlebrush	Comments: Tree appearing free of insect predation or disease.										
9	**Callistemon viminalis**	M	F	No	No	Sy	200	3	2	G	X	MGVF9
	Bottlebrush	Comments: Tree appearing free of insect predation or disease.										
10	**Lonicera maackii**	M	F	No	No	Sy	200	3	2	G	X	MGVF9
	Bhonetsuckle Tree	Comments: Tree appearing free of insect predation or disease.										

5. Discussion

Of the ten trees assessed most are of smaller dimensions with the most substantial tree in regards to height being tree 1. Tree 1 has been subject to modification of its crown in the form of crown lifting and through pruning to clear adjoining utility services. The proposed changes to the land are within its structural and tree protection zone and the tree is not retainable with the design in its current format.

All trees with the exception of tree 10 are to be removed to accommodate the proposed boarding house and associated infrastructure. Removal of these trees should be subject to the introduction of new trees shrubs and ground covers as part of final landscape works utilising some species typically found within the plant assemblage of the immediate area.

Tree 10 located within the neighbouring land is to be retained and protected. This tree is prescribed a Tree Protection Zone (TPZ) of 2.4 metres radius and is to be subject to protection in accordance with the Australian Standard AS4970-2009 as follows:

5.1 (3.2 DETERMINING THE TPZ -Extract from AS4970-2009)

The radius *of the TPZ is calculated for each tree by multiplying its DBH x 12. TPZ = DBH x 12 where DBH = trunk diameter measured at 1.4 m above ground. Radius is measured from the centre of the stem at ground level. A TPZ should not be less than 2m nor greater than 15 m (except where crown protection is required). The TPZ of palms, other monocots, cycads and tree ferns should not be less than 1 m outside the crown projection. All*
Response:T10- *TPZ 2.4 metres radius /SRZ 1.8 metres radius.*

5.2 (4.3 PROTECTIVE FENCING- Extract from AS4970-2009)

Fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works including demolition. Once erected, protective fencing must not be removed or altered without approval by the project arborist. The TPZ should be secured to restrict access. AS 4687 specifies applicable fencing requirements. Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids

into the protected area. Fence posts and supports should have a diameter greater than 20 mm and be located clear of roots. Existing perimeter fencing and other structures may be suitable as part of the protective fencing.
Response: *Fencing for tree 10 within the property boundary at the prescribed radius setback from the trunk centre utilising approved fencing is to be erected prior to works commencing in accordance with AS4970-2009 section 4.3.*

5.3 (4.4 SIGNS - Extract from AS4970-2009)
Signs identifying the TPZ should be placed around the edge of the TPZ and be visible from within the development site. The lettering on the sign should comply with AS 1319.
Response: *TPZ signage will need to be installed to fencing for tree 10 (See Appendix E- Example TPZ signage)*

5.4 (4.5.5 Installing underground services within TPZ - Extract from AS4970-2009)

All services should be routed outside the TPZ. If underground services must be routed within the TPZ, they should be installed by directional drilling or in manually excavated trenches. The directional drilling bore should be at least 600 mm deep. The project arborist should assess the likely impacts of boring and bore pits on retained trees. For manual excavation of trenches the project arborist should advise on roots to be retained and should monitor the works. Manual excavation may include the use of pneumatic and hydraulic tools.
Response: *Any services with the prescribed TPZs of tree 10 are to be installed through use of underground directional drilling equipment located greater then 600mm in depth. All access bore pits are to be located outside the prescribed TPZs of the tree.*

5.5 (4.6.1 Mulching – Extract from AS4970-2009)
The area within the TPZ should be mulched. The mulch must be maintained to a depth of 50–100 mm using material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.
Response: *Mulching needs to be installed within the TPZ of trees 10 within the property boundary.*

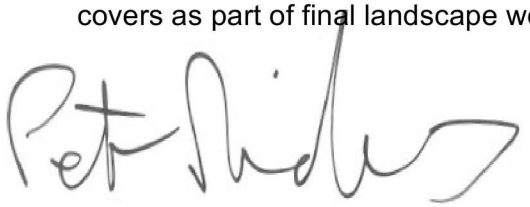
5.6 (4.6.2 Watering- Extract from AS4970-2009)
Soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within the TPZ. An above-ground irrigation system should be installed and maintained by a competent individual.
Response: *Some type of irrigation system needs to be in place within the TPZ during building works either temporary or permanent to be approved by the project arborist for trees 10.*

6. RECOMMENDATIONS

a. That tree 10 be retained.

b. That protection for tree 10 be in accordance with sections 5.1 to 5.10 of this report.

c. That trees 1,2,3,4,5,6,7,8 & 9 be removed and replaced with trees shrubs and ground covers as part of final landscape works



Peter Richards
Tree & Landscape Consultants

Appendix A
Matrix - Sustainable Retention Index Value (S.R.I.V.)©

Developed by IACA – Institute of Australian Consulting Arboriculturists www.iaca.org.au
Version 4, 2010

To be used with the values defined in the Glossary.
An Index value as indicated where ten (10) is the highest value.

Age Class	Vigour Class and Condition Class					
	Good Vigour & Good Condition (GVG)	Good Vigour & Fair Condition (GVF)	Good Vigour & Poor Condition (GVP)	Low Vigour & Good Condition (LVG)	Low Vigour & Fair Condition (LVF)	Low Vigour & Poor Condition (LVP)
	Able to be retained if sufficient space available above and below ground for future growth. No remedial work or improvement to growing environment required. May be subject to high vigour. Retention potential - Medium – Long Term.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work may be required or improvement to growing environment may assist. Retention potential - Medium Term. Potential for longer with remediation or favourable environmental conditions.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work unlikely to assist condition, improvement to growing environment may assist. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. No remedial work required, but improvement to growing environment may assist vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment may assist condition and vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	Unlikely to be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment unlikely to assist condition or vigour. Retention potential - Likely to be removed immediately or retained for Short Term. Potential for longer with remediation or favourable environmental conditions.
(Y) Young	**YGVG - 9** **Index Value 9** Retention potential - Long Term. Likely to provide minimal contribution to local amenity if height <5 m. High potential for future growth and adaptability. Retain, move or replace.	**YGVF - 8** **Index Value 8** Retention potential - Short – Medium Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium-high potential for future growth and adaptability. Retain, move or replace.	**YGVP - 5** **Index Value 5** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Low-medium potential for future growth and adaptability. Retain, move or replace.	**YLVG - 4** **Index Value 4** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium potential for future growth and adaptability. Retain, move or replace.	**YLVF - 3** **Index Value 3** Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5m. Low-medium potential for future growth and adaptability. Retain, move or replace.	**YLVP - 1** **Index Value 1** Retention potential - Likely to be removed immediately or retained for Short Term. Likely to provide minimal contribution to local amenity if height <5 m. Low potential for future growth and adaptability.
(M) Mature	**MGVG - 10** **Index Value 10** Retention potential - Medium - Long Term.	**MGVF - 9** **Index Value 9** Retention potential - Medium Term. Potential for longer with improved growing conditions.	**MGVP - 6** **Index Value 6** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVG - 5** **Index Value 5** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVF - 4** **Index Value 4** Retention potential - Short Term. Potential for longer with improved growing conditions.	**MLVP - 2** **Index Value 2** Retention potential - Likely to be removed immediately or retained for Short Term.
(O) Over-mature	**OGVG - 6** **Index Value 6** Retention potential - Medium - Long Term.	**OGVF - 5** **Index Value 5** Retention potential - Medium Term.	**OGVP - 4** **Index Value 4** Retention potential - Short Term.	**OLVG - 3** **Index Value 3** Retention potential - Short Term. Potential for longer with improved growing conditions.	**OLVF - 2** **Index Value 2** Retention potential - Short Term.	**OLVP - 0** **Index Value 0** Retention potential - Likely to be removed immediately or retained for Short Term.

Appendix B

Definitions & Terminology

From

Dictionary for Managing Trees in Urban Environments

Institute of Australian Consulting Arboriculturists (IACA) 2009.

Condition of trees

Condition A tree's *crown form* and growth habit, as modified by its *environment* (aspect, suppression by other trees, soils), the *stability* and *viability* of the *root plate*, trunk and structural branches (first (1st) and possibly second (2nd) order branches), including structural defects such as wounds, cavities or hollows, *crooked* trunk or weak trunk/branch junctions and the effects of predation by pests and diseases. These may not be directly connected with *vigour* and it is possible for a tree to be of *normal vigour* but in *poor condition*. Condition can be categorized as *Good Condition*, *Fair Condition*, *Poor Condition* and *Dead*.

Good Condition Tree is of good habit, with *crown form* not severely restricted for space and light, physically free from the adverse effects of *predation* by pests and diseases, obvious instability or structural weaknesses, fungal, bacterial or insect infestation and is expected to continue to live in much the same condition as at the time of inspection provided conditions around it for its basic survival do not alter greatly. This may be independent from, or contributed to by vigour.

Fair Condition Tree is of good habit or *misshapen*, a form not severely restricted for space and light, has some physical indication of *decline* due to the early effects of *predation* by pests and diseases, fungal, bacterial, or insect infestation, or has suffered physical injury to itself that may be contributing to instability or structural weaknesses, or is faltering due to the modification of the *environment* essential for its basic survival. Such a tree may recover with remedial works where appropriate, or without intervention may stabilise or improve over time, or in response to the implementation of beneficial changes to its local environment. This may be independent from, or contributed to by vigour.

Poor Condition Tree is of good habit or *misshapen*, a form that may be severely restricted for space and light, exhibits symptoms of advanced and *irreversible decline* such as fungal, or bacterial infestation, major die-back in the branch and *foliage crown*, *structural deterioration* from insect damage e.g. termite infestation, or storm damage or lightning strike, ring barking from borer activity in the trunk, root damage or instability of the tree, or damage from physical wounding impacts or abrasion, or from altered local environmental conditions and has been unable to adapt to such changes and may decline further to death regardless of remedial works or other modifications to the local *environment* that would normally be sufficient to provide for its basic survival if in *good* to *fair* condition. Deterioration physically, often characterised by a gradual and continuous reduction in vigour but may be independent of a change in vigour, but characterised by a proportionate increase in susceptibility to, and *predation* by pests and diseases against which the tree cannot be sustained. Such conditions may also be evident in trees of advanced senescence due to normal phenological processes, without modifications to the growing environment or physical damage having been inflicted upon the tree. This may be independent from, or contributed to by vigour.

Dead Tree is no longer capable of performing any of the following processes or is exhibiting any of the following symptoms;

Processes

Photosynthesis via its foliage crown (as indicated by the presence of moist, green or other coloured leaves);

Osmosis (the ability of the root system to take up water);

Turgidity (the ability of the plant to sustain moisture pressure in its cells);

Epicormic shoots or *epicormic strands* in Eucalypts (the production of new shoots as a response to stress, generated from latent or adventitious buds or from a *lignotuber*);

Symptoms

Permanent leaf loss;

Permanent wilting (the loss of turgidity which is marked by desiccation of stems leaves and roots);

Abscission of the *epidermis* (bark desiccates and peels off to the beginning of the sapwood).

Removed No longer present, or tree not able to be located or having been cut down and retained on a site, or having been taken away from a site prior to site inspection.

Description of Tree Dimensions

Height The distance measured vertically between the horizontal plane at the lowest point at the base of a tree, which is immediately above ground, and the horizontal plane immediately above the uppermost point of a tree.

Spread The furthest expanse of the crown when measured horizontally from one side of the tree to the other, generally through the centre of the trunk. Where the crown is not circular a measurement should be an average of the narrowest and widest diameters and this is dependent upon crown form and to a lesser extent its symmetry.

Crown Cover Percent of the homogenous distribution of foliage across the entire crown based upon that expected for a specimen of that species in good condition and of normal vigour, depending on form in situ, e.g. this may be influenced by crown die-back, proximity to other trees or structures, moisture stress, or overshadowing.

Vigour

Vigour Ability of a tree to sustain its life processes. This is independent of the *condition* of a tree but may impact upon it. Vigour can appear to alter rapidly with change of seasons (seasonality) e.g. *dormant*, deciduous or semi-deciduous trees. Vigour can be categorized as *Normal Vigour, High Vigour*, *Low Vigour* and *Dormant Tree Vigour*.

Normal Vigour Ability of a tree to maintain and sustain its life processes. This may be evident by the typical growth of leaves, crown cover and crown density, branches, roots and trunk and resistance to predation. This is independent of the condition of a tree but may impact upon it, and especially the ability of a tree to sustain itself against predation.

High Vigour *Accelerated growth* of a tree due to incidental or deliberate artificial changes to its growing *environment* that are seemingly beneficial, but may result in *premature aging* or failure if the favourable conditions cease, or promote *prolonged senescence* if the favourable conditions remain, e.g. water from a leaking pipe; water and nutrients from a leaking or disrupted sewer pipe; nutrients from animal waste, a tree growing next to a chicken coop, or a stock feed lot, or a regularly used stockyard; a tree subject to a stringent watering and fertilising program; or some trees may achieve an extended lifespan from continuous *pollarding* practices over the life of the tree.

Low Vigour Reduced ability of a tree to sustain its life processes. This may be evident by the atypical growth of leaves, reduced crown cover and reduced crown density, branches, roots and trunk, and a deterioration of their functions with reduced resistance

to predation. This is independent of the condition of a tree but may impact upon it, and especially the ability of a tree to sustain itself against predation.

Dormant Tree Vigour Determined by existing turgidity in lowest order branches in the outer extremity of the crown, with good bud set and formation, and where the last extension growth is distinct from those most recently preceding it, evident by bud scale scars. Normal vigour during dormancy is achieved when such growth is evident on a majority of branches throughout the crown.
Poor Vigour See low vigour
Good Vigour See Normal Vigour

Age of Trees

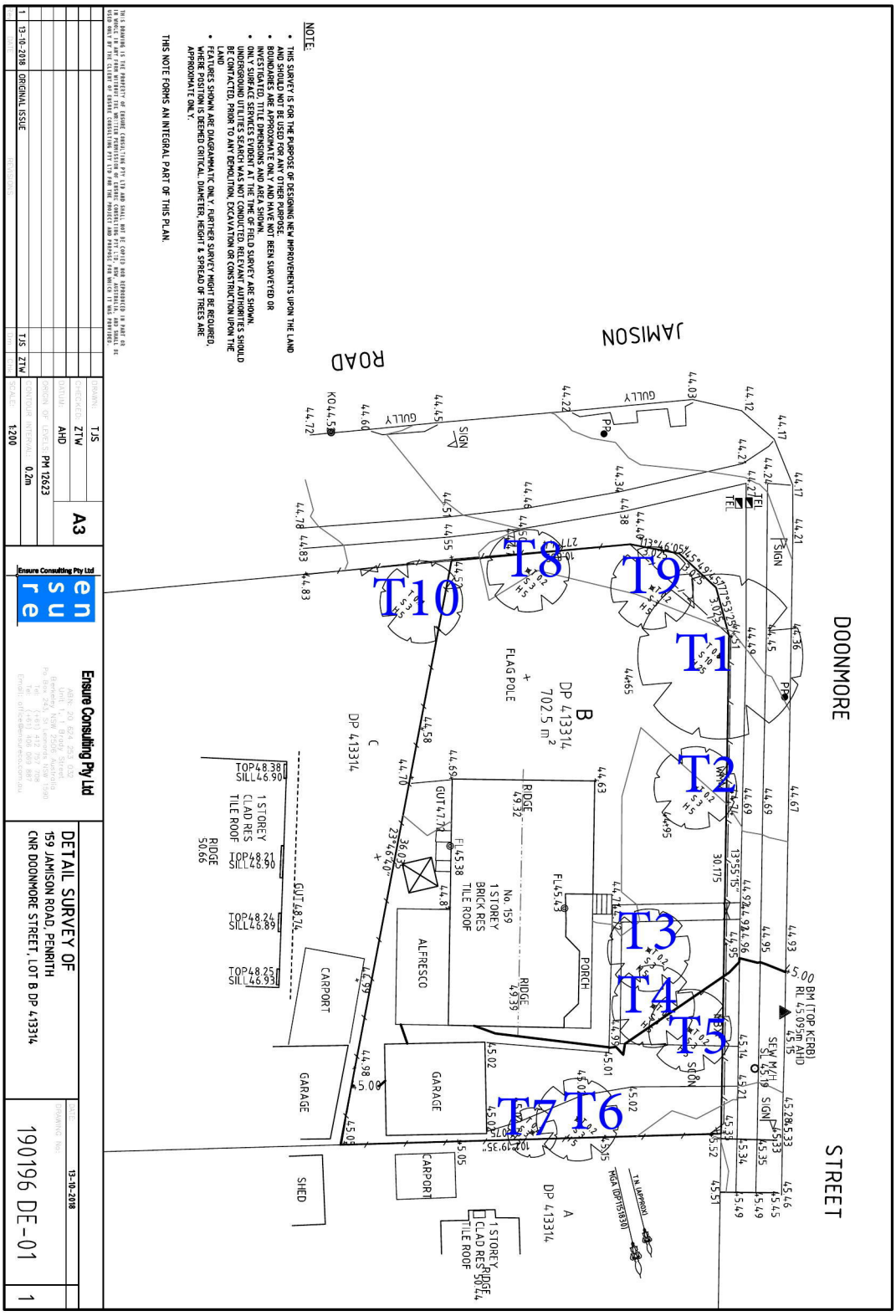
Age of Trees Most trees have a stable biomass for the major proportion of their life. The estimation of the age of a tree is based on the knowledge of the expected lifespan of the taxa in situ divided into three distinct stages of measurable biomass, when the exact age of the tree from its date of cultivation or planting is unknown. These increments are Young, Mature and Overmature.
Young Tree aged less than 20% of life expectancy.
Mature Tree aged 20-80% of life expectancy.
Over-mature Tree aged greater than 80% of life expectancy tending to senescent with or without reduced vigour, and declining gradually or rapidly but irreversibly to death.
Sapling A young tree, early in its development with small dimensions.
Senescent Advanced old age, over-mature.

General Terms

Significant Important, weighty or more than ordinary.
Significant Tree A tree considered important, weighty or more than ordinary. Example: due to prominence of location, or in situ, or contribution as a component of the overall landscape for *amenity* or aesthetic qualities, or *curtilage* to structures, or importance due to uniqueness of taxa for species, subspecies, variety, form, or as an historical or cultural planting, or for age, or substantial dimensions, or habit, or as remnant vegetation, or habitat potential, or a rare or threatened species, or uncommon in cultivation, or of aboriginal cultural importance, or is a commemorative planting.
Substantial A tree with large dimensions or proportions in relation to its place in the landscape.
Excurrent Tree where the crown is comprised of one (1) dominant first order structural branch which is usually an extension of the trunk, erect, straight and continuous, tapering gradually, with the main *axis* clear from base to apex, e.g. *Araucaria heterophylla* - Norfolk Island Pine. Note: some tree species of *typical* excurrent habit may be altered to deliquescent by physical damage of the *apical meristem*, or from top lopping, or from the propagation of inferior quality stock. However, *formative pruning* may be able to correct a *crown* to excurrent if undertaken when a tree is *young*.
Sustainable Retention Index Value (SRIV) A visual method of rating the viability of urban trees for development sites and management, based on general tree and landscape assessment criteria. SRIV© is for the professional manager of urban trees to consider the tree in situ with an assumed knowledge of the taxa and its growing environment and is based on the physical attributes of the tree and its response to its environment considering its age class, vigour class, condition class and its sustainable retention with regard to the safety of people or damage to property and the ability to retain the tree with remedial work or beneficial modifications to its growing environment or removal and replacement. (IACA 2005)
Crown Spread Orientation Direction of the *axis* of *crown spread* which can be categorized as *Orientation Radial* and *Orientation Non-radial*.
Diameter at Breast Height (DBH) Measurement of trunk width calculated at a given distance above ground from the base of the tree often measured at 1.4 m. The trunk of a tree is usually not a circle when viewed in cross section, due to the presence of *reaction wood* or *adaptive wood*, therefore an average diameter is determined with a *diameter tape* or by recording the trunk along its narrowest and widest axes, adding the two dimensions together and dividing them by 2 to record an average and allowing the orientation of the longest axis of the trunk to also be recorded. Where a tree is growing on a lean the distance along the top of the trunk is measured to 1.4m and the diameter then recorded from that point perpendicular to the edge of the trunk. Where a *leaning* trunk is *crooked* a vertical distance of 1.4m is measured from the ground. Where a tree branches from a trunk that is less than 1.4m above ground, the trunk diameter is recorded perpendicular to the length of the *trunk* from the point immediately below the base of the flange of the *branch collar* extending the furthest down the trunk, and the distance of this point above ground recorded as *trunk* length. Where a tree is located on sloping ground the DBH should be measured at half way along the side of the tree to average out the angle of slope. Where a tree is *acaulescent* or *trunkless* branching at or near ground an average diameter is determined by recording the radial extent of the trunk at or near ground and noting where the measurement was recorded e.g. at ground.
Structural Root Zone (SRZ) The minimal area around the base of a tree, generally circular, required for its *stability* in the ground. The section of *root plate* within this area and subsequent soil cohesion necessary to hold the tree upright against *wind throw*, therefore the entire depth of the *root zone* must be included.

Appendix C

Survey Plan/Tree Locations



Appendix E
Example Tree Protection Zone Signage

Appendix F
References

REFERENCES

1. IACA (2009), Sustainable Retention Index Value, Institute of Australian Consulting Arboriculturists, www.iaca.org.au .

2. Australian Standard® AS 4373 – 2007 Pruning of amenity Trees.

3. Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

4. Work Cover NSW 2007, *Code of Practice Tree Work*, New South Wales Government, Australia.

159 Jamison Road Penrith

Traffic and Parking Assessment

Prepared on behalf Alpha Engineering and Development Pty Ltd

7 March 2019

Document Revision: Rev 01

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Revision No.	Author	Description	Date
Rev 01	KM	Final	07.03.2019

Contents

1. Introduction

This traffic assessment is prepared on behalf of Alpha Engineering and Development Pty Ltd to investigate a proposed boarding house development at 159 Jamison Road Penrith NSW.

It is understood that a development application will be lodged with Penrith City Council.

The development plans have been assessed against the following:

- Penrith Development Control Plan (DCP) 2014;
- Penrith Local Environmental Plan (LEP) 2010;
- Australian Standard (AS 2890); and
- RTA (RMS) Guide to Traffic Generating Developments.

1.1. Site Location

The subject site is located at 159 Jamison Road Penrith, as shown in Figure 1-1.

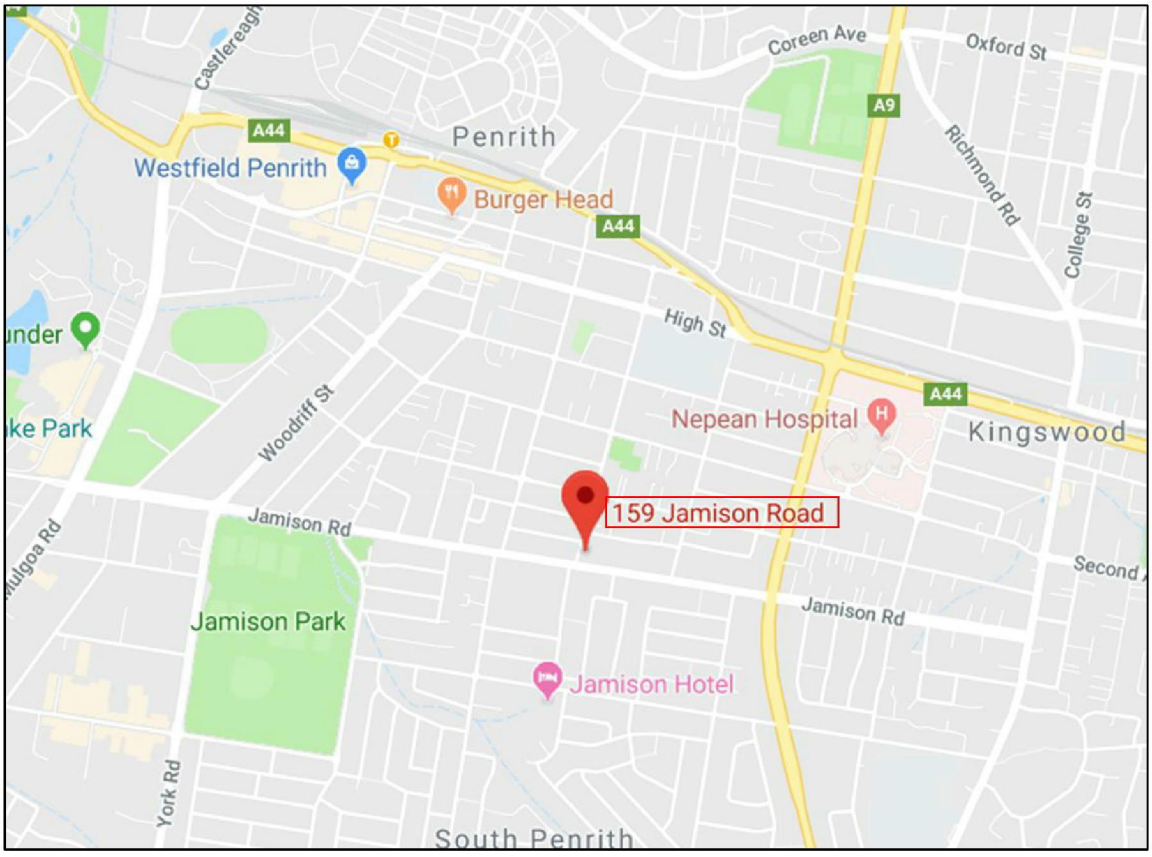

Figure 1-1: Site Location[1]

[1] Source: https://www.google.com/maps/

An aerial photograph showing the site and the surrounding area is shown in Figure 1-2.

Figure 1-2: Aerial Imagery of the Site[2]

1.2. Land Use Zoning

Figure 1-3 shows the land use zoning of the subject site in the context of adjacent sites and the surrounding area.

[2] Source: https://maps.spookfish.com

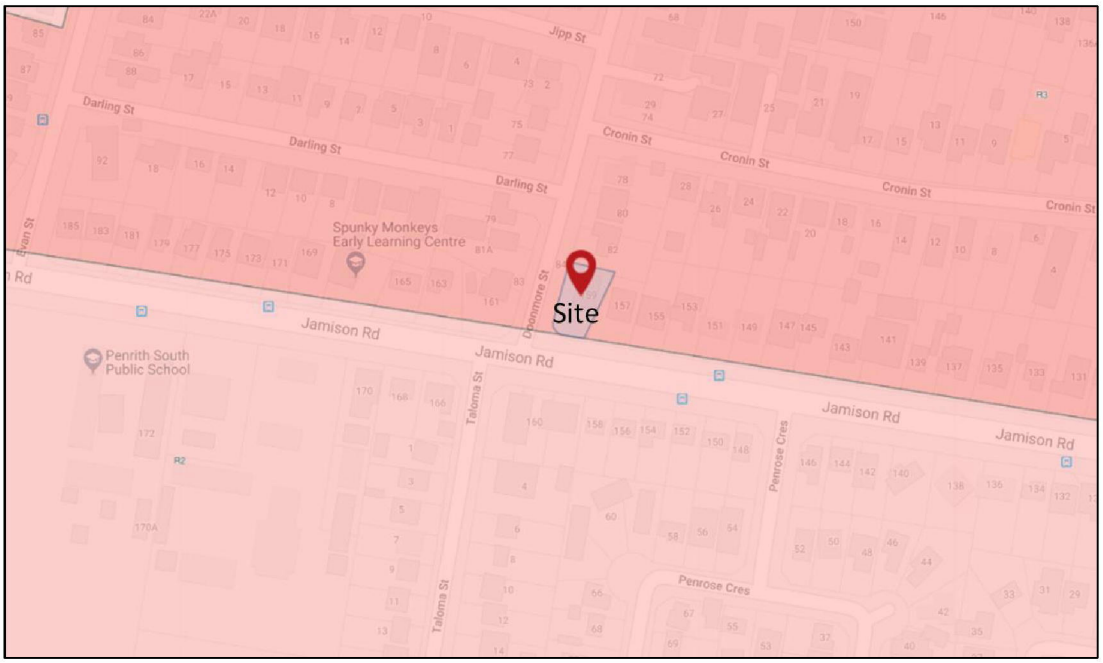

Figure 1-3: Site Location (Land Use Zoning)[3]

The site is located within a Medium Density Residential (R3) Zone, with the land uses in the immediate vicinity of the site being residential (R2 and R3).

The following key features are within vicinity of the site:

- The Penrith Centre (including Penrith Westfield) is located 1.5 km northwest of the site
- Penrith Railway Station is located 1.5 km northwest of the site;
- Nepean Hospital is located 900 metres north east of the site;
- Jamison Park is located 850 metres west of the site; and
- Penrith Panthers is located 1.8 km west of the site.

[3] Source: https://www.planningportal.nsw.gov.au

2. Existing Local Situation

2.1. Road Network

The subject site has street frontages to Jamison Road and Doonmore Street. These roads and the other roads in the vicinity of the site are maintained and controlled by Penrith City Council.

The road characteristics are shown in Table 2-1.

Table 2-1: Road Characteristics

Road	Speed Limit	Lanes	Road Authority
Jamison Road	50kph	4 (undivided, with on-street parking)	Council
Doonmore Street	50kph	2 (undivided plus on-street parking)	Council
Taloma Street	50kph	2 (undivided plus on-street parking)	Council

The intersection of Jamison Road and Doonmore Street is 'Give Way' controlled.

2.2. Assessment of Existing Travel Options

2.2.1. Public Transport

Buses

Bus stops are located Jamison Road within 70 metres walking distance from the site. These bus route that services the bus stop is Route 770 (Penrith to Mount Druitt via Claremont Meadows). This service provides buses every 20 minutes in morning and evening peak periods, and during the off-peak periods.

The bus network map is shown in Figure 2-1.

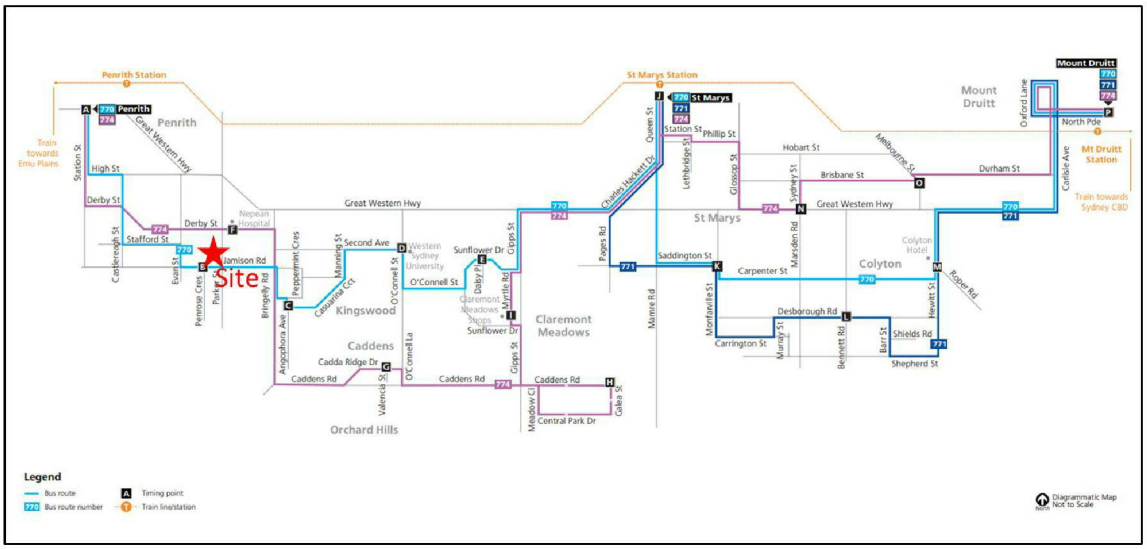

Figure 2-1: Bus Route 770 Network Map[4]

2.2.2. Walking and Cycling Infrastructure

Pedestrian footpaths are located on Jamison Road, Doonmore Street and the streets surrounding the site.

Designated cycle routes are located within the vicinity of the site along Jamison Road, Evan Street, Derby Street and other local roads.

The bike network maps from the NSW Roads and Maritime Services (RMS) are shown in Figure 2-2.

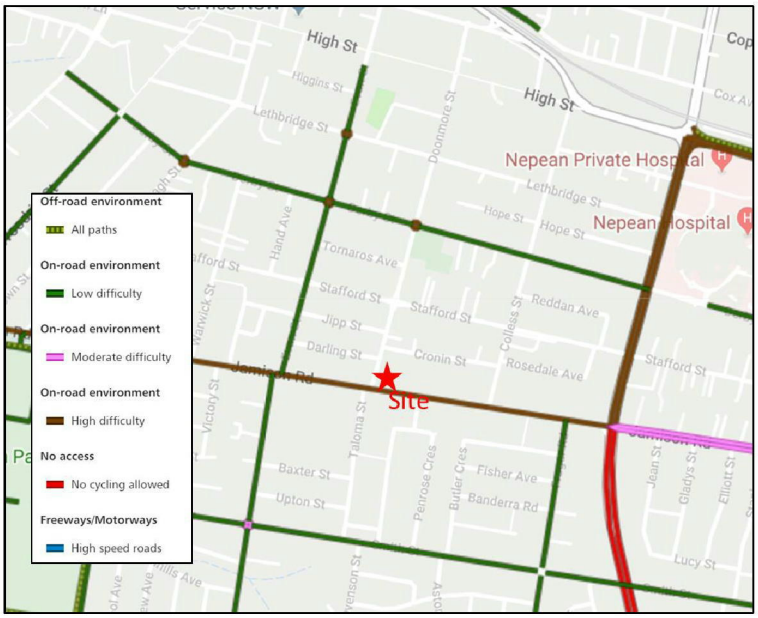

Figure 2-2: RMS Cycle Network[5]

[4] Source: https://www.busways.com.au/
[5] Source: Transport Roads and Maritime Services Website (http://www.rms.nsw.gov.au/roads/bicycles/cyclewayfinder/index.html)

2.3. Existing Parking Survey

A car parking occupancy survey was undertaken at the site on Monday, 18th February 2019, between 4:30pm to 6:00pm. A total of 44 car parking spaces were recorded along Jamison Road and Doonmore Street.

The on-street parking capacity is shown in Figure 2-3.

Figure 2-3: On-Street Parking Capacity

At the time of the parking surveys there were 16 and 17 car parking spaces available for Jamison Road and Doonmore Street, respectively.

A summary of the parking occupancy results is shown in Table 2-2.

Table 2-2: Parking Survey Results

Street Name	Section	Number of On-Street Parking Spaces available	Number of Occupied Parking Spaces	Number of Available Parking Spaces	% of Available parking spaces
Jamison Road	A	16	6	10	63%
	D	8	2	6	75%
Doonmore Street	B	8	3	5	63%
	C	12	0	12	100%

Based on the parking survey results there is spare parking capacity located around vicinity of the subject site along Jamison Road and Doonmore Street.

The site photos during the site inspection is shown in Figure 2-4 to Figure 2-6.

Figure 2-4: View looking north on Doonmore Street

Figure 2-5: View looking east on Jamison Road and Doonmore Street intersection

Figure 2-6: View looking west along Jamison Road

4. Council Parking Supply Requirements

4.1. Council Car Parking Requirements

The Council's Development Control Plan (Penrith DCP 2014) does not specify parking rates for boarding house (accommodation) developments. The 'Affordable Rental Housing State Environmental Planning Policy (ARHSEPP)' has been used to determine the number of car parking spaces provided on site, as detailed in Section 4.2.

4.2. State Environmental Planning Policy (SEPP) Parking Requirements

On 1 June 2018, car parking standards were increased for boarding houses delivered under the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP). The car parking rates is specified below:

- 0.5 car spaces per boarding room in all locations;
- At least one parking space provided for each person employed in connection with the development and who is resident on the site; and
- One bicycle parking space and one motorcycle parking space per 5 boarding rooms.

Table 4-1 presents the car parking requirements in accordance with the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP).

Table 4-1: ARHSEPP Car Parking Rates and Supply

Parking Type	Number of bedrooms	Parking Rates	Parking Requirements	Parking Provisions
Vehicle Parking	20 (excludes manager room)	0.5 car parking space per room	10	9 (including three accessible bay) car parking spaces
Vehicle Parking		At least one parking space provided for each person employed in connection with the development and who is resident on the site	1	1 Car parking space provided to manager
Bicycle parking		1 bicycle per 5 boarding rooms	4	4 bicycle parking spaces
Motor cycle parking		1 motorcycle parking per 5 boarding rooms	4	4 motor cycle parking spaces

From Table 4-1 it can be seen that the car parking provision of 9 car parking spaces does not strictly comply with the ARHSEPP parking requirements, with one car parking space short of the parking requirements.

During the site inspection between 4:30pm to 6:00pm on 18th February 2019 it was observed that on-street parking was available around vicinity of the subject site along Jamison Road and Doonmore Street, as detailed in Section 2.3. The one car parking space can be accommodated on-street along Jamison Road and Doonmore Street without impacting the parking environment.

4.3. Car Parking Layout

The proposed car park design and access arrangement has generally been designed in accordance with the requirements of the Australian Standards (AS/NZS 2890.1:2004).

Table 4-2 identifies the characteristics of the proposed parking and access layout with respect to the relevant design requirements and guidelines. The last column identifies the compliance of each design aspect.

Table 4-2: Car Parking and Access Requirements

Design Aspect	Australian Standards	Proposed Provision	Compliance
Parking space length: Standard bay	5.4 metres	5.4 metres	Complies with AS2890
Parking space width: Standard bay	2.4 metres	2.4 metres	Complies with AS2890
Parking space length: Accessible Bay	5.4 metres	5.4 metres	Complies with AS2890
Parking space width: Accessible Bay	4.8 metres	4.8 metres	Complies with AS2890 and refer to Section 4.4
Aisle Width: Parking aisle	5.8 metres	6.4 metres	Complies with AS2890
Blind Aisle	1 metre beyond the last parking space	Refer to Section 4.5	Refer to Section 4.5
Driveway Width	3.0 to 5.5 metres	3.0 to 5.5 metres	Complies with AS2890 (further details provided in Section 4.6)

Design Aspect	Australian Standards	Proposed Provision	Compliance
Height Clearance	2.2m	2.2m	Complies with AS2890
Height Clearance above accessible bay	2.5m	2.7m	Complies with AS2890
Maximum Gradient Ramp	Up to 20m long – maximum 1 in 4 (25%)	25%	Complies with AS2890
Access Driveway	First 6m from the property boundary shall be a maximum of 1:20 (5%)	First 6m from the property boundary shall be a maximum of 1:20 (5%)	Complies with AS2890
Sight Triangles	Landscaping and signs should not be more than 1.15 metres above the road surface for 2 metres along the property boundary and 2.5 metres along the property exit driveway	Refer to Section 4.7	Refer to Section 4.7

The proposed carpark and access layout generally comply with the requirements of the Australian Standards, with further details provided below:

4.4. Shared Area

As specified in the Australian Standards (AS2890.6):

'An area adjacent to a dedicated space provided for access or egress to or from a parked vehicle and which may be shared with any other purpose that does not involve other than transitory obstruction of the area, e.g. a walkway, a vehicular aisle, dual use with another adjacent dedicated space'

The traffic aisle will form part of the shared area for the parallel accessible bay, this will be considered acceptable for the following reasons:

- The traffic aisle will only be for passing vehicles; and
- Traffic volumes within the site is very low as detailed in Section 5.

4.5. Swept Path Analysis

An evaluation of the car parking spaces has been undertaken using the software package 'AutoTurn'. The vehicle swept paths have been based on the B85 vehicle as outlined in the Australian Standards (AS/NZS 2890.1:2004). The car parking spaces located at the blind aisle will either require a three point turn when entering or exiting the car parking spaces. Vehicle swept path analysis are shown in Figure 4-1 to Figure 4-3.

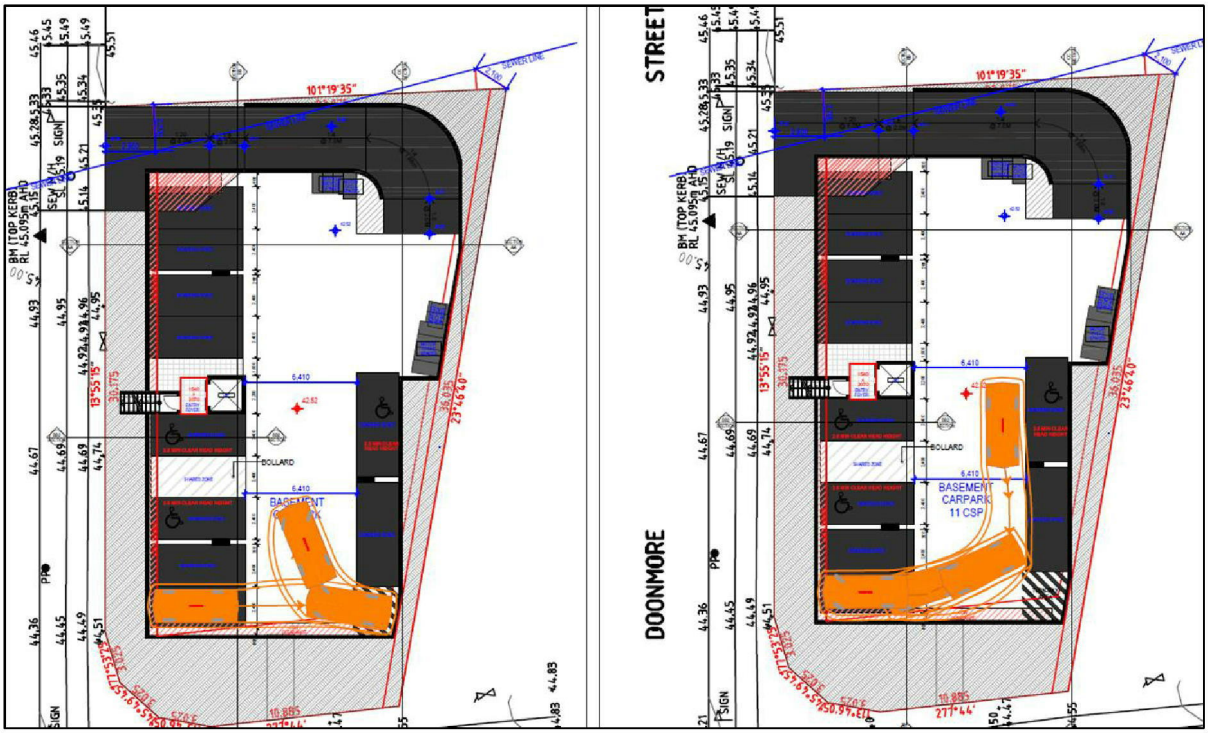

Figure 4-1: Vehicle Swept Path Analysis (Car Parking Space 1)

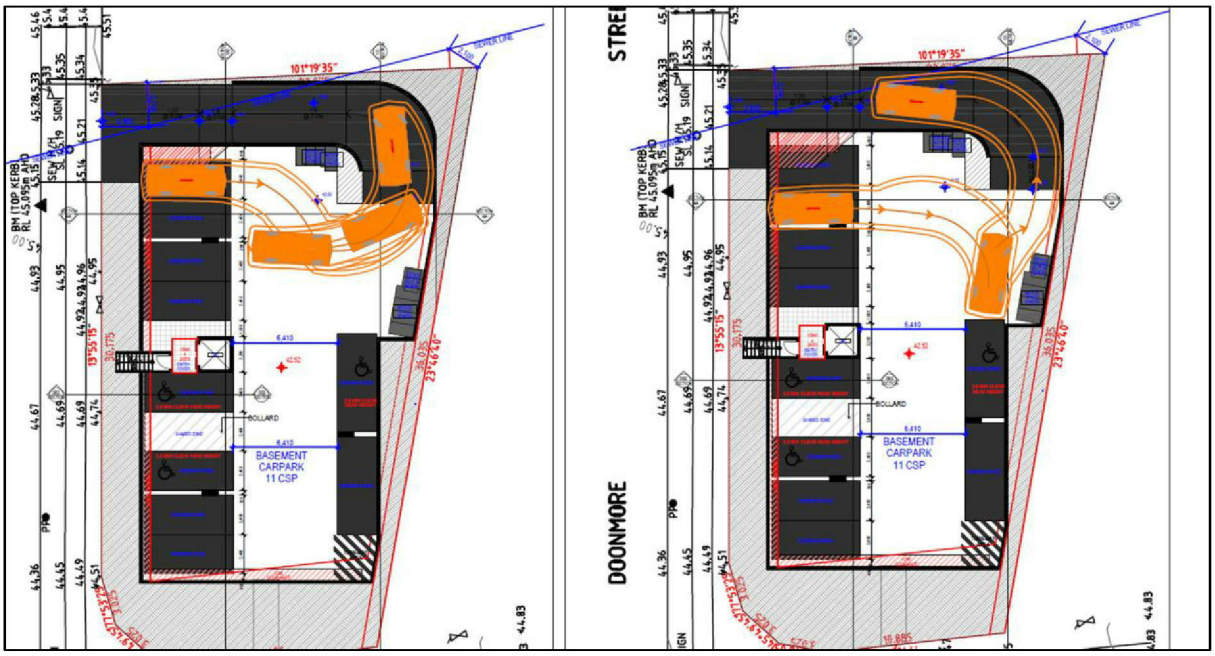

Figure 4-2: Vehicle Swept Path Analysis (Car Parking Space 2)

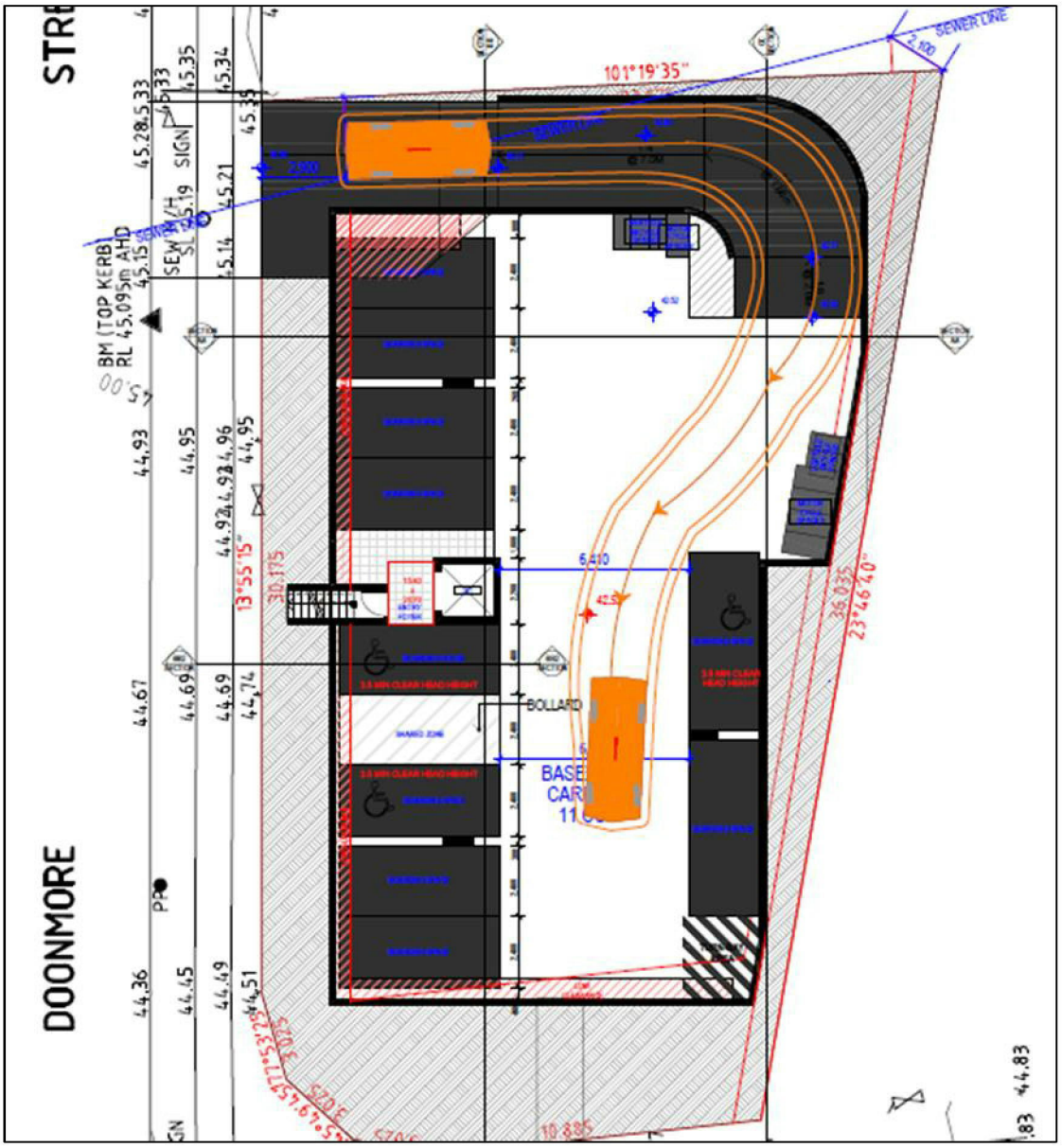

Figure 4-3: Vehicle Swept Path Analysis (Entering the basement level)

4.6. Driveway Access Arrangement

The proposed driveway access is two-way traffic merging to one way traffic flow into the basement level car park. This is acceptable due to the size of the proposed development and the low traffic volumes during the morning and evening peak periods, as detailed in Section 5.

The proposed boarding house development is located 70 metres from the nearest bus stop justifying the reduction in the traffic movements during the morning and evening peak periods.

An evaluation of the access arrangement has been undertaken using the software package 'AutoTurn', demonstrating two vehicles passing at the top of the ramp, as shown in Figure 4-4.

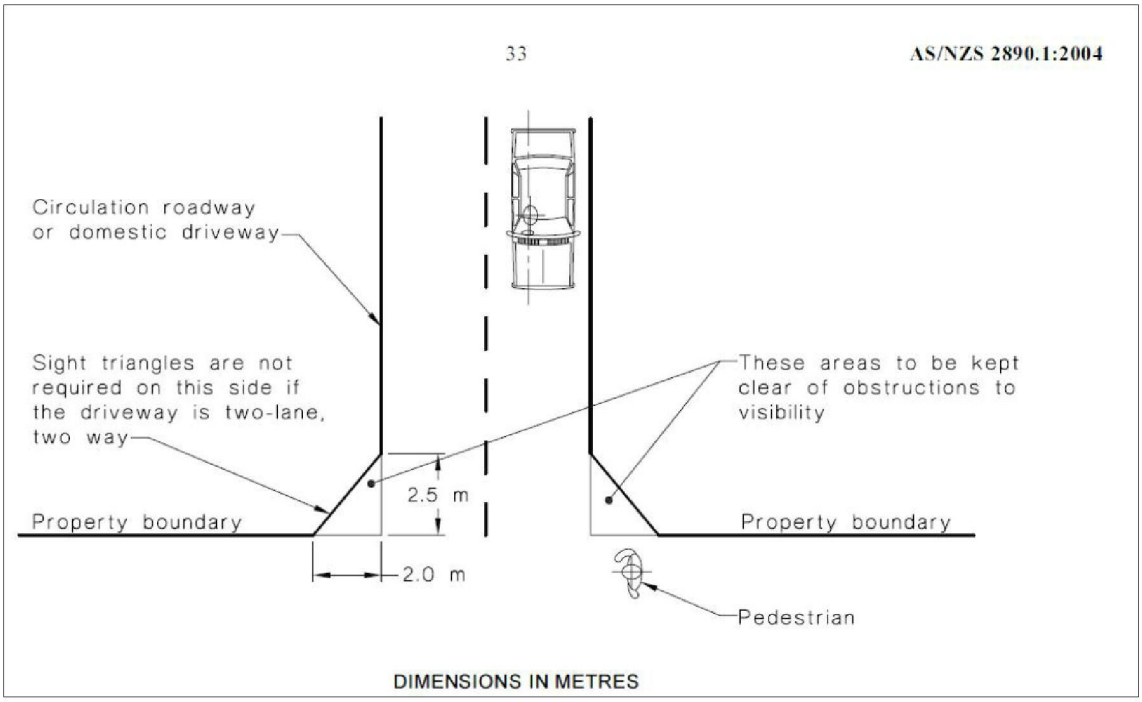

Figure 4-5: Australian Standards – Minimum sight lines for pedestrian safety

It is our advice that the sight triangles would be acceptable at the proposed access. There will be minimal obstructions and kept clear from vegetation and objects. Therefore, there will be minimal conflict with outgoing vehicles from the site and pedestrian activity.

4.8. Service Vehicles

Service vehicles, deliveries and refuse collection will be accommodated kerbside along Doonmore Street. Given the scale and nature of the development it is anticipated that there will be very low and infrequent service vehicle demands for this site. The use of the adjacent kerbside parking is appropriate to meet the needs of the proposed development.

5. Traffic Impacts

The RTA (RMS) 'Guide to Traffic Generating Development Version 2.2 (2002)' specifies land use traffic generation rates for different types of developments. These guidelines do not specify the traffic generation rates for boarding house developments.

Traffic generation rates for medium density residential flat buildings is provided, which can be approximated to generate a similar level of traffic to boarding house developments. Accordingly, medium density residential flat building traffic generation rates have been adopted for the purposes of this assessment.

The expected traffic generation for the development is provided in Table 5-1.

Table 5-1: RMS Traffic Generation Rates

Land Use	RTA Traffic Generation Rates (Peak Hour Vehicle Trips)	Peak Hour Vehicle Trips
Medium Residential Dwelling (21 rooms)	Weekday peak hour vehicle trips – up to 2 two bedrooms 0.4 to 0.5 per dwelling	8.4 to 10.5 (round up to 9 to 11) vehicles

The RMS traffic rates of 0.4 to 0.5 vehicle trips per dwelling results in the proposed development generating up to 11 vehicle movements during the morning and evening peak periods.

It is considered that this level of traffic will have a negligible impact to the intersection of Doonmore Street and Jamison Road, and the road network capacity, or the traffic environment.

6. Response to Council Comments

The following Council comments (Pre-lodgement advice letter dated 31 January 2019) and responses are provided in Table 6-1.

Table 6-1: Council Comments

Council Comments from Pre-Lodgement Meeting Letter dated 03 July 2018	Response to Council Comments
Under the Affordable Rental Housing SEPP, the parking requirements are: • 0.5 spaces per boarding room with 1 space being allocated to a site manager. Due to the number of accessible rooms required to be provided (being 10% of the proposal), 2 of the required car parking spaces need to be accessible in accordance with AS2890.6. Subsequently, the site requires 12 spaces with at least 2 being accessible (disabled) parking spaces. There are 12 spaces proposed, however only one is marked as accessible. • Motorcycle parking is one per 5 boarding rooms, requiring 5 spaces. 4 are proposed, an additional motorcycle parking space is required to be provided. • Bicycle parking is one per 5 boarding rooms, requiring 5 spaces as is proposed	The proposed development is for a boarding house consisting of 20 boarding rooms and one manager room. The Car Parking Rates are taken from the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP), refer to Section 4.2. Refer to Section 4 regarding bicycle parking, motorcycle parking and car parking requirements and supply.
Accessible parking is to be provided in the car park and have complying, accessible paths of travel to the building common areas. This would include headroom clearance (from floor to lowest ceiling obstruction such as light fittings or piping) of at least 2.5 metres above an accessible space and a clear area (possibly a shared space, pedestrian area or aisle) beside the space to allow wheelchair and other access beside the vehicle in accordance with AS 2890.6.	The proposed accessible bay has generally been designed in accordance with the requirements of the Australian Standards (AS2890.1 and AS2890.6) refer to Section 4.3.
Council prefers the provision of two-way ramps to basement car parking for ease of access and access arrangements. If a one-way ramp is pursued, a management system will be required that considers waiting areas to be clear of all turning paths, as well as any stacking of vehicles waiting to access the property to be clear of all turning paths and clear of footpaths.	An evaluation of the access arrangement has been undertaken using the software package 'AutoTurn', demonstrating two vehicles passing at the top of the ramp, as shown in Figure 4-4. In addition, a convex mirror can be installed to provide additional visibility, if required.

Council Comments from Pre-Lodgement Meeting Letter dated 03 July 2018	Response to Council Comments
The parking spaces are not dimensioned; however, they will be required to comply with Council DCP C10 to provide full opening doors as set out in AS 2890.1 Table B1 with at least 2.6 metres wide spaces and there should be an additional 0.3 metres clearance to any walls or other obstructions	The Australian Standard (AS2890) specifies residential parking as Class 1A which states 2.4 metre wide car parking spaces with a 5.8m traffic aisle. Therefore, the proposed 2.4m wide car parking spaces complies with the Australian Standards. Refer to Section 4.3 in regards to the car parking layout.
All vehicles are to enter/exit the site in a forward direction. Consideration will need to be made if all the spaces in the basement car park are full, there should be on site manoeuvring area to enter and leave in a forward direction. Subsequently, swept turn paths are required to be provided for any vehicles accessing the site to demonstrate that the car parking spaces can be accessed, manoeuvring on site to enable a turn around on site with less than 3 turns, and the proposed basement ramp can be used successfully.	An evaluation of the car parking spaces has been undertaken using the software package 'AutoTurn'. The vehicle swept paths have been based on the B85 vehicle as outlined in the Australian Standards (AS/NZS 2890.1:2004). The car parking spaces located at the blind aisle will either require a three point turn when entering or exiting the car parking spaces (refer to Section 4.5) Vehicles are able to enter and exit the site in a forward direction.
All car parking spaces should have complying, headroom, additional widths and clearances from columns, walls and other obstructions.	Refer to Section 4.3 for car park design and compliance
The required sight lines around the driveway entrance and exit are not to be compromised by street trees, landscaping, fencing or signposting.	Refer to Section 4.3 for car park design and compliance

7. Summary and Conclusions

This report has assessed the proposed boarding house development at 159 Jamison Road Penrith. Based on the above assessment, it is concluded that:

- The proposed car parking provision does not strictly comply with the car parking requirements of the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP). The proposed development is less one car parking space on-site. Based on the parking survey results this can be accommodate on-street as detailed in Section 2.3.
- The proposed car parking layout generally complies with AS2890 requirements. Vehicle swept path analysis has been undertaken to demonstrate vehicles manoeuvring in and out of the site and car parking spaces;
- The assessment of the proposed development indicates that the development will not have a significant impact on the surrounding road network or intersections. There is a minor increase of traffic movements of up to 11 vehicles in the morning and evening peak periods; and
- Servicing for this development will be facilitated on Doonmore Street. There will be low and infrequent service vehicle demands for this site.

The proposed boarding house development will result in a negligible change to the traffic and parking environments.

8. Appendix A Site Plans

acousticworks

Proposed Boarding House
159 Jamison Road
Penrith

ACOUSTIC REPORT




Client:
Alpha Engineering & Development Pty Ltd

Reference:
1019019 R01E 159 Jamison Road Penrith RTN ENV MECH

Date Issued:
21 March 2019

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TABLE INDEX

FIGURE INDEX

1. Introduction

The following report is in response to a request by Alpha Engineering and Development Pty Ltd for an environmental and road traffic noise assessment for a proposed boarding house to be located at 159 Jamison Road, Penrith. This traffic noise assessment was conducted in accordance with Penrith City Council and the NSW *Development Near Rail Corridors and Busy Roads – Interim Guideline*. To facilitate the assessment, unattended noise monitoring was conducted to determine the traffic impacts to the proposed boarding house and onsite activities to sensitive receivers.

2. Site Description

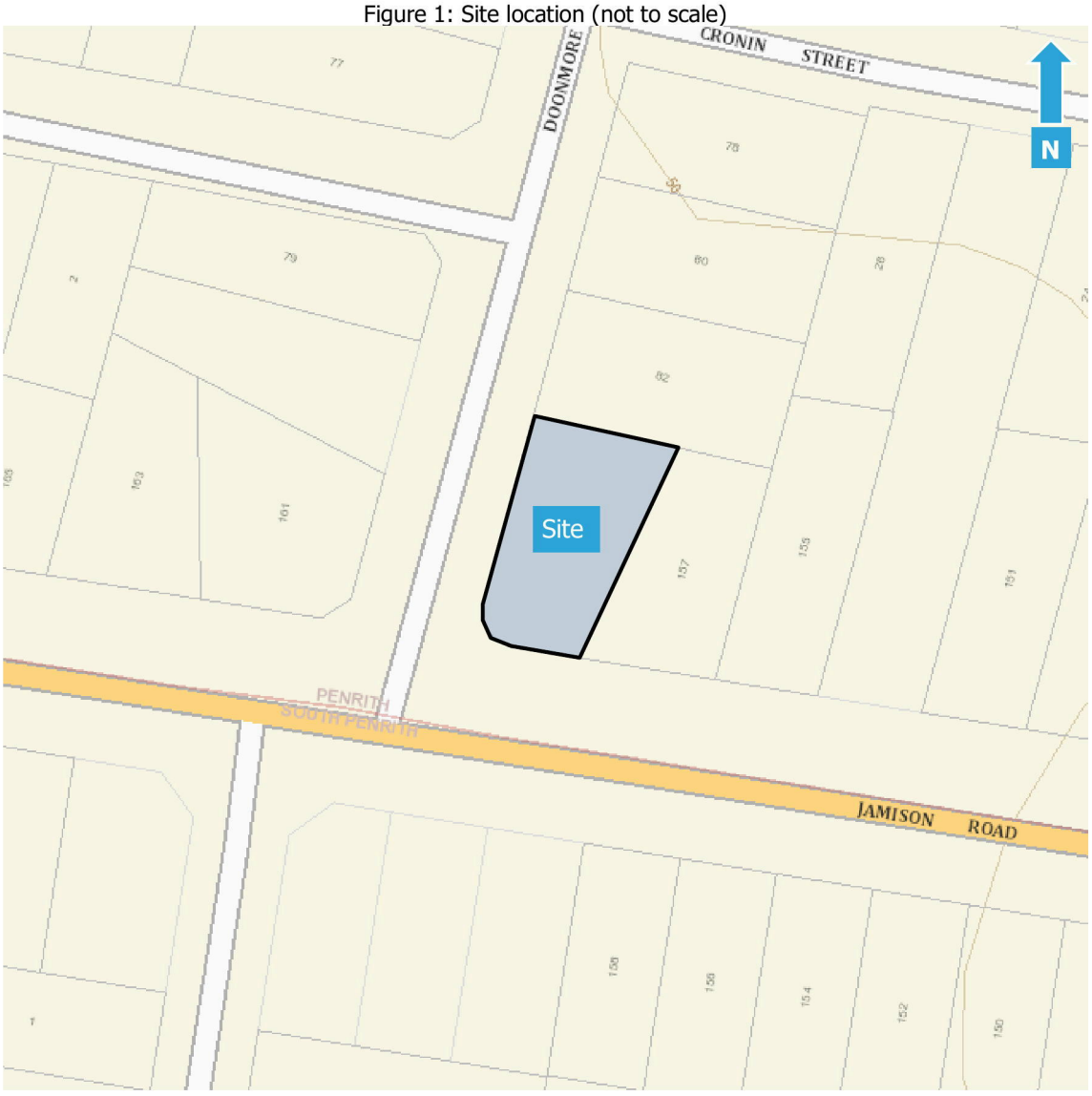
2.1 Site location

The site is described by the following:

159 Jamison Road, Penrith
Lot B on DP413314

Refer to Figure 1 for site location.

Figure 1: Site location (not to scale)



A comprehensive site survey was conducted on the 6th March 2019 and identified the following:

a) A single storey dwelling currently occupies the site and will be demolished for the proposed development.
b) Jamison Road separates the site from residential dwellings.
c) Residential dwellings are located on the western side of Doonmore Street.
d) Single storey residential dwellings are located adjacent to the northern and eastern side boundaries.

2.2 Proposal

The proposal is to construct a two storey boarding house comprised of the following:

- Site area of approximately 702.5m^2.
- Basement carpark containing 11 parking spaces, disabled parking space, bin storage room, 4 motorcycle spaces and 5 bicycle spaces.
- Ground and first floors consisting of 22 studio rooms, managers room with open space terrace and communal room.
- Site access via Doonmore Street.

Refer to the Appendices for development plans.

2.3 Acoustic environment

The surrounding area is primarily affected by traffic noise from the surrounding road network.

3. Equipment

The following equipment was used to record noise levels:

- Rion NL42 Environmental Noise Monitor (SN# 00171587)
- Pulsar Model 105 Ltd Sound Calibrator (SN # 57417)

The Environmental Noise Monitor holds current NATA Laboratory Certification and was field calibrated before and after the monitoring period, with no significant drift from the reference signal recorded.

4. Noise Monitoring Location

4.1 Receiver locations

The nearest representative residential receiver locations were identified as follows;

1. A single storey residential dwelling is located adjacent the eastern site boundary at 157 Jamison Road.
2. A single storey residential dwelling is located adjacent the northern site boundary at 82 Doonmore Road.
3. A single storey residential dwelling is located on the western side of Doonmore Street at 83 Doonmore Street.
4. Residential properties are located on the southern side of Jamison Road at 160 Jamison Road.

Refer to Figure 2 for these locations.

Figure 2: Noise monitoring location

4.2 Unattended noise monitoring

A Rion NL42 environmental noise monitor was placed approximately 12.5m from the nearest lane of Jamison Road to measure road traffic and ambient noise levels. The monitor was located in a free field position with the microphone approximately 1.4 metres above ground surface level. The noise monitor was set to record noise levels between 6th and 14th March 2019.

The environmental noise monitor was set to record noise levels in "A" weighting, Fast response with 15 minute statistical intervals. Road traffic noise was conducted in general accordance with Australian Standard *AS2702:1984 'Acoustics – Methods for the measurement of road traffic noise'*.

For the unattended noise monitoring location refer to Figure 2.

5. Existing Ambient Noise Levels

The following tables present the measured ambient noise levels from the unattended noise survey. Any periods of inclement weather or extraneous noise are omitted from the measured data prior to determining the overall results.

5.1 Meteorological conditions

Meteorological observations during the unattended noise monitoring survey were obtained from the Bureau of Meteorology website (http://www.bom.gov.au/climate/data), shown in Table 1 below.

Table 1: Meteorological conditions – Penrith NSW

Day	Date	Rainfall (mm)	Wind			
			9am		3pm	
			Speed (km/h)	Direction	Speed (km/h)	Direction
Wednesday	06/03/2019	0	2	S	30	W
Thursday	07/03/2019	0	15	S	11	SE
Friday	08/03/2019	0	4	N	11	NE
Saturday	09/03/2019	0	6	SSW	6	ENE
Sunday	10/03/2019	0.6	2	NNE	11	NE
Monday	11/03/2019	0	6	SW	9	SE
Tuesday	12/03/2019	0	4	SE	15	W
Wednesday	13/03/2019	0	6	SSW	7	W

5.2 Unattended road traffic noise levels

The measured road traffic noise levels at the monitoring location are as follows;

Table 2: Measured road traffic noise levels

Day	Date	LA10(18h)	LAeq(15h)	LAeq(9h)
		6am-12pm	7am-10pm	10pm-7am
Thursday	07/03/2019	65.2	63.2	55.7
Friday	08/03/2019	65.1	62.6	55.0
Saturday	09/03/2019	64.9	62.7	54.7
Sunday	10/03/2019	62.7	60.6	55.4
Monday	11/03/2019	64.1	62.4	56.0
Tuesday	12/03/2019	64.1	61.9	55.6
Wednesday	13/03/2019	64.9	62.7	56.0

Refer to the appendix for graphical representation.

5.3 Ambient background noise level

The measured rating background noise levels (RBL), in accordance with the NSW Noise Policy for Industry, are as follows;

Table 3: Measured L90 noise levels

Day	Date	Background L90 dBA		
		Day	Evening	Night
Wednesday	06/03/2019	x	42.9	32.3
Thursday	07/03/2019	46.1	39.0	31.4
Friday	08/03/2019	46.2	43.9	38.2
Saturday	09/03/2019	45.4	41.1	35.2
Sunday	10/03/2019	44.5	42.6	38.4
Monday	11/03/2019	44.8	41.5	39.0
Tuesday	12/03/2019	46.4	43.5	35.2
Wednesday	13/03/2019	46.6	39.7	34.7
RBL		46	42	35

6. Road Traffic Noise Criteria

To determine the appropriate noise criteria to be applied, a review of the Penrith City Council Pre-Lodgement Advice and NSW Development Near Rail Corridors and Busy Roads – Interim Guideline was conducted.

6.1 Penrith City Council

The Penrith City Council Pre-Lodgement Advice – Key Issues and Outcomes – Environmental Management – Noise Impacts, states the following:

"An acoustic assessment is required to be submitted as a part of the development application to demonstrate that the proposed boarding house will not have any impact on nearby sensitive receivers. This report is to be prepared by a suitably qualified acoustic consultant, and is to consider:

- *The 'NSW Noise Policy for Industry' in terms of assessing the noise impacts associated with the development, including noise from the indoor and outdoor communal spaces on surrounding properties (including their outdoor spaces), the car parking spaces, as well as any mechanical plant associated with air conditioning for individual units or mechanical ventilation for the development including basement carpark.*
- *The AS/NZS 2107:2016 Acoustics – Recommended design sound levels and reverberation times for building interiors in terms of ensuring that internal noise levels can be achieved.*
- *The Interim Construction Noise Guideline in assessing the impacts associated with the construction phase of the development.*
- *The potential impact from road traffic noise resulting from vehicles entering and exiting site demonstrating compliance with NSW 'Road Noise Policy'.*

Should mitigation measures be necessary, recommendations should be included to this effect. Recommendations and mitigation measures shall be shown on all architectural plans."

6.2 Development Near Rail and Corridors and Busy Roads – Interim Guideline

The NSW Department of Planning's Development Near Rail Corridors and Busy Roads –Interim Guideline 2008 specifies internal noise criterion for residential buildings as follows:

Table 4: Road traffic noise criteria - DNRCBR 2008

Location	Noise Level dBA	Applicable time period
Living Areas	≤40 (L_{eq}9h) & (L_{eq}15h)	At any time
Sleeping Areas	≤35 (L_{eq}9h)	Night (10 pm to 7 am)

6.3 Noise Policy for Industry

Assessment of noise in accordance with NSW EPA Noise Policy for Industry (2017) has two main components: intrusiveness and amenity criteria. These are compared to each other (after conversion of amenity noise level to LAeq,15min equivalent level) to determine the overall project noise trigger level.

6.3.1 Intrusiveness noise level

The intrusiveness noise level is based on the $L_{Aeq\ (15\ min)}$ associated with commercial activity being less than or equal to the measured L_{A90} Rating Background Level + 5dB as per section 2.3 of the policy. A modifying factor should also be added where appropriate to allow for tonality, impulsiveness, and intermittency or low frequency effects.

6.3.2 Amenity noise level

The amenity noise level is determined in accordance with Section 2.4 of the policy based on the land use and relevant noise criteria specified in Tables 2.2 and 2.3.

The Noise Policy for Industry sets out acceptable noise levels for various locations. Determination of which residential receiver category applies is described in Table 2.3 of the policy.

Table 5: Receiver category (Table 2.3 of the Noise Policy for Industry)

Receiver category	**Typical planning zoning – standard instrument**	**Typical existing background noise levels**	**Description**
Rural residential	RU1 – primary production RU2 – rural landscape RU4 – primary production small lots R5 – large lot residential E4 – environmental living	Daytime RBL <40 dB(A) Evening RBL <35 dB(A) Night RBL <30 dB(A)	**Rural** – an area with an acoustical environment that is dominated by natural sounds, having little or no road traffic noise and generally characterised by low background noise levels. Settlement patterns would be typically sparse. Note: Where background noise levels are higher than those presented in column 3 due to existing industry or intensive agricultural activities, the selection of a higher noise amenity area should be considered.
Suburban residential	RU5 – village RU6 – transition R2 – low density residential R3 – medium density residential E2 – environmental conservation E3 – environmental management	Daytime RBL<45 dB(A) Evening RBL<40 dB(A) Night RBL <35dB(A)	**Suburban** – an area that has local traffic with characteristically intermittent traffic flows or with some limited commerce or industry. This area often has the following characteristic: evening ambient noise levels defined by the natural environment and human activity.
Urban residential	R1 – general residential R4 – high density residential B1 – neighbourhood centre (boarding houses and shop-top housing) B2 – local centre (boarding houses) B4 – mixed use	Daytime RBL> 45 dB(A) Evening RBL> 40 dB(A) Night RBL >35 dB(A)	**Urban** – an area with an acoustical environment that: • is dominated by 'urban hum' or industrial source noise, where urban hum means the aggregate sound of many unidentifiable, mostly traffic and/or industrial related sound sources • has through-traffic with characteristically heavy and continuous traffic flows during peak periods • is near commercial districts or industrial districts • has any combination of the above.

To determine the appropriate receiver category, the following observations were made:

- The nearby residential receivers are zoned R2 – Low Density Residential and R3 Medium Density Residential which corresponds with typical planning zoning of the suburban category.
- The measured RBL values presented in Section 5.3 corresponds with the typical existing background noise levels of the urban category.
- The acoustic environment of the surrounding area has local traffic with characteristically intermittent traffic flows or with some limited commerce or industry, which corresponds with description of the suburban category.

Therefore, the nearest residential receivers would be assessed against the suburban criteria.

6.3.3 Modifying factors

The Noise Policy for Industry includes correction factors such as tonal noise, low-frequency noise, intermittent noise and duration. Where two or more modifying factors are present, the maximum adjustment to a noise source level is 10dBA (excluding duration correction).

6.4 Project noise trigger level

To determine the project trigger noise level, the amenity noise level must first be standardised to and equivalent LAeq 15min in order to compare to the intrusiveness noise level. This is done in accordance with section 2.2 of the policy as follows;

$$L_{Aeq,15min} = L_{Aeq,\ period} - 5dB + 3dB$$

Therefore, based on the measured data presented in Section 5, the project specific noise limits are determined.

6.4.1 Intrusive noise impacts

Based on the measured data, the intrusive noise limits are as follows;

Table 6: Intrusive noise criteria

Time period	Criteria $L_{eq\ (15min)}$ dB(A)
Day (7am-6pm Mon-Sat; 8am-6pm Sun)	51
Evening (6pm-10pm)	47
Night (10pm-7am Mon-Sat; 10pm-8am Sun)	40

6.4.2 Amenity criteria

Based on the measured data, the amenity noise limits are as follows;

Table 7: Amenity criteria

Time period	Criteria $L_{eq(period)}$ dB(A)
Day	53
Evening	43
Night	38

6.4.3 Project specific noise criteria

The project noise trigger level is the lower (that is, the most stringent) value of the intrusiveness and amenity noise levels. Therefore the project noise trigger levels are as follows:

Table 8: Project criteria

Time period	Criteria $L_{eq\ (15min)}$ dBA
Day	51
Evening	43
Night	38

6.5 NSW Road Noise Policy 2008

The NSW Road Noise Policy outlines the criteria for any increase in the total traffic noise level at the location due to a proposed project or traffic generating development. Therefore the following criteria applies:

Table 9: Relative increase criteria for residential land uses

Road Category	Type of project/development	Total traffic noise level increase – dB(A)	
		Day (7am to 10pm)	Night (10pm to 7am)
Freeway/arterial/sub-arterial roads and transitways	New road corridor/redevelopment of existing road/land use development with the potential to generate additional traffic on existing road	Existing traffic $L_{Aeq(15hr)}$ + 12dB (external)	Existing traffic $L_{Aeq(9hr)}$ + 12dB (external)

7. Road Traffic Assessment

7.1 Traffic volumes

Traffic volumes were obtained by a report by JACOBS "*The Northern Road Upgrade, Glenmore Parkway, Glenmore Park to Jamison Road, South Penrith*" dated 26th August 2016, which is available on the Roads and Maritime Services website (http://www.rms.nsw.gov.au).

To be conservative, an estimated 1% annual traffic volume growth factor was applied for the 10-year planning horizon. Using this procedure, the relative increase in traffic noise levels over 10 years is calculated to be approximately 0.4dBA, which is taken into account for the future traffic noise predictions.

7.2 Predicted road traffic noise levels - 2029

Road traffic noise modelling for the proposed development was based on the following information:

- Proposed layout, floor plans and elevations provided by Alpha Engineering and Development Pty Ltd, Project 18-030, Drawings 1001, 2001 to 2004, 3001, 3201 and 4001, drawn by Platform 5 Design dated 18/03/2019.
- Jamison Road speed limit of 60km/h and 40km/h school zone.
- Receiver heights 1.5m above finished floor level.

Table 10 presents the external predicted road traffic noise levels for the development.

Table 10: Predicted road traffic noise impacts

Floor	Unit	Room	LAeq(15hr)	LAeq(9hr)
Ground	G01	Studio	64	58
Ground	G02	Studio	60	54
Ground	G03	Studio	59	53
Ground	G04	Studio	57	51
Ground	G05	Manager	52	46
Ground	G06	Studio	54	48
Ground	G07	Studio	55	49
Ground	G08	Studio	57	51
Ground	G09	Studio	59	53
Ground	G10	Studio	61	55
Ground	G11	Studio	64	58
First	101	Studio	65	59
First	102	Studio	61	55
First	103	Studio	60	54
First	104	Studio	57	51
First	105	Studio	57	51
First	106	Studio	59	53
First	107	Studio	59	53
First	108	Studio	60	54
First	109	Studio	60	54

Floor	Unit	Room	LAeq(15hr)	LAeq(9hr)
First	110	Studio	61	55
First	111	Studio	62	56
First	112	Studio	65	59

Based on the predicted noise levels, additional façade treatments would be required. Refer to Section 10 for recommendations.

8. Environmental Assessment

8.1 Onsite activities

Noise associated with the development was assessed based on previous measurements of similar activities. The calculations assume that the nominated activities are located at a representative distance within the development site to each receiver location. Any relevant shielding or building transmission loss is taken into account for these activities.

8.2 Project specific criteria

The noise source levels at the receiver locations are shown in Table 11. LAeq results are not shown where the calculated total is less than 0dBA.

Table 11: Project specific noise levels

Receiver	Receivers 1. 157 Jamison Road. 2. 82 Doonmore Street. 3. 83 Doonmore Street. 4. 160 Jamison Road. Description	Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	LAeq adj,T ext. dB(A) Day	LAeq adj,T ext. dB(A) Eve	LAeq adj,T ext. dB(A) Nigh	LAeq 15 min Compliance Day	Eve	Night
	Criteria							51	43	38
	Car passby	69		69	29	29	29	Yes	Yes	Yes
1	Car start	74	2	76	24	24	24	Yes	Yes	Yes
	Car door closure	75		75	23	23	23	Yes	Yes	Yes
	Voice conversation	70		70	33	33	33	Yes	Yes	Yes
	Total				35	35	35	**Yes**	**Yes**	**Yes**
	Criteria							51	43	38
	Car passby	69		69	35	35	35	Yes	Yes	Yes
2	Car start	74	2	76	27	27	27	Yes	Yes	Yes
	Car door closure	75		75	26	26	26	Yes	Yes	Yes
	Voice conversation	70		70	32	32	32	Yes	Yes	Yes
	Total				38	38	38	**Yes**	**Yes**	**Yes**
	Criteria							51	43	38
	Car passby	69		69	31	31	31	Yes	Yes	Yes
3	Car start	74	2	76	26	26	26	Yes	Yes	Yes
	Car door closure	75		75	25	25	25	Yes	Yes	Yes
	Voice conversation	70		70	24	24	24	Yes	Yes	Yes
	Total				34	34	34	**Yes**	**Yes**	**Yes**
	Criteria							51	43	38
	Car passby	69		69	29	29	29	Yes	Yes	Yes
4	Car start	74	2	76	24	24	24	Yes	Yes	Yes
	Car door closure	75		75	23	23	23	Yes	Yes	Yes
	Voice conversation	70		70	21	21	21	Yes	Yes	Yes
	Total				32	32	32	**Yes**	**Yes**	**Yes**

Compliance is predicted for onsite activities during all time periods.

9. Road Traffic Noise

The existing annual average daily traffic volume for Jamison Road is approximately 14,580 vehicles per day. In accordance with the RTA *Guide to Traffic Generating Developments*, the proposed boarding house is predicted to produce an additional 28 vehicle movements per day.

Therefore, based on the available information, the predicted increase in daily $LAeq_{(15hr)}$ for receivers near Jamison Road is calculated to be less than 1dB(A) due to traffic generation by the proposed development, which complies with the criterion of +12dB(A) as outlined in Section 6.5.

10. Recommendations

10.1 Road Traffic Noise

All building treatments for road traffic noise were calculated in accordance with Australian Standard *AS3671:1989 'Road Traffic Noise Intrusion – Building Siting and Construction'* and *"Development Near Rail Corridors and Busy Road Interim Guideline 2008"*.

10.1.1 Glazing

The minimum glazing treatments presented in Table 12 are required to comply with the following:

- The minimum glass thickness specified shall not be reduced regardless of the R_w performance of the glazing system.
- If compliance cannot be achieved with the minimum R_w ratings, the glazing system shall be upgraded until compliance is achieved.
- Glazing specified with acoustic seals requires a Q-lon seal or an equivalent product, mohair seals are not acceptable.
- The glazier shall provide NATA test reports on request to verify compliance with the minimum R_w ratings. Generic reports are not acceptable.

Table 12: Required façade acoustic ratings

Unit	Floor	Location	Rw Ratings				Glazing		Acoustic seals
			Wall	Roof	Windows 1	Windows 2	Windows 1	Windows 2	
G01	Ground	Studio	40		28	28	5mm tough	5mm tough	yes
G02	Ground	Studio	40		27		4mm float		yes
G03	Ground	Studio	40		22		4mm float		no
G04	Ground	Studio	40		22		4mm float		no
G05	Ground	Manager	40		22	22	4mm float	4mm float	no
G06	Ground	Studio	40		22		4mm float		no
G07	Ground	Studio	40		22		4mm float		no
G08	Ground	Studio	40		22		4mm float		no
G09	Ground	Studio	40		22		4mm float		no
G10	Ground	Studio	40		22		4mm float		no
G11	Ground	Studio	40		27	27	4mm float	4mm float	yes
101	First	Studio	40	40	30	30	6mm float	6mm float	yes
102	First	Studio	40	40	27		4mm float		yes
103	First	Studio	40	40	22		4mm float		no
104	First	Studio	40	40	22		4mm float		no
105	First	Studio	40	40	22	22	4mm float	4mm float	no
106	First	Studio	40	40	22	22	4mm float	4mm float	no
107	First	Studio	40	40	22		4mm float		no
108	First	Studio	40	40	22		4mm float		no
109	First	Studio	40	40	22		4mm float		no
110	First	Studio	40	40	22		4mm float		no
111	First	Studio	40	40	22		4mm float		no
112	First	Studio	40	40	30	28	6mm float	5mm tough	yes

Any locations not identified in Table 12 would require 4mm float for windows (minimum R_w 22) and 4mm toughened for sliding doors (minimum R_w 22)

10.1.2 Wall construction

The minimum required wall acoustic rating is Rw 40 with brick veneer or double brick complying. For lightweight wall system the following construction would be required:

Table 13: Typical lightweight wall constructions

Description	Cavity insulation	R_W Rating
Minimum 9mm fibre cement sheeting external, 90mm timber studs, 13mm plasterboard internal	75mm glasswool batts (11 kg/m^3)	40

Note that the construction systems listed in the table are not the only possible types of construction. Other similar systems achieving at least minimum Rw 40 would also be suitable.

More detailed information for cladding may be provided on request.

10.1.3 Roofing construction

The required roof/ceiling acoustic rating is Rw 40. For pitched sheet metal roof, the following typical construction would be required:

Table 14: Typical roof constructions

Description	Cavity insulation	R_W Rating
Tiled roof with 60mm Anticon, ceiling joists or trusses at 450mm centres, 10mm thick plasterboard ceiling	Minimum 165mm glasswool batts (14kg/m^3) or equivalent	40

Note that the construction system listed in the table is not the only possible type of construction. Other similar systems achieving at least minimum Rw 40 would also be suitable.

10.1.4 Alternative ventilation

To achieve the required internal noise levels for the development, all bedrooms and living spaces would require the provision for an alternative ventilation system (in accordance with National Construction Code 2016 requirements) similar to air-conditioning or mechanical ventilation to allow doors and windows to be closed.

10.2 Onsite activities

Based on the measured noise levels and assessment of the site and surrounds, noise impacts at the residential receiver locations are predicted to satisfy the assessment criteria for all time periods. Therefore, no further noise attenuation would be necessary in order to comply with the criteria. We recommend that waste collection be conducted in accordance with the surrounding residential properties with recommended hours of 7am to 6pm weekdays and 8am to 6pm weekends.

10.3 Onsite mechanical plant

No information regarding mechanical services was available at the time of the assessment. We recommend that any new mechanical plant is designed to comply with the criteria stated in Section 6.4.3 with an assessment undertaken by qualified acoustic consultant to be conducted prior to installation.

10.4 Construction Noise & Vibration

We recommend that a construction noise management plan is prepared and submitted to council prior to construction certification, in accordance with the *NSW Interim Construction Guideline*.

11. Conclusion

An environmental and road traffic noise assessment was conducted for the proposed boarding house to be located at 159 Jamison Road, Penrith. With the inclusion of acoustic treatments as recommended in Section 10, the development is predicted to satisfy all assessment requirements.

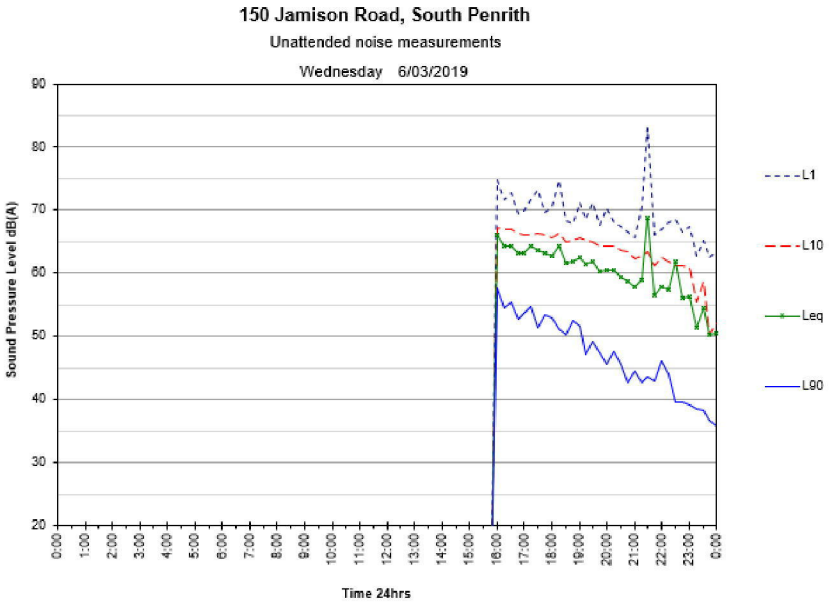
Should you have any queries please do not hesitate to contact us.

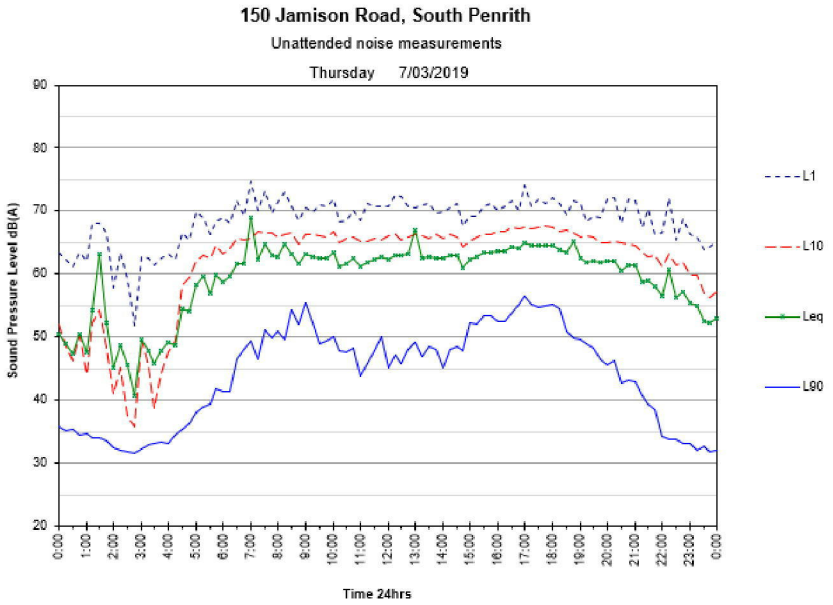
Yours faithfully,

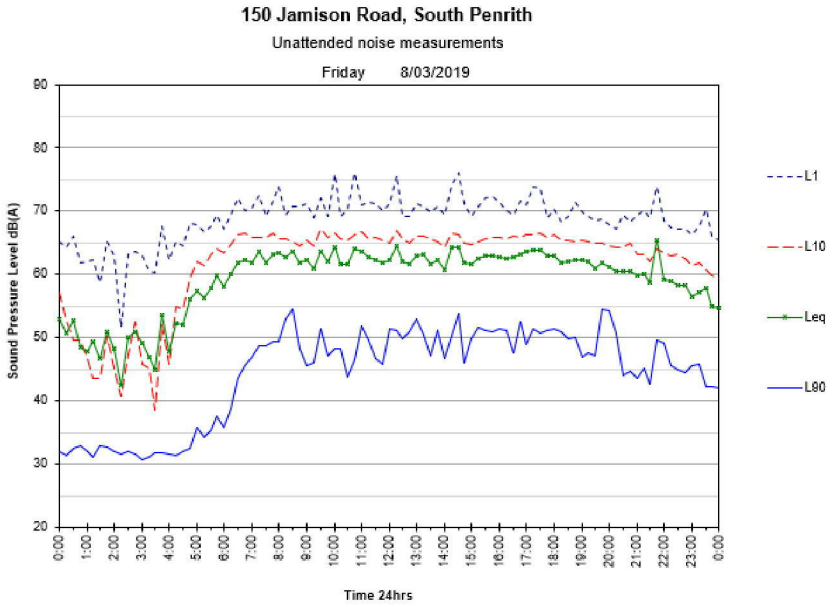
Christian Nguyen
Acoustic Consultant
acousticworks)))

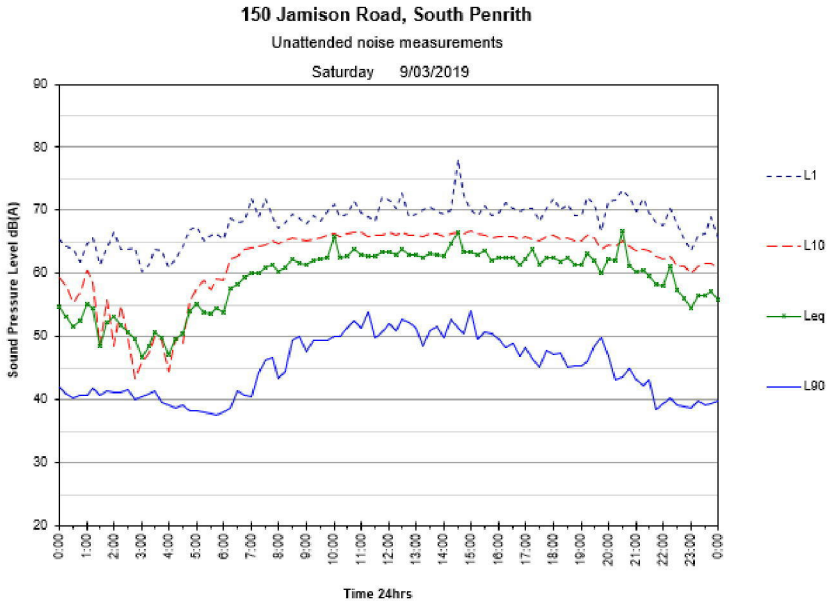
12. Appendices

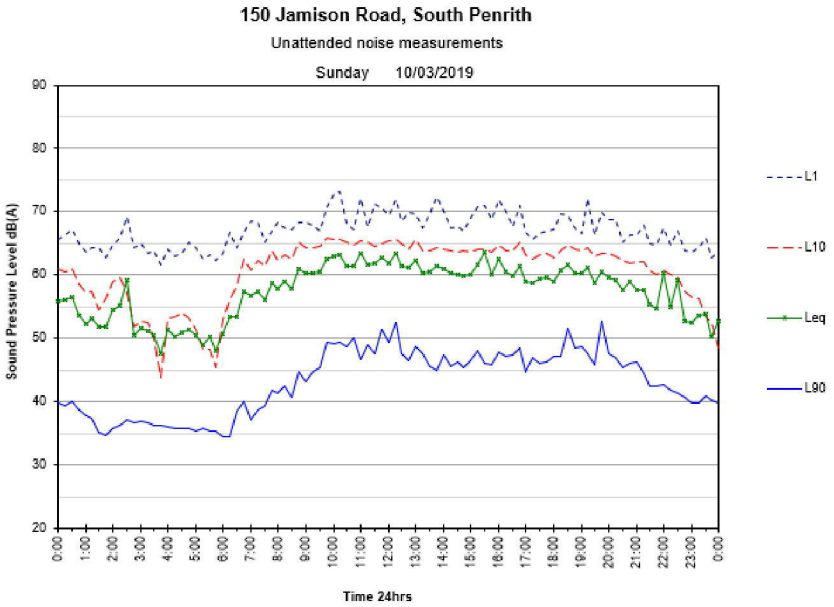
12.1 Noise Monitoring Charts

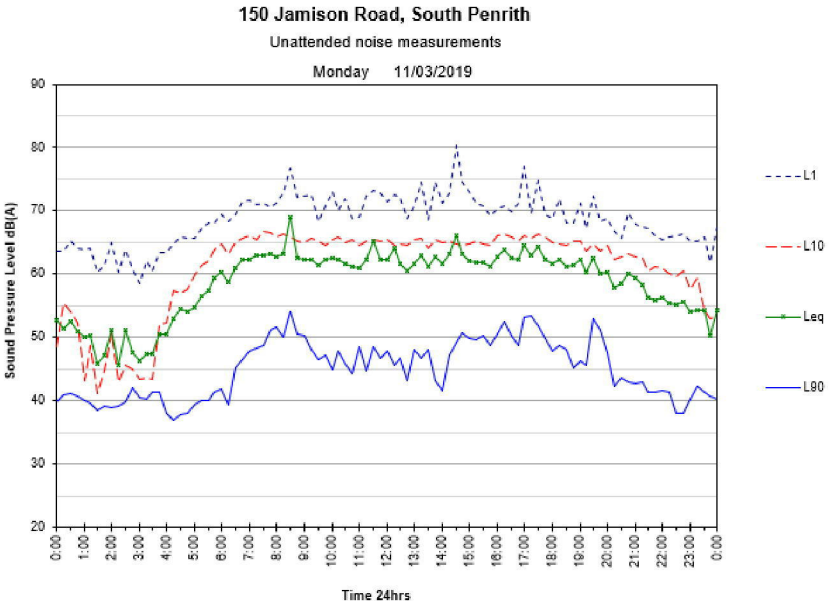


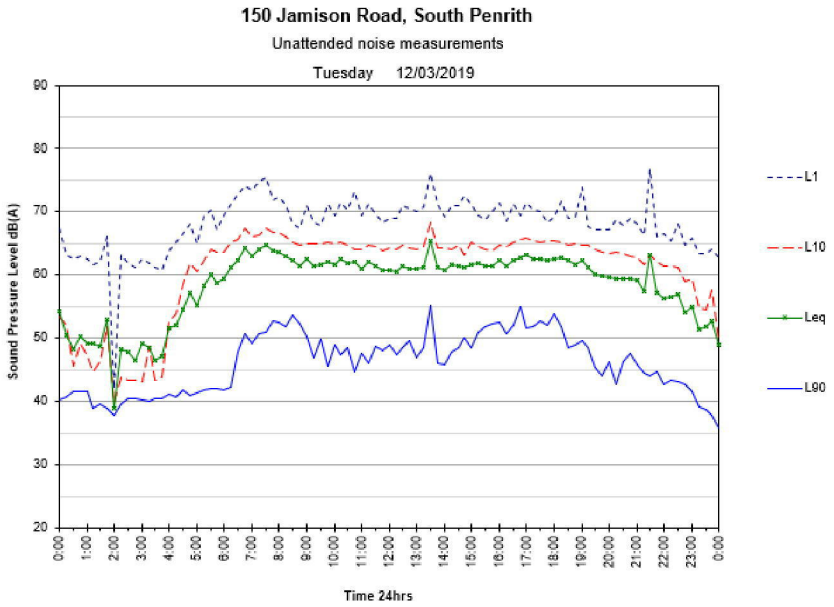


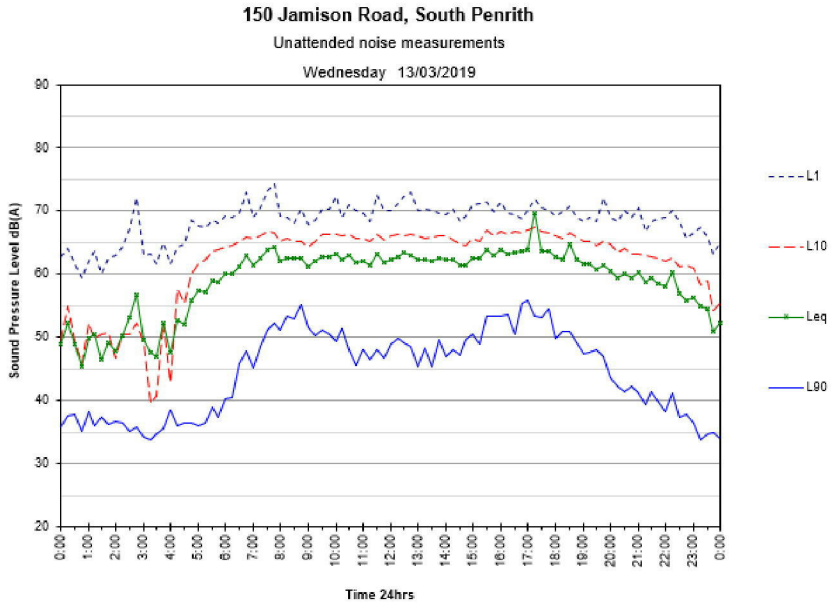


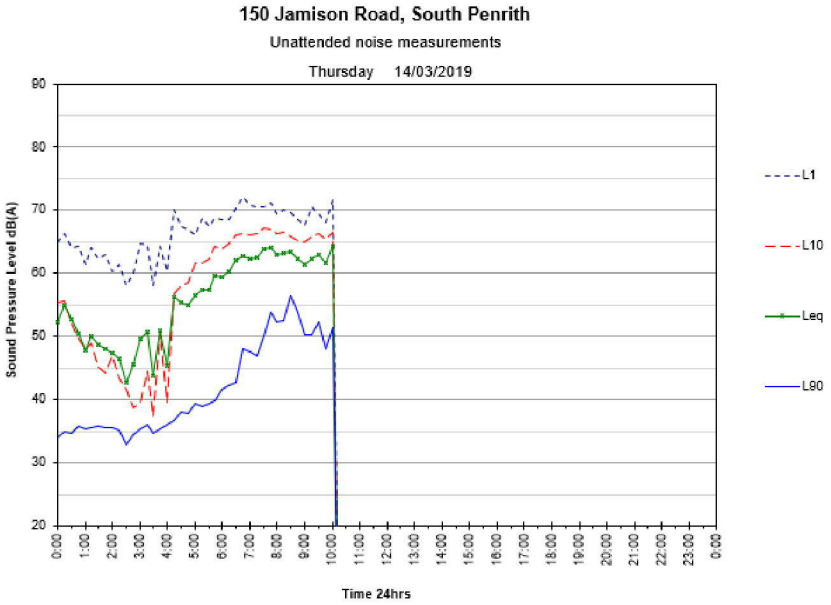




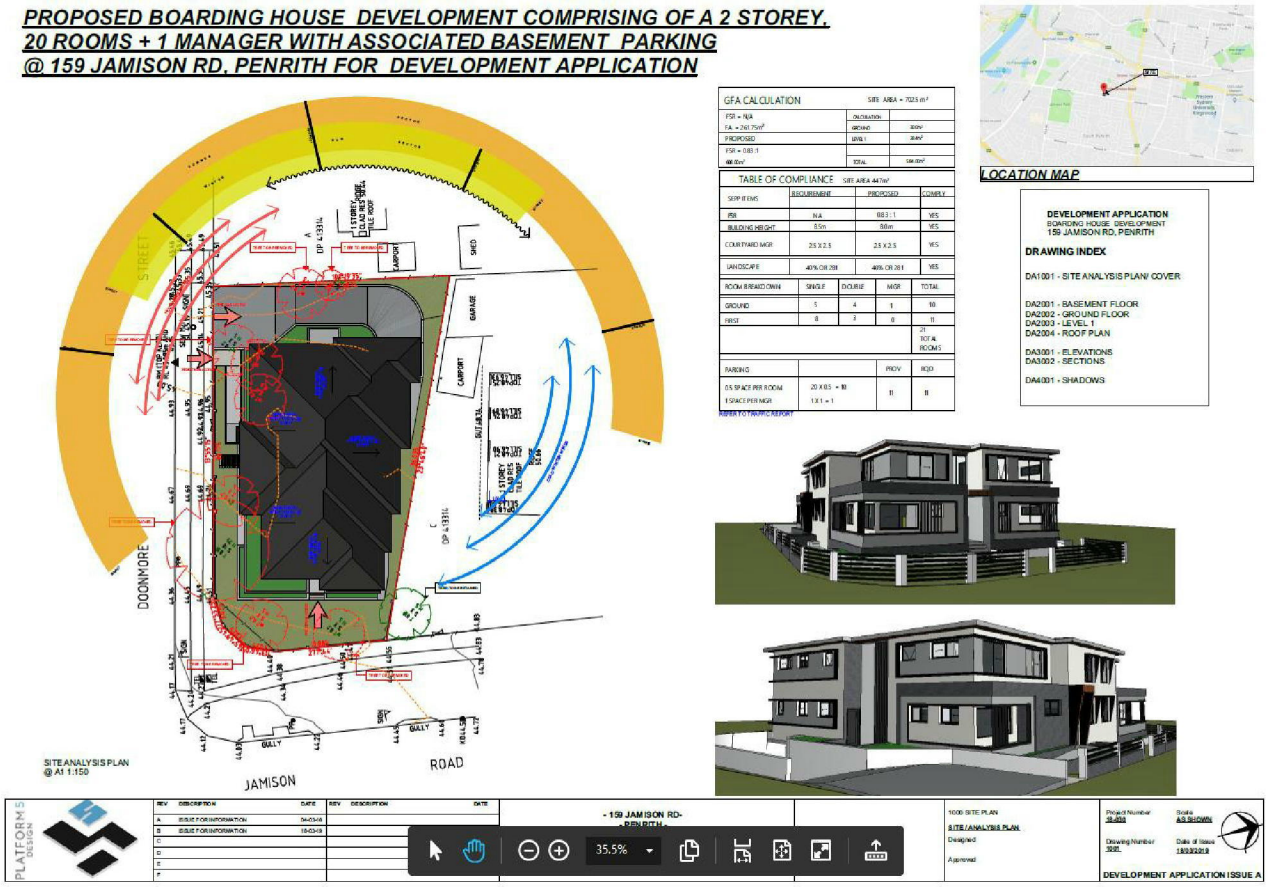


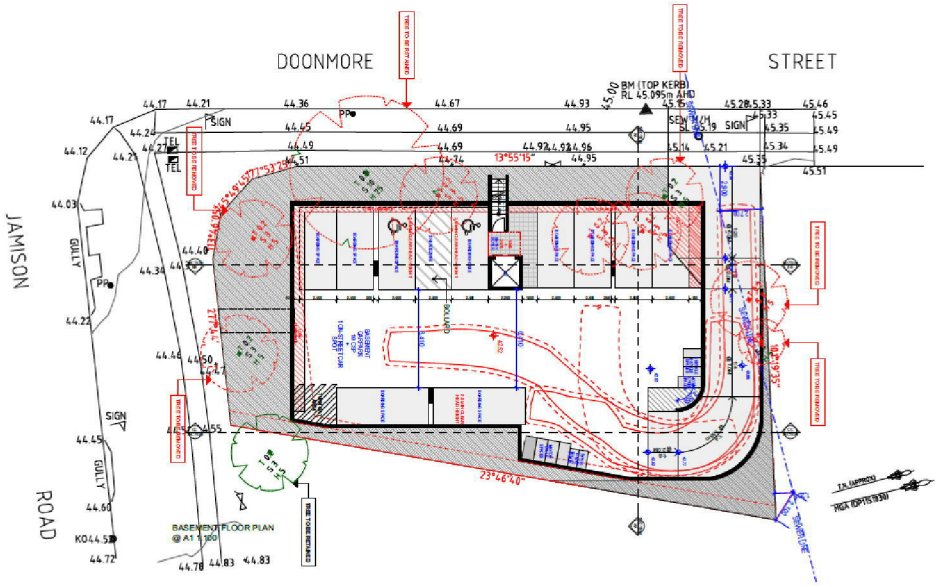


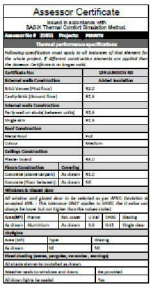




12.2 Development Plans







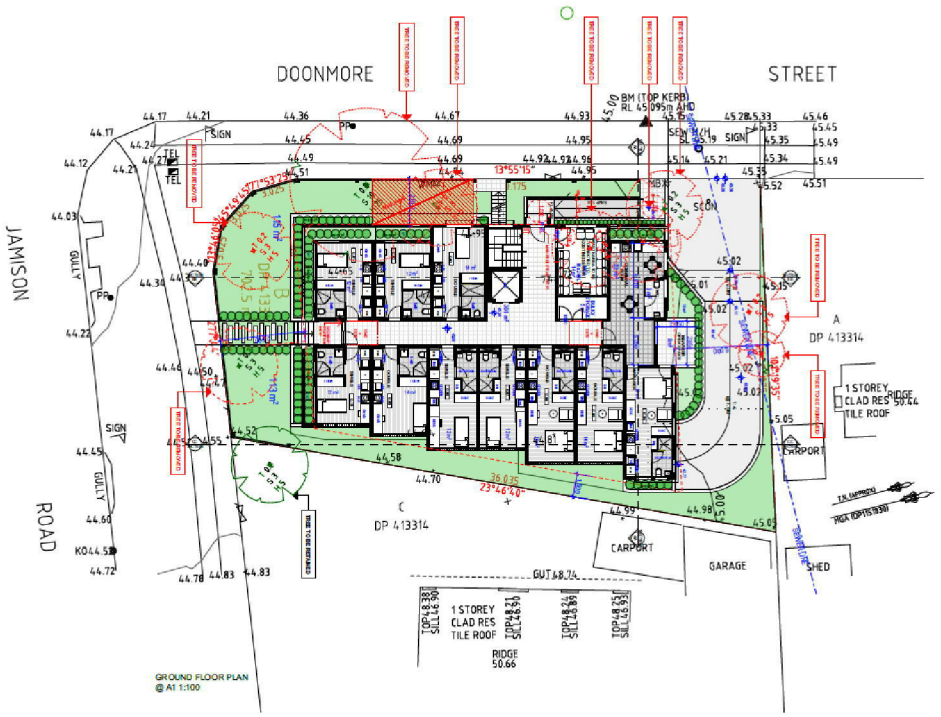
1Thermal Spec_159 JAMISON RD1

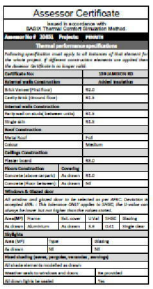
PLATFORM 5 DESIGN

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

2000 FLOOR PLANS
BASEMENT PLAN

DEVELOPMENT APPLICATION ISSUE A





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PLATFORM 5 DESIGN

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

2000 FLOOR PLANS
GROUND FLOOR PLAN

DEVELOPMENT APPLICATION ISSUE A

Assessor Certificate

1Thermal Spec_159 JAMISON RD1

LEVEL 01 PLAN
@ A1 1:100

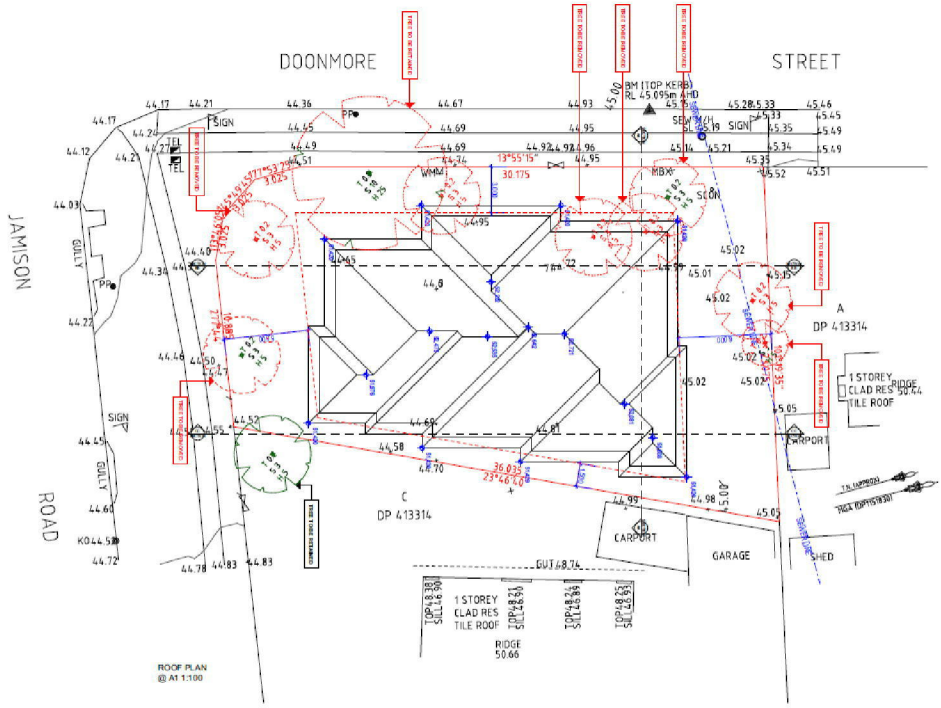
PLATFORMS DESIGN

REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-19
B	ISSUE FOR INFORMATION	18-03-19

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

2000 FLOOR PLANS
LEVEL 1
Designed
Approved

Project Number 18-019
Scale A3 SHOWN
Drawing Number 2000
Date of Issue 18/03/2019
DEVELOPMENT APPLICATION ISSUE A



Assessor Certificate

1Thermal Spec_159 JAMISON RD1

ROOF PLAN
@ A1 1:100

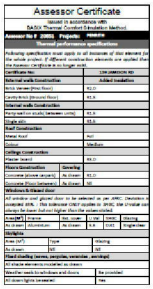
PLATFORMS DESIGN

REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-19
B	ISSUE FOR INFORMATION	18-03-19

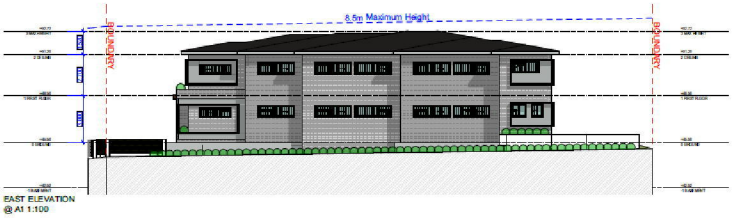
- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

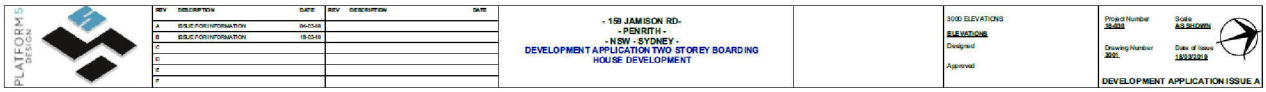
2100 ROOF PLANS
ROOF PLAN
Designed
Approved

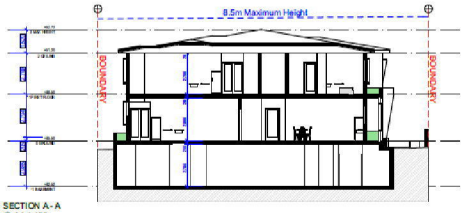
Project Number 18-019
Scale A3 SHOWN
Drawing Number 2100
Date of Issue 18/03/2019
DEVELOPMENT APPLICATION ISSUE A

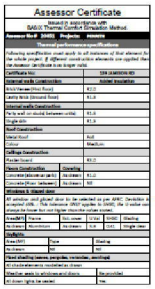


1Thermal Spec_159 JAMISON RD1









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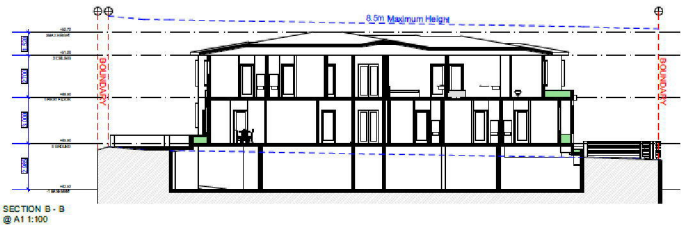
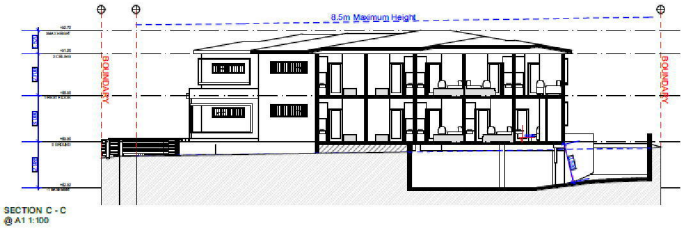




1 JUNE 21ST, 9AM 1:250

1 JUNE 21ST, 12PM 1:250

1 JUNE 21ST, 3PM 1:250

PLATFORMS DESIGN

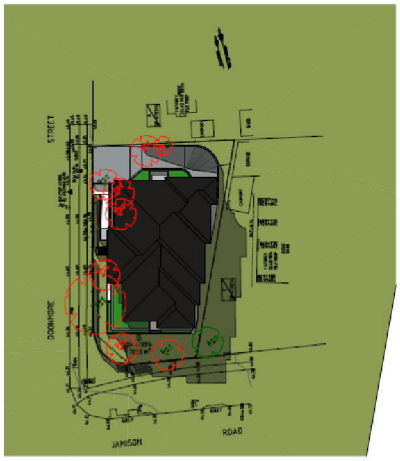
REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
A	ISSUE FOR INFORMATION	04-03-19			
B	ISSUE FOR INFORMATION	18-03-19			
C					
D					
E					
F					

- 159 JAMISON RD-
- PENRITH -
- NSW - SYDNEY -
DEVELOPMENT APPLICATION TWO STOREY BOARDING HOUSE DEVELOPMENT

3200 SHADOW DIAGRAMS
JUNE EQUINOX
Designed
Approved

Project Number 18-093 | Scale A3 SHOWN
Drawing Number 3200 | Date of Issue 18/03/2019

DEVELOPMENT APPLICATION ISSUE A



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1 JUNE 21ST, 2PM 1:250

1 JUNE 21ST, 3PM 1:250

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