

PENRITH CITY COUNCIL

MAJOR ASSESSMENT REPORT

Application number:	DA18/0810
Proposed development:	Demolition of Existing Structures & Construction of Two (2) Storey Boarding House containing 16 Boarding Rooms & Basement Car Parking
Property address:	1 Edna Street, KINGSWOOD NSW 2747
Property description:	Lot 87 DP 241989
Date received:	15 August 2018
Assessing officer	Sufyan Nguyen
Zoning:	Zone R3 Medium Density Residential - LEP 2010
Class of building:	Class 3
Recommendations:	Approve

Executive Summary

Council is in receipt of a development application for a two (2) storey boarding house at 1 Edna Street, Kingswood. The proposed boarding house has a total of sixteen (16) rooms accommodating up to a total of nineteen (19) lodgers with associated kitchenettes, bathrooms and a communal living area. The subject site is zoned R3 Medium Density Residential under the *Penrith Local Environmental Plan 2010* and the proposal is subject to *State Environmental Planning Policy (Affordable Rental Housing) 2009*. The development proposal is permissible with Council consent.

The key issues identified and addressed as part of the assessment of the proposal were in regard to the following matters:

- The bulk and scale of the proposal
- Compatibility with the desired future character of the local area
- Encroachment in to the front setback
- Residential amenity and community safety
- Equitable accessibility
- Potential amenity and privacy impacts on adjoining properties
- Provision for adequate parking and vehicle manoeuvring
- Provision for waste storage

The application has been notified to nearby and adjoining properties and advertised in the local newspaper. Council notified fifteen (15) properties in the immediate and surrounding area with the application exhibited from the 20 August 2018 until 14 September 2018. Two (2) submissions were received during this notification period. Following the conclusion of this notification period, a further twenty-one (21) submissions were received, noting that there were thirteen (13) proforma letters. Therefore, a total overall of ten (10) unique submissions were received and in this regard the application is referred for determination by the Local Planning Panel. It is noted that correspondence was provided to the objectors dated 7 March, 2019 and 18 April, 2019 addressing concerns raised.

It is also noted that the proposal was subject to a pre-Development Application meeting held with Council Officers on the 29 May, 2018.

An assessment of the proposal under Section 4.15 of the *Environmental Planning and Assessment Act 1979* has been undertaken and the application is recommended for approval, subject to recommended conditions.

Site & Surrounds

The subject site has a street address of 1 Edna Street, Kingswood and is legally described as Lot 87, DP 241989. The site has a land area of 651m² and is rectangular in shape with a 18.29m frontage and a depth of 35.66m. The site is situated on the north-western T-junction corner of Edna Street and Callow Lane. The front of the site is slightly affected by local overland flow flooding and majority of Callow Lane is inundated in the case of an 1% AEP event. The site is generally flat and currently contains a single dwelling and ancillary structures.

The surrounding area is typically characterised by traditional single dwellings and multi unit housing. The site adjoins a cluster of local shops eastwards and to the north is Chapman Gardens green open space located on the T-Junction of Second Avenue and Callow Lane approximately 60m northwards. The nearest bus stops are available approximately 68m - 85m north-eastwards and Western Sydney University, Kingswood is located 380m eastwards. Kingswood Train station is situated 770m north-westwards on the Great Western Highway.

Proposal

The applicant seeks development consent for the demolition of existing structures and the erection of a two storey 16 x boarding room with basement parking boarding house at 1 Edna Street, Kingswood.

The proposal includes the following aspects:

- 16 boarding rooms consisting of thirteen (13 single bed) and three (3) double bed rooms (including 2 accessible rooms on ground floor)
- Capacity to accommodate up to 19 lodgers
- Accommodation room sizes 12.0m² - 20.04m²
- Ground floor common room (39.82m²)
- Outdoor communal open space (116.94m²)
- Platform lift from basement
- 8 basement car parking spaces (including 1 accessible parking space)
- Waste room (12 x waste/recycling bins)
- Landscaping works
- Below ground OSD system

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 No 55—Remediation of Land
- Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

Planning Assessment

• Section 4.15 - Evaluation

The development 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

The *State Environmental Planning Policy (Affordable Rental Housing) 2009* (SEPP ARH) aims to deliver affordable rental housing. Under Clause 8 Relationship with other environmental planning instruments of the SEPP ARH, in the event that there is an inconsistency between this policy and an environmental planning instrument, the SEPP prevails to the extent of the inconsistency. The provisions of the SEPP ARH relevant

to boarding houses are addressed below.

Permissibility

Boarding houses are defined under the standard instrument as:

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.

The ARH SEPP provides that development for the purposes of boarding houses may be carried out with consent in a number of zones, including the R1 General Residential, R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential, B1 Neighbourhood Centre, B2 Local Centre and B4 Mixed Use zones or within a land use zone that is equivalent to any of those zones. The site is subject to a R3 zoning and the proposal is a permissible land use.

Development Standards

Clause 29 Standards that cannot be used to refuse consent stipulates a number of standards that cannot be used as grounds to refuse consent by a consent authority. These standards are addressed below.

- (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 ratio for any form of residential accommodation permitted on the land, or

N/A as no FSR standard is applicable to the site under the *Penrith Local Environmental Plan 2010*.

- (b) if the development is on land within a zone in which no residential accommodation is permitted—the existing maximum floor space ratio for any form of development permitted on the land, or

N/A as residential accommodation is permitted.

- (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:

- (i) 0.5:1, if the existing maximum floor space ratio is 2.5:1 or less, or
- (ii) 20% of the existing maximum floor space ratio, if the existing maximum floor space ratio is greater than 2.5:1.

N/A as no FSR standard is applicable to the site.

- (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.

Consistent. The proposal has a maximum building height of approximately 7.4m and is compliant with the 8.5m maximum height of building standard applicable to the site.

- (b) **landscaped area**

if the landscape treatment of the front setback area is compatible with the streetscape in which the building is located,

Consistent. The proposal has a 7.8m front setback which is compatible with the front setback of neighbouring dwellings. It is noted that the proposal includes a pathway, an access ramp and paved area for the waste room within the front setback area, forward of the building line. However, it is considered that sufficient landscaping works are proposed to screen these hardstand areas. This will ensure that the proposal is compatible with the streetscape and its immediate surrounds.

(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.

Consistent. The proposal makes provision for a north and west-facing ground level communal living room in the rear of the building. The communal living room contains northern, western and eastern facing windows which satisfies the minimum solar access requirements.

(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 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 8 square metres with a minimum dimension of 2.5 metres is provided adjacent to that accommodation,

Consistent. The proposed development provides approximately 116.94m² of useable private open space in the rear yard area with a 4.002 - 5.432m rear northern setback. The outdoor communal space also includes decking with a width of 3m within the northern side boundary setback of the property, which is satisfactory.

(e) parking

if:

(i) in the case of development carried out by or on behalf of a social housing provider in an accessible area—at least 0.2 parking spaces are provided for each boarding room, and

(ii) in the case of development carried out by or on behalf of a social housing provider not in an accessible area—at least 0.4 parking spaces are provided for each boarding room, and

(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, 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,

The subject site is within an accessible area and the proposal is subject to a parking rate of 0.5 parking spaces per boarding room. The proposal has a total of sixteen (16) boarding rooms which requires eight (8) car spaces. Eight (8) basement car spaces including one (1) accessible car space is provided which is satisfactory.

(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.

Consistent. The proposed boarding rooms are thirteen (13) single rooms with gross floor areas (GFA) of between 12.0m² - 14.88m² and three (3) double rooms with a GFA's of between 17.90m² to 20.04m².

(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.*

Consistent. The proposal incorporates a self-contained kitchen and bathroom within each boarding room.

Clause 30 Standards for boarding houses stipulates a number of standards that must be satisfied prior to the granting of consent to development for the purposes of a boarding house. Comment is provided below against these provisions.

(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,*

Consistent. The proposal provides one (1) ground level communal living room.

(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,*

Consistent. The maximum accommodation size for any proposed boarding room is 20.04m².

(c) *no boarding room will be occupied by more than 2 adult lodgers,*

Consistent. A condition of consent is to be imposed that restricts any boarding room to a maximum of two (2) adult lodgers at any one time. It is also noted that plans provided are consistent in identifying a maximum of 2 lodgers to any one room.

(d) *adequate bathroom and kitchen facilities will be available within the boarding house for the use of each lodger,*

Consistent. The proposal incorporates a self-contained kitchen and bathroom within each boarding room.

(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,*

N/A.

(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,*

The subject site is situated within a R3 Medium Density Residential zone.

(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.*

Consistent. The proposal has a total of sixteen (16) boarding rooms which requires four (4) parking spaces each for bicycles and motorcycles. The proposal makes provision for four (4) bicycle and four (4) motorcycle parking spaces which is satisfactory.

Clause 30A (Character of Local Area)

This clause requires that:

"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."

Concerns were initially raised with the proposal in regards to an encroachment into the establishing front building line along the northern side of Edna Street and minimal front landscaping, noting an extensive amount of hardstand area for the pedestrian accessway and basement driveway, and also a front terrace area. The original design was considered to lack sufficient articulation and contains visually dominant privacy louvres along the west elevation. As such, the proposal as amended, now incorporates suitable front landscaping and an appropriate mix of architectural design elements including treatment of the western edge of the basement entry

via the provision of a pergola and associated landscaping, which is considered to be compatible with the desired future character of the surrounding area.

Clause 52 (Subdivision of Boarding Houses)

This clause stipulates that boarding houses cannot be strata title or community title subdivided. Neither strata title or community title subdivision forms part of the proposal.

State Environmental Planning Policy No 55—Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) provides aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Under Clause 7 of SEPP 55, it must be considered as to whether the land is contaminated, and if so, Council must be satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which development is proposed to be carried out. In this regard, the subject site has been used for residential purposes for a number of years and the nature of the use will continue to be for residential purposes. Further, it is noted that aerial observation mapping indicates that the site does not appear to contain any unknown imported fill.

Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

An assessment has been undertaken of the proposal against relevant criteria within *Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No. 2—1997)* and the proposal is satisfactory subject to recommended conditions of consent.

Local Environmental Plan 2010 (Amendment 4)

Provision	Compliance
Clause 1.2 Aims of the plan	Complies
Clause 2.3 Permissibility	Complies - See discussion
Clause 2.3 Zone objectives	Complies
Clause 2.7 Demolition requires development consent	Complies
Clause 4.3 Height of buildings	Complies
Clause 4.4 Floor Space Ratio	N/A
Clause 7.2 Flood planning	Complies - See discussion
Clause 7.4 Sustainable development	Complies
Clause 7.6 Salinity	Complies
Clause 7.7 Servicing	Complies

Clause 2.3 Permissibility

The provision of a boarding house within the subject site's R3 Medium Density Residential zoning is permissible, subject to development consent from Council.

Clause 7.2 Flood planning

It is noted that the site is partially affected by an overland flow path which traverses a part of the front of the site. However, the building footprint is clear of any overland flooding flows and conditions of consent are to be imposed to ensure that habitable floor levels are at an appropriate height in accordance with flood planning controls. These measures will ensure that the development proposal does not pose any risk to human life or property.

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

There are no draft environmental planning instruments applying to the development proposal.

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

Development Control Plan 2014

Provision	Compliance
DCP Principles	Complies
C1 Site Planning and Design Principles	Complies - see Appendix - Development Control Plan Compliance
C2 Vegetation Management	Complies - see Appendix - Development Control Plan Compliance
C3 Water Management	Complies - see Appendix - Development Control Plan Compliance
C4 Land Management	Complies
C5 Waste Management	Complies - see Appendix - Development Control Plan Compliance
C6 Landscape Design	Complies
C7 Culture and Heritage	N/A
C8 Public Domain	N/A
C9 Advertising and Signage	N/A
C10 Transport, Access and Parking	Complies - see Appendix - Development Control Plan Compliance
C11 Subdivision	N/A
C12 Noise and Vibration	N/A
C13 Infrastructure and Services	Complies
D2.1 Single Dwellings	N/A
D2.2. Dual Occupancies	N/A
D2.3 Secondary Dwellings	N/A
D2.4 Multi Dwelling Housing	Complies - 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	Complies - see Appendix - Development Control Plan Compliance

Section 79C(1)(a)(iiia) The provisions of any planning agreement

There are no planning agreements applying to the development proposal.

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

The relevant prescribed conditions of the Regulations, such as the requirement for compliance with the Building Code of Australia and fire safety requirements, will be imposed as conditions of consent where applicable. Subject to the recommended conditions of consent, the proposed development complies with the requirements of the *Environmental Planning and Assessment Regulation 2000*.

Further, 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

Under Section 4.15 of the Act, consideration must be given to the likely impacts of the development, including environmental impacts on both the natural and built environments, and the social and economic impacts in the locality.

In this regard, a number of amendments were required to the design as detailed within this report. The revised design is considered to be compatible with the character of the local area given the compliant front setback and suitable front landscaped area treatment. The proposal is considered to incorporate sufficient articulation which reduces the building's overall bulk. In this regard, the size and scale of the proposal is considered to be comparative with its surrounds also noting recessed first floor elements to the eastern facade, the use of landscaping to its perimeter and proposed colours and finishes schedule. Suitable landscape buffers and privacy measures, such as privacy screens and highlight windows are also considered to mitigate amenity and privacy impacts on adjoining properties. Further, the proposal makes provision for adequate residential amenity and services, as stipulated under SEPP ARH. The proposal also satisfies CPTED and community safety principles.

In terms of socio-economic impacts, the proposal is not considered to create a significant impact on the local community given that the proposal is compliant with the relevant provisions related to boarding houses and suitable management practices have been identified as being in place, including a Plan of Management.

The proposal is also considered to provide for a minor increase in local traffic flow. The traffic generated by the proposal is considered to be negligible adverse impacts on the local road network noting the compliant car parking provided on-site. The proposal will provide on-site parking for motor vehicles, motorcycles and bicycles in accordance with SEPP ARH requirements.

Therefore, it is not considered likely that the proposed development will result in any significant impacts on the surrounding natural or built environments or amenity or privacy of adjoining or nearby properties. Further considerations are detailed below in the Community Consultation section of this report in response to concerns raised during and after the notification period.

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

The proposal is of a suitable bulk and scale and is not considered likely to result in any significant impacts on the surrounding natural or built environments including local traffic flows. The site provides adequate basement parking and sufficient connections to services. The site is in proximity to public transport and amenities including recreational activities. The site's soil profile is suitable for the development and the site does not contain any significant flora or fauna or valuable resources. Furthermore, the proposal poses no flooding risk or is subject to any other natural hazards. The site is therefore considered to be suitable for the proposal.

Section 79C(1)(d) Any Submissions

Community Consultation

In accordance with Appendix F4 Notification and Advertising of *Penrith Development Control Plan 2014*, The proposed development was notified to nearby and adjoining properties and advertised in the local newspaper. Council notified fifteen (15) properties in the immediate and surrounding area and the application was exhibited for a period of 14 days from 31 August 2018 to 14 September 2018. During this notification period, two (2) submissions were received in response and after this notification period, a further twenty-one (21) submissions

were received, noting that there were thirteen (13) proforma letters. Overall, a total of ten (10) unique submissions were received, however, the concerns raised are not considered to impede approval of the application.

Key concerns raised in relation to the development proposal were as follows:

Issue Raised	Comments
Notification	<ul style="list-style-type: none"> The proposed boarding house was advertised, notified to adjoining and nearby properties and publicly exhibited in accordance with Appendix F of the <i>Development Control Plan 2014</i> (DCP). It is noted that submissions may be received and considered after the conclusion of the notification period as is the case with this current submission.
R3 Medium Density Residential Zone	<ul style="list-style-type: none"> Council will be working with the community over the next two years to develop a Local Strategic Planning Statement (LSPS), and review and update the existing <i>Penrith Local Environmental Plan 2010</i> (LEP). During this time, opportunities are available to inform the framework that will help guide decisions about land use in Penrith City over the next 20 years. Council's City Planning Team are also responding to a request from Council to consider the appropriateness of the R3 Medium Residential zone in parts of Kingswood in advance of the LEP review. It is noted that Boarding Houses are also a permissible land use with consent in an R2 Low Density Residential zone. Further, the site is in close proximity to Western Sydney University, Kingswood, Penrith Health & Education Precinct, local shops and public transport. The proposal is considered to be compatible with the local area and a suitable scale noting the provisions of the current R3 zoning.
Boarding House Provisions	<ul style="list-style-type: none"> Council has most recently adopted new development controls for boarding houses in the DCP (being Section D5.11) on 21 December 2018, noting that the application was submitted before these amendments were adopted. These controls are in response to the increase of boarding house applications, community concerns and a review of Council's development controls. The proposal has been assessed in accordance with Section 5.11 Boarding Houses of the DCP and considered to satisfy the objectives of these provisions. In regards to any amendments to the <i>State Environmental Planning Policy Affordable Rental Housing (2009)</i> (SEPP ARH) provisions, these matters are a consideration for the Planning Minister.

<p>Suitability of a Boarding House Development</p>	<ul style="list-style-type: none"> • It is noted that the site is in close proximity to Western Sydney University, Kingswood, TAFE, Penrith Health & Education Precinct, local shops, public transport and green open space. Given the location of the site and proximity to employment, it is considered that the subject site is suitable for a boarding house. • In regards to the type of development applications submitted to Council, the applicant has pursued a boarding house development which is up to the discretion of the applicant and a permissible land use with consent in the R3 zone. • In relation to the cumulative impacts of boarding rooms, boarding house proposals undergo comprehensive scrutiny during the development approval process, which includes an internal review by appropriate staff ensures that the site is deemed suitable for the proposed development and that there be no unreasonable adverse impacts on the surrounding area.
<p>Demand for Boarding Houses</p>	<ul style="list-style-type: none"> • The site is in close proximity to Western Sydney University, Kingswood, Penrith Health & Education Precinct, local shops, public transport and green open space. • The demand for affordable housing in this location is market driven.
<p>Local Character</p>	<ul style="list-style-type: none"> • The building design underwent revision to ensure compatibility with the desired future character of the area and existing surrounding residential housing stock. • Amendments include further articulation to the building facades such as rendering, cladding, colour diversity, removal of a pergola feature, etc, which are considered acceptable. • The building is compliant with the 8.5 maximum building height requirement applicable to the site. • The two storey building is an acceptable form of development in a residential area. • The proposal provides generous landscaping embellishment which will aid in visual relief in terms of the overall bulk of the building. • The proposal's physical impacts and relation to the streetscape is considered to be acceptable. The built form is considered to provide sufficient articulation and traditional design features to ensure that the building's appearance is in harmony with the adjoining and nearby buildings.

Parking & Traffic

- The proposal satisfies the minimum car parking requirements stipulated under SEPP ARH (0.5 parking spaces per boarding room - i.e. eight (8) on-site parking spaces for sixteen (16) boarding rooms). It is noted that previous boarding house approvals were assessed under the superseded parking space rate of 0.2 parking space per boarding room and in this regard the current controls are more stringent.
- Council's Traffic Engineer has advised that on-site parking and vehicle manoeuvring is satisfactory and the access driveway location proposed complies with the relevant standards. It is also noted that the driveway is in the same location as the existing driveway.
- The proposal has been assessed in accordance with the trip rates in the Guide to Traffic Generating Development of the Road and Maritime Services and has found to be satisfactory.
- The proposal is considered to be of a suitable scale and is not considered likely to result in any significant impacts on parking or local traffic flows.
- The Traffic Impact Report has been amended to classify the proposal from a motel to a new age boarding house which was reviewed by Council Staff and considered to be satisfactory.
- A condition of consent is to be imposed with any determination granted to ensure that the proposal is compliant with relevant Australian Standards and car parking provisions.
- The accessible parking space that was initially located within the rear yard area has been removed and relocated in the basement car park which is considered to provide for an improved design outcome. This is considered to reduce local traffic flows from Callow Lane and is also considered to protect the amenity of the northern adjoining property.
- It is noted that the site is within 100m walking distance from bus stops with hourly services during peak times and is therefore an accessible area.
- In consideration of the possible type of tenants who are generally low-income earners or students that utilise public transport, it is unlikely that all tenants will own a vehicle and require parking spaces minimising the impact on the existing road network.
- Given the nature of the development, it is unlikely that all the future tenants will own vehicles as boarding rooms do allow for a variety of users, such as students who may commute via public transport or on foot if attending the nearby Western Sydney University for instance.

<p>Amenity Impacts</p>	<ul style="list-style-type: none"> • The application was accompanied by a Noise Impact Assessment Report which was reviewed by Council's Environmental Management Officer. The report demonstrates that the predicted noise levels in particular the outdoor communal area are satisfactory. • In the event of any on-going noise complaints, a noise impact assessment is required to be undertaken to address any concerns raised. • A condition of consent is recommended to restrict the outdoor communal area being used by a maximum of ten (10) users at any one time between 6am to 10pm, Monday to Sunday, and no users between 10pm and 7am, Monday to Sunday. • The minor increase in vehicles is not considered likely to result in any significant impacts on public health given the vast green open space areas, number of trees in the locality and availability amenities.
<p>Solar Access</p>	<ul style="list-style-type: none"> • The proposal retains adequate solar access to neighbouring properties (i.e. a minimum of 3 hours sunlight to living zones and 40% of the main private open space areas at winter solstice on June 21).
<p>Visual Privacy</p>	<ul style="list-style-type: none"> • The property has a separation distance of approximately 40m from the property at 4 Edith Street, Kingswood and is not considered to result in any direct privacy impacts to the south of the site. • The proposal incorporates upper level obscure glazing and privacy louvre windows along the western side and northern rear elevations to minimise overlooking concerns. • Adequate tree screening is provided along the western side and northern rear boundaries in the form of Lilly Pilly trees that have the capacity to grow to a minimum height of 2m at maturity. • These mitigation measures discussed above are considered to minimise any overlooking and privacy impacts on adjoining properties.
<p>Community Safety</p>	<ul style="list-style-type: none"> • Council's Community Safety Officer and Environmental Team has reviewed the proposal and raised no concerns regarding the nature of the development, noting its location and surrounding land uses. • Condition of consent with any determination granted are to be imposed to ensure that the proposal complies with Crime Prevention Through Environmental Design (CPTED) and community safety principles. • All tenants are required to be registered as required under the <i>Boarding Houses Act 2012</i>. • Any approval granted will also be accompanied by a Plan of Management in relation to the operation of the boarding house and resolution of any conflicts which may arise.

Social Impacts	<ul style="list-style-type: none"> • The proposal is to adhere to a plan of management for the operation and management of the proposed boarding house. The plan of management is to be included as a condition of consent with any development consent granted. The plan of management incorporates strategies and procedures to address potential social or environmental impacts associated with the boarding house. • In situations where issues related to the boarding house arise, an appointed management agent will be contactable on a 24-hour basis. • The proposed boarding house is not considered likely to result in any instability for the locality given that appropriate management processes are in place and will be maintained during its operations.
Residential Amenity	<ul style="list-style-type: none"> • The proposal satisfies the minimum private open space (POS) requirement of 20m² and provides for a communal living room as stipulated under SEPP ARH provisions. • It is noted that the terrace has been relocated from the western side boundary to the rear POS area. This is considered to reduce any adverse impacts on adjoining properties given the adequate separation distances from neighbouring POS areas and the northern adjoining large trees.
Maximum Number of Tenants	<ul style="list-style-type: none"> • The proposed boarding room contains 16 boarding rooms with a maximum tenancy rate of 19 tenants.
On-Site Manager	<ul style="list-style-type: none"> • Under SEPP ARH, an on-site manager is not warranted for a boarding house which does not have the capacity to accommodate less than 20 lodgers. • The proposal has the capacity to accommodate up to 19 residents only. • The proposal is subject to adherence to a Plan of Management which has been assessed by Council's Social Planning and Community Safety Officers and is deemed satisfactory in terms of providing effective management and guidelines to deter anti-social behaviour.

<p>Waste Management</p>	<ul style="list-style-type: none"> • The proposal includes a waste storage room and associated infrastructure capable of housing 12 x 240L bins. The waste management system has been reviewed by Council's Senior Waste Planning Officer who has advised that the waste management system is in accordance with Council's residential waste management guidelines. • It is noted that the proposal will be serviced by a waste collect and return system whereby the bins are collected from the waste collection room, emptied in the waste collection vehicle and returned to the waste collection room. It is also noted that residual and recycling waste streams are collected on alternate days.
<p>Stormwater Management</p>	<ul style="list-style-type: none"> • The stormwater plan was revised in accordance with Council's requirements for the on-site stormwater detention system in Council's Stormwater Drainage Specifications for Building Developments Policy. Council's Development Engineer reviewed the revised stormwater plan and noted that the proposal makes provision for adequate stormwater drainage. This will ensure that there are no adverse impacts on adjoining properties and Council's drainage network subject to the implementation of any drainage works.
<p>Pedestrian Pathway</p>	<ul style="list-style-type: none"> • The proposal includes a new pedestrian pathway in front of the property and a 2m x 2m splay corner in the south-western corner of the property which complies with Council's standards.
<p>Construction Works</p>	<ul style="list-style-type: none"> • A Geotechnical Report will be submitted to the Principal Certifying Authority prior to any basement construction works commencing. This will ensure that the basement construction will be undertaken in a manner which will not undermine existing adjacent structures. • Conditions of consent will require that the construction phase is to be undertaken in a manner that minimises any adverse impacts on the surrounding area. This includes requiring protection measures are in place, such as mitigating dust, erosion/sedimentation, noise/vibration and traffic flows. In cases where construction works present a hazard or nuisance, the matter can be reported to the Principal Certifying Authority for action. • It is noted that the proposal does not include the removal of any significant trees and that the landscape plan provides generous landscaping embellishment across the site, including 2 medium sized trees at the front of the site, and 1 medium sized tree in the rear yard area.

Future Resale Value	<ul style="list-style-type: none"> Council is unable to predict that properties will lose values as a result of the boarding house development noting the number of variable factors involved in calculation of any such figure including development potential, and therefore cannot prohibit a boarding house on this basis.
Classification	<ul style="list-style-type: none"> The proposal is defined as a boarding house under the SEPP ARH and LEP. While so, it is noted that the proposal makes provision for a kitchen and bathroom for each boarding room. While this may not be required, this aspect does not change the classification of the proposal being a boarding house.
Edward Street Images	<ul style="list-style-type: none"> The images of Edward Street in the Statement of Environmental Effects appears to be an error in the report.
Property Acquisition	<ul style="list-style-type: none"> The acquisition of property is not generally required to be publicly notified. In this regard, public access is made available under the Government Information (Public Access) Act 2009 (GIPA Act). In regards to who the owner(s)/developer(s) is of a property, this aspect does not form any part of the development assessment process and therefore cannot prohibit a boarding house on this basis.
Existing Boarding Houses	<ul style="list-style-type: none"> There are no current development standards or controls restricting the number of boarding houses in a locality and the assessment has not been identified any unreasonable impacts resulting from cumulative proposals in this immediate location.

Email responses and letters were sent to the submitters on 11 March 2019 and 18 April 2019 advising of the above consideration given to their concerns.

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	No objections - subject to conditions
Environmental - Environmental management	No objections - subject to conditions
Environmental - Waterways	No objections - subject to conditions
Environmental - Public Health	No objections - subject to conditions
Waste Services	No objections - subject to conditions
Traffic Engineer	No objection subject to conditions
Community Safety Officer	No objections - subject to conditions
Tree Management Officer	No objections - subject to conditions
Social Planning	No objections

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

Given the nature and scale of the development proposal, in addition to the proposal being largely compliant with the applicable development controls, the development is not considered likely to generate any significant issues of public interest. The proposal is considered to be consistent with the relevant Environmental Planning Instruments. In this regard, the public interest is served as the development as amended is considered to have adopted the predominant design characteristics found within the surrounding area and will also improve opportunities for low cost rental housing in an appropriate location.

Section 94 - Developer Contributions Plans

There are no occupancy rates applicable to boarding houses under Council's Development Contributions Plans. Therefore, development contributions are not applicable to the proposal.

Conclusion

In assessing this proposal against the relevant environmental planning policies, being *Penrith Local Environmental Plan 2010*, *Penrith Development Control Plan 2014*, *State Environmental Planning Policy (Affordable Rental Housing) 2009* and *Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No. 2—1997)*, the proposal satisfies the aims, objectives and provisions of these policies. The proposal does not contravene any development standards and is unlikely to have any significant impacts on the natural, social or economic environments. The site is suitable for the development and the proposal is in the public interest. Therefore, the application is worthy of support and is recommended for approval subject to conditions.

Recommendation

1. That DA18/0810 for a two (2) storey boarding house with sixteen (16) boarding rooms and basement parking at 1 Edna Street, Kingswood be approved subject to the attached conditions.
2. That those making submissions are notified of the determination.

CONDITIONS

General

1 A001

The development must be implemented substantially in accordance with the following plans and documents stamped approved by Council, the application form and any supporting information received with the application, except as may be amended in red on the stamped approved plans and by the following conditions.

Drawing Title	Prepared By	Project No.	Drawing No.	Dated	Revision
Roof Site/Analysis Plan	Designcorp Architects	2018-140	I0	03-04-2019	i
Basement Floor Plan/ Ground Floor Plan	Designcorp Architects	2018-140	I3	03-04-2019	i
First Floor Plan	Designcorp Architects	2018-140	I4	03-04-2019	i
Elevations/Section C	Designcorp Architects	2018-140	I5	03-04-2019	i
Section A - B/ Accessible Rooms	Designcorp Architects	2018-140	I6	03-04-2019	i
Materials and Finishes Schedule	Designcorp Architects	2018-140	I9	03-04-2019	i
Landscape Plan	Andrew Murphy Design	2018-053	B01	18-11-2018	--
Stormwater Plans	Australian Consulting Engineers	180698	000, 101-105	23/01/2019	D

Documents

- Plan of Management, Reference: New Generation Boarding House: 1 Edna Street, Kingswood prepared by Think Planners, dated 18 November, 2018, as amended by Condition 49,
 - Section-J Report prepared by Outsource Ideas Pty Ltd, Project Reference No. 2018-140, Revision E, dated 8 June, 2018,
 - Arboricultural Development Impacts Assessment Report - 1 Edna Street, Kingswood NSW, prepared by Birds Tree Consultancy, Revision C, dated 5 July, 2017,
 - Noise Impact Assessment Report prepared by Rodney Steven Acoustics, Reference No. Report 180260R1, Revision 1, dated 15 November, 2018,
 - Traffic Impact Report and Car Parking Certification prepared by Safe Way Traffic Management Solutions, Reference: 1 Edna Street, Kingswood - Proposed New Generation Boarding House, Revision 1, dated November 2018,
 - Access Report prepared by Vista Access Architects, Reference No. 18114, and
 - Waste Management Plan prepared by Designcorp Australia Pty Ltd, dated 4 July, 2018.
- 2 **A008 - Works to BCA requirements (Always apply to building works)**

The work must be carried out in accordance with the requirements of the Building Code of Australia. If the work relates to a residential building and is valued in excess of \$20,000, then a contract of insurance for the residential development shall be in force in accordance with Part 6 of the *Home Building Act 1989*.

{Note: Residential building includes alterations and additions to a dwelling, and structures associated with a dwelling house/dwelling such as a carport, garage, shed, rural shed, swimming pool and the like}.

3 A019 - OCCUPATION CERTIFICATE (ALWAYS APPLY)

The development shall not be used or occupied until an Occupation Certificate has been issued.

4 A032 - Goods in buildings

No garbage waste, dumped goods or bulky waste such as disused or broken furnishings are to stored at the site (unless temporarily placed within the approved bulky waste area for booked Council collection). All car parking spaces shall be maintained for the use of tenants of the boarding house at all times and are not to be used for the storage of goods or unregistered/disused vehicles and the like.

5 **A038 - LIGHTING LOCATIONS**

Prior to the issue of an Occupation Certificate, a lighting system shall be installed for the development to provide uniform lighting across common areas and driveways. Exterior lighting shall be located and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary for safe operation. The lighting shall be in accordance with AS 4282 "Control of the obtrusive effects of outdoor lighting" (1997).

6 **A039 - Graffiti**

The finishes of the building is to be maintained at all times and any graffiti or vandalism immediately removed/repaired.

7 **A046 - Obtain Construction Certificate before commencement of works**

A **Construction Certificate** shall be obtained prior to commencement of any building works.

8 **A Special (BLANK)**

The boarding house is permitted to accommodate a maximum of nineteen (19) lodgers at any one time. Approved occupancy rates are to be limited to a maximum of two (2) residents per double room for bedrooms 1, 4 and 6. Each remaining (single) room is to be limited to one (1) resident.

9 **A Special (BLANK)**

Prior to the issue of a Construction Certificate, the stamped approved plans shall be amended to make provision for highlight windows and/or obscure glazing and/or privacy screens with with a window sill height of 1.7m above floor level to rooms 14 and 16. This amendment shall be shown on the Construction Certificate plans.

10 **A Special (BLANK)**

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall ensure that a street number is clearly displayed at the premises and mail boxes are installed and appropriately allocated to individual units.

11 **A Special (BLANK)**

The Principal Certifying Authority shall ensure that the requirements of the Access Report prepared by Vista Access Architects, Reference No. 18114 are incorporated into the Construction Certificate plans and the necessary works completed **prior to the issue of an Occupation Certificate**.

12 **A Special (BLANK)**

The owner of the boarding house is to ensure that the surrounds of building and street front verge are neat, tidy and free from litter at all times.

13 **A Special (BLANK)**

All fencing and retaining wall works shall be at the full cost of the applicant/property owner. The materials and colours of any fencing and retaining walls shall match or complement the external materials of the approved building. All retaining walls shall be of masonry (or similar) construction (not timber).

14 **A Special (BLANK)**

The ground floor communal open space and common room must be available for the use of lodgers of the building.

15 **A Special (BLANK)**

In accordance with the provisions of Clause 52 of *State Environmental Planning Policy (Affordable Rental Housing) 2009* and *Penrith Development Control Plan 2014*, the boarding house cannot be strata subdivided.

16 **A special BLANK**

Noise levels within the premises shall not exceed the relevant noise criteria detailed in the Noise Impact Assessment prepared by Rodney Stevens Acoustics, Reference No. 180260R1, Revision 1, dated 15 November, 2018. The recommendations provided in the above-mentioned acoustic report shall be implemented and incorporated into the design and construction of the development, and shall be shown on plans accompanying the Construction Certificate application. A certificate is to be obtained from a qualified acoustic consultant certifying that the building has been constructed to meet the noise criteria in accordance with the approved acoustic report and the relevant Australian Standards. This certificate is to be submitted to the Principal Certifying Authority **prior to the issue of an Occupation Certificate**.

17 **A special BLANK**

The number of tenants using the outdoor communal area is to be restricted to:

- Maximum of ten (10) people in the evening between 6pm to 10pm, Monday to Sunday, and
- No tenants allowed in the outdoor communal area between 10pm and 7am, Monday to Sunday.

18 **A special BLANK**

In the event of on-going noise complaints relating to the development being received by Council, the owner and/or occupier of the development maybe required by Council to obtain the services of a suitably qualified acoustic consultant to undertake a noise impact assessment on the development to address the concerns of the community.

The noise impact assessment report is to be prepared and provided to Council for approval within forty-five (45) days of being requested. Any mitigation works are to be undertaken within thirty (30) days from the date of notice from Council, unless otherwise specified.

19 **A special BLANK**

The operator/owner of the Boarding House must book a compliance inspection with Penrith City Council within three (3) months of commencement of the boarding house as required under the NSW *Boarding House Act 2012*.

20 **A special BLANK**

Appropriate furniture and fittings must be provided and maintained in good repair. If the place is one in which persons may board or lodge for seven (7) days or longer, an adequate number of beds (each provided with a mattress and pillow and an adequate supply of clean blankets or equivalent bed clothing), adequate storage space and blinds, curtains or similar devices to screen bedroom and dormitory windows for privacy must be provided for the occupants. Individual items must be listed in the Plan of Management for the boarding house.

21 **A special BLANK**

- A minimum of four (4) 8.5 kilogram washing machines and four (4) clothes dryers shall be provided and maintained by the boarding house owner/operator, and
- A minimum of 30.0m of clothes line shall be provided for every twelve (12) residents. Outdoor drying areas should not encroach on the outdoor communal living spaces. Clothes line may be retractable.

22 **A Special BLANK**

All mechanical plant and equipment is to comply with the noise criteria outlined in Noise Impact Assessment prepared by Rodney Steven Acoustics, Reference No. Report 180260R1, Revision 1, dated 15 November, 2018.

Prior to the issue of the Construction Certificate, further details on the type and location of all mechanical plant and equipment associated with the development it to be provided to Council for consideration and approval. Suitable data and information on the noise impacts associated with this plant and equipment is also to be supplied to demonstrate compliance with the established noise criteria.

Prior to the issue of an Occupation Certificate, a Compliance Certificate is to be submitted to and approved by Council. The Certificate is to outline that all plant and equipment have been installed to comply with the above information and the established noise criteria. Should the Compliance Certificate identify any non-compliance issues, the Certificate is to provide suitable recommendations for mitigation of those issues. Any mitigation works are to be undertaken within thirty (30) days from the date of notice from Council, unless otherwise specified.

23 **A Special Condition (BLANK)**

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that the stormwater management plans stipulate the size of the rainwater tank.

24 A Special CPTED Requirements

The following community safety and Crime Prevention Through Environmental Design (CPTED) requirements are required to be implemented:

(a) Lighting

- A lighting system shall be installed for the development to provide uniform lighting across common areas and driveways,
- All pedestrian pathways, driveways and access routes in outdoor spaces throughout the development must be lit to the minimum of AS 1158,
- Lighting should be consistent in order to reduce the contrast between shadows and illuminated areas,
- Exterior lighting shall be located and directed in such a manner so as not to create a nuisance to surrounding land uses,
- The lighting shall be the minimum level of illumination necessary for safe operation, and
- The lighting shall be in accordance with AS 4282 - Control of the obtrusive effects of outdoor lighting.

(b) Basement Car Parking

- A security system must be installed on any pedestrian and vehicle entry/exit points to the car park, including the stairwell, to minimise opportunities for unauthorised access,
- All areas of the car park must be well-lit, with consistent lighting to prevent shadowing or glare, and
- Car park surfaces including walls and ceilings are to be light coloured with details included with the **Construction Certificate** application.

(c) Building Security & Access Control

- Intercom, code or card locks or similar must be installed for all entries to the building including car park and waste room,
- Australian Standard 220 – door and window locks must be installed in all rooms,
- A monitored alarm system should be considered to all communal areas within the property boundary, and
- The mail boxes must be well secured with no front flap lock on the boxes that can be easily broken.

(d) Entrances

- The main entrance to the boarding house must be clearly visible and legible to users,
- The entrance should be designed to allow users to see into the building before entering.

(e) Graffiti/Vandalism

- Graffiti resistant coatings must be used to external surfaces where possible, including fencing and retaining walls, etc, and
- Procedures must be in place to ensure the prompt removal and/or repair of graffiti or vandalism to the building, fencing, and common areas. This includes reporting incidents to police and/or relevant authorities.

(f) Landscaping

- All vegetation must be regularly pruned to ensure that sight lines are maintained.

(g) Boarding House Management

- Boarding House Management will be available at a mutually convenient time, at the invitation of Penrith City Council and/or the NSW Police, to discuss and action agreed Community Safety, Security or other issues in conjunction with other local stakeholders in the area should the need arise.
- Boarding house management is to provide information advertising where to go for help and how to report maintenance or vandalism problems.

Demolition

25 B001 - Demolition of existing structures

Structures nominated for demolition on the approved plans shall be demolished as part of the approved works.

26 [B002 - AS FOR DEMOLITION AND DISPOSAL TO APPROVED LANDFILL SITE](#)

All demolition works are to be conducted in accordance with the provisions of AS 2601-1991 "The Demolition of Structures". **Prior to demolition**, all services shall be suitably disconnected and capped off or sealed to the satisfaction of the relevant service authority requirements.

All demolition and excavated material shall be disposed of at a Council approved site or waste facility. Details of the proposed disposal location(s) of all excavated material from the development site shall be provided to the Principal Certifying Authority **prior to commencement of demolition**.

27 [B003 - ASBESTOS](#)

You should read Council's Fact Sheet titled "Handling and Disposal of Fibrous Cement Products" **before any demolition works commence on-site**.

Prior to commencement of demolition works on-site, a portaloo with appropriate washing facilities shall be located on the site and the Principal Certifying Authority is to be satisfied that:

- Measures are in place so as to comply with the WorkCover Authority's "Short Guide to Working with Asbestos Cement" and
- The person employed to undertake the works is a licensed asbestos removal contractor and is holder of a current WorkCover Asbestos Licence.

Any demolition works involving the removal of all asbestos shall only be carried out by a licensed asbestos removal contractor who has a current WorkCover Asbestos Licence.

All asbestos laden waste, including asbestos cement flat and corrugated sheeting must be disposed of at a tipping facility licensed by the Environment Protection Authority to receive asbestos wastes.

28 [B004 - Dust](#)

Dust suppression techniques are to be employed during demolition works to reduce any potential nuisances to surrounding properties.

29 [B005 - Mud/Soil](#)

Mud and soil from vehicular movements to and from the site must not be deposited on the road.

30 [B006 - Hours of work](#)

Demolition and construction works will be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

- Mondays to Fridays, 7am to 6pm
- Saturdays, 7am to 1pm if inaudible on neighbouring residential premises, otherwise 8am to 1pm
- No demolition work is permitted on Sundays and Public Holidays.

In the event that the demolition relates to works inside the building that does not involve external walls or the roof, and does not involve the use of equipment that emits noise then the demolition works are not restricted to the hours stated above.

The provisions of the *Protection of the Environment Operations Act 1997* in regulating offensive noise also apply to all construction works.

Environmental Matters

31 [D001 - Implement approved sediment& erosion control measures](#)

Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

32 **D006 - No filling without prior approval (Use always, except for bulk earthworks/ major fill operations)**

No fill material shall be imported to the site until such time as a Validation Certificate (with a copy of any report forming the basis for the validation) for the fill material has been submitted to, considered and approved by Council. The Validation Certificate shall:

- state the legal property description of the fill material source site,
- be prepared by an appropriately qualified person (as defined in *Penrith Development Control Plan 2014*) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
- clearly indicate the legal property description of the fill material source site,
- provide details of the volume of fill material to be used in the filling operations,
- provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
- (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.

{Note: *Penrith Development Control Plan 2014* defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}

If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances the works shall be carried out prior to any further approved works.

33 **D007 - Cut and fill of land requiring Validation Certificate –limited to footprint**

Cut and fill operations on the property are only permitted in conjunction with the building works as detailed on the approved plans and specifications, and shall not extend more than two (2) metres past the defined building footprint.

Before any fill material is imported to site, a validation certificate issued by an appropriately qualified person is to be provided to the Principal Certifying Authority. The validation certificate must demonstrate that the fill material is free from contaminants and weeds, that it is suitable for its intended purpose and land use, and that it will not pose an unacceptable risk to human health or the environment.

34 **D009 - Covering of waste storage area**

All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays/bins so as to allow for the separation of wastes, and are to be fully enclosed when the site is unattended.

35 **D010 – Appropriate disposal of excavated or other waste**

All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

36 **D014 - Plant and equipment noise**

The operating noise level of plant and equipment shall not exceed 5dB(A) above the background noise level when measured at the boundaries of the premises. The provisions of the *Protection of the Environment Operations Act 1997* apply to the development, in terms of regulating offensive noise.

37 **D Special (BLANK)**

Where an intruder alarm is installed on the premises, it shall be fitted with a timing device in accordance with the requirements of the *Protection of the Environment Operations Act 1997*.

38 **D Special (BLANK)**

The bin infrastructure and waste collection service will be provided/commenced for the development upon the completion of all on-site waste collection infrastructure and the attainment of an Occupation Certificate.

39 **D Special BLANK**

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that following waste management requirements are complied with and details of compliance demonstrated. This detail shall be shown on the Construction Certificate plans.

- The Waste Collection Area and Bulky Households Goods Area are to provide wash facilities through the use of a centralised mixing valve and hose cock. Respective drainage and waterproofing is to be installed to support the use of hose facilities,
- The Waste Collection Area and Bulky Households Goods Area to provide adequate light and ventilation in accordance with the Building Code of Australia,
- The doors of the bulky waste and waste collection room are to be locked through an abloy key system,
- The northern door of the Waste Collection Area is to be 1.2m wide, outwards opening,
- The service path leading to the Waste Collection Area and Bulky Household Goods Area is to be 1.2m wide unobstructed access pathway, concrete and remain parallel to the contours at all points,
- The Waste Collection Area and Bulky Household Goods Area swing doors are to be provided with a latch to enable each door to be fixed in an open position during collection, and
- The floor of the Waste Collection Area and Bulky Household Goods Area are to be constructed of concrete to a minimum thickness of 75mm, be non-slip and have a smooth/even surface covered at all intersections with a maximum gradient of 1:24.

40 **D Special BLANK**

Prior to the issue of an Occupation Certificate, the developer is to enter into a formal agreement with Penrith City Council for the utilisation of Council's Waste Collection Service. This is to include Council being provided with indemnity against claims for loss and damage.

Note:

By entering into an agreement with Council for Waste Collection, the development will be required to operate in full compliance with Penrith City Council's Waste Collection and Processing Contracts for Standard Waste Collection. The provision of Council's waste collection service will not commence until formalisation of the agreement.

BCA Issues

41 **E009 - Annual fire safety-essential fire safety (Class 2-9 buildings)**

The owner of a building, to which an essential fire safety measure is applicable, shall provide Penrith City Council with an annual fire safety statement for the building. The annual fire safety statement for a building must:

(a) deal with each essential fire safety measure in the building premises, and

(b) be given:

- within 12 months after the last such statement was given, or
- if no such statement has previously been given, within 12 months after a final fire safety certificate was first issued for the building.

As soon as practicable after the annual fire safety statement is issued, the owner of the building to which the statement relates:

- must also provide a copy of the statement (together with a copy of the current fire safety schedule) to the Commissioner of New South Wales Fire Brigades, and
- prominently display a copy of the statement (together with a copy of the current fire safety schedule) in the building.

42 E01A - BCA compliance for Class 2-9

All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the on-going benefit of the community. Compliance with the performance requirements can only be achieved by:

(a) complying with the deemed to satisfy provisions, or

(b) formulating an alternative solution which:

- complies with the performance requirements, or
- is shown to be at least equivalent to the deemed to satisfy provision, or

(c) a combination of (a) and (b).

It is the owner's responsibility to place on display, in a prominent position within the building at all times, a copy of the latest fire safety schedule and fire safety certificate/statement for the building.

Health Matters and OSSM installations

43 F006 - Water tank & nuisance

The rainwater tank must be maintained so as not to create a nuisance and it must be protected against mosquito infestation.

44 F178 - Boarding House

The Boarding House is to be operated in accordance with the requirements set out under the *Local Government (General) Regulation 2005*, Cl 83 and Schedule 2 - Standards Enforceable by Orders, Part 1 – Standards for Places of Shared Accommodation. Rooms are to be provided furnished in accordance with Schedule 2 of the "Regulation".

45 F179 - Boarding Houses - PH Reg 2012

The boarding House is to be operated in accordance with the requirements set out under the *Public Health Regulation 2012*.

46 F180 - Boarding House – BH Act 2012

The boarding house is to be operated in accordance with the requirements set out under the *Boarding House Act 2012* and Regulation.

47 F181 - Boarding House - Registration

The boarding house proprietor is required to register the boarding house, as a "general" boarding house on the register administered by NSW Department of Fair Trading within 28 days from commencement of operation of the boarding house.

48 F182 - Health Care Premises – toilets and waiting areas

Communal areas including the kitchen, laundry and waste room in the premises shall be maintained in a clean and hygienic condition free from a build up of waste at all times

49 **F Special BLANK**

Prior to the issue of an Occupation Certificate, a revised and detailed Plan of Management shall be provided to Council for assessment and approval. Additional information required in the Plan of Management includes:

(a) Plans outlining the occupancy rate for each sleep room, room furnishings, provisions of communal areas and facilities, and access and facilities for people with a disability.

(b) 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, and
- 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.

(c) Minimum room furnishings. Rooms are to be provided fully furnished. 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,
- night light,
- waste container,
- curtains or blinds,
- phone line,
- microwave oven, and
- refrigerator, etc.

(d) 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 addressed in the procedures:

- how cleaning and sanitizing is conducted,
- frequency of cleaning of sanitizing,
- use of chemicals,
- cleaning chemicals and sanitizing solution strengths, and
- record keeping of cleaning and sanitizing and signing off on cleaning and sanitizing.

(g) Consideration needs to be given to accessibility for laundry facilities.

50 **F Special BLANK**

Prior to the issue of an Occupation Certificate, detailed plans of the communal kitchen facilities are required to be submitted to Council for assessment and approval. The communal kitchen area is to be constructed in accordance with AS 4674-2004 - "Design, Construction and Fit-out of Commercial Food Premises".

Utility Services

51 G002 - Section 73 (not for

A Section 73 Compliance Certificate under the *Sydney Water Act 1994* shall be obtained from Sydney Water. The application must be made through an authorised Water Servicing Coordinator. Please refer to “Your Business” section of Sydney Water’s website at www.sydneywater.com.au then the “e-developer” icon, or telephone 13 20 92.

The Section 73 Compliance Certificate must be submitted to the Principal Certifying Authority **prior to the issue of an Occupation Certificate**.

52 G004 - Integral Energy

Prior to the issue of a Construction Certificate, a written clearance is to be obtained from Endeavour Energy stating that electrical services have been made available to the development or that arrangements have been entered into for the provision of services to the development.

In the event that a pad mounted substation is necessary to service the development, Penrith City Council shall be consulted over the proposed location of the substation before the Construction Certificate for the development is issued as the location of the substation may impact on other services and building, driveway or landscape design already approved by Council.

53 G006 -

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that telecommunications infrastructure may be installed to service the premises which complies with the following:

- The requirements of the *Telecommunications Act 1997*;
- For a fibre ready facility, the NBN Co’s standard specifications current at the time of installation; and
- For a line that is to connect a lot to telecommunications infrastructure external to the premises, the line shall be located underground.

Unless otherwise stipulated by telecommunications legislation at the time of construction, the development must be provided with all necessary pits and pipes, and conduits to accommodate the future connection of optic fibre technology telecommunications.

Prior to the issue of an Occupation Certificate, written certification from all relevant service providers that the telecommunications infrastructure is installed in accordance with the requirements above and the applicable legislation at the time of construction, must be submitted to the Principal Certifying Authority.

Construction

54 H001 - Stamped plans and erection of site notice

Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of two (2) signs to be erected on-site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage but no more than two (2) signs stating the above details are to be erected:

- at the commencement of, and for the full length of the, construction works on-site, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

55 H002 - All forms of construction

Prior to the commencement of construction works:

(a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:

- a standard flushing toilet connected to a public sewer, or
- if that is not practicable, an accredited sewage management facility approved by Council, or
- alternatively, any other sewage management facility approved by Council.

(b) All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate professional standards. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

(c) If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:

- must preserve and protect the building from damage, and
- if necessary, must underpin and support the building in an approved manner, and
- must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land (includes a public road and any other public place).

(d) If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place:

- if necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place,
- the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place, and
- any such hoarding, fence or awning is to be removed when the work has been completed.

56 H022 - Survey

The building shall be set out by a registered surveyor. A Survey Certificate shall be undertaken and submitted to the Principal Certifying Authority when the building is constructed to ground floor slab level.

57 H033 – Clothes line

Clothes drying facilities are to be positioned and screened from public view.

58 H036 - Rainwater Tank (Also impose H037, H038, H039, G005 & Q010)

The rainwater tank is to be:

- erected on a self-supporting base in the approved location on the property in accordance with the stamped-approved site plans for the development,
- structurally sound and constructed in accordance with AS/NZS 3500 1.2- 1998: National Plumbing and Drainage - Water Supply - Acceptable Solutions,
- fully enclosed and all openings sealed to prevent access by mosquitoes,
- fitted with a first flush device,
- fitted with a trickle system to top up from mains water,
- provided with an air gap, and
- installed by a licensed plumber in accordance with Sydney Water's "Plumbing requirements Information for rainwater tank suppliers and plumbers April 2003" and the NSW Code of Practice: Plumbing and Drainage.

Additionally, the following are to be provided:

- A back flow prevention device shall be provided at the water meter in accordance with Sydney Water requirements.
- In the event of a power failure, a back up supply of mains water shall be provided to at least one toilet in the dwelling.
- The rainwater tank and associated piping is to be labelled 'Rainwater - Not for Drinking' in accordance with Sydney Water requirements.
- The rainwater tank and pipework is to be painted in colours matching the external finishes of the dwelling and is to be of non-reflective finish.
- The overflow for the rainwater tank is to be connected into the existing stormwater disposal system on the site.

Before a rainwater tank can be used, a certificate or suitable document is to be submitted to the Principal Certifying Authority stating that the rainwater tank has been installed in accordance with:

- the Manufacturer's Specifications, and
- Sydney Water and NSW Health requirements.

This certificate or documentation is to be provided by the licensed plumber who installed the rainwater tank on the property, and is to be submitted **prior to the issue of an Occupation Certificate**.

59 H037 - Safe supply of water from catchment areas (Also impose H036, H038 & H039)

The catchment area (for the rainwater tank) includes the parts of the roof of the dwelling(s) from which water is collected and includes gutters. To ensure a safe supply of water:

- roof catchment areas must be kept clear of overhanging vegetation,
- gutters must have sufficient fall to downpipes to prevent pooling of water,
- overflow, discharge from bleed off pipes from roof mounted appliances such as airconditioners, hot water services and solar heaters must not discharge into the rainwater catchment area,
- for roofs containing lead based, tar based or asbestos material the tank supply must not be connected to drinking, bathing and gardening tap water outlets,
- appropriate measures must be installed to prevent foreign materials from contaminating the water which enters the rainwater tank.

60 H038 - Connection of rainwater tank supply (Also impose H036, H037 & H039)

The rainwater tank supply must not be connected to drinking and bathing water tap outlets.

61 H039 - Rainwater tank pumps (Also impose H036, H037 & H038)

The rainwater tank pump must not exceed 5dBA above ambient background noise level at the nearest residential property boundary. The provisions of the *Protection of the Environment Operations Act 1997* apply to the development, in terms of regulating offensive noise.

62 H042 - Adaptable Dwelling Certification

The Construction Certificate must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Housing Standard (AS 4299- 2009).

Engineering

63 **K101 - Works at no cost to Council**

All roadworks, stormwater drainage works and associated civil works required to effect the consented development shall be undertaken at no cost to Penrith City Council.

64 **K201 - Infrastructure Bond**

An Infrastructure Restoration Bond is to be lodged with Penrith City Council for development involving works around Penrith City Council's Public Infrastructure Assets. The bond is to be lodged with Penrith City Council prior to commencement of any works on site or prior to the issue of a Construction Certificate, whichever occurs first. The bond and applicable fees are in accordance with Council's adopted Fees and Charges.

An application form together with an information sheet and conditions are available on Council's website.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

65 **K202 - S138 Roads Act – Works and Structures - Minor Works in the public road DRIVEWAYS ROAD OPENINGS**

Prior to the issue of a Construction Certificate, a Section 138 Roads Act application, including payment of application and inspection fees, shall be lodged and approved by Penrith City Council (being the Roads Authority for any works required in a public road). These works may include but are not limited to the following:

- a) Vehicular crossings (including kerb reinstatement of redundant vehicular crossings)
- b) Concrete footpaths and or cycleways
- c) Road opening for utilities and stormwater (including stormwater connection to Penrith City Council roads and other Penrith City Council owned drainage)

All works shall be carried out in accordance with the Roads Act approval, the development consent, including the stamped approved plans, and Penrith City Council's specifications, guidelines and best engineering practice.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development, the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) All works associated with the Roads Act approval must be completed **prior to the issue of an Occupation Certificate**.

66 **K209 - Stormwater Discharge – Minor Development**

Stormwater drainage from the site shall be discharged to the:

- a) Street drainage system

The proposed development and stormwater drainage system shall be designed to ensure no adverse impact on adjoining properties by the diversion, damming or concentration of stormwater flows.

The proposed method of stormwater discharge shall be detailed in the Construction Certificate issued by the Certifying Authority.

67 **K210 - Stormwater Management**

The stormwater management system shall be provided generally in accordance with the concept plan/s lodged for development approval, prepared by Australian Consulting Engineers, Reference No. 180698, Revision D, dated 23 January, 2019.

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Penrith City Council's Stormwater Drainage for Building Developments and Water Sensitive Urban Design (WSUD) Policies.

68 [K211 - Stormwater Discharge – Basement Car parks](#)

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that the stormwater drainage system for the basement car park has been designed in accordance with the requirements for pumped systems in AS 3500.3 (or as amended) (Plumbing and Drainage – Stormwater Drainage).

69 [K214 - Flooding – Floor levels](#)

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that all habitable floor levels are in accordance with the stamped approved plans with a minimum floor level of RL 43.70m AHD (standard flood level +0.5m freeboard).

70 [K221 - Overland Flow - General](#)

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that:

- a) All habitable floor levels are a minimum of 500mm above the top water level of the 1% Annual Exceedance Probability RL 43.20m AHD overland flow path.
- b) The proposed development will not concentrate, dam or divert overland flows onto adjoining properties.
- c) The crest in the access ramp to the basement car park shall be a minimum of RL 43.50m AHD.
- d) All proposed penetrations and access points into the basement carpark area minimum of 0.3m above the top water level adopted for the flooding.

Details prepared by a qualified person, demonstrating compliance with these requirements, shall form part of any Construction Certificate issued.

71 [K222 - Access, Car Parking and Manoeuvring – General](#)

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that vehicular access, circulation, manoeuvring, pedestrian and parking areas associated with the subject development are in accordance with AS 2890.1, AS 2890.2, AS 2890.6 and *Penrith Development Control Plan 2014*.

72 [K226 - Basement Geotechnical Testing/ Dilapidation Report](#)

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that a Geotechnical investigation, report and strategy has been conducted to ensure stability of the Council infrastructure and surrounding developments. The geotechnical investigation, report and strategy shall comply with the recommendations contained in the technical direction GTD 2012/001 prepared by the Road and Maritime Services as amended. The development shall undertake a dilapidation report for all surrounding buildings and Council owned infrastructure that confirms that no damage occurs due to the excavations associated with the development. If Council is not the Certifying Authority the dilapidation report shall be submitted to Council **prior to the issue of a Construction Certificate** and then updated and submitted **prior to an Occupation Certificate** confirming no damage has occurred.

73 [K301 - Sediment & Erosion Control](#)

Prior to commencement of any works associated with the development, sediment and erosion control measures shall be installed in accordance with the approved Construction Certificate and to ensure compliance with the *Protection of the Environment Operations Act 1997* and Managing Urban Stormwater series from the Office of Environment and Heritage.

The erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

74 [K302 - Traffic Control Plan](#)

Prior to commencement of any works associated with the development, a Traffic Control Plan, including details for pedestrian management, shall be prepared in accordance with AS 1742.3 “Traffic Control Devices for Works on Roads” and the Roads and Maritime Services’ publication “Traffic Control at Worksites” and certified by an appropriately accredited Roads and Maritime Services Traffic Controller.

Traffic control measures shall be implemented during the construction phase of the development in accordance with the certified plan. A copy of the plan shall be available on site at all times.

Note:

- a) A copy of the Traffic Control Plan shall accompany the Notice of Commencement to Penrith City Council.
- b) Traffic control measures may require road occupancy/road closure approvals issued under Section 138 of the Roads Act by Penrith City Council **prior to the issue of a Construction Certificate**.

75 **K401 - Flooding – Surveyor Verification of floor levels**

A certificate by a registered surveyor verifying that all habitable floor levels are at or above RL 43.70m AHD (standard flood level +0.5m freeboard) shall be submitted upon completion of the building to that level. No further construction of the building is to be carried out until approval to proceed is issued by the Principal Certifying Authority.

76 **K405 - Turf to Verge**

Upon completion of all works in the road reserve, all verge areas fronting and within the development are to be turfed. The turf shall extend from the back of kerb to the property boundary, with the exception of concrete footpaths, service lids or other infrastructure which is not to be turfed over. Turf laid up to concrete footpaths, service lids or other infrastructure shall finish flush with the edge.

77 **K406 - Underground Services**

All existing (aerial) and proposed services for the development, including those across the frontage of the development are to be located or relocated underground in accordance with the relevant authorities regulations and standards.

78 **K501 - Penrith City Council clearance – Roads Act/ Local Government Act**

Prior to the issue of a Occupation Certificate, the Principal Certifying Authority shall ensure that all works associated with a Section 138 Roads Act approval or Section 68 Local Government Act approval have been inspected and signed off by Penrith City Council.

79 **K504 - Stormwater Compliance**

Prior to the issue of any Occupation Certificate, the Principal Certifying Authority shall ensure that the:

a) Stormwater management systems (including on-site detention)

- Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
- Have met the design intent with regard to any construction variations to the approved design.
- Any remedial works required to been undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the Works As Executed drawings.

80 **K505 - Restriction as to User and Positive Covenant**

Prior to the issue of an Occupation Certificate, a restriction as to user and positive covenant relating to the:

a) Stormwater management systems (including on-site detention and water sensitive urban design)

Shall be registered on the title of the property. The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Stormwater Drainage Specification for Building Development Policy.

81 **K508 - Splay**

Prior to the issue of an Occupation Certificate, a 3m by 3m splay corner at the intersection of Edna Street and Callow Lane is to be dedicated as public road to Penrith City Council on a plan of subdivision registered with Land Registry Services (LRS). The dedication of public road and subsequent registration shall be at no cost to Penrith City Council.

82 **K601 - Stormwater Management system operation and maintenance**

The stormwater management systems shall continue to be operated and maintained in perpetuity for the life of the development in accordance with the final operation and maintenance management plan.

Regular inspection records are required to be maintained and made available to Penrith City Council on request. All necessary improvements are required to be made immediately upon awareness of any deficiencies in the stormwater management systems.

83 **K Special (BLANK)**

All car spaces are to be sealed, line marked and dedicated for the parking of vehicles only and are not be used for the storage of materials, products, waste materials, etc

84 **K Special (BLANK)**

The required sight lines around the driveway entrances are not to be compromised by landscaping, fencing or signage.

85 **K Special (BLANK)**

All vehicles are to enter/exit the site in a forward direction.

Landscaping

86 L001 - General

All landscape works are to be constructed in accordance with the stamped approved plans.

Landscaping shall be maintained:

- in accordance with the approved plans, and
- in a healthy state, and in perpetuity by the existing or future owners and occupiers of the property.

If any of the vegetation comprising that landscaping dies or is removed, it is to be replaced with vegetation of the same species and, to the greatest extent practicable, the same maturity as the vegetation which died or was removed.

87 L002 - Landscape construction

The approved landscaping for the site shall be constructed by a suitably qualified and experienced landscape professional.

88 L003 - Report requirement

Upon completion of the landscape works associated with the development and **prior to the issue of an Occupation Certificate** for the development, an Implementation Report must be submitted to the Principal Certifying Authority attesting to the satisfactory completion of the landscaping works for the development. The report is to be prepared by a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to design category (2/3) landscape works.

An Occupation Certificate should not be issued until such time as a satisfactory Implementation Report has been received. If Penrith City Council is not the Principal Certifying Authority, a copy of the satisfactory Implementation Report is to be submitted to Council together with the Occupation Certificate for the development.

89 L005 - Planting of plant

All plant material associated with the construction of approved landscaping is to be planted in accordance with the Tree Planting Specification prescribed in *Penrith Development Control Plan 2014*.

90 L006 - Aust Standard

All landscape works are to meet industry best practice and the following relevant Australian Standards:

- AS 4419 Soils for Landscaping and Garden Use,
- AS 4454 Composts, Soil Conditioners and Mulches, and
- AS 4373 Pruning of Amenity Trees.

91 L008 - Tree Preservation Order

No trees are to be removed, ringbarked, cut, topped or lopped or wilfully destroyed (other than those within the proposed building footprint or as shown on the approved plans) without the prior consent of Penrith City Council and in accordance with Council's Tree Preservation Order and Policy.

92 L Special (Replacement of trees)

Prior to the issue of an Occupation Certificate, a minimum of two (2) suitable replacement trees (preferably native trees) capable of growing to minimum height of 10m height at maturity shall be planted in a suitable location within the property and a replacement street tree must be planted fronting Edna Street.

93 L Special (Tree protection)

All trees that are to be retained shall be protected in accordance with the recommendations in the Arboricultural Development Impacts Assessment Report - 1 Edna Street, Kingswood NSW, prepared by Birds Tree Consultancy, Revision C, dated 5 July, 2017, AS 4970 -2009, Section C2 Vegetation Management of the *Penrith Development Control Plan 2014* and the following:

- All excavation within the tree protection zone (TPZ) is to be carried out using non-destruction methods such as using an Air-Knife. High pressure water and Vacuum/Sucker Trucks are not suitable as the high pressure water will delaminate roots,
- No roots greater than 20mm to be cut or damaged within the TPZ of the subject trees,
- All excavation within the TPZ to be carried out under the supervision of site Arborist (AQF Level 5),
- Pavement design is to be permeable such as EcoTrihex to allow percolation of water and air and gaseous exchange within the TPZ,
- No retaining wall within the TPZ of the subject trees,
- The Stormwater pit is to be moved from within the TPZ of Tree 3 to outside the TPZ,
- The Rainwater tank is to be installed above ground and no excavation for pipework within the TPZ of the subject trees, and
- Total encroachment within the TPZ of the subject trees including over excavation for shoring etc is to be a maximum offset of 1m from the outside of the basement.

Payment of Fees

94 P001 - Costs

All roadworks, dedications and drainage works are to be carried out at the applicant's cost.

95 P002 - Fees associated with Council land (Applies to all works & add K019)

Prior to the commencement of any works on-site, all fees associated with Penrith City Council-owned land and infrastructure shall be paid to Council. These fees include Road Opening fees and Infrastructure Restoration fees.

Certification

96 Q01F - Notice of Commencement & Appointment of PCA2 (use for Fast Light only)

Prior to the commencement of any earthworks or construction works on site, the proponent is to:

- (a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent and related Construction Certificate issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and
- (b) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 6.6 of the *Environmental Planning and Assessment Act 1979*.

Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 6.6 of the *Environmental Planning and Assessment Act 1979*.

97 Q05F - Occupation Certificate for Class10

An Occupation Certificate is to be obtained from the Principal Certifying Authority on completion of all works and prior to the occupation/use of the development.

The Certificate shall not be issued if any conditions of this consent, but not the conditions relating to the operation of the development, are outstanding.

A copy of the Occupation Certificate and all necessary documentation supporting the issue of the Certificate is to be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.

Appendix - Development Control Plan Compliance

Development Control Plan 2014

Part C - City-wide Controls

C1 Site Planning and Design Principles

C1.2.5. Safety and Security (Principles of Crime Prevention through Environmental Design)

Concerns were initially raised in regards to community safety due to the terrace areas located along the ground floor of the eastern side boundary given the adjoining Callows Lane. In addition, the communal living area located at the rear of the building on the ground floor contained only a highlight window which lacked adequate passive surveillance. In this regard, Council's Community Safety Officer has advised that the proposal addresses Crime Prevention through Environmental Design (CTEPD) and Community Safety principles, and therefore the terraces are acceptable, noting that adequate tree buffers are provided along the eastern side boundary. Further, sliding doors are now incorporated along the northern elevation of the communal room and a large tall window for the staircase which is considered to provide appropriate surveillance.

C1.2.6 Maximising Access and Adaptability

The original plans included an unconventional shaped pedestrian pathway to the front entrance. This pedestrian pathway followed a north-west-north route with the access point approximately 2.5m from the south-eastern splay corner at the front boundary and includes an access ramp along the western part of the pedestrian pathway. Noting that an accessible path of travel is to be in accordance with the provisions of Building Code of Australia, the pedestrian pathway was redesigned to provide an additional stepped pathway that directly leads to the front entrance via a north/south direction. The remaining west/east orientated access ramp remains but the access point has been relocated to the south-eastern splay corner of the front boundary, which is compliant with accessibility provisions. The pedestrian pathway resembles a wide, lower case letter "h" shape and is considered to better accommodate disabled access.

In addition, consideration of providing a lift for the boarding house was explored to enable access to the upper floor level. However, further review of BCA requirements revealed that the proposal requires only two (2) accessible rooms and an accessible room located on the upper floor level is not required. In addition, the proposed platform lift that provides access from the accessible basement car parking space is compliant with BCA requirements and is therefore an acceptable outcome.

C2 Vegetation Management

C2.1 Preservation of Trees and Vegetation

The revised landscape plan provides generous landscaping embellishment across the site and is considered to adequately offset the tree loss at the front of the site.

C3 Water Management

C3.6 Stormwater Management and Drainage

Council's Development Engineer noted that the site is affected by an overland flow path at the front of the site and therefore the development proposal is subject to flood planning requirements. In this regard, the outlet control of the on-site stormwater detention (OSD) system was required to be redesigned to be above the 1% AEP flood level at this discharge point to ensure compliance with Council's Stormwater Drainage Specification for Building Developments Policy.

C5 Waste Management

C5.2.1 Siting and Design of Waste Bin Storage Areas for Residential Development

The development proposal initially failed to comply with Council's waste infrastructure requirements. The communal waste bay configuration did not provide separate unobstructed access to the waste room and bulky household goods waste bay. As such, the communal access corridor was deleted as it can potentially be obstructed by overflowing bulky items which impedes access to the waste collection bay. Several revisions of the waste bay were required noting that the mechanical ventilation riser for the basement is required to be integrated in the waste room, limiting certain waste bin layouts.

Final amendments make provision for two (2) rows of single file waste/recycling bins positioned in a north-south orientation, against the eastern and western side walls of the waste collection room, including an internal side entry accessed from the hallway and an external front entrance door. The bulky households waste bay is integrated with and separated from the waste collection, and accessed by an external front entrance double door. In addition, relevant conditions of consent are to be imposed to ensure compliance with Council's waste infrastructure and access requirements.

C10 Transport Access and Parking

C10.5 Parking, Access and Driveways

The basement parking was required to be revised to demonstrate adequate vehicle manoeuvring as advised by Council's Traffic Engineer. The original basement car parking was reconfigured from single aisle east-west orientated parking spaces along the eastern side of the basement and split into two (2) single aisle parking spaces; four (4) parking spaces in a north-south orientation along the northern part of the basement and four (4) parking spaces including an accessible parking space in an east-west orientation in the middle and front part of the basement. This involved repositioning the basement stairs from the middle part of the basement to the north-western corner of the basement and also removed the accessible car park that was originally located within the rear yard area.

The revised configuration provides adequate on-site basement parking and vehicle manoeuvring and also includes adequate motorcycle and bicycle parking spaces. In addition, the Traffic Impact Report was revised to classify the proposal from a "motel" to a new generation boarding house. The proposal in this report has been appropriately redefined in terms of determining traffic generation associated with the nature of the proposal.

D2 Residential Development

Although the *Penrith Development Control Plan 2014* contains specific provisions for boarding houses, the proposal is considered to be closely aligned to multi dwelling housing given the nature and scale of the development also noting their reference within the boarding house section of the DCP. Therefore, the provisions for multi dwelling housing is required to also be used as a basis for assessment.

D2.4 Multi Dwelling Housing

D2.4.5 Front and Rear Setbacks

The front setback was initially 6m and well forward of the established front building line along the northern side of Edna Street, noting that this front setback is approximately 7.8m. As such, the floor plan layout was reconfigured to provide for a 7.8m front setback which satisfies the minimum front setback requirement. It is also noted that the front terrace of Unit 4 was reduced in depth, however it still encroaches into the front setback by approximately 1m. Albeit, suitable landscaping in front of this terrace will screen this area and is considered to be acceptable in this instance. In addition, it is also noted that the relocated terrace encroaches into the minimum 4m rear setback by approximately 1.8m, however, given that the northern adjoining property contains a number of large trees that this area forms part of the open space area, and that the subject adjoins Callow Lane and the back of local shops, it is not considered likely that the terrace will result in any significant impacts on the character of the area or the amenity of the northern adjoining property.

D2.4.8 Landscaped Area

The proposal makes provision for approximately 40.47% of landscaped area (263.5m²). The calculated landscaped area includes the landscape verge along the western side boundary adjacent to the driveway, pedestrian entrances and elevated terraces which complies with DCP requirements. In addition, the landscape plan provides generous landscaping embellishment across the site and is considered to adequately offset the tree loss at the front of the site.

D5 Other Land Uses

D5.11 Boarding Houses

1) Local Character

The development proposal initially raised concerns in relation to the front setback treatment due to the expanse of hardstand area for the basement driveway and pedestrian pathway and an

encroachment of the building footprint into the front building line, including the front decking area for Unit 4 as previously detailed within this report.

In consideration of the above matters, the design initially did not demonstrate that it was aligned with the desired future character of the surrounding area. As such, the floor plan layout was considerably reconfigured to delete a portion of the front of the building to ensure that the established front building line along the northern side of Edna Street is retained.

A handrail was also incorporated around the pedestrian pathway which resembled a commercial premises. In this regard, the handrail was required to be removed as it was not considered to be compatible with the character of the locality.

2) Built form, Scale and Appearance

The original built form failed to provide for a sufficient mix and balance of architectural design elements. The applicant was therefore requested to significantly redesign the building and as such, a front awning/ pergola feature and some privacy screening were deleted. The front building façade now includes cladding and an additional window along the western part of the upper floor level. Below the amended upper floor level is now a rendered finish for the ground level, which is dark in colour and aids in providing visual relief to the front facade.

In addition, further amendments were necessary to better integrate the overhanging upper level and rear pergola located above the communal open space (elevated terrace) along the western elevation. This includes reinstating the front pergola and introducing a hanging vine feature situated over the basement driveway to its western side. Further, the landscaping and hedge planter box wall bounding the rear of the basement driveway was also reduced in width. As a result, the revised pergola is considered to better integrate with the front building facade, which in turn, reduces the overall length of ground floor area and is considered to present as a better design outcome when viewed from the street.

Further, the east elevation has been introduced with rendering to the ground floor level and the west elevation now incorporates additional cladding to the front portion of the upper floor level. Rendering is also provided to the front section of the ground floor, which will be visible from street view. It is also noted that a rendered feature is provided to the rear upper floor section of the east elevation and that privacy louvres have been reduced in height to cover only the upper half portion of selected windows. These amendments are considered to provide sufficient articulation.

3) Tenant Amenity, Safety and Privacy

The proposal provides a kitchen, amenities and window(s) for each boarding room. Two (2) accessible rooms are provided on the ground floor and the design permits equitable access through the ground floor and outdoor communal area. Further, the narrow staircase window along the northern elevation has been modified to a row of 3 staircase windows to improve natural surveillance to the terrace area within this northern private area.

4) Visual and Acoustic Amenity Impacts

It is noted that bedroom windows 14 and 16 overlook on to the western adjoining property's rear private open space. Given the potential for privacy impacts, a condition of consent is to be imposed to modify these windows to highlight windows. In regards to the remaining upper level bedroom windows, appropriate privacy measures are in place in the form of obscure glazing and privacy louvres, noting that the east elevation does not warrant any specific privacy measures given the outlook from these windows are only to the adjoining Callow Lane and the back of a commercial block, being garages and rear doors only.

In addition, the original proposal included a zero setback with an elevated terrace including a clothes line situated along the rear, western elevation of the building. Although amendments were submitted to reduce the width of this terrace to permit a landscape buffer of Lilly Pilly trees adjacent to the terrace, there were still concerns regarding the high potential for amenity impacts on the western adjoining property. In this regard, the terrace has been relocated to the north-eastern portion of the building and the clothes line has been relocated to the north-western corner of the site. The sliding doors along the western elevation have been modified to

regular windows and the deleted terrace area is now a non-accessible area. It is also noted that the rear terrace area has a rear setback of approximately 2.2m which encroaches into the minimum 4m rear setback requirement. However, given that the northern adjoining property contains a number of large significant trees along the rear boundary, this area of the neighbour's rear private open space is considered to be of low use.

Concern was also originally raised by Council's Environmental Section in relation to the submitted Noise Impact Assessment Report. The acoustic report calculated tenant sound power levels at a 50% patron rate with raised voices at any one time in the original outdoor communal area (terrace) located along the western side boundary, as opposed to a worst case scenario being 100% of patrons of the above. Further, the acoustic report recommends that the number of patrons using the outdoor communal area at any one time after 10:00pm should be minimised, however no specific number of patrons is proposed. As such, an amended acoustic report was required to be submitted for further review. In this regard, the revised and predicted tenant sound power levels is deemed acceptable by Council's Environmental Management Officer.

It is noted that since the amended acoustic report was submitted and reviewed by Council's Environmental Team, the terrace has been relocated to the north-western portion of the building. Notwithstanding the above, the acoustic report is considered to remain valid as the relocated terrace has a larger separation distance from adjoining properties in comparison to the original acoustic investigation. Further, the terrace is situated adjacent to large trees, which will act as a landscaping buffer and aid in reducing noise levels and any potential overlooking.

Given that the outdoor communal area is to be restricted to a maximum of ten (10) users at any one time during 6:00pm to 10:00pm and no users between 10:00pm and 7:00am, Monday to Sunday, via a recommended condition of consent, these measures are considered appropriate to mitigate any adverse amenity and privacy impacts on the adjoining properties.

5) Location

It is noted that Edna Street is a cul-de-sac, however the subject site is located on a corner lot, adjacent to Callums Lane with a large separation distance of approximately 105m from this cul-de-sac bulb. Further, Council's Traffic Engineer reviewed the accompanied Traffic Impact Report and advised that the local road network has the capacity to accommodate any traffic generation associated with the proposal. Given that the development is unlikely to result in any significant impacts on on-street parking or traffic flows in the immediate surrounding area, the site is considered to be appropriate for the proposed boarding house.

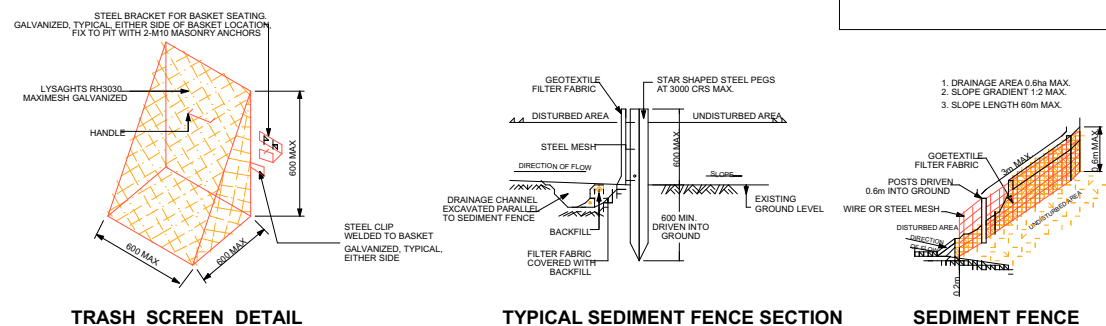
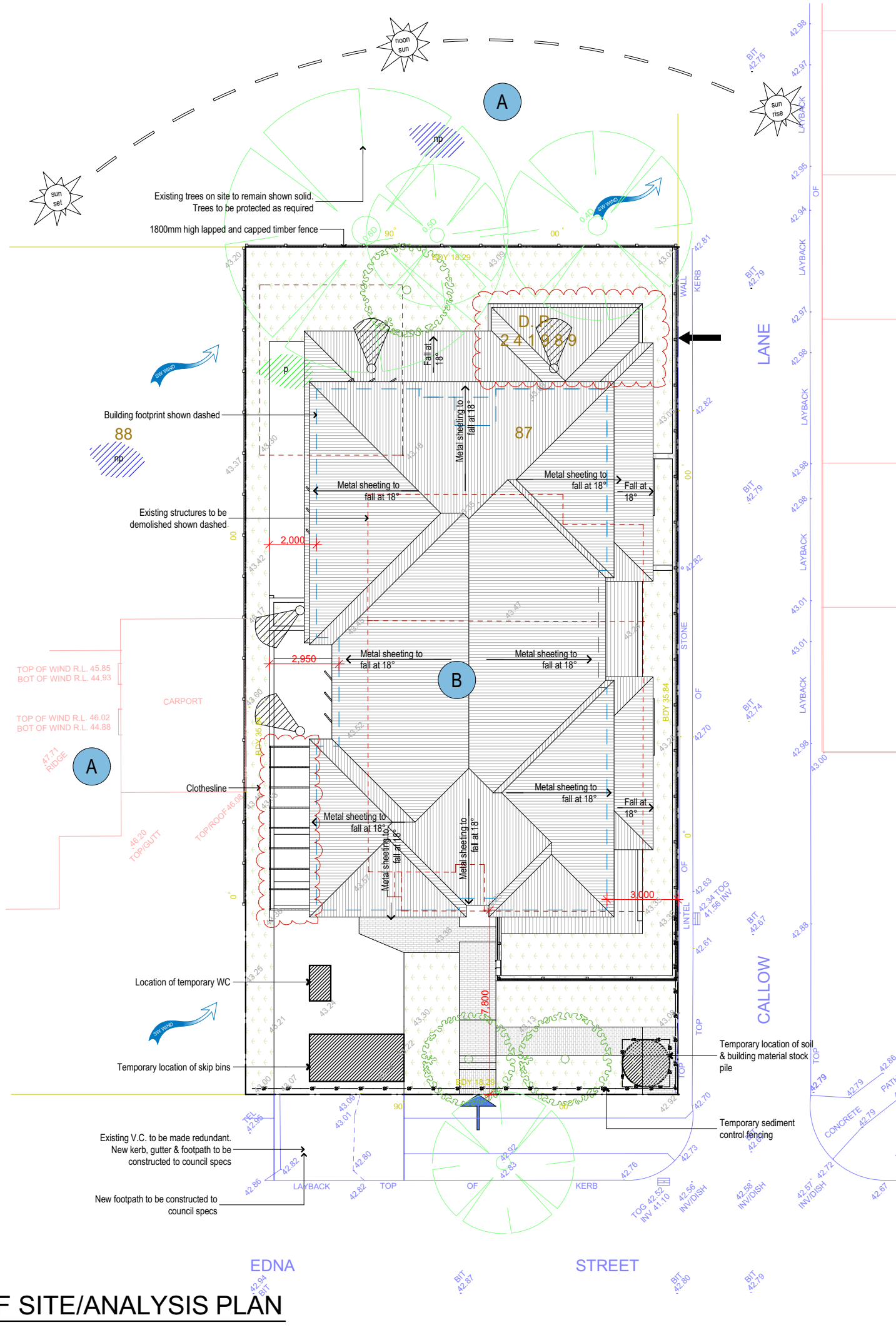
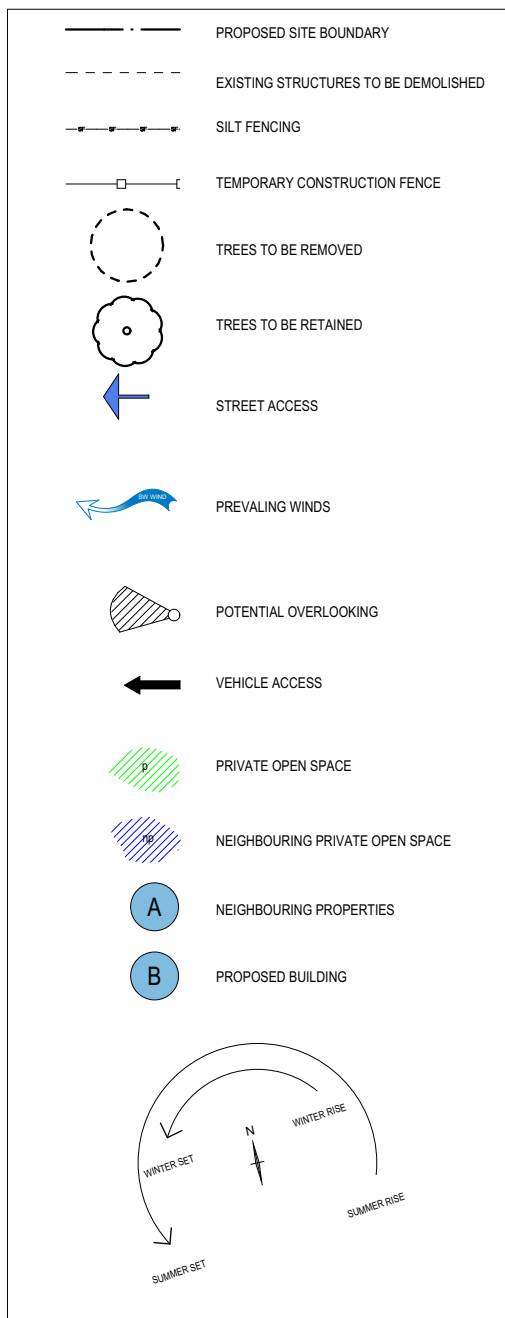
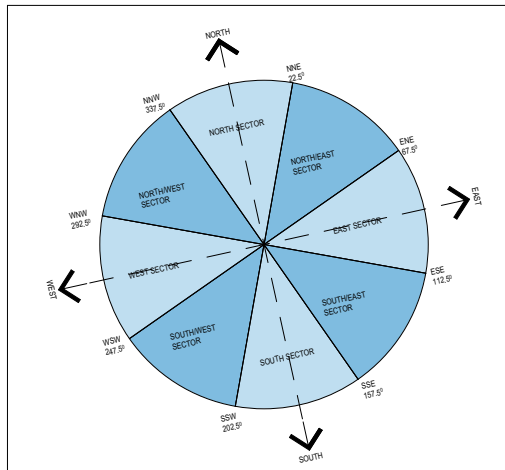
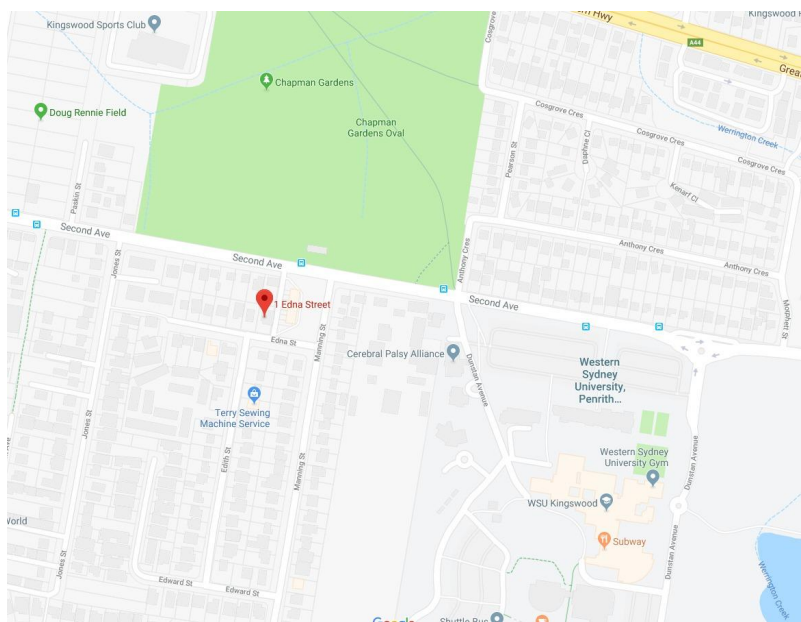
6) Plan of Management

A revised Plan of Management (POM) was required to be submitted as it originally stated that residents are to provide their own furniture and furnishings and that a Resident Special Need Register is to be completed, which is contrary to the relevant provisions applicable for general boarding houses. In addition, further details are required for the POM regarding occupancy rates, pest management, furnishing and cleaning and sanitation which will be addressed via a condition of consent with any determination granted.

PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD FOR MR ELIE ELIAS DEVELOPMENT APPROVAL

SHEET SCHEDULE	
SHEET	TITLE
0	COVER PAGE
1	SITE CONTEXT
2	LEP CONTROLS
3	BASEMENT & GROUND FLOOR PLAN
4	FIRST FLOOR PLAN
5	ELEVATIONS
6	SECTIONS & DETAILS
7	SHADOWS - JUN
8	3D VIEWS
9	MATERIALS & FINISHES

LOCATION MAP



ROOF SITE/ANALYSIS PLAN

1:200



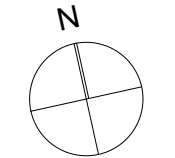
ISSUE K:	03/04/2019
ISSUE I:	DA amendments
ISSUE H:	DA amendments
ISSUE G:	DA deferral redesign
ISSUE F:	DA
ISSUE E:	DA - Amendments
ISSUE D:	DA - Schematic
ISSUE C:	Coordination
ISSUE B:	Pre-DA
ISSUE A:	Schematics

project **PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD**
 client **MR ELIE ELIAS**
 drawn: E.K. scale: as shown
 checked: J.E. date: APRIL 19 ref: 2018-140
 Council PCC

10
 16 dunlop street
 north parramatta nsw 2151
 ph: +61 2 9630 9911
 fax: +61 2 9630 9922
 mob: 0431 111 777
 admin@designcorp.com.au
 www.designcorp.com.au

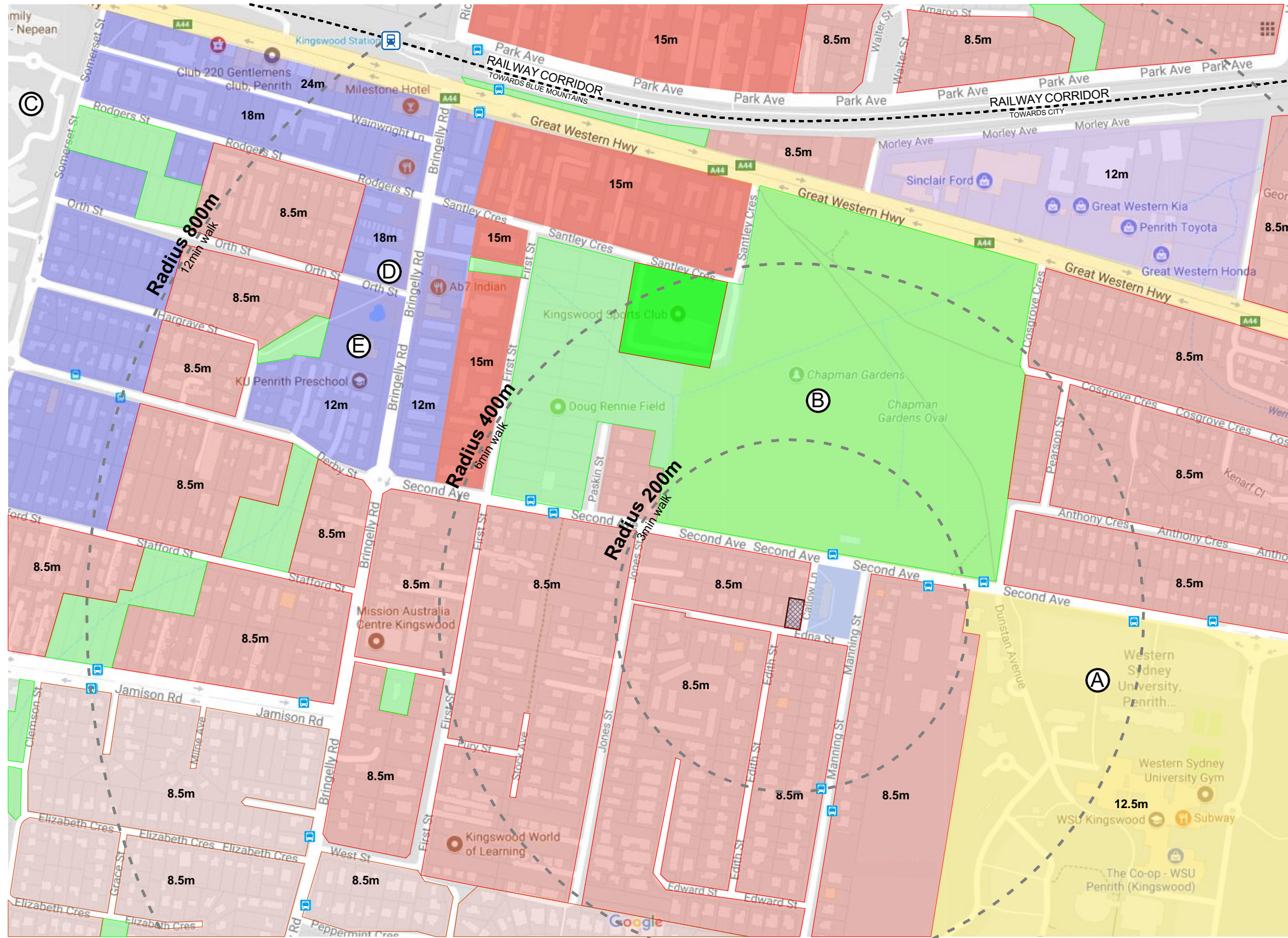


nominated architect - joe el-sabbagh 8707
 This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.
 All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



SITE CONTEXT ANALYSIS

1:5000



- LANDMARKS**
- (A) Western Sydney University, Penrith
 - (B) Chapman Gardens
 - (C) Nepean Hospital
 - (D) Australian Post
 - (E) Kingswood Neighbourhood Centre
- Bus Stop
- Kingswood Train Station
- Proposed development**
- ZONING**
- RE1 Public Recreation
 - RE2 Private Recreation
 - B1 Local Centre
 - B4 Mixed Use
 - IN2 Light Industrial
 - R2 Low Density Residential
 - R3 Medium Density Residential
 - R4 High Density Residential
 - SP2 Educational Establishment
- 8.5m Max Height of Building

issue k:	03/04/2019
issue l: DA amendments	07/02/2019
issue h: DA amendments	19/11/2018
issue g: DA deferral redesign	05/07/2018
issue f: DA	08/06/2018
issue e: DA - Amendments	31/05/2018
issue d: DA - Schematic	28/05/2018
issue c: Coordination	01/05/2018
issue b: Pre-DA	30/04/2018
issue a: Schematics	

project **PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD**

client **MR ELIE ELIAS**

drawn: E.K. scale: as shown

checked: J.E. date: APRIL 19 scale: as shown

Council ref: 2018-140 PCC

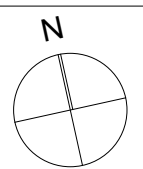
16 dunlop street
north parramatta nsw 2151
ph: +61 2 9630 9911
fax: +61 2 9630 9922
mob: 0431 111 777
admin@designcorp.com.au
www.designcorp.com.au



nominated architect - joe el-sabbagh 8707

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.

All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



issue k:	03/04/2019
issue l: DA amendments	07/02/2019
issue h: DA amendments	19/11/2018
issue g: DA deferral redesign	05/07/2018
issue f: DA	08/06/2018
issue e: DA - Amendments	31/05/2018
issue d: DA - Schematic	28/05/2018
issue c: Coordination	01/05/2018
issue b: Pre-DA	01/04/2018
issue a: Schematics	30/04/2018

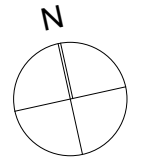
project PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD
client MR ELIE ELIAS
drawn: E.K. **scale:** as shown **date:** APRIL 19
checked: J.E. **scale:** as shown **ref:** 2018-140
Council PCC

12
 16 dunlop street
 north parramatta nsw 2151
 ph: +61 2 9630 9911
 fax: +61 2 9630 9922
 mob: 0431 111 777
 admin@designcorp.com.au
 www.designcorp.com.au

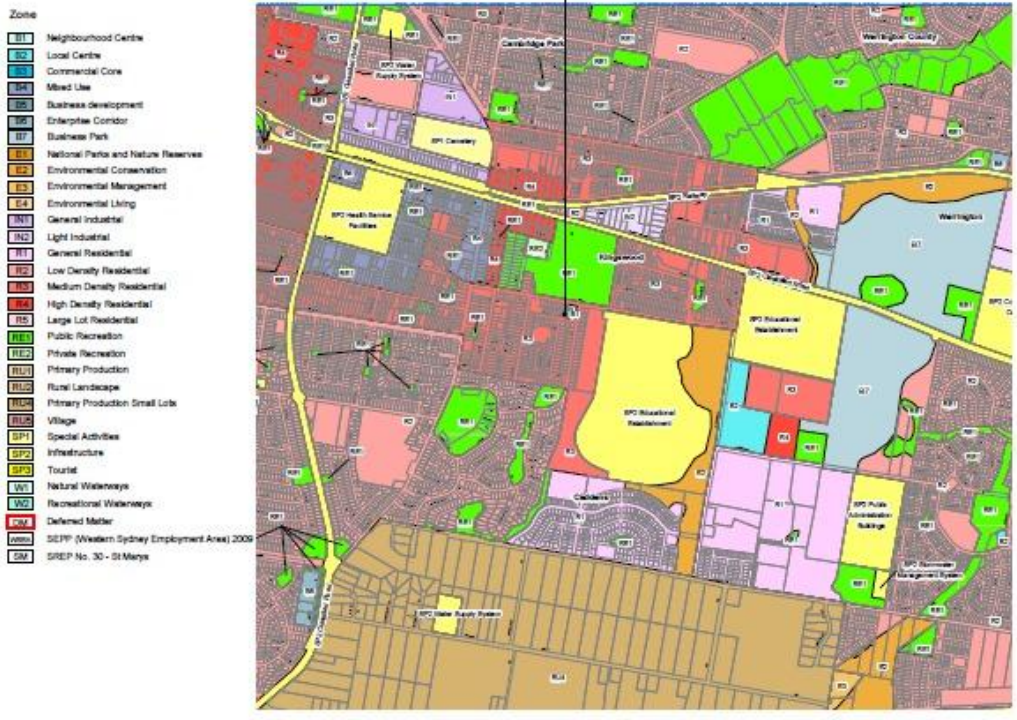


nominated architect - joe el-sabbagh 8707

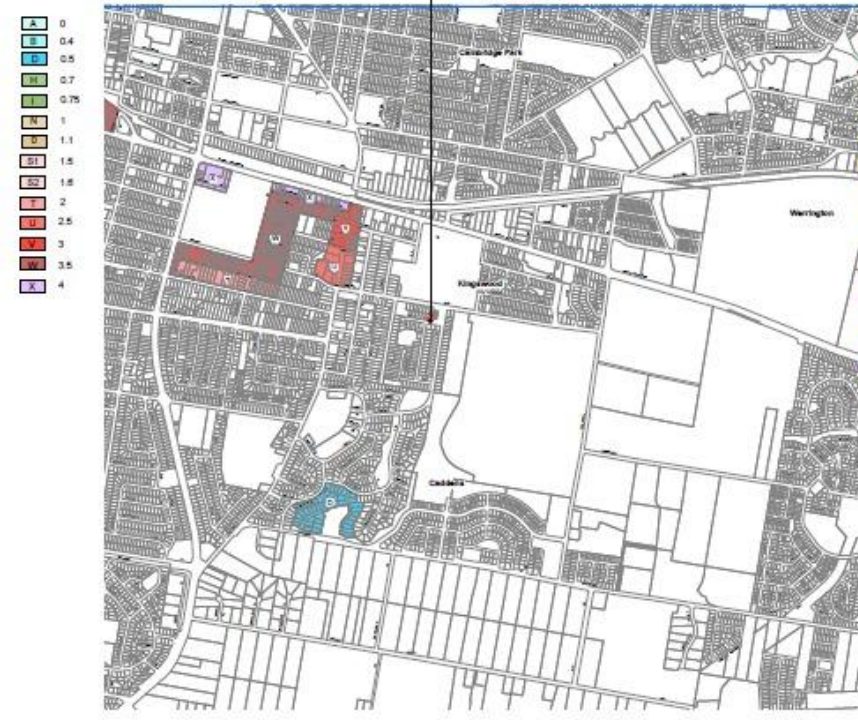
This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.
 All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



ZONING - R3



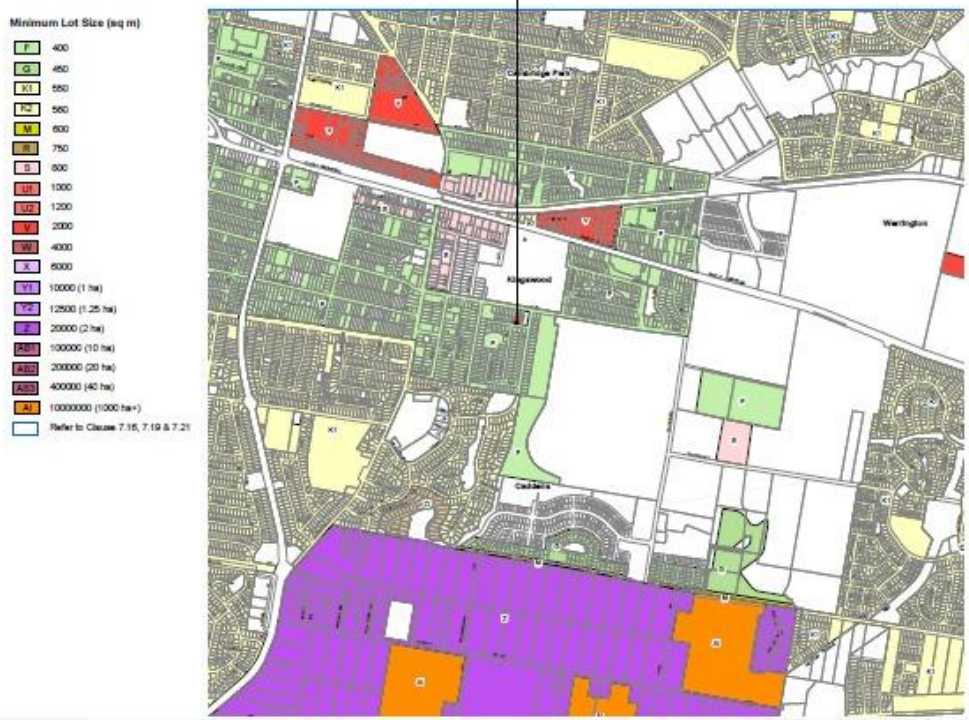
FSR - N/A



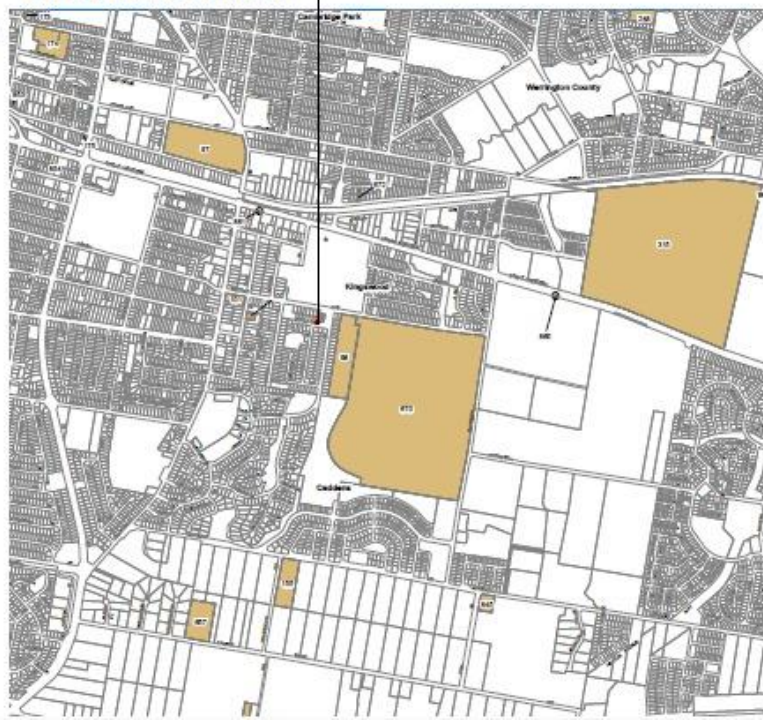
HEIGHT - 8.5m



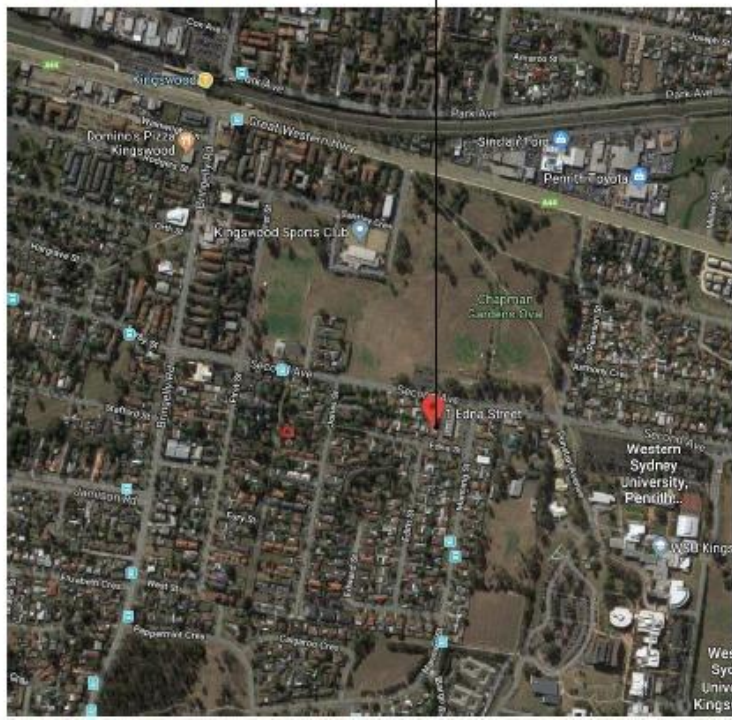
MIN LOT SIZE - 400m2



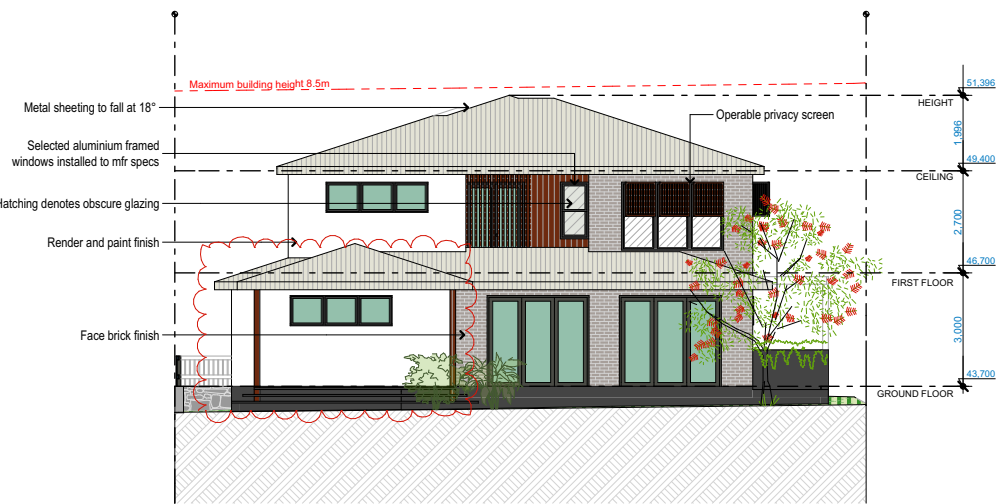
HERITAGE MAP



LOCALITY MAP



ISSUE K:	03/04/2019
ISSUE I:	DA amendments
ISSUE H:	DA amendments
ISSUE G:	DA deferral redesign
ISSUE F:	DA
ISSUE E:	DA - Amendments
ISSUE D:	DA - Schematic
ISSUE C:	Coordination
ISSUE B:	Pre-DA
ISSUE A:	Schematics



NORTH ELEVATION

1:200



EAST ELEVATION

1:200



SOUTH ELEVATION

1:200

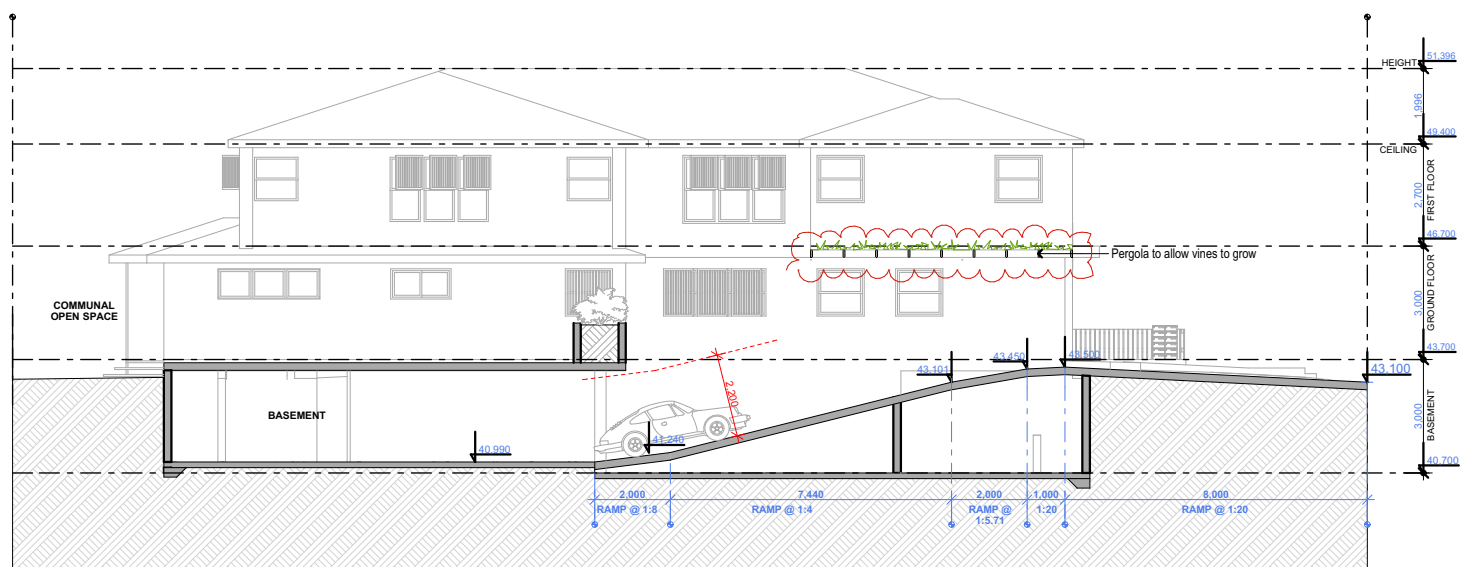


WEST ELEVATION

1:200

NOTE

1. ALL DIMENSIONS AND FLOOR AREAS ARE TO BE VERIFIED BY BUILDER PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK. ANY DISCREPANCIES ARE TO BE CONFIRMED BY THE DESIGNER.
2. LEVELS SHOWN ARE APPROXIMATE UNLESS ACCOMPANIED BY REDUCED LEVELS BY A REGISTERED SURVEYOR.
3. FIGURED DIMENSIONS ARE TO BE TAKEN IN PREFERENCE TO SCALING.
4. ALL BOUNDARY CLEARANCES MUST BE VERIFIED BY THE SURVEYOR PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
5. WHERE ENGINEERING OR HYDRAULIC DRAWINGS ARE REQUIRED, SUCH MUST TAKE PREFERENCE TO THIS DRAWING.
6. STORMWATER TO BE CONNECTED AND DISCHARGED TO COUNCIL'S REQUIREMENTS AND TO AS 3500.3-1990.
7. ALL SERVICES TO BE LOCATED AND VERIFIED BY THE BUILDER WITH THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
8. ALL DIMENSIONS TO BE VERIFIED BY BUILDER/ REGISTERED SURVEYOR ON SITE PRIOR TO CONSTRUCTION COMMENCING
9. ALL DEMOLITION AND REMOVAL WORK TO BE CARRIED OUT WITH APPROVED WASTE MANAGEMENT PLAN AND IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS & D.A. CONDITIONS



SECTION C

1:200

project **PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD**
client **MR ELIE ELIAS**

drawn: E.K. scale: as shown
checked: J.E. date: APRIL 19 ref: 2018-140
Council PCC

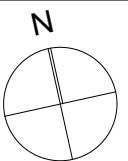
15

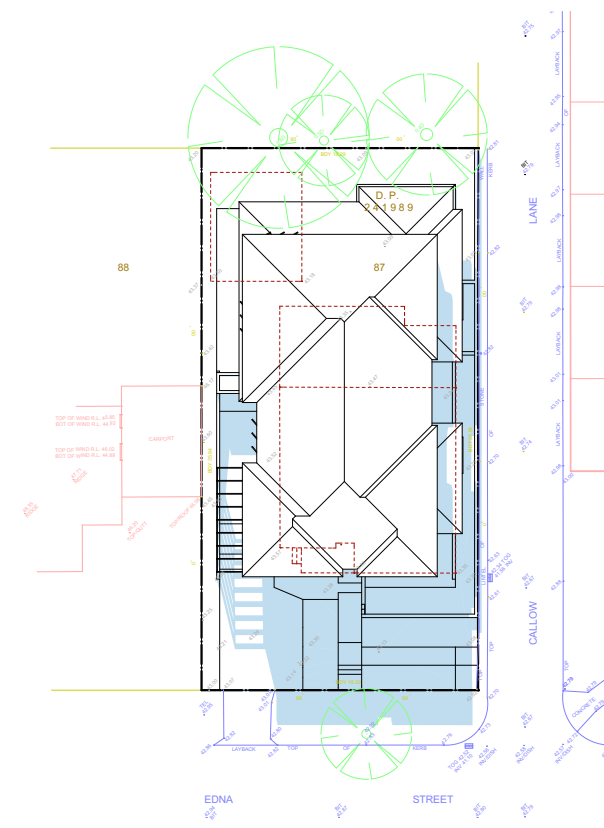
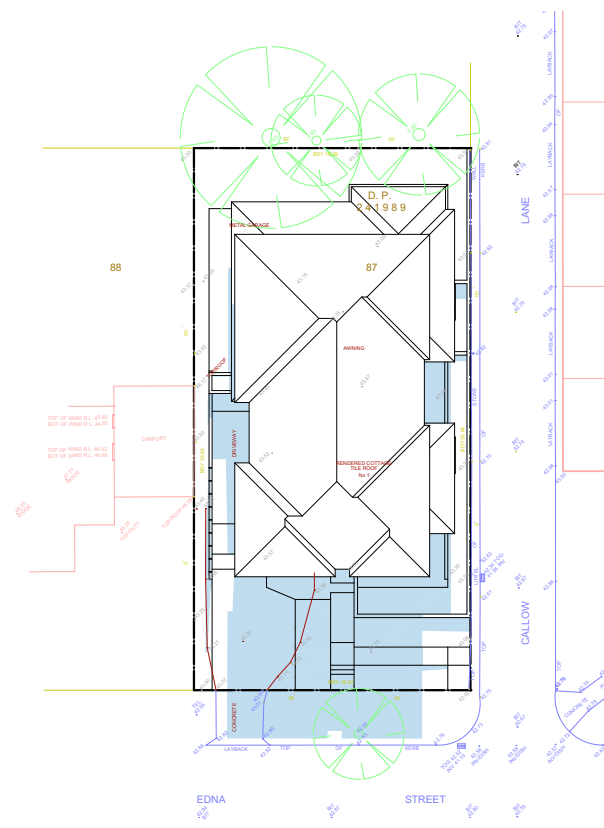
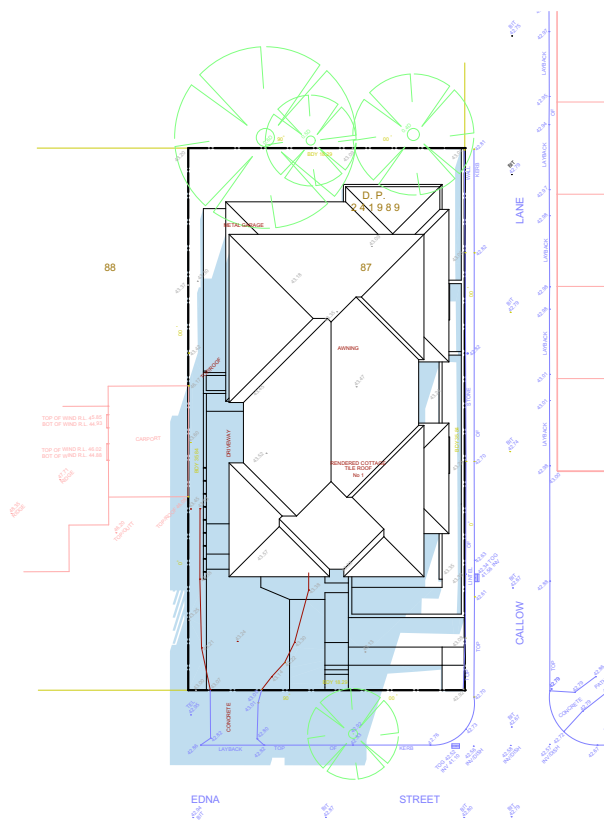
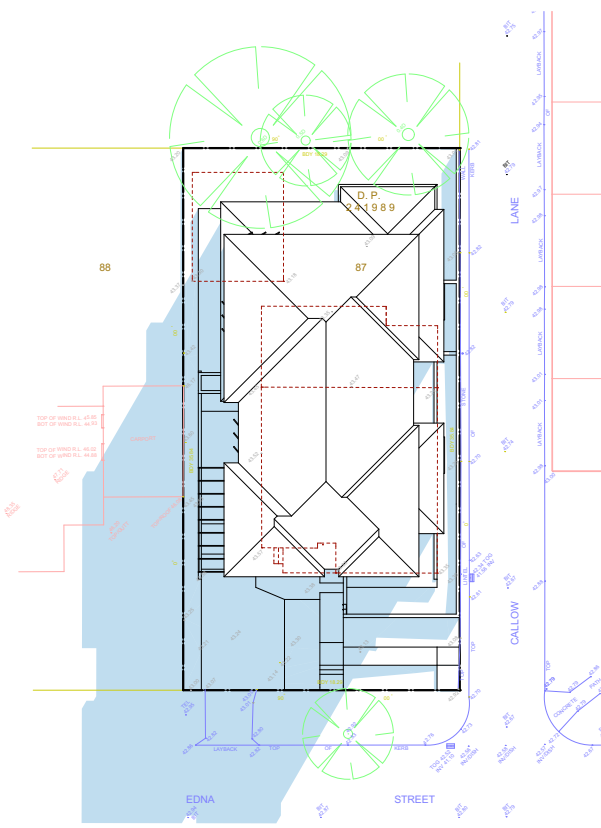
16 dunlop street
north parramatta nsw 2151
ph: +61 2 9630 9911
fax: +61 2 9630 9922
mob: 0431 111 777
admin@designcorp.com.au
www.designcorp.com.au



nominated architect - joe el-sabbagh 8707

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



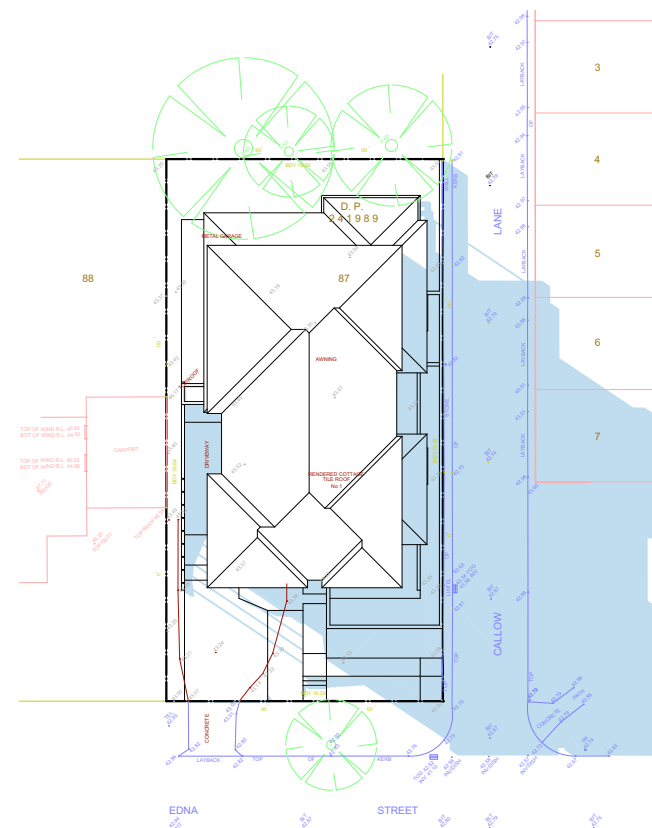
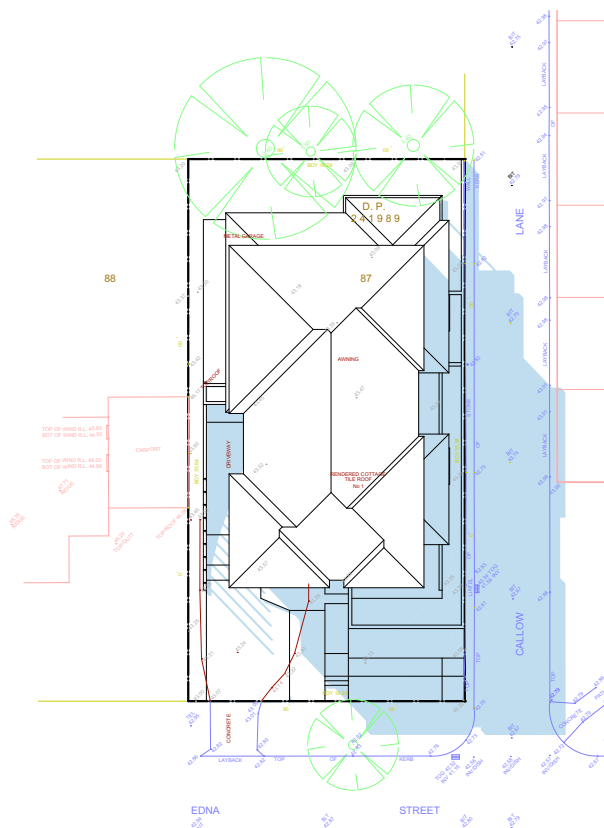
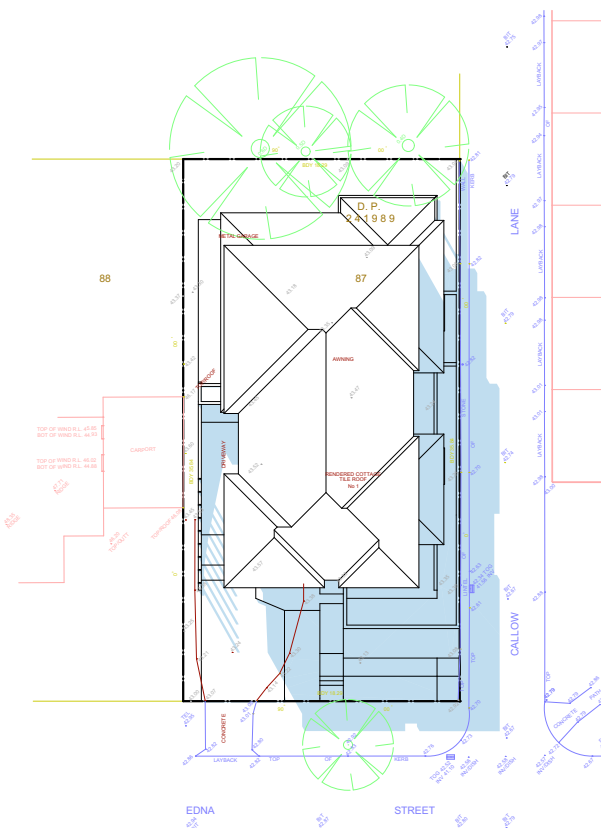


Jun-21-9am
1:500

Jun-21-10am
1:500

Jun-21-11am
1:500

Jun-21-12pm
1:500



NOTE

1. ALL DIMENSIONS AND FLOOR AREAS ARE TO BE VERIFIED BY BUILDER PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK. ANY DISCREPANCIES ARE TO BE CONFIRMED BY THE DESIGNER.
2. LEVELS SHOWN ARE APPROXIMATE UNLESS ACCOMPANIED BY REDUCED LEVELS BY A REGISTERED SURVEYOR.
3. FIGURED DIMENSIONS ARE TO BE TAKEN IN PREFERENCE TO SCALING.
4. ALL BOUNDARY CLEARANCES MUST BE VERIFIED BY THE SURVEYOR PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
5. WHERE ENGINEERING OR HYDRAULIC DRAWINGS ARE REQUIRED, SUCH MUST TAKE PREFERENCE TO THIS DRAWING.
6. STORMWATER TO BE CONNECTED AND DISCHARGED TO COUNCIL'S REQUIREMENTS AND TO AS 3500.3-1990.
7. ALL SERVICES TO BE LOCATED AND VERIFIED BY THE BUILDER WITH THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
8. ALL DIMENSIONS TO BE VERIFIED BY BUILDER/ REGISTERED SURVEYOR ON SITE PRIOR TO CONSTRUCTION COMMENCING
9. ALL DEMOLITION AND REMOVAL WORK TO BE CARRIED OUT WITH APPROVED WASTE MANAGEMENT PLAN AND IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS & D.A. CONDITIONS

Jun-21-1pm
1:500

Jun-21-2pm
1:500

Jun-21-3pm
1:500

issue k:	03/04/2019
issue l: DA amendments	07/02/2019
issue h: DA amendments	19/11/2018
issue g: DA deferral redesign	05/07/2018
issue f: DA	08/06/2018
issue e: DA - Amendments	31/05/2018
issue d: DA - Schematic	28/05/2018
issue c: Coordination	01/05/2018
issue b: Pre-DA	01/05/2018
issue a: Schematics	30/04/2018

project **PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD**
client **MR ELIE ELIAS**

drawn: E.K. scale: as shown
checked: J.E. date: APRIL 19 ref: 2018-140
Council PCC

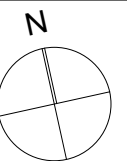
16 dunlop street
north parramatta nsw 2151
ph: +61 2 9630 9911
fax: +61 2 9630 9922
mob: 0431 111 777
admin@designcorp.com.au
www.designcorp.com.au



nominated architect - joe el-sabbagh 8707

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.

All dimensions must be checked on-site prior to the commencement of any works. Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



issue k:	03/04/2019
issue j:	DA amendments
issue i:	DA amendments
issue h:	DA amendments
issue g:	DA deferral redesign
issue f:	DA
issue e:	DA - Amendments
issue d:	DA - Schematic
issue c:	Coordination
issue b:	Pre-DA
issue a:	Schematics



VIEW FROM CORNER

COMMUNAL AREA



SOUTH SIDE VIEW

VIEW FROM LANE

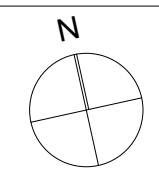
project PROPOSED NEW GENERATION
BOARDING HOUSE
@ 1 EDNA ST KINGSWOOD
client MR ELIE ELIAS
drawn: E.K. **scale:** as shown
checked: J.E. **date:** APRIL 19 **ref:** 2018-140
Council PCC

18
 16 dunlop street
 north parramatta nsw 2151
 ph: +61 2 9630 9911
 fax: +61 2 9630 9922
 mob: 0431 111 777
 admin@designcorp.com.au
 www.designcorp.com.au



nominated architect - joe el-sabbagh 8707

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.
 All dimensions must be checked on-site prior to the commencement of any works.
 Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



PROPOSED NEW GENERATION BOARDING HOUSE AT 1 EDNA ST KINGSWOOD, MATERIALS AND FINISHES SCHEDULE

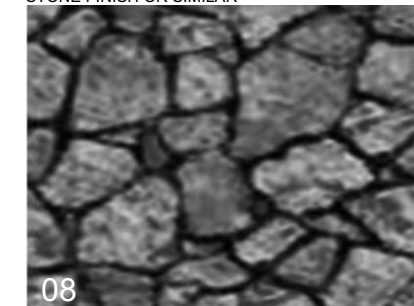


issue k:	03/04/2019
issue j:	07/02/2019
issue i:	19/11/2018
issue h:	05/07/2018
issue g:	08/06/2018
issue f:	31/05/2018
issue e:	28/05/2018
issue d:	01/05/2018
issue c:	01/05/2018
issue b:	01/05/2018
issue a:	30/04/2018



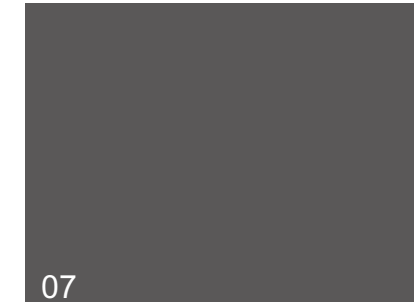
PLANTER BOXES

STONE FINISH OR SIMILAR



DOORS & WINDOWS

ALUMINIUM - COLORBOND RAKU



ROOF MATERIAL

METAL SHEETING - COLORBOND SHALE GREY OR SIMILAR



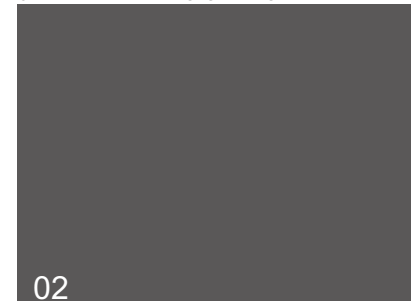
EXTERNAL BRICK WALLS

FACE BRICK - BORAL VOLCANIC OR SIMILAR



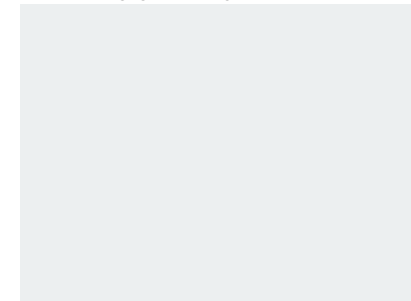
EXTERNAL RENDER 01

CEMENT RENDER - DULUX RAKU



EXTERNAL RENDER 02

PAINTED - DULUX WHITE ON WHITE



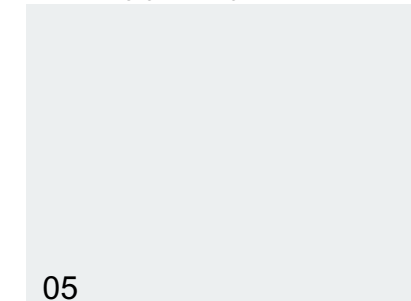
EXTERNAL CLADDING

TIMBER FINISH OR SIMILAR



FASCIA & SOFFIT

PAINTED - DULUX WHITE ON WHITE



project **PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD**
client **MR ELIE ELIAS**

drawn: E.K. scale: as shown
checked: J.E. date: APRIL 19 ref: 2018-140
Council PCC

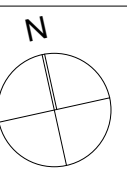
19

16 dunlop street
north parramatta nsw 2151
ph: +61 2 9630 9911
fax: +61 2 9630 9922
mob: 0431 111 777
admin@designcorp.com.au
www.designcorp.com.au

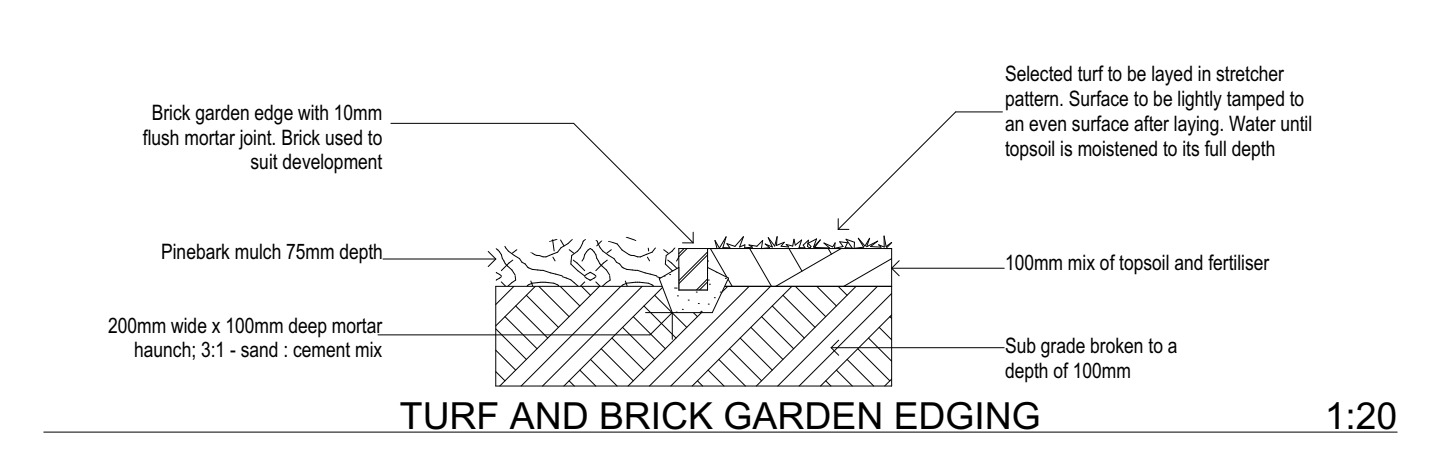
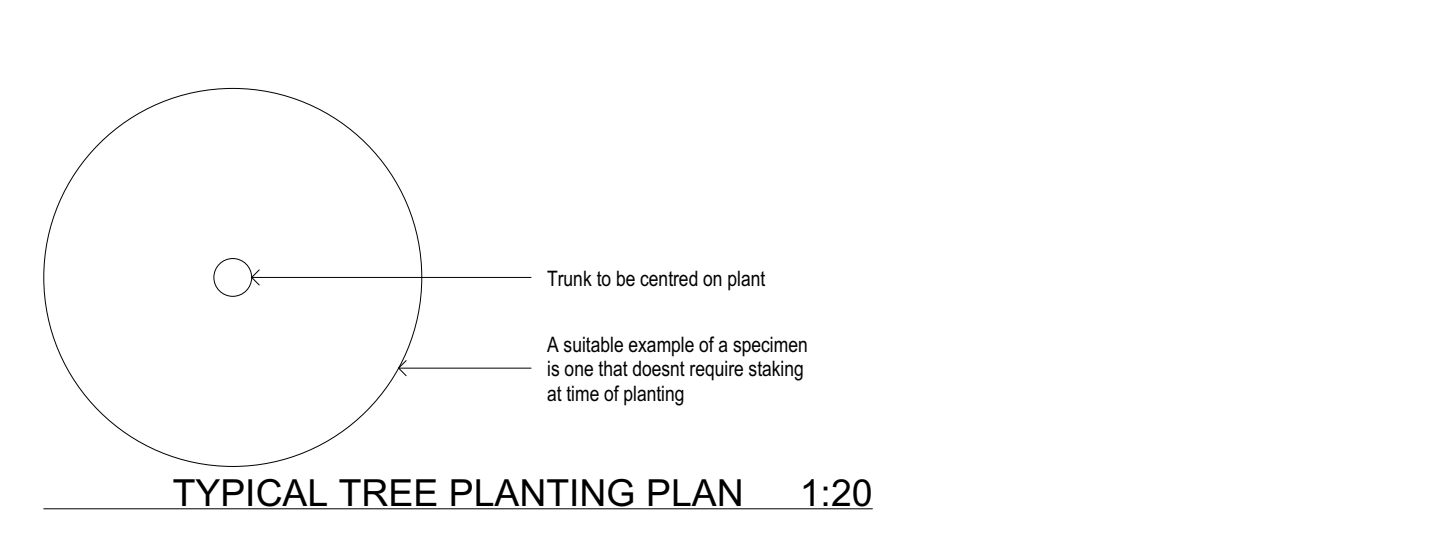
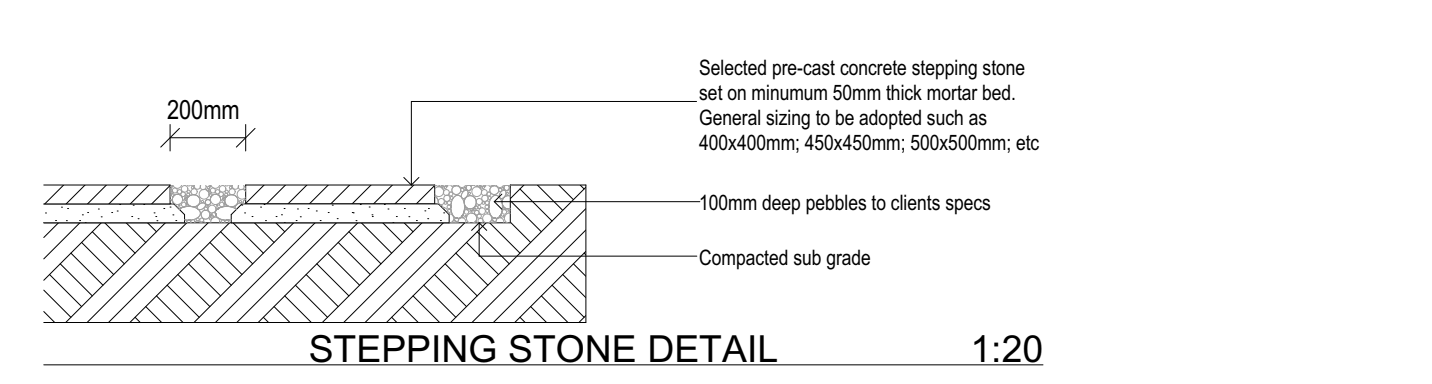
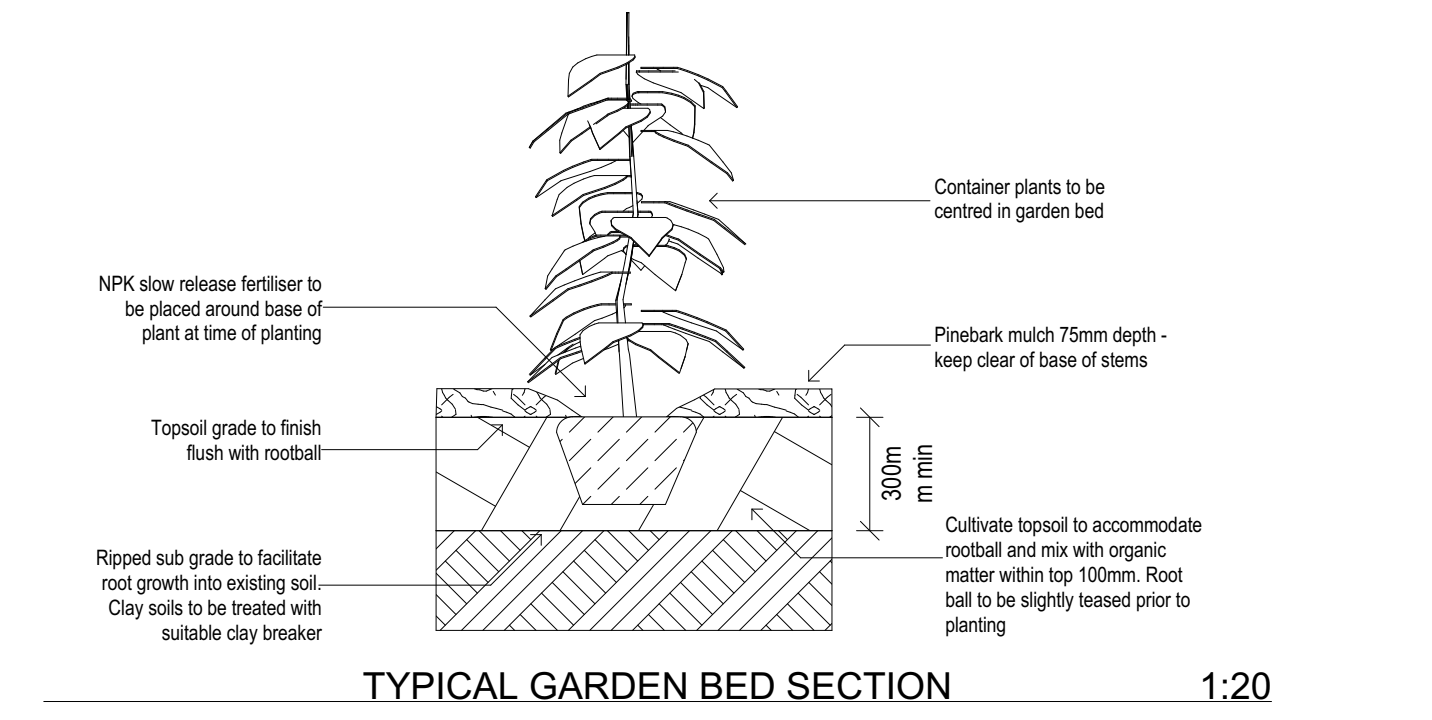
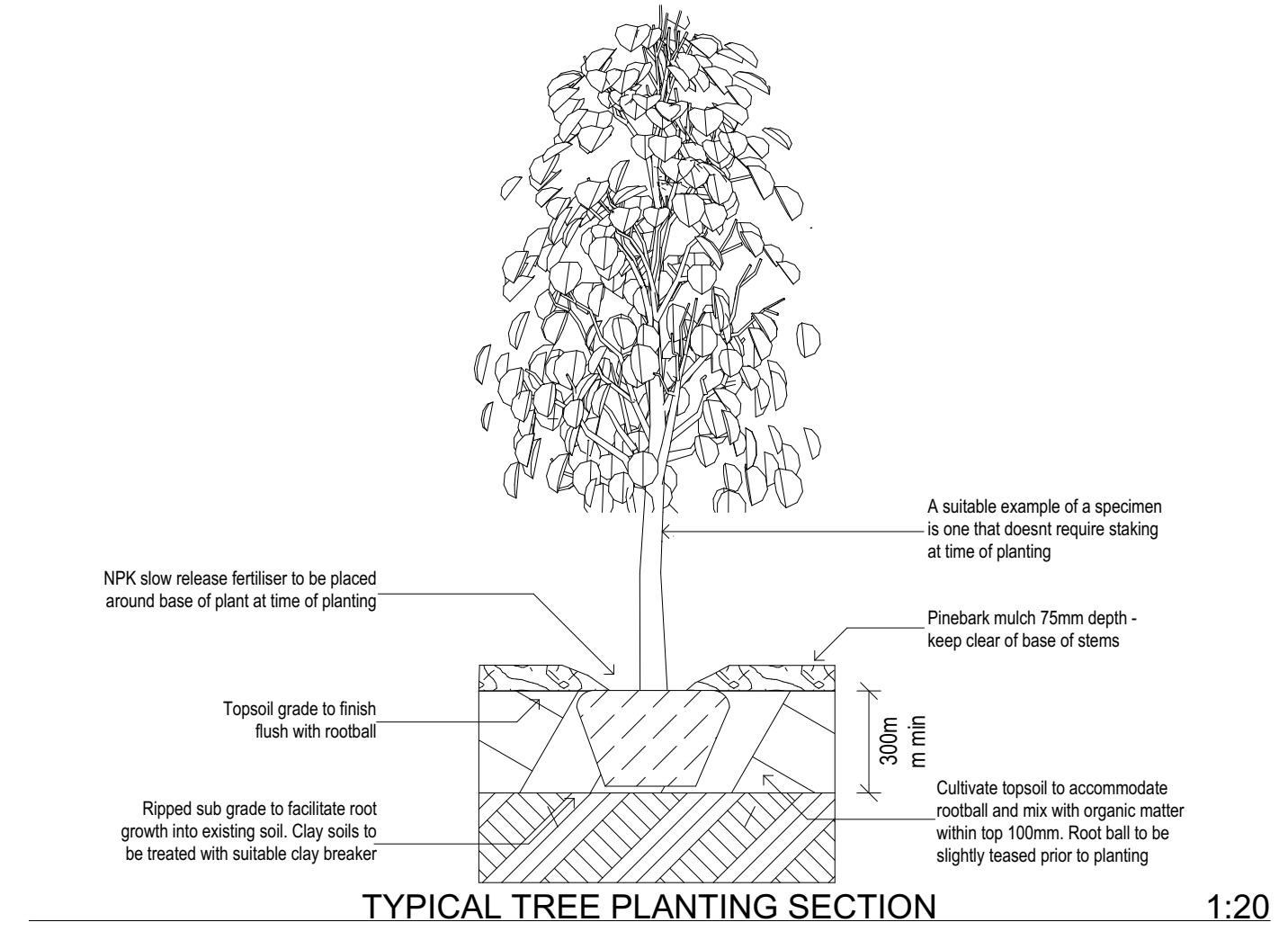
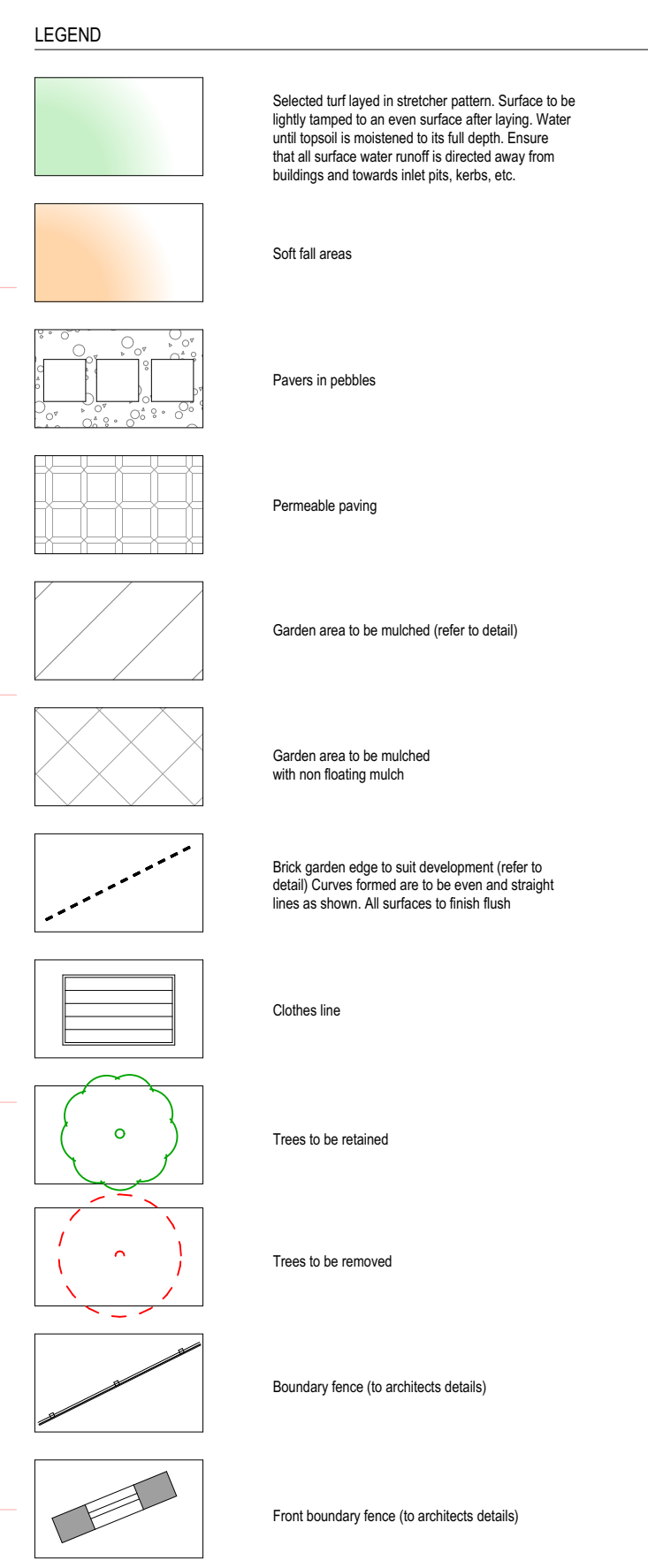
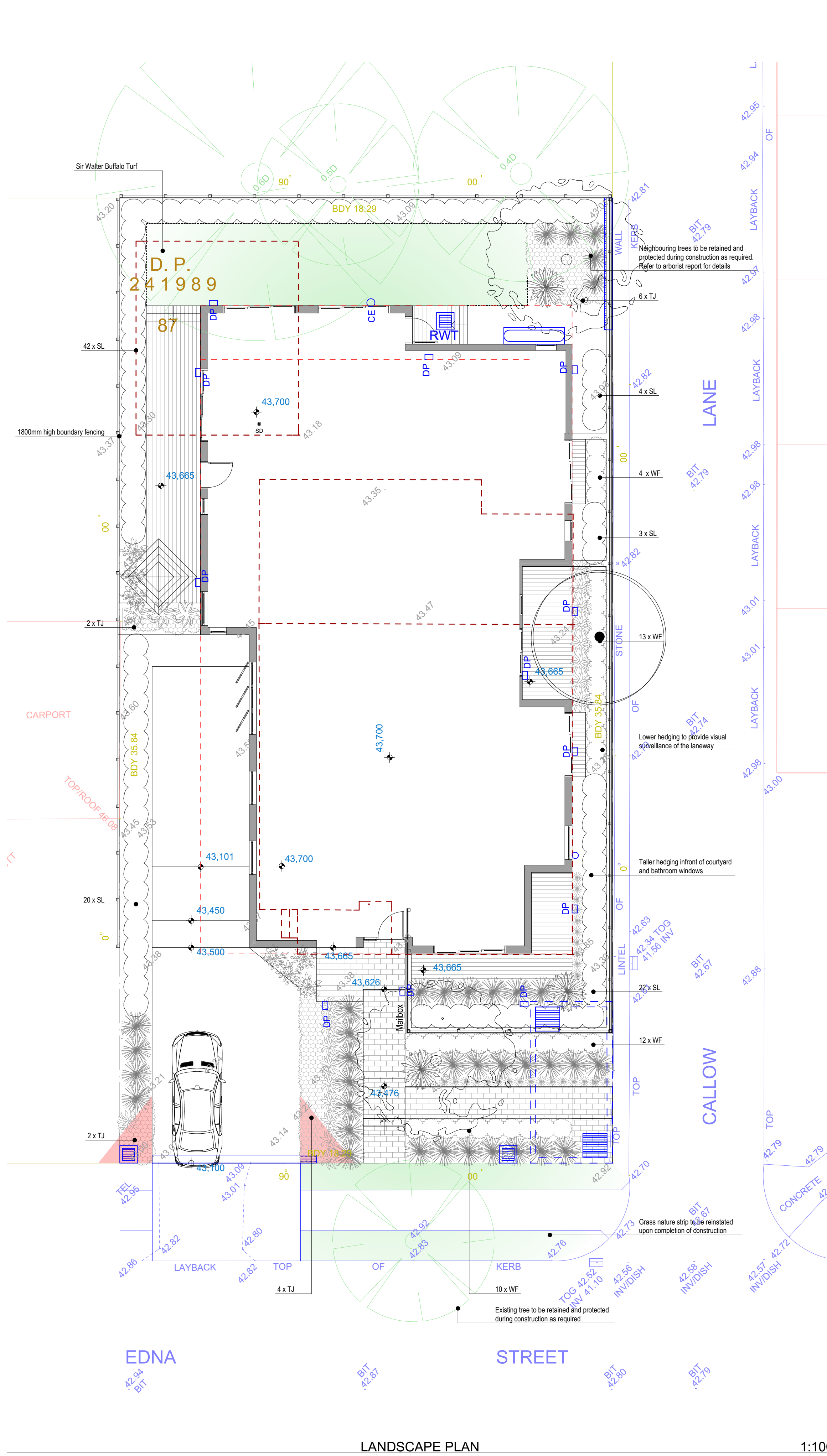
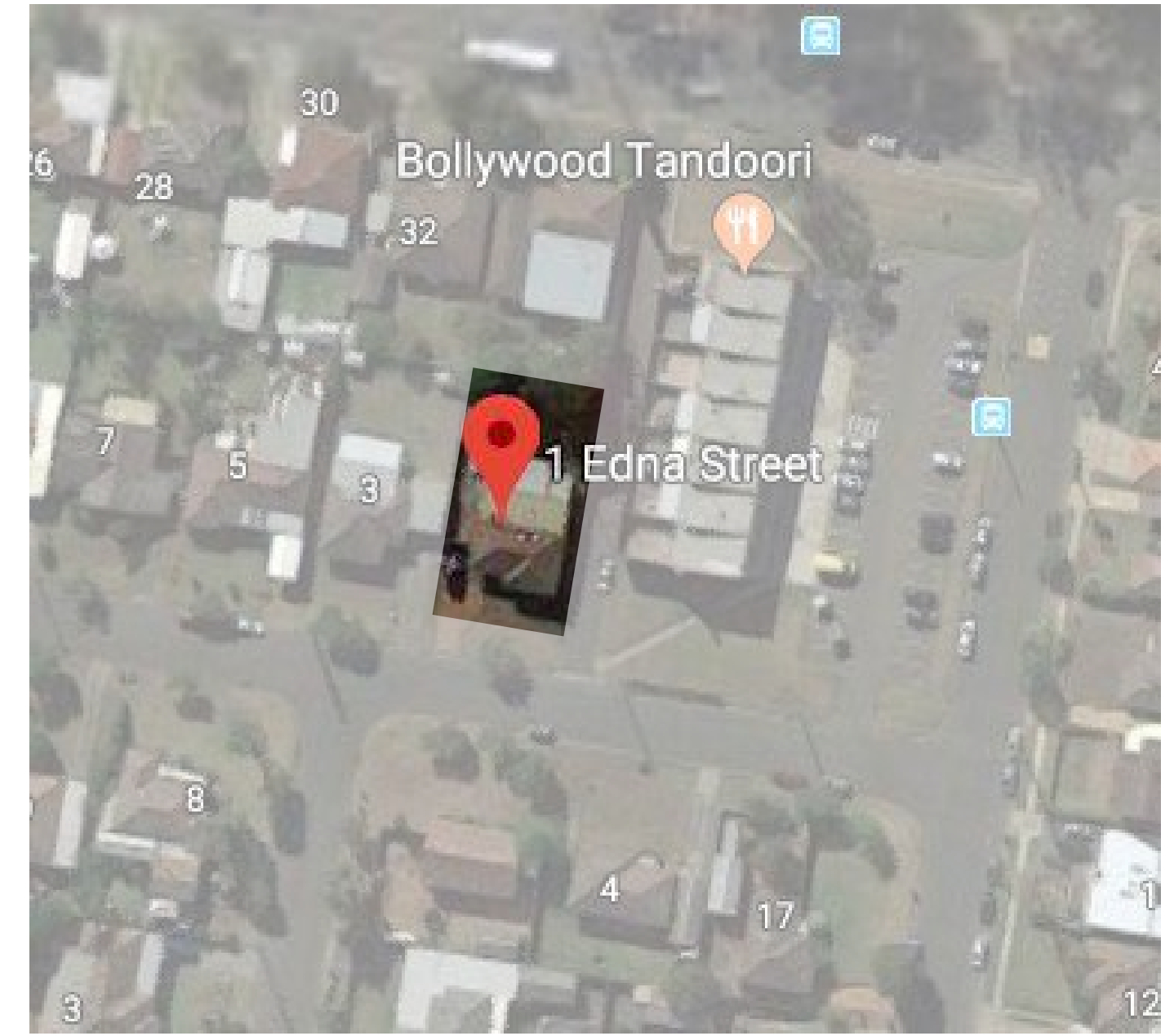


nominated architect - joe el-sabbagh 8707

This document is COPYRIGHT and the property of DESIGNCORP ARCHITECTS Pty. Ltd. It is not to be retained, copied or used without the prior written permission of the author.
All dimensions must be checked on-site prior to the commencement of any works.
Any discrepancies are to be brought to the attention of DESIGNCORP ARCHITECTS.



PROPOSED LANDSCAPE DESIGN @ 1 EDNA STREET, KINGSWOOD FOR MR ELIE ELIAS DEVELOPMENT APPROVAL

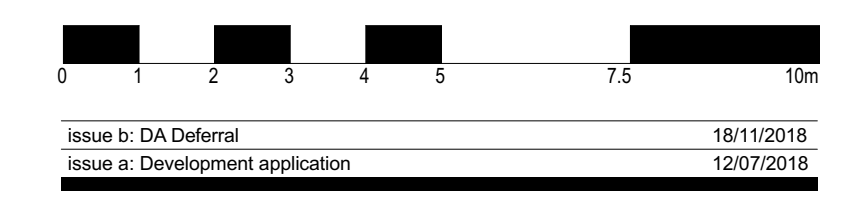


PLANTING SCHEDULE

Note: Plant symbols on plan refers directly to table below. Plants to be mass planted have number allocated accordingly *denotes native species

Symbol	Code	Botanical Name	Common Name	Mature Height	Pot size	Quantity
	TJ	Trachelospermum jasminoides	Star Jasmine	300mm	140mm	14
	LM	Liriope muscari cvs	Lily Turf	400mm	50mm	26
	LLT	Lomandra longifolia 'Tanika'	Tanika Lomandra	700mm	140mm	18
	WF	Westringia frutescens *	Coastal Rosemary	1,000mm	200mm	39
	PX	Phlloendron 'Xanadu'	Xanadu	1,000mm	140mm	4
	PAR	Pennisetum advena 'Rubrum'	Purple Fountain Grass	1,200mm	140mm	32
	LH	Lomandra hysterix *	Katie's Belles Lomandra	1,500mm	150mm	3
	DE	Doryanthes excelsa *	Gymea Lily	1,500mm	25L	3
	SL	Syzygium leuhmannii *	Lily Pilly 'Royal Flame'	2,000mm	200mm	91
	ER	Elaeocarpus reticulatus *	Blueberry Ash	10,000mm	45L	1
	TL	Tristania laurina *	Water Gum	15,000mm	75L	1

- ### NOTES
- Contractors must verify all dimensions on site before commencing work which must be approved before manufacturing
 - Do not scale off drawing. If in doubt all dimensions are to be verified by designer
 - This drawing is to be read in conjunction with the approved architectural, hydraulic and survey plans
 - All trees to be retained shall be protected as per arborist report and/or council requirements. All pruning shall be in accordance with A.S. 4373
 - All landscape works shall comply with all council DA & CC conditions and all relevant Australian Standards. Any deviation from the approved design is not authorised under the development consent. Any alteration to design and plant material must be approved by the accredited certifier
 - Irrigation system - If required, shall be designed & installed to comply with AS 2698.1-1994, AS 2698.2-1995, AS 2698.3-1990, water board and other relevant authority regulations
 - All landscape works are to be maintained for a period of 12 months after final completion. All plants that fall are to be replaced with the same species. Mulch is to be maintained at specified depth. All plants and turf shall be watered on a regular basis to maintain moisture levels required for optimum growth. All garden areas are to be maintained free from weeds
 - Minimum BASIX requirement in relation to native landscaped area to be met
 - Planted areas within on site detentions or any planted areas on a flood risk sites or sites that contain overland flow are to be mulched with non floating mulch to avoid feeding material



PO BOX 5081
Old Toongabbie NSW 2146
mob: 0413 933 613
info@andrewmurphydesign.com.au

ANDREW MURPHY DESIGN ABN 658019745153


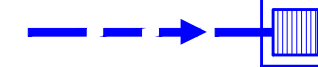
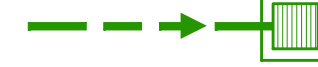






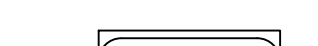


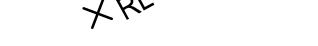

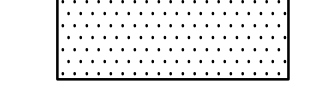




Project: PROPOSED LANDSCAPE DESIGN @ 1 EDNA STREET, KINGSWOOD
Client: MR ELIE ELIAS
drawn: A.M. | date: NOV18 | ref: 2018-053 | Council PCC

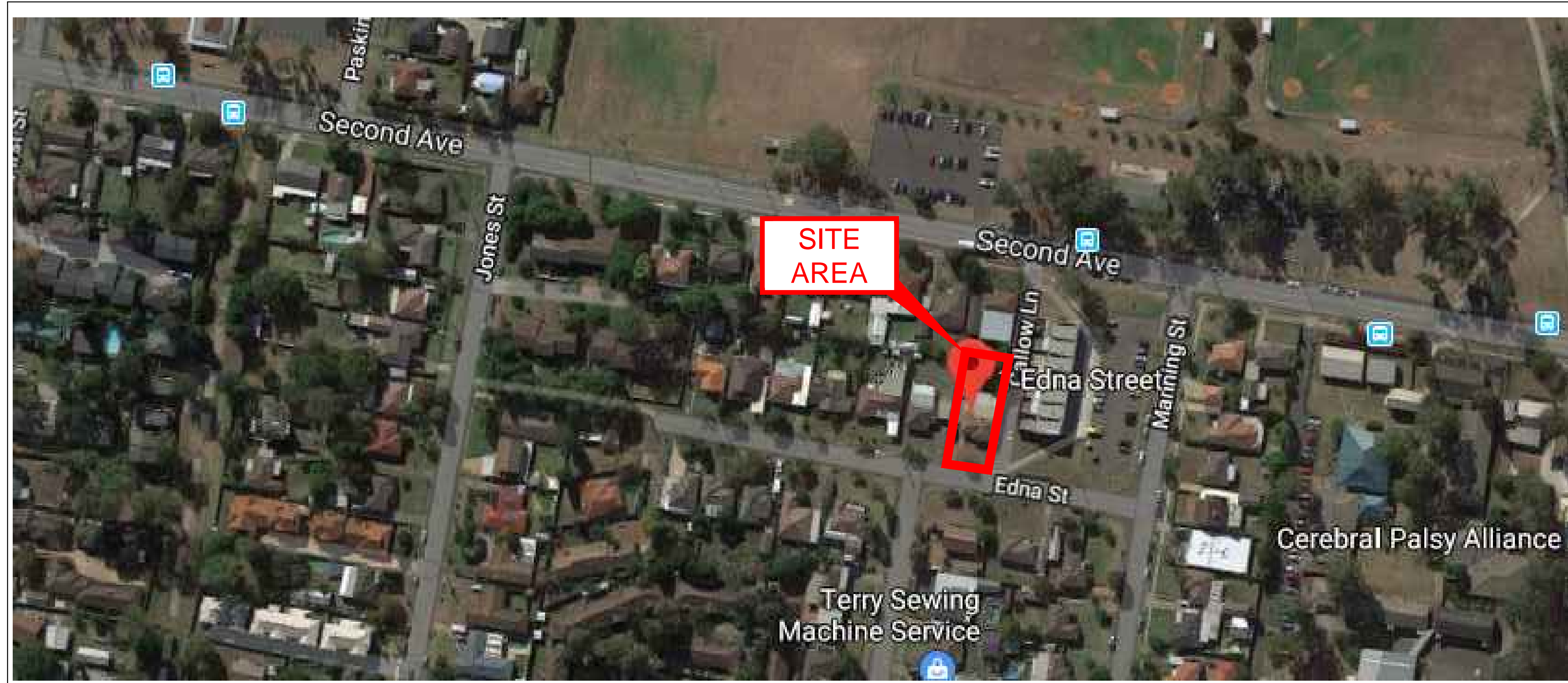
B01

1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE

STORMWATER CONCEPT PLANS

LEGEND

-  PROPOSED STORMWATER BYPASSING OSD
-  PROPOSED STORMWATER DRAINING TO RWT
-  PROPOSED STORMWATER DRAINING TO OSD
-  SUBSOIL DRAINAGE
-  EXISTING SEWER MAIN (FROM RECORDS)
-  GUTTER DOWNPIPE
-  ROOF GUTTER HIGH POINT
-  PLANTER GRATE
-  RAINWATER OUTLET
-  Ø300 CLEANING EYE
-  2,000L RAINWATER TANK
-  SURFACE FLOW ARROWS
-  DESIGN SURFACE LEVEL
-  EXISTING SURFACE LEVEL
-  PROPOSED OSD STORAGE
-  ROOF AREA TO RAINWATER TANK
-  TILED AREA
-  TREES TO BE RETAINED
-  TREES TO BE REMOVED



LOCALITY PLAN
N.T.S.

GENERAL NOTES

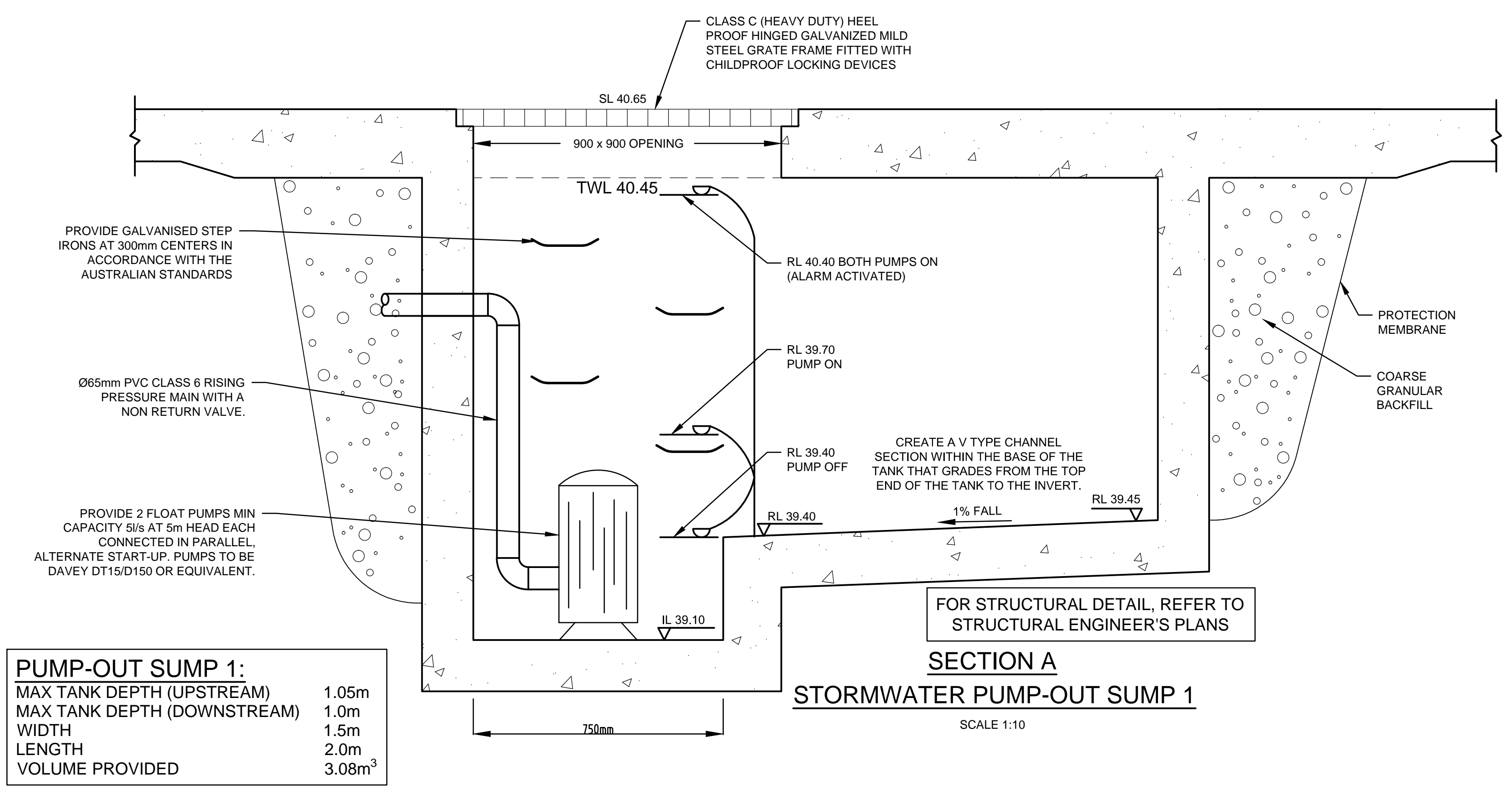
1. ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
2. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
3. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
4. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
5. PITS LESS THAN 600mm DEEP MAY BE BRICK, PRECAST OR CONCRETE.
6. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
7. ALL EXTERNAL SLABS TO BE WATERPROOFED.
8. ALL GRATES TO HAVE CHILD PROOF LOCKS.
9. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
10. ALL DPs TO HAVE LEAF GUARDS.
11. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
12. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
14. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
15. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
16. CARE TO BE TAKEN AROUND EXISTING SEWER. STRUCTURAL ADVICE IS REQUIRED FOR SEWER PROTECTION AGAINST ADDITIONAL LOADING FROM NEW PITS, PIPES, RETAINING WALLS AND OSD BASIN WATER LEVELS.
17. ALL PIPES IN BALCONIES TO BE Ø65 uPVC CAST IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS/PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION
18. THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES.

DRAWING INDEX	
Drawing No.	DESCRIPTION
000	COVER SHEET, LEGEND & NOTES
101	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 1 OF 2
102	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 2 OF 2
103	STORMWATER CONCEPT PLAN
104	ON-SITE DETENTION TANK AND CALCULATION SHEET
105	MISCELLANEOUS DETAILS SHEET

PIPES NOTE:
 Ø65 PVC @ MIN 1.0%
 Ø90 PVC @ MIN 1.0%
 Ø100 PVC @ MIN 1.0%
 Ø150 PVC @ MIN 1.0%
 Ø225 PVC @ MIN 0.5%
 Ø300 PVC @ MIN 0.4%
 UNLESS NOTED OTHERWISE

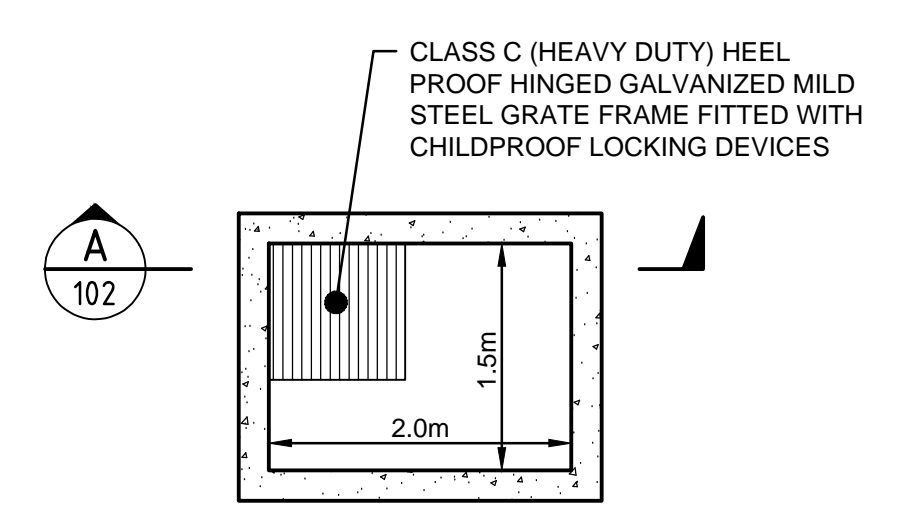
NOT FOR CONSTRUCTION

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">D</td><td style="width: 75%;">COUNCIL COMMENTS</td><td style="width: 10%;">23/01/2019</td><td style="width: 10%;">EHZ</td><td style="width: 10%;">JAB</td></tr> <tr><td>C</td><td>COUNCIL COMMENTS</td><td>19/11/2018</td><td>EHZ</td><td>JAB</td></tr> <tr><td>B</td><td>ARCHITECTURAL AMENDMENTS</td><td>06/07/2018</td><td>EHZ</td><td>JAB</td></tr> <tr><td>A</td><td>ISSUE FOR DEVELOPMENT APPLICATION</td><td>28/06/2018</td><td>SMF</td><td>JAB</td></tr> <tr> <th>Issue</th> <th>Description</th> <th>Date</th> <th>Design</th> <th>Checked</th> </tr> </table>	D	COUNCIL COMMENTS	23/01/2019	EHZ	JAB	C	COUNCIL COMMENTS	19/11/2018	EHZ	JAB	B	ARCHITECTURAL AMENDMENTS	06/07/2018	EHZ	JAB	A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB	Issue	Description	Date	Design	Checked	Certification By:  Architect Designcorp 16 Dunlop Street, North Parramatta, NSW 2151 EMAIL: admin@designcorp.com.au PHONE: (+612) 9630 9911 WEB: www.designcorp.com.au	Client Mr. Elie Elias Council Penrith City Council	Scale  AUSTRALIAN CONSULTING ENGINEERS. PTY LTD - A.C.N. 084 059 941 SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137 PH: (02) 9763 1500 FX: (02) 9763 1515 EMAIL: info@aceeng.com.au	Project 1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE STORMWATER CONCEPT PLANS DEVELOPMENT APPLICATION	Drawing Title COVER SHEET, LEGEND & NOTES Scale: A1 Project No: 180698 Dwg. No: 000 Issue: D
D	COUNCIL COMMENTS	23/01/2019	EHZ	JAB																										
C	COUNCIL COMMENTS	19/11/2018	EHZ	JAB																										
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EHZ	JAB																										
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB																										
Issue	Description	Date	Design	Checked																										



PUMP-OUT SUMP 1:

MAX TANK DEPTH (UPSTREAM)	1.05m
MAX TANK DEPTH (DOWNSTREAM)	1.0m
WIDTH	1.5m
LENGTH	2.0m
VOLUME PROVIDED	3.08m ³



NOTE:

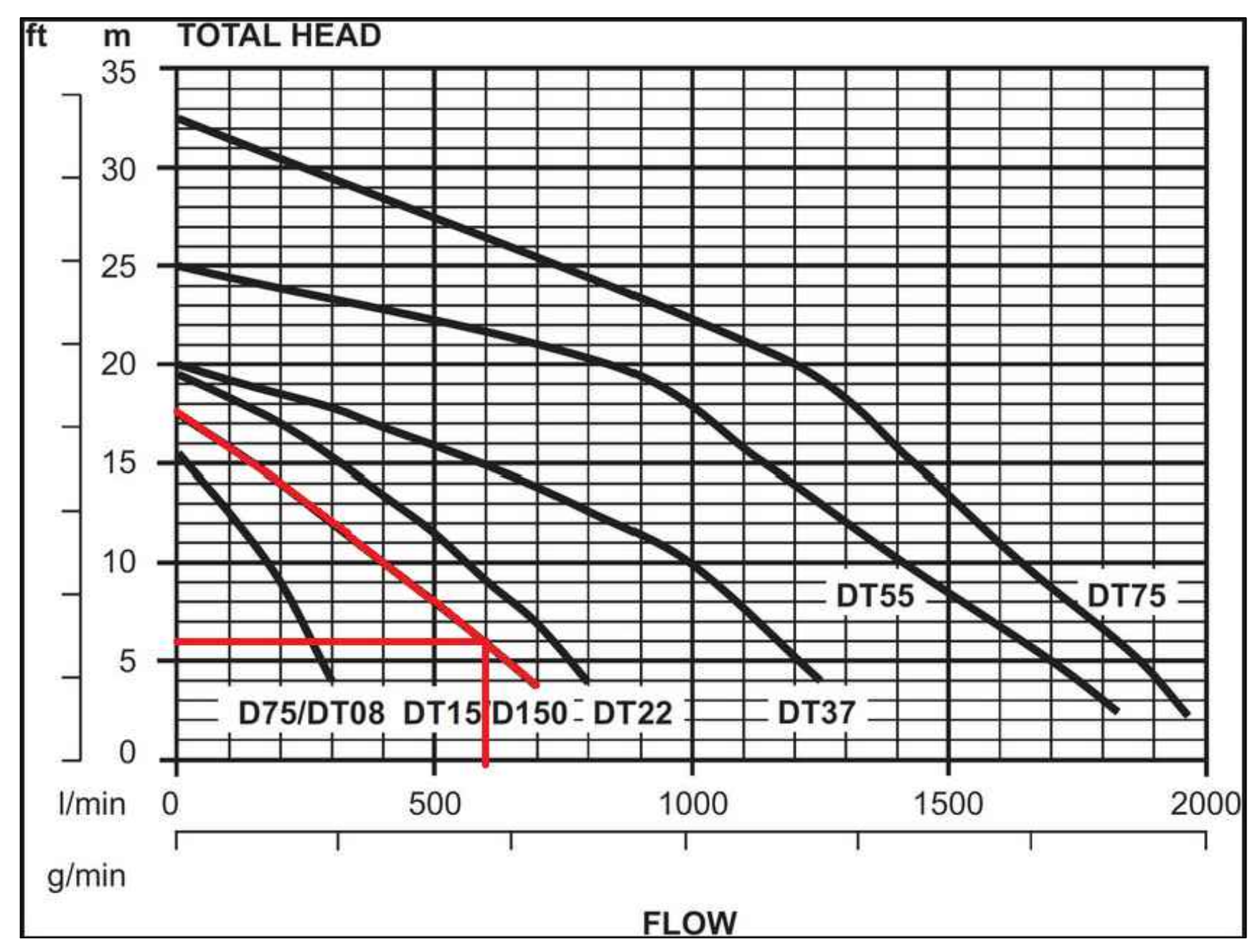
- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
- ALL THE AG LINES BEHIND BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

**PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50**

**SECTION A
STORMWATER PUMP-OUT SUMP 1
SCALE 1:10**

PUMP STORAGE VOLUME CALCULATION

- $I_{100,90min} = 55.15 \text{ mm/hour}$
- PUMP STORAGE CATCHMENT AREA: $A = 22.5 \text{ m}^2 = 0.00225 \text{ ha}$
- $Q = C \times I \times A / 360$ WHERE $C = 1.0$ (REFER TO AS3500.3.5.4.6 (a))
 $= 1.0 \times 55.15 \times 0.00225 / 360$
 $= 0.000345 \text{ m}^3/\text{s}$
 $= 0.345 \text{ L/s}$
- THEREFORE, THE PUMP HOLDING TANK VOLUME IS:
 $V = 0.345 \times 1.5 \times 3600$
 $= 1.86 \text{ m}^3$
- TOTAL REQUIRED VOLUME IS 3.0 m^3



PUMP CALCULATIONS												
Project Address:		1 Edna Street, Kingswood										
$HL = (3.35 \times 10e6 \times Q / (d^2.63 \times C))^{1.852}$		$h1 = kv^2 / 2g$		$H(\text{total head}) = Hf + h1 + \text{Elevation Head (static head)}$								
HL(m/100m), Q(L/s), d(mm)		k(cum), v(m/s), g=9.8(m)		Elevation Head(m) = 10				Pipe Length(m) = 10				
d(mm) = 65		v(m/s) = 0.00		Bend Losses, Kb = 3.06				Hazen - Williams C = 145				
				Valve Losses, Kv = 2.13				Hazen-Williams Constant				
				Entry/Exit Losses, Ke = 5.00				125-140 Commercial steel pipe				
				Cum Losses, K = 10.19				135-140 Bitumen Lined Cast iron pipe				
Start Flow = 0								140-145 Copper Tube				
Increment = 1								145-150 PVC				
Q(L/s)		0	1	2	3	4	5	6	7	8	9	10
HL(m/100m)		0.00	0.18	0.64	1.36	2.32	3.51	4.92	6.55	8.39	10.44	12.68
Hf(m)	HL x pipe Length/100	0.00	0.02	0.06	0.14	0.23	0.35	0.49	0.66	0.84	1.04	1.27
v(m/s)	Q(L/s) / area of pipe crossing section	0.00	0.30	0.60	0.90	1.21	1.51	1.81	2.11	2.41	2.71	3.01
h1(m)	$k(\text{cum}) \times v(\text{m/s})^2 / 2 \times g$	0.00	0.05	0.19	0.42	0.76	1.18	1.70	2.31	3.02	3.82	4.72
H(m)	=Hf+h1+Elevation Head	10.00	10.07	10.25	10.56	10.99	11.53	12.19	12.97	13.86	14.87	15.99

UNDERGROUND PUMP - OUT SUMP STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m ²)	CUMULATIVE VOLUME (m ³)
0	3.0	0
100	3.0	0.225
200	3.0	0.525
300	3.0	0.825
400	3.0	1.125
500	3.0	1.425
600	3.0	1.725
700	3.0	2.025
800	3.0	2.325
900	3.0	2.625
1000	3.0	2.925
1050	3.0	3.075

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EHZ	JAB
C	COUNCIL COMMENTS	19/11/2018	EHZ	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EHZ	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
16 Dunlop Street,
North Parramatta, NSW 2151
EMAIL: admin@designcorp.com.au
PHONE: (+612) 9630 9911
WEB: www.designcorp.com.au

Client
Mr. Elie Elias
Council
Penrith City Council

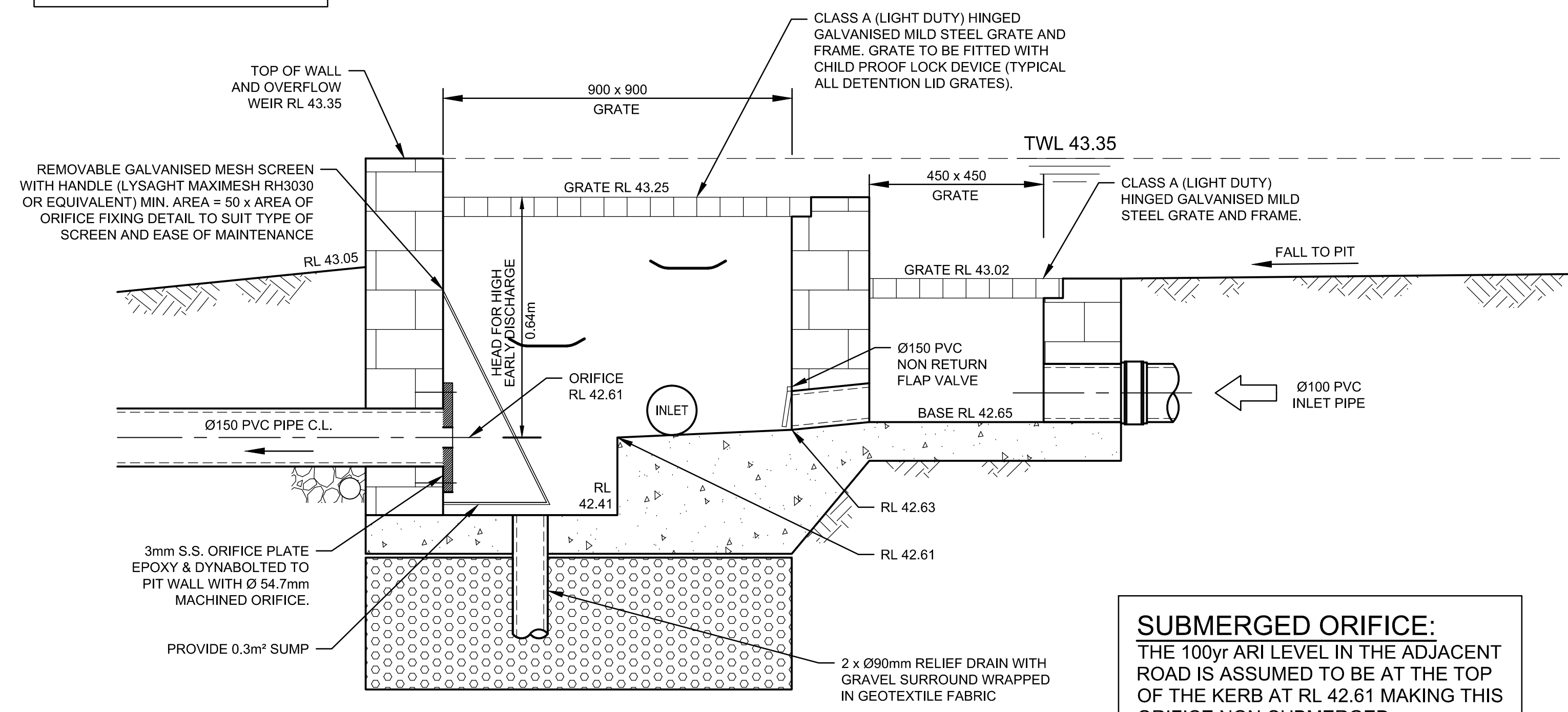
Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 1 2 3m
SCALE 1:50 @ A1

Project
**1 EDNA STREET, KINGSWOOD
PROPOSED NEW GENERATION BOARDING HOUSE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION**

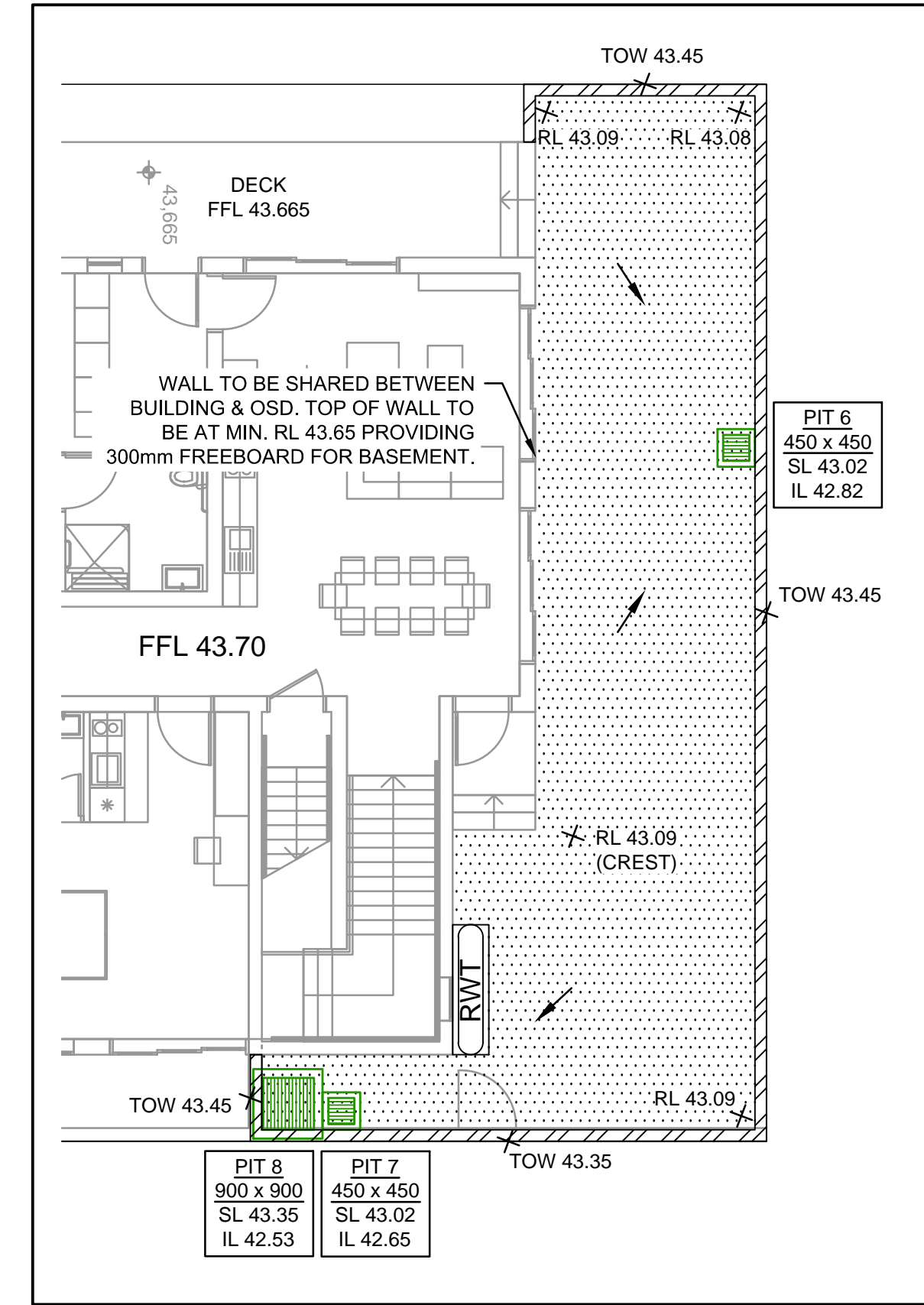
Drawing Title
**STORMWATER CONCEPT PLAN
BASEMENT LEVEL
SHEET 2 OF 2**

Scale As Shown Project No. 180698 Dwg. No. 102 Issue

DETENTION BASIN:
 MAX DEPTH 0.33m
 AREA 79.72m²
 VOLUME PROVIDED 23.52m³



ON-SITE DETENTION & DISCHARGE CONTROL PIT DETAIL
 SCALE 1:10



ON-SITE DETENTION DETAILS
 SCALE 1:100

OSD CALCULATIONS:

SITE AREA = 655.5 m²
 = 0.06555 ha

AREA BYPASSING OSD = 37 m² (6%)
 FOLLOWING COUNCIL'S STORMWATER DRAINAGE SPECIFICATION TABLE 8 FOR PERMISSIBLE OSD DISCHARGE AND REQUIRED STORAGE,

PSD = 83.4 l/s/ha
 SSR = 343 m³/ha

THEREFORE:
 PSD = 83.4 x 0.06555 = 5.47 l/s

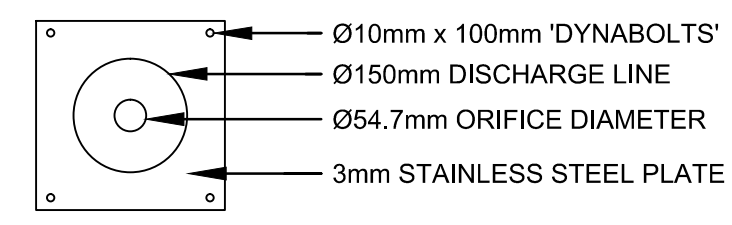
SSR = 343 x 0.06555 = 22.48 m³

ORIFICE CALCULATIONS:

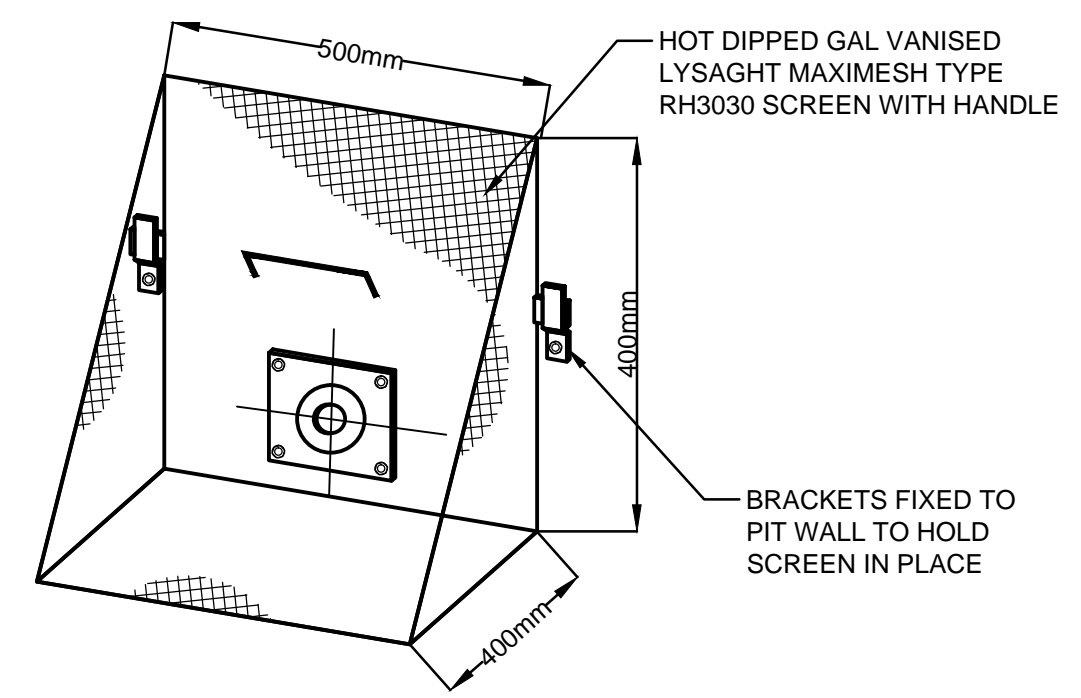
$Q = C \times A \times (2 \times g \times h)^{0.5}$

SO: $A = Q / (C \times \text{sqrt}(2 \times g \times h))$
 = 0.00547 / (0.61 x sqrt(2 x 9.81 x 0.74))
 = 0.00235 m²

THEREFORE:
 $d = \text{sqrt}(4 \times A / \pi)$
 = sqrt(4 x 0.00235 / 3.14159)
 = 54.7 mm



ORIFICE PLATE DETAIL
 N.T.S.



TRASH SCREEN DETAIL
 N.T.S.

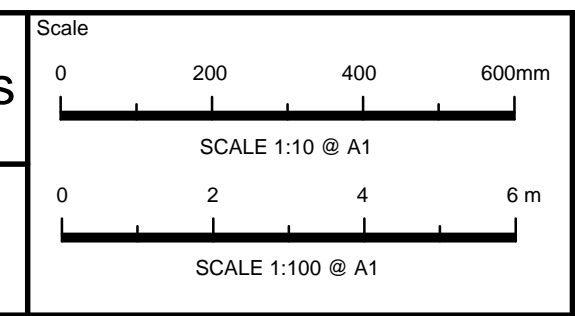
NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EZH	JAB
C	COUNCIL COMMENTS	19/11/2018	EZH	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EZH	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
 16 Dunlop Street,
 North Parramatta, NSW 2151
 EMAIL: admin@designcorp.com.au
 PHONE: (+612) 9630 9911
 WEB: www.designcorp.com.au

Client
Mr. Elie Elias
 Council
Penrith City Council



AUSTRALIAN CONSULTING ENGINEERS.
 PTY LTD - A.C.N. 084 059 941
 SHOP 2-141 CONCORD RD NORTH STRATHFIELD NSW 2137
 PH: (02) 9763 1500 FX: (02) 9763 1515
 EMAIL: info@aceeng.com.au

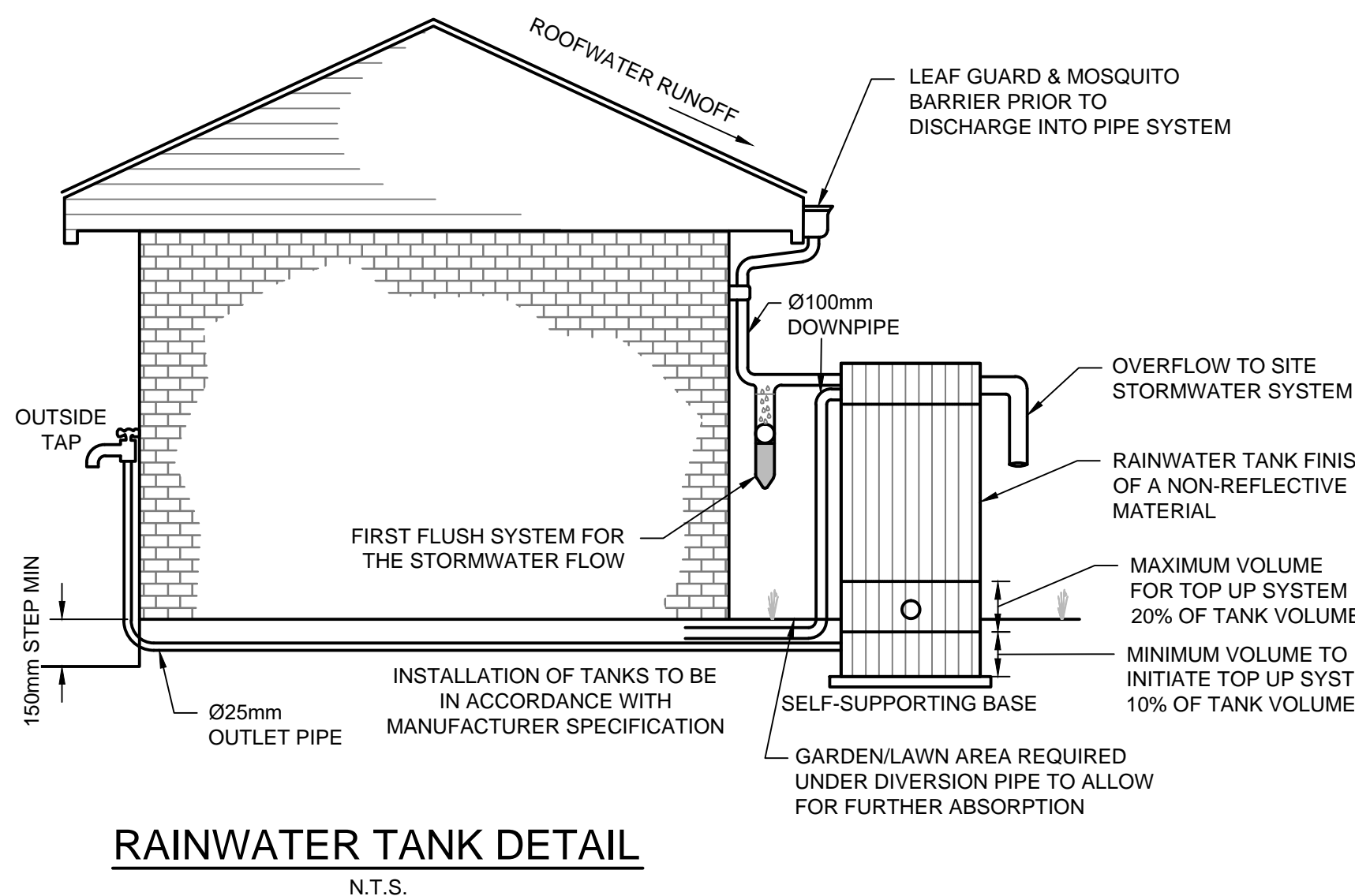
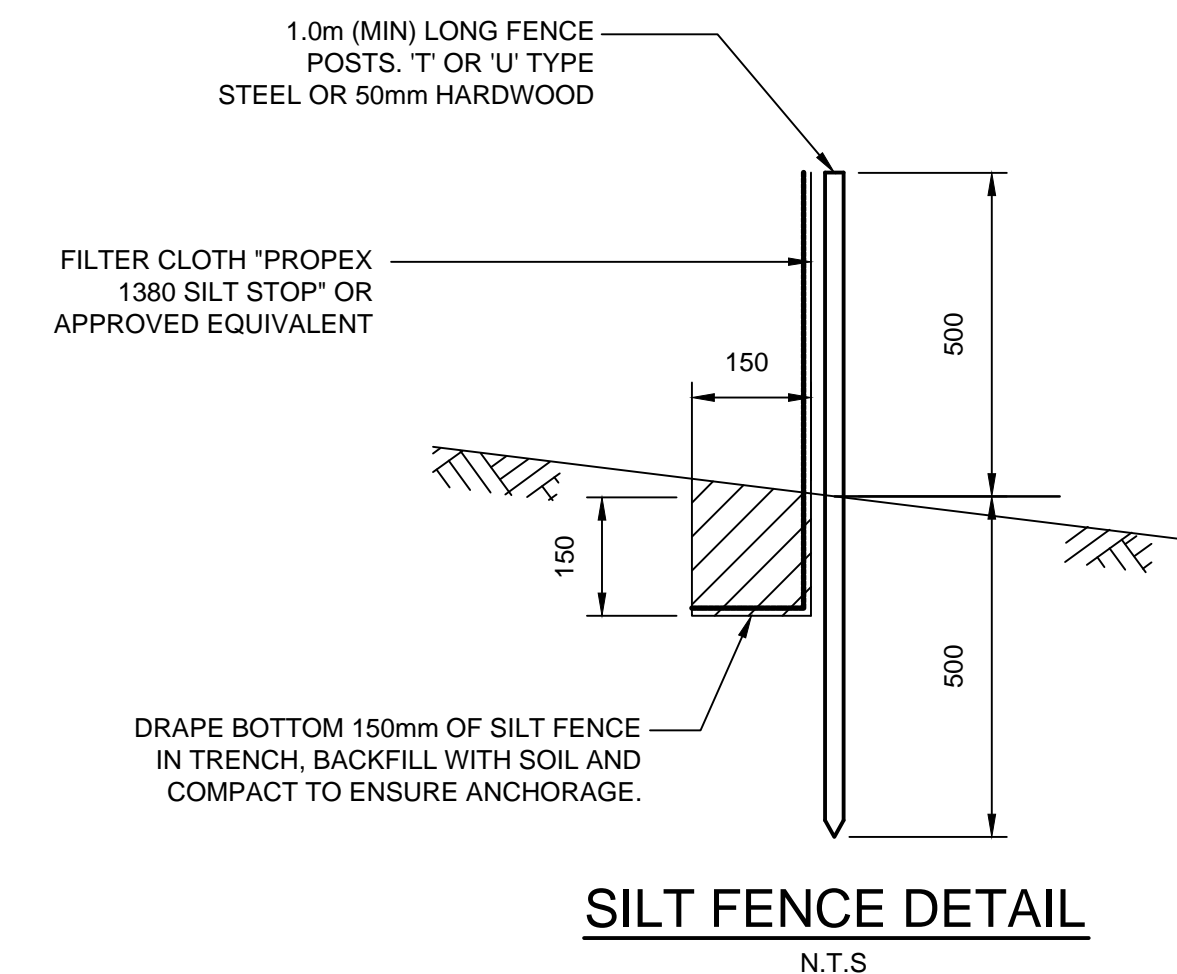
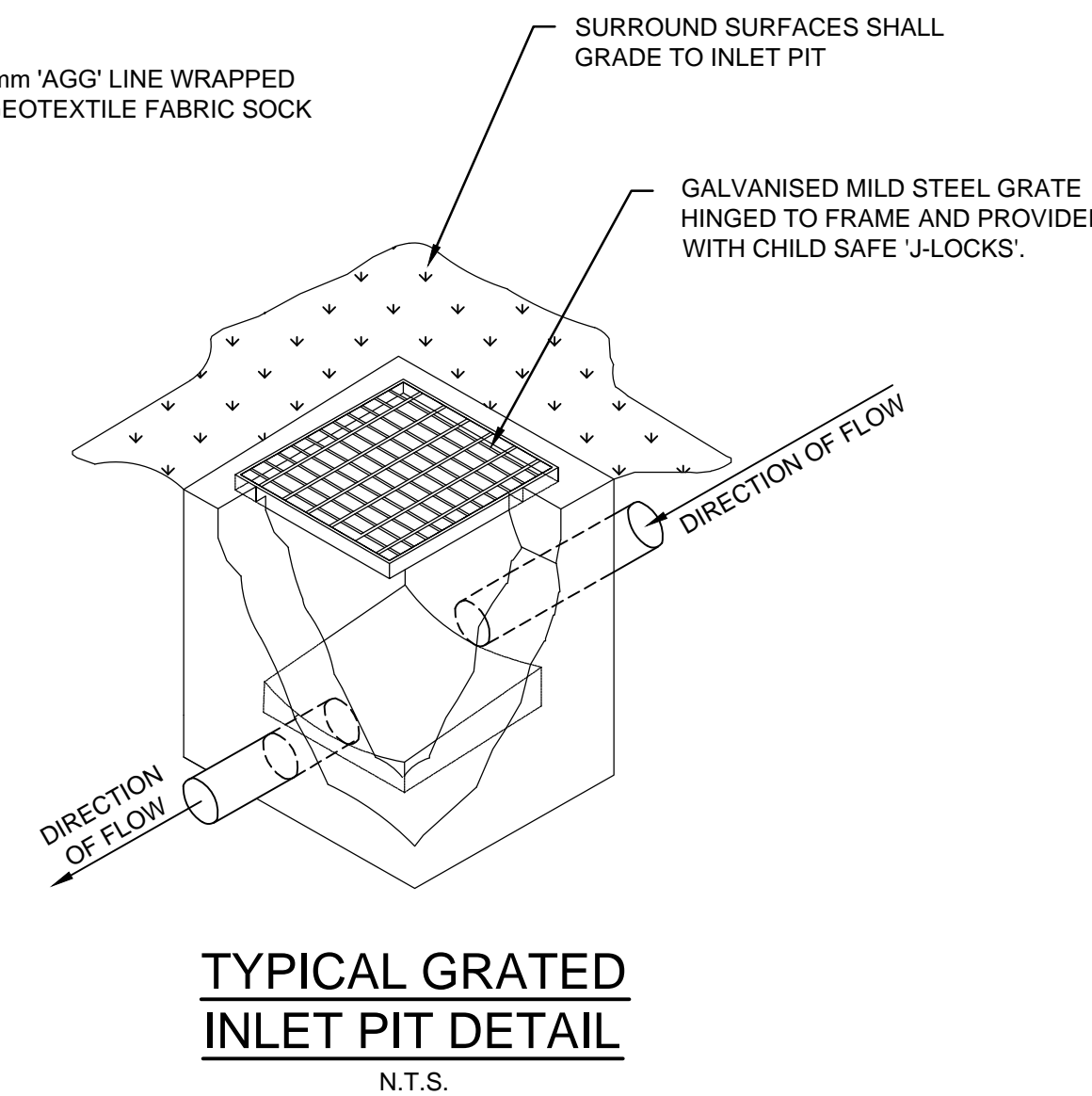
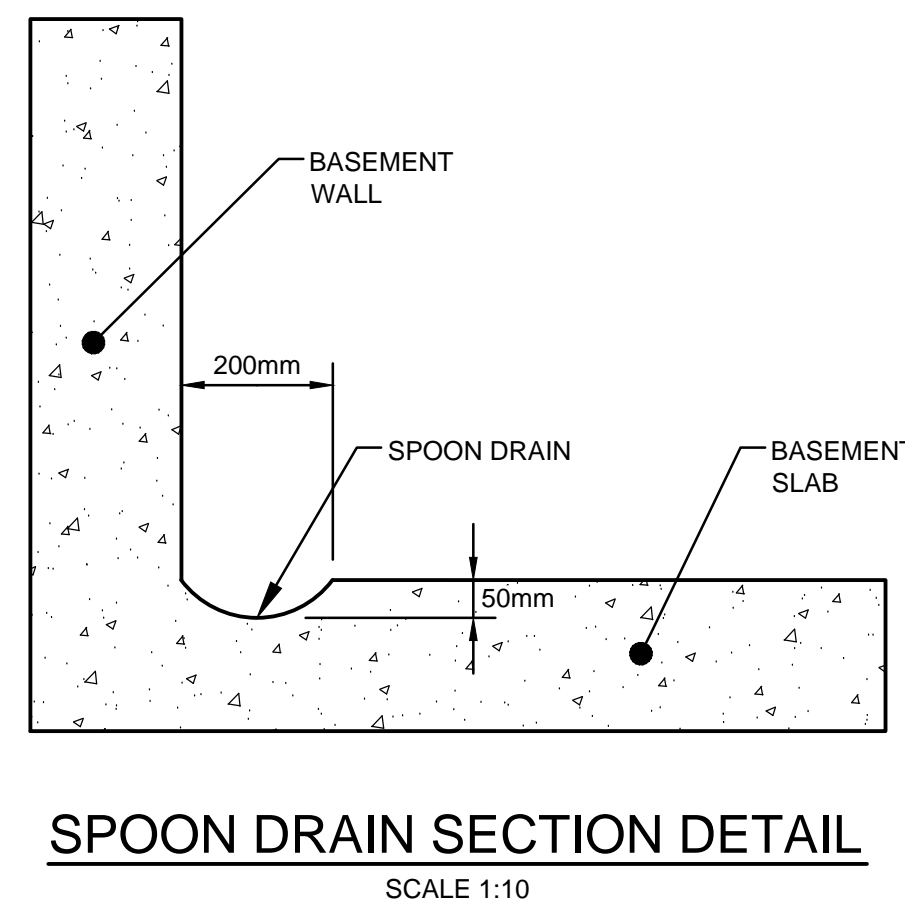
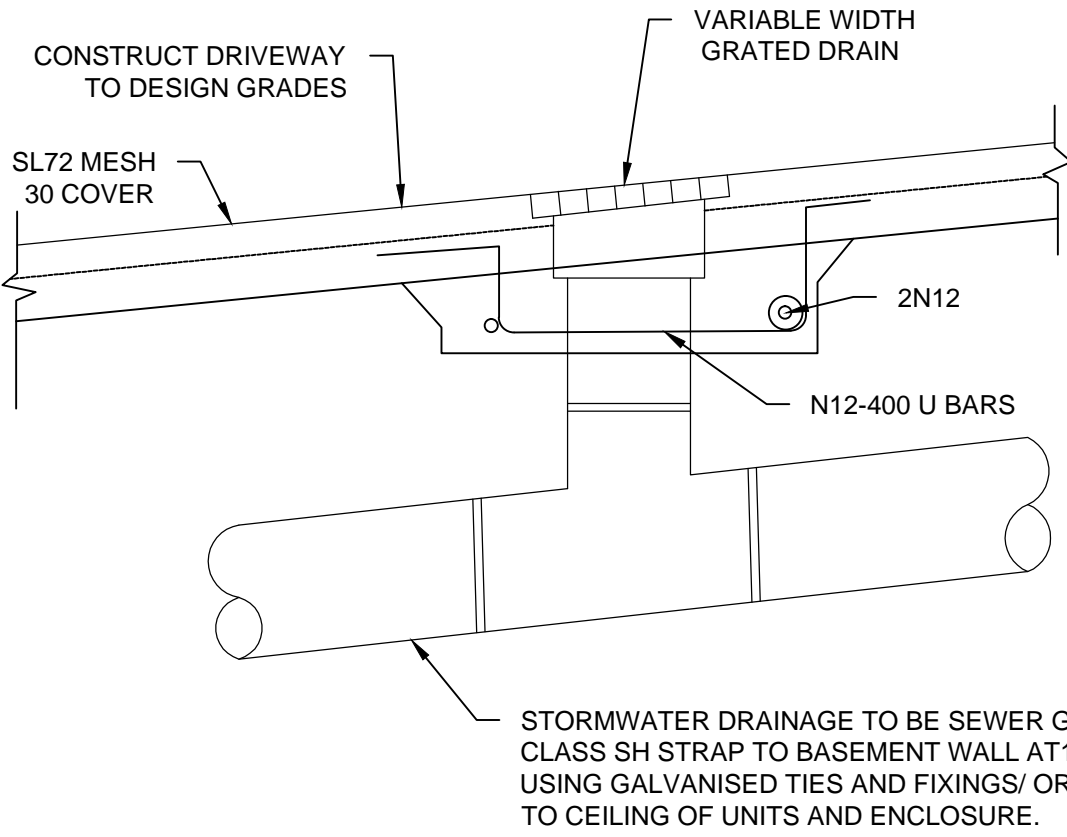
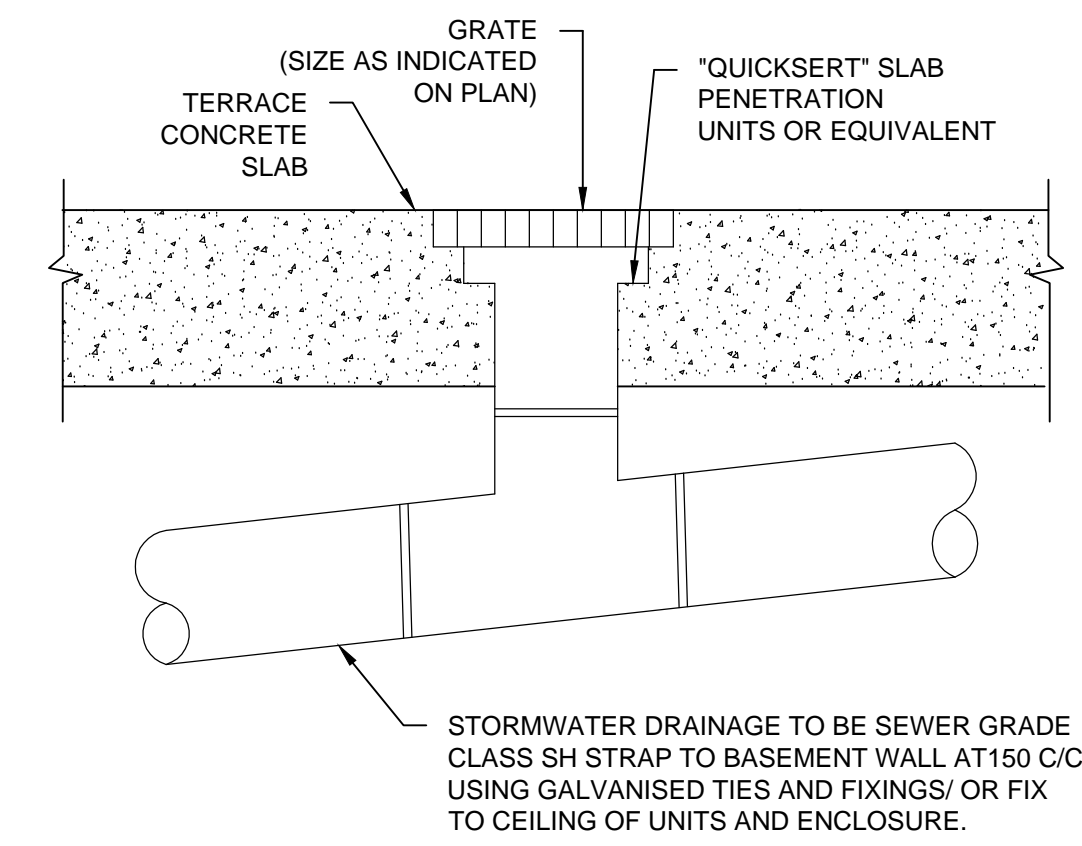
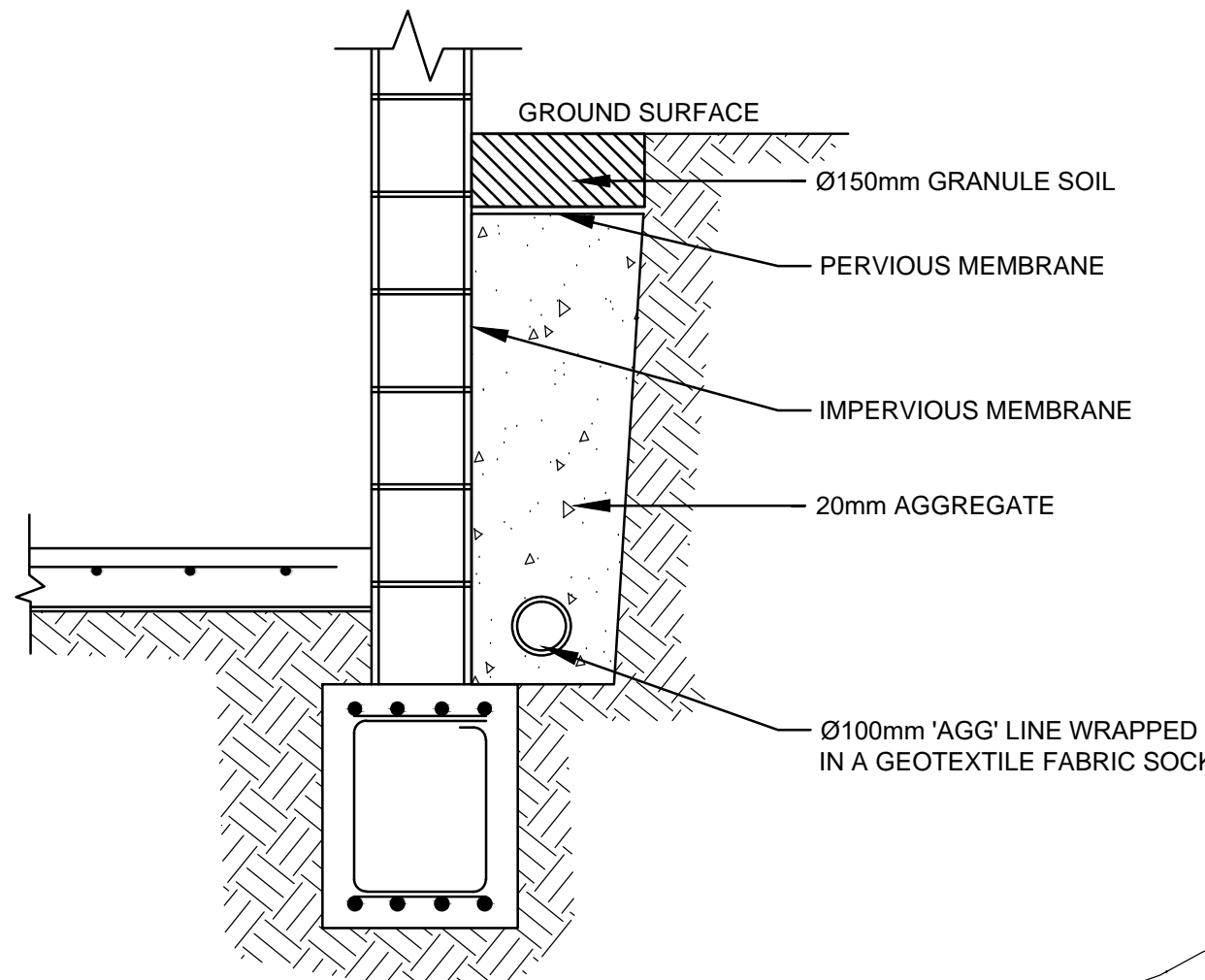
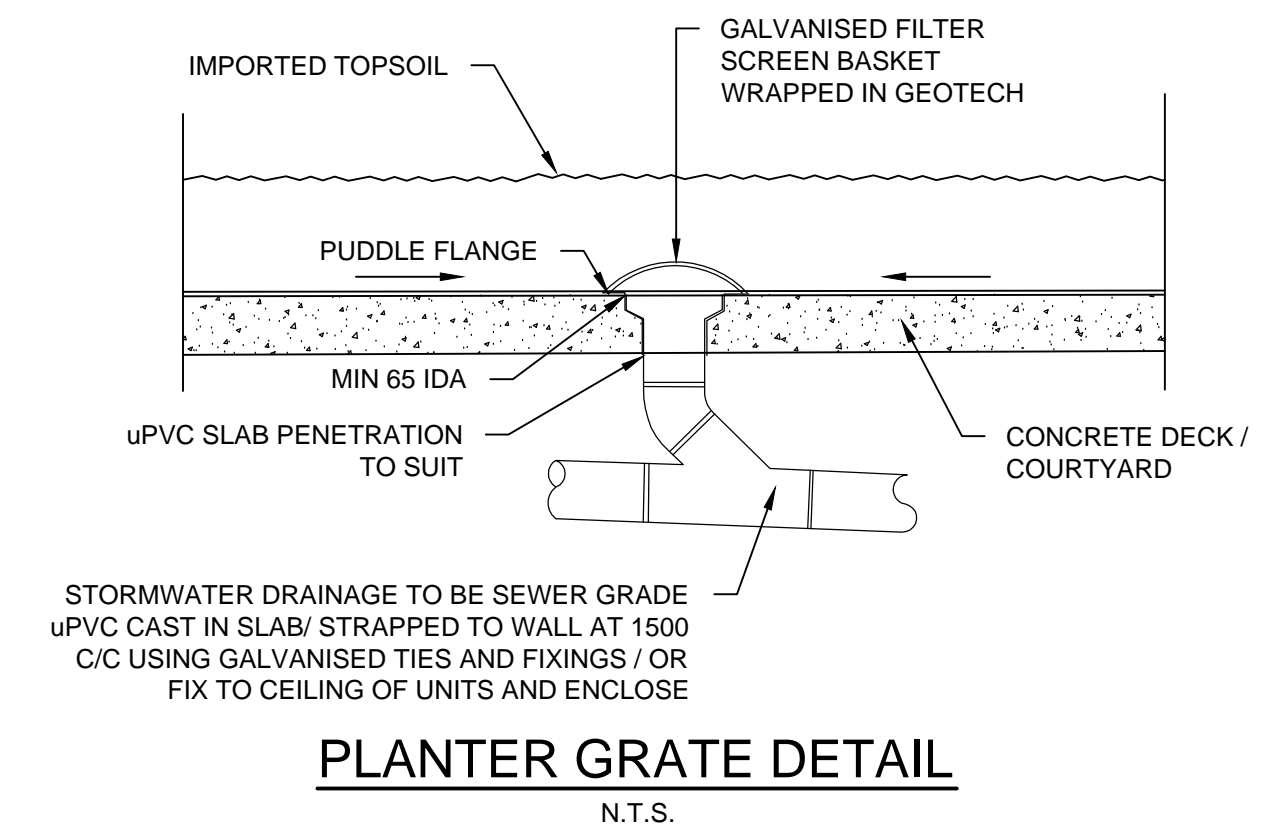
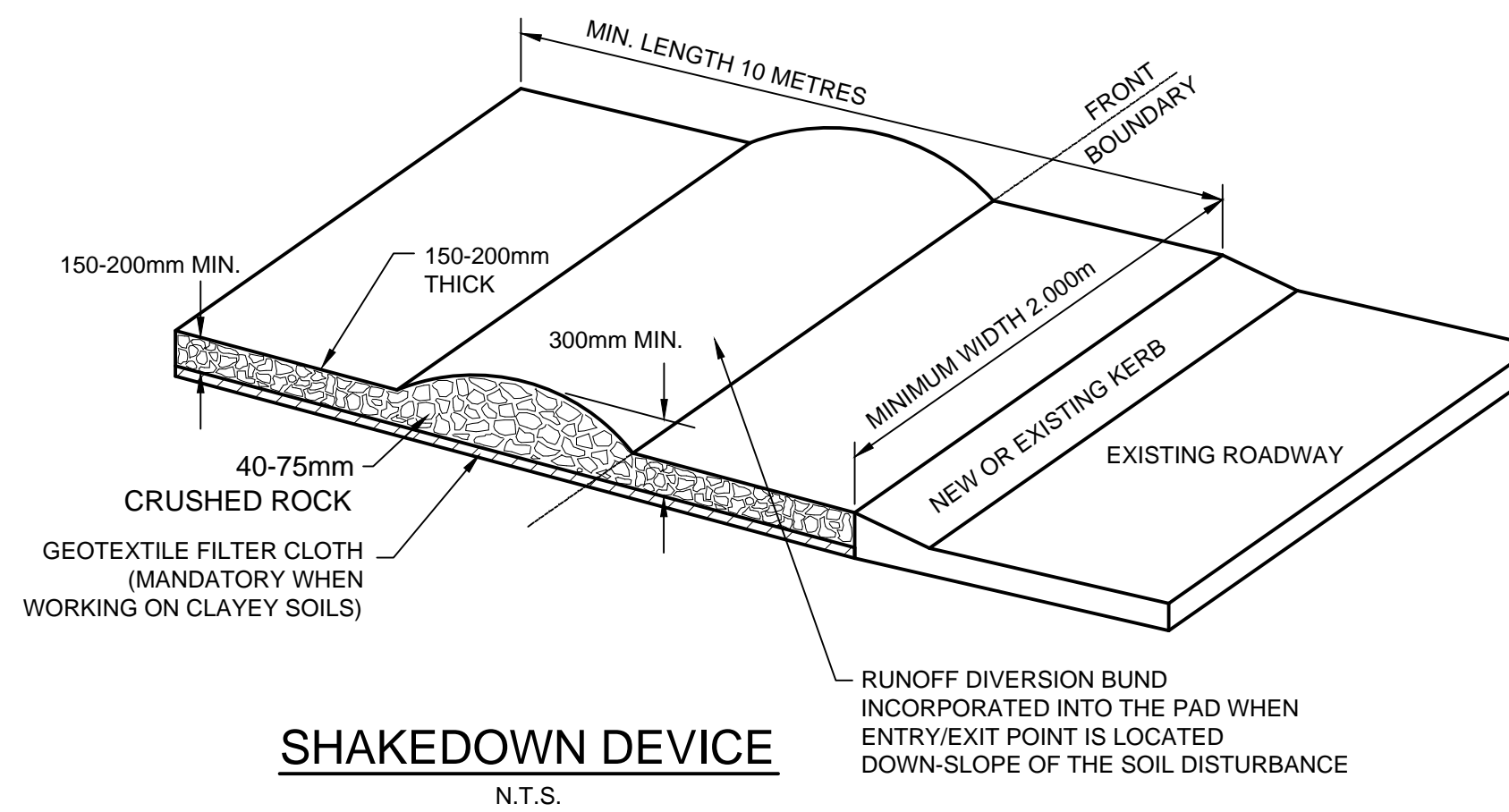
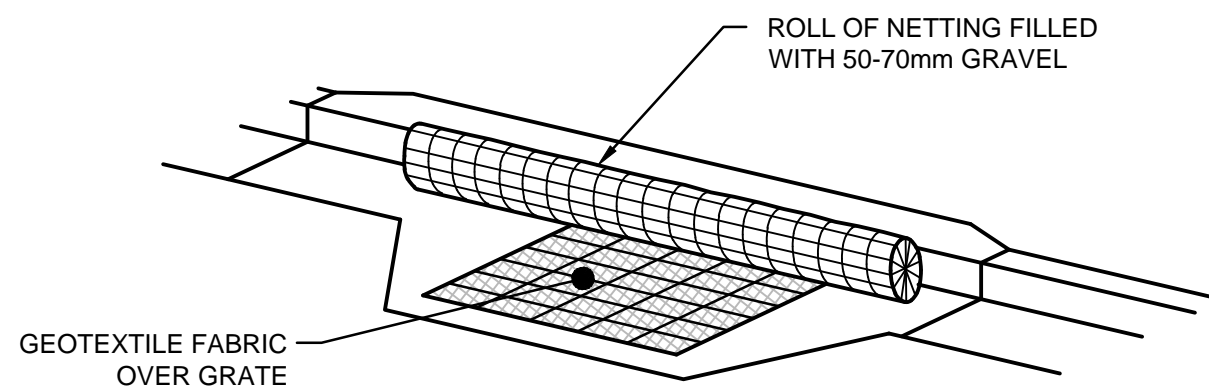
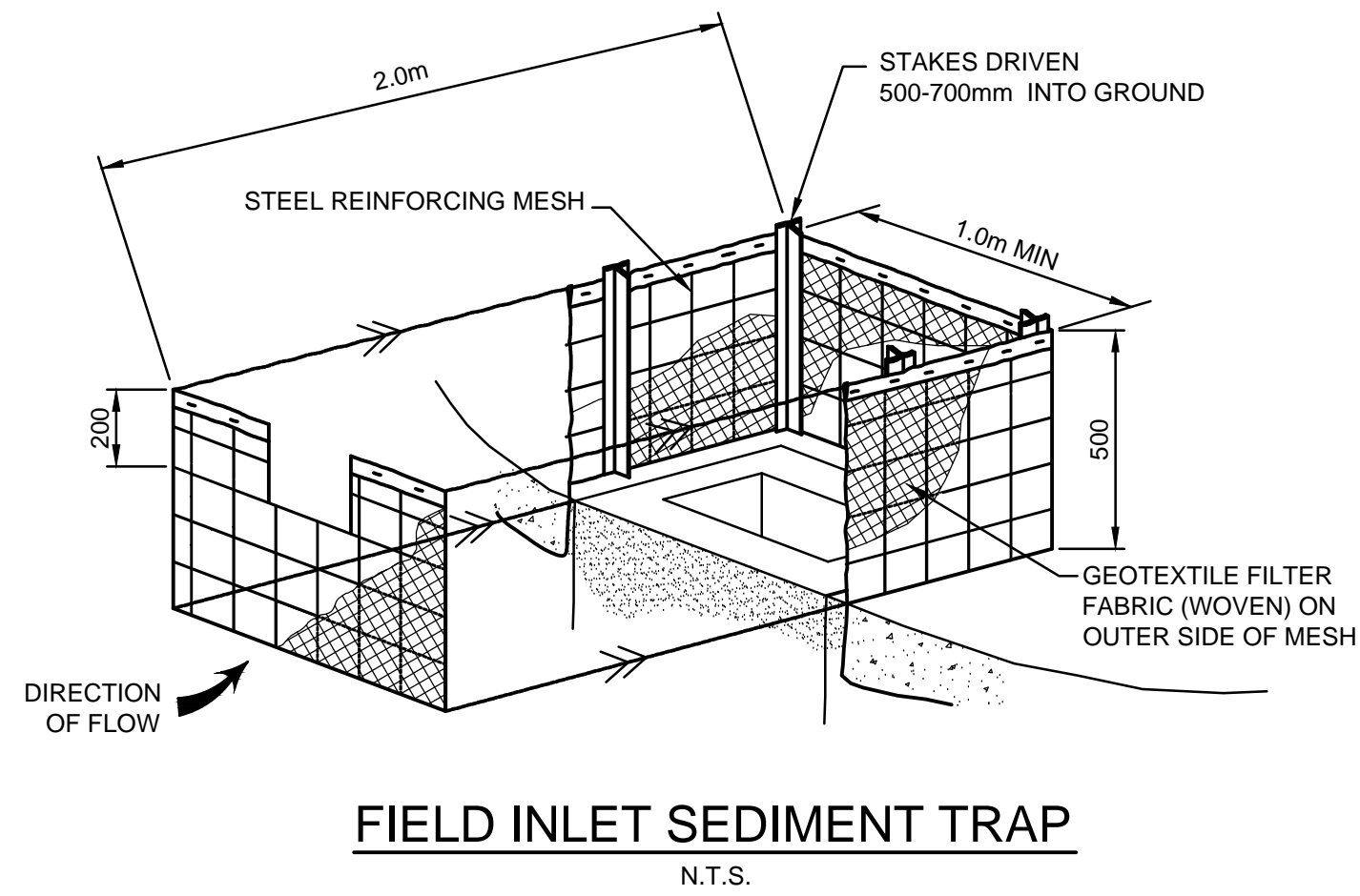
Project
1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE STORMWATER CONCEPT PLANS DEVELOPMENT APPLICATION

Drawing Title
ON-SITE DETENTION DETAILS AND CALCULATION SHEET

Scale As Shown A1 Project No. 180698 Dwg. No. 104 Issue D

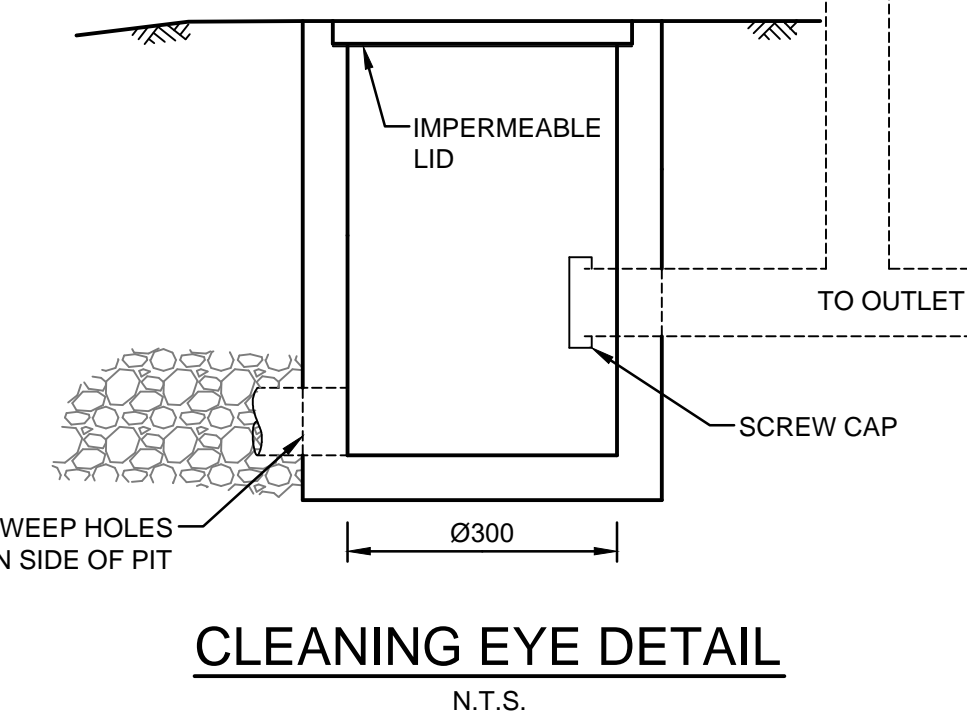
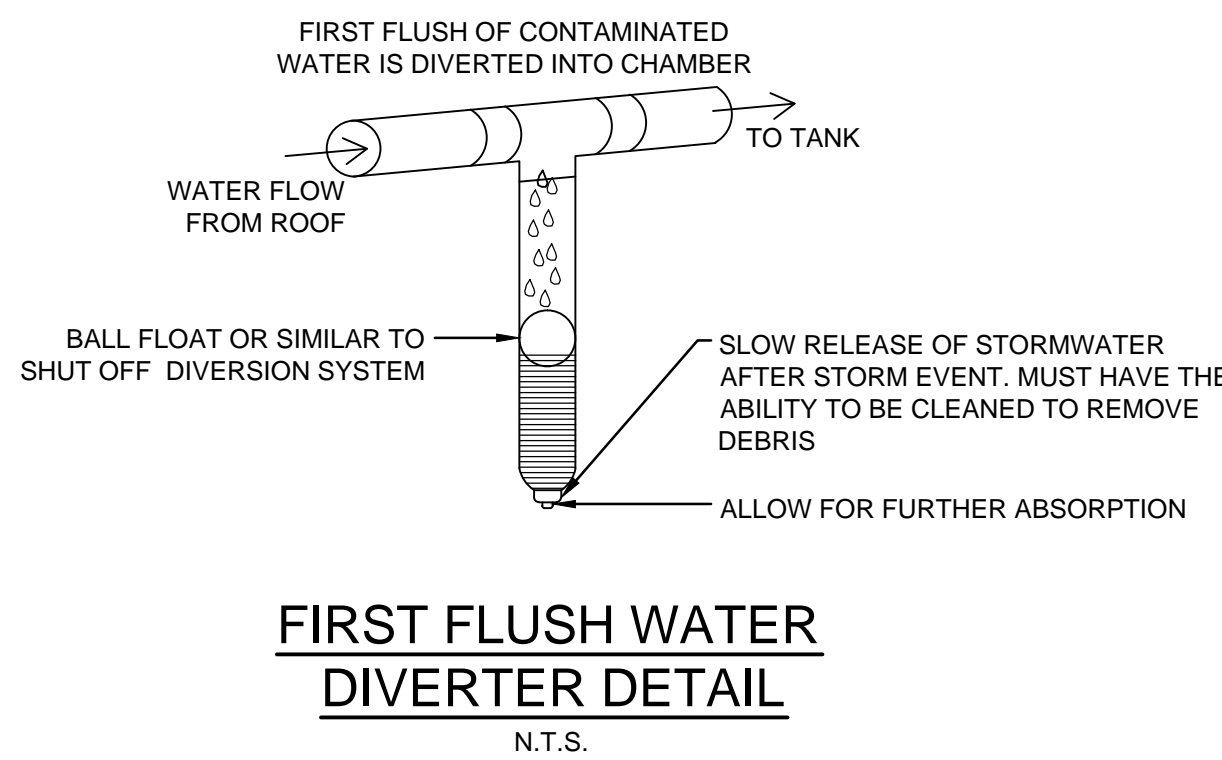
SEDIMENT & EROSION NOTES

1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.
15. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS etc.



STORAGE TANK NOTES:

1. TANK WATER TAPS SHALL BE MARKED "RAINWATER NOT TO HUMAN CONSUMPTION".
2. RAINWATER TANKS SHALL BE CONNECTED TO MAINS WATER SUPPLY AS BACKUP.
3. THE PUMPS ARE TO BE INSULATED IN ACCORDANCE WITH COUNCIL POLICY.
4. PUMPS SHALL PROVIDE MINIMUM 150 kPa PRESSURE.
5. EACH TANK TO BE CONNECTED TO AN OUTDOOR TAP FOR IRRIGATION USE.
6. RAINWATER TANKS TO BE CLEANED OUT EVERY 6 MONTHS.
7. WATER TANK AND ASSOCIATED STRUCTURE TO BE THE SAME COLOR, OR A COLOR COMPLEMENTARY TO THE DWELLING.
8. TOP TANK TO BE BELOW TOP OF NEAREST FENCE, OR 1.8 METERS WHICHEVER IS LESS.
9. THE WATER TANK SHOULD BE LOCATED AT LEAST 900mm FROM ANY PROPERTY BOUNDARY.
10. PLUMBING FROM THE WATER TANK IS TO BE KEPT SEPARATED FROM THE RETICULATED WATER SUPPLY SYSTEM.
11. TANK TO BE BUILT ON SELF-SUPPORTING BASE.
12. PROVIDE BACK-FLOW PREVENTION DEVICE AT MAINS WATER METER.
13. ROOF DRAINING TO TANK MUST NOT CONTAIN LEAD, TAR BASED PAINTS OR ASBESTOS.
14. WATER TO BE DRAWN FROM ANAEROBIC ZONE OF TANK.



SILT FENCE NOTES:

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES.
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN 'BULGES' DEVELOP IN SILT FENCE.
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EZH	JAB
C	COUNCIL COMMENTS	19/11/2018	EZH	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EZH	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
16 Dunlop Street,
North Parramatta, NSW 2151
EMAIL: admin@designcorp.com.au
PHONE: (+612) 9630 9911
WEB: www.designcorp.com.au

Client
Mr. Elie Elias
Council
Penrith City Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1

AUSTRALIAN CONSULTING ENGINEERS.
PTY LTD - A.C.N. 084 059 941
SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au

Project
**1 EDNA STREET, KINGSWOOD
PROPOSED NEW GENERATION BOARDING HOUSE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION**

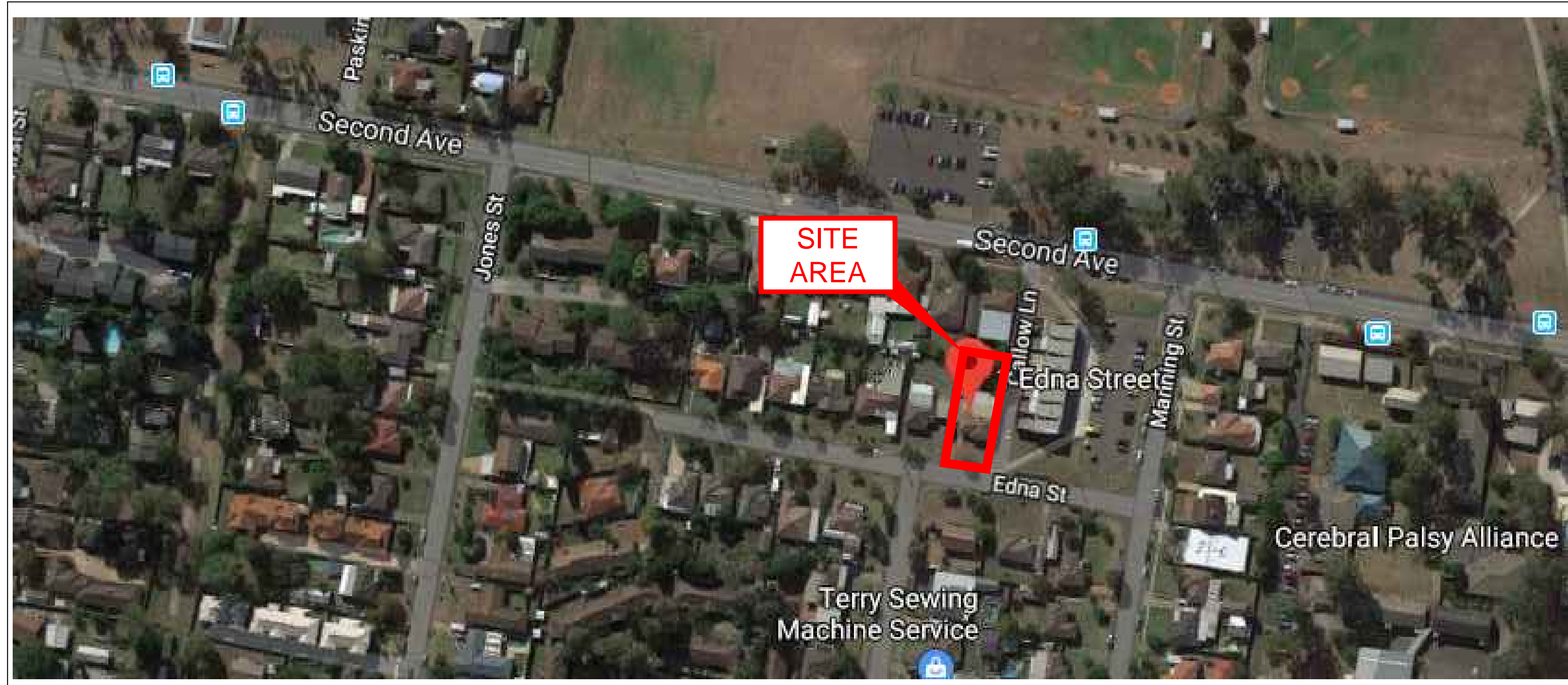
Drawing Title
MISCELLANEOUS DETAILS SHEET
Scale A1 Project No. 180698 Dwg. No. 105 Issue D

1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE

STORMWATER CONCEPT PLANS

LEGEND

- PROPOSED STORMWATER BYPASSING OSD
- PROPOSED STORMWATER DRAINING TO RWT
- PROPOSED STORMWATER DRAINING TO OSD
- SUBSOIL DRAINAGE
- EXISTING SEWER MAIN (FROM RECORDS)
- GUTTER DOWNPIPE
- ROOF GUTTER HIGH POINT
- PLANTER GRATE
- RAINWATER OUTLET
- Ø300 CLEANING EYE
- 2,000L RAINWATER TANK
- SURFACE FLOW ARROWS
- DESIGN SURFACE LEVEL
- EXISTING SURFACE LEVEL
- PROPOSED OSD STORAGE
- ROOF AREA TO RAINWATER TANK
- TILED AREA
- TREES TO BE RETAINED
- TREES TO BE REMOVED



LOCALITY PLAN
N.T.S.

GENERAL NOTES

1. ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
2. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
3. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
4. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
5. PITS LESS THAN 600mm DEEP MAY BE BRICK, PRECAST OR CONCRETE.
6. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
7. ALL EXTERNAL SLABS TO BE WATERPROOFED.
8. ALL GRATES TO HAVE CHILD PROOF LOCKS.
9. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
10. ALL DPs TO HAVE LEAF GUARDS.
11. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
12. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
14. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
15. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
16. CARE TO BE TAKEN AROUND EXISTING SEWER. STRUCTURAL ADVICE IS REQUIRED FOR SEWER PROTECTION AGAINST ADDITIONAL LOADING FROM NEW PITS, PIPES, RETAINING WALLS AND OSD BASIN WATER LEVELS.
17. ALL PIPES IN BALCONIES TO BE Ø65 uPVC CAST IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS/PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION
18. THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES.

DRAWING INDEX	
Drawing No.	DESCRIPTION
000	COVER SHEET, LEGEND & NOTES
101	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 1 OF 2
102	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 2 OF 2
103	STORMWATER CONCEPT PLAN
104	ON-SITE DETENTION TANK AND CALCULATION SHEET
105	MISCELLANEOUS DETAILS SHEET

PIPES NOTE:
 Ø65 PVC @ MIN 1.0%
 Ø90 PVC @ MIN 1.0%
 Ø100 PVC @ MIN 1.0%
 Ø150 PVC @ MIN 1.0%
 Ø225 PVC @ MIN 0.5%
 Ø300 PVC @ MIN 0.4%
 UNLESS NOTED OTHERWISE

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EHZ	JAB
C	COUNCIL COMMENTS	19/11/2018	EHZ	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EHZ	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
 16 Dunlop Street,
 North Parramatta, NSW 2151
 EMAIL: admin@designcorp.com.au
 PHONE: (+612) 9630 9911
 WEB: www.designcorp.com.au

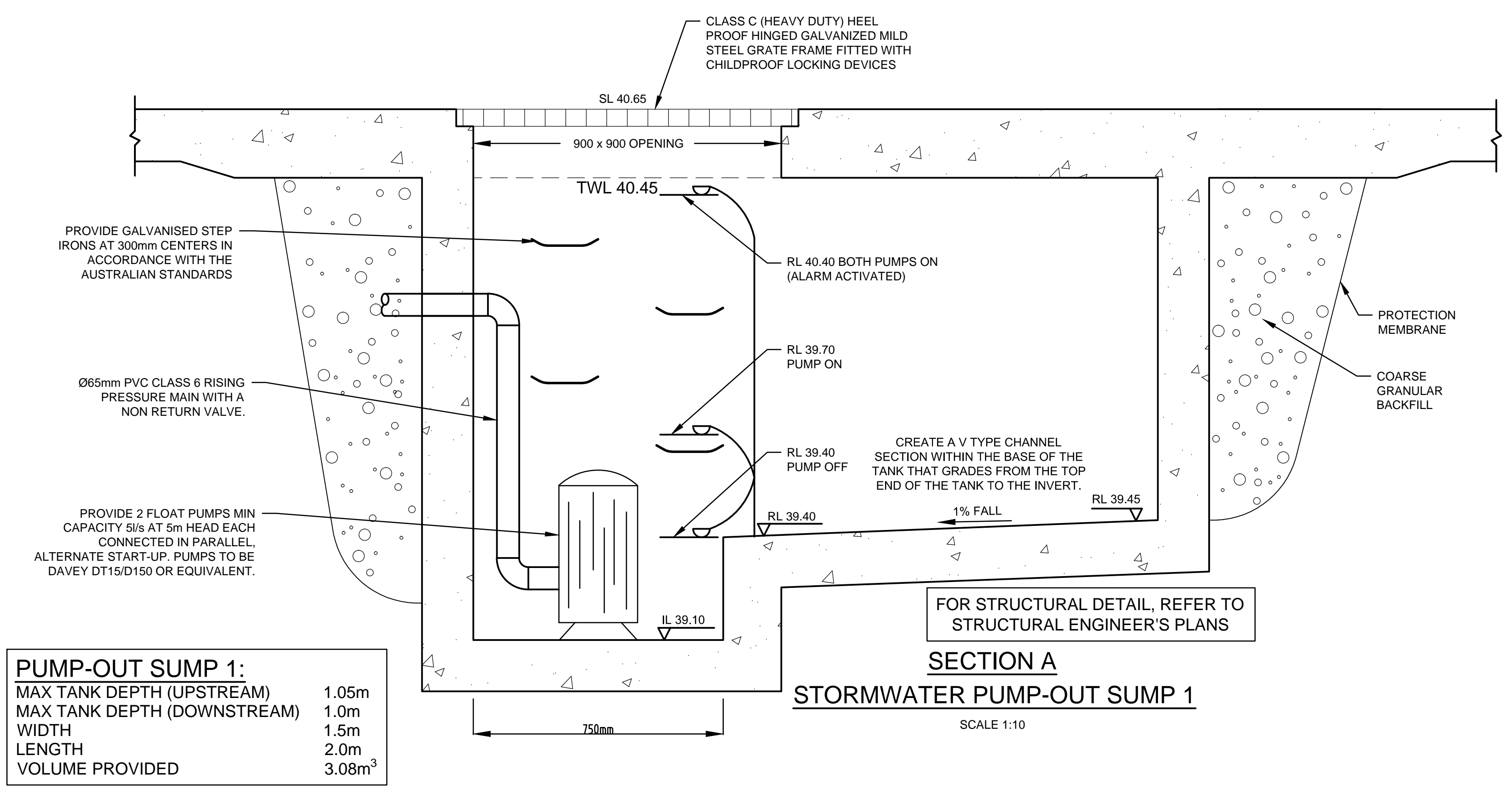
Client
Mr. Elie Elias
 Council
Penrith City Council

Scale

AUSTRALIAN CONSULTING ENGINEERS.
 PTY LTD - A.C.N. 084 059 941
 SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
 PH: (02) 9763 1500 FX: (02) 9763 1515
 EMAIL: info@aceeng.com.au

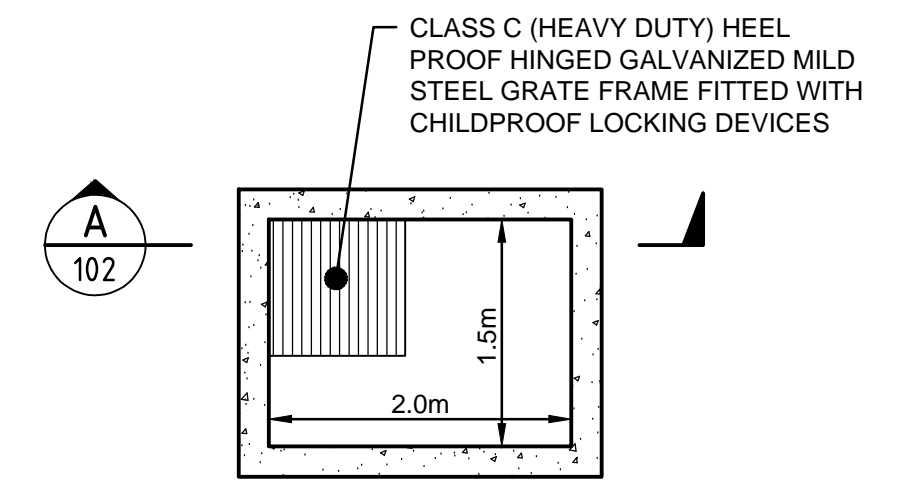
Project
**1 EDNA STREET, KINGSWOOD
 PROPOSED NEW GENERATION BOARDING HOUSE
 STORMWATER CONCEPT PLANS
 DEVELOPMENT APPLICATION**

Drawing Title			
Scale	Project No.	Dwg. No.	Issue
N.T.S.	180698	000	D



PUMP-OUT SUMP 1:

MAX TANK DEPTH (UPSTREAM)	1.05m
MAX TANK DEPTH (DOWNSTREAM)	1.0m
WIDTH	1.5m
LENGTH	2.0m
VOLUME PROVIDED	3.08m ³



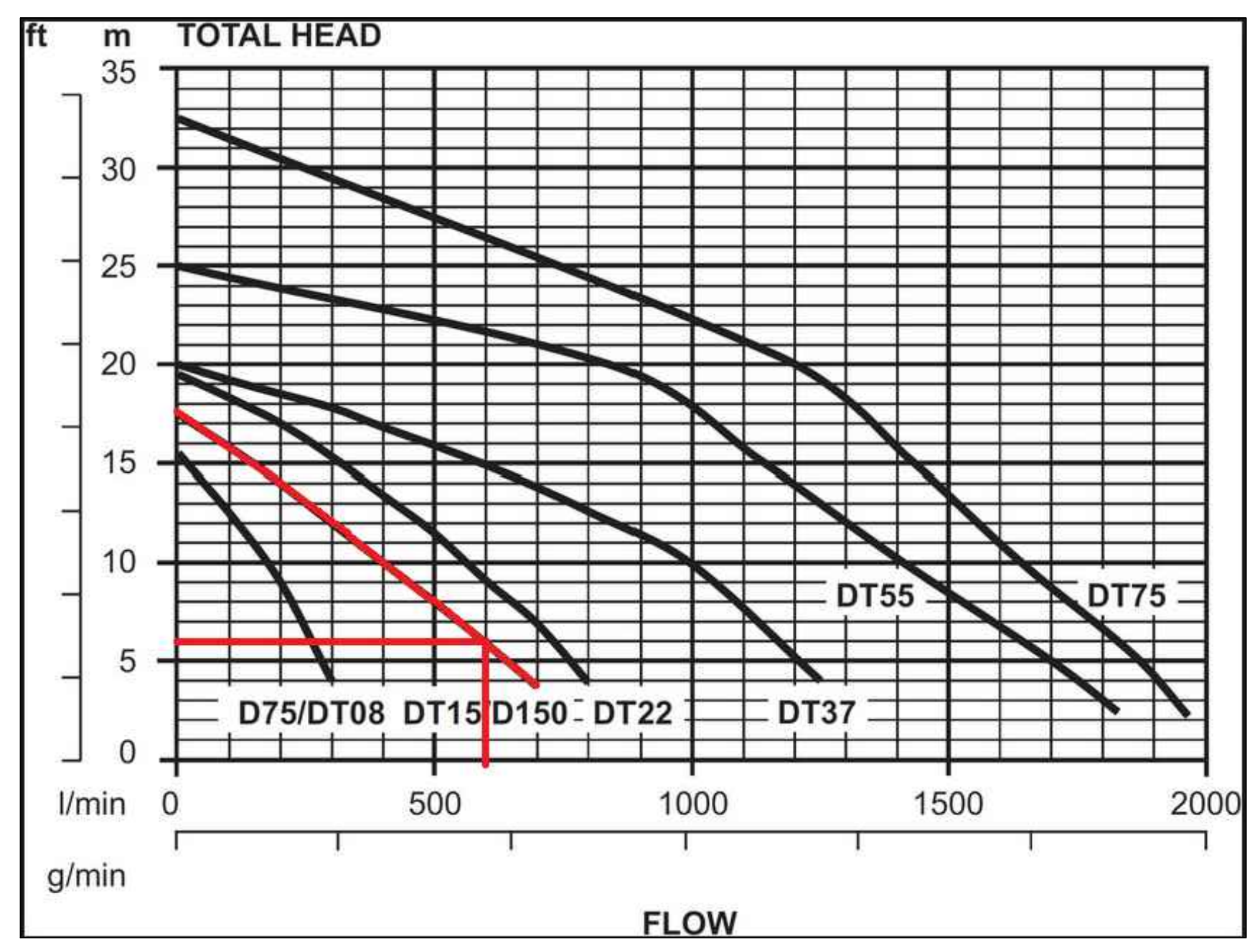
NOTE:

- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
- ALL THE AG LINES BEHIND BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50

PUMP STORAGE VOLUME CALCULATION

- $I_{100,90min} = 55.15 \text{ mm/hour}$
- PUMP STORAGE CATCHMENT AREA: $A = 22.5 \text{ m}^2 = 0.00225 \text{ ha}$
- $Q = C \times I \times A / 360$ WHERE $C = 1.0$ (REFER TO AS3500.3.5.4.6 (a))
 $= 1.0 \times 55.15 \times 0.00225 / 360$
 $= 0.000345 \text{ m}^3/\text{s}$
 $= 0.345 \text{ L/s}$
- THEREFORE, THE PUMP HOLDING TANK VOLUME IS:
 $V = 0.345 \times 1.5 \times 3600$
 $= 1.86 \text{ m}^3$
- TOTAL REQUIRED VOLUME IS 3.0 m^3



PUMP CALCULATIONS

Project Address: 1 Edna Street, Kingswood

$HL = (3.35 \times 10e6 \times Q / (d^2 \times 63 \times C))^{1.852}$

$HL(m/100m), Q(L/s), d(mm)$

$h1 = kv^2 / 2g$

$k(cum), v(m/s), g=9.8(m/s^2)$

H(total head) = Hf + h1 + Elevation Head (static head)

Elevation Head(m) = 10 Pipe Length(m) = 10

Hazen - Williams C = 145 Hazen-Williams Constant

125-140 Commercial steel pipe

135-140 Bitumen Lined Cast iron pipe

140-145 Copper Tube

145-150 PVC

Q(L/s)	0	1	2	3	4	5	6	7	8	9	10
HL(m/100m)	0.00	0.18	0.64	1.36	2.32	3.51	4.92	6.55	8.39	10.44	12.68
Hf(m)	0.00	0.02	0.06	0.14	0.23	0.35	0.49	0.66	0.84	1.04	1.27
v(m/s)	0.00	0.30	0.60	0.90	1.21	1.51	1.81	2.11	2.41	2.71	3.01
h1(m)	0.00	0.05	0.19	0.42	0.76	1.18	1.70	2.31	3.02	3.82	4.72
H(m)	10.00	10.07	10.25	10.56	10.99	11.53	12.19	12.97	13.86	14.87	15.99

Start Flow = 0

Increment = 1

d(mm) = 65

v(m/s) = 0.00

Bend Losses, Kb = 3.06

Valve Losses, Kv = 2.13

Entry/Exit Losses, Ke = 5.00

Cum Losses, K = 10.19

UNDERGROUND PUMP - OUT SUMP STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m ²)	CUMULATIVE VOLUME (m ³)
0	3.0	0
100	3.0	0.225
200	3.0	0.525
300	3.0	0.825
400	3.0	1.125
500	3.0	1.425
600	3.0	1.725
700	3.0	2.025
800	3.0	2.325
900	3.0	2.625
1000	3.0	2.925
1050	3.0	3.075

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EHZ	JAB
C	COUNCIL COMMENTS	19/11/2018	EHZ	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EHZ	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
16 Dunlop Street,
North Parramatta, NSW 2151
EMAIL: admin@designcorp.com.au
PHONE: (+612) 9630 9911
WEB: www.designcorp.com.au

Client
Mr. Elie Elias
Council
Penrith City Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 1 2 3 m
SCALE 1:50 @ A1

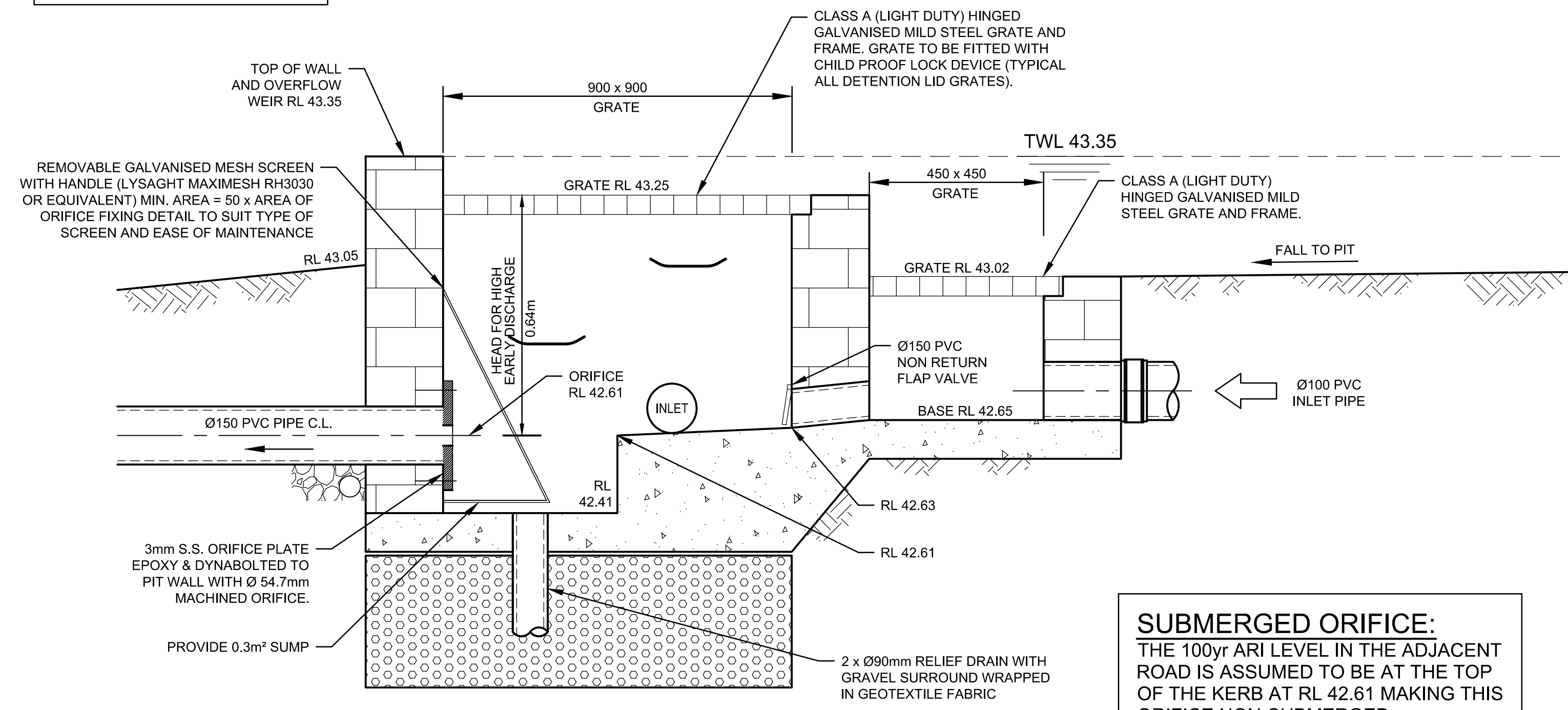
AUSTRALIAN CONSULTING ENGINEERS.
PTY LTD - A.C.N. 084 059 941
SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au

Project
1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE STORMWATER CONCEPT PLANS DEVELOPMENT APPLICATION

Drawing Title
STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 2 OF 2

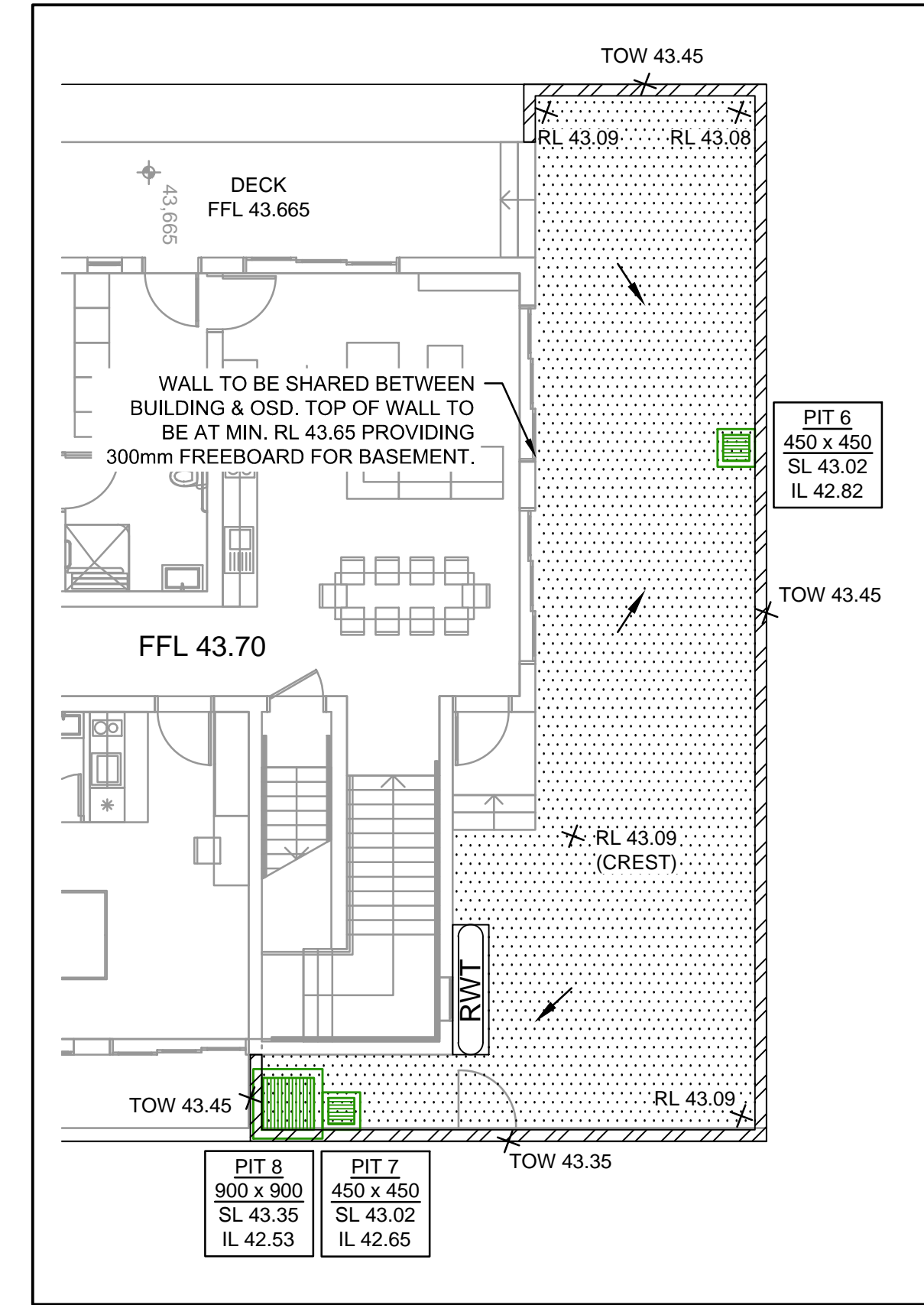
Scale A1 Project No. 180698 Dwg. No. 102 Issue

DETENTION BASIN:
 MAX DEPTH 0.33m
 AREA 79.72m²
 VOLUME PROVIDED 23.52m³



ON-SITE DETENTION & DISCHARGE CONTROL PIT DETAIL
 SCALE 1:10

SUBMERGED ORIFICE:
 THE 100yr ARI LEVEL IN THE ADJACENT ROAD IS ASSUMED TO BE AT THE TOP OF THE KERB AT RL 42.61 MAKING THIS ORIFICE NON-SUBMERGED.



ON-SITE DETENTION DETAILS
 SCALE 1:100

OSD CALCULATIONS:

SITE AREA = 655.5 m²
 = 0.06555 ha

AREA BYPASSING OSD = 37 m² (6%)
 FOLLOWING COUNCIL'S STORMWATER DRAINAGE SPECIFICATION TABLE 8 FOR PERMISSIBLE OSD DISCHARGE AND REQUIRED STORAGE,

PSD = 83.4 l/s/ha
 SSR = 343 m³/ha

THEREFORE:
 PSD = 83.4 x 0.06555 = 5.47 l/s

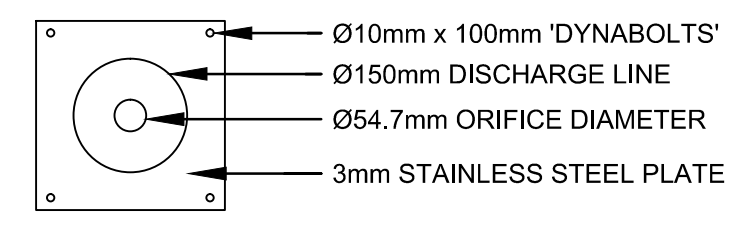
SSR = 343 x 0.06555 = 22.48 m³

ORIFICE CALCULATIONS:

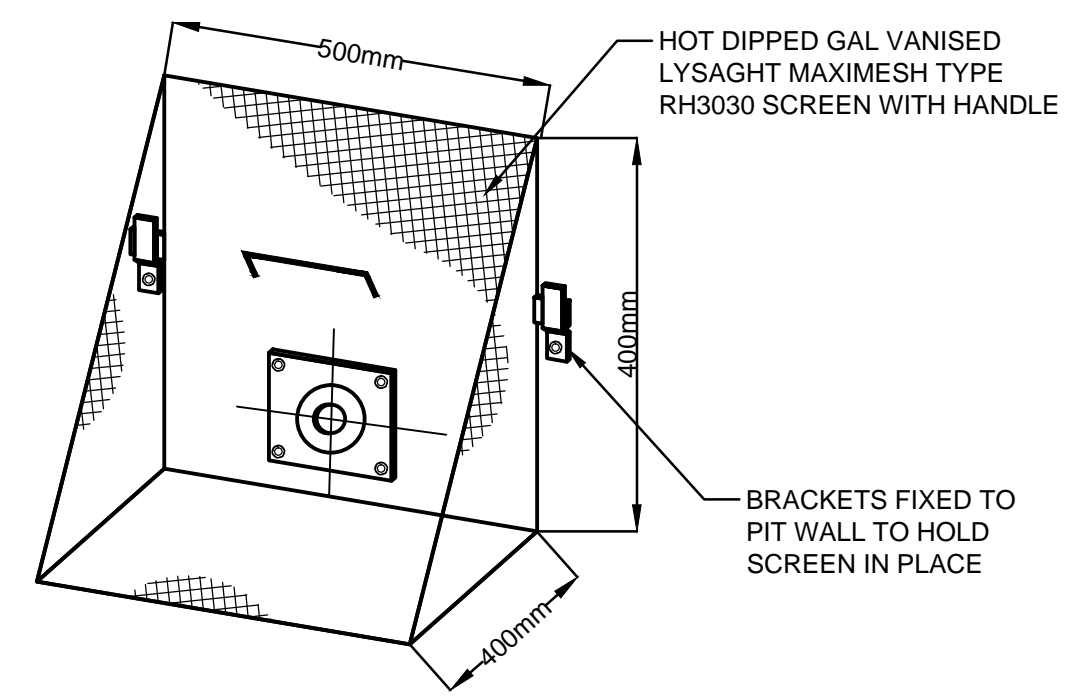
$Q = C \times A \times (2 \times g \times h)^{0.5}$

SO: $A = Q / (C \times \text{sqrt}(2 \times g \times h))$
 = 0.00547 / (0.61 x sqrt(2 x 9.81 x 0.74))
 = 0.00235 m²

THEREFORE:
 $d = \text{sqrt}(4 \times A / \text{pi})$
 = sqrt(4 x 0.00235 / 3.14159)
 = 54.7 mm



ORIFICE PLATE DETAIL
 N.T.S.



TRASH SCREEN DETAIL
 N.T.S.

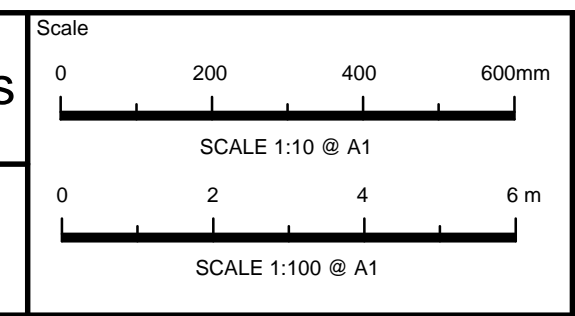
NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EZH	JAB
C	COUNCIL COMMENTS	19/11/2018	EZH	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EZH	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect
Designcorp
 16 Dunlop Street,
 North Parramatta, NSW 2151
 EMAIL: admin@designcorp.com.au
 PHONE: (+612) 9630 9911
 WEB: www.designcorp.com.au

Client
Mr. Elie Elias
 Council
Penrith City Council



AUSTRALIAN CONSULTING ENGINEERS.
 PTY LTD - A.C.N. 084 059 941
 SHOP 2-141 CONCORD RD NORTH STRATHFIELD NSW 2137
 PH: (02) 9763 1500 FX: (02) 9763 1515
 EMAIL: info@aceeng.com.au

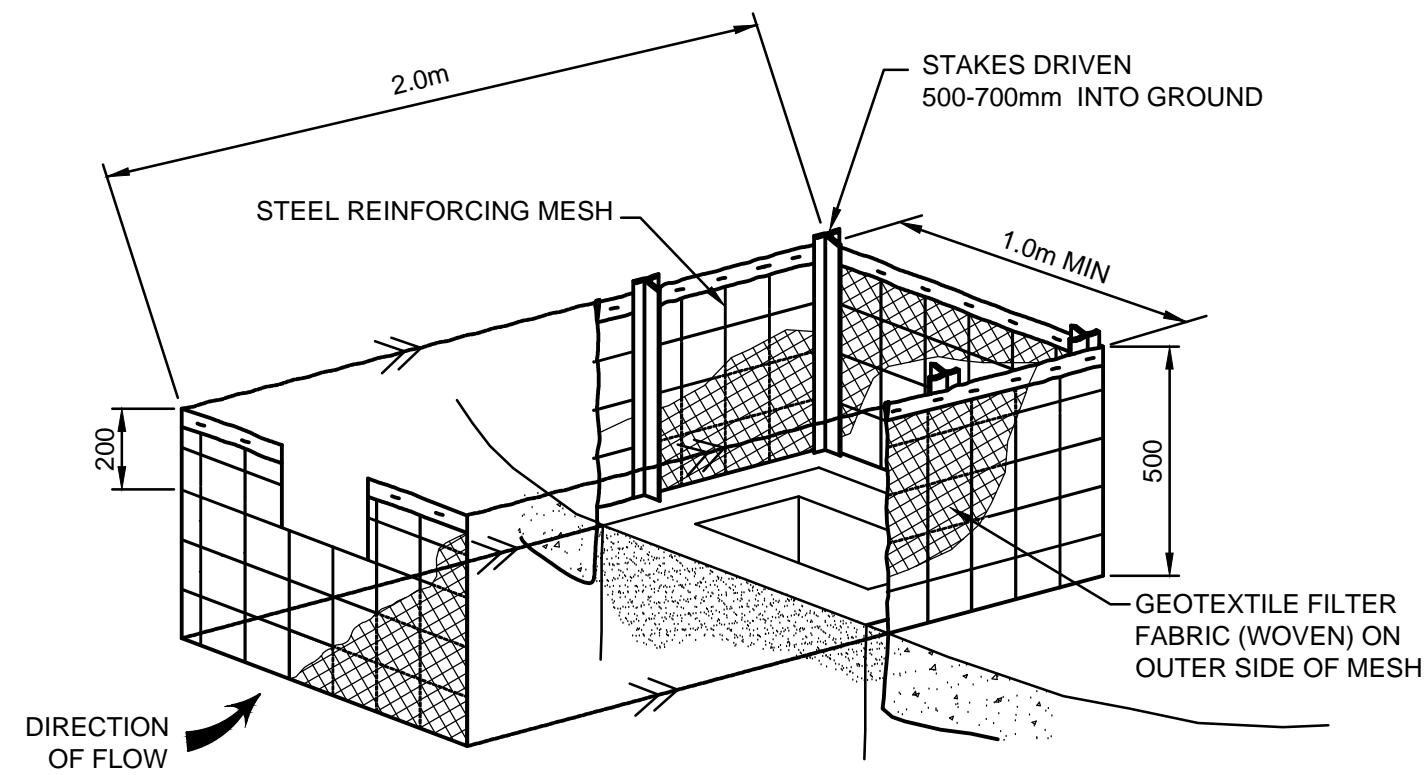
Project
1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE STORMWATER CONCEPT PLANS DEVELOPMENT APPLICATION

Drawing Title
ON-SITE DETENTION DETAILS AND CALCULATION SHEET

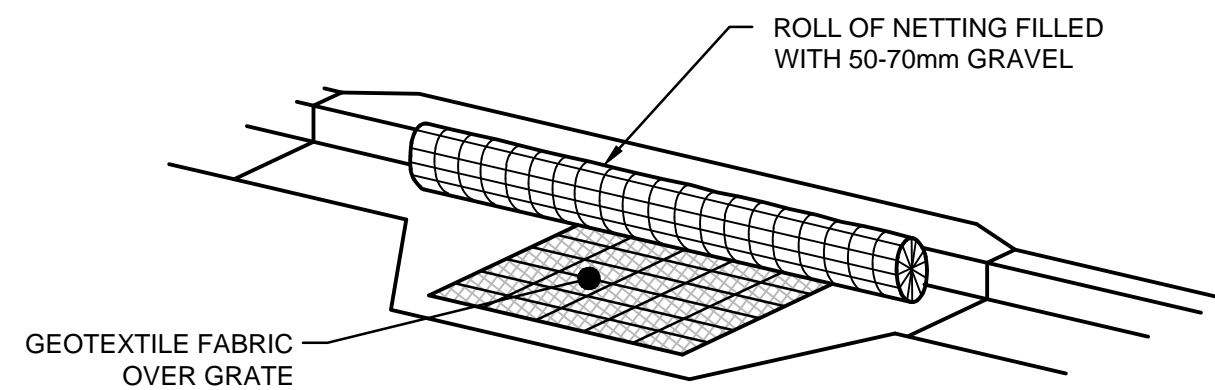
Scale As Shown Project No. 180698 Dwg. No. 104 Issue D

SEDIMENT & EROSION NOTES

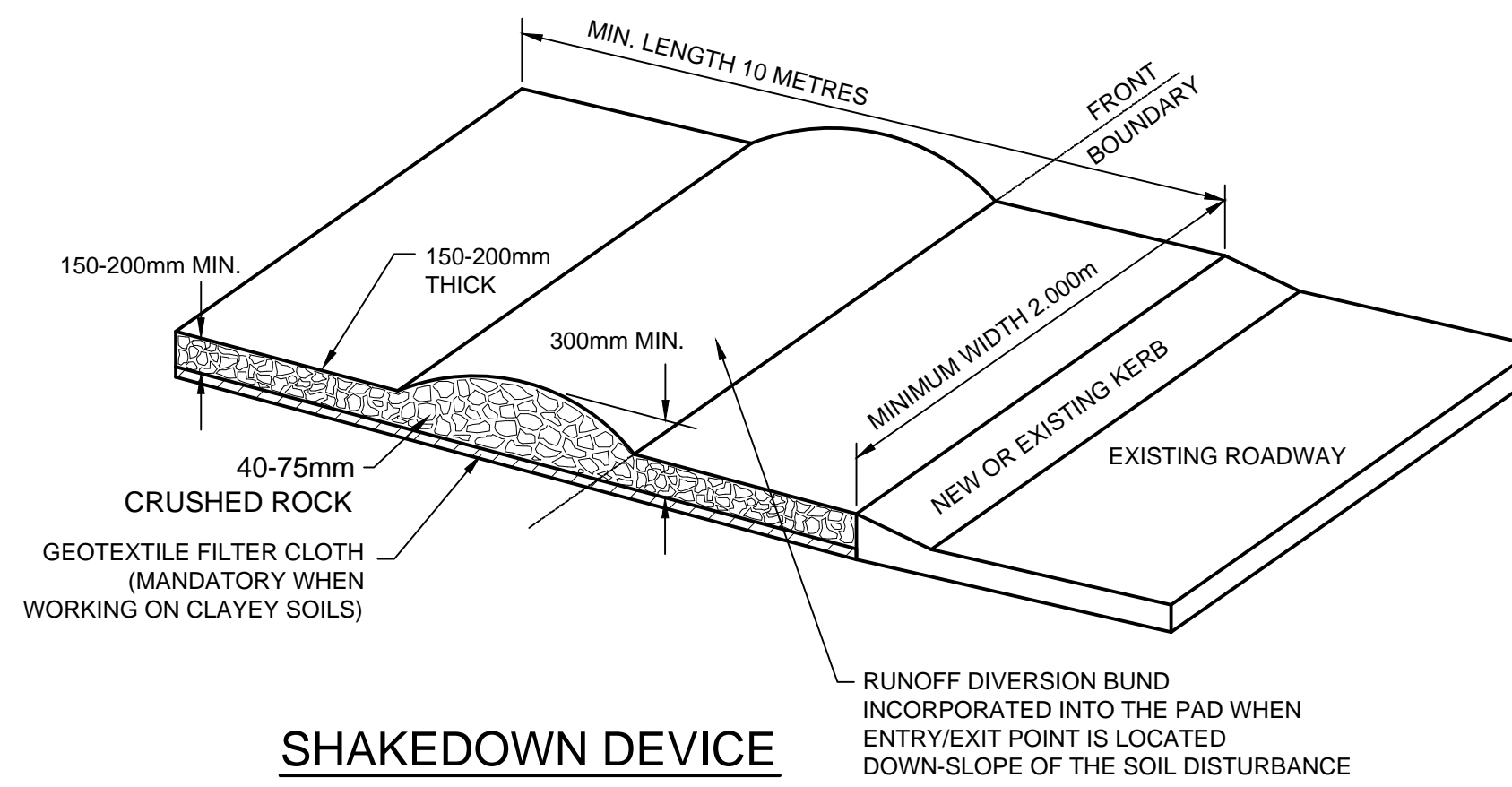
1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.
15. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS etc.



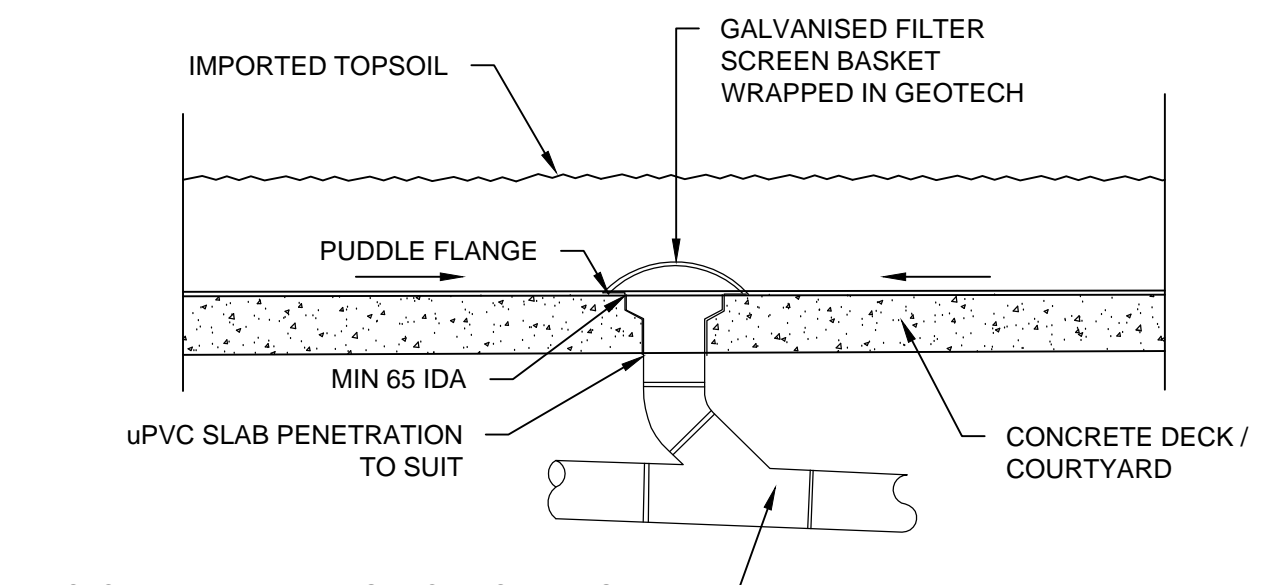
FIELD INLET SEDIMENT TRAP
N.T.S.



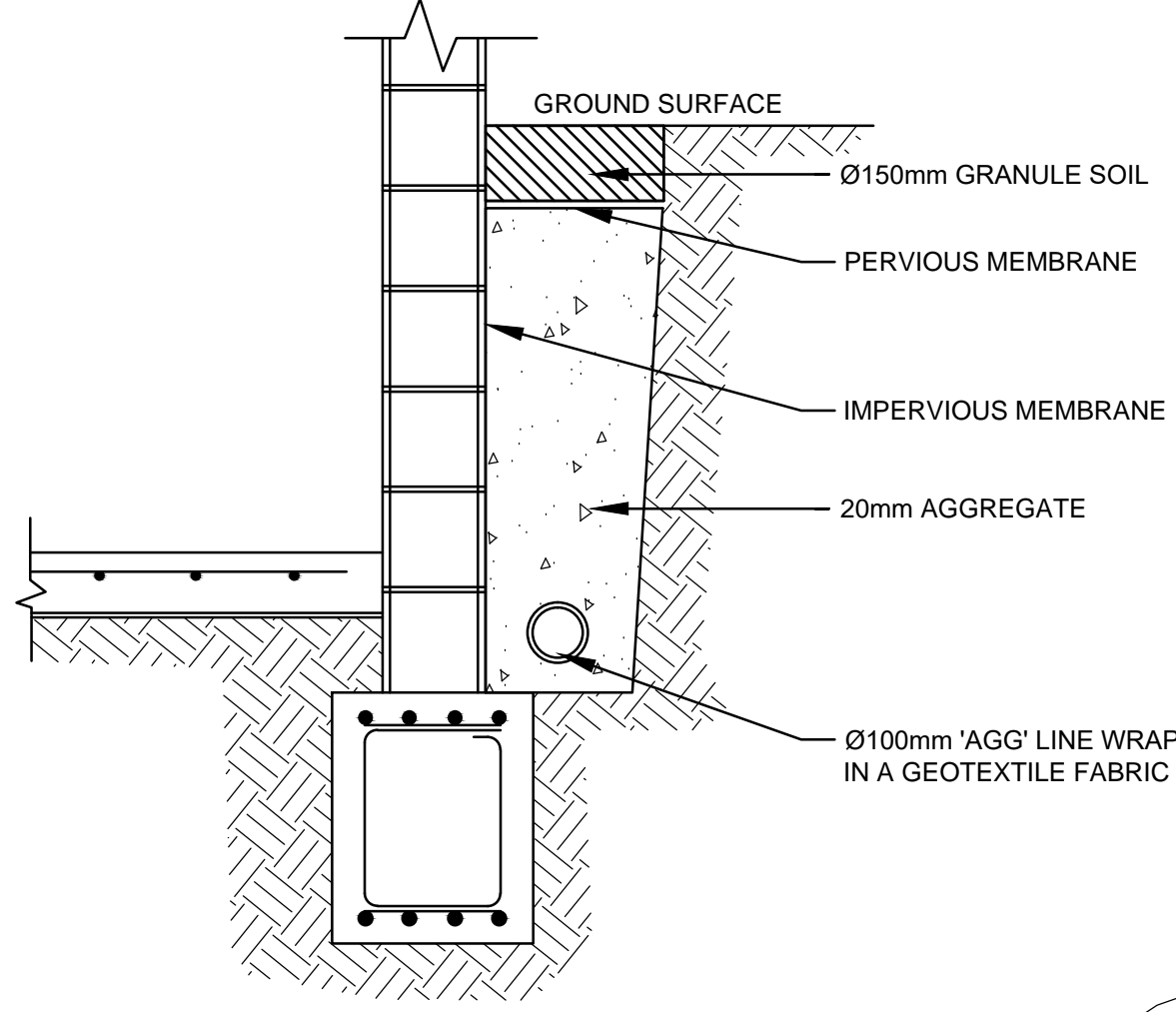
KERB INLET PROTECTION SAG GULLIES
N.T.S.



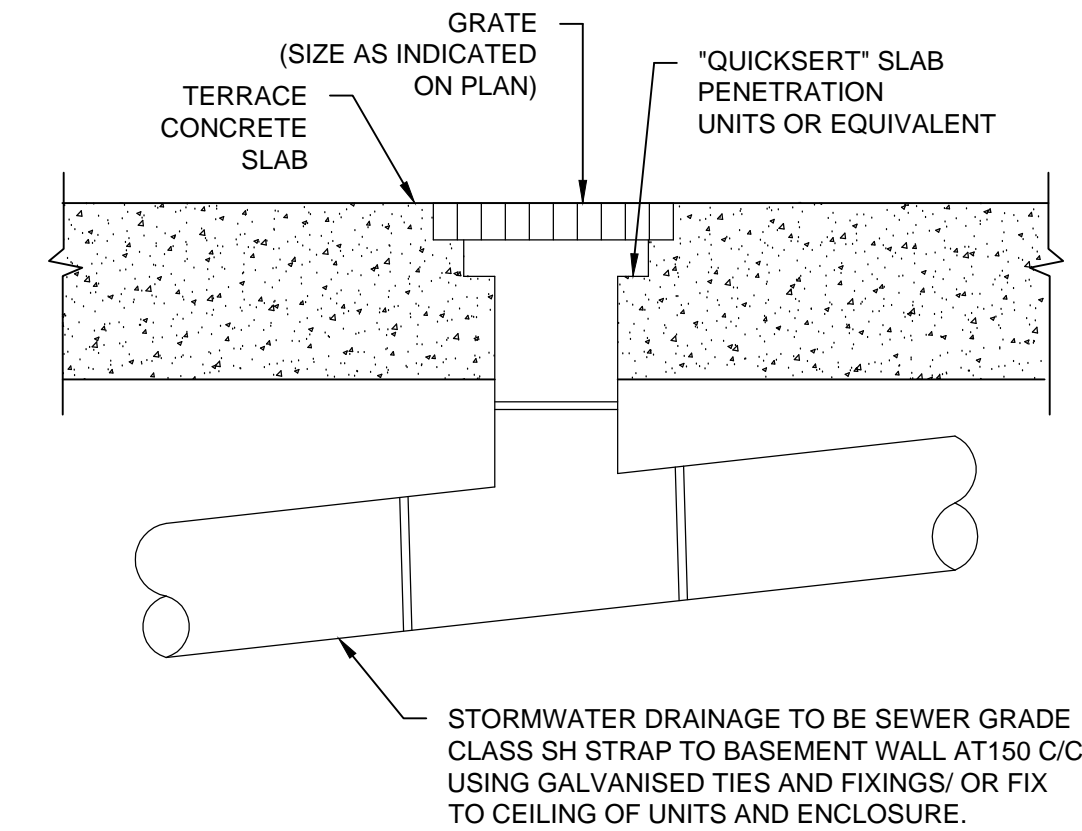
SHAKEDOWN DEVICE
N.T.S.



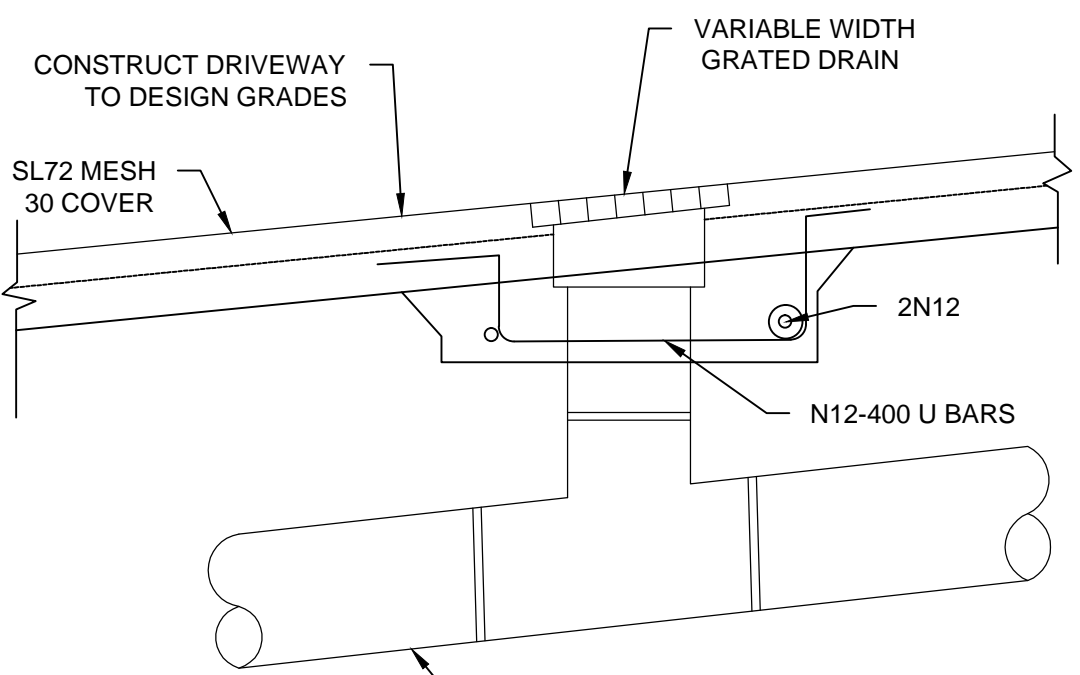
PLANTER GRATE DETAIL
N.T.S.



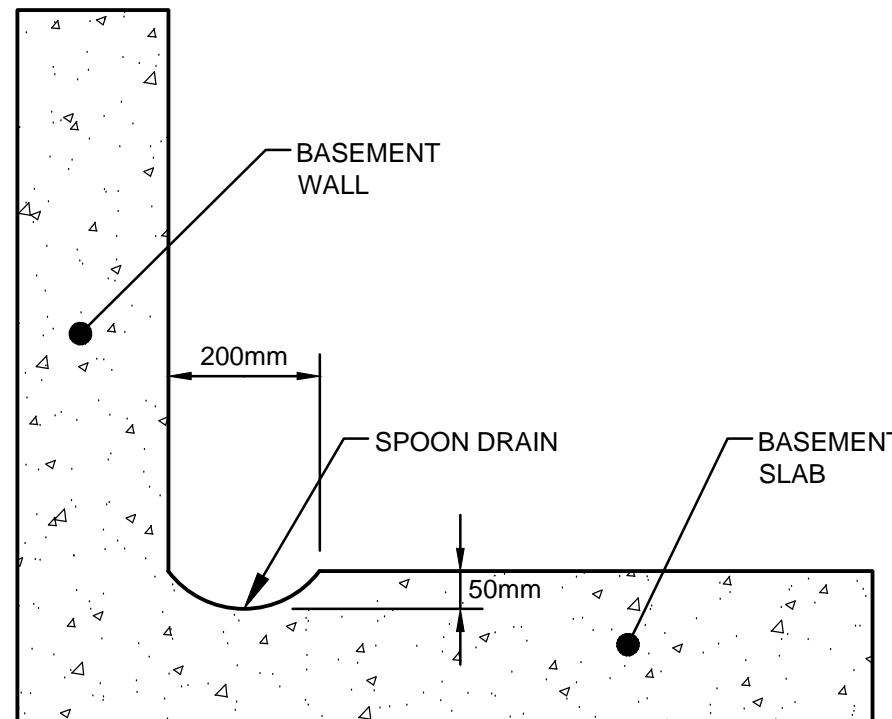
TYPICAL SUBSOIL DRAIN
N.T.S.



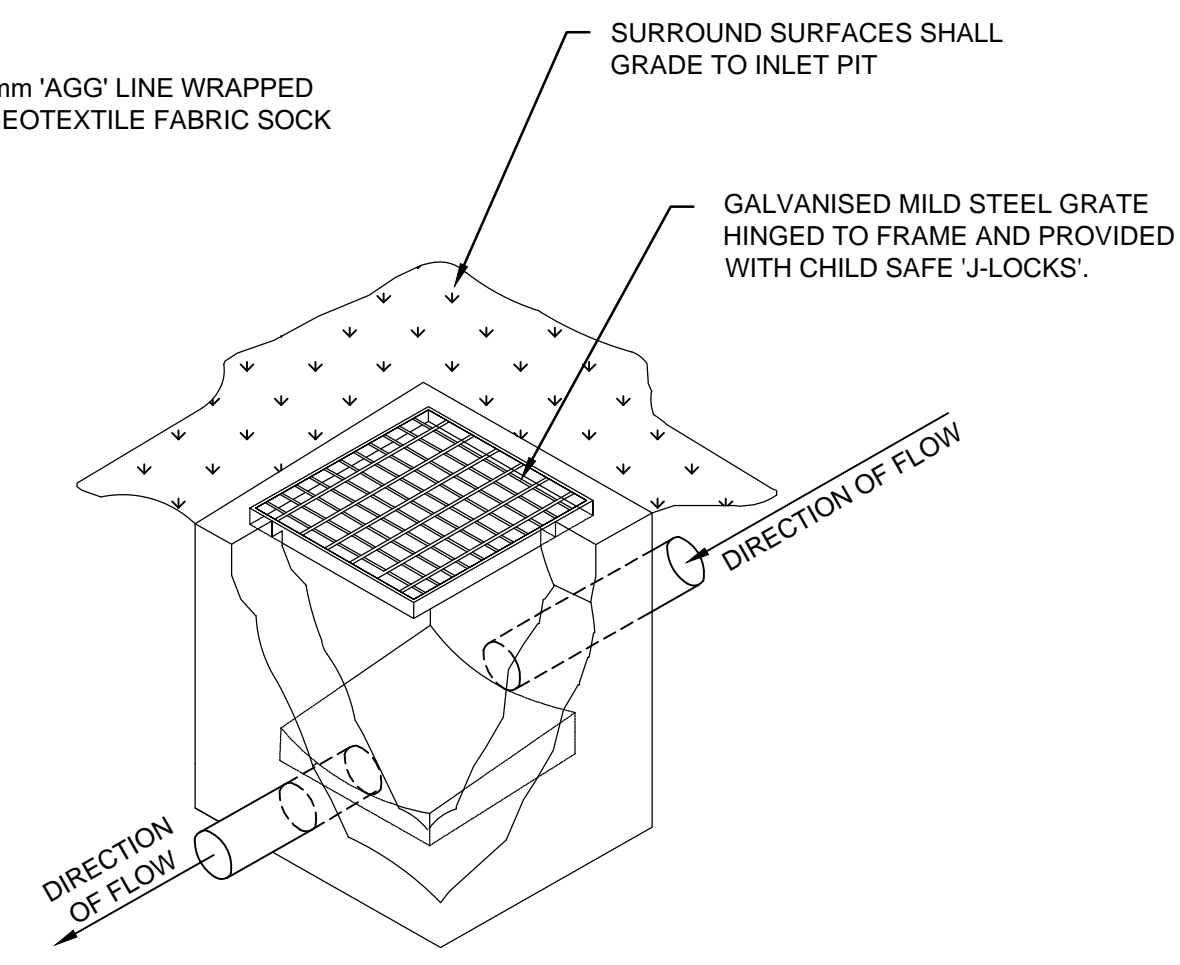
RAINWATER OUTLET DETAIL
N.T.S.



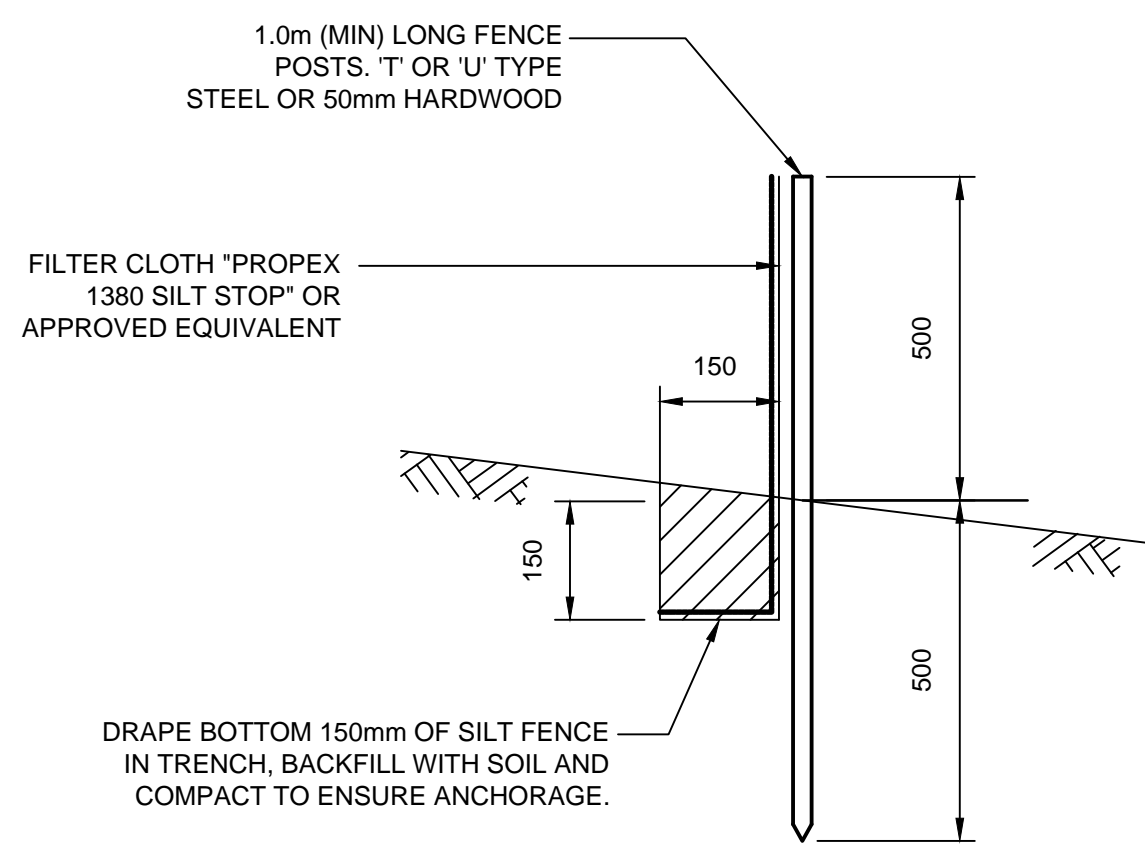
GRATED DRAIN DETAIL
N.T.S.



SPOON DRAIN SECTION DETAIL
SCALE 1:10



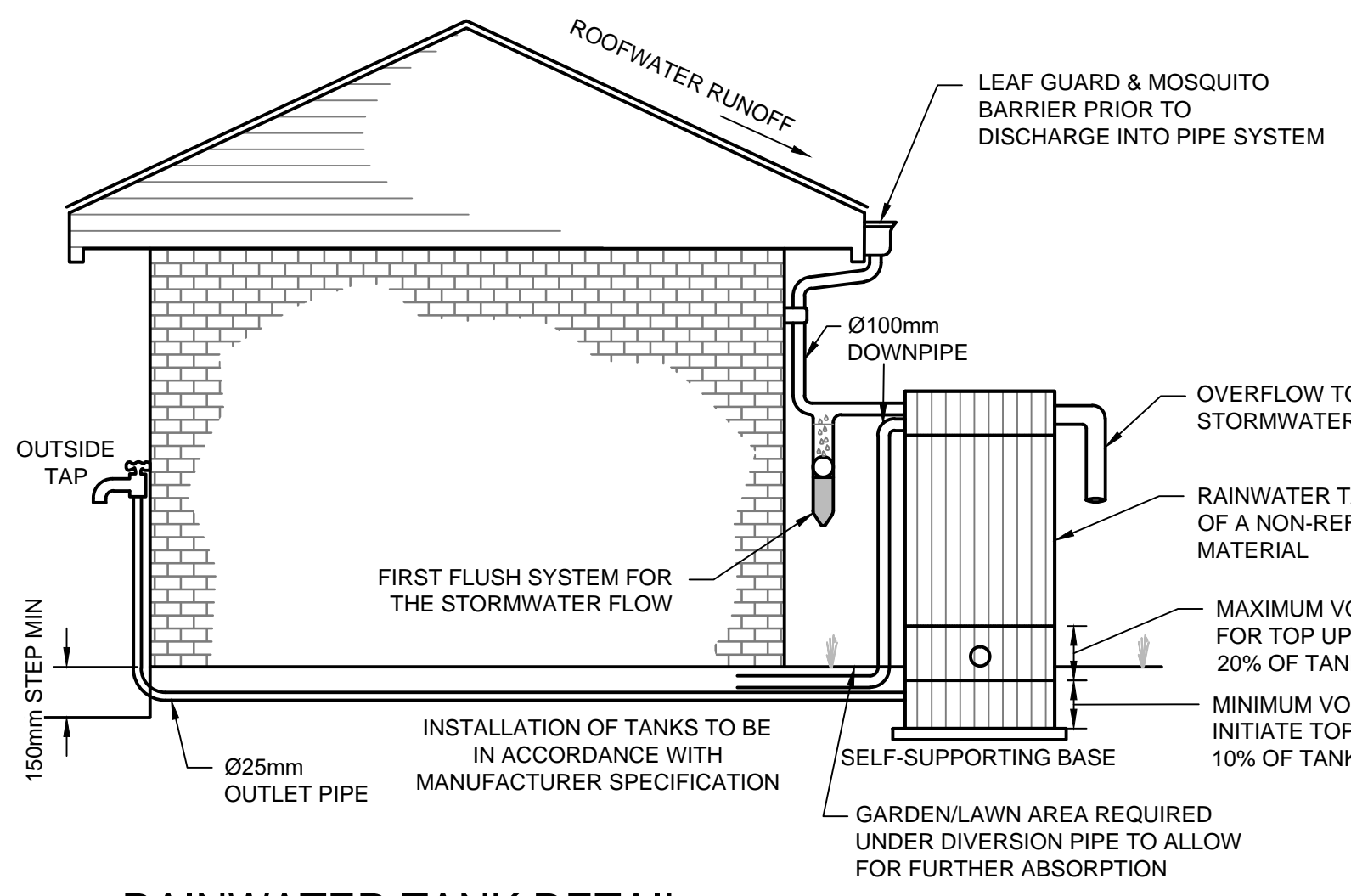
TYPICAL GRATED INLET PIT DETAIL
N.T.S.



SILT FENCE NOTES:

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES.
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN 'BULGES' DEVELOP IN SILT FENCE.
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

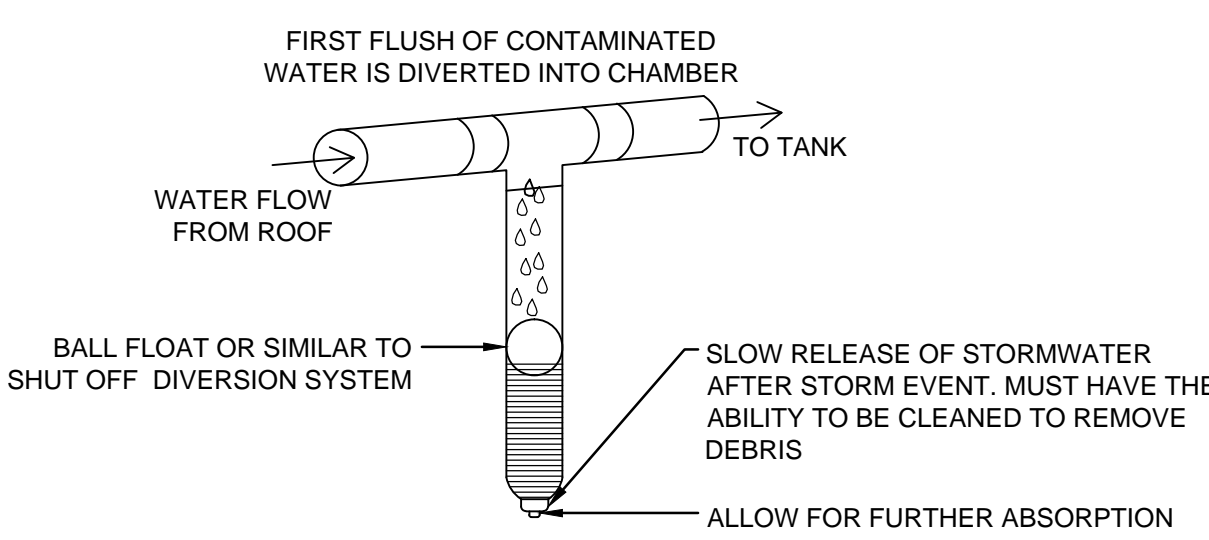
NOT FOR CONSTRUCTION



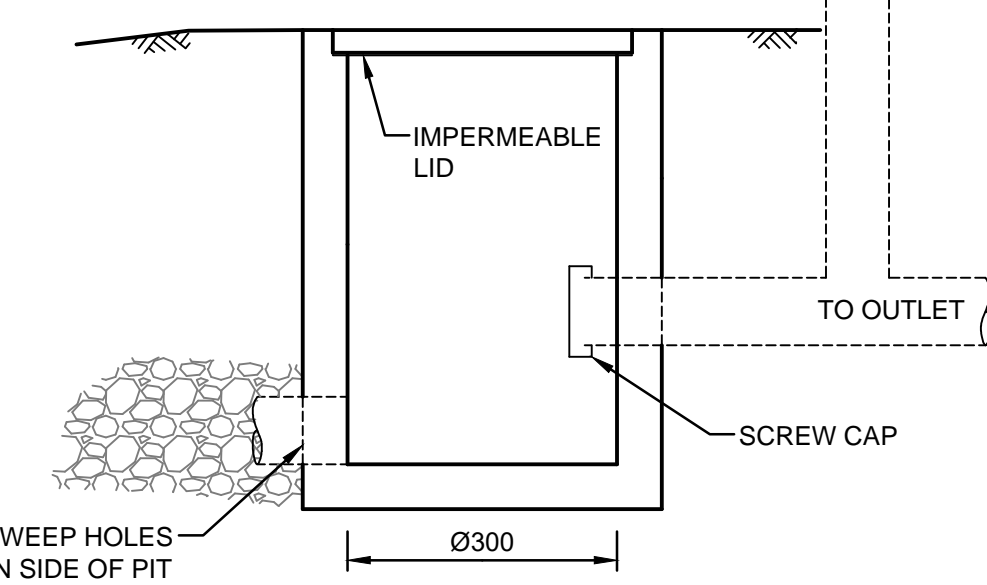
RAINWATER TANK DETAIL
N.T.S.

STORAGE TANK NOTES:

1. TANK WATER TAPS SHALL BE MARKED "RAINWATER NOT TO HUMAN CONSUMPTION".
2. RAINWATER TANKS SHALL BE CONNECTED TO MAINS WATER SUPPLY AS BACKUP.
3. THE PUMPS ARE TO BE INSULATED IN ACCORDANCE WITH COUNCIL POLICY.
4. PUMPS SHALL PROVIDE MINIMUM 150 kPa PRESSURE.
5. EACH TANK TO BE CONNECTED TO AN OUTDOOR TAP FOR IRRIGATION USE.
6. RAINWATER TANKS TO BE CLEANED OUT EVERY 6 MONTHS.
7. WATER TANK AND ASSOCIATED STRUCTURE TO BE THE SAME COLOR, OR A COLOR COMPLEMENTARY TO THE DWELLING.
8. TOP TANK TO BE BELOW TOP OF NEAREST FENCE, OR 1.8 METERS WHICHEVER IS LESS.
9. THE WATER TANK SHOULD BE LOCATED AT LEAST 900mm FROM ANY PROPERTY BOUNDARY.
10. PLUMBING FROM THE WATER TANK IS TO BE KEPT SEPARATED FROM THE RETICULATED WATER SUPPLY SYSTEM.
11. TANK TO BE BUILT ON SELF-SUPPORTING BASE.
12. PROVIDE BACK-FLOW PREVENTION DEVICE AT MAINS WATER METER.
13. ROOF DRAINING TO TANK MUST NOT CONTAIN LEAD, TAR BASED PAINTS OR ASBESTOS.
14. WATER TO BE DRAWN FROM ANAEROBIC ZONE OF TANK.



FIRST FLUSH WATER DIVERTER DETAIL
N.T.S.



CLEANING EYE DETAIL
N.T.S.

Issue	Description	Date	Design	Checked
D	COUNCIL COMMENTS	23/01/2019	EZH	JAB
C	COUNCIL COMMENTS	19/11/2018	EZH	JAB
B	ARCHITECTURAL AMENDMENTS	06/07/2018	EZH	JAB
A	ISSUE FOR DEVELOPMENT APPLICATION	28/06/2018	SMF	JAB

Certification By:

Architect: **Designcorp**
16 Dunlop Street, North Parramatta, NSW 2151
EMAIL: admin@designcorp.com.au
PHONE: (+612) 9630 9911
WEB: www.designcorp.com.au

Client: **Mr. Elie Elias**
Council: **Penrith City Council**

Scale: 0 200 400 600mm
SCALE 1:10 @ A1

AUSTRALIAN CONSULTING ENGINEERS.
PTY LTD - A.C.N. 084 059 941
SHOP 2-4/1 CONCORD RD NORTH STRATHFIELD NSW 2137
PH: (02) 9763 1500 FX: (02) 9763 1515
EMAIL: info@aceeng.com.au

Project: **1 EDNA STREET, KINGSWOOD PROPOSED NEW GENERATION BOARDING HOUSE STORMWATER CONCEPT PLANS DEVELOPMENT APPLICATION**

Drawing Title: **MISCELLANEOUS DETAILS SHEET**

Scale: A1 Project No: 180698 Dwg. No: 105 Issue: D



Statement of Environmental Effects

1 EDNA STREET,
KINGSWOOD
18 NOVEMBER 2018



QUALITY ASSURANCE	
Project:	<i>Boarding House</i>
Address:	<i>1 Edna Street, Kingswood</i>
Lot /DP:	<i>Lot 87 DP 241989</i>
Council:	<i>Penrith City Council</i>
Author:	<i>Think Planners Pty Ltd</i>

<i>Date</i>	<i>Purpose of Issue</i>	<i>Rev</i>	<i>Reviewed</i>	<i>Authorised</i>
<i>July 2018</i>	<i>Draft Issue for Comment</i>	<i>Draft</i>	<i>SK/SF</i>	<i>JW</i>
<i>Nov 2018</i>	<i>DA Revised DA Issue</i>	<i>Final</i>	<i>JW</i>	<i>AB</i>

<i>Integrated Development (under S91 of the EP&A Act). Does the development require approvals under any of the following legislation?</i>	
<i>Fisheries Management Act 1994</i>	<i>No</i>
<i>Heritage Act 1977</i>	<i>No</i>
<i>Mine Subsidence Act 1992</i>	<i>No</i>
<i>Mining Act 1992</i>	<i>No</i>
<i>National Parks and Wildlife Act 1974</i>	<i>No</i>
<i>Petroleum (Onshore) Act 1991</i>	<i>No</i>
<i>Protection of the Environment Operations Act 1997</i>	<i>No</i>
<i>Roads Act 1993</i>	<i>No</i>
<i>Rural Fires Act 1997</i>	<i>No</i>
<i>Water Management Act 2000</i>	<i>No</i>
<i>Concurrence</i>	
<i>SEPP 1- Development Standards</i>	<i>No</i>
<i>SEPP 64- Advertising and Signage</i>	<i>No</i>
<i>SEPP 71 – Coastal Protection</i>	<i>No</i>
<i>SEPP (Infrastructure) 2007</i>	<i>No</i>
<i>SEPP (Major Development) 2005</i>	<i>No</i>
<i>SREP (Sydney Harbour Catchment) 2005</i>	<i>No</i>

CONTENTS

EXECUTIVE SUMMARY	5
SITE AND LOCALITY DESCRIPTION	7
LEGAL DESCRIPTION	7
SUBJECT SITE	7
ZONING	9
LOCALITY ANALYSIS	10
BROADER LOCALITY ANALYSIS	11
HERITAGE	14
DESCRIPTION OF PROPOSAL	15
RESPONSE TO COUNCIL ISSUES	17
PLANNING CONTROLS	19
STATUTORY CONTROLS	19
POLICY CONTROLS	19
CONSIDERATION OF PLANNING CONTROLS	20
STATE ENVIRONMENTAL PLANNING POLICY (BASIX) 2004	20
STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND	20
STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007	20
STATE ENVIRONMENTAL PLANNING POLICY- (VEGETATION IN NON-RURAL AREAS) 2017	20
STATE ENVIRONMENTAL PLANNING POLICY (AFFORDABLE RENTAL HOUSING 2009)	21
SYDNEY REGIONAL ENVIRONMENTAL PLAN (SREP) NO. 20 – HAWKESBURY NEPEAN RIVER	29
PENRITH LOCAL ENVIRONMENTAL PLAN 2010	29
PENRITH DEVELOPMENT CONTROL PLAN 2014	34
CONCLUSION	48

TABLE OF FIGURES

Photograph 1: Shows the subject site – 1 Edna Street.....	7
Figure 1: Aerial Map Extract of Subject Site (Six Maps).....	8
Figure 2: Zoning Map Sheet LZN_013 Extract (Source: Penrith LEP 2010).....	9
Figure 3: Locality Aerial Map Extract of Subject Site (Source: Google Maps)	10
Figure 4: Broader Aerial Map Extract of Subject Site (Source: Google Maps).....	11
Photograph 2: Shows a recently constructed comparable boarding house No. 55 Second Ave, Kingswood	12
Photograph 3: Shows WSU Kingswood Campus via Second Avenue.....	12
Photograph 4: Streetscape via Edna Street as viewing eastwards.....	13
Photograph 5: Streetscape via Edna Street as viewing westwards	13
Figure 5: Heritage Map Sheet HER_013 Extract (Source: Penrith LEP 2004).....	14
Figure 6: 3D Photomontage Extract – Viewed from Corner of Edna St & Callow Ln	Error! Bookmark not defined.
Figure 7: Bus Stop Location.....	22
Figure 8 3D Photomontage Extract – Viewed from the Communal Area	Error! Bookmark not defined.
Figure 9: 3D Photomontage Extract – Viewed from Callow Ln.....	Error! Bookmark not defined.
Figure 10: Zoning Map Sheet LZN_013 Extract (Source: Penrith LEP 2010).....	29

EXECUTIVE SUMMARY

This revised Statement of Environmental Effects has been prepared in support of a Development Application for the demolition of existing structures to construct a New Generation 'Boarding House' at 1 Edna Street, Kingswood.

The plans have been amended to respond to the issues raised by Council with a number of key adjustments made including:

- Reconfiguration of the basement areas to improve the circulation and removal of an at grade parking space.
- Increase to the front setback to 7.8m to align with Councils request
- Reconfiguration of the access ramp to a 5% grade that does not require a hand rail;
- Reconfiguration to waste storage
- Increased landscaped to the western setback to enable screen plantings;
- Adjustment to the building presentation to respond to the issues raised by Council.

The boarding house is to accommodate a total of 16 rooms, each with full bathroom, kitchenette and living area, noting 2 of the room on the ground floor have been designed to be adaptable. The boarding house will accommodate a total of 19 lodgers based on the room size and configuration and as nominated on the plans, noting that the proposal provides a total of 13 x single occupancy rooms and 3 x double occupancy rooms. The development also includes a communal room and communal open space within the ground floor, a total of 8 car parking spaces with 4 x motorcycle parking space and 4 x bicycle parking spaces within the basement level.

A summary of the key elements of the proposal are provided below:

Boarding House

A total of 19 rooms/suites with the following mix:

- o 13 x 1 adult lodger room/suite.
- o 3 x 2 adult lodger room/suite (noting 2 x adaptable room/suite is provided on the ground floor).

Parking

A total of 8 carparking spaces are provided within a basement level.

'Boarding Houses' are permissible with consent within the R3 Medium Residential zone with the application made pursuant to State Environmental Planning Policy (Affordable Rental Housing) 2009. The development proposes to provide affordable rental housing, noting that students are to be a key target market for future residents considering the site's proximity to an established university and TAFE.

Following a review of the relevant planning controls, it is concluded that the proposed development is consistent with the objectives, planning strategies and detailed controls of these planning documents.

Having regard to the benefits of the proposal and considering the absence of adverse environmental, social or economic impacts, the application is submitted to Council for assessment and granting of development consent. Think Planners Pty Ltd recommends the approval of the application, subject to necessary, relevant and appropriate conditions of consent.

SITE AND LOCALITY DESCRIPTION

LEGAL DESCRIPTION

The subject site is legally known as Lot 87 DP 241989, though more commonly known as 1 Edna Street, Kingswood.

SUBJECT SITE

Located behind a local neighbourhood shop the development site is situated within walking distance of 500m from the Western Sydney University – Penrith Campus and within walking distance from TAFE NSW College Kingswood.

Residing on the corner of Edna Street and Callow Lane, the subject land parcel can be best described as a regular shaped corner land parcel with a frontage of 18.29m to Edna Street, frontage of 35.84m to Callow Lane and a total site area of 655.55m².

The subject site currently accommodates an older style residential dwelling, vehicle cross-over, driveway, vegetation and associated structures, as demonstrated by Photograph 1 below.

Photograph 1: Shows the subject site – 1 Edna Street



The site is also within proximity to Nepean Hospital, Kingswood Commercial Precinct, suburban train station, local primary school (Kingswood Primary School), child care centres, large parks/sportsground with a bus stop with regular services to Penrith and Mt Druiitt situated on the eastern and western side of Manning Street.

The site itself is bounded by single storey residential dwellings to its northern, southern and western boundaries. The development proposes to provide affordable rental housing, noting that students are to be a key target market for future residents considering the site's proximity to an established university and TAFE. This is illustrated by an aerial map extract below.

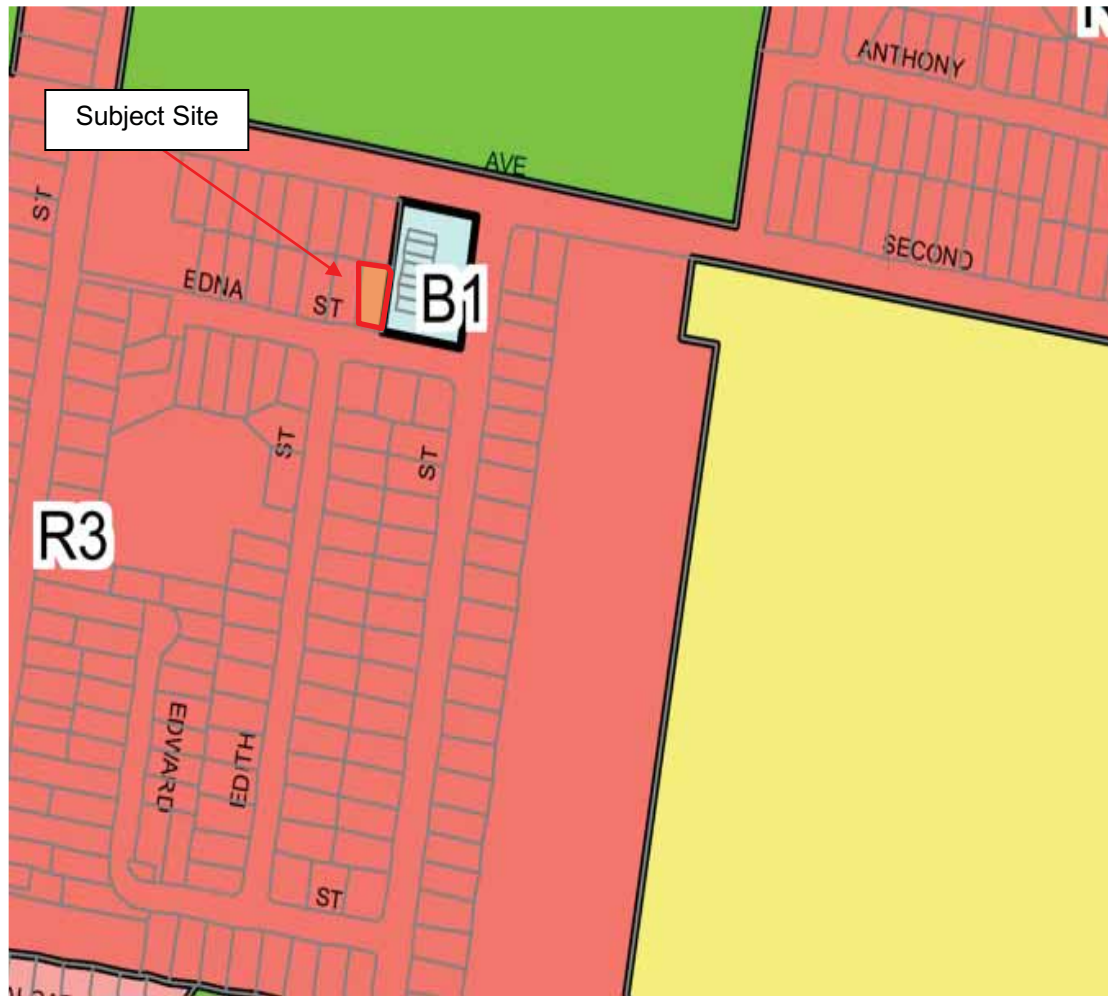
Figure 1: Aerial Map Extract of Subject Site (Six Maps)



ZONING

The site is zoned R3 Medium Density Residential under the provisions of the Penrith Local Environmental Plan 2010 and is attributed with a maximum permitted building height limit of 8.5m. Council's zoning map extract is provided in the following page.

Figure 2: Zoning Map Sheet LZN_013 Extract (Source: Penrith LEP 2010)



The built form along Edna Street comprises predominantly of older style single storey dwellings within a garden setting interspersed by larger two storey dwellings and dual occupancies as well as boarding houses, child care centres and a few large older style multi dwelling housing developments.

'Boarding Houses' are permissible with consent within the R3 Medium Residential zone with the application made pursuant to State Environmental Planning Policy (Affordable Rental Housing) 2009.

LOCALITY ANALYSIS

An analysis of the built form character along Edna and nearby Manning Street indicates that single storey dwellings set within a garden setting is the predominant dwelling form interspersed by larger two-storey dwellings and dual occupancies.

Renewal of the locality is inevitable and potential residential redevelopment patterns and form is heavily dictated by historical subdivision patterns, which will dictate the shape and form of residential areas. The immediate locality comprises predominantly of smaller lots which are not inductive to undertaking redevelopment for multi dwelling housing which typically requires cluster of large and deep lots and as such land parcels along the Edna Street are more likely to be redeveloped as larger modern two storey forms including dual occupancies and unlikely to be redeveloped for multi dwelling housing in the medium term and as such the proposed new age boarding housing is designed to appear as a large two storey duplex set within a landscape setting to be consistent with the existing and anticipated higher-intensity low density housing character of the immediate locality.

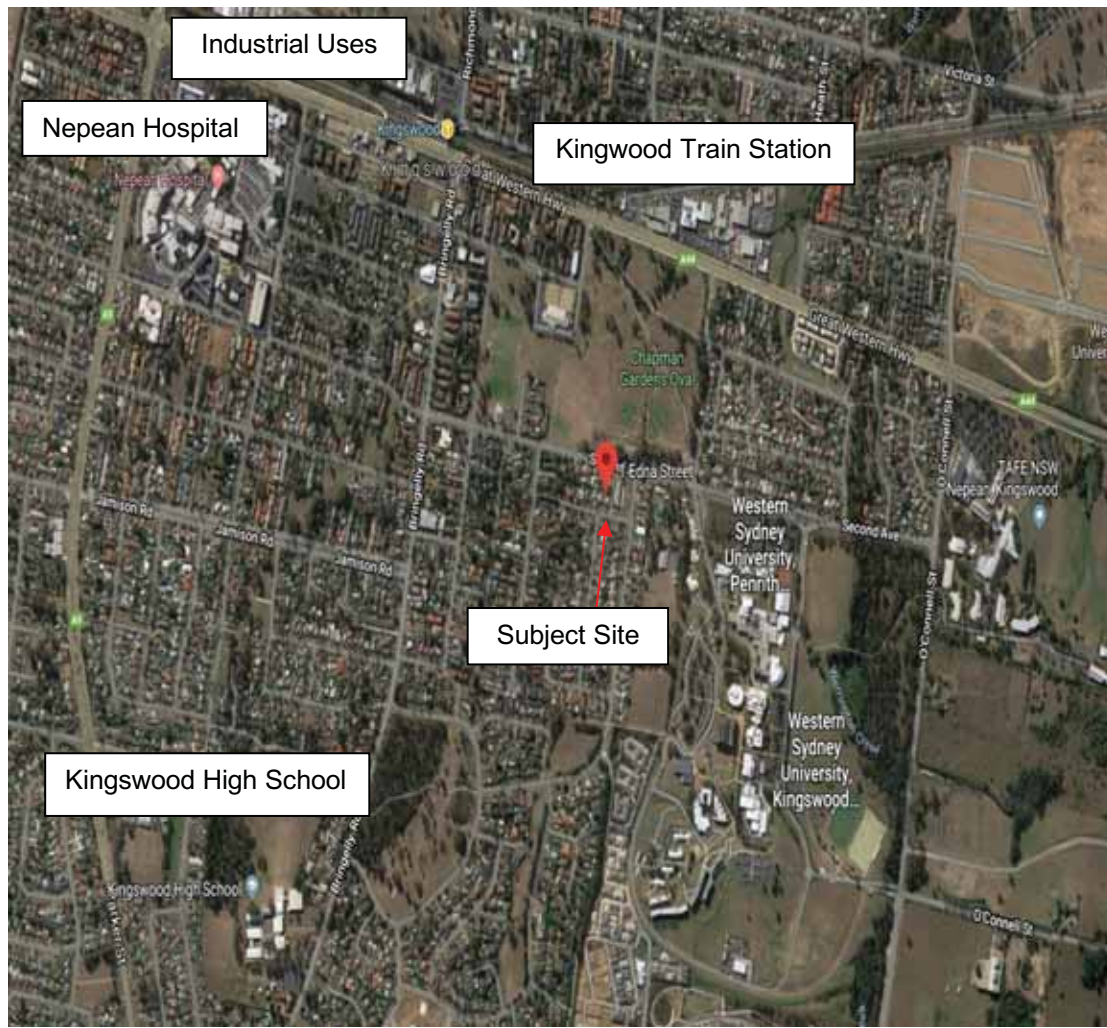
Figure 3: Locality Aerial Map Extract of Subject Site (Source: Google Maps)



BROADER LOCALITY ANALYSIS

The subject area is ideal to accommodate a new age boarding house due to its proximity to Nepean Hospital, Kingswood Commercial Precinct, local primary school (Kingswood Primary School), child care centres, large parks/sportsground and public transportation (suburban train station and local bus stops with services between Penrith and Mt DrUITt). The site is also serviced by key road networks including The Great Western Highway, as illustrated by an aerial map of the broader locality within the following page.

Figure 4: Broader Aerial Map Extract of Subject Site (Source: Google Maps)



The development proposes to provide affordable rental housing, noting that students are to be a key target market for future residents considering the site’s proximity to an established university. Photographs are provided overleaf that give context to the locality and the relationship of the development site with adjoining developments.

Photograph 2: Shows a recently constructed comparable boarding house No. 55 Second Ave, Kingswood



Photograph 3: Shows WSU Kingswood Campus via Second Avenue



Photograph 4: Streetscape via Edna Street as viewing eastwards



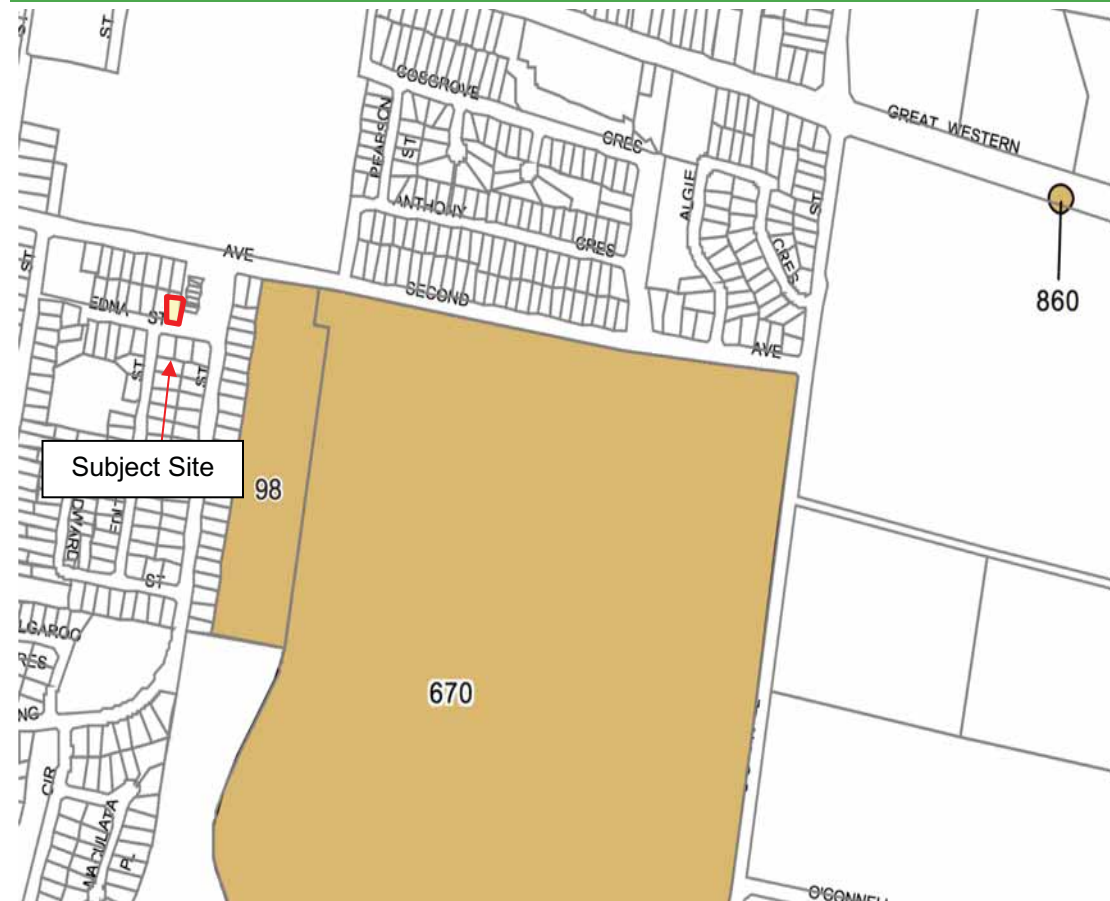
Photograph 5: Streetscape via Edna Street as viewing westwards



HERITAGE

The site is not identified as a heritage item, and it is not located within a heritage conservation area, however there is a heritage item (I670) located near the subject site, as illustrated by Council's Heritage Map Extract below.

Figure 5: Heritage Map Sheet HER_013 Extract (Source: Penrith LEP 2004)



Item 670 is a former Teacher's Residence and is an item of local significance, noting that Kingswood Public School is also listed and is bounded towards the eastern side of Manning Street.

Due to the nature of the proposal and physical separation to the item there is no impact on the setting of the nominated heritage item as it is located on the southern side of Second Avenue within the grounds of the University and school.

Given the separation the proposal will have no impact on the curtilage associated with the heritage item and therefore the development will have no impact on the heritage significant of heritage item 670 or 98. As a result, the subject site will not have any associated heritage restrictions. A heritage impact statement is not deemed to be necessary.

DESCRIPTION OF PROPOSAL

The Development Application is for the demolition of existing structures in-order to construct a two storey New Generation 'Boarding House' consisting of 16 rooms/suites and with a total of 8 car parking spaces at 1 Edna Street, Kingswood.

The plans have been amended to respond to the issues raised by Council with a number of key adjustments made including:

- Reconfiguration of the basement areas to improve the circulation and removal of an at grade parking space.
- Increase to the front setback to 7.8m to align with Councils request
- Reconfiguration of the access ramp to a 5% grade that does not require a hand rail;
- Reconfiguration to waste storage
- Increased landscaped to the western setback to enable screen plantings;
- Adjustment to the building presentation to respond to the issues raised by Council.

The boarding house is to accommodate a total of 16 rooms, each with full bathroom, kitchenette and living area, noting 2 of the room on the ground floor have been designed to be adaptable. The boarding house will accommodate a total of 19 lodgers based on the room size and configuration and as nominated on the plans, noting that the proposal provides a total of 13 x single occupancy rooms and 3 x double occupancy rooms. The development also includes a communal room and communal open space within the ground floor, a total of 8 car parking spaces with 4 x motorcycle parking space and 4 x bicycle parking spaces within the basement level.

A summary of the key elements of the proposal are provided below:

Boarding House

A total of 19 rooms/suites with the following mix:

- o 13 x 1 adult lodger room/suite.
- o 3 x 2 adult lodger room/suite (noting 2 x adaptable room/suite is provided on the ground floor).

Parking

A total of 8 carparking spaces are provided within a basement level.

The proposal is purpose built to provide low cost flexible rental accommodation to a wide range of tenants. Most tenants are likely to be students from Western Sydney University, but may also include single retirees, working singles and young couples. In addition the site is within broad proximity to the Kingswood Health and Education Precinct and therefore nurses and other medical professionals may also be future residents.

The boarding house will accommodate a maximum of 19 lodgers (based on room configuration).

The boarding house has been designed to present as a large two storey dual occupancy to be consistent with the existing and anticipated 2 storey low density-built form character within the immediate locality, noting Council has recently approved comparable two storey boarding houses within R3 zones within the immediate locality (55 Second Avenue, Kingswood). The development also incorporates contemporary architectural aesthetics that relate to existing development in proximity to the site and are sympathetic to the nature and character of the area.

Design consideration has also been given to residential amenity including aspects such as privacy and solar access for both future residents of the proposal and those of surrounding properties.

The relevant architectural plans for the proposal have been prepared by Design Corp, while supporting reports have been prepared by relevant consultants.

The design of the proposal development incorporates contemporary architectural aesthetics that aims to be consistent with the character in the locality.

RESPONSE TO COUNCIL ISSUES

Council issued a letter dated 29 October 2018 in relation to the proposal. The following table provides a summary of the issues discussed and the design response.

Comment	Response
Landscaped Area	We note that the DCP provision for a numerical amount of landscaped area does not apply- as the SEPP only requires the front setback area to be compatible and Council cannot refuse to grant consent on that basis. However the plans have been revised to increase the amount of landscaping to both street frontages. In particular the removal of a parking space frees up landscaped area in the north eastern corner of the site. The extent of landscaped area is considered suitable in the context of the streetscape noting the hard surfaces are mitigated as much as possible.
Character	As noted the plans have been revised to increase the amount of landscaping to both street frontages. In particular the removal of a parking space frees up landscaped area in the north eastern corner of the site. The extent of landscaped area is considered suitable in the context of the streetscape noting the hard surfaces are mitigated as much as possible. In relation to the design the corner treatment and building design has been revised to mitigate the building bulk and scale and provides a better contextual response.
Amenity	The reconfigured rooms have been revised to provide additional windows where practicable.
Overlooking	The western facing windows now adopts fixed privacy screen windows to the upper level western windows to address the issue raised by Council. Further in relation to the GF POS this area has been revised to provide screen planting.
Front Setback	The front setback has been increased to provide 7.8m as requested.
Building Envelope	We note that the use of the MUH envelope is not appropriate given the small allotment size and the dual occupancy envelope is more suitable and the proposal is fully compliant with this.
Landscaped Area	We note that the DCP provision for a numerical amount of landscaped area does not apply- as the SEPP only requires the front setback area to be compatible and Council cannot refuse to grant consent on that basis. However the plans have been revised to increase the amount of landscaping to both street frontages. In particular the removal of a parking space frees up landscaped area in the north eastern corner of the site. The extent of landscaped area is considered suitable in the context of the streetscape noting the hard surfaces are mitigated as much as possible.

Building Design	See above in relation to building design.
Safety Concerns	Fencing has been added to the ground floor unit areas to deal with the security concerns identified.
Traffic Matters	These have been addressed in the amended plans.
Engineering Matters	These have been addressed in the amended plans.
Acoustic	These matters have been addressed in the revised Acoustic Report.
Waste	The waste area has been revised to address Council's concerns and a waste management plan is provided with the application. Bulk storage provision is made as per Council's guidelines.
Social planning	A revised PoM has been prepared.
Other Matters	Have been addressed in the revised documents.

PLANNING CONTROLS

STATUTORY CONTROLS

The relevant Statutory Planning Controls include:

- State Environmental Planning Policy BASIX
- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy- (Vegetation in Non-Rural Areas) 2017
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Affordable Rental Housing) 2009
- Sydney Regional Environmental Plan (SREP) NO. 20 – Hawkesbury Nepean River.
- Penrith Local Environmental Plan 2010.

POLICY CONTROLS

The applicable policy control documents include:

- Penrith Development Control Plan 2014.

CONSIDERATION OF PLANNING CONTROLS

The following summarises the relevant planning controls in relation to the proposal and the compliance of each.

STATE ENVIRONMENTAL PLANNING POLICY (BASIX) 2004

The proposal is not subject to BASIX and hence a Section J report accompanies the development application.

STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

Given the historical use of the locality for residential purposes, land contamination is not likely. A review of aerial photographs and the site itself does not indicate any potentially contaminating activities occurring on the site and therefore Clause 7 is satisfied.

Further investigation and reporting under SEPP 55 is not considered necessary as there is no underlying change of use of the land and as such Clause 7 of the SEPP is satisfied. If any contaminated material or suspected contaminated material is unearthed during the construction process, then actions consistent with the legislative requirements and guideline document will be undertaken.

STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

The development site is not located on a classified road and thus it is not necessary to consider the provisions of Clause 102, and 104 of the SEPP. Clause 104 identifies several types of development that require concurrence from Roads and Maritime Services where development is identified as *'traffic generating development'*.

The current proposal is not identified as traffic generating development as the site does not trigger the threshold requirements.

Therefore, concurrence from the RMS is not required.

STATE ENVIRONMENTAL PLANNING POLICY- (VEGETATION IN NON-RURAL AREAS) 2017

State Environmental Planning Policy (Vegetation in Non-Rural Areas) was introduced in August 2017. This SEPP seeks to protect the biodiversity values of trees and other vegetation in non-rural areas of the state, and to preserve the amenity of non-rural areas of the State through the appropriate preservation of trees and other vegetation.

The subject site is within a well-established residential area, having historically been used for residential purposes.

This application seeks Council consent for the removal of a few small trees/shrubs on site as identified in the attached plans. It is highlighted that where appropriate existing trees/vegetation are to be retained noting no significant vegetation is to be impacted as part of the proposal.

Development proposes extensive landscape embellishment works within a low to medium residential context including landscaping along the sites front, side and rear setbacks will be undertaken as part of the proposal in accordance with the attached Landscape Plan.

The landscape treatment will soften the built form, assist with maintaining privacy and help to integrate the development with the site's context.

STATE ENVIRONMENTAL PLANNING POLICY (AFFORDABLE RENTAL HOUSING 2009)

The SEPP permits Boarding Houses on land zoned residential, neighbourhood, local centre and mixed use.

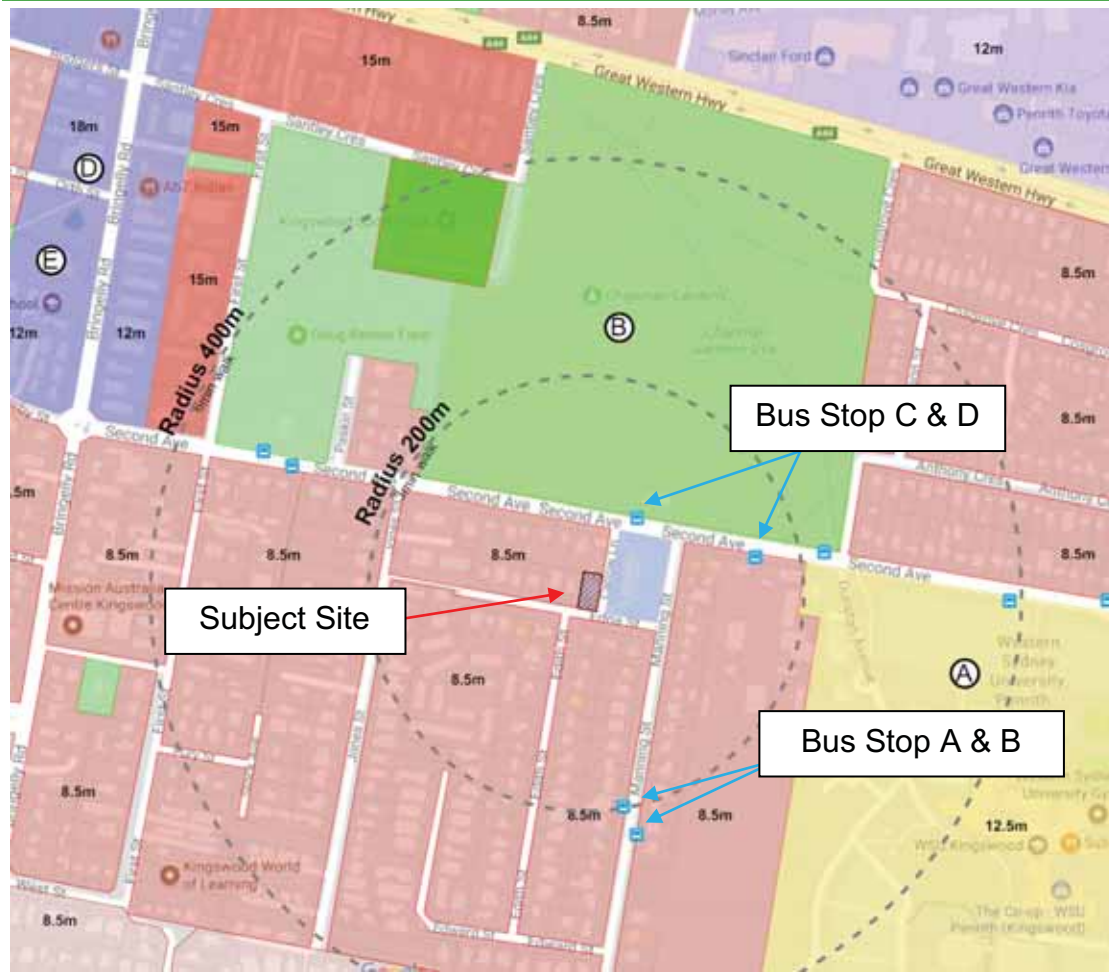
The effect of the SEPP is to confirm that such uses are consistent with the objectives of the zone.

The site is located within an '*accessible area*' being within 400m of a bus stop that provides the required level of service as defined in the SEPP.

As shown on the map extract in the following page, a local bus stop that provides an hourly service to Penrith via the 770/774/775/776 bus routes that run between 06.00 and 21.00 from Monday to Friday and between 08.00 and 18.00 on each Saturday and Sunday, is situated 80m away from the subject site and two bus stops (on each side of the road) that provide a hourly service to Mt Druitt via the 770/774/775/776 bus routes that run between 06.00 and 21.00 from Monday to Friday and between 08.00 and 18.00 on each Saturday and Sunday, is situated approximately 390m north from the development site.

As such it is demonstrated that the site is within an accessible area and that the level of service complies with the SEPP requirements to be considered as an '*accessible area*'.

Figure 7: Bus Stop Location



The proposal will provide affordable rental housing within medium density residential zoned land to address current shortages in the availability of affordable rental housing.

The table below provides discussion against the relevant provisions of the SEPP.

SEPP ARH Requirement

3 Aims of Policy

The aims of this Policy are as follows:

- (a) to provide a consistent planning regime for the provision of affordable rental housing,
- (b) to facilitate the effective delivery of new affordable rental housing by providing incentives by way of expanded zoning permissibility, floor space ratio bonuses and non-discretionary development standards,
- (c) to facilitate the retention and mitigate the loss of existing affordable rental housing,

The proposal is for a form of affordable housing directly sought in the SEPP. The proposal will result in the addition of affordable short-term rental housing in the area that is close to public transport and as such is consistent with the aims of the policy.

- (d) to employ a balanced approach between obligations for retaining and mitigating the loss of existing affordable rental housing, and incentives for the development of new affordable rental housing,
- (e) to facilitate an expanded role for not-for-profit providers of affordable rental housing,
- (f) to support local business centres by providing affordable rental housing for workers close to places of work,
- (g) to facilitate the development of housing for the homeless and other disadvantaged people who may require support services, including group homes and supportive accommodation.

25 Definition

In this Division:

Communal living room means a room within a boarding house or on site that is available to all lodgers for recreational purposes, such as a lounge room, dining room, recreation room or games room.

The development provides a common living room and communal open space.

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:

The site is zoned R3 Medium Density Residential.

- (a) Zone R1 General Residential,
- (b) Zone R2 Low Density Residential,
- (c) Zone R3 Medium Density Residential,
- (d) Zone R4 High Density Residential,
- (e) Zone B1 Neighbourhood Centre,
- (f) Zone B2 Local Centre,
- (g) Zone B4 Mixed Use.

27 Development to which Division applies

This Division applies to development, on land to which this Division applies, for the purposes of boarding houses.

28 Development may be carried out with consent
Development to which this Division applies may be carried out with consent.

Consent is sought in this development application.

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:

There is no applicable maximum FSR for land zoned R3 within Penrith LEP 2010.

<p>(a) the existing maximum floor space ratio for any form of residential accommodation permitted on the land, or</p> <p>(2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:</p> <p>(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,</p> <p>(b) landscaped area if the landscape treatment of the front setback area is compatible with the streetscape in which the building is located,</p> <p>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,</p> <p>(d) private open space if at least the following private open space areas are provided (other than the front setback area):</p> <p>(i) one area of at least 20 square metres with a minimum dimension of 3 metres is provided for the use of the lodgers,</p> <p>(ii) if accommodation is provided on site for a boarding house manager—one area of at least 8 square metres with a minimum dimension of 2.5 metres is provided adjacent to that accommodation,</p> <p>(e) parking if not more than:</p> <p>(i) in the case of development not carried out by a social housing provider—at least 0.5 parking spaces are provided for each boarding room</p> <p>(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:</p> <p>(i) 12 square metres in the case of a boarding room intended to be used by a single lodger, or</p> <p>(ii) 16 square metres in any other case.</p>	<p>Development complies with prescribed height controls under the Penrith LEP.</p> <p>The front setback landscape treatment is compatible with the existing streetscape, noting street tree is to be retained.</p> <p>One communal area is provided to the boarding house. The communal living room is oriented to the north and will receive at least 3 hours of direct sunlight from 12 noon to 3pm.</p> <p>The proposal provides communal open space area to the rear of the site with depth greater than 3m (6m) and a total area over 20m² (75.32m²) and as such is compliant with the SEPP.</p> <p>The proposal is for a 16-room boarding house accommodating 19 lodgers and therefore a boarding house manager is not required, noting ARH SEPP states a total of 20 or more lodgers triggers the need to provide an on-site boarding house manager.</p> <p>The site is in an accessible area (within 400m to bus stop).</p> <p>0.5 x 16 = 8 car parking spaces.</p> <p>The application provides a total of 8 resident car parking spaces in the basement.</p> <p>The proposal also provides for 4 motorcycle parking spaces and 4 bicycle parking space within a basement level, which complies with the SEPP.</p> <p>All single lodger rooms are >12m² when excluding the kitchen and bathroom areas and all double lodger rooms are >16m², when excluding kitchen and bathroom areas.</p>
---	---

<p>(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.</p>	<p>Each room has a kitchen and bathroom.</p>
<p>30 Standards for boarding houses</p>	
<p>(1) A consent authority must not consent to development to which this Division applies unless it is satisfied of each of the following:</p>	
<p>(a) if a boarding house has 5 or more boarding rooms, at least one communal living room will be provided,</p>	<p>A communal living room is provided on the ground floor with generous ancillary outdoor space.</p>
<p>(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,</p>	<p>The rooms measure no more than 25m² in area in total when excluding the kitchen and bathroom areas.</p>
<p>(c) no boarding room will be occupied by more than 2 adult lodgers,</p>	<p>Boarding House designed with a maximum of 2 adults lodgers. A condition to this effect is anticipated.</p>
<p>(d) adequate bathroom and kitchen facilities will be available within the boarding house for the use of each lodger,</p>	<p>All boarding rooms are self-contained rooms containing a kitchen and bathroom.</p>
<p>(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,</p>	<p>The boarding has the capacity to accommodate up to 19 lodgers and as such a boarding house manager must be provided on-site.</p>
<p>(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,</p>	<p>Not applicable.</p>
<p>(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.</p>	<p>SEPP requires a total of 1 bicycle parking space and 3.2 (4) bicycle parking spaces.</p>
	<p>The proposal makes provision for 4 x bicycle parking spaces and 4 x motorcycle parking spaces, which complies with the SEPP.</p>
<p>52 No subdivision of boarding houses</p>	
<p>A consent authority must not grant consent to the strata subdivision or community title subdivision of a boarding house.</p>	<p>No subdivision is proposed.</p>

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.

An analysis of the character of the local area and the compatibility of a boarding house is provided overleaf.

Character of the Local Area

The SEPP requires consideration as to whether the design of the development is compatible with the character of the local area. The question of compatibility is set out in the planning principle set out in *Project Venture Developments v Pittwater Council (2005) NSW LEC 191*. A decision in *Moscaritolo v Ryde City Council [2012] NSW LEC 1024* reinforced that the planning principle is relevant to development to which the Affordable Rental Housing SEPP applies. A discussion of the character of the locality is provided as well as assessment of the compatibility of the proposal that aligns with the planning principle.

Existing Character

The existing character of the locality is of 1-2 storey residential dwellings of mixed age and architectural style. Given the age of housing stock in the locality a key consideration in the current circumstance is the form of development anticipated for the area. As addressed, the site is zoned R3 Medium Density Residential under the Penrith LEP 2010 and boarding houses, multi-unit housing, dual occupancies, semi-detached dwellings and dwelling houses are permissible on the site and in the surrounding locality.

Renewal of this established residential estate is inevitable and potential residential redevelopment pattern and form is heavily dictated by historical subdivision patterns, which will dictate the shape and form of residential areas. The immediate locality comprises predominantly of smaller lots which are not inductive to undertaking redevelopment for multi dwelling housing which typically requires cluster of large and deep lots and as such land parcels along the both Edna Street and Manning Street are more likely to be redeveloped as larger modern two storey dwelling and large two storey duplex and unlikely to be redeveloped for multi dwelling housing in the medium term and as such the proposed new age boarding housing is designed to appear as a large two storey duplex set within a low-residential density landscape setting to be consistent with the existing and anticipated higher-intensity low density housing character of the immediate locality, noting adjoining properties are sized for dual occupancy developments rather than multi-unit housing and therefore adopting those controls as a guide for the building footprint are considered most suitable.

The development has been influenced and designed to be consistent with the form, style, bulk and scale of a comparable two storey boarding houses elsewhere in the immediate locality and broadly adopted the setback controls that would apply to a dual occupancy on a corner allotment given the allotment size and configuration would otherwise likely to result in a dual occupancy development.

In consideration of the likely future character of this local area and anticipated building forms, the current proposal will be entirely consistent with the future character of the locality as envisaged under the controls contained within the Penrith LEP 2010.

Furthermore, it will not be out of context with the existing established character.

Compatibility of the Proposal with the Character of the Area

In accordance with the Planning Principle set out in *Project Venture Developments v Pittwater Council (2005) NSW LEC 191* the following tests apply in determining whether development is compatible with surrounding development:

24 *Where compatibility between a building and its surroundings is desirable, its two major aspects are physical impact and visual impact. To test whether a proposal is compatible with its context, two questions should be asked.*

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?*

These questions will be dealt with in turn however it is important to note that as set out in the planning principle *'Compatibility is... different from sameness. It is generally accepted that buildings can exist together in harmony without having the same density, scale or appearance, though as the difference in these attributes increases, harmony is harder to achieve'*.

Therefore, it is not necessary that the development adopt the same built form as surrounding, and in this case anticipated, development. In terms of the physical impacts of development the following points are made:

- The design of the proposal and the orientation of the lot means that there is minimal overshadowing to adjoining properties, with adjoining properties retaining adequate solar access at mid-winter.
- Privacy impacts are mitigated using building separation, reduced windows to side boundaries and the use of screens.

- Noise impacts are reduced through siting the communal areas internally and communal open space towards the rear of the development site away from adjoining dwellings and road traffic areas.
- The development proposal does not result in the constrained development potential of the adjoining properties.

Therefore, the physical impacts of the proposal are acceptable.

In response to the second question set out in the planning principle, the following comments are made:

- The scale of the proposed building is consistent with the anticipated character of residential buildings in the area, as discussed above. This is particularly the case given that the LEP adopts a building height of 8.5m for the site with development near the site permitted to adopt comparable forms of dual occupancies, and townhouses, noting that Council has recently approved comparable two storey boarding houses within R3 zones within the immediate locality (55 Second Avenue, Kingswood).
- The proposal incorporates a maximum height of 8.5m, thus the proposal is consistent with the height required by the LEP and therefore respects the character of the local area.
- The boarding house provides compatible building setbacks allowing for substantial areas of open space and landscape plantings. The height is consistent with the planning controls and is a 2-storey building that appears as a 2-storey dual occupancy development comparable to development within the locality, noting that the development has been influenced and designed to be consistent with the form, style, bulk and scale of a comparable two storey boarding house within a R3 zone that has recently approved by Council within the subject are (55 Second Avenue, Kingswood).
- The extent of landscaping is comparable to the adjoining developments and is reasonable on that basis noting screen plantings are proposed along the front boundary to soften the development.
- The architectural style seeks to downplay overall bulk and scale and the contemporary design is anticipated to be reflective of future developing character in the locality (larger two storey-built form). This is reflected on the revised 3D views that have incorporated Councils comments and concerns regarding the proposal.

Based on the foregoing discussion the development proposal is considered compatible with the character of the local area, with reference to the anticipated future character of the locality that will adopt a comparable form and scale to the current proposal.

SYDNEY REGIONAL ENVIRONMENTAL PLAN (SREP) NO. 20 – HAWKESBURY
NEPEAN RIVER

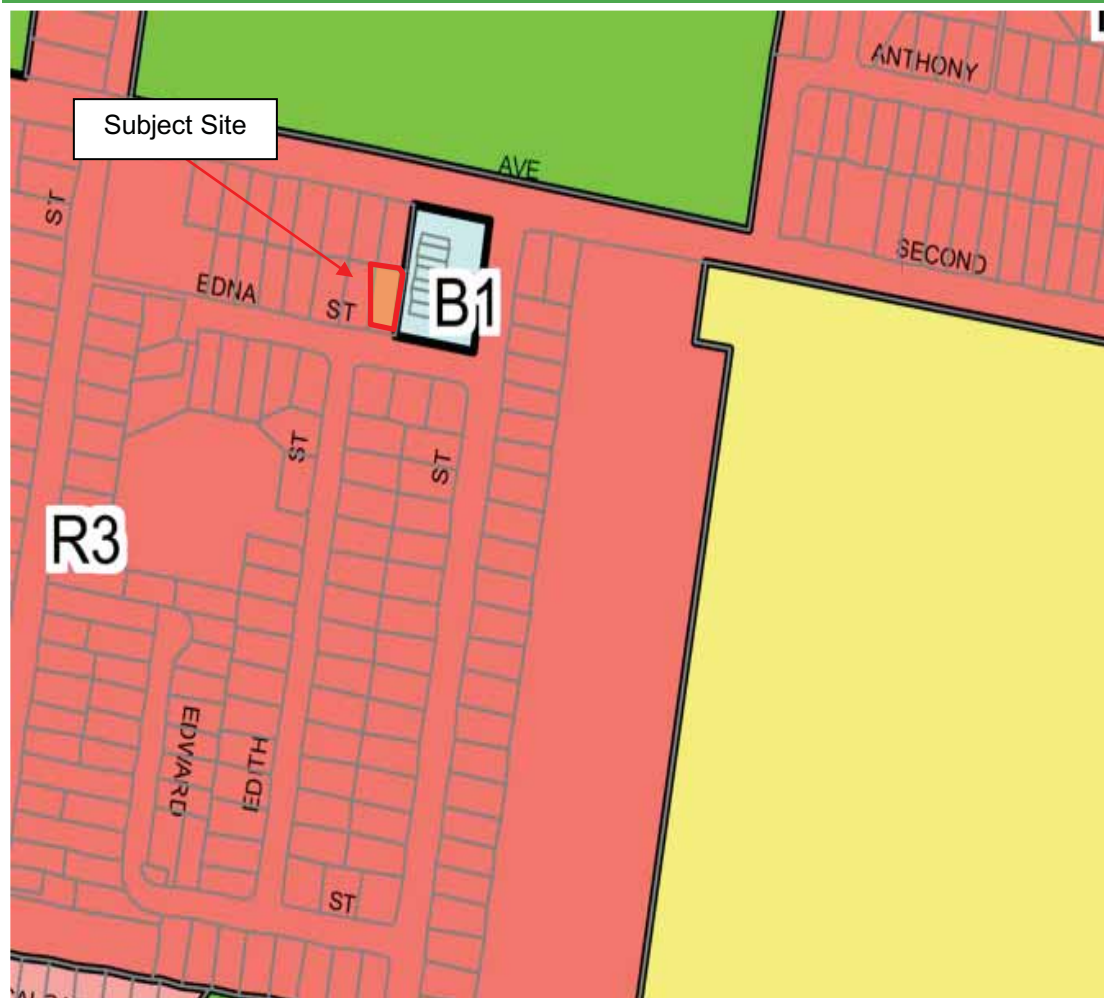
The development proposal incorporates a drainage concept that demonstrates that stormwater can be adequately conveyed to the existing street network. Appropriate erosion and sediment controls can be implemented through construction and it is anticipated that conditions of consent will reinforce this.

It is noted that the proposal meets the recently adopted WSUD measures required to achieve appropriate water quality for stormwater discharge.

PENRITH LOCAL ENVIRONMENTAL PLAN 2010

The development site is zoned R3 Medium Density Residential, as per the zoning map extract below, under the provisions of the Penrith LEP 2010.

Figure 10: Zoning Map Sheet LZN_013 Extract (Source: Penrith LEP 2010)



Boarding Houses are permissible with consent within the subject site and the proposal is consistent with the definition contained within the LEP:

Boarding House means a building that:

- (a) is wholly or partly let in lodging, 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.

The development proposal is also consistent with the prescribed zone objectives that are stipulated as:

- *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.*

The proposal development provides a new generation boarding house that is not only located within a suitable location but will make available a variety of housing types within the and contribute towards providing low cost flexible rental accommodation for tenants such as single retirees, working singles, students from outside the Sydney metropolitan area and young couples an opportunity to live within Kingswood.

The proposed new generation boarding house incorporates the characteristics of a large 2 storey dual occupancy to be compatible with the existing and anticipated large two storey residential dwellings, noting the 2-storey form of the development is appropriate within a medium density residential context subject to a height limit of 8.5m.

The table below provides detail on the development standards relevant to the current proposal as well as other relevant LEP provisions.

Penrith Local Environmental Plan 2010 – Compliance Table			
Clause	Controls	Comments	Complies
Zoning	R3 – Medium Density	Boarding houses are permissible with Council consent in the R3 – Medium Density zone	Yes
Part 2 Permitted or Prohibited Development			
2.3	Zone Objectives and Land Use Table	The proposal is consistent with the zone objectives of the R3 – Medium Density and will appropriately fulfil the subject site’s zoning potential and will provide low rent short term accommodation in the form of a new age boarding housing within the catchment of public transport and services.	Yes
2.6	Subdivision – Consent Requirements	No subdivision is proposed.	N/A
2.7	Demolition Requires Consent	Council consent is sought for the demolition of the existing structures on site.	Yes
Part 4 Principal Development Standards			
4.1A	Minimum Subdivision Lot Size: No minimum lot size for boarding houses	Not applicable	N/A
4.3	Height of Building: 8.5m	Penrith Local Environmental Plan 2010 Height of Buildings Map Sheet HOB_013 indicates that the maximum building height within the subject site is 8.5m. Development proposes a two-storey building with a maximum building height of 8.2m. Complies.	Yes
4.4	Floor Space Ratio	No FSR control applies to the subject site. Not relevant.	N/A

Clause	Controls	Comments	Complies
Part 5 Miscellaneous Provision			
5.10	Heritage Conservation	<p>The site is not identified as a heritage item, and it is not located within a heritage conservation area, however there is a heritage item (I670) located near the subject site.</p> <p>Due to the nature of the proposal – a two storey new age boarding house set within a landscape setting and with sufficient separation, the proposal will have no impact on the curtilage associated with the heritage item and therefore the development will have no impact on the heritage significance of heritage item 670.</p> <p>As a result, the subject site will not have any associated heritage restrictions.</p> <p>A heritage impact statement is not deemed to be necessary.</p>	Yes
Part 7 Additional Local Provisions			
7.1	Earthworks	<p>This application seeks Council consent for the excavation of the site as per the attached plans. It is considered that the proposed excavation will have minimal adverse environmental or amenity impact.</p> <p>The proposal results in an appropriate outcome when considering the nature of the development, the unique characteristics of the site and compliance with relevant Council controls.</p> <p>The proposal will not adversely affect or disrupt drainage and flood patterns, flood storage or soil stability in the area.</p> <p>The proposed excavation is consistent with the current and future use of the land and will develop the site into context with its surrounds and in accordance with Councils current and proposed planning strategies.</p> <p>It is considered unlikely due to the location of the site as well as previous development that excavation will lead to the disturbance of relics.</p>	Yes
7.2	Flood Planning	<p>The subject site is identified as being flood prone however this is limited and there is no impact from the development given it only affects a corner of the site which is clear of development.</p>	Yes

Clause	Controls	Comments	Complies
7.3	Development on Natural Resources Sensitive Land	The subject site is not identified on the Natural Resource Sensitive Map. Not applicable.	N/A
7.4	Sustainable Development	<p>The proposal satisfies the LEP in that:</p> <p>(a) conserving energy and reducing carbon dioxide emissions,</p> <p>(b) embodied energy in materials and building processes,</p> <p>(c) building design and orientation,</p> <p>(d) passive solar design and day lighting,</p> <p>(e) natural ventilation,</p> <p>All units are to receive good solar access.</p> <p>(f) energy efficiency and conservation,</p> <p>(g) water conservation and water reuse,</p> <p>Proposal will comply with the accompanying Section J Report.</p> <p>(h) waste minimisation and recycling,</p> <p>Waste management and recycling can be addressed through waste management plan.</p> <p>(i) reduction of vehicle dependence,</p> <p>Proposal is located within walking distance of bus stops with regular services to Penrith and Mt Druitt situated on the eastern and western side of Manning Street.</p> <p>(j) potential for adaptive reuse.</p> <p>Given the zoning of the site as R3 there is limited adaptive re-use potential on the site.</p>	Yes
7.5	Protection of Scenic Character and Landscape Values	The site is not identified on the Land with Scenic and Landscape Values Map. Not applicable.	N/A
7.6	Salinity	Due to the nature and location of the site it is not likely to be affected by Saline Soils. Not applicable.	N/A
7.7	Servicing	The development site is well serviced by water and sewer and the required utility clearances will be obtained prior to works commencing on site.	Yes

PENRITH DEVELOPMENT CONTROL PLAN 2014

State Environmental Planning Policy (Affordable Rental Housing) 2009 outlines the development standards for boarding houses within NSW.

The Penrith Development Control Plan 2014 does not apply to the development application as section D2 states that the DCP applies to dwelling houses, secondary dwelling, dual occupancy development, multi dwelling housing and residential flat development.

The development application is for a boarding house and does not fall into the development types mentioned and therefore the DCP provisions in section D2 are not strictly relevant to the assessment of the proposal.

However, to demonstrate that the proposal is a compatible form of development a discussion in consideration of the relevant objectives under the Penrith Development Control Plan 2014, noting the dual occupancy provisions are of relevance in the assessment of the application as the site would alternatively be development as a dual occupancy form given the allotment size and frontage-noting the site is not of sufficient size to accommodate a townhouse development proposal.

The relevant Council controls have been identified and considered in the following compliance table.

Penrith Development Control Plan 2014 Compliance Table			
Clause	Controls	Comments	Complies
C1 Site Planning and Design Principles			
1.1	Site Planning	<p><u>1.1.1 Site Analysis</u></p> <p>A Site Analysis has been prepared and is attached as part of this application.</p> <p>The site analysis identifies the relevant considerations required by Council and acknowledges the unique opportunities and constraints of the site that have informed the design of the development proposal.</p> <p><u>1.1.2 Key Areas with Scenic and Landscape Values</u></p> <p>The subject site is not located within the Scenic and Landscape Values Map under the Penrith LEP 2010.</p> <p>Not applicable.</p>	<p>Yes</p> <p>N/A</p>

Clause	Controls	Comments	Complies
1.2	Design Principles	<p><u>1.2.2 Built Form – Energy Efficiency and Conservation</u></p> <p>The proposed development has orientation that maximise solar access to most rooms and designed in a manner that achieves natural ventilation to some of the rooms.</p> <p><u>1.2.3 Building Form – Height, Bulk and Scale</u></p> <p>It is considered that the proposal will result in an appropriate outcome on site that responds to the unique characteristics of the site, noting development is compliant with prescribed height control.</p> <p>The subject area is currently undergoing a transformation from single storey residential dwelling to larger two storey residential dwelling, dual occupancies and medium density housing, with the proposal designed to be consistent with the evolving medium density-built form character along Edna Street, noting development has been influenced and designed to be consistent with the form, style, bulk and scale of a comparable two storey boarding house within a R3 zone that has recently approved by Council within the subject are (55 Second Avenue, Kingswood).</p> <p><u>1.2.4 Responding to the Site’s Topography and Landform</u></p> <p>The subject site responds to the topography and landform noting the land parcel relatively flat as such will not impact upon the site’s ability to accommodate the proposed Boarding House development.</p> <p><u>1.2.5 Safety and Security (Principles of Crime Prevention through Environmental Design)</u></p> <p>The proposed development incorporates an active façade that will permit casual surveillance of both Edna Street and Callow Lane, as well as common areas and landscaped areas of the proposal.</p>	Yes
			Yes
			Yes
			Yes

Clause Controls	Comments	Complies
	<p>The proposal incorporates open space and landscaped areas that will contribute to activity and natural surveillance of the area.</p> <p>The proposed landscaping and fencing is appropriate when considering CPTED principles and will not permit easy concealment of intruders.</p> <p>The proposed development is appropriate and provides measures, built elements, landscaping and design features that are consistent with CPTED principles.</p> <p><u>1.2.6 Maximising Access and Adaptability</u></p> <p>The proposed development incorporates a suitable path of travel from the street to the units and provides 2 x accessible rooms.</p>	<p>Yes</p>
C2 Vegetation Management		
<p>2.1 Preservation of Trees and Vegetation</p>	<p>The subject site is within a well-established residential area, having historically been used for residential purposes and is predominantly void of vegetation. It is noted that identified trees are to be removed to accommodate the proposed development. See attached plans for detail.</p> <p>The site is not identified as being located within the Natural Resource Sensitive Map under Penrith LEP 2010.</p> <p>The proposal will incorporate landscape embellishment works in accordance with the landscape plan to help soften the physical bulk and built form of the proposed development.</p> <p>The subject site does not contain any significant trees or vegetation.</p> <p>Landscaping of the site is to be undertaken in accordance with the attached Landscape Plan.</p>	<p>Yes</p>
<p>2.2 Biodiversity Corridors and Areas of Remnant Indigenous Vegetation in Non-Urban Areas</p>	<p>Subject site is not identified as being within a Natural Resource Sensitive Land under Penrith LEP 2010. Not applicable.</p>	<p>N/A</p>

Clause	Controls	Comments	Complies
2.3	Bushfire Management	The subject site is not located in a bushfire prone area.	N/A
C3 Water Management			
3.2	Catchment Management and Water Quality	<p>Appropriate management of the site during the demolition and construction phases will contribute towards protecting the water system.</p> <p>A Stormwater Management Plan has been prepared and is attached as part of this application noting stormwater is conveyed to the easement.</p> <p>See attached Stormwater Management Plan for detail.</p>	Yes
3.3	Watercourses, Wetlands and Riparian Corridors	Subject site is not located within proximity to a watercourse, wetland or riparian corridor. Not applicable.	N/A
3.4	Groundwater	The proposed development is to be for a boarding house development. It is therefore considered that the risk of site contamination occurring during construction and future use of the site is low. Not applicable.	N/A
3.5	Flood Planning	The site is flood prone land but the impact of this is limited and engineering plans provide further detail noting the affectation is only to a corner of the site.	Yes
3.6	Stormwater Management and Drainage	A Stormwater Management Plan has been prepared and is attached as part of this application.	Yes
3.9	Water Sensitive Urban Design	<p>The proposed development incorporates Water Sensitive Urban Design (WSUD) principles that seek to minimise and manage the impact of stormwater on site and within the area.</p> <p>The proposed development appropriately addresses the unique characteristics of the site and will allow for the efficient management of stormwater.</p> <p>See attached Stormwater Management Plan for detail.</p>	Yes

Clause Controls	Comments	Complies
C4 Land Management		
<p>4.1 Site Stability and Earthworks</p>	<p>This application seeks Council consent for the excavation of the site as per the attached plans. It is considered that the proposed excavation, will have minimal adverse environmental or amenity impact.</p> <p>The proposal results in an appropriate outcome when considering the nature of the development, the unique characteristics of the site and compliance with relevant Council controls.</p> <p>The proposal will not adversely affect or disrupt drainage and flood patterns, flood storage or soil stability in the area.</p> <p>The proposed excavation is consistent with the current and future use of the land and will develop the site into context with its surrounds and in accordance with Councils current and proposed planning strategies.</p> <p>Further the extent of excavation to the ground floor is limited to the footprint of the dwellings to maximize landscaping above.</p> <p>It is considered unlikely due to the location of the site as well as previous development that excavation will lead to the disturbance of relics.</p>	<p>Yes</p>
<p>4.3 Erosion and Sedimentation</p>	<p>This application seeks Council consent for the excavation of the site as per the attached plans.</p> <p>It is considered that the proposed excavation, will have minimal adverse environmental or amenity impact.</p> <p>The proposal results in an appropriate outcome when considering the nature of the development, the unique characteristics of the site and compliance with relevant Council controls.</p> <p>An Erosion and Sediment Control Plan is attached as part of this application.</p>	<p>Yes</p>

Clause	Controls	Comments	Complies
4.4	Contaminated Lands	<p>The site was previously used for urban purposes. The land is not known to have been used for any purposes that may give rise to the likelihood of contamination.</p> <p>Nothing on site indicates a previous contaminating use. If any contaminated material or suspected material is unearthed during the construction process, then actions consistent with the legislative requirements and guideline documents will be undertaken.</p>	Yes
4.5	Salinity	Due to the nature and location of the site it is not likely to be affected by Saline Soils, Not relevant.	N/A
C5 Waste Management			
		<p>A Waste Management Plan is attached as part of this application. Notwithstanding it is noted that waste is to be appropriately managed during the demolition and construction stages of the development.</p> <p>Bin storage area is located on the ground floor and are designed to align with the Council design guidelines for a collect and return service.</p> <p>Areas adjacent are landscaped to minimise impact to the streetscape. Refer to attached Architectural Plans and Waste Management Plans for detail- noting the design of the waste facility has been carried out to align with the comments received from Council during the Pre-DA Meeting.</p>	Yes
C6 Landscape Design			
		A landscape concept plan accompanies this development application. Where appropriate existing trees are to be retained. The concept plan details the landscape embellishment works proposed and these works is consistent with landscape works of other comparable low-density developments along Edna Street and surrounding streets and will also contribute towards softening the proposed built form.	Yes

Clause	Controls	Comments	Complies
C7 Cultural and Heritage			
7.1	Heritage	<p>The site is not identified as a heritage item, and it is not located within a heritage conservation area, however there is a heritage item (I670 and I98) located near the subject site.</p> <p>Due to the nature of the proposal – a two storey new generation boarding house set within a landscape setting and with sufficient separation, the proposal will have no impact on the curtilage associated with the heritage item and therefore the development will have no impact on the heritage significance of heritage item 670 and 98. As a result, the subject site will not have any associated heritage restrictions.</p> <p>A heritage impact statement is not deemed to be necessary.</p>	Yes
7.2	Aboriginal Cultural and Heritage	Not relevant.	N/A
7.3	Significant Trees and Gardens	The subject site does not contain any trees or gardens that is considered to be of cultural, historical, scientific or aesthetic significant.	N/A
C10 Transport, Access and Parking			
10.2	Traffic Management and Safety	<p>It is considered that the vehicular access and exit points are clearly defined and provide for the safe and efficient movement of vehicular traffic on site and entering and exiting the site.</p> <p>The proposed car parking is provided at-grade and within a basement level.</p> <p>It is noted that the development site will be landscaped and also contain fencing where practicable to help obscure any visual impacts and reduce any acoustic impacts associated with the vehicle access and parking arrangements.</p> <p>Furthermore, the proposal provides for the safe and efficient movement of pedestrian and vehicular traffic within the site and both entering and exiting the site.</p>	Yes

Clause	Controls	Comments	Complies
		3. & 4. An appropriate green corridor is provided along the rear boundary.	Yes
		5. No garages are proposed noting only an accessible parking is to be provided at-grade with the remaining vehicle, bicycle and motorcycle parking to be provided within a basement level.	Yes
		Finally, appropriate landscape is provided along the site's front setbacks. Refer to attached plans for detail.	
2.2.4	Urban Form	1. The proposal adopts a traditional orientation as far as practicable. The front setbacks are to be appropriately landscaped. Furthermore, the front façade of the boarding house has been designed with articulation features and window placements to present as a large 2 storey attached dual occupancy. It is also noted that appropriate rear and side landscaping is provided.	Yes
		3. The boarding house proposes an accessible car parking space at-grade and the remaining parking spaces within a basement level and as such the proposal will not have a gun barrel design.	Yes
		4. The development has been articulated through shadow casting features and stepping external walls.	Yes
		Where appropriate, the proposed building has been designed to incorporate a variety of roof forms and pitches. It is noted that the proposal provides windows in every elevation.	
2.2.5	Front and Rear Setbacks	1 & 2. The development provides a 4m rear setback to its ground floor level from the primary building line and a rear setback of 6m to the two-storey component of the building from the primary building line.	Yes
	Rear Setback:		
	- Single Storey Component: 4m		
	- Two Storey Component: 6m		
		3 & 4. The front setback is 7.8m from the primary building line and is to be landscaped with the primary frontage is taken to Edna Street to reflect the existing dwelling configuration on the site.	Yes

Clause	Controls	Comments	Complies
	Front Setback: Average of neighboring development or 5.5m minimum.	Therefore, the secondary street setback to Callow Lane is predominantly 3m which is appropriate and generally compliant when having regard to the secondary frontage provisions and the avoidance of blank walls or garage structures to these areas.	
		5. No garages proposed.	N/A
2.2.6	Building Envelope and Side Setbacks	1, 2 and 3. The proposal is within the building envelope. Complies.	Yes
		4. Cut and fill is limited to <500mm.	Yes
		5. The roof pitch is <25 degrees.	Yes
	Side Setbacks: 900mm	6. The development provides side setbacks >900mm to the first floor component and a minimum side setback of 3m from the primary building line to the second storey component.	Yes
		Development proposes setback of 1.5m to Callow Lane to the first floor component, however considering that the development is to incorporate landscape screens via the planting of hedges and considering that Callow Lane fronts the rear of commercial buildings and operates as a service lane, the proposed 1.5m setback to the laneway is considered acceptable.	
2.2.7	Driveways and Parking Areas	1. The proposal complies with the provisions in accordance with the parking section of the Penrith DCP 2014 and State Environmental Planning Policy (Affordable Rental Housing) 2009.	Yes – ARH SEPP 2009
		2. No garages are proposed.	N/A
		Driveways, access ways and car parking spaces are to be appropriately dimensioned in accordance with Council controls.	Yes
		The proposed car parking arrangement is to be appropriately integrated into the proposal and is consistent with existing development. In addition, vehicles can enter and leave the site in a forward direction.	

Clause	Controls	Comments	Complies
		<p>Furthermore, it is considered that the proposal provides an appropriate outcome on site that provides adequate parking arrangements as well as ensuring the safe and efficient movement of vehicular and pedestrian traffic. See attached plans for detail.</p>	
2.2.8	<p>Landscaped Area</p> <p>Minimum landscaped area:</p> <p>40% of the site</p>	<p>SEPP ARH 2009 prevails regarding landscaped area and the 40% control is not relevant to the proposal as the ARH SEPP prevails.</p> <p>It is noted the proposal provides sufficient amount of landscape area which is comparable to the control- again reinforcing that the landscaped area provisions are not relevant to the boarding house proposal.</p>	N/A
2.2.9	Solar Planning	<p>1. The proposal incorporates appropriate design features including window size and location that will permit adequate solar penetration.</p> <p>The proposal complies with the ARH SEPP in relation to the required 3 hours of solar access to the common room between 12 noon and 3pm.</p> <p>The proposal does not result in unacceptable overshadowing of adjoining residential properties. Appropriate setbacks are employed to ensure solar access and privacy to adjoining development.</p> <p>Shadow diagrams demonstrate that adjoining property to the site's immediate western boundary continues to receive adequate solar access at mid-winter, noting the majority of the shadow casted by the proposed development falls onto the existing street network. See shadow diagram for detail.</p>	Yes
2.2.10	<p>Significant Townscapes & Landscapes</p>	<p>The site is not within an area of townscape or landscape significance. Not relevant.</p>	N/A

Clause	Controls	Comments	Complies
2.2.11	Corner Site and Park Frontages	<p>The site has a primary frontage to Edna Street and a secondary frontage to Callow Lane.</p> <p>The development to the secondary street, Callow Lane is consistent with the urban form within the locality, as discussed previously.</p>	Yes
2.2.12	Building Design	<p>1. No dormer windows proposed.</p> <p>2. The proposal incorporates physical articulation of the built form and a mixed palette of building materials and finishes that are typical of comparable development within the locality and within the wider Penrith Local Government Area.</p> <p>Furthermore, the development adopts a variety of architectural features designed to minimise the apparent scale and bulk of the proposed two storey boarding house by:</p> <ul style="list-style-type: none"> • Incorporation of stepped alignment of walls • Articulation of the front façade • Alternate materials • Varied window placements. <p>Materials used are consistent with that existing in the area while being contemporary in character, including wall and awning cladding and a mix of face and painted brickwork.</p> <p>The range of materials significantly contributes to the articulation of the building and reducing the overall bulk and mass of the building.</p> <p>The facade of the proposed 2-storey building includes windows and doors along all visible walls and feature facade to provide an attractive built form.</p>	<p>N/A</p> <p>Yes</p>

Clause	Controls	Comments	Complies
2.2.13	Energy Efficiency	<p>The proposal will comply with the accompanying Section J Report.</p> <p>Furthermore, the common rooms have been oriented to incorporate appropriate design features including window size and location that will permit adequate solar penetration.</p> <p>Appropriate shading devices are proposed to provide adequate shading from the summer sun.</p>	Yes
2.2.14	Design of Dwelling and Private Courtyards	<p>1. The proposal incorporates appropriate common open space. Private open space for each dwelling is not required under the ARH SEPP.</p> <p>An area of common open space is required and provided at the rear of the development site.</p>	Yes
2.2.15	Garage Design	<p>1. No garages are proposed.</p> <p>2. Development provides 8 car parking spaces as per SEPP (Affordable Rental Housing) 2009.</p>	N/A Yes
2.2.16	Garden Design	<p>Where appropriate, small to medium trees are to be planted along the sites front and side boundaries, noting an existing street tree is to be retained.</p> <p>See Landscape Plan for detail.</p>	Yes
2.2.17	Paving Design	<p>Where appropriate, hard paved surfaces are minimised to maximize landscaping and gardens.</p> <p>The proposal provides attractive driveways and provide soft verge planting.</p> <p>Refer to attached Landscape Plans for detail.</p>	Yes
2.2.18	Fencing and Retaining Walls	<p>Proposed fencing is to be consistent with that existing within Penrith Local Government Area of similar boarding house developments.</p> <p>The proposed fencing is compliant with Council controls.</p>	Yes

Clause	Controls	Comments	Complies
2.2.19	Visual and Acoustic Privacy and Outlook	<p>The proposal contains design elements that seek to reduce potential visual, privacy and acoustic impacts and promote a high standard of residential amenity.</p> <p>This includes the siting/layout of dwellings, location/size of windows, as well as the incorporating other elements including using landscaping, blank walls, and offset windows.</p> <p>It is considered that the proposed development produces an appropriate outcome on site that will provide a high level of residential amenity for future residents and will not adversely impact upon residential amenity currently enjoyed by adjoining properties.</p>	Yes
2.2.20	Safety and Security	<p>The proposed development incorporates an active façade that will permit casual surveillance to both Edna Street and Callow Lane as well as driveway and landscaped areas of the proposal.</p> <p>The proposal incorporates open space and landscaped areas that will contribute to activity and natural surveillance of the area.</p> <p>The proposed landscaping and fencing is appropriate when considering CPTED principles and will not permit easy concealment of intruders. The proposed development is appropriate and provides measures, built elements, landscaping and design features that are consistent with CPTED principles.</p>	Yes
2.2.21	Accessibility and Adaptability	<p>Proposal has been designed to provide access to and from the site for people with a disability, including graded pedestrian pathways to and from the site.</p> <p>Dwellings have been designed to meet the needs of an ageing population, noting 2 of the rooms have been designed to meet accessibility standards.</p>	Yes

CONCLUSION

Following a review of the relevant planning controls, it is concluded that the proposed development is consistent with the objectives, planning strategies and detailed controls of these planning documents.

Consideration has been given to the potential environmental and amenity impacts that are relevant to the proposed development and this report addresses these impacts.

Having regard to the benefits of the proposal and considering the absence of adverse environmental, social or economic impacts, the application is submitted to Council for assessment and granting of development consent. Think Planners Pty Ltd recommends the approval of the application, subject to necessary, relevant and appropriate conditions of consent.

Plan of Management

NEW GENERATION BOARDING HOUSE: 1 EDNA STREET, KINGSWOOD



Prepared by Think Planners Pty Ltd

Date: 18 November 2018



Contents

Plan of Management Overview	3
Legislative Framework.....	4
Key Requirements	4
Management of the Boarding House	8
Maintenance of Common Areas and Responsibilities.....	9
Maintenance of Individual Areas and Responsibilities.....	9
Laundry Areas & Chemical Storage	9
Resident Registers to be Kept.....	9
Pest Control Arrangements	10
Waste Management and Collection.....	10
Fire Safety	10
Emergency Contacts and Procedures.....	10
Security and Access	10
Conflict Resolution	10
Complaints Mechanism: External	11
Complaints Mechanism: Between Lodgers	11
Location and Room Number of Manager	Error! Bookmark not defined.
Code of Conduct: House Rules - Amenity of the Neighbourhood and Control of Noise.....	12
Parking Allocation	12

Attachments

Draft House Rules



Plan of Management Overview

This Plan of Management has been prepared for the operation and management of a Boarding House 1 Edna Street, Kingswood.

The boarding house is to accommodate a total of 16 rooms, each with an ensuite and kitchenette. The boarding house will accommodate a total of 19 lodgers based on the room size and configuration and as nominated on the plans, noting that 13 single rooms and 3 double rooms are proposed. It is noted the proposal also provides an indoor and outdoor communal open space with each lodger having access and an off-site boarding house manager.

This Plan of Management identifies appropriate strategies and procedures to address potential social or environmental impacts associated with Boarding Houses. The Plan of Management embraces current best practice methodologies such as casual surveillance, formal CCTV surveillance, clear contact points and procedures, complaint handling processes, articulation of responsibilities, and agreed house rules.

A plan of management is an accepted concept in environmental law and can be used in a range of circumstances. This plan of management assists in addressing the amenity impacts on the neighbours and integrating the proposed development with the existing development in the street.

The plan of management assists in addressing any adverse impacts on the amenity and characteristics of the established residential area. It provides a procedure to receive and resolve complaints and requires the appointment of an onsite manager who will be contactable 24 hours a day, 7 days per week.

The measures outlined in this plan of management will be of assistance in maintaining the amenity and characteristics of the area.

This Plan of Management will require ongoing revision and may need to be updated to reflect any DA conditions of consent imposed by Council.

It is noted that this new generation boarding house will not be provided as a fully furnished product and therefore tenants are to provide their own furniture and associated furnishing for their room- more akin to a small studio apartment than a traditional boarding house. We note the Council's comments regarding the provisions of the Local Government Act and understand the Council may place a condition on the consent to this effect.



Legislative Framework

The Boarding House is regulated by the Boarding Houses Act 2012 and the associated Boarding Houses Regulation 2013. The provisions of the Act and Regulations are to be complied with at all times.

Objects of the Act

The objects of the Act are to: *establish an appropriate regulatory framework for the delivery of quality services to residents of registrable boarding houses, and for the promotion and protection of the wellbeing of such residents, by:*

- (a) providing for a registration system for registrable boarding houses, and*
- (b) providing for certain occupancy principles to be observed with respect to the provision of accommodation to residents of registrable boarding houses and for appropriate mechanisms for the enforcement of those principles, and*
- (c) providing for the licensing and regulation of assisted boarding houses and their staff (including providing for service and accommodation standards at such boarding houses), and*
- (d) promoting the sustainability of, and continuous improvements in, the provision of services at registrable boarding houses.*

Definition

The proposal is defined as a 'general boarding house' under the Act:

- (2) Boarding premises are a **general boarding house** if the premises provide beds, for a fee or reward, for use by 5 or more residents (not counting any residents who are proprietors or managers of the premises or relatives of the proprietors or managers).*

Key Requirements

Registration of Boarding Houses

The boarding house is required to Notify the Commissioner the following according to Section 9:

9 Notification of particulars about registrable boarding house

(1) A proprietor of boarding premises that are used as a registrable boarding house must notify the Commissioner, in accordance with this section, of the following particulars so as to enable the Commissioner to include information about the boarding house in the Register:

- (a) the name, and the residential or business address, of each proprietor of the boarding house,*
- (b) the name (if any) and the address of the registrable boarding house,*
- (c) whether the boarding house is a general or regulated assisted boarding house,*
- (d) whether development consent or approval is required under the [Environmental Planning and Assessment Act 1979](#) to use the boarding house as boarding premises and, if so, whether such consent or approval has been granted,*
- (e) the number of residents of the registrable boarding house,*
- (f) the number of residents who are under 18 years of age,*



- (g) the name of the manager (if any) of the registrable boarding house,*
- (h) the total number of bedrooms provided as sleeping accommodation for the residents,*
- (i) such other particulars as may be approved by the Commissioner or prescribed by the regulations.*

The additional particulars specified by Section 9(1)(i) are identified in Section 4 of the Regulations and stated as:

(1) The following additional particulars are prescribed for the purposes of section 9 (1) (i) of the Act:

- (a) the telephone number and email address, if any, of the manager (if any) of the registrable boarding house,*
- (b) the telephone number, email address and website address, if any, of the registrable boarding house,*
- (c) the local government area in which the registrable boarding house is located,*
- (d) the telephone number and email address, if any, of each proprietor of the registrable boarding house,*
- (e) the maximum number of fee-paying residents who can be accommodated in the registrable boarding house,*
- (f) the method or methods for calculating charges for fee-paying residents and the fee amounts payable,*
- (g) the methods of payment used by fee-paying residents (including cash payments, credit cards, cheques, direct bank debits, money orders, BPay and Australia Post),*
- (h) the kinds of services provided to any residents (including accommodation, meals and personal care services),*
- (i) whether the registrable boarding house has special provisions for physical access and, if so, the kind of provisions provided,*
- (j) the numbers of residents who fit into each of the following categories (to the extent that it is reasonably practicable to ascertain this information):*
 - (i) males,*
 - (ii) females,*
 - (iii) elderly persons (that is, persons 60 years of age or more),*
 - (iv) students of tertiary institutions,*
 - (v) persons who are mentally ill persons within the meaning of the [Mental Health Act 2007](#),*
 - (vi) persons who have a disability (however arising and whether or not of a chronic episodic nature) that is attributable to an intellectual, psychiatric, sensory, physical or like impairment or to a combination of such impairments,*
 - (vii) persons with significant health problems,*
 - (viii) persons needing assistance with daily tasks and personal care.*

Occupancy Agreements

A written Occupancy Agreement is to be formulated in accordance with the Act and associated Regulations that sets out the terms of the occupancy agreement. The Occupancy Agreement is to align with the Occupancy Principles contained in Schedule 1 of the Act, as stated below (but may be updated from time to time):



Schedule 1 Occupancy principles

(Section 30 (1))

1 State of premises

A resident is entitled to live in premises that are:

- (a) reasonably clean, and*
- (b) in a reasonable state of repair, and*
- (c) reasonably secure.*

2 Rules of registrable boarding house

A resident is entitled to know the rules of the registrable boarding house before moving into the boarding house.

3 Penalties for breaches of agreement or house rules prohibited

A resident may not be required to pay a penalty for a breach of the occupancy agreement or the rules of the registrable boarding house.

4 Quiet enjoyment of premises

A resident is entitled to quiet enjoyment of the premises.

5 Inspections and repairs

A proprietor is entitled to enter the premises at a reasonable time on reasonable grounds to carry out inspections or repairs and for other reasonable purposes.

6 Notice of increase of occupancy fee

A resident is entitled to 4 weeks written notice before the proprietor increases the occupancy fee.

7 Utility charges

(1) The proprietor is entitled to charge a resident an additional amount for the use of a utility if:

- (a) the resident has been notified before or at the time of entering the occupancy agreement of the use of utilities in respect of which the resident will be charged, and*
- (b) the amount charged is based on the cost to the proprietor of providing the utility and a reasonable measure or estimate of the resident's use of that utility.*

*(2) A **utility** for the purposes of this clause is each of the following:*

- (a) the supply of electricity,*
- (b) the supply of gas,*
- (c) the supply of oil,*
- (d) the supply of water,*
- (e) the supply of any other service prescribed by the regulations.*

8 Payment of security deposits

(1) The proprietor may require and receive a security deposit from the resident or the resident's authorised representative only if:

- (a) the amount of the deposit does not exceed 2 weeks of occupancy fee under the occupancy agreement, and*
- (b) the amount is payable on or after the day on which the resident (or the resident's authorised representative) enters the agreement.*

(2) Within 14 days after the end of the occupancy agreement, the proprietor must repay to the resident (or the resident's authorised representative) the amount of the security deposit less the amount necessary to cover the following:



- (a) the reasonable cost of repairs to, or the restoration of, the registrable boarding house or goods within the premises of the boarding house, as a result of damage (other than fair wear and tear) caused by the resident or an invitee of the resident,*
 - (b) any occupation fees or other charges owing and payable under the occupancy agreement or this Act,*
 - (c) the reasonable cost of cleaning any part of the premises occupied by the resident not left reasonably clean by the resident, having regard to the condition of that part of the premises at the commencement of the occupancy,*
 - (d) the reasonable cost of replacing locks or other security devices altered, removed or added by the resident without the consent of the proprietor,*
 - (e) any other amounts prescribed by the regulations.*
- (3) The proprietor may retain the whole of the security deposit after the end of the occupancy agreement if the costs, fees or charges referred to in subclause (2) (a)–(e) are equal to, or exceed, the amount of the security deposit.*

(4) In this clause:

security deposit means an amount of money (however described) paid or payable by the resident of a registrable boarding house or another person as security against:

- (a) any failure by the resident to comply with the terms of an occupancy agreement, or*
- (b) any damage to the boarding house caused by the resident or an invitee of the resident, or*
- (c) any other matter or thing prescribed by the regulations.*

9 Information about occupancy termination

A resident is entitled to know why and how the occupancy may be terminated, including how much notice will be given before eviction.

10 Notice of eviction

- (1) A resident must not be evicted without reasonable written notice.*
- (2) In determining what is reasonable notice, the proprietor may take into account the safety of other residents, the proprietor and the manager of the registrable boarding house.*
- (3) Subclause (2) does not limit the circumstances that are relevant to the determination of what is reasonable notice.*

11 Use of alternative dispute resolution

A proprietor and resident should try to resolve disputes using reasonable dispute resolution processes.

12 Provision of written receipts

A resident must be given a written receipt for any money paid to the proprietor or a person on behalf of the proprietor.



Management of the Boarding House

The Boarding House will be managed by an appointed off-site manager, who will be contactable 24 hours a day and 7 days per week. In the event that the Off-site Manager is unable to be contacted (eg emergency, unwell, etc), a separate arrangement with a Property Management Company, that is to be a recognised property management firm operating as a business with relevant ABN and authorities for property management and is licensed under the Property Stock and Business Agents Act and associated regulations, will be made the point of contact. The Off-site Manager is to be trained and have resources to screen potential occupants, manage complaints efficiently and ensure maintenance of common property is systematic and thorough.

The Off-site Manager is to be engaged by contract on an annual basis. The appointment of a Property Management Company to cover for the Offsite Manager in circumstances where 24hr 7 day per week contact is not possible will ensure that there is a management regime in place.

The Off-site Manager will be able to respond within short timeframes and be responsible for contracts and contacts with maintenance persons and companies, manage the facilities for the recording and storing of CCTV footage, and have established relationships/contacts with security companies and services such as the NSW Police Force, NSW Ambulance Service and NSW Fire Brigade. Any matters that require urgent and potentially life threatening responses are the responsibility of either police, ambulance or fire services.

The Off-site Manager must:

- Be experienced in the operation of multiple occupancy residential development.
- Oversee all occupancy agreements and ensure such agreements align with the provisions of the Boarding Houses Act 2012 and associated Regulations, including setting out information about occupancy evictions (such as the amount of notice to be provided of eviction).
- Organise building and landscaping maintenance as required through the engaging of contractors to undertaken maintenance, landscaping and cleaning functions.
- Promptly address and respond to tenant issues and building operation and maintenance matters.
- Maintain an incident register and record any complaints. The register is to be made available to Council.
- Ensure that the total occupancy of the boarding rooms pursuant to the leases does not exceed 19 lodgers.
- Provide the tenant with a copy of the Resident Information Brochure and House Rules with any new occupancy agreement;
- Undertake periodic inspections of the boarding rooms to ensure that they are being maintained in a clean and tidy fashion and that maximum occupant numbers are maintained.
- Hold a Senior First Aid Certificate, Child Protection Clearance, and pass a Police Background Check.



Maintenance of Common Areas and Responsibilities

Common areas are to be maintained by users and spaces should be left as they are found- in a clean and tidy state.

A weekly cleaner will be employed, at the cost of the Boarding House owner, to ensure that the common property is clean and to take out the bins for the council garbage collection and subsequently bring in the bins after collection. Recycling bins and residual bins will be provided in each room to promote recycling.

The Boarding House Offsite Manager is to employ the services of professional maintenance companies to undertake regular maintenance of the building. The maintenance companies are to enter the premises regularly and complete all maintenance required.

Any damage of internal or external property is repaired immediately together with all wear and tear items.

Maintenance of Individual Areas and Responsibilities

Individual residents are responsible for maintaining their rooms in a clean and tidy state and must be made available for inspection by the boarding house manager upon request (48 hours' notice).

Laundry Areas & Chemical Storage

Residents are to purchase their own laundering consumables (including washing powder, detergent, and the like) and store them securely. Residents are to clean the laundry as required after use. Chemicals and poisons are to be secured in a lockable cupboard and labelled accordingly.

Resident Registers to be Kept

Resident Registers are to be completed by every person on arrival which includes but is not limited to: name, previous address, mobile phone contact, source of referral, date of arrival, estimated date of departure, vehicle registration, date of birth, number in party, age and gender of Children. This is to be stored by the boarding house manager in a secure location.

Resident Special Need Register is to be kept- noting that any personal information provided regarding special needs is voluntary and privacy is to be respected. If it is provided the information is to include but not be limited to: details of any medication requirements, emergency contacts, disability access and any other information volunteered by resident in initial consultation in relation to special needs or personal information. This is to be stored by the boarding house manager in a secure location.



Pest Control Arrangements

Cleaning will also include regular inspections for vermin control and pest control services will be arranged by the boarding house manager on a regular basis.

Waste Management and Collection

A weekly cleaner will be employed, at the cost of the Boarding House owner, to ensure that the common property is clean and to take out the bins for the council garbage collection and subsequently bring in the bins after collection. Recycling bins and residual bins will be provided in each room to promote recycling.

Fire Safety

A Fire Safety Evacuation Plan will be prepared and attached to this Plan of Management prior to commencement of operations of the boarding house. The plan will contain pictorial instructions detailing evacuation steps in the case of an emergency. The plan is to include evacuation routes, assembly points, and a plan of action once a fire alarm has been activated. The Fire Safety Evacuation Plan is to be prominently located in each room and in the common area. The phone numbers of appropriate contacts will be prominently displayed throughout the premises e.g. NSW Police, Security Company, NSW Fire and Rescue, NSW Ambulance Service and other local emergency assistance services.

Emergency Contacts and Procedures

The phone numbers of appropriate contacts will be prominently displayed throughout the premises (foyer and common room) e.g. NSW Police, Security Company, NSW Fire and Rescue, NSW Ambulance Service and other local emergency assistance services. Phone numbers are also to be provided for appropriate support infrastructure service providers such as Telstra, Electrical Authority, Water Authority, local Council, etc.

Security and Access

Residents will be issued with 1 set of access keys to the common areas and their own individual room. They are not to be duplicated or given to any visitors to the site.

Conflict Resolution

Complaints from the community and between lodgers are to be noted in an Incident Diary with details of the complaint and the action taken to address the complaint. The task of the Off-site Manager is to ensure that all neighbourhood and internal complaints are recorded, and management responses documented. A Management Diary and an Incident Register is to be kept.



The Offsite Manager will listen to complaints or respond to correspondence and detail procedures to the persons complaining as to how the Boarding House intends minimising any further impact in the future on neighbours or between residents.

The procedures detailed in this Plan of Management are designed to minimise complaints. The Offsite Manager is to deal with empathy and respect to any person making a complaint.

Complaints Mechanism: External

The Offsite Manager is responsible for establishing contact and maintaining a relationship with the neighbours of the Boarding House within a 100m radius by undertaking the following tasks:

- Upon appointment letterbox drop all mail boxes within 100m radius of the Boarding Housing advising of their appointment and nominating all methods to contact them should any matter arise that warrants addressing. There shall be no less than two after hours contact numbers.
- Provide a clear sign at the front of the Boarding House, that is visible to the public, identifying the name of the On-site Manager and the methods of contacting the Manager in the event that there is a matter that warrants addressing.

Complaints from the community are to be noted in an Incident Diary with details of the complaint and the action taken to address the complaint.

The task of the Off-site Manager is to ensure that all neighbourhood complaints are recorded, and management responses documented. A Management Diary and an Incident Register is to be kept. The Off-site Manager will listen to complaints or respond to correspondence and detail procedures to the persons complaining as to how the Boarding House intends minimising any further impact in the future.

The procedures detailed in this Plan of Management are designed to minimise complaints.

The Off-site Manager is to deal with empathy and respect to any person making a complaint.

Complaints Mechanism: Between Lodgers

The Offsite Manager is responsible for acting as mediator in disputes between lodgers.

Complaints from the lodgers are to be noted in an Incident Diary with details of the complaint and the action taken to address the complaint.

The task of the Off-site Manager is to ensure that all complaints are recorded, and management responses documented. A Management Diary and an Incident Register is to be kept.



The Off-site Manager will listen to complaints or respond to correspondence and detail procedures to the persons complaining as to how it is intended to minimise any further impact in the future.

The procedures detailed in this Plan of Management are designed to minimise complaints.

The Off-site Manager is to deal with empathy and respect to any person making a complaint.

Code of Conduct: House Rules - Amenity of the Neighbourhood and Control of Noise

The draft “House Rules” for the Boarding House are attached to this Plan of Management. It is noted that the document is a draft as it outlines the minimum requirements to be implemented by the Off-site Manager; however it may be appropriate to amend and add to the House Rules as the Boarding House operations evolve.

The House Rules are to be prominently displayed in the common areas. Each new tenant is to be provided with a copy of the House Rules when signing their leasing agreement and agree to be bound by the House Rules.

Appropriate signage is to be provided within the building informing residents of the maximum number of guests permitted and limiting non-residents arrival and departure times.

House Rules relate to –

- the emission of noise (from within the boarding house and also the external spaces);
- prohibition of large gatherings and parties on the premises;
- interference with the peace and quiet of other residents and neighbours;
- volume of television and music players;
- control of alcohol intake and prohibition of illegal substances; and
- anti-social behaviour.

The emission of noise and appropriate hours for noise emission is dictated in legislation and enforced by parties such as the local Council.

The Offsite Manager is to be familiar with the legislative requirements and rules and be aware of the relevant authorities that are responsible for enforcement of noise issues.

Parking Allocation

To avoid conflict parking spaces will be allocated to individual rooms as part of occupancy agreements. Any other vehicles are only permitted to park in lawful locations.



HOUSE RULES

The following rules are a condition of your occupancy agreement – Any breach of these rules will result in termination of your occupancy agreement.

Resident Behaviour & Neighbour Relations

Each occupant is required to ensure that other occupants of this boarding house as well as surrounding neighbours are allowed to peacefully and quietly enjoy their own premises. Each occupant is required to ensure they do not do anything or allow anything to occur that will impact on the quiet enjoyment of each tenant and neighbour of this boarding house.

Occupants of each boarding room shall make available their boarding room available for inspection by the property manager. This shall be by appointment with 24 hours' notice. However, in the case of an emergency, no notice is required, and the property manager may use the spare key to enter the premises

Occupants are not to congregate in groups in any part of the common property, especially the external common property. Anti-social behaviour of any kind is prohibited and will be referred immediately to the police.

Any breach of the house rules will result in warnings initially, and in the case of persistent and serious breaches, termination of your lease and eviction from the premises.

Noise & Radio/TV

At any time noisy activities are occurring, occupants should keep doors any windows closed where possible to reduce noise emission and impact on neighbours.

Television, music players and any other sound emitting device should be kept at a moderate level and not be audible from neighbouring properties

Use of External Areas

The common room and common courtyard shall only be used during the following Hours:

- Sunday to Thursday 7am to 10pm
- Friday and Saturday 7am to 10pm



Alcohol and Smoking

No Alcohol or illegal substances are to be consumed or be brought into common property at any time. Alcohol consumed in rooms must be disposed of in designated recycling bins.

No smoking is permitted within the Boarding House. Smoking is to be limited to visually obscured external open space areas only. No smoking is to be undertaken at the front of the property, only in the designated external smoking spaces.

Appropriate signage is provided within the building informing residents of restrictions that apply in relation to smoking, alcohol and drug usage.

Parking of Vehicles

Any cars unable to be accommodated on site will be parked on the street network and are not to block driveways or being parked in no parking or no stopping zones.

Register of Complaints & Dealing with Complaints: Neighbours

The Off-site Manager is responsible for establishing contact and maintaining a relationship with the neighbours of the Boarding House within a 100m radius by undertaking the following tasks:

- Upon appointment letterbox drop all mail boxes within 100m radius of the Boarding Housing advising of their appointment and nominating all methods to contact them should any matter arise that warrants addressing. There shall be no less than two after hours contact numbers.
- Provide a clear sign at the front of the Boarding House, that is visible to the public, identifying the name of the Off-site Manager and the methods of contacting the Manager in the event that there is a matter that warrants addressing.

Complaints from the community are to be noted in an Incident Diary with details of the complaint and the action taken to address the complaint. This is to include specific room numbers that generate complaints.

The task of the Off-site Manager is to ensure that all neighbourhood complaints are recorded, and management responses documented. A Management Diary and an Incident Register is to be kept.

The Off-site Manager will listen to complaints or respond to correspondence and detail procedures to the persons complaining as to how the Boarding House intends minimising any further impact in the future.



Register of Complaints & Dealing with Complaints: Between Tenants

If conflict between lodgers cannot be resolved amicably complaints are to be directed to the boarding house manager who will act as a mediator between lodgers. Complaints are to be noted in an Incident Diary with details of the complaint and the action taken to address the complaint.

This is to include specific room numbers that generate complaints.

The task of the Off-site Manager is to ensure that all internal complaints are recorded, and management responses documented. A Management Diary and an Incident Register is to be kept.

The Off-site Manager will listen to complaints or respond to correspondence and detail procedures to the persons complaining as to how it is intended to minimise any further impact in the future.

Cleaning Schedules

Each resident is required keep common areas clean. After using common facilities such as the kitchen or bathroom, residents are clean up after themselves. Residents are encouraged to use their own private kitchen and bathroom where possible.

Common areas are to be maintained by users and spaces should be left as they are found- in a clean and tidy state.

A weekly cleaner will be employed, at the cost of the Boarding House owner, to ensure that the common property is clean and to take out the bins for the council garbage collection and subsequently bring in the bins after collection. Recycling bins and residual bins will be provided in each room to promote recycling.

Waste Disposal

Waste is to be disposed to the communal waste bins once bins are full;

Number of Approved Boarding House Rooms

There are to be no more than 1-2 lodgers in each room to align with the room areas and approved plans of occupancy.

Common Areas and Usage Times

Common areas are available for the enjoyment of boarders provided good order is maintained. All waste is to be disposed of and not left in the common areas or externally in common areas;



The common room and common courtyard shall only be used during the following Hours:

- Sunday to Thursday 7am to 10pm
- Friday and Saturday 7am to 10pm

In addition the recommendations of the acoustic report are to be followed that confirms that:

- No music is to be played in the outdoor communal area.
- Outdoor patron numbers are a maximum of 10 people
- No use is permitted before 7am and after 10pm.

Behaviour and Guest Visiting Times

Each tenant of this boarding house is responsible for themselves and their visitors. Tenants should ensure their visitors enter and exit the site in a quiet and respectful manner, having regard to the time of day or night they are entering or exiting the site.

Animals

There is to be no keeping of animals on the premises as this may compromise the health and/or safety of other residents and will impact upon maintenance and cleanliness requirements within the Boarding House.

Smoking

No smoking is permitted within the Boarding House. Smoking is to be limited to visually obscured external open space areas only. No smoking is to be undertaken at the front of the property, only in the designated external smoking spaces.

Alcohol and Drugs

No Alcohol or illegal substances are to be consumed or be brought into common property at any time. Alcohol consumed in rooms must be disposed of in designated recycling bins.

Security

The Boarding House is to be fitted with recording CCTV cameras in the common areas such entries, car parking area and common lounge room. All movement in these areas is to be recorded and monitored. The footage is to be capable of being viewed live and recorded, over the Internet from any fixed or portable Internet viewing device, from anywhere locally or internationally. The continual electronic monitoring and recording of common areas is a key function of providing actual and perceived security.



Plan of Management:
1 Edna Street, Kingswood

These premises are under 24/7 video surveillance which is recorded and held and will be provided to council and/or law enforcement at any time. Disturbances are to be reported to the manager and NSW Police (if manager unavailable).

Function and Event Restrictions

No parties or any other noise generating activity is to occur after 10pm Sunday to Thursday and after midnight Friday and Saturday



REPORT 180260R1

Revision 0

Noise Impact Assessment
Proposed Boarding House
1 Edna Street, Kingswood

PREPARED FOR:
Designcorp Architects
Studio 56, L5, 61 Marlborough Street
SURRY HILLS NSW 2010

15 November 2018



Noise Impact Assessment

Proposed Boarding House

1 Edna Street, Kingswood NSW

PREPARED BY:

Rodney Stevens Acoustics Pty Ltd
Telephone: 61 2 9943 5057 Facsimile 61 2 9475 1019
Email: info@rodneystevensacoustics.com.au
Web: www.rodneystevensacoustics.com.au

DISCLAIMER

Reports produced by Rodney Stevens Acoustics Pty Ltd are prepared for particular Clientele objectives and based on a specific scope, conditions and limitations, as agreed between Rodney Stevens Acoustics and the Client. Information and/or report(s) prepared by Rodney Stevens Acoustics may not be suitable for uses other than the original intended objective. No parties other than the Client should use any information and/or report(s) without first conferring with Rodney Stevens Acoustics.

The information and/or report(s) prepared by Rodney Stevens Acoustics is not be re-produced, presented or reviewed, except in full. Before passing on to a third party any information and/or report(s) prepared by Rodney Stevens Acoustics, the Client is to fully inform the third party of the objective and scope and any limitations and conditions, including any other relevant information which applies to the material prepared by Rodney Stevens Acoustics. It is the responsibility of any third party to confirm whether information and/or report(s) prepared for others by Rodney Stevens Acoustics are suitable for their specific objectives.

DOCUMENT CONTROL

Reference	Status	Date	Prepared	Checked	Authorised
180260R1	Revision 0	2 July 2018	Dani Awad	Desmond Raymond	Rodney Stevens
180260R1	Revision 1	15 November 2018	Dani Awad	Desmond Raymond	Rodney Stevens



TABLE OF CONTENTS

1	INTRODUCTION	5
2	PROPOSED DEVELOPMENT	5
	2.1 Site Location	5
	2.2 Proposed Development	5
3	EXISTING ACOUSTIC ENVIRONMENT	6
	3.1 Unattended Noise Monitoring	6
	3.2 Ambient Noise Level Results	6
4	NOISE CRITERIA	7
	4.1 Road Noise and Vibration Criteria	7
	4.1.1 Penrith City Council Requirements	7
	4.1.2 State Environmental Planning Policy (Infrastructure) 2007	7
	4.2 Operational Noise Project Trigger Noise Levels	8
	4.2.1 Intrusiveness Noise Levels	8
	4.2.2 Amenity Noise Levels	8
	4.2.3 Area Classification	9
	4.2.4 Project Specific Trigger Noise Levels	9
5	NOISE IMPACT ASSESSMENT	10
	5.1 Road Traffic Noise	10
	5.1.1 Road Traffic Noise Intrusion Assessment	10
6	RECOMMENDED NOISE CONTROL TREATMENT	10
	6.1 Glazing	10
	6.2 Rw Requirements for Glazing	11
7	OPERATIONAL NOISE ASSESSMENT	12
	7.1 Mechanical Plant Noise Assessment	12
	7.2 Typical Vocal Levels	12
	7.3 Tenant Sound Power Levels	12
	7.4 Noise Emissions Calculation	13
	7.5 Predicted Noise Levels	13
	7.6 Outdoor Communal Area Mitigation Recommendations	14
8	CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN	15
	8.1 Project Area and Sensitive Receivers	15
9	CONSTRUCTION NOISE & VIBRATION MANAGEMENT PLAN	17
10	CONCLUSION	20
Table 3-1	Measured Ambient Noise Levels	6



Table 4-1	DP&I Interim Guideline Noise Criteria	8
Table 4-2	Project Specific Trigger Noise Levels	9
Table 5-1	Measured Traffic Noise Levels	10
Table 6-1	In-principle Glazing Recommendations	11
Table 7-1	Speech Spectrums - Handbook of Acoustical Measurements and Noise Control.	12
Table 7-2	Sound Power Levels of People talking with Raised Voice - Lw – dB(A)	12
Table 7-3	Predicted Noise Levels at sensitive receivers.	14
Table 8-1	Recommended Residential Construction Noise Criteria	16
Table 8-2	Adopted Vibration Constriction Criteria	17
Table 9-1	Noise Levels of Typical Construction Plant & Equipment	17
Table 9-2	Summary of Noise & Vibration Mitigation Measures	19
Figure 2-1	Site Location	5
Figure 7-1	Sensitive Receiver Location	13
Figure 8-1	Sensitive Receivers	15



1 INTRODUCTION

Rodney Stevens Acoustics Pty Ltd (here forth referred to as RSA), has been engaged by Designcorp Architects to conduct a noise impact assessment for Development Application (DA) lodgment of the proposed boarding house at 1 Edna Street, Kingswood.

This report will address noise impact from Edna Street, Second Avenue and the commercial area to the east on the amenity of the proposed boarding house. A construction and vibration management plan has been included in addition to statements concerning the potential effects of any mechanical plant, carpark and outdoor communal area noise caused by the site on nearby sensitive receivers.

This assessment is to form part of the supporting documentation for the DA submission to Penrith City Council.

Specific acoustic terminology is present throughout this report. An explanation of these acoustic terms is provided in Appendix A

2 PROPOSED DEVELOPMENT

2.1 Site Location

The proposed residential development site is located at 1 Edna Street, Kingswood. It is bounded by residential premises to the north, west and south with a small commercial area to the east. The location of the proposed site and surrounding area is presented in Figure 2-1.

Figure 2-1 Site Location



Aerial image courtesy of Near Map © 2018

2.2 Proposed Development

The proposal consists of the construction of a two-story boarding house comprising of 16 boarding rooms split between the ground and first floor. The site will have a small outdoor communal area, 2 outdoor and 6 basement car parking spaces. The architectural plans of the proposed residential development are presented in Appendix C.



3 EXISTING ACOUSTIC ENVIRONMENT

3.1 Unattended Noise Monitoring

In order to characterize the existing acoustical environment of the area, RSA carried out unattended noise monitoring between Wednesday 30 May and Wednesday 6 June 2018 at the logging location shown in Figure 2-1. The noise monitoring at this location is representative of the acoustic environment at the project site.

RSA selects logger location with consideration to; other noise sources, which may influence readings, equipment security issues and gaining permission for access from other landowners.

Instrumentation for the survey comprised of a RION NL-42 environmental noise logger (serial number: 546393) fitted with a microphone windshield. Calibration of the logger was checked prior to and following measurements. Drift in calibration did not exceed ± 0.5 dB (A). All equipment carried appropriate and current NATA (or manufacturer) calibration certificates.

3.2 Ambient Noise Level Results

In order to assess the acoustical implications of the proposed development on the levels of noise received at the neighboring residential and commercial premises, the measured data was processed according to the NSW Environment Protection Authority (EPA) and Noise Policy for Industry (NPI) assessment time periods. Table 3-1 details the RBL (background) and L_{Aeq} noise levels recorded during the daytime, evening and nighttime periods.

Table 3-1 Measured Ambient Noise Levels

Noise Level – dB(A) re 20 μ Pa					
Day		Evening		Night	
RBL ¹	L_{Aeq} ²	RBL ¹	L_{Aeq} ²	RBL ¹	L_{Aeq} ²
44	54	42	50	35	48

Note 1: The RBL noise level is representative of the average minimum background sound level (in the absence of the source under consideration), or simply the background level

Note 2: The L_{Aeq} is essentially the average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.



4 NOISE CRITERIA

4.1 Road Noise and Vibration Criteria

The determination of an acceptable level of road noise that will impact internal residential spaces requires consideration of the activities carried out within the space and the degree to which noise will interfere with those activities.

As sleep is the activity most affected by traffic noise, bedrooms are considered to be the most sensitive internal living areas. Higher levels of noise are acceptable in living areas without interfering with activities such as reading, listening to the television etc. Noise levels in utility spaces such as kitchens, bathrooms, laundries etc. can be higher.

4.1.1 Penrith City Council Requirements

Penrith City Council has specific requirements for traffic noise intrusion into residential spaces. These requirements are detailed in the Penrith City Council's DCP and pertain to the SEPP (Infrastructure) 2007 they are as follows:

State Environmental Planning Policy (Infrastructure) 2007

Appropriate measures must be taken to ensure that the following LAeq levels are not exceeded:

In any bedroom in the building – 35 dB(A) at any time between 10 pm and 7 am

Anywhere else in the building (other than a garage, kitchen, bathroom or hallway) – 40 dB(A) at any time

Environmental Health

An acoustic report is to be prepared by an appropriately qualified acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/or grade membership of the Australian Acoustical Society (MAAS). The report shall consider noise intrusion from the road and measures to ensure compliance with SEPP (Infrastructure) 2007. The report should also consider noise emissions from the development including but not limited to proposed mechanical plant (air conditioners, lift shift, automatic roller doors, and ventilation plant for the underground car park) and construction/vibration impacts. The report should be prepared in accordance with the NSW Environment Protection Authority Industrial Noise Policy, EPA's Interim Construction Noise Guidelines & NSW DP&I's Development near Rail Corridors and Busy Roads – Interim Guideline

4.1.2 State Environmental Planning Policy (Infrastructure) 2007

Road and Rail Noise Criteria

The NSW Government's State Environmental Planning Policy (Infrastructure) 2007 (SEPP (Infrastructure) 2007) was introduced to facilitate the delivery of infrastructure across the State by improving regulatory certainty and efficiency. In accordance with the SEPP, Table 3.1 of the NSW Department of Planning and Infrastructure's "Development near Rail Corridors and Busy Roads - Interim Guideline" (the DP&I Guideline) of December 2008 provides noise criteria for residential and non-residential buildings. These criteria are summarized in Table 4-1.



Table 4-1 DP&I Interim Guideline Noise Criteria

Type of occupancy	Noise Level dB(A)	Applicable time period
Sleeping areas (bedroom)	35	Night 10 pm to 7 am
Other habitable rooms (excl. garages, kitchens, bathrooms & hallways)	40	At any time

Note 1: Airborne noise is calculated as $L_{Aeq(15hour)}$ daytime and $L_{Aeq(9hour)}$ night-time

The following guidance is provided in the DP&I Guideline:

“These criteria apply to all forms of residential buildings as well as aged care and nursing home facilities. For some residential buildings, the applicants may wish to apply more stringent design goals in response to market demand for a higher quality living environment.

The night-time “sleeping areas” criterion is 5 dB (A) more stringent than the “living areas” criteria to promote passive acoustic design principles. For example, designing the building such that sleeping areas are less exposed to road or rail noise than living areas may result in less onerous requirements for glazing, wall construction and acoustic seals. If internal noise levels with windows or doors open exceed the criteria by more than 10 dB(A), the design of the ventilation for these rooms should be such that occupants can leave windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia.”

The noise criteria presented in Section 4.1.2 and in Table 4-1 apply to a ‘windows closed condition’. Standard window glazing of a building will typically attenuate noise ingress by 20 dB(A) with windows closed and 10 dB(A) with windows open (allowing for natural ventilation). Accordingly, the external noise threshold above which a dwelling will require mechanical ventilation is an $L_{Aeq(9hour)}$ of 55 dB(A) for bedrooms and $L_{Aeq(15hour)}$ of 60 dB(A) for other areas.

Where windows must be kept closed, the adopted ventilation systems must meet the requirements of the Building Code of Australia and Australian Standard 1668 – The use of ventilation and air conditioning in buildings.

4.2 Operational Noise Project Trigger Noise Levels

Responsibility for the control of noise emissions in New South Wales is vested in Local Government and the EPA. The EPA oversees the Noise Policy for Industry (NPfI) October 2017 which provides a framework and process for deriving project trigger noise level. The NPfI project noise levels for industrial noise sources have two (2) components:

- Controlling the intrusive noise impacts for residents and other sensitive receivers in the short term; and
- Maintaining noise level amenity for particular land uses for residents and sensitive receivers in other land uses.

4.2.1 Intrusiveness Noise Levels

For assessing intrusiveness, the background noise generally needs to be measured. The intrusiveness noise level essentially means that the equivalent continuous noise level (L_{Aeq}) of the source should not be more than 5 dB(A) above the measured Rated Background Level (RBL), over any 15-minute period.

4.2.2 Amenity Noise Levels

The amenity noise level is based on land use and associated activities (and their sensitivity to noise emission). The cumulative effect of noise from industrial sources needs to be considered in assessing the impact. The



noise levels relate only to other industrial-type noise sources and do not include road, rail or community noise. The existing noise level from industry is measured.

If it approaches the project trigger noise level value, then noise levels from new industrial-type noise sources, (including air-conditioning mechanical plant) need to be designed so that the cumulative effect does not produce total noise levels that would significantly exceed the project trigger noise level.

4.2.3 Area Classification

The NPfI characterises the “Suburban” noise environment as an area with an acoustical environment 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

The area surrounding the proposed development falls under the “Suburban” area classification.

4.2.4 Project Specific Trigger Noise Levels

Having defined the area type, the processed results of the attended noise monitoring have been used to determine project specific project trigger noise level. The intrusive and amenity project trigger noise level for nearby residential premises are presented in Table 4-2. These project trigger noise levels are nominated for the purpose of assessing potential noise impacts from the proposed development.

For each assessment period, the lower (i.e. the more stringent) of the amenity or intrusive criteria are adopted. These are shown in bold text in Table 4-2.

Table 4-2 Project Specific Trigger Noise Levels

Receiver	Time of Day	ANL ¹ L _{Aeq} (15min)	Measured		Project specific Noise Levels	
			RBL ² L _{A90} (15min)	L _{Aeq} Noise Level)	Intrusive L _{Aeq} (15min)	Amenity ³ L _{Aeq} (15min)
Residential	Day	55	44	54	49	55
	Evening	45	42	50	47	45
	Night	40	35	48	40	40
Commercial	When in Use	65	-	-	-	65

Note 1: ANL = “Acceptable Noise Level” for residences in Suburban Areas.

Note 2: RBL = “Rating Background Level”.

Note 3: Assuming existing noise levels are unlikely to decrease in the future



5 NOISE IMPACT ASSESSMENT

5.1 Road Traffic Noise

5.1.1 Road Traffic Noise Intrusion Assessment

In order to ascertain the existing noise levels from the surrounding area, the measured noise logger data was processed in accordance to the NSW Road Noise Policy assessment time periods. Table 5-1 details the traffic noise levels.

Table 5-1 Measured Traffic Noise Levels

Logger Location	Noise Level – dB(A) re 20 µPa	
	L _{Aeq} (15hour)	L _{Aeq} (9hour)
	07:00 – 22:00	22:00 to 07:00
1 Edna Street	53	47

Traffic noise levels recorded by the noise logger have been corrected to account for the distance from the road to the proposed façade. These are representative of the noise levels the proposed façade will encounter.

6 RECOMMENDED NOISE CONTROL TREATMENT

The calculation procedure establishes the required noise insulation performance of each surface component such that the internal noise level is achieved whilst an equal contribution of traffic noise energy is distributed across each component. Building envelope components with a greater surface area must therefore offer increased noise insulation performance.

The recommended acoustic treatments are based on the following floor finishes:

- Bedrooms: Carpet and underlay
- Living Room: Hard Flooring
- Kitchen/Wet Areas: Tiles

The acoustic requirements shown in this report will further increase where bedroom floor finishes are tiled or timbered.

All recommendations must be checked against others to ensure compliance with other non-acoustic requirements that Council or other authorities may impose (e.g. Thermal requirements for BASIX compliance).

6.1 Glazing

The R_w rating required for each window will vary from room to room. Recommendations for windows also apply to any other item of glazing located on the external facade of the building in a habitable room unless otherwise stated.

Note that the R_w rating is required for the complete glazing and frame assembly. The minimum glazing thicknesses will not necessarily meet the required R_w rating without an appropriate frame system. It will be therefore necessary to provide a window glass and frame system having a laboratory tested acoustic performance meeting the requirements acoustic requirements.

The window systems must be tested in accordance with both of the following:



- Australian Window Association Industry Code of Practice Window and Door – Method of Acoustic Testing; and
- AS 1191 Acoustics – Method for laboratory measurement of airborne sound insulation of building elements.

It is necessary to submit such Laboratory certification for the proposed glazing systems (i.e. windows and framing systems) (e.g. NAL or CSIRO) for approval by RSA Acoustics prior to ordering or commitment.

The entire frame associated with the glazing must be sealed into the structural opening using acoustic mastics and backer rods. Normal weather proofing details do not necessarily provide the full acoustic insulation potential of the window system. The manufacturers’ installation instructions for the correct acoustic sealing of the frame must be followed.

It is possible that structural demands for wind loading or fire rating or the like may require more substantial glass and framing assemblies than nominated above. Where this is the case the acoustic requirements must clearly be superseded by the structural or fire rating demands.

6.2 Rw Requirements for Glazing

Based on the predicted internal noise levels, glazed windows and doors certain facades of residential development should have the following minimum Rw rating as indicated in Table 6-1 below.

Table 6-1 In-principle Glazing Recommendations

Location	Glazing Type	Minimum Glazing Rw Rating	Indicative Glazing System
All Façades			
Living/Communal Room	Sliding Doors	Rw 22	5mm clear glass in acoustically sealed frame*
	Windows	Rw 22	5mm clear glass in acoustically sealed frame*
Bedrooms/private rooms	Windows	Rw 22	5mm clear glass in acoustically sealed frame*

Note *: glazing system are for reference only. Any glazing system to be installed for the development is to achieve the minimum Rw rating indicated above.

Please note Rw ratings provided in Table 6-1 rely on the acoustic performance of the window glazing and frame. Rw ratings should be checked with glazing manufacturers and frames should be selected and installed as to not degrade the performance of the glazing. It is also recommended that glazing specifications are reviewed at the detailed design stage, most notably if changes to the glazing area are made throughout the design.



7 OPERATIONAL NOISE ASSESSMENT

7.1 Mechanical Plant Noise Assessment

Finalised architectural layouts and specific mechanical plant selections have not been supplied at this stage. It is anticipated that the building will be serviced by typical mechanical ventilation/air conditioning and heating equipment.

It is likely that the criteria set out by Penrith City Council and other regulatory standards will be met through the use of conventional noise control methods (e.g. selection of equipment on the basis of quiet operation and, where necessary, providing enclosures, localised barriers, silencers and lined ductwork).

An appropriately qualified acoustic consultant should review the mechanical plant associated with the development at the detailed design stage when final plant selections have been made and full mechanical plant assessment must then be carried out.

7.2 Typical Vocal Levels

Calculations of the amount of noise transmitted to these receivers from the proposed boarding house have been based on voice levels as referenced in the Handbook of Acoustical Measurements and Noise Control by Cyril M. Harris. This handbook provides voice spectrums for males and females as well as different vocal efforts. The spectrum is given in Table 7-1.

The spectra have been scaled based upon the overall number of patrons expected to be in the outdoor areas at any given time

Table 7-1 Speech Spectrums - Handbook of Acoustical Measurements and Noise Control.

Type	Noise Level (dB) at Octave Band Centre Frequency (Hz)							Overall dB(A)
	125	250	500	1 k	2 k	4 k	8 k	
Male (Raised)	49	55	58	51	47	43	37	58
Female (Raised)	37	51	54	49	44	43	38	55

7.3 Tenant Sound Power Levels

Based on a maximum number of 20 tenants in the outdoor area (assuming that 20 people will live in the development, that being 1 or 2 tenants per room), the following worst-case operational scenarios have also been assumed for our assessment:

- A total of 20 people in the outdoor area. Therefore, with 100 percent of the patrons talking, the worst-case scenario will be 20 tenants talking at any one time in the outdoor area.

Table 7-2 Sound Power Levels of People talking with Raised Voice - L_w – dB(A)

Scenario	Resultant Sound Power Level per Octave Band (dB)							
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
20 Tenants with Raised Vocal in the Outdoor Area	-	72	78	82	77	72	67	61



7.4 Noise Emissions Calculation

Calculations of the noise levels from the operation of the proposed mechanical plant have been carried out using the data in tables 7-1 and 7-2. We have used the worst-case scenario where all noise is active at the same time. Calculations take into account factors such as distance, shielding from buildings and barriers.

The following figure presents the proposed development and all sensitive receivers

Figure 7-1 Sensitive Receiver Location



7.5 Predicted Noise Levels

Predictive resultant noise levels have been calculated for residents using the rear yard and car movements within the site. Noise emissions at the nearest residential receivers are presented in the table below. The predicted noise calculations take into account the following:

- Heights of receivers are assumed to be 1.5 meters above ground level.
- The boundary fence on the west and north boundaries is a solid 1.8 meters fence
- Up to 20 people will be in the outdoor communal area at a time (day and evening time only) night time will be restricted to 7 people.
- The maximum capacity of the both carpark areas is 8 cars and 5 motorbikes/bicycles, we have assumed that 4 cars leave the parking area at the same time.



Table 7-3 Predicted Noise Levels at sensitive receivers.

Receiver	Period	Calculated Noise Level $L_{Aeq} - dB(A)$	Criteria	Compliance
R1	Day	49	49	Yes
	Evening	49	47	No
	Night	47	40	No
R2	Day	45	49	Yes
	Evening	45	47	Yes
	Night	43	40	No
R3	Day	45	65	Yes
	Evening	45	65	Yes
	Night	43	-	Yes
R4	Day	43	49	Yes
	Evening	43	47	Yes
	Night	40	40	Yes

It is likely that most tenants will use the common room, however, all tenants must be instructed to minimise noise while using the outdoor areas to minimise unnecessary noise. We note that our calculations assumed that the outdoor common areas will only be used by the tenants.

7.6 Outdoor Communal Area Mitigation Recommendations

To ensure the future amenity of nearby sensitive receivers most notably the residential development to the west, the following recommendations should be put in place:

- Ensuring the proposed 1.8m boundary fencing is built on the north and west facades.
- No music is to be played in the outdoor communal area.
- Minimise the number of tenants using the outdoor area to 10 people in the evening.
- No tenants allowed in the outdoor area after 10pm



8 CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

8.1 Project Area and Sensitive Receivers

Construction will wholly take place within the boundaries of at 1 Edna Street, Kingswood. Potentially affected sensitive receivers are displayed below in red in correlation to the site in yellow in Figure 8-1.

Figure 8-1 Sensitive Receivers



8.2 Proposed Construction Works

All construction works required to complete the proposed development will be undertaken during standard daytime construction hours of 7 am – 6 pm Monday to Friday and 8 am – 1 pm Saturday only. Works outside of the standard daytime construction hours will only be undertaken with prior assessment and required approvals.

The construction program is to include the following key work stages and potential noise and ground vibration generating activity:

- Demolition of the parts of the existing building located at the project site;
- Excavation of some of the bedrock adjacent to the residence;
- Construction of the new parts of the residential building including foundation works, concreting and infrastructure installation of framework, walls, roof and electrical fit out;



The construction phases will include some limited site clearance, foundation preparation and infrastructure installation. It is our understanding that the construction program is proposed to be more than 3 weeks in duration.

8.3 Construction Noise and Vibration Criteria

8.3.1 Construction Noise

Noise criteria for construction works are established in accordance with the EPA *Interim Construction Noise Guidelines* (ICNG).

All construction works are to be undertaken during daytime core hours of 7 am–6 pm Monday to Friday and 8 am-1 pm Saturdays. No construction works are anticipated to be required outside of the standard daytime standard construction hours unless otherwise approved.

The ICNG provides recommended construction (airborne) noise management levels for residential receivers as detailed in Table 8-1.

Site specific noise management levels (NML) have been established adopting the background noise levels (L_{A90}) measured within the project site.

The noise management levels are design as a trigger for the project to investigate feasible and reasonable noise management and mitigation measures to reduce noise impacts at nearest noise affected receivers.

Table 8-1 Recommended Residential Construction Noise Criteria

Time of construction	Noise Management level $L_{Aeq, 15min}$	Adopted noise NML $L_{Aeq, 15min}$ at neighbouring residences
Standard construction hours		
Monday to Friday 7 am – 6 pm	Noise affected receivers RBL + 10 dB(A)	54 dB(A)
Saturday 8 am-1 pm		
No work on Sundays or public holidays		

Note: RBL rating background level, the measured L_{A90} noise level.

As construction works for the proposed development will only be carried out during the daytime period a standard daytime construction noise management level for the neighbouring residential receivers of $L_{Aeq, 15min}$ 54 dB(A) has been adopted in accordance with the ICNG. NMLs for the evening and night periods are not applicable to this assessment.

There are no noise sensitive receivers such as schools, hospitals or places of worship that have been identified within the study area.

A $L_{Aeq, 15min}$ 75 dB(A) highly noise affected construction noise management level will be applied as a trigger for the application of additional construction noise controls such as respite periods or restriction of construction hours of operation. This trigger would apply to noise impacts on residential receivers only.

The recommended noise management levels are planning goals only. Factors such as the social benefits of the activity, economic constraints, and the nature and duration of the proposed construction program need to be considered when assessing potential noise impacts from construction works.



8.3.2 Construction Vibration

Vibration during construction works is considered an intermittent source associated with two main types of impact; disturbance at receivers and potential architectural/structural damage to buildings. Generally, if disturbance issues are controlled, there is limited potential for structural damage to buildings.

Detailed in Table 8-2, the ICNG guidance adopts the *Environmental Noise Management Assessing Vibration: a technical guideline* (2006) for the assessment of human annoyance due to construction vibration. German Standard DIN 4150: Part 3-1999, provides guidelines for evaluating the effects of vibration on structures.

Dependent upon the dominant frequency of vibration, assessed in Hertz (Hz), structural vibration limits are established at the foundation of nearest buildings.

Table 8-2 Adopted Vibration Constriction Criteria

Receiver	Annoyance VDV criteria, $m/s^{1.75}$		Structural PPV criteria, mm/s
	Preferred	Maximum	
Residential	0.2	0.4	5 - 20

Notes: structural vibration goals established for < 10 – 100 Hz dominant frequency of vibration.

VDV = vibration dose value; PPV = peak particle velocity

9 CONSTRUCTION NOISE & VIBRATION MANAGEMENT PLAN

9.1 Noise & Vibration Intensive Works

9.1.1 Construction Noise

The basis for the project-specific construction airborne noise goals for approved daytime hours is shown in Table 8-1.

Where the noise goals shown in cannot be achieved, the construction contractor will use all reasonable and feasible noise mitigation and management measures to reduce noise generation and impacts.

9.1.2 Construction Vibration

The construction contractor will, if required, ensure compliance with the criteria of Table 8-1.

It is anticipated that there will be minimal Construction Vibration within this development.

9.1.3 Typical Plant & Equipment Sound Pressure Levels

Sound pressure levels for typical items of plant are listed in Table 9-1. These noise levels are representative of modern plant operating with noise control measures in good condition.

Table 9-1 Noise Levels of Typical Construction Plant & Equipment

Item	Typical Plant Type	Typical L_{Aeq} Noise Level at 15 metres – dB(A)
Excavator	5 to 8 tonnes	75
Bob Cat		71



Tip trucker	72
Hand Tools: - saws, nail gun, drills, hammers	70
Concrete pump	75
Cement mixer	75
Crane	70
Kango	75

9.2 Noise & Vibration Mitigation Measures

9.2.1 Noise Control

The following noise mitigation measures will, if required, be implemented. The construction contractor will, where reasonable and feasible, apply best practice noise mitigation measures including:

- Maximising the offset distance between noisy plant items and nearby noise sensitive receivers.
- Avoiding the coincidence of noisy plant working simultaneously close together and adjacent to sensitive receivers.
- Minimising consecutive works in the same locality.
- Orienting equipment away from noise sensitive areas.
- Carrying out loading and unloading away from noise sensitive areas.

In order to minimize noise impacts during the works, the construction contractor will take all reasonable and feasible measures to mitigate noise effects.

The contractor will also take reasonable steps to control noise from all plant and equipment. Examples of appropriate noise control include efficient silencers and low noise mufflers.

Silenced air compressors, fitted with noise labels indicating a maximum (L_{Amax}) sound pressure level of not more than 75 dB(A) at 7 m will be used on site. The sound pressure level of noise emitted from a compressor used will comply with noise label requirements.

9.2.2 Vibration Control

The following vibration mitigation measures will be implemented by the construction contractor:

- Relocate any vibration generating plant and equipment to areas within the site in order to lower the vibration impacts.
- Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment.
- Use lower vibration generating items of excavation plant and equipment e.g. smaller capacity rock breaker hammers.
- Minimise consecutive works in the same locality (if applicable).



- Schedule a minimum respite period of at least 0.5 hour before activities commence which are to be undertaken for a continuous four-hour period.

9.2.3 Summary of Mitigation Measures

The noise and vibration mitigation measures to be implemented by the construction contractor are listed in Table 9-2.

Table 9-2 Summary of Noise & Vibration Mitigation Measures

Item	Description
Construction Hours	Works will be carried out within the standard construction hours.
Deliveries	Deliveries will be carried out within the standard construction hours.
Site Layout	Where possible, plant and equipment will be located and orientated to direct noise away from sensitive receivers.
Quietest Suitable Equipment	Plant and equipment will be selected to minimise noise emission, where possible, whilst maintaining efficiency of function. Residential grade silencers will be fitted and all noise control equipment will be maintained in good order.
Hammer Equipment	Maximise hammer penetration (and reduce blows) by using sharp hammer tips. Keep stocks of sharp profiles at site and monitor the profiles in use.
Reversing Alarms	Mobile plant and trucks operating on site for a significant portion of the project will have reversing alarm noise emissions minimised, where possible, recognising the need to maintain occupational safety standards.
PA System	No public-address system will be used at this site.
Truck Noise (off site)	All trucks regularly used for the project are to have mufflers, and any other noise control equipment, maintained in good working order. Trucking routes will use main roads, where feasible.
Construction Hours	Works will be carried out within the standard construction hours.

9.3 Identifying and Managing Future Noise & Vibration Issues

If additional activities or plant are found to be necessary that will emit noise and/or vibration emissions significantly exceeding those assumed for this assessment, these will, if required, be assessed by the Acoustical Consultant on a case-by-case basis and appropriate mitigation measures will be implemented.

9.4 Complaint Handling

The construction contractor will adopt the following protocol for handling complaints. This protocol is intended to ensure that the issues are addressed and that appropriate corrective action is identified and implemented as necessary:

- The project manager will record all verbal and telephone complaints in writing and will forward all complaints to the contractor, together with details of the circumstance leading to the complaint and all subsequent actions.
- Complaints received by the contractor will, as an initial step, be referred to the project manager who will respond as described above.



- The contractor will investigate the complaint in order to determine whether a criterion exceedance has occurred or whether noise and/or vibration have occurred unnecessarily.
- If excessive or unnecessary noise and/or vibration have been caused, corrective action will be planned and implemented by the project manager.
- Complainants will be informed by contractor that their complaints are being addressed, and (if appropriate) that corrective action is being taken.

Complainants will be informed of the implementation of the corrective action that has been taken to mitigate the adverse effects.

10 CONCLUSION

Rodney Stevens Acoustics has conducted a noise impact assessment of the proposed boarding house development located at 1 Edna Street, Kingswood NSW. The review has assessed the noise intrusion of the site and compared it with the noise criteria required by in Penrith City Council and other relevant standards including the EPA's Noise Policy for Industry.

Rodney Stevens Acoustics has developed a construction noise and vibration management plan for the proposed boarding house development located at 1 Edna Street, Kingswood NSW.

A noise survey has been carried out and the processed data has been used to determine traffic noise from the surrounding area to the project site. Based on the noise impact study conducted, the proposed development is deemed to comply with the SEPP (Infrastructure) 2007-noise criteria with recommendations from this report. It is therefore recommended that planning approval be granted for the proposed development based on acoustics.

Approved: -

Rodney Stevens
Manager/Principal

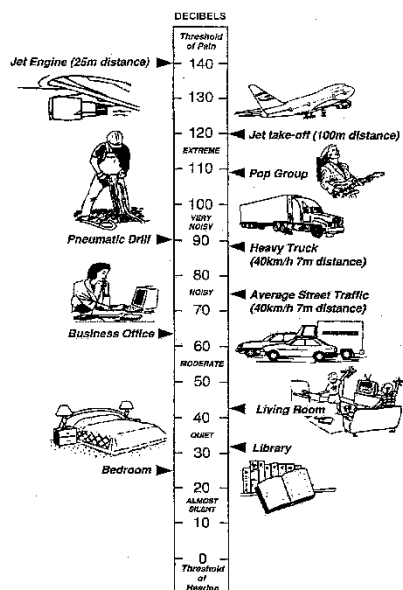
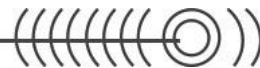


Appendix A. Acoustic Terminology

A-weighted sound pressure	The human ear is not equally sensitive to sound at different frequencies. People are more sensitive to sound in the range of 1 to 4 kHz (1000 – 4000 vibrations per second) and less sensitive to lower and higher frequency sound. During noise measurement, an electronic ' <i>A-weighting</i> ' frequency filter is applied to the measured sound level <i>dB(A)</i> to account for these sensitivities. Other frequency weightings (B, C and D) are less commonly used. Sound measured without a filter is denoted as linear weighted <i>dB(linear)</i> .
Ambient noise	The total noise in a given situation, inclusive of all noise source contributions in the near and far field.
Community annoyance	Includes noise annoyance due to: <ul style="list-style-type: none">■ character of the noise (e.g. sound pressure level, tonality, impulsiveness, low-frequency content)■ character of the environment (e.g. very quiet suburban, suburban, urban, near industry)■ miscellaneous circumstances (e.g. noise avoidance possibilities, cognitive noise, unpleasant associations)■ human activity being interrupted (e.g. sleep, communicating, reading, working, listening to radio/TV, recreation).
Compliance	The process of checking that source noise levels meet with the noise limits in a statutory context.
Cumulative noise level	The total level of noise from all sources.
Extraneous noise	Noise resulting from activities that are not typical to the area. Atypical activities may include construction, and traffic generated by holiday periods and by special events such as concerts or sporting events. Normal daily traffic is not considered to be extraneous.
Feasible and reasonable measures	Feasibility relates to engineering considerations and what is practical to build; reasonableness relates to the application of judgement in arriving at a decision, taking into account the following factors: <ul style="list-style-type: none">■ Noise mitigation benefits (amount of noise reduction provided, number of people protected).■ Cost of mitigation (cost of mitigation versus benefit provided).■ Community views (aesthetic impacts and community wishes).■ Noise levels for affected land uses (existing and future levels, and changes in noise levels).
Impulsiveness	Impulsive noise is noise with a high peak of short duration or a sequence of these peaks. Impulsive noise is also considered annoying.



Low frequency	Noise containing major components in the low-frequency range (20 to 250 Hz) of the frequency spectrum.
Noise criteria	The general set of non-mandatory noise levels for protecting against intrusive noise (for example, background noise plus 5 dB) and loss of amenity (e.g. noise levels for various land use).
Noise level (goal)	A noise level that should be adopted for planning purposes as the highest acceptable noise level for the specific area, land use and time of day.
Noise limits	Enforceable noise levels that appear in conditions on consents and licences. The noise limits are based on achievable noise levels, which the proponent has predicted can be met during the environmental assessment. Exceedance of the noise limits can result in the requirement for either the development of noise management plans or legal action.
Performance-based goals	Goals specified in terms of the outcomes/performance to be achieved, but not in terms of the means of achieving them.
Rating Background Level (RBL)	The rating background level is the overall single figure background level representing each day, evening and night time period. The rating background level is the 10 th percentile min L _{A90} noise level measured over all day, evening and night time monitoring periods.
Receptor	The noise-sensitive land use at which noise from a development can be heard.
Sleep disturbance	Awakenings and disturbance of sleep stages.
Sound and decibels (dB)	<p>Sound (or noise) is caused by minute changes in atmospheric pressure that are detected by the human ear. The ratio between the quietest noise audible and that which should cause permanent hearing damage is a million times the change in sound pressure. To simplify this range the sound pressures are logarithmically converted to decibels from a reference level of 2×10^{-5} Pa.</p> <p>The picture below indicates typical noise levels from common noise sources.</p>



dB is the abbreviation for decibel – a unit of sound measurement. It is equivalent to 10 times the logarithm (to base 10) of the ratio of a given sound pressure to a reference pressure.

Sound power Level (SWL)

The sound power level of a noise source is the sound energy emitted by the source. Notated as SWL, sound power levels are typically presented in $dB(A)$.

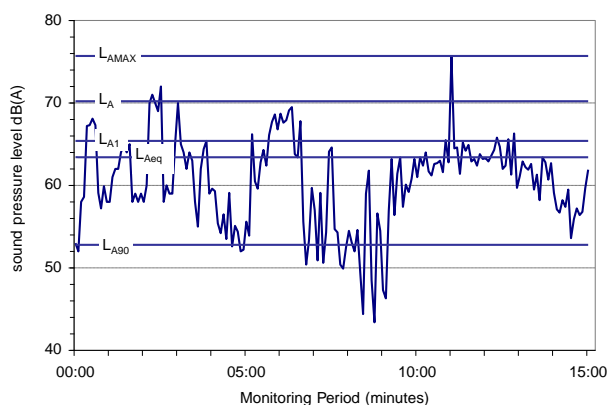
Sound Pressure Level (SPL)

The level of noise, usually expressed as SPL in $dB(A)$, as measured by a standard sound level meter with a pressure microphone. The sound pressure level in $dB(A)$ gives a close indication of the subjective loudness of the noise.

Statistic noise levels

Noise levels varying over time (e.g. community noise, traffic noise, construction noise) are described in terms of the statistical exceedance level.

A hypothetical example of A weighted noise levels over a 15 minute measurement period is indicated in the following figure:



Key descriptors:

L_{Amax} Maximum recorded noise level.

L_{A1} The noise level exceeded for 1% of the 15 minute interval.



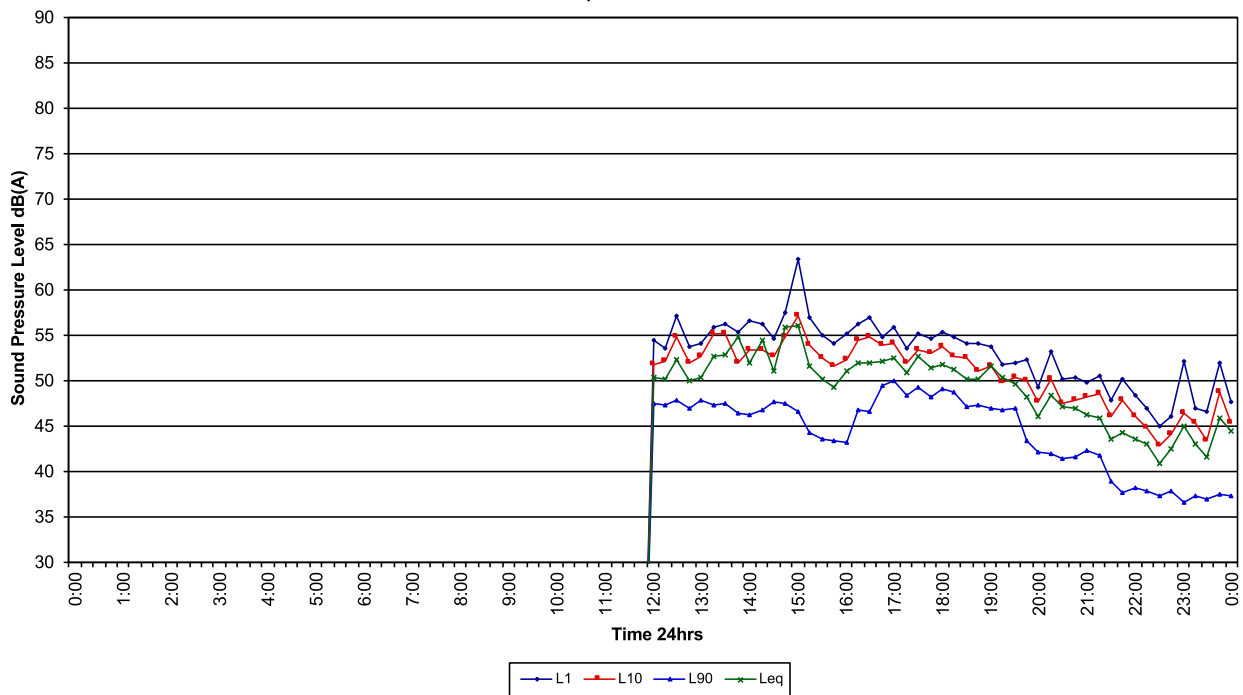
	<p>L_{A10} Noise level present for 10% of the 15-minute interval. Commonly referred to as the average maximum noise level.</p> <p>L_{Aeq} Equivalent continuous (energy average) A-weighted sound pressure level. It is defined as the steady sound level that contains the same amount of acoustic energy as the corresponding time-varying sound.</p> <p>L_{A90} Noise level exceeded for 90% of time (background level). The average minimum background sound level (in the absence of the source under consideration).</p>
Threshold	The lowest sound pressure level that produces a detectable response (in an instrument/person).
Tonality	Tonal noise contains one or more prominent tones (and characterised by a distinct frequency components) and is considered more annoying. A 2 to 5 dB(A) penalty is typically applied to noise sources with tonal characteristics



Appendix B Logger Graphs

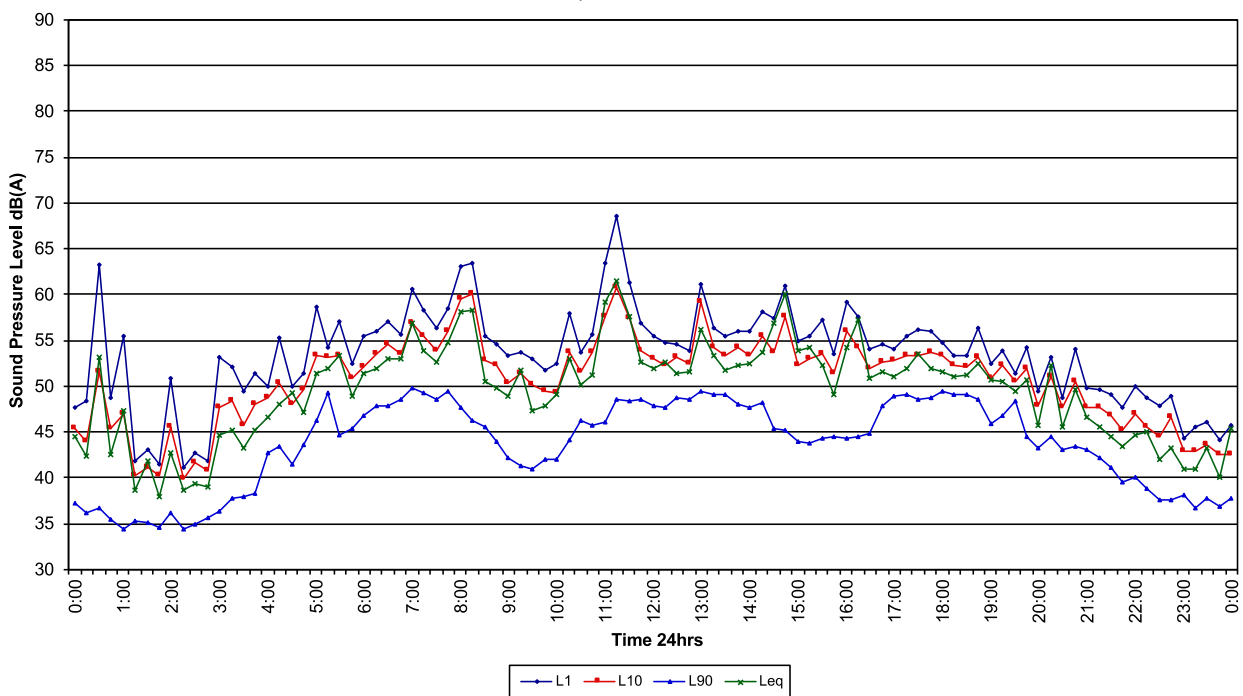
1 Edna St, Kingswood

Wednesday 30/5/18



1 Edna St, Kingswood

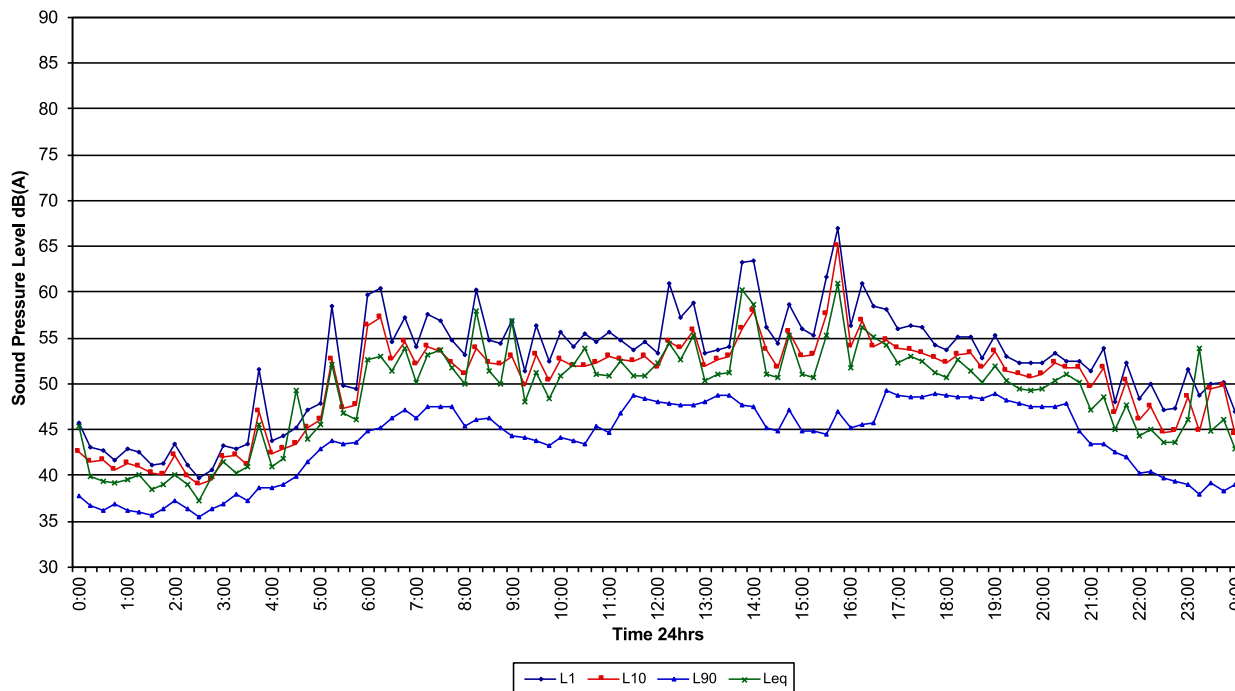
Thursday 31/5/18





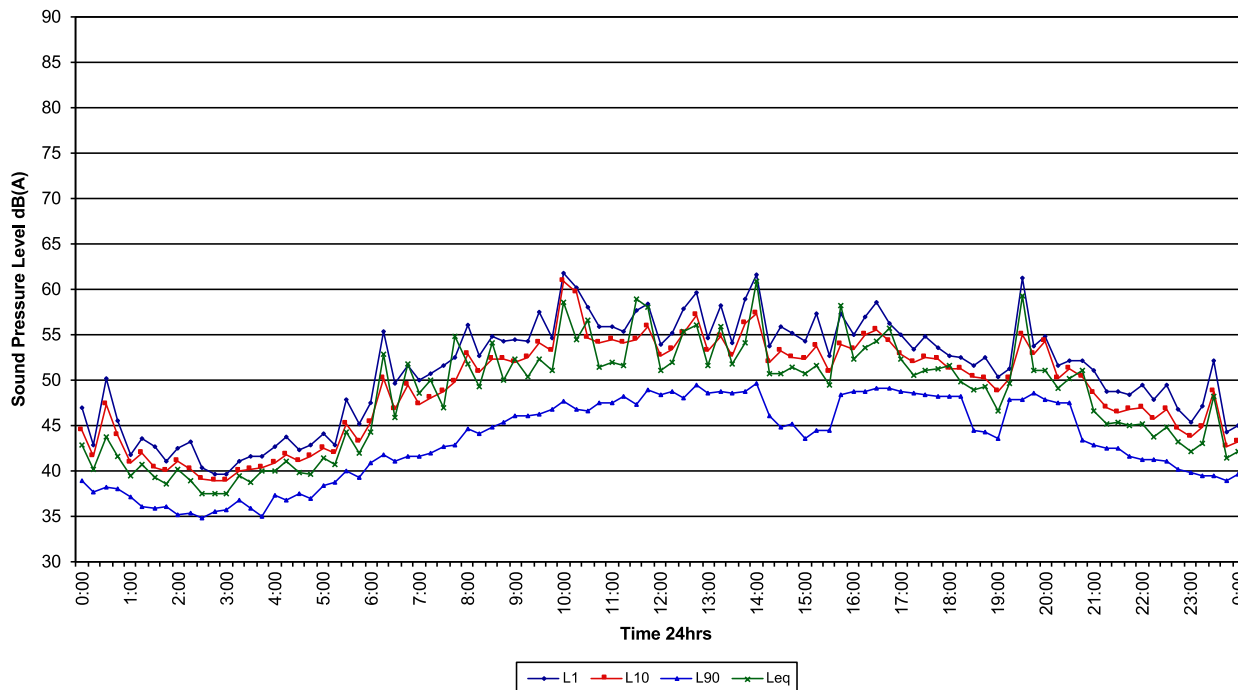
1 Edna St, Kingswood

Friday 1/6/18



1 Edna St, Kingswood

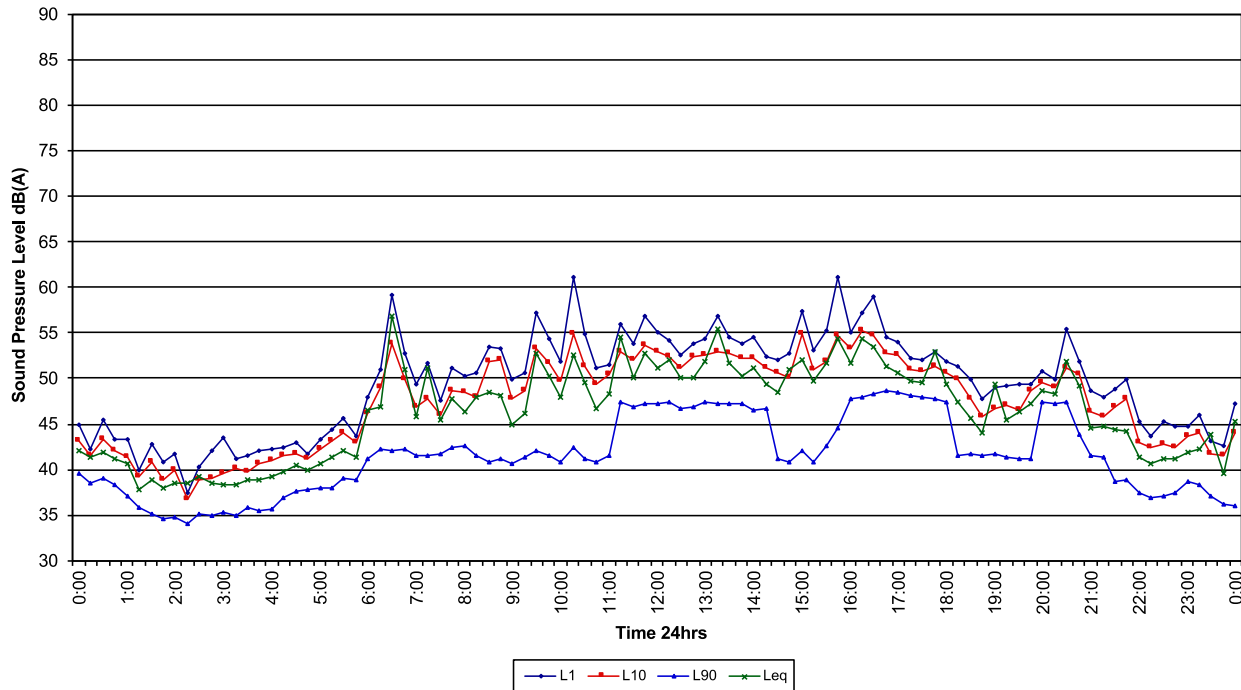
Saturday 2/6/18





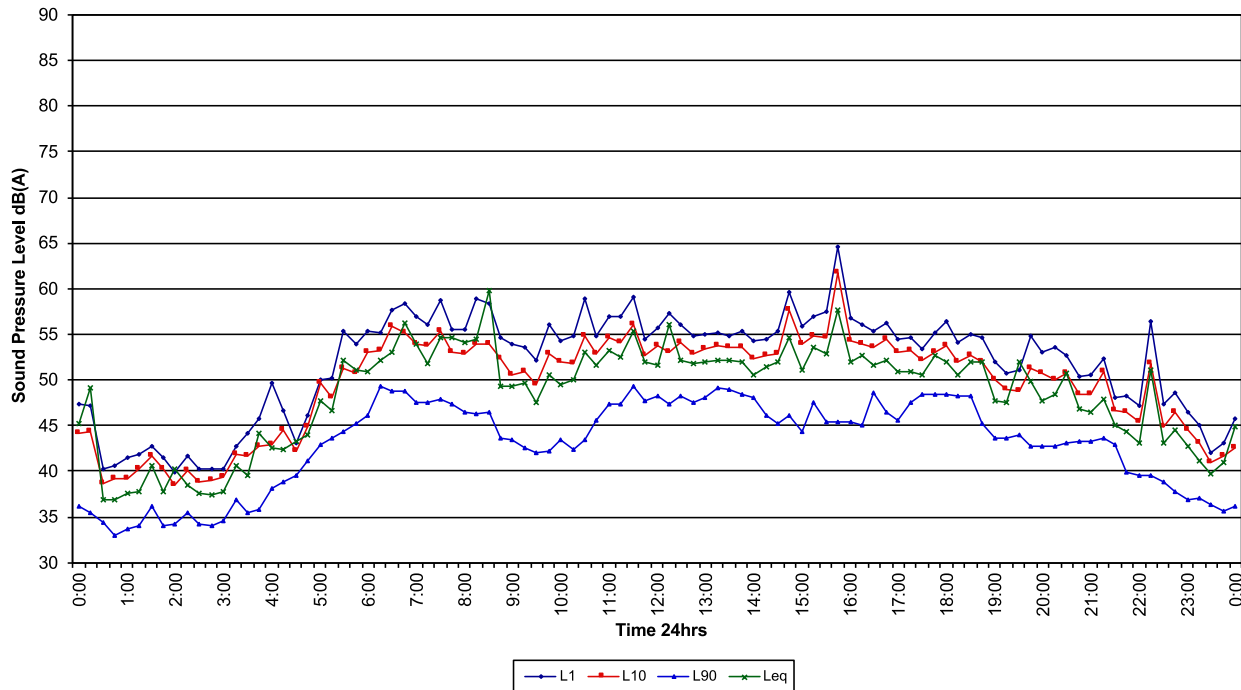
1 Edna St, Kingswood

Sunday 3/6/18



1 Edna St, Kingswood

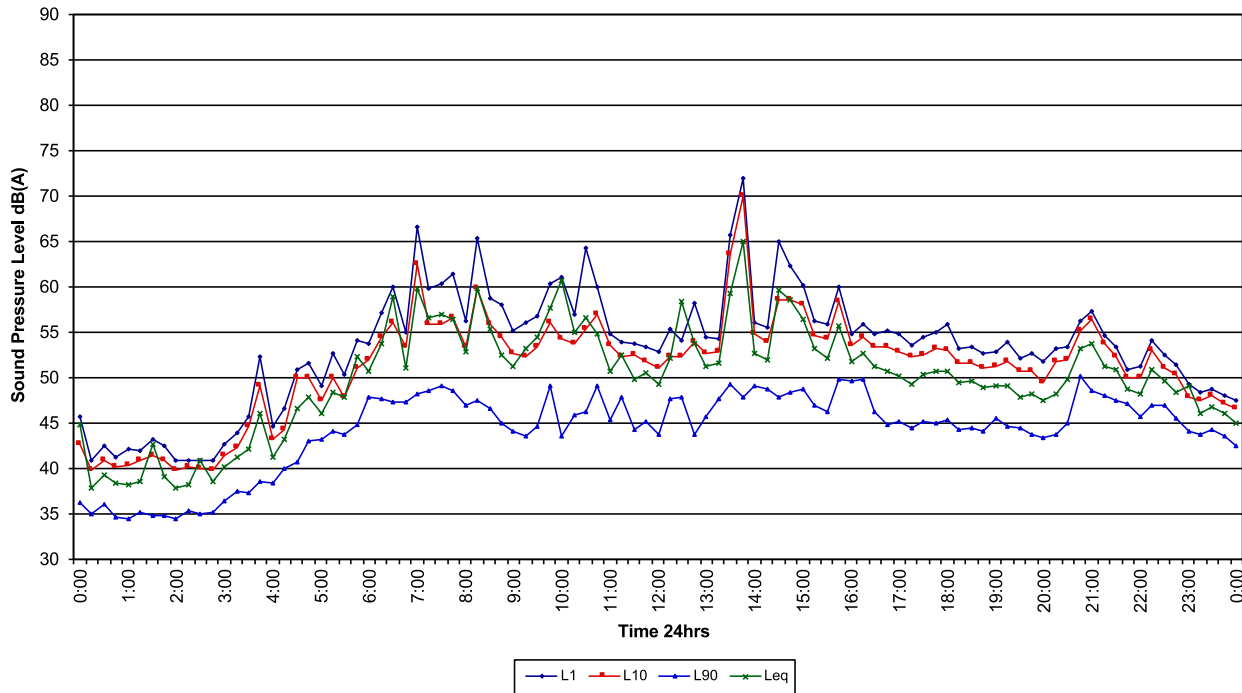
Monday 4/6/18





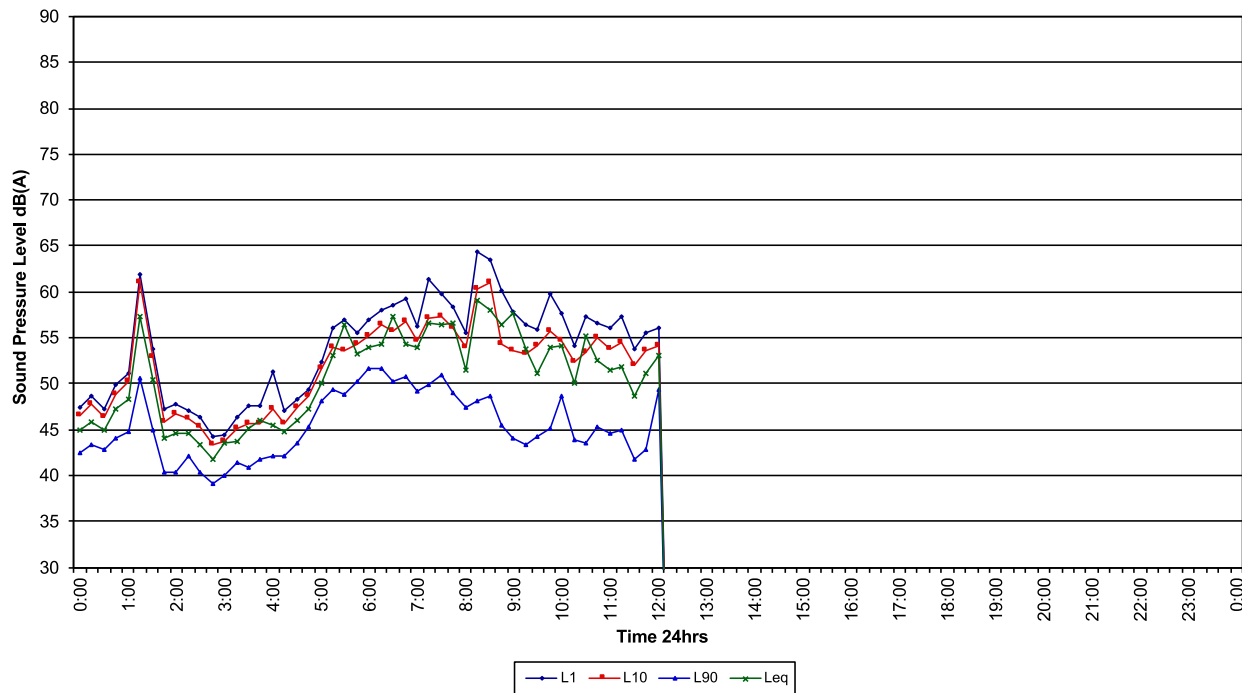
1 Edna St, Kingswood

Tuesday 5/6/18



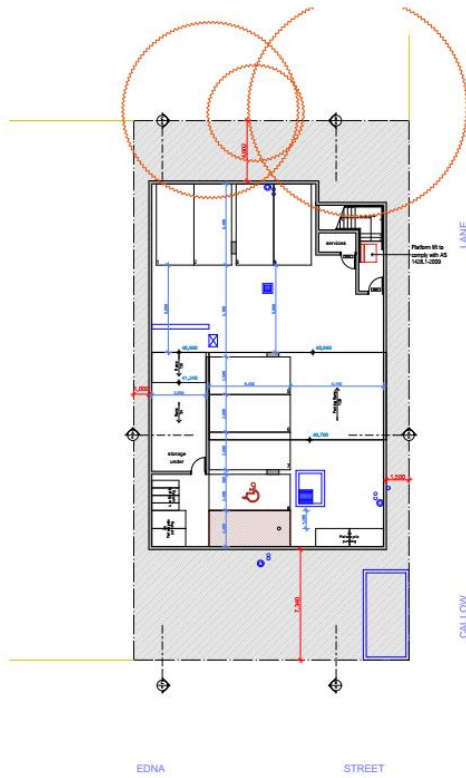
1 Edna St, Kingswood

Wednesday 6/6/18

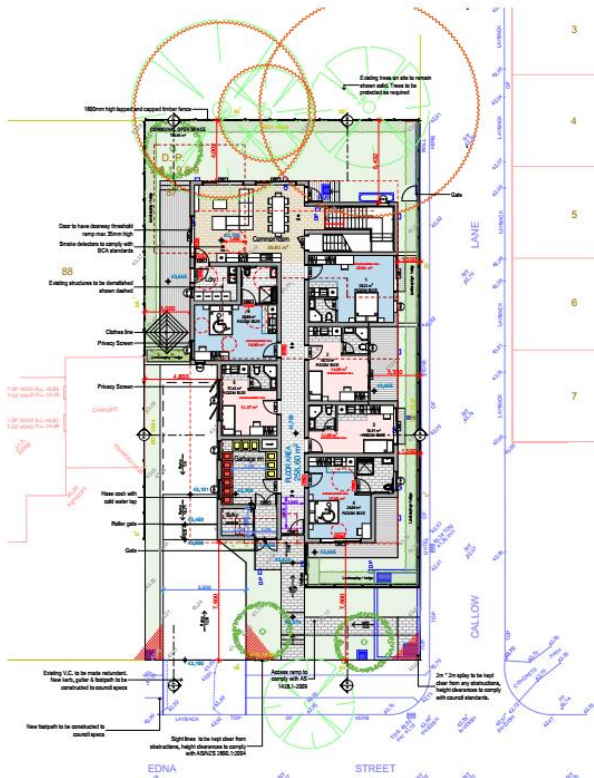




Appendix C Architectural plans



BASEMENT FLOOR PLAN
1:200



GROUND FLOOR PLAN
1:200

Member No.	1000000000
Member Name	MR. J. ELIAS
Member Address	1000000000
Member City	1000000000
Member State	1000000000
Member Postcode	1000000000
Member Email	1000000000
Member Phone	1000000000
Member Fax	1000000000
Member Website	1000000000
Member Signature	1000000000

PROJECT: PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD

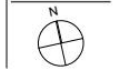
CLIENT: MR. ELIE ELIAS

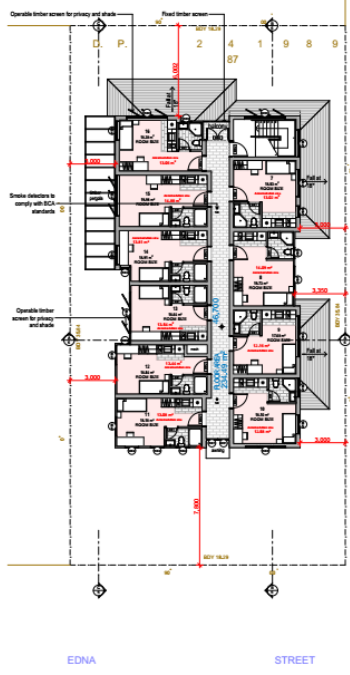
Project: as shown | Scale: as shown | Consultant: PCC

Drawn: JE. | Issue: NOV19 | File: 2019-10

G3

16 Dunlop Street
North Parramatta NSW 2151
ph: +61 2 9630 9911
fax: +61 2 9630 9922
mob: 0431 111 777
admin@designcorp.com.au
www.designcorp.com.au





FIRST FLOOR PLAN
1:200

No. Occupants			
LEVEL	UNIT TYPE	ROOMS	OCCUPANTS
GROUND	2bed	3	6
	3bed	0	0
FIRST	2bed	0	0
	3bed	0	0
TOTAL		16	19

NOTE

1. ALL DIMENSIONS AND FLOOR AREAS ARE TO BE VERIFIED BY BUILDER PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK. ANY DISCREPANCIES ARE TO BE CONFIRMED BY THE DESIGNER.
2. LEVELS SHOWN ARE APPROXIMATE UNLESS ACCOMPANIED BY REDUCED LEVELS BY A REGISTERED SURVEYOR.
3. FIGURED DIMENSIONS ARE TO BE TAKEN IN PREFERENCE TO SCALING.
4. ALL BOUNDARY CLEARANCES MUST BE VERIFIED BY THE SURVEYOR PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
5. WHERE ENGINEERING OR HYDRAULIC DRAWINGS ARE REQUIRED, SUCH MUST TAKE PREFERENCE TO THIS DRAWING.
6. STORMWATER TO BE CONNECTED AND DISCHARGED TO COUNCIL'S REQUIREMENTS AND TO AS 3500.3-1990.
7. ALL SERVICES TO BE LOCATED AND VERIFIED BY THE BUILDER WITH THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
8. ALL DIMENSIONS TO BE VERIFIED BY BUILDER/REGISTERED SURVEYOR ON SITE PRIOR TO CONSTRUCTION COMMENCING.
9. ALL DEMOLITION AND REMOVAL WORK TO BE CARRIED OUT WITH APPROVED WASTE MANAGEMENT PLAN AND IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS & D.A. CONDITIONS.

LEVEL	ROOM	ROOM GROSS FLOOR AREA (including bathroom & kitchen)	SINGLE BED = 12m ² min (max 25m ²)	DOUBLE BED = 16m ² min (max 25m ²)
GRND	1	25.22		20.04
	2	19.73	14.09	
	3	18.11	12.9	
	4	26.06		17.9
	5	17.43	12.37	
	6	26.55		18.5
FIRST	7	18.53	13.02	
	8	17.73	14.09	
	9	17.68	12.16	
	10	18.1	12.58	
	11	18.18	13.08	
	12	18.54	13.44	
	13	18.64	13.54	
	14	18.91	13.81	
	15	19.98	14.88	
	16	18.38	13.06	
TOTAL		16	13	3

LEP/DCP - COMPLIANCE TABLE			
CONTROL	REQUIRED	PROPOSED	Compliance
Site Area (m ²)	600	615.55	YES
Lot Width	15m	16.3m	YES
Street Frontage Setback	Average of immediate neighbours or 5.5m	7.8m	YES
Secondary Setback	3m	3m	YES
Side Setback	2m	2m	YES
Rear Setback	4m for single storey (6m for two storey building comparison)	4 & 6m	YES
Building Height	max 8.5m	8.2m	YES
Solar Access	3 hours, Between 9am & 3pm 21 Jun	3 hours	YES

ASHPEP - COMPLIANCE TABLE			
CONTROL	REQUIRED	PROPOSED	Compliance
Min. Landscaping	Landscaping of front setback area compatible with streetscape	Proposed front yard landscaping and landscaping compatible with streetscape	YES
Solar Access	Common living rooms minimum 3 hours direct sunlight 10:00am to 3:00pm mid winter	Common rooms linked to open courtyard receiving into 3 hrs of direct sunlight	YES
Private Open Space	Min 20m ² , min dimension 3m	All rooms have access to shared open courtyard and garden 116.8 m ² (incl. deck 3m)	YES
Common Living room	If boarding flat or more boarding rooms	16 rooms proposed - 1 Common room provided	YES
Parking	0.5 per room / (10% of 16)	8	YES
Parking (Motor cycle / Bicycle)	Motorcycle space for every 5 boarding rooms (16/5=3.2)	4 - Motorcycles - 4 - Bicycles	YES

DOOR SCHEDULE						
ID	TYPE	HEIGHT	WIDTH	PLAN	ELEVATION	Q
D01	SINGLE SWING	2,070	750			14
D02	SINGLE SWING	2,070	800			24
D03	DOUBLE SWING	2,070	1,400			1
D04	DOUBLE SWING	2,400	1,500			1
D05	SLIDING	2,400	2,400			2
D06	SLIDING	2,400	1,800			1
D07	SLIDING	2,400	2,700			4
D08	SINGLE SWING & Sidelight	2,700	1,800			2
D09	SINGLE SWING	2,400	800			1

WINDOW SCHEDULE							
ID	TYPE	SKL	WIDTH	HEIGHT	PLAN	ELEVATION	Q
W01	Louver in Frame	800	775	1,800			2
W02	Double Hung	1,100	600	1,250			4
W03	Double Hung	900	750	1,500			6
W04	Double Hung	600	900	1,800			3
W05	Double Hung	1,100	2,700	1,250			1
W06	Double Hung	1,100	1,250	1,250			10
W07	Sliding	900	1,800	1,500			8
W08	Double Hung	600	2,700	1,800			8



NORTH ELEVATION
1:200



EAST ELEVATION
1:200



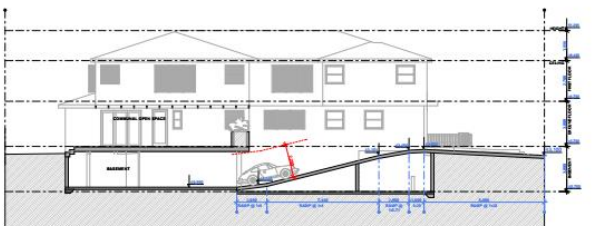
SOUTH ELEVATION
1:200



WEST ELEVATION
1:200

NOTE

1. ALL DIMENSIONS AND FLOOR AREAS ARE TO BE VERIFIED BY BUILDER PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK. ANY DISCREPANCIES ARE TO BE CONFIRMED BY THE DESIGNER.
2. LEVELS SHOWN ARE APPROXIMATE UNLESS ACCOMPANIED BY REDUCED LEVELS BY A REGISTERED SURVEYOR.
3. FIGURED DIMENSIONS ARE TO BE TAKEN IN PREFERENCE TO SCALING.
4. ALL BOUNDARY CLEARANCES MUST BE VERIFIED BY THE SURVEYOR PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
5. WHERE ENGINEERING OR HYDRAULIC DRAWINGS ARE REQUIRED, SUCH MUST TAKE PREFERENCE TO THIS DRAWING.
6. STORMWATER TO BE CONNECTED AND DISCHARGED TO COUNCIL'S REQUIREMENTS AND TO AS 3500.3-1990.
7. ALL SERVICES TO BE LOCATED AND VERIFIED BY THE BUILDER WITH THE RELEVANT AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORK.
8. ALL DIMENSIONS TO BE VERIFIED BY BUILDER/REGISTERED SURVEYOR ON SITE PRIOR TO CONSTRUCTION COMMENCING.
9. ALL DEMOLITION AND REMOVAL WORK TO BE CARRIED OUT WITH APPROVED WASTE MANAGEMENT PLAN AND IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS & D.A. CONDITIONS.



SECTION C
1:200

designcorp ARCHITECTS
 16 Dunlop Street North, Parramatta NSW 2151
 ph: +61 2 9630 9911
 fax: +61 2 9630 9922
 mob: 0431 111 777
 admin@designcorp.com.au
 www.designcorp.com.au

PROJECT: PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD
 Client: MR ELIE ELIAS
 Architect: MR ELIE ELIAS
 Designer: J.E.
 Scale: as shown
 Date: NOV19
 Ref: 2019-140
 Consultant: PCC

designcorp ARCHITECTS
 This document is copyright and the design of architectural elements is the intellectual property of designcorp architects. No reproduction or use in any form is permitted without the written consent of designcorp architects.

designcorp ARCHITECTS
 16 Dunlop Street North, Parramatta NSW 2151
 ph: +61 2 9630 9911
 fax: +61 2 9630 9922
 mob: 0431 111 777
 admin@designcorp.com.au
 www.designcorp.com.au

PROJECT: PROPOSED NEW GENERATION BOARDING HOUSE @ 1 EDNA ST KINGSWOOD
 Client: MR ELIE ELIAS
 Architect: MR ELIE ELIAS
 Designer: J.E.
 Scale: as shown
 Date: NOV19
 Ref: 2019-140
 Consultant: PCC

designcorp ARCHITECTS
 This document is copyright and the design of architectural elements is the intellectual property of designcorp architects. No reproduction or use in any form is permitted without the written consent of designcorp architects.



TRAFFIC IMPACT REPORT AND CAR PARKING CERTIFICATION

1 EDNA STREET, KINGSWOOD, NSW

Proposed New Generation Boarding House

Prepared for:	Designcorp Architects Pty Ltd
Date Prepared:	November 2018
Revision:	1.0
Penrith City Council #:	TBC

INDEX

Introduction 3

Background and Existing Conditions 3

 Location and Land Use 3

 Figure 1 – Edna Street in Proximity to the Subject Site.....4

 Figure 2: Subject Site Location on Street Map4

 Figure 3: Aerial View of Surrounding Area5

 Public Transport 5

 Active Transport..... 5

Traffic Impacts of the Proposed Development 5

Car Parking Provisions 6

Car Park Design Review 6

 AS 2890.1-2004 Compliance 6

 Car Space Dimensions 6

 Mobility Impaired Parking..... 7

Conclusions 9

Introduction

SafeWay TMS was commissioned by Designcorp Architects Pty Ltd to prepare a Traffic Impact Report and a Car Parking Certification for the proposed New Generation Boarding House located at 1 Edna Street, Kingswood.

The proposed development will provide

- 16 rooms for guests
- A communal area
- A common room.

This report will assess the traffic impacts of this proposed development on the surrounding environment and the compliance of the proposed car parking with the Australian Standards and the Penrith DCP. In the course of preparing this assessment, the subject site and its environment have been inspected, plans of the development examined, and all relevant traffic data collected and analysed.

Background and Existing Conditions

Location and Land Use

The subject site is located at 1 Edna Street, Kingswood (with additional frontage to Callow Lane) and is currently occupied by a low density residential dwellings.

The Penrith LEP zones the subject site as R3 Medium Density Residential. Thus the proposed development is consistent with this zoning.

A small retail precinct is located adjacent to the east of the subject site, however the land use in the proximity to the proposed development predominantly consists of low density residential dwellings.

Edna Street is a local road that provides a travel lane and parking lane in either direction (Figure 1). Kerbs and gutters and street lighting are provided on both verges within the road reserve. Grassed verges are provided on Edna Street to facilitate the movement of pedestrians. The overall alignment of the road is relatively straight, offering good visibility.

Figure 1 – Edna Street in Proximity to the Subject Site



Figure 2 shows the site on the local road network from a street map perspective.

Figure 3 provides an aerial view of the immediate area surrounding the subject site.

Figure 2: Subject Site Location on Street Map

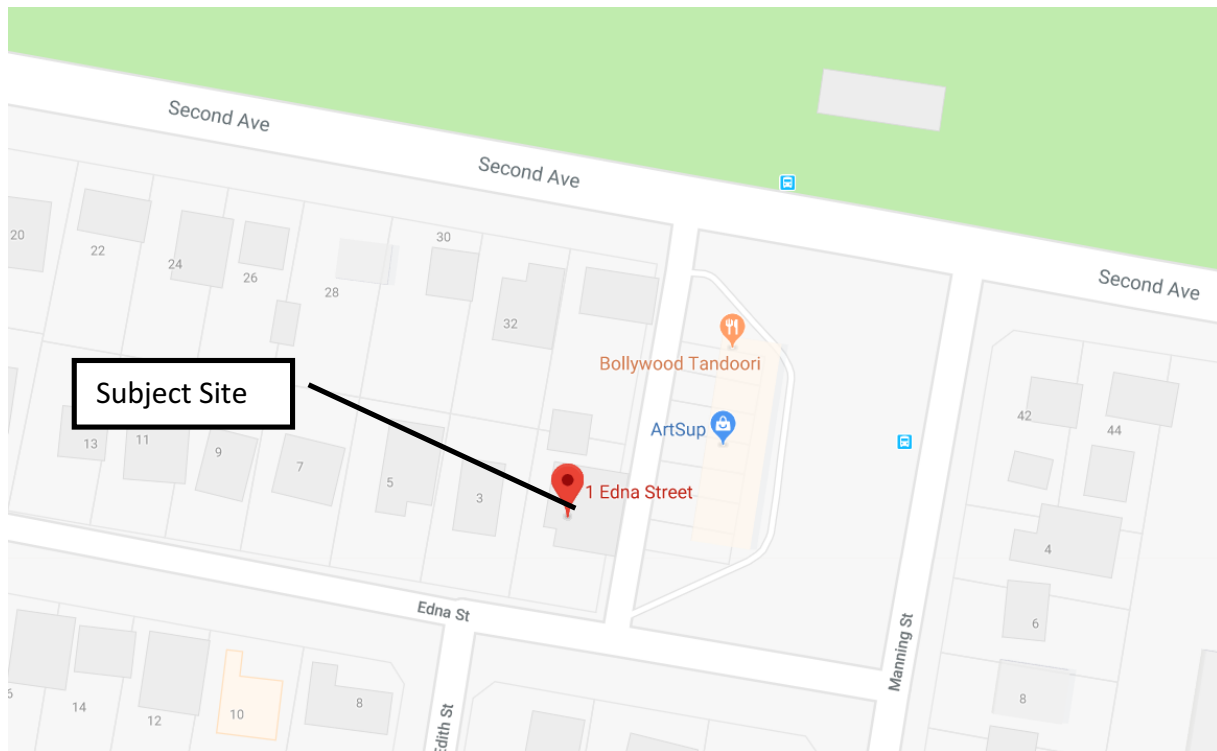
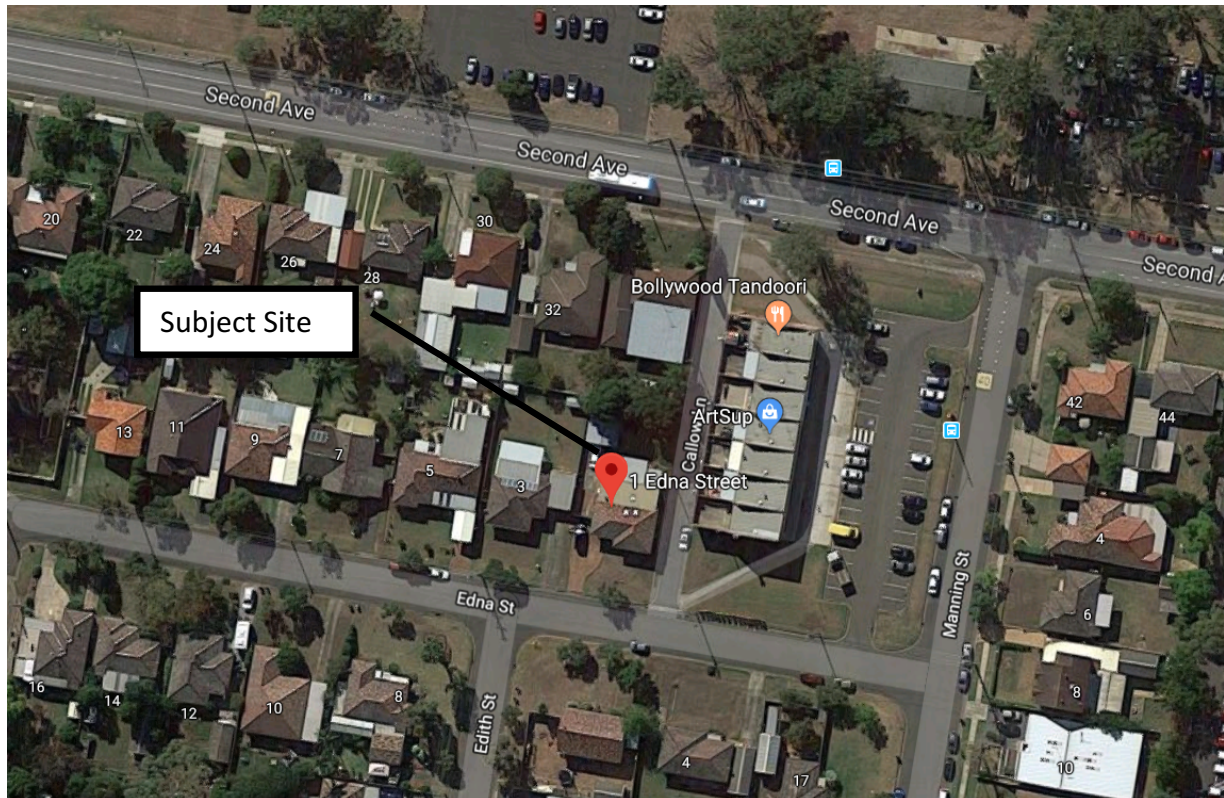


Figure 3: Aerial View of Surrounding Area



Public Transport

The following bus services operate on the roads in proximity to the subject site:

- 770 – Mount Druitt to Penrith via St Marys
- 774 – Mount Druitt to Penrith via Nepean Hospital
- 775 - Mount Druitt to Penrith via Erskine Park
- 776 - Mount Druitt to Penrith via St Claire.

Kingswood Station is located approximately 700 m to the northwest of the subject site. Kingswood Station is located on T1 Western Line. This line provide connectivity to a numbers of Sydney’s population and economic centres including Penrith, Parramatta, Strathfield and the Sydney CBD.

Accordingly, the subject site is well served by public transport.

Active Transport

Pedestrian footpaths and grassed verges are provided on Edna Street and other roads in proximity to the subject site to facilitate the movements of pedestrians.

Traffic Impacts of the Proposed Development

The trip generation characteristics of the proposed development have been assessed in accordance with trip rates included in the Roads and Maritime Services Guide to Traffic Generating Developments.

The Guide defines a motel as a building substantially for overnight accommodation.

The Guide identifies a trip rate for motels as 0.4 trips per room.

An alternative is to use the rate for medium density residential dwellings (between 2 and 20 dwellings).

For small units up to two bedrooms the guide specifies a rate of 0.4 to 0.5 trips per dwelling.

Using the higher rate the proposed boarding is expected to generate approximately 8 peak hour trips. At an average rate of (approximately) a trip every 7- 8 minutes, the proposed development will have a negligible impact on the adjoining road network.

Car Parking Provisions

The State Environmental Planning Policy (SEPP) Affordable Rental Housing specifies a rates of 0.5 spaces per room.

Accordingly the development (16 rooms) requires 8 parking bays.

The proposed development provides:

- Nine parking bays in a basement car park
- An at grade parking bay for the mobility impaired
- 4 motor cycle parking bays
- 4 bicycle parking spaces.

The proposed parking supply complies with SEPP specifications.

Car Park Design Review

AS 2890.1-2004 Compliance

This section will investigate the compliance of the proposed car park with the requirements outlined in AS 2890.1-2004 and AS 2890.6-2009.

Car Space Dimensions

In accordance with the requirements specified in Australian Standard AS:2890.1 residential car parking is categorised as a User Class 2 Off-Street Car Parking Facility, namely:

Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, (generally medium term parking).

The requirements for User Class 2 car parks are as follows:

- Bay width 2.5m;
- Bay length 5.4m; and
- Aisle width 5.8m.

The proposed development complies with this specification.

Blind Aisles

According to AS2890.1-2004, blind aisles must be extended by a minimum of 1m beyond the last parking space. Where a parking space is bound by a wall, it is required to be widened by at least 0.3m.

The proposed development basement parking level comply with these specifications.

Mobility Impaired Parking

The proposed development's design includes 1 parking space for the mobility impaired. Australian Standard AS2890.6:2009, stipulates the following requirements for these spaces:

- A parking space of minimum dimensions 2.4m x 5.4m; plus
- An adjacent shared space of equal dimensions; and
- Indication of appropriate markings and bollard instalment along the shared space.

The proposed development complies with these specifications.

Driveway Widths

Australian Standards specify that one way ramps should have a width of 3.0m and two way ramps 5.5m (between 0.3m kerbs). However Australian Standards further specifies that for developments generating less than 30 trips per hours a width of 5.5m can be provided for the first 6m from the property boundary after which a width of 3m can be provided.

The proposed development provides a driveway width of 6.1m for the first 6m from the property boundary and then narrows to a 3.6m which complies with Australian Standards.

Ramps

AS 2890.1-2004 states the grade requirements for straight ramps at private or residential car parks as follows:

(i) The maximum gradient for a domestic driveway shall 1 in 4 (25%).

(ii) A stepped ramp comprising a series of lengths each exceeding 1 in 5 (20%) grade shall have each two lengths separated by a grade of not more than 1 in 8 (12½%) and at least 10 m long.

(iii) Transition ramps of 2m in length will typically be sufficient to prevent vehicle scraping

The proposed development's access ramp provides a grade of 1 in 20 (5 %) for the first 6 m from the property boundary, a maximum grade of 1 in 4 (25%) and transition ramps of 1 in 8 (12.5%), and thus complies with Australian Standards

Swept Path

Swept path figures of an 85th Percentile Australian Vehicle manoeuvring within the car park are included in Appendix A.

The swept paths indicate that due to the relatively narrow frontage of the subject site, vehicles are required to undertake multi-point turns within the circulation aisles to access some parking bays and also to egress the car park.

While it is recognised that this is not a preferred situation, due to specific site constraints it is not possible to provide sufficient width for vehicles to access / egress the car park with a single manoeuvre.

Conclusions

Based on the assessment presented in this report, it is considered that:

- SafeWay TMS was commissioned by Designcorp Architects Pty Ltd to prepare a Traffic Impact Report and a Car Parking Certification for the Proposed New Generation Boarding House located 1 Edna Street, Kingswood.
- The development is proposed to consist of 16 room for guests and a common room.
- The site is located in proximity to a number of bus and rail services and is well served by public transport.
- The proposed development is expected to generate approximately 8 peak hour trips. At an average of a trip every (approximately) 7 - 8 minutes, the proposed development will have a negligible impact on the adjoining road network.
- The car park assessment indicates that the proposed development's car park typically complies with AS 2890.1-2004 specifications.

Appendix A – Swept Path Analysis