

**NSLPP MEETING HELD ON 07/06/2023****Attachments:**

1. Site Plan
2. Architectural Plans
3. Clause 4.6 Statement (Building Height)
4. Clause 4.6 Statement (Non-residential floor space)

ADDRESS/WARD: 127-129 Willoughby Road, Crows Nest

APPLICATION No: DA 2/22

PROPOSAL: Demolition of existing structures and construction of a new mixed use building containing 10 apartments, commercial space and basement parking.

PLANS REF:

Plan No.	Rev No.	Description	Prepared by	Dated
DA 101	B	Site Plan	PA Studio	20.06.22
DA 102	D	Lower Ground Floor	PA Studio	09.02.23
DA 103	D	Ground Floor	PA Studio	09.02.23
DA 104	D	First Floor	PA Studio	09.02.23
DA 105	D	Second Floor	PA Studio	09.02.23
DA 106	D	Food Plan	PA Studio	09.02.23
DA 201	B	Sections 01 & 02	PA Studio	20.06.22
DA 202	B	Section 03	PA Studio	20.06.22
DA 301	B	Elevations in Context	PA Studio	20.06.22
DA 302	B	Building Elevation	PA Studio	20.06.22
DA 1301	B	Demolition	PA Studio	20.06.22
DA 401	B	List of Materials and Finishes	PA Studio	20.06.22
DA 1101	B	Landscape	PA Studio	20.06.22
34111-02/12	B	Lower Ground Plan, Notes & Details	ING Consulting Engineers	13 June 2022
34111-03/12	A	Ground Floor / Site Plan	ING Consulting Engineers	13 Dec. 2021
34111-04/12	B	Floors & Roof Plan	ING Consulting Engineers	13 June 2022
34111-05/12	B	Site Plan (Public Domain)	ING Consulting Engineers	13 June 2022
34111-06/12	B	Pipe Longitudinal Sections and Hydraulic Grade Lines	ING Consulting Engineers	13 June 2022
34111-07/12	B	Pipe Longitudinal Section 2 and Hydraulic Grade Lines 2	ING Consulting Engineers	13 June 2022
34111-08/12	B	Notes & Details	ING Consulting Engineers	13 June 2022
34111-09/12	B	Notes & Details 2	ING Consulting Engineers	13 June 2022
34111-10/12	B	Notes & Details (Public Domain)	ING Consulting Engineers	13 June 2022
34111-11/12	B	Notes & Details (Public Domain 2)	ING Consulting Engineers	13 June 2022
34111-12/12	B	Notes & Details (Public Domain 3)	ING Consulting Engineers	13 June 2022

OWNER: Willoughby 129 Pty Ltd

APPLICANT: Ultraflex Holdings Pty Ltd

AUTHOR: Damon Kenny, Executive Planner

DATE OF REPORT: 21 April 2023

DATE LODGED: 4 January 2022

RECOMMENDATION: Approval

EXECUTIVE SUMMARY

This development application seeks approval for the demolition of existing structures and construction of a new mixed use building containing 10 apartments, commercial space and basement parking.

The application is reported to the North Sydney Local Planning Panel for determination as the applicant is a sensitive development to which *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development* applies and makes a request to contravene the building height development standard of 10m, prescribed by cl. 4.3 North Sydney Local Environmental Plan 2013 (the LEP) by more than 10%.

The request to breach the prescribed height maximum is examined by this report. According to the request to contravene the standard, the maximum height breach is mainly caused by the topographical constraints of the site. The maximum height standard is 10m and the greatest degree of the breach 12.8m is satisfactory, having satisfied the requirements of cl. 4.6 of the LEP. The applicant's request demonstrates that compliance is unreasonable in the circumstances of the case, and that there are environmental planning grounds to justify the non-compliance. The breach is also in the public interest, being consistent with objectives of the development standard and the B4 Mixed Use zone affecting the subject land.

The applicant has submitted a written request pursuant to Clause 4.6 in NSLEP 2013 to contravene Clause 4.4A of NSLEP 2013. The proposed development provides a non-residential floor area of 310m², representing a non-residential FSR of 0.47:1. The non-compliance is represented by a floor area of 16.9m². In the circumstances, the proposed development will provide a continuous and active street frontage. Further, the proposed development will materially improve the activation of the street frontages relative to the existing buildings on the site. The proposal is assessed as meeting the objectives of the non-residential FSR development standard and the objectives for the B4 Mixed Use Zone.

The proposed development is considered satisfactory when evaluated against the Design Quality Principles in Schedule 1 to SEPP 65 – Design Quality of Residential Apartment Development and is generally consistent with the objectives of the Apartment Design Guide and NSDCP 2013.

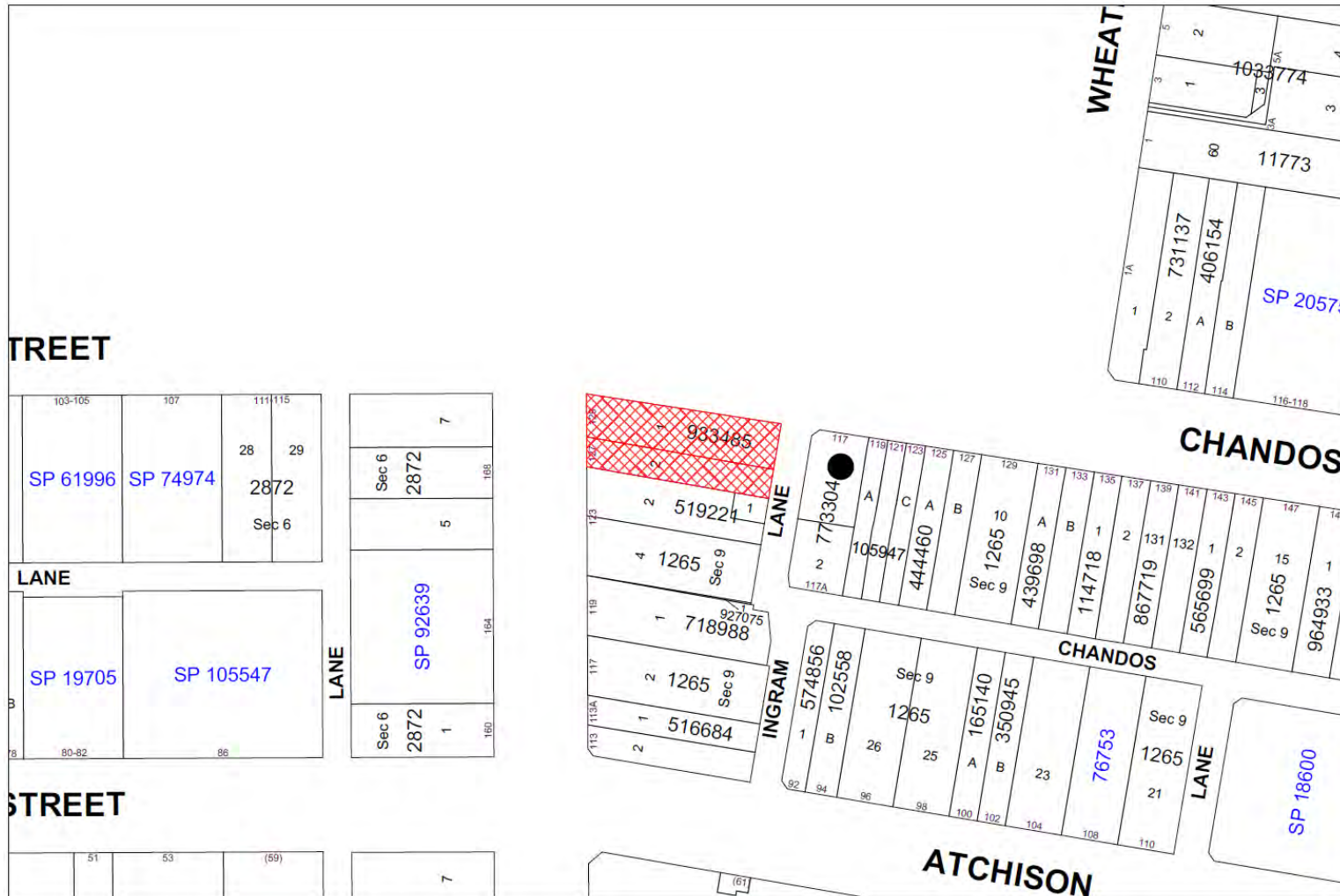
The application was notified in accordance with the Community Engagement Protocol. Council received three (3) submissions objecting to issues including the proposed height variation, non-residential floor space variation, amenity impacts, traffic congestion, noise and safety.

The development application has been assessed against the North Sydney Local Environmental Plan 2013, North Sydney Development Control Plan 2013 and the relevant State Planning Policies and generally found to be satisfactory in consideration of the site constraints, context and circumstances.

The assessment of the proposal has considered the concerns raised in the submissions as well as the performance of the application against Council's planning requirements. Following this assessment and having regard to the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* (as amended), the application is recommended for **approval**.

LOCATION MAP

† Property/Applicant ● Submitters - Properties Notified



DESCRIPTION OF PROPOSAL

The application seeks consent for the following:

- Demolition of existing structures on the site;
- Excavation of the site, for part basement levels mainly for vehicle parking;
- Construction of a four (4) storey mixed use development including:
 - Lower Ground level with car park entry, 12 car parking spaces and waste storage; and
 - Ground level commercial area, residential entry, 2 x 2 bedroom apartments, lift and fire stairs, and
 - Level 1 and 2 with 8 apartments comprising 6 x 3 bedroom and 2 x 2 bedroom, lift and fire stairs; and
- Roof level with solar panels, mechanical plant, lift overrun.

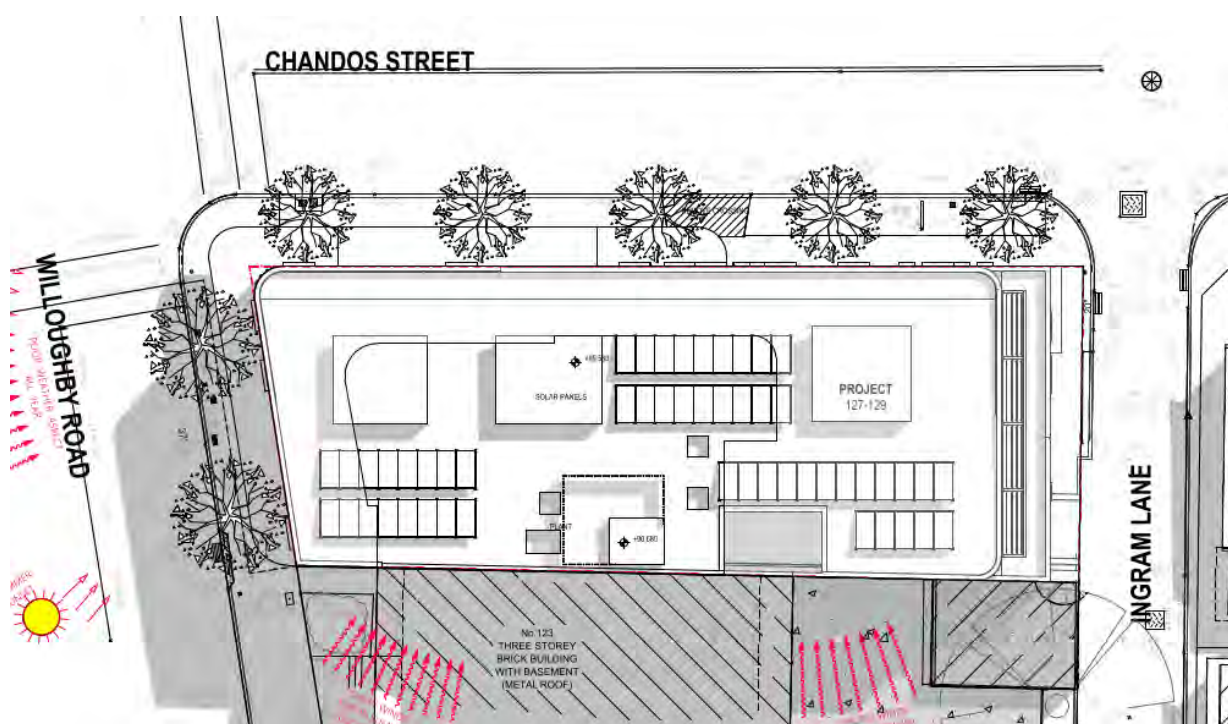


Figure 1: Site Plan (PA Studio)

STATUTORY CONTROLS

North Sydney LEP 2013 (the LEP)

- Zoning – B4 Mixed Use
- Item of Heritage - No
- In Vicinity of Item of Heritage - No
- Conservation Area – Adjacent to the Holtermann Estate A conservation area
- Local Development
- SEPP (Biodiversity and Conservation) 2021 Chapter 6 Water catchments
- SEPP (Resilience and Hazards) Chapter 4 Remediation of Land

POLICY CONTROLS

- North Sydney Development Control Plan (the DCP)
- North Sydney Local Infrastructure Contributions Plan 2020

DESCRIPTION OF SITE & LOCALITY

The subject site 127-129 Willoughby Road, Crows Nest (lot 1 and 2 in DP 933485) is located on the eastern side of Willoughby Road at the intersection of Chandos Street and Willoughby Road.

On-site is a 1 storey commercial building at No. 127 and a 2-storey commercial building on No. 129. The site has rear vehicular access via Ingram Lane on the eastern boundary. The 653.8m² site is generally rectangular in shape, with the site's topography sloping down to the east by approximately 2.8m.

The site is on the edge of the Crows Nest Town Centre. Across Ingram Lane to the east is the Holtermann A Heritage Conservation Area, which is characterised by low density residential buildings including dwelling houses, semi-detached dwellings and townhouses, of one and two storeys.

The site is adjoined the south by a 3-storey mixed-use building (No. 123 – 125 Willoughby Road) incorporating retail floor space at the ground floor level, and commercial floor space above.

The surrounding development to the west (on the opposite side of Willoughby Road) comprises a series of mixed-use buildings, generally accommodating retail/commercial land uses and residential apartments.

The surrounding development to the north (on the opposite side of Chandos Street) comprises a series of 2-storey residential flat buildings.

The surrounding development to the east (on the opposite side of Ingram Lane) comprises a series of 1 – 2 storey detached dwellings and terrace houses.

Part C of the DCP (cl. 3.2.2.1, P3) generally describes the type of development sought in the town centre:

Predominantly medium rise mixed use development built boundary to boundary, with setbacks to laneways, and above the podium, with shops at ground level, non-residential/residential on first floor and residential above.



Figure 2: Site location, site outlined in yellow (James Lovell and Associates).

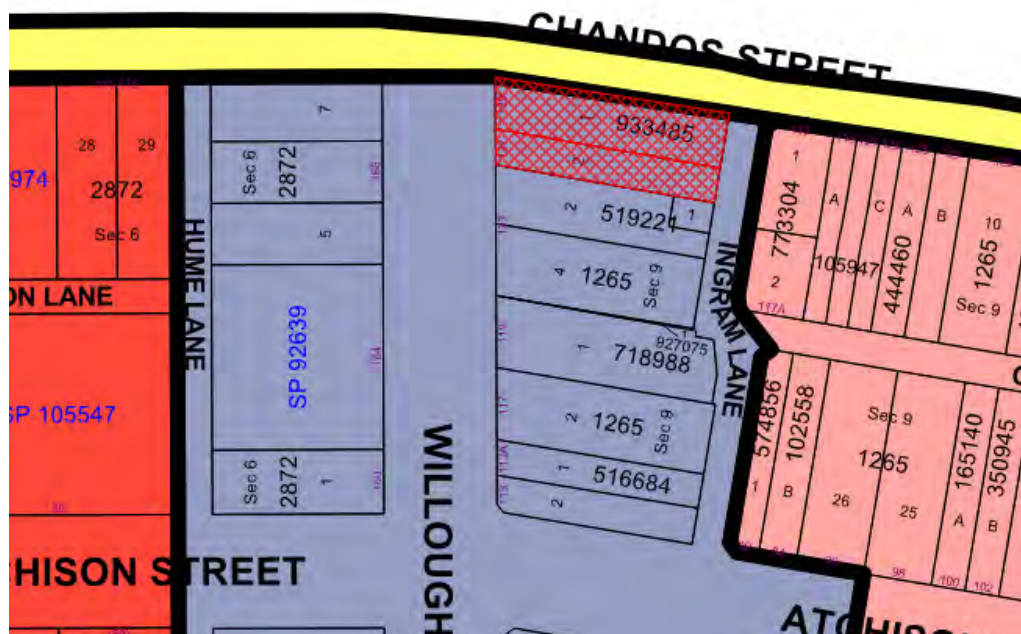


Figure 3. NSLEP Site (outlined in red) is zoned B4 Mixed Use (lilac). Adjacent land (pink) is in the R2 Low Density Residential zone (IFM).

RELEVANT HISTORY

Current Application

Date	Action
04/01/22	Development Application lodged
14/01/22	DA notified, for 14 days (until 04/02/22)
08/02/22	DA considered by North Sydney Design Excellence Panel
13/04/22	Request for information sent to applicant
1/07/22	Applicant response to request for information
19/07/22	Application amended
06/03/2022	Further amendments submitted

INTERNAL REFERRALS

ENVIRONMENTAL HEALTH

No objection was raised by Council's environmental health division and conditions are recommended in the event the application is approved.

TRAFFIC

No objection was raised by Council's traffic engineers and conditions are recommended in the event the application is approved.

DEVELOPMENT ENGINEERING

No objection was raised by Council's development engineers and conditions are recommended in the event the application is approved.

LANDSCAPING

No objection was raised by Council's landscape development officer and conditions are recommended in the event the application is approved.

DESIGN EXCELLENCE PANEL

Set out below are excerpts from the panel's report, germane to this assessment. They are based on the originally submitted application, not the amendments received subsequent to the panel's consideration of the proposal.

Principle 1: Context and local character

The proposal is consistent with the context of the site, having the character of a mixed-use development.

Principle 2: Built form, scale and public domain/ urban design response

The site has a height limit of 10m and the site immediately to the east is subject to an 8.5m height limit and a lower density R2 zone. The proposed 4th storey is almost entirely above the 10m height limit and cannot be supported given both that the site transitions to a lower density zone to the east, and that it would set an unacceptable precedent. Although level 3 is also in part well over the height control, it could be accepted because of the sloping site, and since it would not have any unacceptable impacts.

Principle 3: Density

The proposed density is not consistent with the North Sydney LEP and DCP provisions drafted for this site, as a result of the Level 4 dwelling and the under-provision of non-residential floor space at Ground Floor level.

A separate tenancy to Chandos Street should be considered in order to achieve the required non-residential floor area.

Principle 4: Sustainability, building performance and adaptability

The configuration of the eastern units should be reviewed in order to improve solar access and natural light within the apartments. The solar shading to the west elevation does not appear effective and should be revised to protect windows from low-angle summer afternoon sun. Refer to the ADG Part 4A.

Each elevation should respond to its differing solar orientation, outlook and privacy requirements.

Principle 5: Landscape Integration

Additional details are required in relation to the proposed landscaping, including in relation to street trees, planters, irrigation, soil depth, etc. Additional detailed sections should be provided.

Principle 6: Building configuration, planning, and amenity

The residential entry is tortuous and winding, with no natural light.

Clarification should be provided in relation to the stairs not being fire-isolated stairs under the BCA and the proposed provision of a skylight to the stair roof.

Consideration should be given to relocating the light well to the west adjacent to the lift, which would reduce acoustic and visual privacy issues between dwellings on different levels. Alternative strategies for achieving cross ventilation could be considered such as deep façade recesses to the north elevation which could potentially provide cross ventilation to 100% of apartments.

The amenity of Apartments G01, G02, 103, 104, 203, 204 is compromised as a result of the proposed configuration.

Units 101 and 102 are well-designed, however units 103 and 104 are excessively deep with poor natural light and long corridors partly resulting from the stepping party wall. It may be possible, with adjustments, to mirror units 101 and 102 which would improve internal amenity and area efficiency.

Principle 7: Safety

The proposed Ingram Lane treatment would provide satisfactory safety for pedestrians with regard to CPTED principles, with casual surveillance of the laneway from the balconies.

The residential entry configuration should be reconsidered, to improve safety with regard to CPTED principles.

Principle 8: Housing diversity and social interaction

In relation communal open space, the roof level room should be re-planned to improve solar access. It is supported in this location, although above the height control, since it would have no adverse impacts in relation to visual or amenity issues. If Unit 301 at roof level is deleted as recommended, the room could have very good access to sunlight.

Principle 9: Architectural expression and materiality

Additional detail is required in relation to the treatment of the elevations, particularly to the north-west and north-east corner. The north and west façade treatments should be reviewed in order to provide for a gateway treatment to the Crows Nest commercial area. The east elevation should be developed further to respond to the lower scale and character of the cottages and laneway to the east boundary.

Recommendations to Achieve Design Excellence

The Panel does not support the proposal in its current form for the reasons stated above.

Planner's comment

Having considered the panel's advice, the applicant provided amended plans incorporating the following changes (as summarised by the applicant):

- *The upper floor of the building has been deleted.*
- *The density of the proposed development has been reduced via the deletion of the upper floor and associated apartment.*
- *Consideration has been given to providing a separate tenancy fronting Chandos Street, however, the proposed development maintains the non-residential floor space as a single tenancy. In that regard, the primary street frontage is to Willoughby Road and the non-residential tenancy extends along the Chandos Street frontage to the point where the topographical conditions of the site and surrounds elevate the non-residential floor space above the footpath level. In that regard, providing additional non-residential floor space above the footpath will not assist in activating the street frontage, and the partial inclusion of residential floor space will provide a better transition with the residential land uses to the east. Further, the Applicant considers that providing a separate non-residential tenancy along the Chandos Street frontage will not be commercially viable and would reduce the size and viability of the primary tenancy fronting Willoughby Road.*
- *The residential apartments at the eastern end of the building have not been materially reconfigured on the basis that they provide a good level of internal amenity, and the building as a whole complies with the requirements of the Apartment Design Guide (ADG) in relation to floor area, solar access and natural ventilation.*
- *The Landscape Plan has been supplemented to include additional information in relation to the proposed landscaping, including the provision of six (6) street trees along the frontages to both Willoughby Road and Chandos Street. The plan identifies the proposed planter beds, soil depths and irrigation arrangements.*
- *The residential entrance to the building is clear and direct and located along the primary street frontage to Willoughby Road.*

- *The proposed development complies with the ADG in relation to solar access and natural cross ventilation.*
- *The communal open space previously proposed at the roof level has been deleted as part of the removal of the upper floor of the building. The small size and scale of the proposed development does not warrant the provision of communal open space and the proposed apartments comply with the ADG in relation to the provision of private open space.*

The amendments to the proposal generally address the comments provided the Panel and found to be satisfactory for the reasons outlined within this report.

EXTERNAL REFERRALS

AUSGRID

The proposed development was referred to Ausgrid. Ausgrid assessed the application and raised no objections, subject to the imposition of a condition as follows:

“Overhead Powerlines

Safe work NSW Document – Work Near Overhead Powerlines: Code of Practice, outlines the minimum safety separation requirements between these mains/poles to structures within the development throughout the construction process. It is a statutory requirement that these distances be maintained throughout construction. Special consideration should be given to the positioning and operating of cranes and the location of any scaffolding.

The “as constructed” minimum clearances to the mains should also be considered. These distances are outlined in the Ausgrid Network Standard, NS220 Overhead Design Manual. This document can be sourced from Ausgrid’s website, www.ausgrid.com.au

It remains the responsibility of the developer and relevant contractors to verify and maintain these clearances onsite.

"Should the existing overhead mains require relocating due to the minimum safety clearances being compromised in either of the above scenarios, this relocation work is generally at the developers cost.

It is also the responsibility of the developer to ensure that the existing overhead mains have sufficient clearance from all types of vehicles that are expected be entering and leaving the site."

Underground Cables

Special care should also be taken to ensure that driveways and any other construction activities within the footpath area do not interfere with the existing cables in the footpath. Ausgrid cannot guarantee the depth of cables due to possible changes in ground levels from previous activities after the cables were installed. Hence it is recommended that the developer locate and record the depth of all known underground services prior to any excavation in the area.

Safework Australia – Excavation Code of Practice, and Ausgrid’s Network Standard NS156 outlines the minimum requirements for working around Ausgrid’s underground cables.

Should ground anchors be required in the vicinity of the underground cables, the anchors must not be installed within 300mm of any cable, and the anchors must not pass over the top of any cable.”

Planner’s comment

The above advice is noted and considered. The recommended condition will be included in the consent.

SYDNEY WATER CORPORATION

The proposed development was referred to Sydney Water, in accordance with Section 78 of the *Sydney Water Act 1994*. Sydney Water provided the following comments:

“Sydney Water has reviewed the application based on the information supplied and provides the following comments to assist in planning the servicing needs of the proposed development.

Water Servicing

- *Potable water servicing should be available via a 375 CICL Portable Trunk watermain (laid in 1969) on Willoughby Road.*
- *Amplifications, adjustments, and/or minor extensions may be required.*

Wastewater Servicing

- *Wastewater servicing should be available via a 225 SGW wastewater main (laid in 1901) on Chandos Street*
- *Amplifications, adjustments, and/or minor extensions may be required.*

Planner’s comment

The above commentary is noted and considered. Standard conditions for water and wastewater connections are to be imposed should consent be granted.

TRANSPORT FOR NSW

The proposed development was referred Transport for NSW who provided the following comments:

“Reference is made to Council’s referral, regarding the abovementioned application which was referred to Transport for NSW (TfNSW) for concurrence under section 138 of the Roads Act 1993 and clause 101 of the State Environmental Planning Policy (Infrastructure) 2007. TfNSW notes that:

- *Willoughby Road, at this location, is a regional classified roads under the care and control of Council.*

- *Council is seeking advice to assist in its assessment under clause 101 of State Environmental Planning Policy (Infrastructure) 2007 noting the site has frontage to Willoughby Road.*
- *Concurrence from it is required in accordance with section 138 of the Roads Act 1993.*

Having regard for the above, TfNSW has reviewed the information provided and raises no objection to the DA and as such would provide concurrence to Council under section 138 of the Roads Act 1993 subject to Council being satisfied with the proposed access arrangements in terms of safety and efficiency and the inclusion of the following requirements in any determination issued:

1. *All buildings and structures together with any improvements integral to the future use of the site shall be wholly within the freehold property (unlimited in height or depth), along the Willoughby Road boundary.*
2. *The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements in relation to landscaping and/or fencing, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1-2004, AS2890.6-2009 and AS 2890.2-2018.*
3. *The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.*
4. *All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping.*
5. *A Construction Pedestrian Traffic Management Plan (CPTMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council for approval prior to the issue of a construction certificate.*
6. *A Road Occupancy Licence (ROL) should be obtained from Transport Management Centre for any works that may impact on traffic flows on the surrounding state classified road network during construction activities. A ROL can be obtained through <https://myrta.com/oplinc2/pages/security/oplincLogin.jsf>."*

Planner's comment

The above commentary is noted and considered. The recommended conditions will be imposed should consent be granted.

SUBMISSIONS

Original proposal

On 14 January 2022, Council notified adjoining properties and the Holtermann Precinct of the proposed development seeking comment between 21 January 2022 and 4 February 2022. Council received three (3) submissions. The matters raised in the submissions are listed below:

The issues have been addressed elsewhere in this report. Original submissions may be viewed by way of DA tracking on Council's website https://www.northsydney.nsw.gov.au/Building_Development/Current_DAs and are available for review by NSLPP members.

Basis of Submissions

- Retention of existing building and the building should be heritage listed
- Height
- Floor space ratio
- Number of floors
- Traffic, noise, and safety
- Overshadowing
- Waste collection
- Site location
- Advertising

Amended Proposal

Being of a similar scope and smaller scale to the original proposal, renotification was considered unnecessary in accordance with the provisions of Council's Community Engagement Protocol.

CONSIDERATION

Relevant matters of Section 4.15 of the *Environmental Planning and Assessment Act 1979* (as amended) are considered below.

SEPP (Biodiversity and Conservation) 2021

Chapter 6 Water catchments

Part 6.2 Development in regulated catchments

The SEPP defines the Sydney Harbour Catchment as a "regulated catchment", meaning relevant provisions of Chapter 6 apply to land and development in the catchment.

Water quality and quantity

The proposed development will have acceptable impacts on water quality and quantity in the catchment, provided suitable regimes are adopted for water management during construction and operation of the development, as proposed and required by recommended conditions.

SEPP (Resilience and Hazards) 2021

The provisions of this policy require Council to consider the likelihood that the site has previously been contaminated and to address the methods necessary to remediate the site. As a change in use is proposed and the site having only previously been used for commercial purposes, there is a low probability of the site having been contaminated. Further, the DA is accompanied by a *Preliminary Site Investigation* which concludes that:

“Based on the results of this investigation it is considered that the risks to human health and the environment associated with soil and groundwater contamination at the site are moderate in the context of the proposed use of the site. The site can be made suitable for the proposed development, subject to the following recommendations:

- *Preparation of a Detailed Site Investigation (Phase 2 Environmental Site assessment) by a suitably qualified Environmental Consultant.*
- *Any soil requiring removal from the site, as part of future site works, should be classified in accordance with the ‘Waste Classification Guidelines, Part 1: Classifying Waste’ NSW EPA (2014).*

If during any potential site works any significant unexpected occurrence is identified, site works should cease in that area, at least temporarily, and the environmental consultant should be notified immediately to set up a response to this unexpected occurrence.”

The application is also accompanied by a *Detailed Site Investigation* which concludes that *“the site can be made suitable for the proposed development”*.

Council can be satisfied the policy can be complied with subject to conditions and consent accordingly granted.

SEPP (Building Sustainability Index: BASIX) 2004

A valid BASIX Certificate has been submitted with the application to satisfy the aims of this SEPP.

SEPP 65 – DESIGN QUALITY OF RESIDENTIAL FLAT BUILDINGS

State Environmental Planning Policy No. 65 aims to improve the design quality of residential flat buildings in New South Wales by recognising that the design quality of residential flat development is of significance for the environment within NSW due to the economic, environmental, cultural and social benefits of high quality design. The SEPP aims to:

- (a) *to ensure that it contributes to the sustainable development of New South Wales:*
 - (i) *by providing sustainable housing in social and environmental terms, and*
 - (ii) *by being a long-term asset to its neighbourhood, and*
 - (iii) *by achieving the urban planning policies for its regional and local contexts, and*
- (b) *to achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define, and*
- (c) *to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilities, and*

- (d) to maximise amenity, safety and security for the benefit of its occupants and the wider community, and*
- (e) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions.*

The design quality principles are discussed as follows:

Principle 1: Context and neighbourhood character

The scale and the proposed built form responds to its context by defining the street edges along Willoughby Road and Chandos Street. The proposed is set back Ingram Lane by 1.5 meters on ground level up to podium level as per the NSDCP controls and level 3 is setback from Ingram Lane frontage to reduce the perceived bulk from the neighbouring property on the corner of Devonshire Street and Alexander Lane.

It is considered that the proposed development is consistent with the general context of the area, and the desired future character, as defined in the Character Statement within the NSDCP. The development responds appropriately to the adjoining buildings and surrounding area, and incorporates appropriate design elements to achieve a reasonable architectural merit.

Principle 2: Built form and scale

The site is located within an area consisting of commercial and mixed use buildings of 1 to 4 storeys. The scale of the proposal responds appropriately to adjoining buildings and the controls stipulated in NSLEP.

The proposed development has been designed to define the street edge and public domain, with a zero setback on the Willoughby Road and Chandos Street frontages. The scale is compatible with adjoining developments along Willoughby Road and delivers an appropriate transition to the low density areas to the east.

The proposal achieves an appropriate built form for the site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. The building form defines the public domain, contributes to the character of streetscape and provides internal amenity and outlook.

Principle 3: Density

The proposed density is appropriate for the site and within the context of the area by its proximity to public transport, community facilities and business generally within Crows Nest and St Leonards Centre precincts. The development provides for new residential accommodation with reasonable internal amenity. The density achieved is considered to be appropriate within this mixed-use area under transition taking into account the controls, close proximity to facilities along Willoughby Road; St Leonards Station and the new Metro station now under construction at the corner of Hume and Clarke Streets. The proposed mix will meet the need for a diverse range of residential accommodation.

Principle 4: Sustainability

A BASIX Certificate was submitted with the application and the proposal is satisfactory with regard to sustainability. Residential floor layouts have been designed such that living areas and private open spaces are orientated to towards North and west, with one balcony per unit has been allowed to be accessible from the principal living area of each.

Principle 5: Landscape

Satisfactory in the context of a B4 zone. The site does not currently provide any landscaping, and the established pattern of development includes an intended dominance of built form over landscaping, with the character statement for the Crows Nest Town Centre specifying zero setbacks to all street frontages, and 1.5 metres to all laneways. Irrespective, a series of new street trees is also proposed along the frontages to Willoughby Road and Chandos Street.

Principle 6: Amenity

The internal amenity of the proposed development is considered to be satisfactory and the proposal would not result in unreasonable adverse impacts on the amenity of the nearby properties. The proposed apartments incorporate open plan living, where the primary living areas of the dwellings open and extend to private open spaces. The proposal has been designed considering the constraints.

Principle 7: Safety

Satisfactory. The proposed mixed-use development with its public domain improvements, along with orientation of living areas towards all 3 frontages and provision of separate entries will encourage natural surveillance of the subject site.

Principle 8: Housing diversity and social interaction

The proposed unit mix is satisfactory. As stated by the applicant *"It is envisaged that the future occupants of this building are likely to be older local residents ("empty-nesters") or younger professionals who wish to take advantage of the facilities of the St Leonards and Crows Nest shopping areas, public transport and other amenities.*

The market research carried out for this project indicates that the convenience of being within a shopping strip, close to public transport, and having ready access to the city, make this a desirable location for new apartments, provided the accommodation is of a high standard and relatively affordable."

Principle 9: Aesthetics

The building form properly address the street frontages through the change of materials, colour and creates visual interest through appropriately scaled massing and varying setbacks. The proposed development incorporates varied building elements, textures, materials and finishes which all contribute to an overall quality and balanced building. The overall appearance of the building is in keeping with the desired future character of the area.

Apartment Design Guide (ADG)

The proposed development has also been considered against the Apartment Design Guide and as detailed in the table below:

Amenity	Design Criteria	Compliance	Comments
2F - Building Separation	<p><i>Minimum separation distances for buildings (up to four storeys):</i></p> <ul style="list-style-type: none"> • <i>6m setbacks for habitable rooms and balconies.</i> • <i>3m setbacks for non-habitable rooms.</i> • <i>No separation distance is required between blank walls.</i> 	Yes	<p>The proposed development complies with the required building separation distances.</p> <p>The blank walls on the southern side of the building will not result in any adverse privacy impacts and are sufficiently articulated and modulated to achieve appropriate visual bulk and break-up of the built form.</p>
3D - Communal Open Space	<p><i>Communal open space has a minimum area equal to 25% of the site.</i></p> <p><i>Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of two hours between 9.00 am and 3.00 pm on 21 June (mid-winter)</i></p> <p><i>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i></p> <p><i>Communal open space is designed to maximise safety</i></p>	No – demonstrates merit	<p>The size and scale of the building, and the generous provision of private open space, mitigates the need to provide on-site communal open space.</p>
3E - Deep Soil Zones	<p><i>Deep soil zones are to meet the following minimum requirements:</i></p> <ul style="list-style-type: none"> • <i>3m minimum width</i> • <i>Criteria: minimum 7% of the site area</i> • <i>Guidance: minimum 10% of the site area (650-1000m²)</i> • <i>Guidance: minimum 15% of site area (>1500m²)</i> 	No – demonstrates merit	<p>Deep soil zones are provided to accommodate the landscaping within the development and along the street frontages.</p> <p>The proposed mixture of deep soil zones and other landscaping treatments are considered sufficient in softening the development, providing an interruption of bulk and massing, and improving the current landscaping within the site. The proposed development will have a positive and appropriately balanced contribution to the streetscape through the provision of these landscaped areas.</p>

Amenity	Design Criteria	Compliance	Comments
3F - Visual privacy	<p><i>Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:</i></p> <p><i>6m (between habitable rooms and balconies to boundaries)</i> <i>3m (between non-habit-able rooms)</i></p>	<p>Yes</p>	<p>The proposed development provides adequate building separation and design measures to achieve reasonable levels of external and internal visual privacy.</p> <p>The site orientation and building design provide adequate levels of privacy without compromising access to light and air, and maintain a good outlook from the habitable rooms and private open space.</p>
3G - Pedestrian Access and Entries	<p><i>Building entries and pedestrian access connects to and addresses the public domain</i></p> <p><i>Access, entries and pathways are accessible and easy to identify</i></p>	<p>Yes</p>	<p>Pedestrian entry/exit is centrally located and can accommodate accessible access.</p> <p>Vehicular access is clearly segregated and distinguished and there is sufficient space to allow for waste services to occur.</p>
3H - Vehicle Access	<p><i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i></p>	<p>Yes</p>	<p>The vehicular access point achieves safety for vehicles, and separate pedestrian access points are provided to minimise conflicts.</p>
3J - Bicycle and Car parking	<p><i>For development in the following locations:</i></p> <ul style="list-style-type: none"> <i>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</i> <i>• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the mini-mum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less</i> <p><i>The car parking needs for a development must be provided off street</i></p> <p><i>Parking and facilities are provided for other modes of transport</i></p>	<p>Yes</p>	<p>DCP requirements:</p> <p>Car parking (max.): Residential flat buildings in all other zones other than B4:</p> <ul style="list-style-type: none"> • 3 or more bedrooms: 1.5 spaces per dwelling • Visitor spaces: 0.25 spaces per dwelling <p>Bicycle parking (min.): 1 space per dwelling and 1 visitor space per 10 dwellings.</p> <p>No min. or max. number of motorcycle spaces.</p> <p>As per the above requirements the proposed development generates the following parking requirements:</p> <ul style="list-style-type: none"> • Twelve (12) car spaces (residents) and two (2) visitor spaces = fourteen (14) car spaces (max.) • Eight (8) bicycle spaces (1 per dwelling) and 1 visitor space = 9 bicycle spaces (min.) • No minimum motorcycle spaces. <p>The final scheme features 14 car spaces, eight (8) bicycle spaces and two (2) motorcycle spaces across two (2) levels of basement. As such, compliance against the above maximum and minimum parking rates is demonstrated.</p>

Amenity	Design Criteria	Compliance	Comments
4A - Solar and daylight access	<i>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas</i>	Yes	The units comply with the solar access criteria with living rooms and private open spaces orientated to the north, east and west.
	<i>A maximum of 15% of apartments receive no direct sunlight between 9am and 3pm at mid-winter.</i>	Yes	
4B - Natural ventilation	<p><i>All habitable rooms are naturally ventilated.</i></p> <p><i>The layout and design of single aspect apartments maximises natural ventilation.</i></p> <p><i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents - At least 60% of apartments are naturally cross ventilated</i></p>	Yes	The proposed development features openings for all habitable rooms - ensuring these are naturally ventilated.
4C - Ceiling Heights	<i>Ceiling height achieves sufficient natural ventilation and daylight access - Minimum 2.7 m (habitable rooms)</i>	Yes	The proposed ceiling heights comply with a minimum floor to floor height of 3.1m.

Amenity	Design Criteria	Compliance	Comments
<p>4D 1 - Apartment size and layout</p>	<p><i>Apartments are required to have the following minimum internal areas:</i> 50m² (1-bedroom) 70m² (2-bedroom), 90m² (3-bedroom)</p> <p><i>Additional bathrooms increase the minimum internal area by 5m² each</i></p> <p><i>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each</i></p> <p><i>Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</i></p>	<p>Yes</p>	<p>All units comply with the minimum internal areas specified.</p> <p>All habitable rooms have external walls with windows that provide daylight and ventilation.</p>
<p>4D 2 - Apartment size and layout</p>	<p>1. <i>Habitable room depths are limited to a maximum of 2.5 x the ceiling height</i></p> <p>2. <i>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</i></p>	<p>Yes</p> <p>Yes</p>	<p>Complies with the maximum depths for habitable rooms and open plan layouts.</p>
<p>4D 3- Apartment size and layout</p>	<p>1. <i>Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)</i></p> <p>2. <i>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</i></p> <p>3. <i>Living rooms or combined living/dining rooms have a minimum width of:</i></p> <ul style="list-style-type: none"> • <i>4m for 2-bedroom and 3-bedroom apartments</i> 	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Master bedrooms have a minimum area of 13m². Other bedrooms have a minimum area of 10m².</p> <p>All bedrooms have a minimum width of 3m.</p> <p>Living rooms have a minimum width of 4.4m.</p>

Amenity	Design Criteria	Compliance	Comments
4E - Private open space and balconies	<p><i>All apartments are required to have primary balconies as follows:</i></p> <p><i>3+ bedroom apartments 12m² and minimum depth 2.4m</i></p> <p><i>The minimum balcony depth to be counted as contributing to the balcony area is 1m</i></p> <p><i>2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.</i></p> <p><i>Primary private open space and balconies are appropriately located to enhance liveability for residents.</i></p> <p><i>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.</i></p> <p><i>Private open space and balcony design maximises safety.</i></p>	Yes	Primary balconies and terraces comply with the required minimum area and minimum depth.
4F - Common circulation and spaces	<p><i>1. The maximum number of apartments off a circulation core on a single level is eight</i></p>	Yes	Maximum of four (4) apartments per level and circulation core.
4G -Storage	<p><i>Studio apartments- 4m³</i> <i>1-bedroom apartments - 6m³</i> <i>2-bedroom apartments - 8m³</i> <i>3+ bedroom apartments - 10m³</i></p>	Yes	The proposed storage areas comply with the minimum storage requirements for each unit..

NORTH SYDNEY LOCAL ENVIRONMENT PLAN (NSLEP 2013)

1. Permissibility

The proposed development is for the purposes of “commercial premises” and “residential flat building” as defined by the LEP, which are a permissible use in the zone, with development consent.

2. Objectives of the zone

Clause 2.3 of NSLEP 2013 specifies that the consent authority must have regard to the objectives for the development in a zone when determining a development application.

The objectives of the B4 Mixed Use zone are:

- *To provide a mixture of compatible land uses.*

- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To create interesting and vibrant mixed use centres with safe, high quality urban environments with residential amenity.*
- *To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses concentrated on the lower levels and residential uses predominantly on the higher levels.*

The proposed mixed use development is generally consistent with the objectives of the B4 Mixed Use zone. The proposed development provides a mix of compatible non-residential and residential land uses; the site is well serviced by public transport which provide convenient access to the North Sydney Central Business District (CBD), St Leonards, Chatswood and beyond; the proposed development will contribute to a safe and vibrant urban environment offering a good level of residential amenity; and the proposed development provides non-residential floor space at the lower level, with the residential apartments occupying the floor levels above.

Consistency with these objectives is also considered below, regarding the applicant’s request to breach to building height control and non-residential floor space ratio.

Part 4 – Principal Development Standards

Principal Development Standards – North Sydney Local Environmental Plan 2013			
Site Area - #m²	Proposed	Control	Complies
Clause 4.3 – Heights of Building	12.8m	10m	NO – A request to contravene the standard was submitted
Clause 4.4a – Non-residential FSR	0.47:1	0.5:1	NO – A request to contravene the standard was submitted

3. Height of Building

Objectives for the development standard are quoted from clause 4.3 in NSLP 2013 below:

- to promote development that conforms to and reflects natural landforms, by stepping development on sloping land to follow the natural gradient,*
- to promote the retention and, if appropriate, sharing of existing views,*
- to maintain solar access to existing dwellings, public reserves and streets, and to promote solar access for future development,*
- to maintain privacy for residents of existing dwellings and to promote privacy for residents of new buildings,*
- to ensure compatibility between development, particularly at zone boundaries,*
- to encourage an appropriate scale and density of development that is in accordance with, and promotes the character of, an area.*

The proposed works would have a height of 12.8m that fails to comply with the permissible height limit of 10m in accordance with clause 4.3 in NSLEP 2013.



Figure 4: Height Plane Diagram

Request to vary development standard

The applicant has submitted a written request pursuant to Clause 4.6 of NSLEP 2013 (Attachment 3). The written request has adequately addressed cl 4.6(3), for these reasons:

- The written request adequately demonstrates that compliance is unreasonable and that there are sufficient environmental planning grounds to breach the standard,
- The proposal is in the public interest because it is consistent with the relevant objectives of the development standard and of the applicable zone.
- Departure from the standard does not raise matters of regional or state planning significance.
- There is no public benefit in maintaining compliance with the development standard.

Compliance is unnecessary or unreasonable

The applicant submits:

1. *The proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.*
2. *The objectives and purpose of the building height control remain relevant, and the proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.*
3. *The proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.*

Further, strict compliance with the building height control would effectively require the removal of parts of the upper level of the building in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties.

4. *The building height control has not specifically been abandoned or destroyed by the Council's actions. Irrespective, the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the building height control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations.*

In that regard, the Council has approved approximately 69 DA's involving variations to the building height control for the most recent reporting period of January 2019 to September 2021.

In addition, a series of DA's were approved with variations to the building height control between 2014 and 2018, including the following properties:

- *84 – 90 Atchison Street, Crows Nest;*
- *160 Willoughby Road, Crows Nest;*
- *162 – 166 Willoughby Road, Crows Nest;*
- *104 – 106 Alexander Street, Crows Nest;*
- *88 – 90 Alexander Street, Crows Nest;*
- *41 – 49 Atchison Street, Crows Nest;*
- *53 – 57 Atchison Street, Crows Nest;*
- *7 – 19 Albany Street, Crows Nest;*
- *101 – 111 Willoughby Road, Crows Nest; and*
- *137 – 139 Alexander Street, Crows Nest.*

Further, the objectives of Clause 4.6 of the LEP includes to provide "an appropriate degree of flexibility in applying certain development standards to particular development".

5. *The zoning of the land remains relevant and appropriate. Irrespective, strict compliance with the building height control would effectively require the removal of the upper level of the building (and portions of the level below) in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties.*

Comment:

The written request has demonstrated that the proposed development conforms to and reflects the existing slope of the land as far as practical. The site falls by approximately 2.9m from the western side (front boundary) to the eastern side (rear boundary). The building has been designed to respond to the topographical conditions of the site with the building form stepping down the site to reflect the level change from Willoughby Road to Ingram Lane.

The shadows cast by the proposed building will predominately fall within the shadows cast by the existing and surrounding building. Further, the impact on the residential properties to the east (on the opposite side of Ingram Lane) is limited to a period of approximately 1.5 hours between 1.30pm and 3.00pm in mid-winter.

The written request has demonstrated that reasonable levels of privacy would be maintained for existing residents of the surrounding buildings. The non-complying elements generally relate to the roof form, lift over run and solar panels, and would not have any associated privacy impacts.

Where the upper portion of the glazing within the eastern elevation of the upper most level does not comply, the building is set back approximately 9m from the adjoining residential development on the opposite side of Ingram Lane.

The written request demonstrates that the proposed development would be compatible with the surrounding development as the proposed building would fit comfortably within its context. The proposed development is consistent with the desired future character of the Crows Nest Town Centre described in the character statement in Part C of NSDCP 2013.

The proposed development also considers the surrounding mixed development context which includes a variety of building typologies. The proposed development is compatible with the streetscape and has an appropriate relationship with the surrounding development notwithstanding the proposed variation.

The written request demonstrates that the proposed development would have an appropriate scale and density, having regard to the character of the surrounding area. The 12m height control anticipates a four storey building. The proposed development, including the non-complying elements is four storeys and the variation is generally limited to the roof form, lift over run and solar panels, and a portion of the overall built form where the land falls away to the east.

The scale and density of the proposed development also would not exceed that anticipated outcome arising from the relevant development controls as the proposed development generally complies with the built form provisions and in part provides a primary 3 storey form, and generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the building stepping down the site to reflect the topographical fall towards the rear



Figure 5: Excerpt of LEP Height Map, site partly outlined in yellow. (ePlanning Spatial Viewer)

Sufficient environmental planning grounds

The applicant submits the following to justify the breach:

1. *the proposed development has been carefully designed to negotiate the topographical conditions of the site, with the building from stepping down the site to reflect the level change from the Willoughby Road frontage to the Ingram Lane frontage;*
2. *the building form provides horizontal and vertical articulation, and the architectural expression of the building provides a primary 3- storey form;*
3. *the proposed development will have no significant or adverse impact on any existing public or private views;*
4. *the shadows cast by the proposed building will predominately fall within the shadows cast by the existing and surrounding building. Further, the impact on the residential properties to the east (on the opposite side of Ingram Lane) is limited to a period of approximately 1.5 hours between 1.30pm and 3.00pm in midwinter;*
5. *the surrounding road carriageways provide spatial to the north, east and west, and there are no window openings orientated towards the south;*
6. *the most proximate residential property to the east (on the opposite side of Ingram Lane), maintains separation distances from the residential apartments of approximately 9 metres, and the existing dwelling has private open space to the south-west, providing further spatial separation, and an off-set alignment in the relative position of the private open space;*

7. *the surrounding land to the west (on the opposite side of Willoughby Road) is subject to specifies a 13 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey mixed-use buildings;*
8. *the surrounding development to the north (on the opposite side of Chandos Street) is subject to a 12 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey residential flat buildings;*
9. *the proposed development generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the upper level apartment recessed behind the alignment of the levels below;*
10. *the bulk and scale of the building when viewed from Willoughby Road is generally consistent with the building height control, and compatible with the existing and likely future development along both sides of Willoughby Road, and the opposite side of Chandos Street;*
11. *the site occupies a corner location where additional bulk and scale can be best accommodated, and the road carriageways provide physical and spatial separation beyond that which it is typical of other sites subject to the same controls;*
12. *the building form is capable of being accommodated on the site without imposing and significant or adverse impacts on the amenity of surrounding land;*
13. *the proposed development has been carefully designed to achieve a very high standard of architectural presentation to the public domain, with the building designed to address the street frontages, with active uses at the ground floor level, and a refined palette of external materials and finishes;*
14. *strict compliance with the building height control would require the removal of the portions of the upper level of the building in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties;*
15. *the proposed development will promote good design and the amenity of the built environment which is a recently incorporated object of the Act: “(g) to promote good design and amenity of the built environment”;*
16. *the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the building height control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations;*
17. *the proposed development is consistent with, or not antipathetic to, the relevant objectives of the B4 – Mixed Use zone; and*
18. *the proposed development is generally consistent with, or not antipathetic to, the objectives of the building height control, notwithstanding the numerical variation.*

Comment:

The environmental planning grounds advanced in the written request are considered to be sufficient to justify the contravention of the development standard in the circumstances of the case. The written request identifies the fall of the land across the site towards the east which is a site specific constraint. The proposed development generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the building stepping down the site to reflect the topographical fall towards the rear (east).

The bulk and scale of the building when viewed from Willoughby Road is generally consistent with the building height control, and compatible with the existing and likely future development along both sides of Willoughby Road, and the opposite side of Chandos Street.

The development must be in the public interest, by being consistent with the aims of the development standard and the zoning of the site

Objectives of the development standard

As discussed above the proposal is consistent with applicable objectives of the building height standard, despite the breach proposed.

Objectives of the zoning of the land

As quoted from the applicant's submission, the development is consistent with relevant B4 zone objectives:

- *To provide a mixture of compatible land uses.*

Applicant: *the proposed development provides a mix of compatible non-residential and residential land uses;*

- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

Applicant: *the site is well serviced by public transport which provide convenient access to the North Sydney Central Business District (CBD), St Leonards, Chatswood and beyond;*

- To create interesting and vibrant mixed use centres with safe, high quality urban environments with residential amenity.

Applicant: *the proposed development will contribute to a safe and vibrant urban environment offering a good level of residential amenity; and*

- To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses concentrated on the lower levels and residential uses predominantly on the higher levels.

Applicant: *the proposed development maintains non-residential floor space at the lower level, with the residential apartments occupying the floor levels above.*

Comment: The proposed variation is considered to be in the public interest as it has been demonstrated that the proposed development is consistent with the objectives of the zone and the objectives of the development standard as discussed above.

Concluding remarks

The written request to vary the development standard provided by the applicant is considered well founded. The written request demonstrates that compliance with the development standard would be unreasonable and unnecessary in the circumstances of the case and that there are sufficient planning grounds to justify the variation. The proposed development is considered to be in the public interest. It is recommended that the variation be supported in these circumstances.

4. Non-Residential floor space ratios

The objectives of this clause are as follows:

- (a) *to provide for development with continuous and active street frontages on certain land in Zone B1 Neighbourhood Centre, Zone B4 Mixed Use and Zone SP2 Infrastructure,*
- (b) *to encourage an appropriate mix of residential and non-residential uses,*
- (c) *to provide a level of flexibility in the mix of land uses to cater for market demands,*
- (d) *to ensure that a suitable level of non-residential floor space is provided to promote employment and reflect the hierarchy of commercial centres.*

Clause 4.4A of the North Sydney Local Environmental Plan (LEP) 2013 specifies a minimum non-residential floor space ratio (FSR) of 0.5:1. The proposed development provides a non-residential floor area of approximately 310m², representing a non-residential FSR of 0.47:1. The non-compliance is represented by a floor area of 16.9m².

Request to vary development standard

The applicant has submitted a written request pursuant to Clause 4.6 of NSLEP 2013 (Attachment 4). The written request has adequately addressed cl 4.6(3), for these reasons:

- The written request adequately demonstrates that compliance is unreasonable and that there are sufficient environmental planning grounds to breach the standard,
- The proposal is in the public interest because it is consistent with the relevant objectives of the development standard and of the applicable zone.
- Departure from the standard does not raise matters of regional or state planning significance.
- There is no public benefit in maintaining compliance with the development standard.

Compliance is unnecessary or unreasonable

The applicant submits:

1. *The proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.*
2. *The objectives and purpose of the non-residential control remain relevant, and the proposed development is generally consistent with the objectives of the control, notwithstanding the numerical variation.*

- 3. The proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.*

Further, strict compliance with the non-residential FSR control would effectively require parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site.

- 4. The non-residential FSR control has not specifically been abandoned or destroyed by the Council's actions. Irrespective, the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the non-residential FSR control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations.*

Further, the objectives of Clause 4.6 of the LEP includes to provide "an appropriate degree of flexibility in applying certain development standards to particular development".

- 5. The zoning of the land remains relevant and appropriate. Irrespective, strict compliance with the non-residential FSR control would effectively require parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site.*

Comment:

The proposed development includes 310m² of commercial floor space extending along the Willoughby Road and Chandos Street frontages to the point at which the sloping topography necessarily elevates the internal floor level well above the adjacent footpath level.

The proposed development will provide a continuous and active street frontage. Further, the proposed development will materially improve the activation of the street frontages relative to the existing buildings on the site.

The development will provide an appropriate (and improved) mix of residential and commercial floor space on the site, consistent with the location of the site at the northern edge of the main commercial centre. The commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building. Further, the size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre.

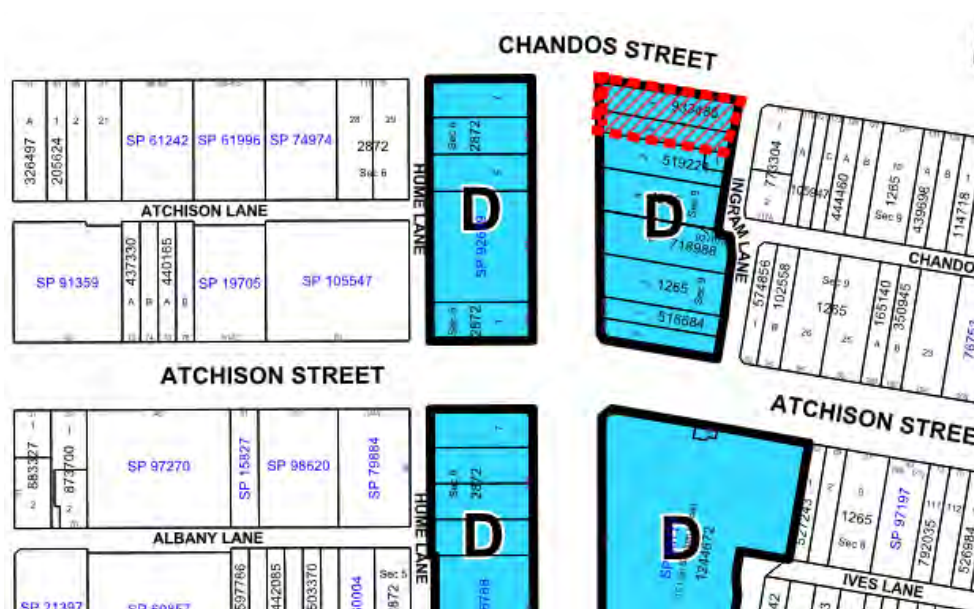


Figure 6: Excerpt of LEP non-residential FSR Map, site outlined in red. (IFM SISmap)

Sufficient environmental planning grounds

The applicant submits the following to justify the breach:

1. the proposed development has been carefully designed to negotiate the topographical conditions of the site, with the building from stepping down the site to reflect the level change from the Willoughby Road frontage to the Ingram Lane frontage;
2. the proposed development includes 310m² of commercial floor space extending along the Willoughby Road and Chandos Street frontages, beyond the point at which the sloping topography necessarily elevates the internal floor level above the adjacent footpath level;
3. the non-compliance is numerically minor, with the non-compliance represented by a floor area of 16.9m²;
4. the proposed development will provide a continuous and active street frontage, and materially improve the activation of the street frontages relative to the existing buildings on the site;
5. the commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building;

6. *the size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre;*
7. *strict compliance with the non-residential FSR control would effectively require additional parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site;*
8. *the proposed development will promote good design and the amenity of the built environment which is a recently incorporated object of the Act: "(g) to promote good design and amenity of the built environment";*
9. *the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the non-residential FSR control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations;*
10. *the proposed development is consistent with, or not antipathetic to, the relevant objectives of the B4 – Mixed Use zone; and*
11. *the proposed development is generally consistent with, or not antipathetic to, the objectives of the non-residential FSR control, notwithstanding the numerical variation.*

Comment:

The commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building. The size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre. In the circumstances, the proposed development does not affect the public benefit of maintaining compliance with the non-residential FSR control in other instances.

In summary, the proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.

The development must be in the public interest, by being consistent with the aims of the development standard and the zoning of the site

Objectives of the development standard

As discussed above the proposal is consistent with applicable objectives of the non-residential floor space standard, despite the breach proposed.

Objectives of the zoning of the land

As quoted from the applicant's submission, the development is consistent with relevant B4 zone objectives:

- *To provide a mixture of compatible land uses.*

Applicant: *the proposed development provides a mix of compatible non- residential and residential land uses;*

- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

Applicant: *the site is well serviced by public transport which provide convenient access to the North Sydney Central Business District (CBD), St Leonards, Chatswood and beyond;*

- To create interesting and vibrant mixed use centres with safe, high quality urban environments with residential amenity.

Applicant: *the proposed development will contribute to a safe and vibrant urban environment offering a good level of residential amenity; and*

- To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses concentrated on the lower levels and residential uses predominantly on the higher levels.

Applicant: *the proposed development maintains non-residential floor space at the lower level, with the residential apartments occupying the floor levels above.*

Comment:

The proposed variation is considered to be in the public interest as it has been demonstrated that the proposed development is consistent with the objectives of the zone and the objectives of the development standard as discussed above.

Concluding remarks

The written request to vary the development standard provided by the applicant is considered well founded. The written request demonstrates that compliance with the development standard would be unreasonable and unnecessary in the circumstances of the case and that there are sufficient planning grounds to justify the variation. The proposed development is considered to be in the public interest. It is recommended that the variation be supported in these circumstances.

Part 6 – Additional local Provisions

5. Earthworks

A geotechnical report has been submitted which indicates the proposed either complies with or is capable of complying with relevant provisions of cl 6.10 (3) of the LEP:

- (a) *the likely disruption of, or any detrimental effect on—*
 - (i) *drainage patterns and soil stability in the locality of the development, and*
 - (ii) *natural features of, and vegetation on, the site and adjoining land,*
- (b) *the effect of the development on the likely future use or redevelopment of the land,*
- (c) *the quality of the fill or the soil to be excavated, or both,*

- (d) *the effect of the development on the existing and likely amenity of adjoining properties,*
- (e) *the source of any fill material and the destination of any excavated material,*
- (f) *the likelihood of disturbing Aboriginal objects or relics,*
- (g) *the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
- (h) *any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

This report's recommendation includes conditions to ensure the recommendations of the submitted geotechnical report are complied with.

6. Residential flat buildings

Clause 6.12A specifies that "the residential flat building must be part of a mixed use development", and "no part of the ground floor level of the building that is facing a street is used for residential accommodation".

Other than the residential entry foyer which is permitted pursuant to Clause 4.4A(6) of the LEP, the whole ground floor level (at footpath level) facing a street is occupied by non-residential floor space.

The residential apartment at the ground floor level is elevated above the existing ground level and adjacent footpath level as a consequence of the topographical fall towards the Ingram Lane. Accordingly, the topographical conditions between Willoughby Road and Ingram Lane would effectively represent a one (1) storey level change, since there is a change in level from boundary to boundary of approximately 3.5 metres.

Accordingly, the site effectively has two (2) separate ground levels for the purposes of a "shop top housing" development, and the ground level apartment is elevated above elements of the building that do not form part of the residential apartments above.

The proposed development continues to maintain non-residential floor space along Willoughby Road and Chandos Street, where pedestrian access can be provided from the adjacent footpath level to the non-residential floor space. The topographical conditions of the site prevent that from occurring towards the Ingram Lane frontage.

NORTH SYDNEY DEVELOPMENT CONTROL PLAN 2013

The proposal has been assessment in accordance with requirements of the DCP relevant to the Crows Nest Town Centre, including the recently updated section 3.2 – of Part C – Area Character Statements – St Leonards/ Crows Nest Planning Area.

DEVELOPMENT CONTROL PLAN 2013 – Part B Section 2- Commercial and Mixed-Use Development		
	<i>complies</i>	<i>Comments</i>
2.2 Function		
Diversity of Activities	Yes	The proposal would ensure diversity of activities within the mixed use zone with retail on the ground floor and residential uses on the upper levels.
Maximise Use of Public Transport	Yes	The site is close to public transport facilities with regular bus services along Willoughby Road. The site is also within close proximity of the metro station (under construction).
Mixed Residential Population	Yes	The dwelling mix is consistent with the DCP controls as it provides a minimum of two dwelling types comprising 4 x 2 bedroom and 6 x 3 bedroom apartments. This development provides apartments within walking distance of shops, employment, public transport, recreational, educational and health services. Two (2) units have been designed to be adaptable dwellings, which satisfies the requirements of the North Sydney DCP.
2.3 Environmental Criteria		
Noise	Yes	The proposed development is unlikely to generate excessive noise.
Reflectivity	Yes	The external facades provide an appropriate balance between solid and glazed elements, and non-reflective materials will be used throughout.
Awnings	Yes	A continuous awning is proposed along the non-residential frontage of the site, consistent with the character statement for the Crows Nest Town Centre.
Solar Access	Yes	Solar and sunlight access performance of the building is satisfactory.
Views	Yes	The proposal would not cause significant view loss from nearby properties.
Acoustic Privacy	Yes	There being adjacent residential development, conditions are recommended to manage potentially unacceptable sounds levels being emitted from the development.
Visual Privacy	Yes	No significant impacts are anticipated, The siting and design of openings and balconies is satisfactory in terms of visual privacy within the development also externally.
2.4 Quality built form		
Context	Yes	The design of the proposed mixed-use building is generally in context with surrounding development.
Site Consolidation	Yes	In the Crows Nest Town Centre Area Character Statement, a 10-15m frontage is specified. The proposal provides for a 16.62m street frontage.
Setbacks – Side & Rear	Yes	The site is subject to the setback provisions under the Crows Nest Town Centre under Part C Section 3.2 of the DCP. A zero-metre setback has been applied to the Willoughby Road and Chandos Street frontages for ground floor and levels 1-2. A setback of 1.5m is proposed to Ingram Lane for ground floor and Levels 1. Level 2 is set back further.
Podiums	N/A	The proposed building does not have a podium/tower form.
Building Design	Yes	Floor to floor heights are consistent with DCP requirements.

Skyline	Yes	Satisfactory.
Streetscape	Yes	The design of the building and the treatment of the building façades are considered to be acceptable and would make a positive contribution to the streetscape. The proposal provides ground level uses that activate Willoughby Road and residential access is provided from the Willoughby Road frontage. The residential units will provide additional surveillance to the area, including the rear laneway.
Entrances and Exits	Yes	Entrances and exits to the building are directly visible and clearly identifiable from the public domain and have clear sight lines. They are unobscured by landscaping or other obstructions.
Nighttime appearance	Yes	The ground floor commercial/retail use and the building entrances would enhance the visual interest and night time appearance of the proposed development.
2.5 Quality Urban Environment		
Accessibility	Yes	The proposed development, including the ground floor commercial/retail tenancy and the apartment unit, are accessible. Furthermore, two apartment units are designed to be adaptable for people with disabilities.
Safety and Security Illumination	Yes	The design of the proposal has considered personal safety and security with secured access and lighting for the building entrance.
High Quality Residential Accommodation	Yes	The proposal satisfies the requirements for private open space in accordance with the provisions of the ADG. 90% of the apartments will achieve a minimum of 2 hours sunlight to a portion of the private open space between 9am and 3pm in mid-winter.
Private Open Space	Yes	Balconies complying with the ADG have been proposed for the apartments.
Vehicular Access	Yes	Vehicle access to the site will be provided via Ingram Lane. Conditions are recommended for compliance with relevant Australian Standards.
Car Parking	Yes	Subject to conditions of consent, the proposal complies with relevant DCP provisions for car and bicycle parking.
Waste Management	Yes	Communal on-site waste storage areas are provided, and waste will be transferred to/from the storage area for collection. Separate waste storage rooms are provided for the residential and non-residential components. The garbage facilities are designed and will be constructed in accordance with Council's Waste Facility Guide.
Site Facilities	Yes	Storage areas have been proposed within the basement to provide additional storage capacity for residents.
2.6 Efficient Use of Resources		
Energy Efficiency	Yes	The application is accompanied by a compliant BASIX Certificate.
Natural Ventilation	Yes	The proposal would achieve a reasonable level of natural ventilation with 90% of the apartments being cross ventilated.
Stormwater Management	Yes	Council's Development Engineer has raised no objection to the proposal subject to the imposition appropriate conditions for stormwater management.
Building Materials	Yes	The proposed finishes and materials as submitted with the plans are acceptable, from a sustainability perspective.

St Leonards/Crows Nest Planning Area (Crows Nest Town Centre)

The proposal is generally consistent with the desired character for Crows Nest, as expressed by the DCP. The proposed mixed use building would be generally consistent with the desired mixed use character for development along Alexander Street. The design of the proposed mixed use building is also consistent with the desired built form within the town centre in terms of bulk/scale, setbacks, height and car parking arrangements.

LOCAL INFRASTRUCTURE CONTRIBUTIONS PLAN

The proposed development would increase the number of residents within the locality and therefore a contribution levied under Section 7.11 the Act is required in accordance with Council’s Infrastructure Contributions Plan 2020.

Development type	Existing	Proposed	Unit	Increase
Residential accommodation				
2-bed dwelling (excl. secondary dwellings)	-	4 dwellings	dwellings	4 dwellings
3 or more bed dwellings	-	6 dwellings	dwellings	6 dwellings
Non-residential development				
Shops – neighbourhood shops, excl. supermarkets	402 sqm	310 sqm	57 sqm/worker	-1.6 workers
Open space and recreation facilities:	\$108,430.86			
Public domain:	\$56,581.75			
Active transport:	\$3,229.52			
Community facilities:	\$21,778.83			
Plan administration and management:	\$2,840.24			
Total:	\$192,861.20			

The total contribution payable is \$192,861.20. A condition is recommended requiring payment prior to the issue of any Construction Certificate.

ALL LIKELY IMPACTS OF THE DEVELOPMENT

All likely impacts of the proposed development have been considered within the context of this report.

ENVIRONMENTAL APPRAISAL	CONSIDERED
1. Statutory Controls	Yes
2. Policy Controls	Yes
3. Design in relation to existing building and natural environment	Yes
4. Landscaping/Open Space Provision	Yes

5.	Traffic generation and Carparking provision	Yes
6.	Loading and Servicing facilities	Yes
7.	Physical relationship to and impact upon adjoining development (Views, privacy, overshadowing, etc.)	Yes
8.	Site Management Issues	Yes
9.	All relevant s. 4.15 (1) considerations of Environmental Planning and Assessment (Amendment) Act 1979	Yes

SUBMITTERS CONCERNS

The application was notified to adjoining properties and the Holtermann Precinct seeking comment between 21 January 2022 and 4 February 2022. Council received three (3) submissions. The submissions informed the lodgement of amended plans which reduced the bulk and scale of the proposed building.

Many of the issues raised have been considered in other parts of this report and where relevant are addressed below.

- *Retention of existing building and the building should be heritage listed*

The existing buildings have not been identified as having heritage significance, neither has any evidence be provided to substantiate this claim. The proposed development allows for re-development of the site to achieve a high standard of architectural presentation to the public domain, with the building designed to address the street frontages.

- *Traffic, noise, and safety*

The proposed development has 12 parking spaces and complies with the maximum permitted parking rates in Section 10.2 of Part B in NSDCP 2013, including the provision of visitor parking. The additional dwellings on the site is unlikely to give rise to and significant additional congestion. Conditions are provided to address construction traffic safety and noise management. Council's Traffic Engineers raise no objection to the number of parking spaces or trip demand associated with the number of apartments.

- *Advertising*

The application was notified in accordance with Council's Community Engagement Protocol.

SUITABILITY OF THE SITE

The site is in a B4 Mixed Use zone where mixed use development is a permissible form of development. Consequently, the proposal is considered to be suitable for the site having regard to the merits of the proposal as described in the above report.

PUBLIC INTEREST

There are no matters raised in which approval of the application would not be in the public interest.

HOW WERE THE COMMUNITY VIEWS TAKEN INTO CONSIDERATION?

The application, was notified in accordance with Council Community Engagement Protocol from 21 January 2022 to 4 February 2022. The submissions received in part informed the amended plans which included a reduction in building height.

CONCLUSION + REASONS

The proposed development was considered under the relevant Environmental Planning Instruments and policies including NSLEP 2013 and NSDCP 2013 and generally found to be satisfactory, subject to the satisfaction of recommended conditions of consent.

The proposed development is considered satisfactory when evaluated in accordance with the design quality principles in SEPP 65 – Design Quality of Residential Apartment Development. The proposed development also performs well against the objectives of the ADG.

The written requests made pursuant to Clause 4.6 *Departure to development standards* in NSLEP 2013 demonstrates that compliance with the development standard is both unreasonable and unnecessary in the circumstances and that there are sufficient environmental planning grounds to justify the variation. Approval of the variation would be in the public interest.

Notification of the proposal has attracted three (3) submissions and the assessment of the proposal has considered the performance of the application against Council's planning requirements. Any substantive points raised by the submissions have been addressed/clarified in the section above (refer to Submitters Concerns).

Subject to the satisfaction of conditions, it is considered that the proposal is acceptable as it will not result in any significant adverse impacts upon the locality or surrounding properties, and the quality of the streetscape are maintained. The proposed development will also not result in any unreasonable impacts to the amenity of adjoining properties including impacts to views, overshadowing or loss of privacy.

Having regard for the potential impacts upon the amenity of adjoining properties and the unique context of the site, subject to conditions, the development application is considered to be satisfactory and is recommended for approval.

The assessment of the proposed development has considered the concerns raised in the submissions as well as the performance of the application against Council's planning requirements. Following this assessment, and having regard to the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* (as amended), the application recommended for **approval** given the consistency to the objectives and controls within the North Sydney Local Environmental Plan and Development Control Plan 2013, and lack of material adverse impacts on the redevelopment of the adjoining properties.

RECOMMENDATION

THAT the North Sydney Local Planning Panel, exercising the functions of Council, assume the concurrence of the Secretary of The Department of Planning and Environment and invoke the

provisions of Clause 4.6 in NSLEP 2013 with regards to the non-compliance with Clause 4.3 and Clause 4.4A, and grant consent to Development Application No. 2/22 for the demolition of existing structures and construction of a new mixed use building containing 10 apartments, commercial space and basement parking on Land at 127-129 Willoughby Road, Crown Nest, subject to the conditions attached to this report:

DAMON KENNY
EXECUTIVE ASSESSMENT PLANNER

STEPHEN BEATTIE
MANAGER DEVELOPMENT SERVICES

NORTH SYDNEY COUNCIL
CONDITIONS OF DEVELOPMENT APPROVAL
127-129 WILLOUGHBY ROAD, CROWS NEST
DEVELOPMENT APPLICATION NO. 2/22

A. Conditions that Identify Approved Plans

Development in Accordance with Plans/Documentation

- A1. The development must be carried out in accordance with the following drawings and documentation and endorsed with Council's approval stamp, except where amended by the following conditions of this consent.

Plan No.	Rev No.	Description	Prepared by	Dated
DA 101	B	Site Plan	PA Studio	20.06.22
DA 102	D	Lower Ground Floor	PA Studio	09.02.23
DA 103	D	Ground Floor	PA Studio	09.02.23
DA 104	D	First Floor	PA Studio	09.02.23
DA 105	D	Second Floor	PA Studio	09.02.23
DA 106	D	Food Plan	PA Studio	09.02.23
DA 201	B	Sections 01 & 02	PA Studio	20.06.22
DA 202	B	Section 03	PA Studio	20.06.22
DA 301	B	Elevations in Context	PA Studio	20.06.22
DA 302	B	Building Elevation	PA Studio	20.06.22
DA 1301	B	Demolition	PA Studio	20.06.22
DA 401	B	List of Materials and Finishes	PA Studio	20.06.22
DA 1101	B	Landscape	PA Studio	20.06.22
34111-02/12	B	Lower Ground Plan, Notes & Details	ING Consulting Engineers	13 June 2022
34111-03/12	A	Ground Floor / Site Plan	ING Consulting Engineers	13 Dec. 2021
34111-04/12	B	Floors & Roof Plan	ING Consulting Engineers	13 June 2022
34111-05/12	B	Site Plan (Public Domain)	ING Consulting Engineers	13 June 2022
34111-06/12	B	Pipe Longitudinal Sections and Hydraulic Grade Lines	ING Consulting Engineers	13 June 2022
34111-07/12	B	Pipe Longitudinal Section 2 and Hydraulic Grade Lines 2	ING Consulting Engineers	13 June 2022
34111-08/12	B	Notes & Details	ING Consulting Engineers	13 June 2022
34111-09/12	B	Notes & Details 2	ING Consulting Engineers	13 June 2022
34111-10/12	B	Notes & Details (Public Domain)	ING Consulting Engineers	13 June 2022
34111-11/12	B	Notes & Details (Public Domain 2)	ING Consulting Engineers	13 June 2022
34111-12/12	B	Notes & Details (Public Domain 3)	ING Consulting Engineers	13 June 2022

(Reason: To ensure that the form of the development undertaken is in accordance with the determination of Council, Public Information)

Plans on Site

- A2. A copy of all stamped approved plans, specifications and documents (including the plans, specifications and documents submitted and approved with the Construction Certificate) must be kept on site at all times so as to be readily available for perusal by any officer of Council or the Principal Certifying Authority.

All documents kept on site in accordance with this condition must be provided to any officer of the Council or the certifying authority upon their request.

(Reason: To ensure that the form of the development undertaken is in accordance with the determination of Council, Public Information and to ensure ongoing compliance)

B. *Matters to be Completed before the lodgement of an Application for a Construction Certificate*

Construction Management Program – North Sydney Council Traffic & Transport Operations Division

B1. A Construction Management Program prepared by a suitably qualified and experienced traffic consultant must be submitted for consideration by the North Sydney Traffic Committee and approved in writing by North Sydney Council's Traffic Division PRIOR TO THE ISSUE OF ANY Construction Certificate. Any use of Council property will require appropriate approvals prior to any work commencing. At a minimum, the Construction Management Program must specifically address the following matters:

- a) A plan view (min 1:100 scale) of the entire site and frontage roadways indicating:
 - i. Dedicated temporary construction site driveway entrances and exits, controlled by a certified traffic controller, to safely manage pedestrians and construction related vehicles in the frontage roadways and footways;
 - ii. The proposed signage for pedestrian management to comply with the relevant Australian Standards, including pram ramps;
 - iii. Turning areas within the site for construction and spoil removal vehicles, allowing a forward egress for all construction vehicles on the site;
 - iv. The locations of any proposed Work Zones in the frontage roadways (to be approved by Council's Traffic Committee);
 - v. Locations of hoardings proposed;
 - vi. Location of any proposed crane standing areas;
 - vii. A dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries;
 - viii. Material, plant and spoil bin storage areas within the site, where all materials are to be dropped off and collected; and
 - ix. The provision of an on-site parking area for employees, tradesperson and construction vehicles as far as possible.

- b) A detailed heavy vehicle access route map through the Council area to Arterial Roads. Provision is to be made to ensure through traffic is maintained at all times.

- c) The proposed phases of works on the site, and the expected duration of each phase.

- d) How access to neighbouring properties will be maintained at all times and the proposed manner in which adjoining property owners will be kept advised of the timeframes for completion of each phase of process.
- e) The road is not to be used as a waiting area for trucks delivering to or awaiting pick up of materials.
- f) The proposed method of support to any excavation adjacent to adjoining properties, or the road reserve. The proposed method of support is to be designed and certified by an appropriately qualified and practising structural engineer and must not involve any permanent or temporary encroachment onto Council's property.
- g) Proposed protection for Council and adjoining properties. Details are to include site fencing and the provision of "B" class hoardings over footpaths and laneways.
- h) A Waste Management Plan. The Waste Management Plan must include, but not be limited to, the estimated volume of waste and method of disposal for the construction and operation phases of the development, design of on-site waste storage and recycling area and administrative arrangements for waste and recycling management during the construction process.

All traffic control work and excavation, demolition and construction activities must be undertaken in accordance with the approved Construction Management Program and any conditions attached to the approved Program. A certificate of compliance with this condition must be obtained from Council's development engineers. The certificate and the approved Construction Management Program must be submitted as part of the documentation lodged with the application for approval of a construction certificate. A copy of the approved Construction Management Program and any conditions imposed on that Program, must be kept on the site at all times and made available to any officer of Council upon request.

Notes:

- 1) North Sydney Council's adopted fee for certification of compliance with this condition shall be payable on lodgement, or in any event, prior to the issue of the relevant approval.
- 2) Any use of Council property will require appropriate approvals and demonstration of liability insurances prior to such work commencing.
- 3) Failure to provide complete and detailed information may result in delays. It is recommended that your Construction Management Plan be lodged with Council as early as possible, as a **minimum six (6) weeks' assessment period** is required, including referral to the Traffic Committee.

- 4) Dependent on the circumstances of the site, Council may request additional information to that detailed above.

(Reason: To ensure appropriate measures have been considered for site access, storage and the operation of the site during all phases of the demolition process in a manner that respects adjoining owner's property rights and residential amenity in the locality, without unreasonable inconvenience to the community)

C. *Prior to the Issue of a Construction Certificate (and ongoing, where indicated)*

Dilapidation Report Damage to Public Infrastructure

- C1. A dilapidation survey and report (including photographic record) must be prepared by a suitably qualified consultant which details the pre-developed condition of the existing public infrastructure in the vicinity of the development site. Particular attention must be paid to accurately recording any pre-developed damaged areas so that Council is fully informed when assessing any damage to public infrastructure caused as a result of the development. A copy of the dilapidation survey and report is to be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

The developer may be held liable for all damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded and demonstrated as pre-existing under the requirements of this condition.

The developer shall bear the cost of carrying out works to restore all public infrastructure damaged as a result of the carrying out of the development, and no occupation of the development shall occur until damage caused as a result of the carrying out of the development is rectified.

A copy of the dilapidation survey and report must be lodged with North Sydney Council by the Certifying Authority with submission of the Construction Certificate documentation.

(Reason: To record the condition of public infrastructure prior to the commencement of construction)

Dilapidation Report Private Property (Excavation)

- C2. A full dilapidation survey and report on the visible and structural condition of all neighbouring structures within the 'zone of influence' of the required excavations must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The zone of influence is to be defined as the horizontal distance from the edge of the excavation face to twice the excavation depth.

The dilapidation report and survey are to be prepared by a consulting structural/geotechnical engineer agreed to by both the applicant and the owner of any affected adjoining property.

All costs incurred in achieving compliance with this condition shall be borne by the person entitled to act on this Consent.

In the event that access for undertaking the dilapidation survey is denied by an adjoining owner, the applicant **MUST DEMONSTRATE**, in writing, to the satisfaction of Council that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed. Written concurrence must be obtained from Council in such circumstances.

Note: This documentation is for record keeping purposes only and may be used by the developer or affected property owner to assist in any action required to resolve any dispute over damage to adjoining properties arising from the works. It is in the applicant's and adjoining owner's interest for it to be as full and detailed as possible.

(Reason: To record the condition of property/i.e., prior to the commencement of construction)

Dilapidation Survey Private Property (Neighbouring Buildings)

- C3. A photographic survey and dilapidation report of adjoining property No. 123-125 Willoughby Road detailing the physical condition of the properties, both internally and externally, including, but not limited to, such items as walls, ceilings, roof, structural members and other similar items, **SHALL BE** submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The survey and report are to be prepared by an appropriately qualified person agreed to by both the applicant and the owner of the adjoining property. A copy of the report is to be provided to Council, if Council is not the Certifying Authority, prior to the issue of any Construction Certificate.

All costs incurred in achieving compliance with this condition shall be borne by the person entitled to act on this Consent.

In the event that access for undertaking the photographic survey and dilapidation report is denied by an adjoining owner, the applicant **MUST DEMONSTRATE**, in writing, to the satisfaction of Council that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed. Written concurrence must be obtained from Council in such circumstances.

Note: This documentation is for record keeping purposes only and may be used by an applicant or affected property owner to assist in any action required to resolve any dispute over damage to adjoining properties arising from the works. It is in the applicant's and adjoining owner's interest for it to be as full and detailed as possible.

(Reason: Proper management of records)

Shoring for Adjoining Property

- C4. Where any shoring for excavation is to be located on or is supporting Council's property, or any adjoining private property, engineering drawings certified as being adequate for their intended purpose by an appropriately qualified and practising structural engineer, showing all details, including the extent of encroachment and the method of removal and de-stressing of shoring elements, must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. A copy of this documentation must be provided to the Council for record purposes.

Note: Approval of engineering drawings for shoring works to be located on adjoining property by the Certifying Authority does not authorise a trespass on private or public land. All relevant permissions/legal rights must be obtained to undertake any works on adjoining land.

(Reason: To ensure the protection of existing public infrastructure and adjoining properties)

Structural Adequacy of Adjoining Properties - Excavation Works

- C5. A report prepared by an appropriately qualified and practising structural engineer detailing the structural adequacy of adjoining property No. 123 Willoughby Road, which certifies its ability to withstand the proposed excavation and outlines any measures required to be implemented to ensure that no damage will occur to adjoining properties during the course of the works, must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The measures outlined in the certified report must be complied with at all times.

(Reason: To ensure the protection and structural integrity of adjoining properties in close proximity during excavation works)

Geotechnical Report

- C6. Prior to issue of any Construction Certificate a Geotechnical/Civil Engineering report must be prepared which addresses at a minimum (but is not limited to) the following:

- a) the type and extent of substrata formations by the provision of a minimum of four (4) representative bore hole logs which are to provide a full description of all material from ground surface to 1.0 m below the finished basement floor level and include the location and description of any anomalies encountered in the profile. The surface and depth of the bore hole logs must be related to Australian Height Datum;
- b) the appropriate means of excavation/shoring in light of point (a) above and proximity to adjacent property and structures. Potential vibration caused by method of excavation and potential settlements affecting nearby footings/foundations must be discussed and mechanisms to ameliorate any such impacts recommended;
- c) the proposed method to temporarily and permanently support the excavation for the basement adjacent to adjoining property, structures and road reserve if nearby (full support must be provided within the subject site);
- d) the existing groundwater levels in relation to the basement structure, where influenced;
- e) the drawdown effects on adjacent properties (including road reserve), if any, the basement excavation will have on groundwater together with the appropriate construction methods to be utilised in controlling groundwater. Where it is considered there is the potential for the development to create a “dam” for natural groundwater flows, a groundwater drainage system must be designed to transfer groundwater through or under the proposed development without a change in the range of the natural groundwater level fluctuations. Where an impediment to the natural flow path is constructed, artificial drains such as perimeter drains and through drainage may be utilised; and
- f) recommendations to allow the satisfactory implementation of the works. An implementation program is to be prepared along with a suitable monitoring program including control levels for vibration, shoring support, ground level and groundwater level movements during construction. The implementation program is to nominate suitable hold points at the various stages of the works for verification of the design intent before sign-off and before proceeding with subsequent stages.

The geotechnical report must be prepared by an appropriately qualified consulting geotechnical/hydrogeological engineer with previous experience in such investigations and reporting.

It is the responsibility of the consulting geotechnical/hydrological specialist to undertake the appropriate investigations, reporting and specialist recommendations to ensure a reasonable level of protection to adjacent property and structures both during and after construction. The report must contain site-specific geotechnical recommendations and shall specify the necessary hold/inspection points by relevant professionals as appropriate.

The design principles for the geotechnical report are as follows:

- a) no ground settlement or movement is to be induced which is sufficient enough to cause an adverse impact to adjoining property and/or infrastructure;
- b) no changes to the ground water level are to occur as a result of the development that are sufficient enough to cause an adverse impact to the surrounding property and infrastructure;
- c) no changes to the ground water level are to occur during the construction of the development that are sufficient enough to cause an adverse impact to the surrounding property and infrastructure;
- d) vibration is to be minimised or eliminated to ensure no adverse impact on the surrounding property and infrastructure occurs, as a result of the construction of the development;
- e) appropriate support and retention systems are to be recommended and suitable designs prepared to allow the proposed development to comply with these Design Principles; and
- f) an adverse impact can be assumed to be crack damage as identified within the relevant Australian Standard for determining such damage.

The report, satisfying the requirements of this condition, must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

The professional recommendations, implementation program, monitoring program, mitigation measures and the like contained in the report must be implemented in full during the relevant stages of excavation and construction.

(Reason: To ensure the structural integrity of the subject site and adjoining sites during the excavation process)

Sediment Control

- C7. Where construction or excavation activity requires the disturbance of the soil surface or existing vegetation, erosion and sediment control techniques, as a minimum, are to be in accordance with the publication *Managing Urban Stormwater: Soils and Construction* (4th edition, Landcom, 2004) commonly referred to as the "Blue Book" or a suitable and effective alternative method.

A Sediment Control Plan must be prepared and submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate and prior to any works commencing. The Sediment Control Plan must be consistent with the Blue Book and disclose:

- a) All details of drainage to protect and drain the site during the construction processes;
- b) All sediment control devices, barriers and the like;
- c) Sedimentation tanks, ponds or the like;
- d) Covering materials and methods; and
- e) A schedule and programme of the sequence of the sediment and erosion control works or devices to be installed and maintained.
- f) Methods for the temporary and controlled disposal of stormwater during construction.

All works must be undertaken in accordance with the approved Sediment Control plan.

The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To protect the environment from the effects of sedimentation and erosion from development sites)

Waste Management Plan

- C8. A Waste Management Plan is to be submitted for approval by the Certifying Authority prior to the issue of any Construction Certificate. The plan must include, but not be limited to:
- a) The estimated volume of waste and method of disposal for the construction and operation phases of the development;
 - b) The design of the on-site waste storage and recycling area; and
 - c) Administrative arrangements for waste and recycling management during the construction process.

The approved Waste Management Plan must be complied with at all times in the carrying out of the development.

(Reason: To encourage the minimisation of waste and recycling of building waste)

External Finishes and Materials

- C9. The external colours and finishes must be in accordance with the approved schedule of finishes and materials. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure quality built form of development)

No External Service Ducts

- C10. Service ducts must be provided within the building to keep external walls free of plumbing, drainage or any other utility installations. Plans and specifications which comply with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure quality built form of the development)

Work Zone

- C11. If a Work Zone is proposed, an application must be made to the North Sydney Local Traffic Committee to install the 'Work Zone'. A Work Zone permit is required to be issued by the Council prior to the issue of any Construction Certificate.

Work Zones are provided specifically for the set down and pick up of materials and not for the parking of private vehicles associated with the site. Work Zones will generally not be approved where there is sufficient space on-site for the setting down and picking up of goods being taken to or from a construction site. If the Work Zone is approved by the Committee, the Applicant must obtain a written copy of the related resolution from the North Sydney Local Traffic Committee and submit a copy of this to the Certifying Authority to enable issue of the Construction Certificate.

Where approval of the 'Work Zone' is given by the Committee, the requirements of the Committee, including installation of the necessary 'Work Zone' signage and payment of any fees, must occur prior to commencement of any works on the site. Further, at the expiration of the Work Zone approval, the developer is required to remove the Work Zone signs and reinstate any previous signs, all at the developer's cost. The requirements imposed by the Committee on the Work Zone permit (or permits) must be complied with at all times.

(Reason: Amenity and convenience during construction)

Maintain Property Boundary Alignment Levels

- C12. Except where otherwise approved by Council, the property boundary alignment levels must match the levels which existed prior to the commencement of works. Plans and specifications which document existing and proposed levels adjacent to the site boundaries and which comply with the requirements of this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure interface between property and public land remains uniform)

Basement Car Park to Comply with Relevant Standards

- C13. The basement layout must comply with all requirements of Australian Standard AS2890.1. Certification from a suitably qualified and practicing Civil Engineer that the basement design will comply with the requirements of the Australian Standard must be provided to the Certifying Authority for approval prior to issue of any Construction Certificate.

(Reason: To ensure the basement layout complies with relevant standards)

Required Infrastructure Works - Roads Act 1993

- C14. Prior to issue of any Construction Certificate engineering design plans and specifications must be prepared by a qualified civil design engineer. An application must be made to Council on the "To Satisfy DA Consent Condition" application form with payment of the adopted assessment/inspection fees. The plans and specifications must be to a detail suitable for construction issue purposes and must provide detail and specification for the following infrastructure works to be completed as part of the development:

Road Works

- a) All civil works in the public domain are to be constructed in accordance with Council's latest version of the Public Domain Style Manual for Village Centres and Activity Strips.
- b) construction of a fully new replacement footpath is required across the entire site frontages in Willoughby Road, Chandos Street and Ingram Lane. A longitudinal section is required along the footpath property boundary at a scale of 1:50 extending 5m past the property boundary line. The footpath shall be designed at a single straight grade of 3% falling to top of kerb so that it is uniform without showing signs of dipping or rising particularly at entrances. 3% footpath cross fall gradient will determine new property boundary levels. (footpath cross-fall must rise 3% up from the existing top of the kerb levels towards the property boundary).
- c) reconstruction of the carriageway shoulder will be required, extending out one (1) lane width in Willoughby Road and Chandos Street, from the gutter lip in AC10 - 50mm thick, adjacent to all new gutter works.
- d) reconstruction of the carriageway will be required, adjacent to the full length of the site and for the full lane width (gutter lip to gutter lip) in Ingram Lane, in AC10 - 50mm thick.
- e) construction of a fully new kerb and gutter (except in the location of the new vehicular layback) is required across the entire site frontages in Willoughby Road, Chandos Street and Ingram Lane Street. A longitudinal section is required along the gutter line (existing and proposed levels), at a scale of 1:50 extending 5m past the property boundary line.

- f) cross sections at a scale of 1:50 along the centreline of each access point to the building must be provided and are to show the calculated clearance to the underside of any overhead structure. All the entry points are to comply with the Building Code of Australia (BCA), including disability requirements. The Council approved footpath levels must be accommodated at the building entry points.

Drainage Works

Connection of the site stormwater system must be made directly to the existing kerb inlet pit in Ingham Lane. To accommodate this requirement, the following drainage infrastructure works must be carried out on Council property at the Applicants expense: -

- a) The existing 900x1200mm box culvert is to be capped at both ends and made redundant.
- b) construction of a standard grated gully pit with extended kerb inlet (1.8m lintel) in the kerb fronting the subject site in Willoughby Street adjacent to the corner with Chandos Street. The pit must be constructed in accordance with Councils "Infrastructure Specification for Roadworks, Drainage and Miscellaneous Works".
- c) construction of a standard grated gully pit with extended kerb inlet (1.8m lintel) in the kerb fronting the subject site in Chandos Street adjacent to the corner with Willoughby Street. The pit must be constructed in accordance with Councils "Infrastructure Specification for Roadworks, Drainage and Miscellaneous Works".
- d) construction of a new 1200 dia. class 4 RCP in-ground drainage line under the kerb and gutter at standard depth. The line must connect the existing kerb inlet pit in Willoughby Street with all new kerb inlet pits and finally with existing kerb inlet pit in Chandos Street, adjacent to the corner with Ingham Lane. The pipes within the road reserve must have bedding in accordance with Australian Standard AS 3725 – (Loads on buried concrete pipes) with minimum pipe cover of 450mm. The developer shall be responsible for carrying out any service investigations to allow a gravity connection.
- e) The floor level of the commercial lot is to be set at the 1% AEP level. The Residential floor levels and all basement entrances are to be set at the 1% AEP level + 500mm. The use of mechanical flood devices are not acceptable due to the long period between flooding events and the possibility that the device may not be in working condition when a flood occurs.

Certifying Authorities must not issue a Construction Certificate without the formal written approval of Council (as Roads Authority) under the Roads Act 1993.

The required plans and specifications are to be designed in accordance with North Sydney Council's current documents Infrastructure Specification for Road Works, Drainage and Miscellaneous Works and Performance Guide for Engineering Design and Construction. The drawings must detail existing utility services and trees affected by the works, erosion control requirements and traffic management requirements during the course of works. A detailed survey must be undertaken as required. Traffic management is to be certified on the drawings as being in accordance with the documents SAA HB81.1 – 1996 – Field Guide for Traffic Control at Works on Roads – Part 1 and RMS Traffic Control at Work Sites (1998). Construction of the works must proceed only in accordance with any conditions attached to the Council Roads Act 1993 approval.

Note: A minimum of 21 days will be required for Council to assess Roads Act submissions. Early submission is recommended to avoid any delays in obtaining a Construction Certificate. A fee to cover cost of assessment (set out in Council's adopted fees and charges) is payable and Council will withhold any consent and approved plans until full payment of the correct fees. Plans and specifications must be marked to the attention of Council's Development Engineers. In addition, a copy of this condition must be provided, together with a covering letter stating the full address of the property and the accompanying DA number.

(Reason: To ensure infrastructure works are designed and constructed to appropriate standards and requirements of the Roads Act 1993)

Obtain Driveway Crossing Permit under S.138 Roads Act 1993

C15. A driveway crossing and roads infrastructure works permit to suit the approved off-street parking facilities must be granted by the Council prior to the issue of any Construction Certificate. In order to obtain a permit under S.138 of the Roads Act 1993, an application must be made to Council on the 'Vehicular Access Application' form with payment of the adopted assessment/inspection fees. Council will require civil design construction drawings and certification from the applicant's Civil Engineer to verify design details and enable issue of the permit. The requirements of the permit must be complied with at all times.

The civil design drawings must include the following at a minimum:

- a) the vehicular access way must comply with AS 2890.1 and Council's current Vehicular Access Application Guidelines and Specification (gutter bridges not permitted) to ensure that a B85 vehicle will not scrape/strike the surface of the carriageway, layback, vehicular crossing or parking floor,
- b) All redundant layback crossings must be reinstated as kerb gutter and footpath,
- c) the width of the vehicular layback must be 4 metres (including the wings),
- d) the vehicular crossover must be set square to the kerb,

- e) The proposed gutter invert levels in Ingham Lane must be set as a string line in between existing gutter invert level adjacent to the existing stormwater kerb inlet pit in Ingham Lane close to the corner with Chandos Street and existing gutter invert level at the projected property boundary of 123 Willoughby Road.
- f) The property boundary levels along Ingham Lane must be set no more than 80mm above the new top of the kerb levels at any point, to make sure that footpath cross-fall gradients are not greater than 3%. Standard kerb height must be 150mm from the invert of the gutter.
- g) the crossing (between the layback and the property boundary) must be placed on a single straight grade of approximately 4.5%, falling to the back of the layback,
- h) the footpath, kerb gutter, and road shoulder must be transitioned 1m on both sides of the crossing to ensure uniformity in the road reserve,
- i) any twisting of driveway access must occur entirely within the subject property,
- j) all inspection openings, utility services must be adjusted to match the proposed driveway levels,
- k) sections along centreline and extremities are required at a scale of 1:50 to be taken from the centreline of the roadway through to the parking area itself and must include all changes of grade and levels both existing and proposed,
- l) a longitudinal section along the gutter line at a scale of 1:50 showing how it is intended to blend the vehicular crossing with the existing and proposed kerb and gutter,
- m) a longitudinal section along the footpath property boundary at a scale of 1:50 is required,
- n) the sections must show the calculated clearance to the underside of any overhead structure,
- o) all details of internal ramps between parking levels, and
- p) a swept path analysis is required demonstrating that an 85th percentile vehicle can manoeuvre in and out of the garage spaces in accordance with AS 2890.1 2004 "Off Street Parking".

The permit must be granted by Council prior to the issue of any Construction Certificate.

All driveway and infrastructure works on the road reserve must be undertaken in accordance with the terms of the permit issued by Council. Inspections by Council will be required as specified. The Certifying Authority issuing the Construction Certificate must ensure that the permit issued by Council is obtained and referenced on and accompanies the Construction Certificate issued.

(Reason: To facilitate appropriate vehicular access to private sites, without disruption to pedestrian and vehicular traffic)

Stormwater Management and Disposal Design Plan - Construction Issue Detail

C16. Prior to issue of any Construction Certificate, a site drainage management plan must be prepared by a qualified drainage design engineer. The site drainage management plan must detail the following requirements of North Sydney Council:

- a) compliance with BCA drainage requirements, Councils Engineering Performance guide and current Australian Standards and guidelines, such as AS/NZ3500.3.2 1998, National Plumbing and Drainage Code,
- b) stormwater runoff and subsoil drainage generated by the approved development must be conveyed in a controlled manner by gravity to existing kerb inlet pit in Ingham Lane,
- c) all redundant stormwater pipelines within the footpath area shall be removed and footpath and kerb shall be reinstated,
- d) the design and installation of the rainwater tank(s) must comply with BASIX and Sydney Water requirements. Overflow from the tank(s) shall be connected by gravity to the stormwater disposal system,
- e) all sub-soil seepage drainage shall be discharged via a suitable silt arrester pit. Details of all plans certified as being adequate for their intended purpose and compliant with the provisions of AS3500.3.2 by an appropriately qualified and practising civil engineer shall be submitted with the application for a Construction Certificate,
- f) provide subsoil drainage to all necessary areas with pump out facilities as required.

A site drainage management plan which complies with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure controlled stormwater management and disposal without nuisance)

On-site Stormwater Detention

- C17. On site detention must be provided to ensure that the maximum discharge of stormwater collected from the undeveloped site, which would occur during a one-in-five-year storm of one-hour duration is not exceeded. All other stormwater run-off from the site for all storms up to a one-in-one hundred-year storm event is to be retained on the site for gradual release to the kerb and gutter or piped drainage system. Provision is to be made for satisfactory overland flow should a storm in excess of the above parameters occur.

Engineering calculations, design and certification complying with this condition must be provided by an appropriately qualified and practising Civil Engineer and submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

(Reason: To ensure appropriate provision is made for the disposal and management of stormwater generated by the development, and to ensure that public infrastructure in Council's care and control is not overloaded)

Floor Levels for Flooding

- C18. The floor level of the commercial lot is to be set at the 1% AEP level. The Residential floor levels and all basement entrances are to be set at the 1% AEP level = 500mm.

Note: The use of mechanical flood devices are not acceptable due to the long period between flooding events and the possibility that the device may not be in working condition when a flood occurs..(Jim's comments)

Plans and specifications which comply with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: Prevention of damage to dwellings as a result of flood events)

Pump-out System Design for Stormwater Disposal

- C19. The design of the pump-out system for stormwater disposal will be permitted for drainage of basement areas only, and must be designed in accordance with the following criteria:

- a) the pump system shall consist of two pumps, connected in parallel, with each pump being capable of emptying the holding tank at the rate equal to the rate of inflow for the one-hour duration storm. The holding tank shall be capable of holding one hour's runoff from a one-hour duration storm of the 1 in 20-year storm,
- b) the pump system shall be regularly maintained and serviced, every six (6) months, and

- c) any drainage disposal to the street gutter from a pump system, must have a stilling sump provided at the property line, connected to the street gutter by a suitable gravity line.

Engineering details demonstrating compliance with these criteria and certified by an appropriately qualified and practising civil engineer shall be provided to the Certifying Authority for approval prior to the issue of any Construction Certificate.

(Reason: To ensure adequate provision is made for the discharge of sub-surface stormwater from the excavated parts of the site)

Bond for Damage and Completion of Infrastructure Works - Stormwater, Kerb and Gutter, Footpaths, Vehicular Crossing and Road Pavement

C20. Prior to the issue of any Construction Certificate, security deposit or bank guarantee must be provided to Council to the sum of \$322,000.00 to be held by Council for the payment of cost for any/all of the following:

- a) making good any damage caused to any property of the Council as a consequence of the doing of anything to which this consent relates,
- b) completing any public work (such as road work, kerbing and guttering, footway construction, stormwater drainage and environmental controls) required in connection with this consent.
- c) remedying any defects in any such public work that arise within six months after the work is completed.

The security required by this condition and in the schedule contained later in these conditions must be provided by way of a deposit with the Council; or other such guarantee that is satisfactory to Council (such as a bank guarantee). Any guarantee provided as security must name North Sydney Council as the nominated beneficiary and must not be subject to an expiry date.

The security will be refundable following the expiration of six months from the issue of any final Occupation Certificate or completion of public work required to be completed (whichever is the latest) but only upon inspection and release by Council's Engineers.

Council shall have full authority to make use of the bond for such restoration works as deemed necessary by Council in circumstances including the following:

- where the damage constitutes a hazard in which case Council may make use of the security immediately;
- the applicant has not repaired or commenced repairing damage within 48 hours of the issue by Council in writing of instructions to undertake such repairs or works;
- works in the public road associated with the development are to an unacceptable quality; and

- the Certifying Authority must ensure that security is provided to North Sydney Council prior to issue of any Construction Certificate.

(Reason: To ensure appropriate security for works on public land and an appropriate quality for new public infrastructure)

Protection of Trees

- C21. The following tree(s) are required to be protected and retained as part of the development consent in accordance with AS 4970-2009 - Protection of trees on development sites:

Tree	Location
T2 <i>Eucalyptus scoparia</i>	Eastern boundary of 123-125 Willoughby Road.

Plans and specifications complying with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

Any tree(s) shown as being retained on the approved plans (regardless of whether they are listed in the above schedule or not) must be protected and retained in accordance with this condition.

(Reason: Protection of existing environmental and community assets)

Pruning of Trees

- C22. All pruning works shall to the following tree(s) shall be undertaken under the guidance of an appropriately qualified arborist/tree surgeon in accordance with Australian Standard AS 4373-2007 - Pruning of Amenity Trees:

T2 *Eucalyptus scoparia*

A report detailing the measures to be employed during construction shall be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

Marked up pics showing exactly what pruning is required shall be provided to council for approval by LDO prior. Minimal pruning only shall be permitted, scaffolding and hoarding shall be designed to minimise pruning, and branches shall be tied back rather than pruned, where possible.

All measures required by the said report must be complied with at all times in the carrying out of the development.

(Reason: To ensure the protection and longevity of existing significant trees)

Garbage and Recycling Facilities

- C23. An appropriate area must be provided within the premises for the storage of garbage bins and recycling containers and all waste and recyclable material generated by this premises. The following requirements must be met:
- a) all internal walls of the storage area must be rendered to a smooth surface, covered at the floor/wall intersection, graded and appropriately drained with a tap in close proximity to facilitate cleaning;
 - b) provision for the separation and storage in appropriate categories of material suitable for recycling;
 - c) the storage area must be adequately screened from the street, with the entrance to the enclosures no more than 2 m from the street boundary of the property;
 - d) if a storage facility is to be provided at another suitable location within the building, a complementary garbage bin holding bay must be provided no more than 2 m from the street boundary of the property;
 - e) garbage enclosures serving residential units are not to be located within areas designated for non-residential uses; and
 - f) garbage enclosures serving non-residential uses are not to be located within areas designated for dining purposes.

Plans and specifications which comply with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

Note: The applicant may wish to discuss bin storage requirements and location with Council's Environmental Services prior to finalisation of the required detail, and a copy of Council's Waste Handling Guide should be obtained for reference purposes before the design is finalised.

(Reason: To ensure the provision of appropriate waste facilities for residents and protect community health, and to ensure efficient collection of waste by collection contractors)

Noise from Plant and Equipment

- C24. The use of all plant and equipment installed on the premises must not:
- (a) Comply with the noise emission criteria in the Acoustic Logic Acoustic Assessment dated December 2021 pertaining to the site.

It must not contribute an LAeq(15min) which will cause the total LAeq(15min) from all plant and equipment operating contemporaneously on the site or in the strata scheme or in the mixed strata schemes to exceed the RBL by more than 5dB when measured at the boundary of any affected receiver. The modifying factor adjustments in Section 4 of the EPA Industrial Noise Policy shall be applied.

- (b) Cause “offensive noise” as defined in the *Protection of the Environment Operations Act 1997*.

“affected receiver” includes residential premises (including any lot in the strata scheme or another strata scheme), premises for short-term accommodation, schools, hospitals, places of worship, commercial premises and parks and such other affected receiver as may be notified by the Council in writing.

“boundary” includes any window or elevated window of an affected receiver.

Terms in this condition have the same meaning as in the Noise Guide for Local Government and the Industrial Noise Policy published by the NSW Environment Protection Authority.

(Reason: To maintain an appropriate level of amenity for adjoining land uses)

Air Conditioners in Residential Premises

C25. The use of any air conditioner installed on the premises must comply with the requirements of the Protection of the Environment Operations (Noise Control) Regulations 2008 and State Environmental Planning Policy (Infrastructure) 2007 and must not:

- (a) emit a noise that is audible within a habitable room in any affected residence (regardless of whether any door or window to that room is open);
- (i) before 8.00 am and after 10.00 pm on any Saturday, Sunday or Public Holiday; or
- (ii) before 7.00 am or after 10.00 pm on any other day
- (b) cause an LAeq(15min) which exceeds the RBL background noise level by more than 5dB when measured at the boundary of any affected residence. The modifying factor adjustments in Section 4 of the EPA Industrial Noise Policy will be applied.

“affected residence” includes residential premises (including any lot in the strata scheme or another strata scheme), premises for short-term accommodation and hospitals.

“boundary” includes any window or elevated window of an affected residence.

Terms in this condition have the same meaning as in the Noise Guide for Local Government and the Industrial Noise Policy published by the NSW Environment Protection Authority.

(Reason: To maintain residential amenity)

Acoustic Privacy (Residential Apartments)

- C26. Noise levels in sole occupancy units of residential apartments must not exceed the following:

Location	Maximum
Habitable Rooms other than Sleeping Areas	40 LAeq (1hr)
Sleeping Areas	35 LAeq (1hr)

The "Maximum" limits are to apply in any hour of a 24-hour period with the windows of the sole occupancy unit closed.

"habitable room" has the same meaning as in the Building Code of Australia.

A floor separating sole occupancy units shall have a weighted standardised impact sound pressure level $L'_{nT,w}$ not more than 55dB when measured insitu in accordance with AS ISO 140.7-2006 "Field measurements of impact sound insulation of floors," and rated to AS ISO 717.2-2004 "Rating of sound insulation in buildings and of building elements. Part 2: Impact sound insulation." This clause shall not apply to the floor of a kitchen, bathroom, toilet or laundry in a residential sole occupancy unit.

Mechanical equipment such as lift plant, air conditioning plant servicing the building and pumps shall not be located immediately adjacent bedrooms.

A statement from an appropriately qualified acoustical consultant eligible for membership of the Association of Australian Acoustic Consultants, certifying that the acoustic mitigation measures outlined above have been satisfied, must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

(Reason: To comply with best practice standards for residential acoustic amenity)

Compliance with Acoustic Report

- C27. The recommendations contained in the acoustic report prepared by Acoustic Logic dated December 2021, must be implemented during construction and use of the development.

A statement from an appropriately qualified acoustical consultant eligible for membership of the Association of Australian Acoustic Consultants, certifying that the acoustic mitigation measures outlined in the above stated report have been suitably incorporated into the development and that relevant noise criteria have been satisfied, must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate.

The Principal Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To maintain an appropriate level of amenity for adjoining land uses)

Construction Noise Management Plan

- C28. A Construction Noise Management Plan must be prepared by an appropriately qualified acoustical consultant eligible for membership of the Association of Australian Acoustic Consultants, and must include the following:
- (a) Identification of noise affected receivers near to the site.
 - (b) A prediction as to the level of noise impact at noise affected receivers from the use and proposed number of high noise intrusive appliances intended to be operated onsite.
 - (c) Details of work schedules for all construction phases;
 - (d) A statement should also be submitted outlining whether or not predicted noise levels will comply with the noise criteria stated within the Environment Protection Authority's EPA Construction Noise Guideline ("CNG").
 - (e) Representative background noise levels should be submitted in accordance with the CNG.
 - (f) Confirmation of the level of community consultation that is to be undertaken by occupants at noise affected receivers likely to be most affected by site works and the operation of plant/machinery particularly during the demolition and excavation phases.
 - (g) Confirmation of noise monitoring methodology that is to be undertaken during the noise intensive stages of work including details of monitoring to be undertaken at the boundary of any noise affected receiver.
 - (h) What course of action will be undertaken following receipt of a complaint concerning offensive noise.
 - (i) Details of any noise mitigation measures that have been outlined by an acoustic consultant or otherwise that will be deployed on site to reduce noise impacts on the occupants at noise affected receivers.
 - (j) Details of selection criteria for any plant or equipment that is to be used on site, the level of sound mitigation measures to be undertaken in each case and the criteria adopted in their selection taking into account the likely noise impacts on occupants at noise affected receivers and other less intrusive technologies available; and
 - (k) Details of site induction to be carried out for all employees and contractors undertaking work at the site.

"affected receiver" includes residential premises (including any lot in the strata scheme or another strata scheme), premises for short-term accommodation, schools, hospitals, places of worship, commercial premises and parks and such other affected receiver as may be notified by the Council in writing.

"boundary" includes any window or elevated window of an affected residence.

The Construction Noise Management Plan must be submitted to the Principal Certifier and a copy provided to Council prior to the issue of the Construction Certificate.

(Reason: To ensure noise generating activities are appropriately managed and nearby sensitive receivers protected)

Adaptable Housing

C29. Proposed apartments 101 and 202 are to be designed with accessible features for disabled persons and must incorporate level entries and wider doorways and corridors, slip resistant surfaces, reachable power points, disabled toilet, and lever door handles and taps. These features are to be designed generally in accordance with the relevant Australian Standard 4299-1995. Plans and specifications complying with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure equity of access and availability of accommodation in the future for an ageing population)

Section 7.11 Contributions

C30. A monetary contribution pursuant to the provisions of Section 7.11 of the Environmental Planning and Assessment Act 1979 is to be paid to Council, in accordance with the North Sydney Council's Contribution Plan, to provide for local infrastructure improvements.

Based on the cost of development at the date of determination, the total contribution payable to Council is **\$192,861.20**.

A	B (\$)
Open space and recreation facilities	\$108,430.86
Public domain	\$56,581.75
Active transport	\$3,229.52
Community facilities	\$21,778.83
Plan administration and management	\$2,840.24
The total contribution is	\$192,861.20

A copy of the North Sydney Contribution Plan can be viewed at North Sydney Council's Customer Service Centre, 200 Miller Street, North Sydney or downloaded via Council's website at www.northsydney.nsw.gov.au.

(Reason: To provide for local infrastructure identified in the North Sydney Council

Security Deposit/Guarantee Schedule

C31. All fees and security deposits/guarantees in accordance with the schedule below must be provided to Council prior to the issue of any Construction Certificate:

Security Deposit/Guarantee	Amount (\$)
Infrastructure Damage Bond	\$21,000.00
Drainage Construction Bond	\$49,000.00
Engineering Construction Bond	\$252,000.00
Others	
TOTAL BONDS	\$322,000.00

Note: The following fees applicable

Fees	
Section 7.11 Contributions	\$192,861.20
TOTAL FEES	\$192,861.20

The security required by the above schedule must be provided by way of a deposit with the Council; or other such guarantee that is satisfactory to Council (such as a bank guarantee). Any guarantee provided as security must name North Sydney Council as the nominated beneficiary and must not be subject to an expiry date.

(Reason: Compliance with the development consent)

BASIX Certificate

C32. Under clause 97A(3) of the Environmental Planning and Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in BASIX Certificate No. 1269258M_07 for the development are fulfilled. Plans and specifications complying with this condition must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure the proposed development will meet the Government's requirements for sustainability and statutory requirements)

Outdoor Lighting

C33. All outdoor lighting must comply with, where relevant AS/NZ1158.3:1999 Pedestrian Area (Category P) Lighting and AS4282:1997 Control of the Obtrusive Effects of Outdoor lighting. Details demonstrating compliance with these requirements must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the building plans and specifications submitted fully satisfy the requirements of this condition.

(Reason: To maintain the amenity of adjoining land uses)

Under Awning Lighting

C34. Under awning lighting must be provided to the Willoughby Road and Chandos Street frontage of the site. Such lighting is to be designed to P1 standard in accordance with AS/NZS 1158.3.1. The luminaries must be:

- a) weatherproof and vandal proof;
- b) designed in conjunction with Energy Australia so that the system can easily be connected to a public lighting system when available; and
- c) the location and type of the said luminaries shall be to the satisfaction of Council's Director of Engineering and Property Services.

Plans and specifications complying with this condition must be submitted to the Certifying Authority and the Council's Director of Engineering and Property Services for approval prior to the issue of any Construction Certificate. A construction certificate must not be issued without the approval of the Council's Director of Engineering and Property Services. The Certifying Authority must ensure that the building plans and specifications submitted fully satisfy the requirements of this condition.

(Reason: To enhance the amenity and safety of the footpath adjacent to the premises)

Remediation

C35. Prior to the release of the Construction Certificate the site must be remediated in accordance with:

- (a) an approved Remedial Action Plan; and
- (b) North Sydney Development Control Plan 2013 - Section 14 - Contamination and Hazardous Building Materials; and
- (c) state Environmental Planning Policy – (Resilience and Hazards) 2021; and,
- (d) the guidelines in force under the Contaminated Land Management Act.
- (e) The Foundation Earth Sciences Detailed Site Investigation dated December 2021 pertaining to the site.

Within thirty (30) days after the completion of the remediation works, and prior to the issue of any construction certificate, a notice of completion, including validation and/or monitoring report is to be provided to Council. This notice from a suitably qualified environmental consultant, must be consistent with State Environmental Planning Policy (Resilience and Hazards) 2021.

(Reason: To ensure the land is suitable for its intended purpose)

D. Prior to the Commencement of any Works (and continuing where indicated)

Protection of Trees

D1. All trees that are specifically nominated to be retained by notation on plans or by condition as a requirement of this consent must be maintained and protected during demolition, excavation and construction on the site in accordance with AS4970-2009 (Protection of trees on development sites). A report containing recommendations, and methods of tree protection prepared by an appropriately qualified person must be provided to the Certifying Authority for approval by an appropriately qualified person prior to commencement of any works on the site. Any recommendations must be undertaken for the duration of works on the site.

(Reason: To ensure compliance with the requirement to retain significant planting on the site)

Public Liability Insurance - Works on Public Land

D2. Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of public land and the undertaking of approved works within Council's road reserve or public land, as approved by this consent. The Policy is to note and provide protection/full indemnification for North Sydney Council, as an interested party. A copy of the Policy must be submitted to Council prior to commencement of any works. The Policy must be valid for the entire period that the works are being undertaken.

Note: Applications for hoarding permits, vehicular crossings etc will require evidence of insurance upon lodgement of the application.

(Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land)

Notice of Proposed Work (Remediation Work)

D3. Notice of proposed work must be given to the Council in accordance with Clause 4.14 of State Environmental Planning Policy (Resilience and Hazards) 2021

The following additional information must be submitted with the notice to the Council:

- a) Copies of any preliminary investigation, detailed investigation and remediation action plan for the site; and
- b) Contact details for the remediation contractor and any other party responsible for ensuring compliance of remediation work with regulatory requirements.

Note: Thirty (30) days' notice is required for any remediation work. In the case of work required to be carried out immediately under the terms of a remediation order a minimum of two days' notice is required.

(Reason: Protection of the environment, State Environmental Planning Policy (Resilience and Hazards) 2021 compliance)

Asbestos Material Survey

D4. Prior to the commencement of any works, a report must be prepared by a suitably qualified person in relation to the existing building fabric to be demolished and/or disturbed identifying the presence or otherwise of asbestos contamination and, if asbestos contamination is present, making recommendations as to the work required to safely address the contamination.

Any demolition works or other works identified in the report as having to be carried out must be carried out in accordance with the recommendations of the report and the following:

- a) the removal of asbestos must be undertaken by a WorkCover licensed contractor;
- b) all removal must be in strict accordance with the requirements of the WorkCover Authority in relation to the removal, handling and disposal of material containing asbestos and any Work Safe Australia requirements.
- c) during the removal of any asbestos a sign stating "DANGER ASBESTOS REMOVAL IN PROGRESS" must be erected in a visible position at the boundary of the site; and
- d) Waste disposal receipts must be provided to the Certifying Authority as proof of correct disposal of asbestos laden waste.

The report must be submitted to the Certifying Authority for approval prior to the issue of any Construction Certificate. The Certifying Authority must ensure that the report, and other plans, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

(Reason: To ensure the long-term health of workers on site and occupants of the building is not put at risk unnecessarily)

Sydney Water Approvals

D5. Prior to the commencement of any works, the approved plans must be submitted to Sydney Water to determine whether the development application will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. The Certifying Authority must ensure that Sydney Water has appropriately stamped the plans before the commencement of building works.

Notes: **Sydney Water Building Plan Approvals** can be obtained from the Sydney Water Tap in™ online service. Building plans must be submitted to the Tap in™ to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met. For further information visit <http://www.sydneywater.com.au/tapin/index.htm> or call 13 000 TAP IN (1300 082 746) for further information.

(Reason: To ensure compliance with Sydney Water requirements)

Commencement of Works' Notice

D6. Building work, demolition or excavation in accordance with this development consent must not be commenced until the developer has given at least two days' notice to North Sydney Council of the person's intention to commence building work, demolition or excavation in accordance with this development consent.

(Reason: To ensure appropriate safeguarding measures are in place prior to the commencement of any building work, demolition or excavation)

E. During Demolition and Building Work

Parking Restrictions

E1. Existing public parking provisions in the vicinity of the site must be maintained at all times during works. The placement of any barriers, traffic cones, obstructions or other device in the road shoulder or kerbside lane is prohibited without the prior written consent of Council. Changes to existing public parking facilities/restrictions must be approved by the North Sydney Local Traffic Committee. The Developer will be held responsible for any breaches of this condition and will incur any fines associated with enforcement by Council regulatory officers.

(Reason: To ensure that existing kerbside parking provisions are not compromised during works)

Road Reserve Safety

E2. All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works, with no obstructions caused to the said footways and roadways. Construction materials and plant must not be stored in the road reserve without approval of Council. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site.

Where public infrastructure is damaged, repair works must be carried out in when and as directed by Council officers (at full Developer cost). Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (1996) "Traffic Control Devices for Work on Roads". **If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may undertake proceedings to stop work.**

(Reason: Public Safety)

Temporary Disposal of Stormwater Runoff

E3. During construction, stormwater runoff must be disposed in a controlled manner that is compatible with the erosion and sediment controls on the site. Immediately upon completion of any impervious areas on the site (including roofs, driveways, paving) and where the final drainage system is incomplete, the necessary temporary drainage systems must be installed to reasonably manage and control runoff as far as the approved point of stormwater discharge. Such ongoing measures must be to the satisfaction of the Certifying Authority.

(Reason: Stormwater control during construction)

Geotechnical Stability during Works

E4. A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified and consulting geotechnical engineer must oversee the excavation procedure.

Geotechnical aspects of the development work, namely appropriate excavation method and vibration control, support and retention of excavated faces, and hydrogeological considerations must be undertaken in accordance with the recommendations of the approved geotechnical report and all subsequent geotechnical inspections carried out during the excavation and construction phase.

Approval must be obtained from all affected property owners, including North Sydney Council where rock anchors (both temporary and permanent) are proposed below adjacent private or public property.

(Reason: Ensure appropriate professional are engaged at appropriate stages during construction)

Progress Survey

E5. In order to ensure compliance with approved plans, a Survey Certificate, to Australian Height Datum, must be prepared by a Registered Surveyor as follows:

- a) at the completion of the first structural floor level indicating the level of that floor and the relationship of the building to the boundaries;

- b) at the completed height of the building, prior to the placement of concrete formwork, or the laying of roofing materials; and
- c) at completion, the relationship of the building, and any projections thereto, to the boundaries.

Progress certifications in response to points (a) through (c) must be provided to the Certifying Authority for approval at the time of carrying out relevant progress inspections. In the event that such survey information is not provided or reveals discrepancies between the approved plans and the proposed works, all works, save for works necessary to bring the development into compliance with the approved plans, must cease. Works may only continue upon notification by the Certifying Authority to the Applicant that survey information (included updated survey information following the carrying out of works to comply with the approved plans) complies with this condition.

(Reason: To ensure compliance with approved plans)

Council Inspection of Public Infrastructure Works

E6. During the works on public infrastructure reverting to Council's care and control, Council's development engineer may undertake inspections of the works at the following hold points:

- Formwork for layback, kerb/gutter, footpath, etc
- AI reinforcement for the concrete base beneath pavers,
- Formwork and reinforcement for in-situ stormwater pits,
- Pipe connections prior to back filling.

All works must proceed in accordance with Roads Act 1993 approvals or other permits relating to roads issued by Council. A minimum of 48 hours' notice must be given to Council to book an inspection. Work must not proceed until the works or activity covered by the inspection is approved.

(Reason: To ensure quality of construction joints and connections in the drainage system)

Noise and Vibration

E7. The works must be undertaken in accordance with the "Interim Construction Noise Guideline," published by the NSW Environment Protection Authority, to ensure excessive levels of noise and vibration do not occur so as to minimise adverse effects experienced on any adjoining land.

(Reason: To ensure residential amenity is maintained in the immediate vicinity)

Developer's Cost of Work on Council Property

- E8. The developer must bear the cost of all works associated with the development that occurs on Council's property, including the restoration of damaged areas.

(Reason: To ensure the proper management of public land and funds)

Special Permits

- E9. Unless otherwise specifically approved in writing by Council, all works, processes, storage of materials, loading and unloading associated with the development must occur entirely on the property.

The developer, owner or builder may apply for specific permits available from Council's Customer Service Centre for the undermentioned activities on Council's property. In the event that a permit is granted by Council for the carrying out of works, processes, storage of materials, loading and unloading associated with the development on Council's property, the development must be carried out in accordance with the requirements of the permit. A minimum of forty-eight (48) hours' notice is required for any permit:

1) **On-street mobile plant**

E.g., cranes, concrete pumps, cherry-pickers, etc. - restrictions apply to the hours of operation, the area of operation, etc. Separate permits are required for each occasion and each piece of equipment. It is the developer's, owner's and builder's responsibilities to take whatever steps are necessary to ensure that the use of any equipment does not violate adjoining property owner's rights.

(Reason: Proper management of public land)

2) **Hoardings**

Permits are required to erect Class A and Class B hoardings. If an 'A' Class hoarding is to alienate a section of Council's property, that section will require a permit for the occupation of Council's property.

(Reason: Proper management of public land)

3) **Storage of building materials and building waste containers (skips) on Council's property**

Permits to utilise Council property for the storage of building materials and building waste containers (skips) are required for each location. Failure to obtain the relevant permits will result in the building materials or building waste containers (skips) being impounded by Council with no additional notice being given. Storage of building materials and waste containers on open space reserves and parks is prohibited.

(Reason: Proper management of public land)

4) **Kerbside restrictions, construction zones**

Attention is drawn to the existing kerbside restrictions adjacent to the development. Should alteration of existing kerbside restrictions be required, or the provision of a construction zone, the appropriate application must be made and the fee paid to Council. Alternatives to such restrictions may require referral to Council's Traffic Committee and may take considerable time to be resolved. An earlier application is suggested to avoid delays in construction programs.

(Reason: Proper management of public land)

Construction Hours (Commercial Core and Mixed-use Zones)

E10. Construction activities and works approved under this consent must be carried out only within the hours stipulated in the following table:

Location	Standard Construction Hours	
	Day	Hours
B3 Commercial Core Zone B4 Mixed-use Zone	Monday - Friday	7.00 am - 7.00 pm
	Saturday	8.00 am - 1.00 pm
	Sunday, Public holiday	No work permitted

Construction activities for development approved under this consent must be carried out in accordance with the standard construction hours above and any Construction Noise Management Plan required under this consent.

In the event of breach to the approved hours of construction Council take may take enforcement action under Part 9 of the EP&A Act 1979 and in accordance with Council's adopted Compliance and Enforcement Policy.

(Reason: To ensure that works do not interfere with reasonable amenity expectations of residents and the community)

Installation and Maintenance of Sediment Control

- E11. Erosion and sediment controls must be installed and maintained at all times in accordance with the Sediment and erosion control plan submitted and approved with the Construction Certificate.

Erosion and sediment measures must be maintained in accordance with the publication Managing Urban Stormwater: Soils and Construction (4th edition, Landcom, 2004), commonly referred to as the "Blue Book" and can only be removed when development activities have been completed and the site fully stabilised.

(Reason: To protect the environment from the effects of sedimentation and erosion from development sites)

Sediment and Erosion Control Signage

- E12. A durable sign must be erected during building works in a prominent location on site, warning of penalties should appropriate erosion and sedimentation control devices not be maintained. A sign of the type referred to in this condition is available from Council.

(Reason: To protect the environment from the effects of sedimentation and erosion from development sites)

Remedial Action Plan (Contaminated Land)

- E13. The remediation work must be carried out in accordance with the Remedial Action Plan approved under this consent and all relevant guidelines issued under the Contaminated Land Management Act.

(Reason: To ensure the proper management of contaminated land)

Site Amenities and Facilities

- E14. Where work involved in the erection and demolition of a building is being carried out, amenities which satisfy applicable occupational health and safety and construction safety regulations, including any WorkCover Authority requirements, must be provided and maintained at all times. The type of workplace determines the type of amenities required.

Further information and details can be obtained from the Internet at www.workcover.nsw.gov.au.

(Reason: To ensure the health and safety of the community and workers on the site)

Health and Safety

- E15. All work undertaken must satisfy applicable occupational health and safety and construction safety regulations, including any WorkCover Authority requirements to prepare a health and safety plan. Site fencing must be installed sufficient to exclude the public from the site. Safety signs must be erected that warn the public to keep out of the site and provide a contact telephone number for enquiries.

Further information and details regarding occupational health and safety requirements for construction sites can be obtained from the internet at www.workcover.nsw.gov.au.

(Reason: To ensure the health and safety of the community and workers on the site)

Prohibition on Use of Pavements

- E16. Building materials must not be placed on Council's footpaths, roadways, parks or grass verges, (unless a permit is obtained from Council beforehand). A suitable sign to this effect must be erected adjacent to the street alignment.

(Reason: To ensure public safety and amenity on public land)

Dewatering

- E17. Any dewatering at the site must be in accordance with the Foundation Earth Sciences report which states that groundwater from the site cannot be discharged to stormwater.

(Reason: To ensure proper management of groundwater)

Waste Disposal

- E18. All records demonstrating the lawful disposal of waste must be retained and kept readily accessible for inspection by regulatory authorities such as North Sydney Council and the Environmental Protection Authority.

(Reason: To ensure the lawful disposal of construction and demolition waste)

Asbestos Removal

- E19. All demolition works involving the removal and disposal of asbestos cement must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with National Occupational Health and Safety Commission.

(Reason: To ensure works are carried out in accordance with relevant WorkCover requirements)

F. Prescribed Conditions imposed under EP&A Act and Regulations and other relevant Legislation

National Construction Code

F1. All building work must be carried out in accordance with the provisions of the National Construction Code.

(Reason: Prescribed - Statutory)

Home Building Act

F2. 1) Building work that involves residential building work (within the meaning and exemptions provided in the Home Building Act 1989) for which the *Home Building Act 1989* requires there to be a contract of insurance under Part 6 of that Act must not be carried out unless the Principal Certifying Authority for the development to which the work relates has given North Sydney Council written notice of the contract of insurance being issued and of the following:

a) in the case of work for which a principal contractor is required to be appointed:

- i) the name and licence number of the principal contractor, and
- ii) the name of the insurer by which the work is insured under Part 6 of that Act, or

(b) in the case of work to be done by an owner-builder:

- (i) the name of the owner-builder, and
- (ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

2) If arrangements for doing residential building work are changed while the work is in progress such that the information submitted to Council in accordance with this conditions is out of date, work must cease and no further work may be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

(Reason: Prescribed - Statutory)

Appointment of a Principal Certifying Authority (PCA)

- F3. Building work, demolition or excavation in accordance with the development consent must not be commenced until the developer has appointed a Principal Certifying Authority for the building work in accordance with the provisions of the EP&A Act and its Regulations.

(Reason: Statutory: To ensure appropriate safeguarding measures are in place prior to the commencement of any building work, demolition or excavation)

Construction Certificate

- F4. Building work, demolition or excavation in accordance with the development consent must not be commenced until a Construction Certificate for the relevant part of the building work has been issued in accordance with the provisions of the EP&A Act and its Regulations.

(Reason: Statutory: To ensure appropriate safeguarding measures are in place prior to the commencement of any building work, demolition or excavation)

Occupation Certificate

- F5. A person must not commence occupation or use of the whole or any part of a new building (*new building* includes an altered portion of, or an extension to, an existing building) unless an Occupation Certificate has been issued in relation to the building or part. Only the Principal Certifying Authority appointed for the building work can issue an Occupation Certificate.

(Reason: Statutory)

Critical Stage Inspections

- F6. Building work must be inspected by the Principal Certifying Authority on the critical stage occasions prescribed by the EP&A Act and its Regulations, and as directed by the appointed Principal Certifying Authority.

(Reason: Statutory)

Commencement of Works

- F7. Building work, demolition or excavation in accordance with this development consent must not be commenced until the developer has given at least two (2) days' notice to North Sydney Council of the person's intention to commence the erection of the building.

(Reason: Statutory: To ensure appropriate safeguarding measures are in place prior to the commencement of any building work, demolition or excavation)

Excavation/Demolition

- F8. 1) All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.
- 2) 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.
- 3) Demolition work must be undertaken in accordance with the provisions of AS2601- Demolition of Structures.

(Reason: To ensure that work is undertaken in a professional and responsible manner and protect adjoining property and persons from potential damage)

Protection of Public Places

- F9. 1) A hoarding and site fencing must be erected between the work site and adjoining public place.
- 2) 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.
- 3) The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.
- 4) Any such hoarding, fence or awning is to be removed when the work has been completed.
- 5) No access across public reserves or parks is permitted.

Note: Prior to the erection of any temporary fence or hoarding over property owned or managed by Council, written approval must be obtained. Any application needs to be accompanied by plans indicating the type of hoarding and its layout. Fees are assessed and will form part of any approval given. These fees must be paid prior to the approval being given. Approval for hoardings will generally only be given in association with approved building works, maintenance or to ensure protection of the public. An application form for a Hoarding Permit can be downloaded from Council's website.

(Reason: To ensure public safety and the proper management of public land)

Site Sign

- F10. 1) A sign must be erected in a prominent position on the site

- a) stating that unauthorised entry to the work site is prohibited;
 - b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
 - c) showing the name, address and telephone number of the Principal Certifying Authority for the work.
- 2) Any such sign must be maintained while building work or demolition work is being carried out but must be removed when the work has been completed.

(Reason: Prescribed - Statutory)

G. Prior to the Issue of an Occupation Certificate

Infrastructure Repair and Completion of Works

- G1. Prior to the issue of any Occupation Certificate any and all works relating to the development:
- a. in the road reserve must be fully completed; and
 - b. to repair and make good any damaged public infrastructure caused as a result of any works relating to the development (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub-contractors, concrete vehicles) must be fully repaired;

to the satisfaction of Council Engineers at no cost to Council.

(Reason: Maintain quality of public assets)

Line Marking

- G2. A certificate prepared by an appropriately qualified and practising Civil Engineer certifying the construction, paving, line marking and signposting of the off-street carparking spaces, together with access driveways, in accordance with the approved development plans, appropriate Australian Standards and industry best practice as appropriate must be submitted to, and approved by, the Certifying Authority prior to issue of any Occupation Certificate.

(Reason: To ensure ongoing compliance with this development consent and Australian Standards relating to manoeuvring and access of vehicles)

Certification - Civil Works

- G3. a) An appropriately qualified and practising Civil Engineer must certify to the Certifying Authority that the stormwater drainage system is constructed in accordance with this consent and the provisions of the applicable Australian Standard. A copy of the certificate must be submitted to Council (if it is not the Certifying Authority) upon completion of the development works and prior to the issue of an Occupation Certificate.
- b) An appropriately qualified and practicing Civil Engineer must certify to the Certifying Authority that the vehicular crossing and associated works and road works were constructed in accordance with this consent and any approval for works in the road reserve issued by the Council. A copy of the certificate must be submitted to Council (if it is not the Certifying Authority), upon completion of the development works and prior to the issue of an Occupation Certificate.

(Reason: Compliance with the Consent)

Works as Executed Drawings and Video

- G4. A works-as-executed survey drawing (W.A.E.) of the completed stormwater drainage system must be obtained. The W.A.E. survey drawing must show the alignment, depth and grade of the stormwater drainage pipelines, pits and ancillary plumbing. The W.A.E. survey drawing must be reviewed by a qualified and practising civil engineer and certification provided to the Certifying Authority that the as-built system achieves the design intent of the plans approved with the Construction Certificate. Certification must be provided with the W.A.E. survey drawing to the Certifying Authority prior to the issue of an Occupation Certificate.

CCTV inspection of conduits, that revert to the care and control of Council, shall be conducted in accordance with the Conduit Inspection Reporting Code of Australia WSA 05-2013.

The camera, transportation unit, distance measuring devices, illumination systems and ancillary equipment shall be used suitable for the conduit size, material and conditions under which the inspection is undertaken.

The camera shall be steerable and be able to negotiate bends within the drainage pipe.

The use of a pushrod camera may only be acceptable for pipe diameters less than 150mm or where a steerable camera cannot navigate.

A colour camera shall be used which has remotely operated automatic and/or manual adjustment of the focus and iris to allow optimum picture quality to be achieved.

The camera lens shall be capable of viewing the extremities of the conduit and panning and or tilting to view the lateral connections and defects or features at and position around the conduit regardless of the direction of travel of the camera in the main conduit.

The adjustment of focus and iris shall provide a focal range from 15 mm to infinity. The distance along the conduit in focus from the initial point of observation shall be a minimum of four times the vertical height of the conduit.

Where required, specialised instruments, apparatus and/or software shall be used to facilitate measurement of parameters to determine acceptance. Hardware and software used in measuring the parameters shall be correctly calibrated for each application using the manufacturer's methods.

For circular or regular shaped conduits, the camera shall be positioned centrally, $\pm 10\%$ of the vertical and horizontal diameter, within the conduit.

A copy of the WAE survey drawing, certification and CCTV inspection footage must be submitted to the Council if it is not the Certifying Authority.

(Reason: Compliance with the Consent)

Noise Certification

- G5. Prior to issue of the any Occupation Certificate a certificate from an appropriately qualified acoustical consultant eligible for membership of the Association of Australian Acoustic Consultants is to be submitted to, and approved by, the Certifying Authority certifying that the noise and vibration from use of the development complies with the conditions of consent herein.

(Reason: To ensure acoustic amenity)

Validation for Remediation

- G6. A validation and site monitoring report prepared in accordance with relevant guidelines issued under the *Contaminated Land Management Act 1997* must be submitted to the Council within one month of completion of the remediation work, and prior to the issuing of any Occupation Certificate.

(Reason: To ensure environmental amenity is maintained)

Damage to Adjoining Properties

- G7. All precautions must be taken to prevent any damage likely to be sustained to adjoining properties. Adjoining owner property rights and the need for owner's permission must be observed at all times, including the entering onto land for the purpose of undertaking works.

(Reason: To ensure adjoining owner's property rights are protected)

Utility Services

G8. All utility services shall be adjusted to the correct levels and/or location/s required by this consent, prior to issue of an occupation certificate. This shall be at no cost to Council.

(Reason: To ensure compliance with the terms of this consent)

Covenant and Restriction (Stormwater Control Systems)

G9. An Instrument pursuant to Sections 88B and 88E of the *Conveyancing Act* 1919 and one copy must be submitted to Council in registrable form, providing for:

- a. a restriction as to user and positive covenant as to user as appropriate in favour of North Sydney Council burdening 127-129 Willoughby Road, Crows Nest requiring the ongoing retention, maintenance and operation of the stormwater facility (on-site detention, pump-out, charged lines);
- b. North Sydney Council being nominated in the Instrument as the only party authorised to release, vary or modify the Instrument;
- c. the wording on the Instrument making reference to the Council file/s which hold:
 - (a) the Construction plans; and
 - (b) the "Work-as-Executed" (as built) plans;

Upon Council being satisfied as to the terms of the Instrument, North Sydney Council's official seal will be affixed to these documents, prior to submission to the Land and Property Information Office for registration

The Instrument creating the restriction and/or covenant under ss 88B and 88E required by this condition of consent must be registered on the Title of the development site prior to the issue of an Occupation Certificate or commencement of use of the site, whichever is the earlier.

Evidence of the registration of the instrument referred to in this condition is to be provided to Council prior to the issue of an Occupation Certificate.

All costs associated with the preparation, approval and registration of the Instrument required by this condition of consent must be borne by the person acting on this consent including the reasonable costs of Council in obtaining advice, negotiating the terms or otherwise facilitating the execution and registration of the required Instrument.

(Reason: Compliance and adequate maintenance of drainage system)

Basement Pump-out Maintenance

- G10. Prior to issue of an Occupation Certificate a Maintenance Regime must be prepared for the basement stormwater pump-out system and submitted to the Principal Certifying Authority for approval with the Occupation Certificate documentation. The regime must specify that the system is to be regularly inspected and checked by qualified practitioners.

The basement stormwater pump-out system must be maintained in accordance with the approved Maintenance Regime at all times.

(Reason: To ensure future provision for maintenance of the drainage system)

Asbestos Clearance Certificate

- G11. For building works where asbestos based products have been removed or altered, an asbestos clearance certificate signed by an appropriately qualified person (being an Occupational Hygienist or Environmental Consultant) must be submitted to and approved by the Certifying Authority (and a copy forwarded to Council if it is not the Certifying Authority) for the building work prior to the issue of any Occupation Certificate, the asbestos clearance certificate must certify the following:

- a) the building/land is free of asbestos; or
- b) the building/land has asbestos that is presently deemed safe.

The certificate must also be accompanied by tipping receipts, which detail that all asbestos waste has been disposed of at an approved asbestos waste disposal depot. If asbestos is retained on site the certificate must identify the type, location, use, condition and amount of such material.

Note: Further details of licensed asbestos waste disposal facilities can be obtained from www.epa.nsw.gov.au.

(Reason: To ensure that building works involving asbestos-based products are safe for occupation and will pose no health risks to occupants)

Sydney Water

- G12. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained.

The final Section 73 Certificate must be submitted to the Certifying Authority prior to release of any linen plan for subdivision or prior to occupation of the development, whichever is the earlier.

The Section 73 Certificate must be submitted to the Certifying Authority prior to the issue of the Strata Certificate.

Notes: Application must be made through an authorised Water Servicing Co-ordinator, for details see the Sydney Water web site www.sydneywater.com.au/customer/urban/index, or telephone 13 20 92.

Following application, a 'Notice of Requirements' will be forwarded detailing water and sewer extensions to be built and charges to be paid. Please make early contact with the Coordinator since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

(Reason: To ensure compliance with the statutory requirements of Sydney Water)

BASIX Completion Certificate

G13. In accordance with Section 45 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, prior to issuing a final occupation certificate, the Principal Certifier must provide a BASIX completion receipt.

(Reason: To ensure compliance with the Regulations)

House Numbering (Dwellings)

G14. Prior to any Occupation Certificate being issued an application must be made to North Sydney Council for written confirmation, or allocation, of the street address(es) or apartment number(s) for the completed project in accordance with Council's Property Addressing Policy. These are the numbers that will be recorded in Council records and must be displayed at the property in accordance with the provisions of AS/NZS 4819:2011.

Note: If apartments are to be sold off the plan, the applicant must have written confirmation from Council of the address and apartment numbering if the apartment number is to be identified on the contract.

(Reason: To ensure that Council records are accurate, and that house numbering complies with the requirements of Council's House Numbering Policy. Proper house numbering also assists emergency services in readily locating properties.)

Landscaping

G15. The landscaping shown in the approved landscape plan numbered DA 1101 prepared by PA Studio dated 20 June 2022 must be completed prior to the issue of any Occupation Certificate.

(Reason: To ensure compliance)

Damage to Adjoining Properties

- G16. On completion of the development the subject of this consent and prior to the issue of the Occupation Certificate, a report is to be prepared by an appropriately qualified consultant and is to be provided to the Certifying Authority (and a copy to Council if it is not the Certifying Authority) certifying:
- a) whether any damage to adjoining properties has occurred as a result of the development;
 - b) the nature and extent of any damage caused to the adjoining property as a result of the development;
 - c) the nature and extent of works required to rectify any damage caused to the adjoining property as a result of the proposed development;
 - d) the nature and extent of works carried out to rectify any damage caused to the adjoining property as a result of the development; and
 - e) the nature and extent of any agreements entered into for rectification of any damage caused to the adjoining property as a result of the development.

The report and certification must reference the dilapidation survey and reports required to be provided to the Certifying Authority in accordance with this consent.

Where works required to rectify any damage caused to adjoining property as a result of the development identified in the report and certification have not been carried out, a satisfactory agreement for rectification of the damage is to be made with the affected person/s as soon as possible prior to the issue of an Occupation Certificate.

All costs incurred in achieving compliance with this condition shall be borne by the developer.

(Reason: To ensure adjoining owner's property rights are protected in so far as possible)

Required Tree Planting

- G17. On completion of works and prior to the issue of an Occupation Certificate trees in accordance with the schedule hereunder must be planted in Council's nature strip/footpath:

Schedule

Tree Species	Location	Pot Size
Platanus digitata	Council footpath on Willoughby Road and Chandos Street	150l

The installation of such trees, their current health and their prospects for future survival must be certified upon completion by an appropriately qualified horticulturalist.

Upon completion of installation and prior to the issue of an Occupation Certificate an appropriately qualified horticulturalist must certify that any trees planted in accordance with this condition are healthy and have good prospects of future survival. The certification must be submitted with any application for an Occupation Certificate.

(Reason: To ensure that replacement plantings are provided to enhance community landscaped amenity and cultural assets)

I. Ongoing/Operational Conditions

First Use of Premise - Further Consent Required

11. A separate development application for the fit out and use of the commercial tenancy must be submitted to and approved by Council prior to that fit out or use commencing.

(Reason: To ensure development consent is obtained prior to uses commencing)

Noise and Vibration Impact

12. The ongoing use of the premises approved under this consent must comply with all conditions pertaining to noise and vibration specified in this consent.

(Reason: To ensure compliance with the specified levels of noise and vibration and to maintain the amenity of surrounding land uses)

Allocation of Spaces

13. The allocation of carparking spaces within the development must be maintained at all times in accordance with the terms of this consent. The allocation of spaces must be maintained in accordance with the following table:

8	Residential
1	Residential - Visitors
1	Commercial
2	Accessible

Carparking spaces provided must only be used in conjunction with the approved uses contained within the development.

In the case of Strata subdivision any car parking for strata lots for residential purposes must be individually allocated to its corresponding residential strata lot as part of each lot's unit entitlement.

Visitor parking facilities must be designated as common property on the strata plan. Visitor parking facilities must not at any time be allocated, sold, licensed or leased for the exclusive use of any occupier or owner and must be retained as common property by the owner's corporation for use by building visitors.

(Reason: To ensure that adequate parking facilities to service the development are

provided on site)

Minimum Headroom for Car Parking

14. Minimum headroom of 2.2 m must be provided over all car-parking areas.

(Reason: To ensure compliance with relevant standards and provide appropriate headroom)

Trade Waste Collection (Crows Nest Trade Waste Policy)

15. All trade waste and recycling generated from the premises must be managed and disposed of in accordance with the Crows Nest Trade Waste Policy available on Council's website at www.northsydney.nsw.gov.au.

Arrangements for the collection and storage of trade waste bins must comply with the following:

- (a) Bins must be placed out for collection no earlier than 5.00 pm and no later than 10.00 pm on the day before collection.
- (b) All trade waste must be collected between the hours of 6.00 am and 10.00 am.
- (c) Waste and recycling bins are not to be stored permanently in streets and laneways unless specifically prescribed by Council in writing.

(Reason: To ensure compliance with Council's waste controls for the Crows Nest commercial area)

Delivery Hours

16. No deliveries, loading or unloading associated with the premises are to take place between the hours of 10.00 pm and 6.00 am on any day.

(Reason: To ensure the acoustic amenity of surrounding properties)

Maintenance of Structures on Public Land

17. The owner of the premises at 127-129 Willoughby Road, Crows Nest is to maintain the awning approved by this consent and located over Council's footpath, directly adjacent to the property. This awning must be maintained at all times to a structurally sound condition in order to provide an acceptable level of public safety.

(Reason: To ensure pedestrian and public safety and ensure that structures located on public land for private benefit are maintained to an acceptable standard)

J. Prior To the Issue of Any Subdivision Certificate (Land/Torrens/Stratum)

Sydney Water Compliance Certificate

- J1. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained prior to the release of a subdivision certificate.

The Section 73 Certificate must be submitted to the certifying authority or North Sydney Council with the documentation to enable the issue of the Strata Certificate.

Notes: Application must be made through an authorised Water Servicing Co-ordinator, for details see the Sydney Water web site <http://www.sydneywater.com.au/SW/plumbing-building-developing/developing/providers/lists/index.htm>, or telephone 13 20 92.

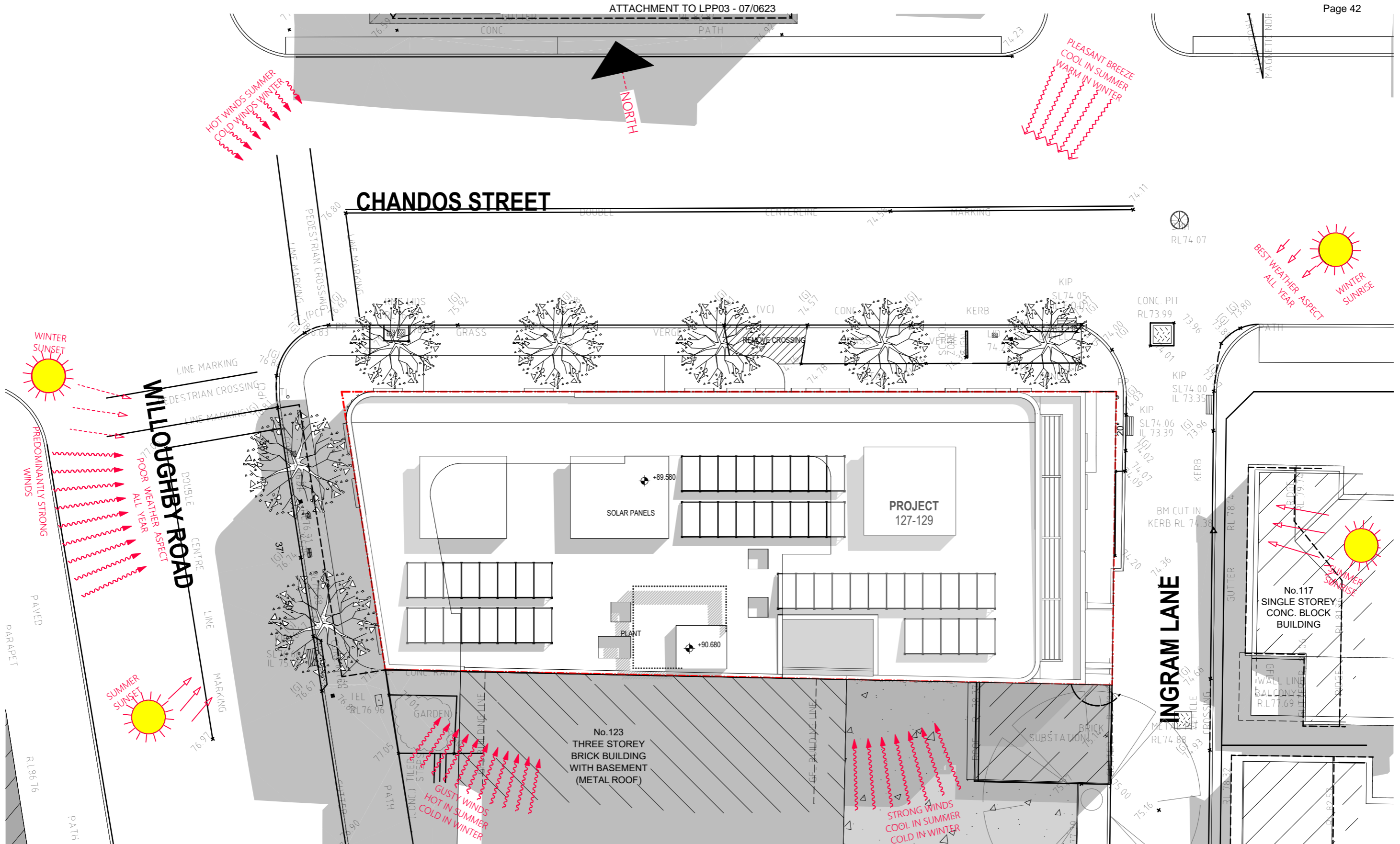
Following application, a 'Notice of Requirements' will be forwarded detailing water and sewer extensions to be built and charges to be paid. Please make early contact with the Coordinator since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

(Reason: To ensure compliance with Sydney Water requirements)

Services within Lots

- J2. A report must be provided by a Registered Surveyor certifying that all services (including but not limited to stormwater drainage, gas, electricity, telephone cable) as constructed or to be constructed are/will be contained within each lot or within the necessary easements to accommodate such services. The report must be submitted to the Certifying Authority for approval prior to the issue of any Subdivision Certificate.

(Reason: To ensure adequate servicing of the development)



SITE PLAN

1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud - BIMcloud Basic for ARCHICAD 24\WILL129

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
	B	20.06.22	UPDATE TO COUNCIL GUIDELINES		
	A	10.12.21	ORIGINAL ISSUE		

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SITE PLAN

SCALE: AS SHOWN

PA STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:	DA 10	ISSUE
SUBSET: PLANS	DA 101	
DRAWN BY: WH		B
FILE: WILL129		



LOCATION PLAN: 129 WILLOUGHBY ROAD, CROWS NEST

DRAWINGS TO BE APPROVED

D.No.	NAME	REV	DATE
COVER			
DA 001	COVER PAGE	B	20.06.22
PLANS			
DA 101	SITE PLAN	B	20.06.22
DA 102	LOWER GROUND FLOOR	B	20.06.22
DA 103	GROUND FLOOR	B	20.06.22
DA 104	FIRST FLOOR	B	20.06.22
DA 105	SECOND FLOOR	B	20.06.22
DA 106	ROOF FLOOR	B	20.06.22
SECTIONS			
DA 201	SECTIONS 01 & 02	B	20.06.22
DA 202	SECTION 03	B	20.06.22
ELEVATIONS			
DA 301	ELEVATIONS IN CONTEXT	B	20.06.22
DA 302	BUILDING ELEVATION	B	20.06.22
MATERIALS & FINISHES			
DA 401	LIST OF MATERIALS AND FINISHES	B	20.06.22
BASIX			
DA 501	BASIX COMMITMENTS	B	20.06.22
DA 502	BASIX COMMITMENTS	B	20.06.22

SUPPLEMENTARY DRAWINGS NOT REQUIRING APPROVAL

D.No.	NAME	REV	DATE
SHADOW DIAGRAMS & VIEWS FROM THE SUN			
DA 601	SHADOW DIAGRAMS 21 MAR	B	20.06.22
DA 602	SHADOW DIAGRAMS 21 JUNE	B	20.06.22
DA 603	SHADOW DIAGRAMS 21 SEPT	B	20.06.22
DA 604	VIEWS FROM THE SUN	B	20.06.22
SOLAR ACCESS & CROSS VENTILATION			
DA 701	ADG SOLAR	B	20.06.22
DA 702	ADG CROSS VENTILATION	B	20.06.22
ADAPTABLE UNIT DIAGRAMS			
DA 801	ADAPTABLE UNITS	B	20.06.22
3D VIEWS			
DA 901	3D VIEWS 01	B	20.06.22
DA 902	3D VIEWS 02	B	20.06.22
DA 903	3D VIEWS 03	B	20.06.22
3D VIEW SHOWING BUILDING HEIGHT BLANKETS			
DA 1001	3D VIEW SHOWING BUILDING HEIGHT BLANKETS	B	20.06.22
LANDSCAPE			
DA 1101	LANDSCAPE	B	20.06.22
NOTIFICATION PLAN			
DA 1201	NOTIFICATION PLAN	B	20.06.22
DEMOLITION			
DA 1301	DEMOLITION	B	20.06.22
SURVEY			
DA 1401	SURVEY		

General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24\WILL129

Printed 20/06/2022

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SCALE: AS SHOWN

P A S T U D I O
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID: **DA 00**

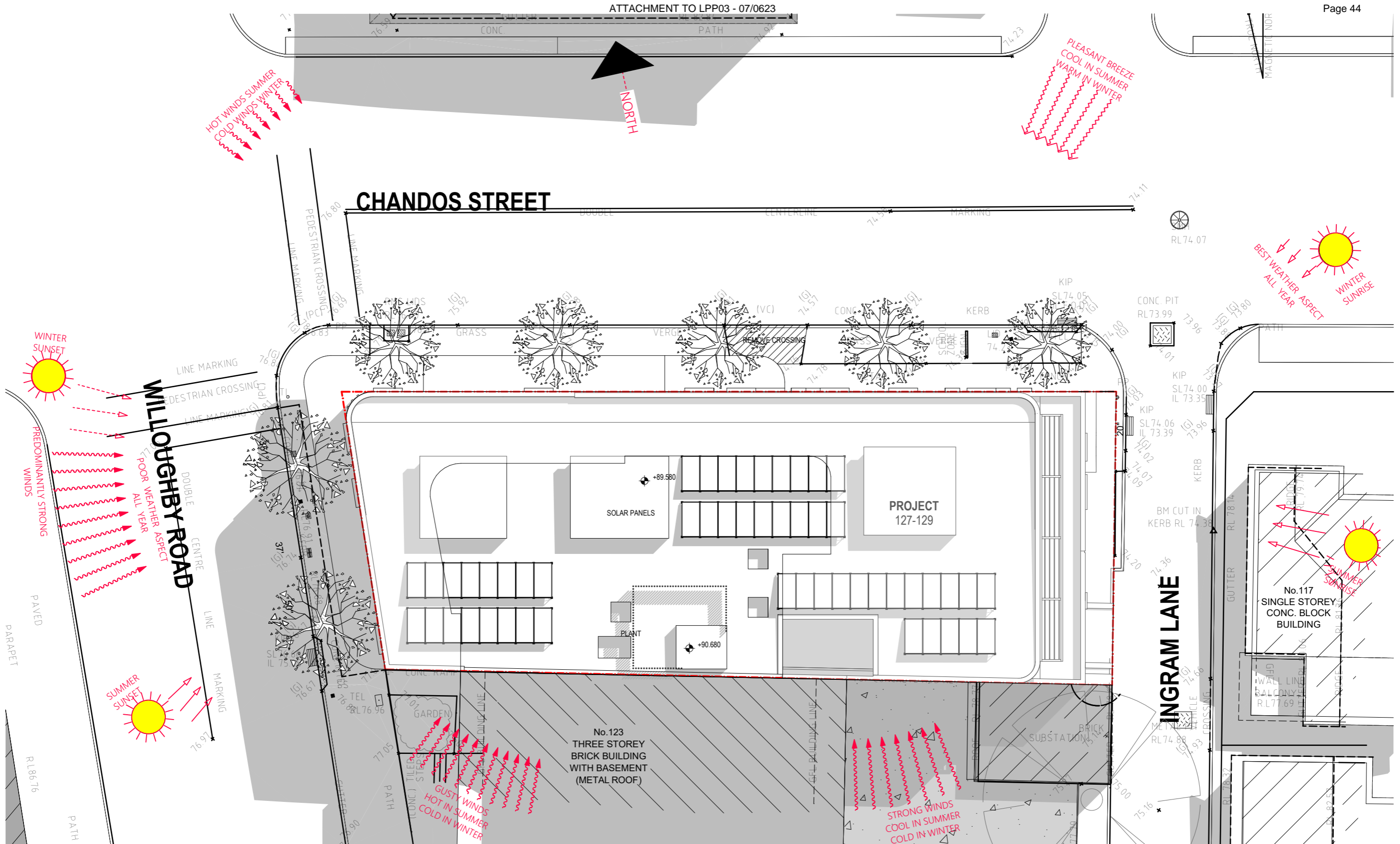
SUBSET: COVER

DRAWN BY: WH

FILE: WILL129

DA 001

ISSUE: **B**



SITE PLAN

1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey.

FILE PATH: BIMcloud - BIMcloud Basic for ARCHICAD 24\WILL129

Printed 20/06/2022

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
	B	20.06.22	UPDATE TO COUNCIL GUIDELINES		
	A	10.12.21	ORIGINAL ISSUE		

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SITE PLAN

SCALE: AS SHOWN

PA STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:	DA 10	ISSUE
SUBSET: PLANS	DA 101	
DRAWN BY: WH		B
FILE: WILL129		

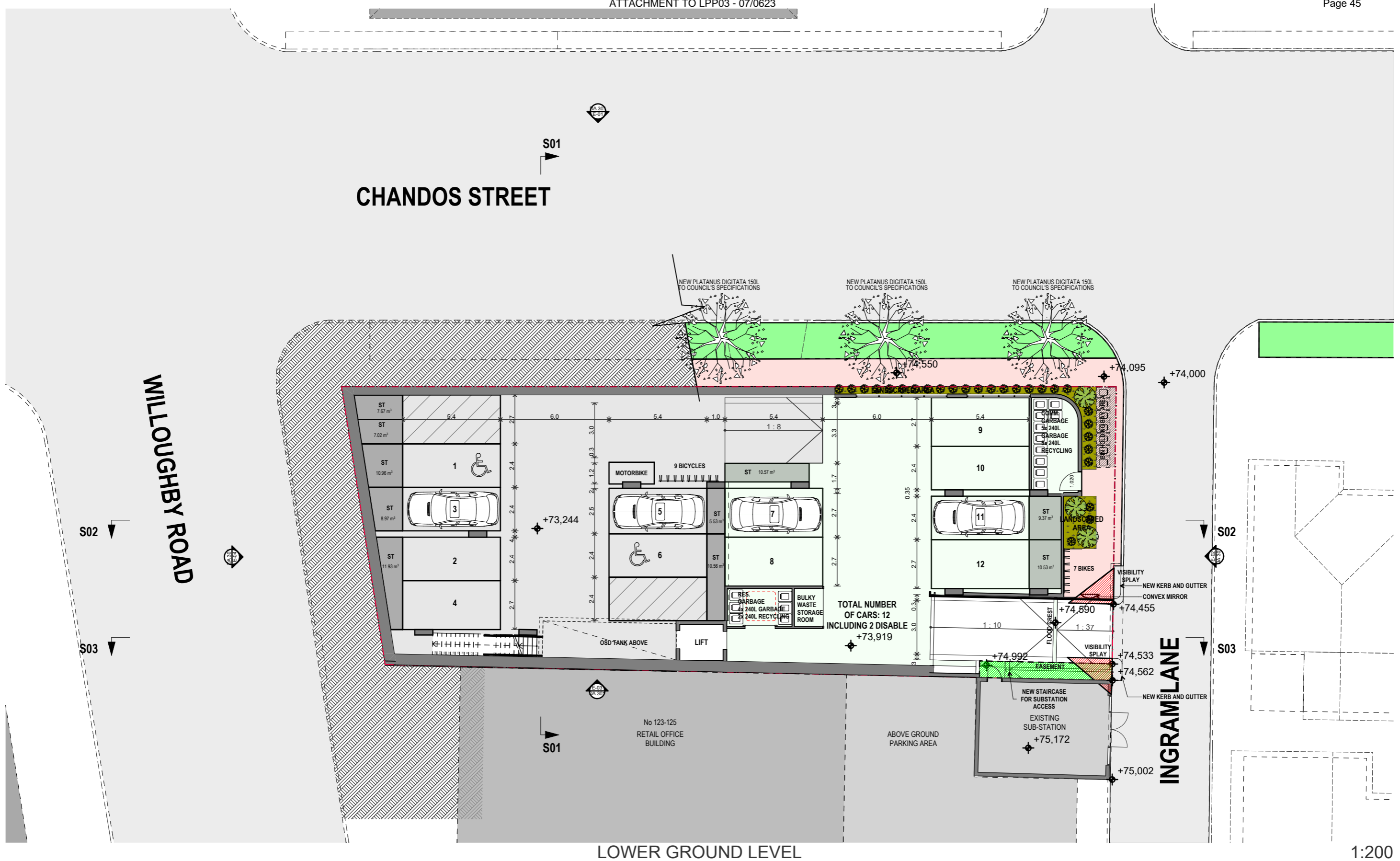
CHANDOS STREET

WILLOUGHBY ROAD

INGRAM LANE

LOWER GROUND LEVEL

1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: Z:\WILLOUGHBY RD 127-129\DA REV DWILL129.pln

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
D		09.02.23			
C		28.11.22			
B	UPDATE TO COUNCIL GUIDELINES	20.06.22			
A	ORIGINAL ISSUE	10.12.21			

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

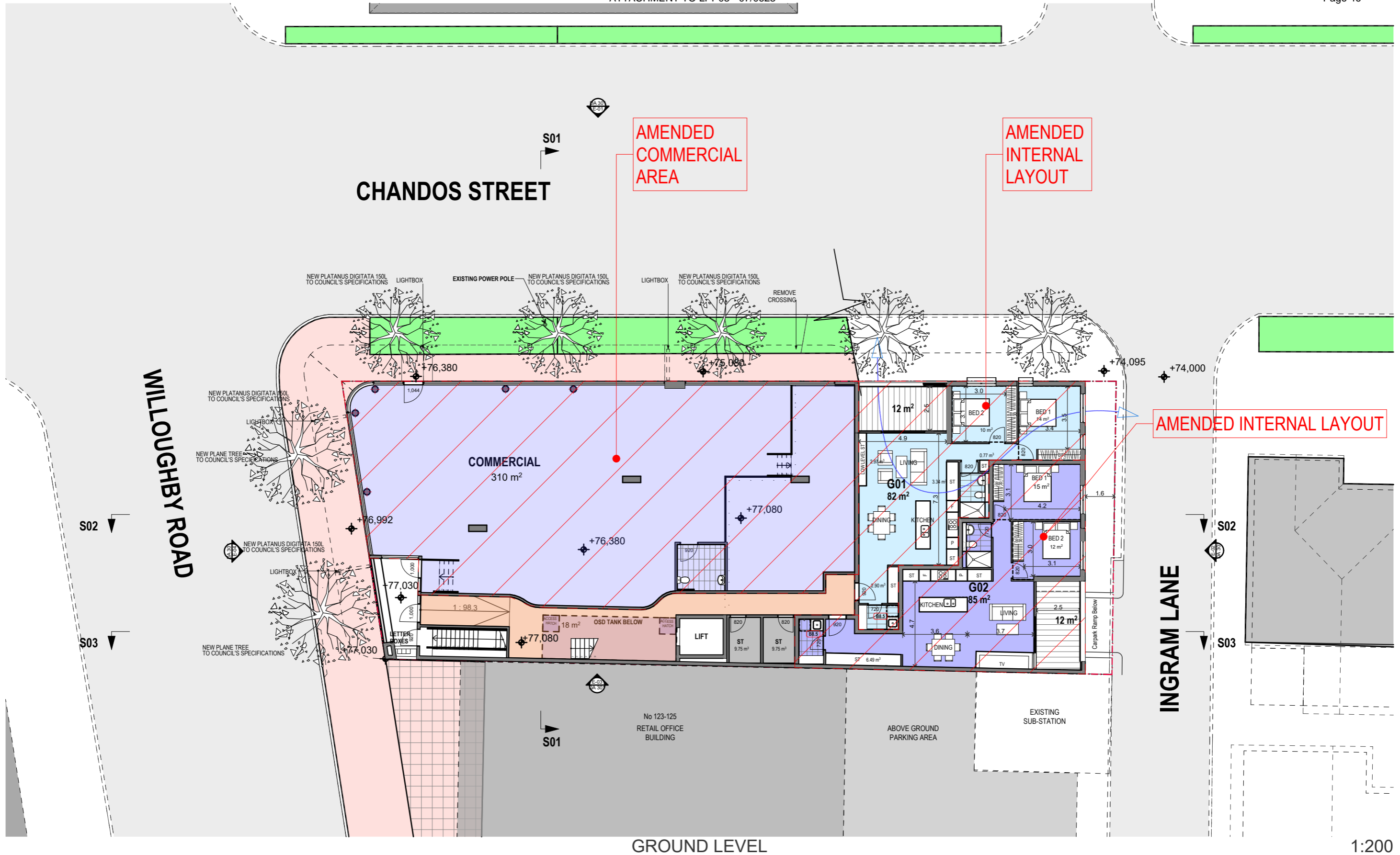
LOWER GROUND FLOOR

SCALE: AS SHOWN

P A STUDIO
 LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID: DA 10
 SUBSET: PLANS
 DRAWN BY: WH
 FILE: WILL129.pln

DA 10
DA 102
 ISSUE
 D



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

FILE PATH: Z:\WILLOUGHBY RD 127-129\DA REV DWILL129.pln

Printed 13/02/2023

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
			D		09.02.23
			C		28.11.22
			B	UPDATE TO COUNCIL GUIDELINES	20.06.22
			A	ORIGINAL ISSUE	10.12.21

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

GROUND FLOOR

SCALE: AS SHOWN

P A STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:	DA 10	ISSUE
SUBSET: PLANS	DA 103	
DRAWN BY: WH		D
FILE: WILL129.pln		

CHANDOS STREET

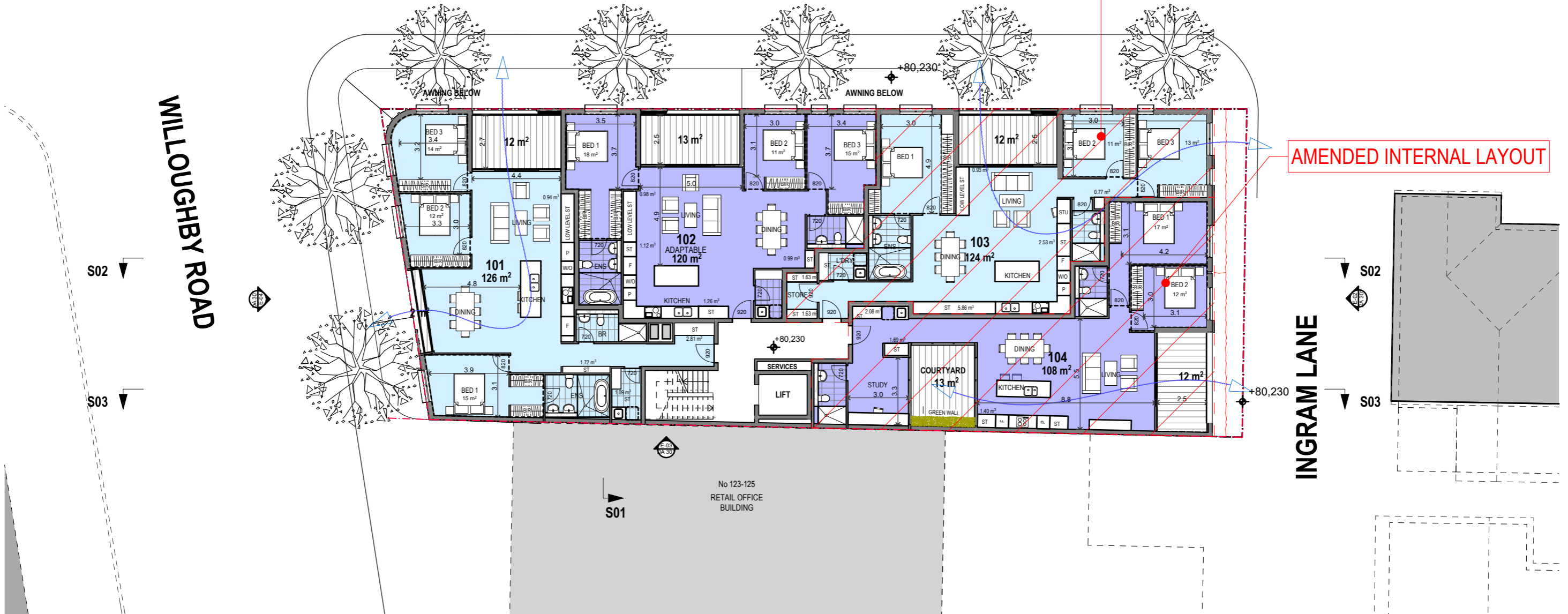
WILLOUGHBY ROAD

AMENDED INTERNAL LAYOUT

INGRAM LANE

FIRST LEVEL

1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 13/02/2023

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				D			09.02.23
				C			28.11.22
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485
 BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

FIRST FLOOR

SCALE: AS SHOWN

P A S T U D I O
 LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID: DA 10
 SUBSET: PLANS
 DRAWN BY: WH
 FILE: WILL129.pln

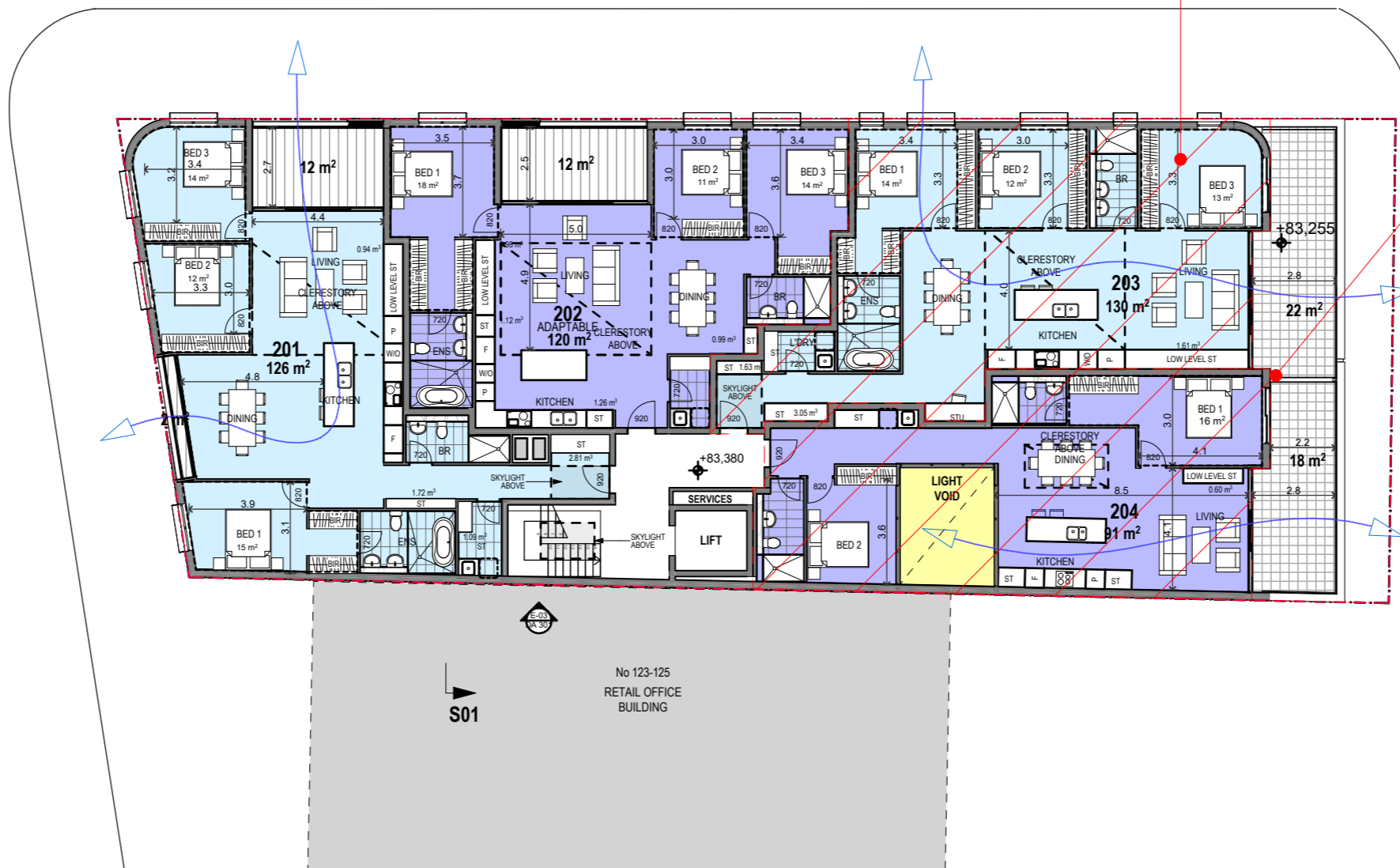
DA 10
 DA 104
 D



CHANDOS STREET

WILLOUGHBY ROAD

AMENDED INTERNAL LAYOUT



INGRAM LANE

SECOND LEVEL

1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 13/02/2023

FILE PATH: Z:\WILLOUGHBY RD 127-129\DA REV DWILL129.pln

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				D			09.02.23
				C			28.11.22
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29
 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485
 BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SECOND FLOOR

SCALE:
 AS SHOWN

P A S T U D I O
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:
 SUBSET:
 PLANS
 DRAWN BY: WH
 FILE: WILL129.pln

DA 10

DA 105

ISSUE

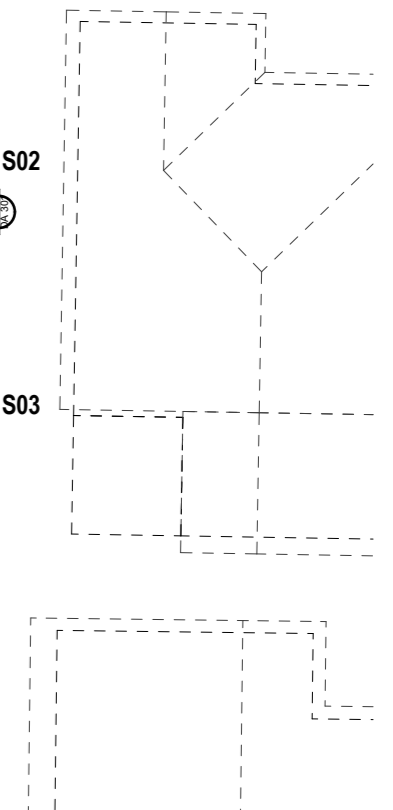
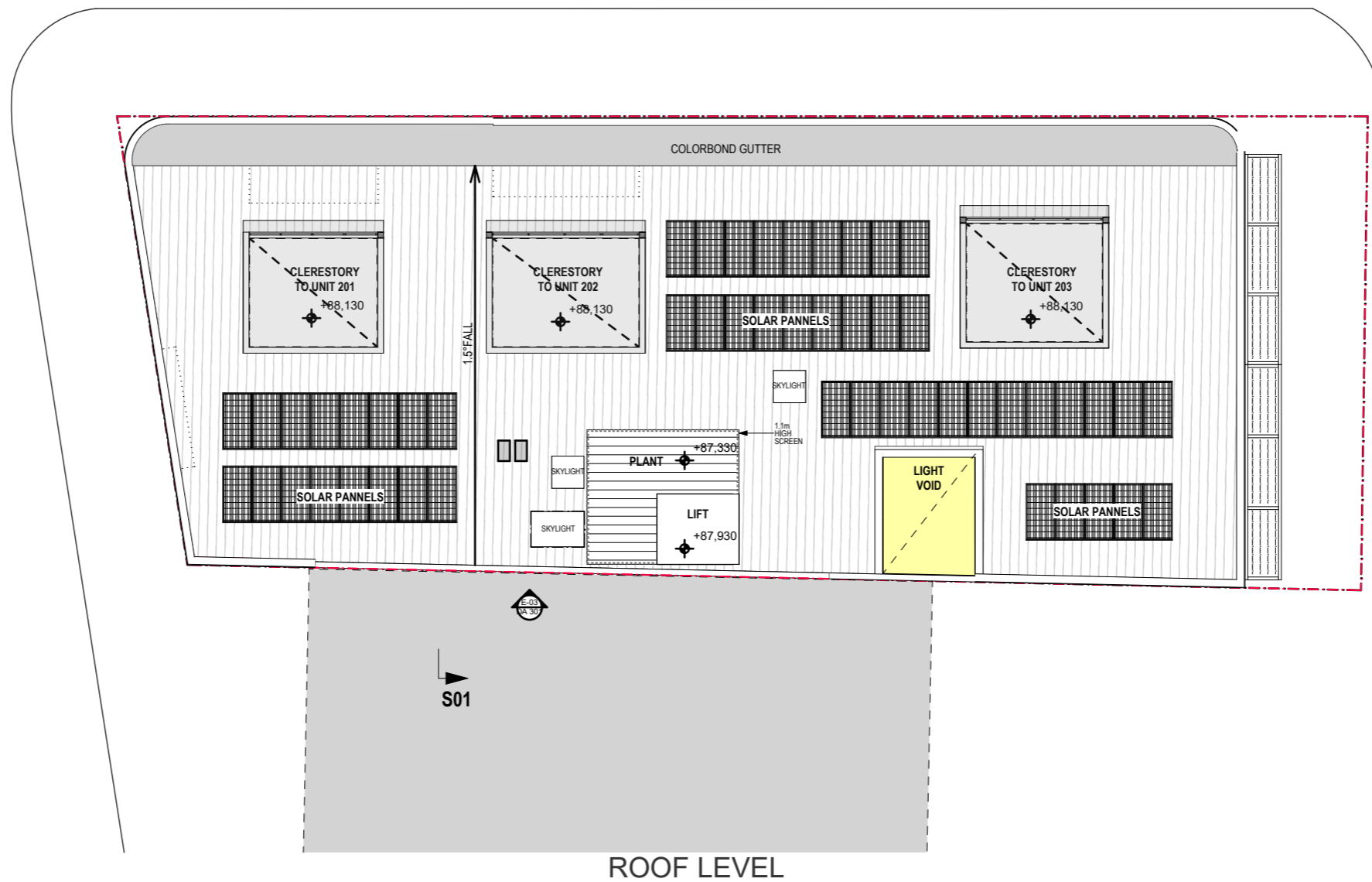
D



CHANDOS STREET

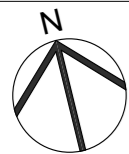
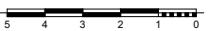
WILLOUGHBY ROAD

INGRAM LANE



1:200

ROOF LEVEL



General Notes
The Builder shall check all dimensions and levels on site prior to construction.
Notify any errors, discrepancies or omissions to the architect.
Drawings shall not be used for construction purposes until issued for construction.
Do not scale drawings.
All boundaries and contours subject to survey

Printed 13/02/2023

FILE PATH: Z:\WILLOUGHBY RD 127-129\DA REV DWILL129.pln

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				D			09.02.23
				C			28.11.22
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29
WILLOUGHBY ROAD, CROWS NEST
LOT 2 DP 933485
BUILDING PRACTITIONER: GEORGE REVAY
QUALIFICATION: ARCHITECT (Reg No. 3954)

ROOF FLOOR

SCALE:
AS SHOWN

PA STUDIO
LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

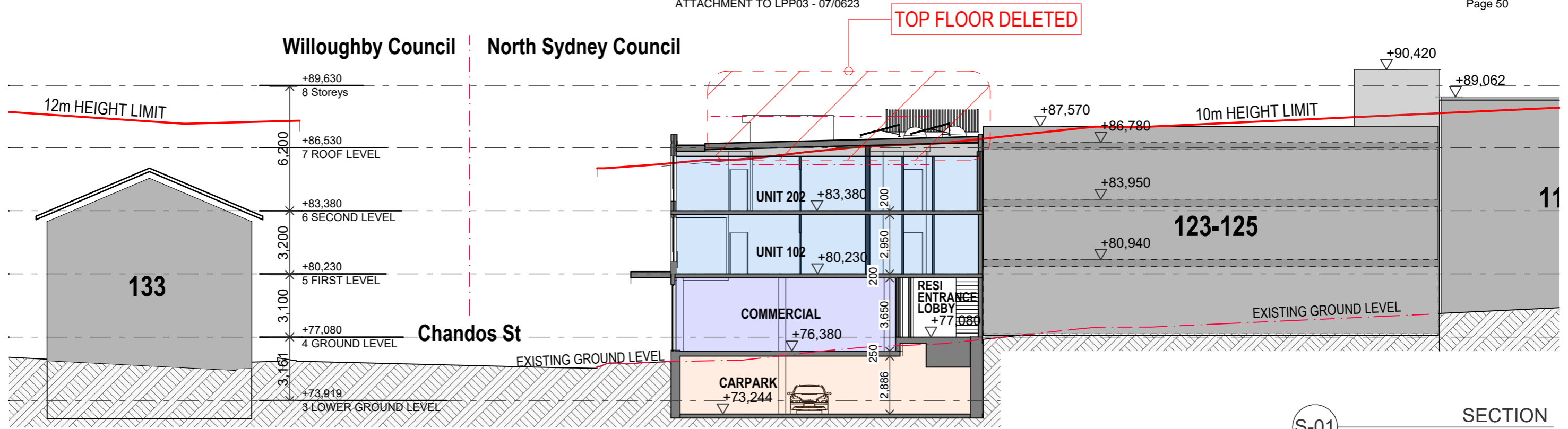
DRAWING SET ID:
SUBSET:
PLANS
DRAWN BY: WH
FILE: WILL129.pln

DA 10

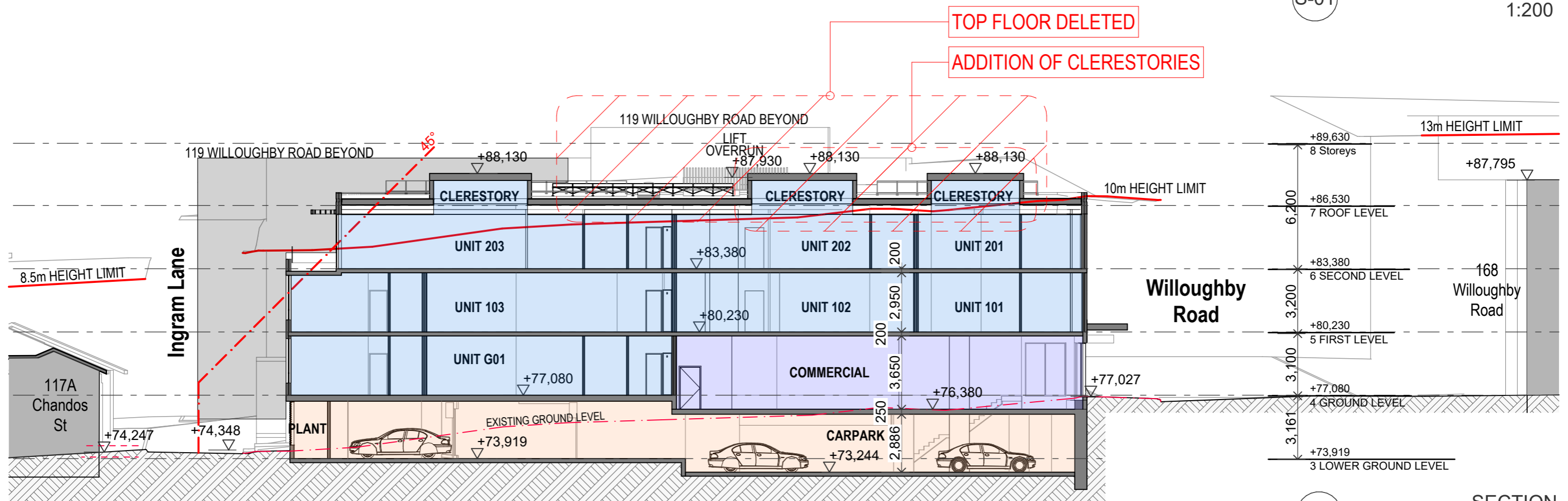
DA 106

ISSUE

D



S-01 SECTION 1:200



S-02 SECTION 1:200

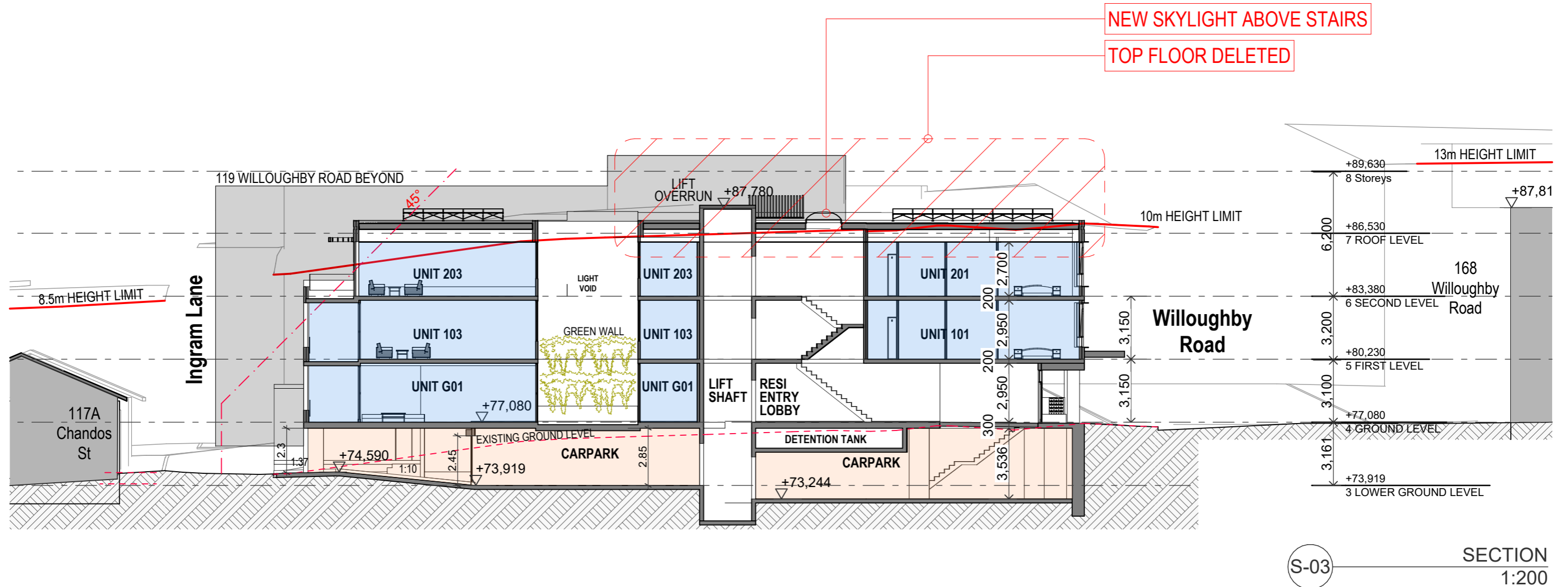
General Notes
 The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey.
 FILE PATH: BIMcloud - BIMcloud Basic for ARCHICAD 24/WILL129
Printed 20/06/2022

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
	B		20.06.22	UPDATE TO COUNCIL GUIDELINES			
	A		10.12.21	ORIGINAL ISSUE			

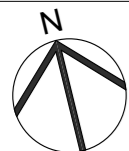
MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485
 BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SECTIONS 01 & 02
 SCALE: AS SHOWN
PA STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:	DA 20	ISSUE
SUBSET: SECTIONS	DA 201	
DRAWN BY: WH		B
FILE: WILL129		



S-03 SECTION 1:200



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud Basic for ARCHICAD 24/WILL129

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

SECTION 03

SCALE: AS SHOWN

PA STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 20

SUBSET: SECTIONS

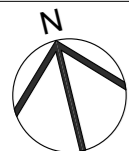
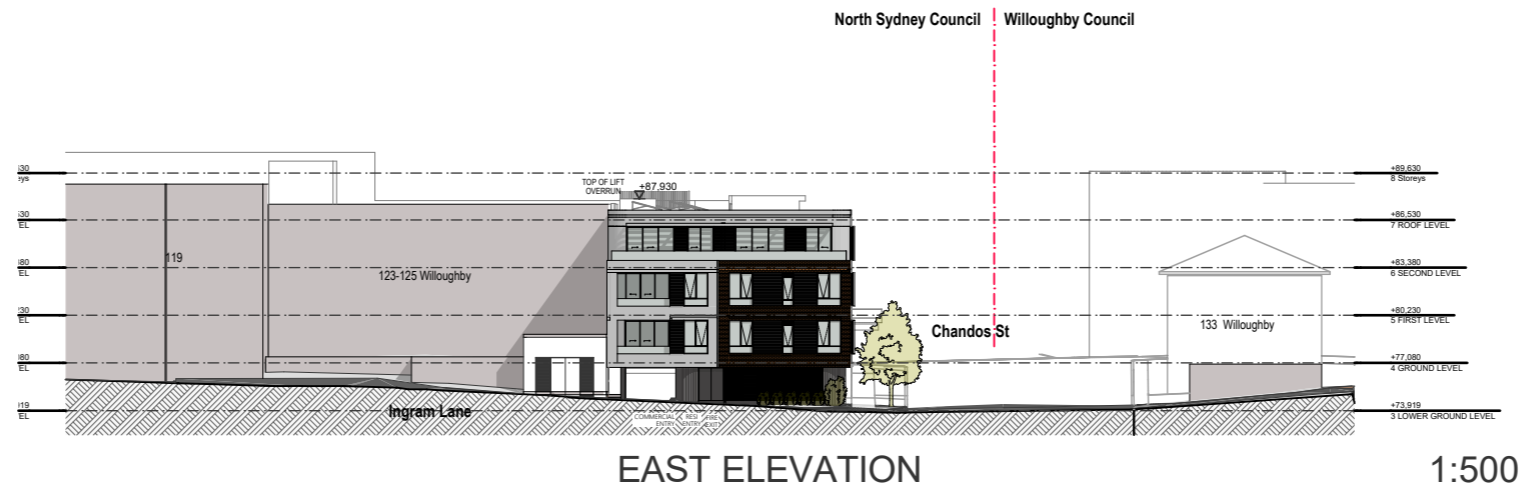
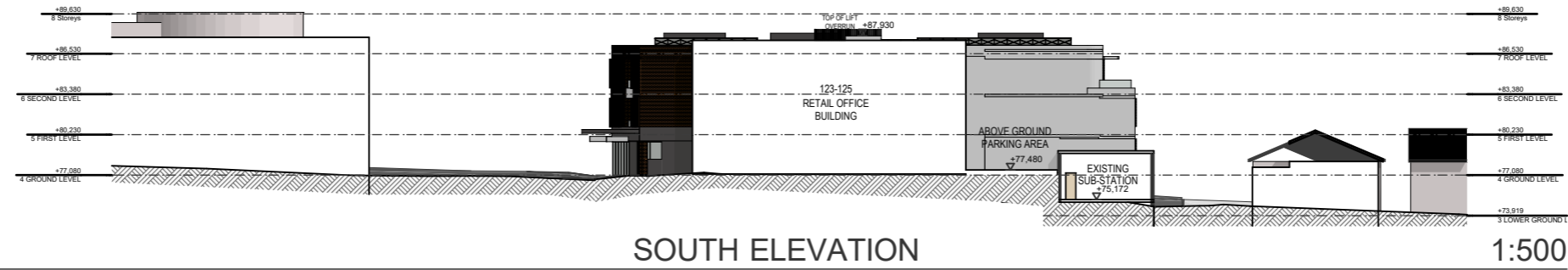
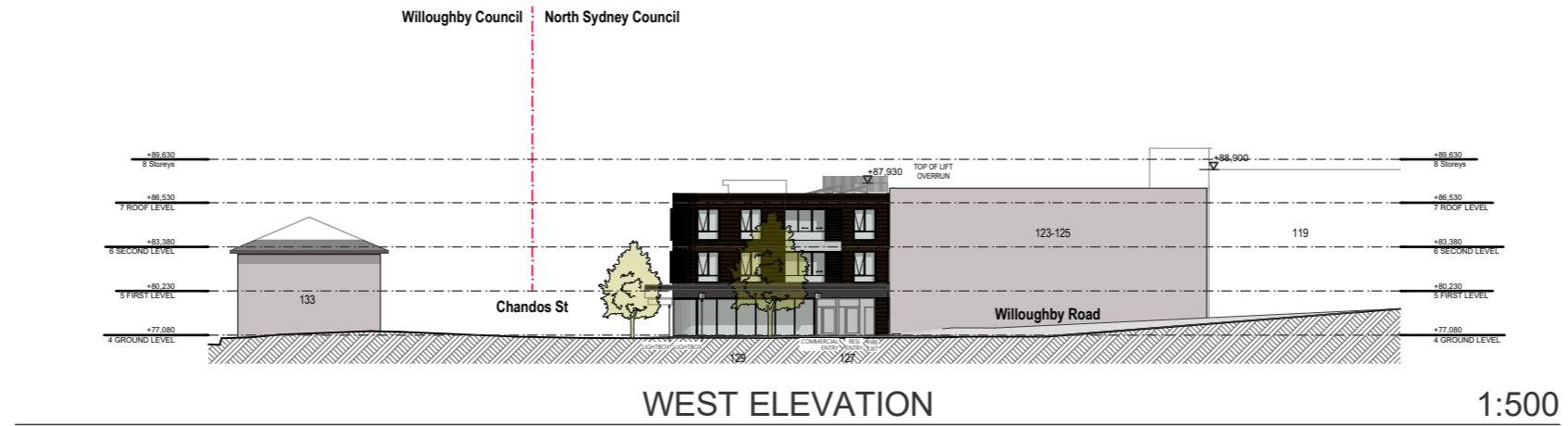
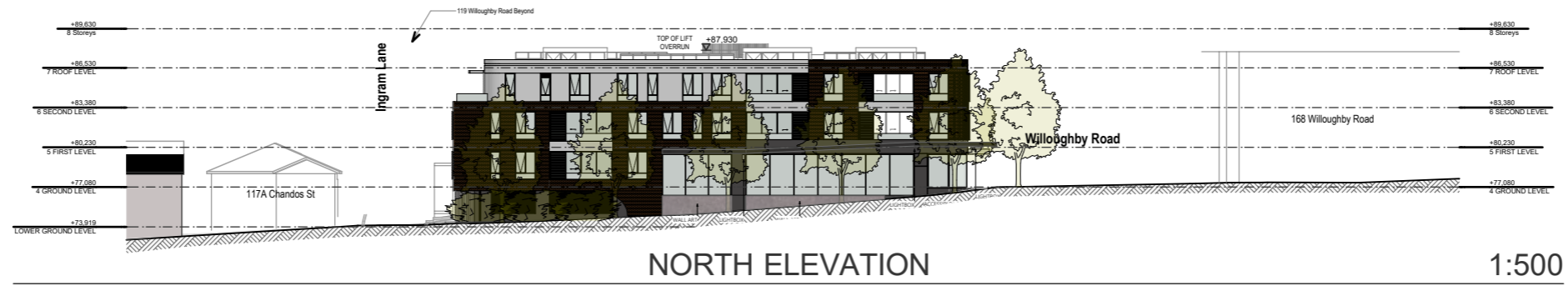
DA 202

DRAWN BY: WH

FILE: WILL129

ISSUE

B



General Notes
 The Builder shall check all dimensions and levels on site prior to construction.
 Notify any errors, discrepancies or omissions to the architect.
 Drawings shall not be used for construction purposes until issued for construction.
 Do not scale drawings.
 All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24/WILL129

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

**MIXED USE DEVELOPMENT AT 127-29
 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485**

BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

ELEVATIONS IN CONTEXT

SCALE:
 AS SHOWN

PA STUDIO
 LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 30

SUBSET:
 ELEVATIONS

DA 301

DRAWN BY: WH

FILE: WILL129

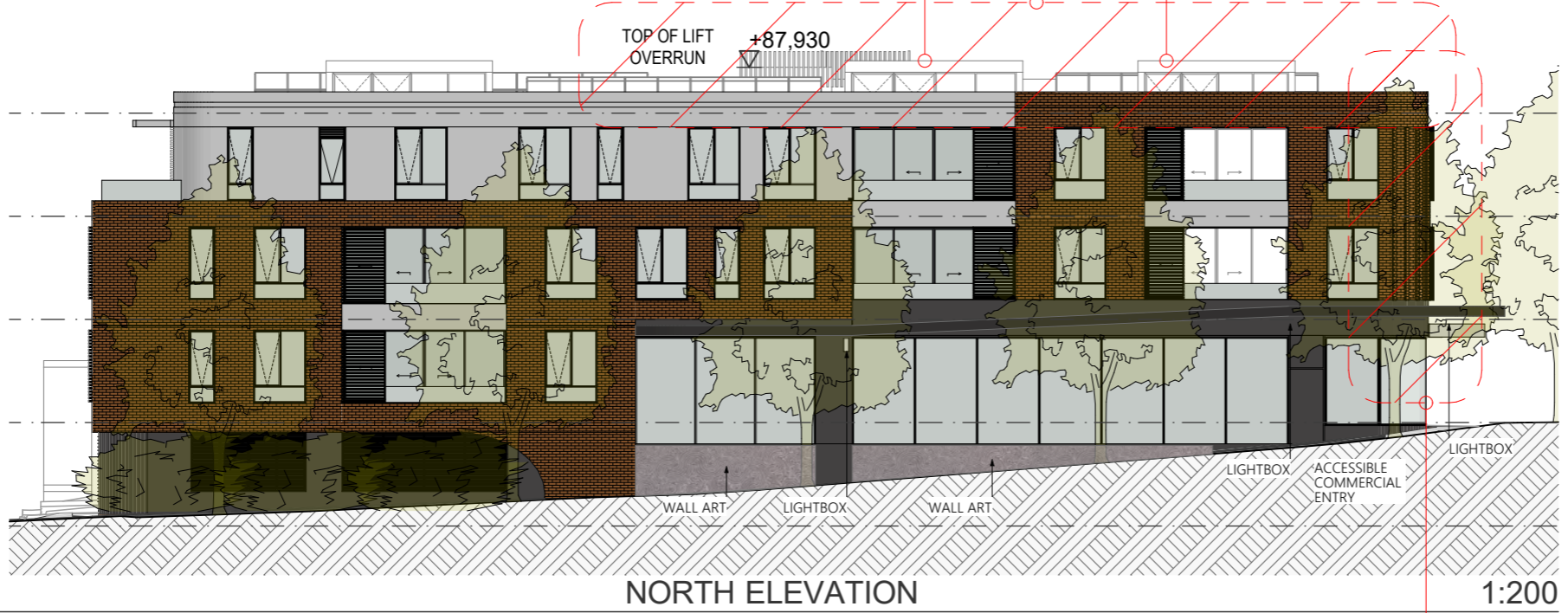
ISSUE

B

ADDITION OF CLERESTORIES

TOP FLOOR DELETED

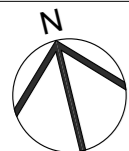
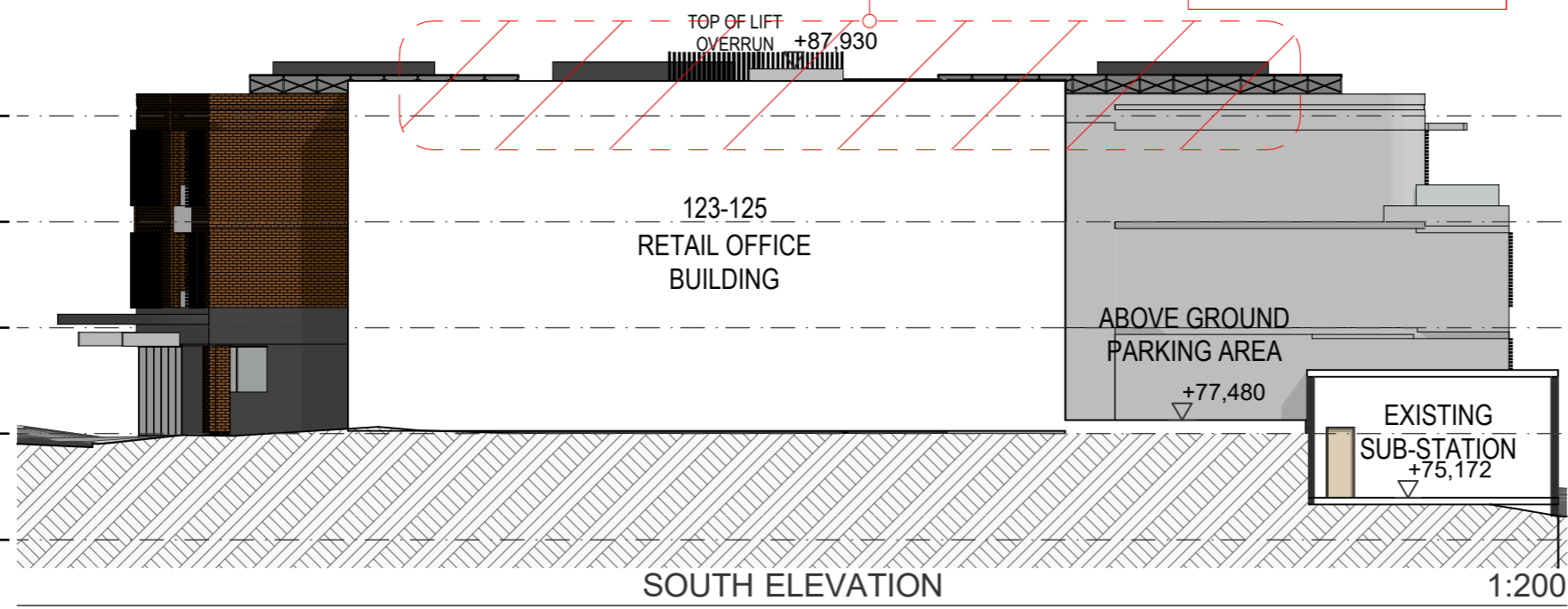
+86,530
7 ROOF LEVEL
+83,380
6 SECOND LEVEL
+80,230
5 FIRST LEVEL
+77,080
4 GROUND LEVEL
+73,919
3 LOWER GROUND LEVEL



NEW DETAILING TO N/E FACADE CORNER

TOP FLOOR DELETED

+86,530
7 ROOF LEVEL
+83,380
6 SECOND LEVEL
+80,230
5 FIRST LEVEL
+77,080
4 GROUND LEVEL
+73,919
3 LOWER GROUND LEVEL



General Notes
The Builder shall check all dimensions and levels on site prior to construction.
Notify any errors, discrepancies or omissions to the architect.
Drawings shall not be used for construction purposes until issued for construction.
Do not scale drawings.
All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24/WILL129

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
	B		UPDATE TO COUNCIL GUIDELINES		20.06.22
	A		ORIGINAL ISSUE		10.12.21

MIXED USE DEVELOPMENT AT 127-29
WILLOUGHBY ROAD, CROWS NEST

LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY

QUALIFICATION: ARCHITECT (Reg No. 3954)

SCALE:

AS SHOWN

BUILDING ELEVATION

PA STUDIO

LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 30

SUBSET:
ELEVATIONS

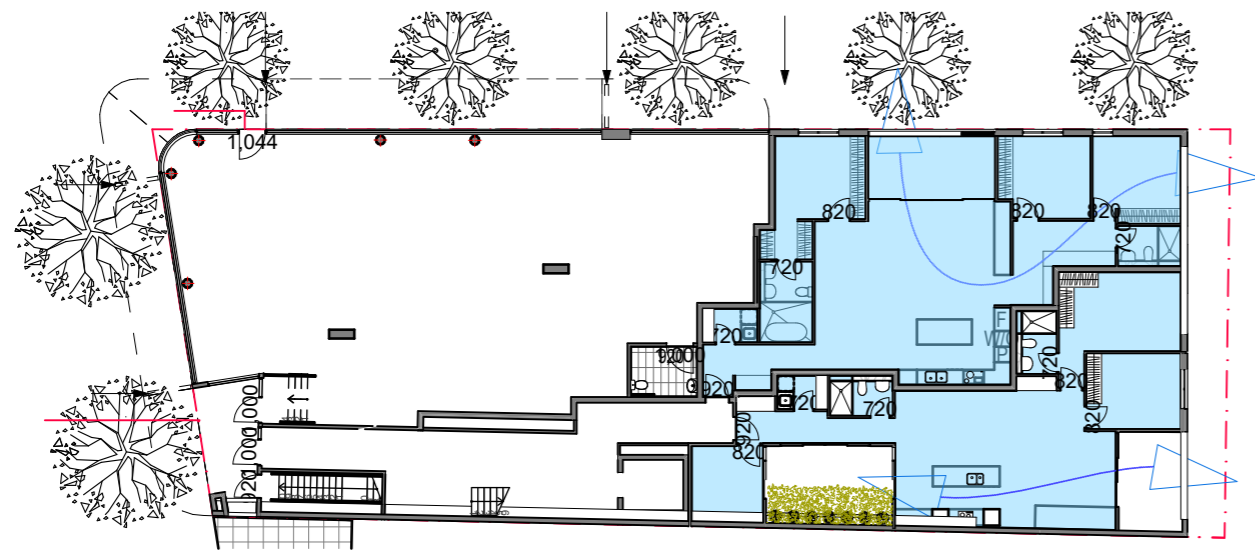
DRAWN BY: WH

FILE: WILL129

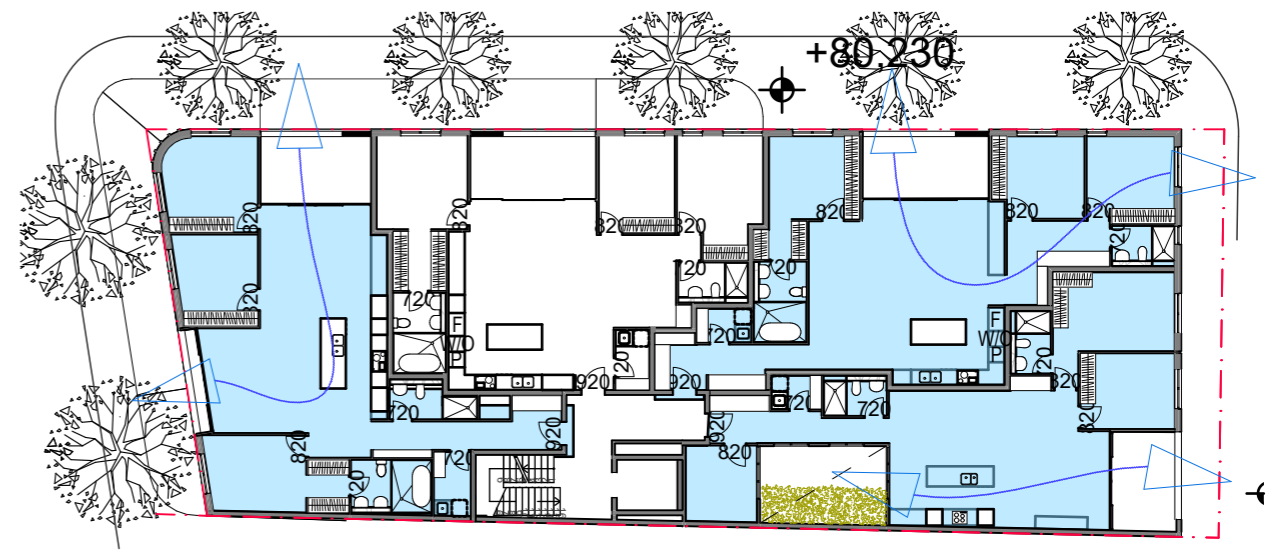
DA 302

ISSUE

B

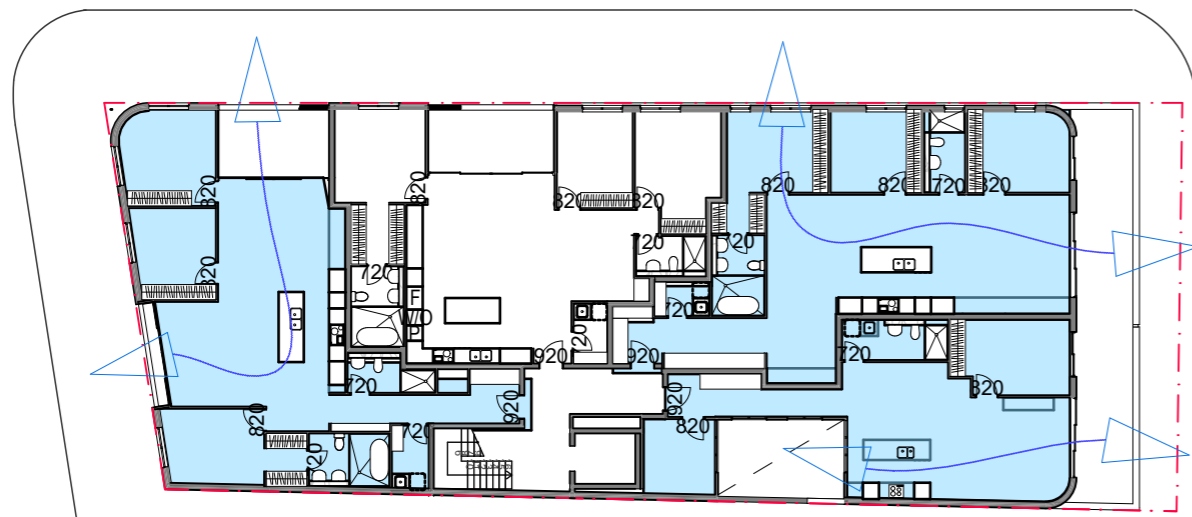


GROUND LEVEL

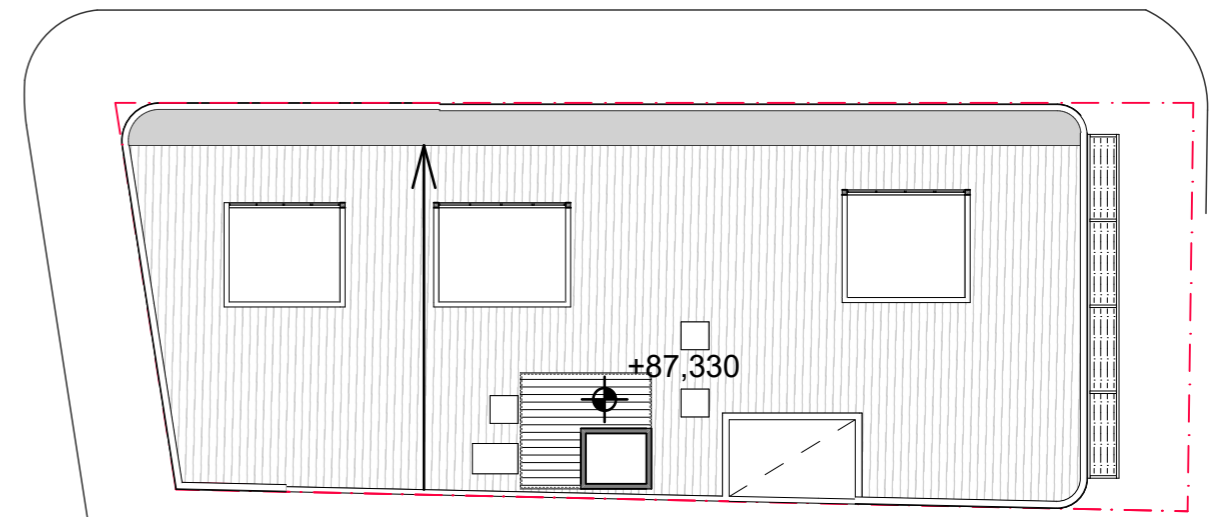


FIRST LEVEL

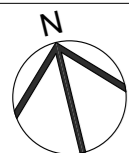
**UNITS WITH CROSS VENTILATION:
9 OUT OF 10 - 90% OF UNITS**



SECOND LEVEL



ROOF LEVEL



General Notes
The Builder shall check all dimensions and levels on site prior to construction.
Notify any errors, discrepancies or omissions to the architect.
Drawings shall not be used for construction purposes until issued for construction.
Do not scale drawings.
All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24\WILL129

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
				B	UPDATE TO COUNCIL GUIDELINES		20.06.22
				A	ORIGINAL ISSUE		10.12.21

**MIXED USE DEVELOPMENT AT 127-29
WILLOUGHBY ROAD, CROWS NEST**

LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY

QUALIFICATION: ARCHITECT (Reg No. 3954)

ADG CROSS VENTILATION

SCALE:
AS SHOWN

PA STUDIO
LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 70

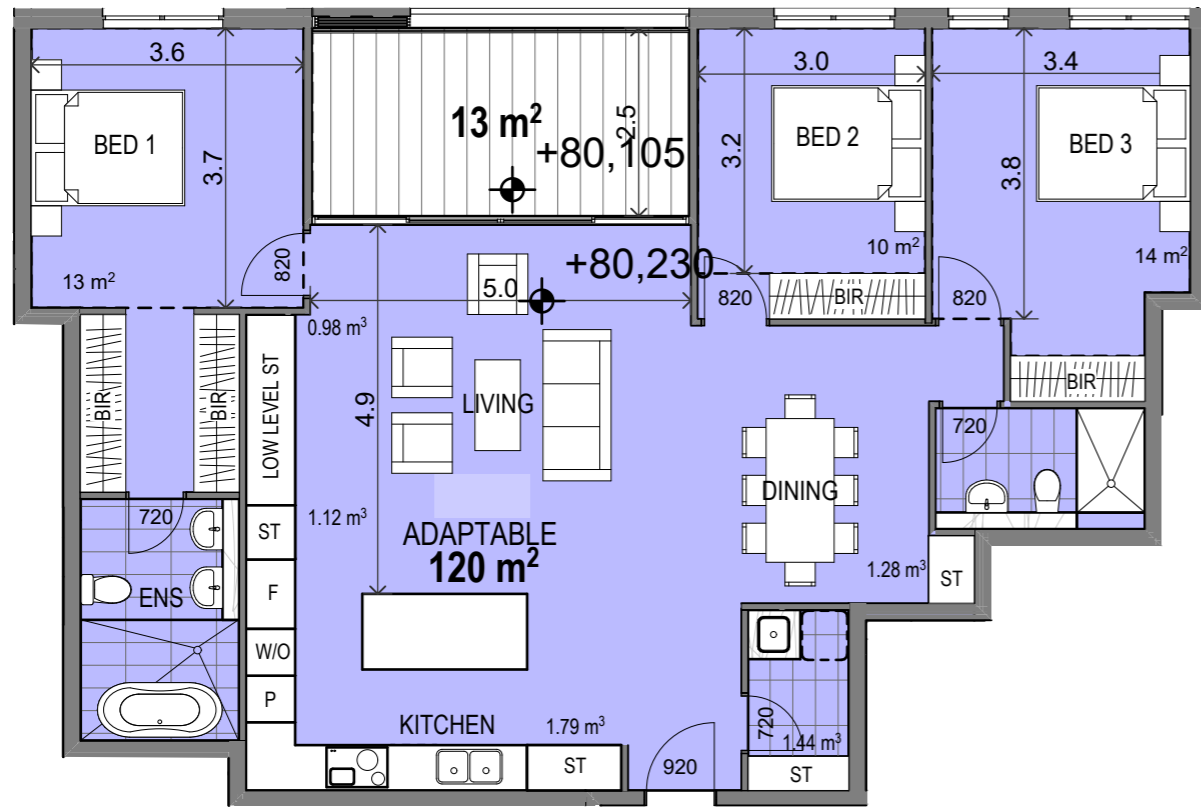
ADG ACCESS &
CROSS
VENTILATION
DRAWN BY: WH

DA 702

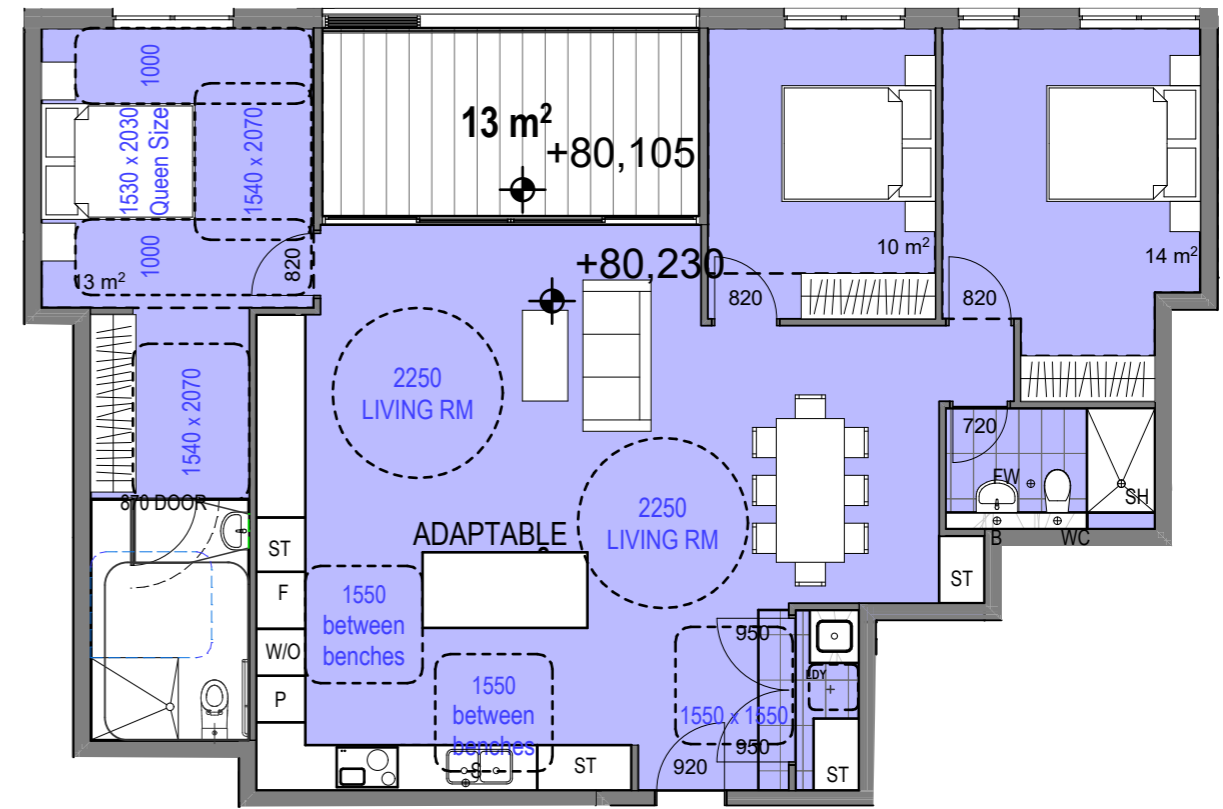
FILE: WILL129

ISSUE

B



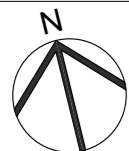
PRE ADAPTATION 1:100



POST ADAPTATION 1:100

ADAPTABLE UNITS 102 & 202

PRELIMINARY



General Notes
The Builder shall check all dimensions and levels on site prior to construction.
Notify any errors, discrepancies or omissions to the architect.
Drawings shall not be used for construction purposes until issued for construction.
Do not scale drawings.
All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: Bimcloud - BIMcloud Basic for ARCHICAD 24\WILL129

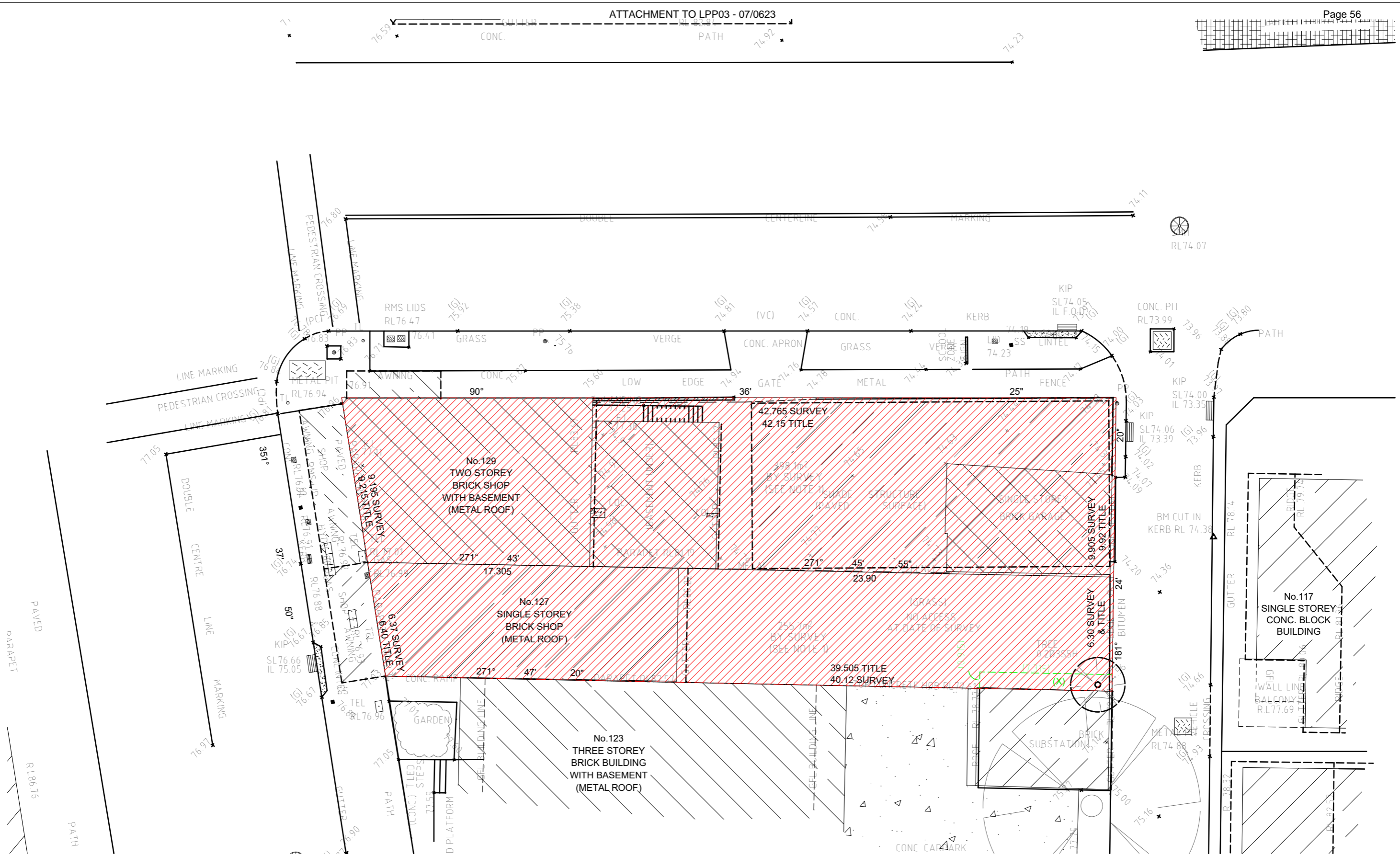
ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
			A	ORIGINAL ISSUE	10.12.21

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST	
LOT 2 DP 933485	
BUILDING PRACTITIONER:	GEORGE REVAY
QUALIFICATION:	ARCHITECT (Reg No. 3954)

ADAPTABLE UNITS	
SCALE:	AS SHOWN
PA STUDIO LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288	

DRAWING SET ID:	DA 80
SUBSET: ADAPTABLE UNIT DIAGRAMS	DA 801
DRAWN BY: WH	
FILE: WILL129	

ISSUE



DEMOLITION
1:200



General Notes
The Builder shall check all dimensions and levels on site prior to construction.
Notify any errors, discrepancies or omissions to the architect.
Drawings shall not be used for construction purposes until issued for construction.
Do not scale drawings.
All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud Basic for ARCHICAD 24\WILL129

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
	B	20.06.22	UPDATE TO COUNCIL GUIDELINES		
	A	10.12.21	ORIGINAL ISSUE		

**MIXED USE DEVELOPMENT AT 127-29
WILLOUGHBY ROAD, CROWS NEST**
LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
QUALIFICATION: ARCHITECT (Reg No. 3954)

DEMOLITION

SCALE:
AS SHOWN

PA STUDIO
LEVEL 2, 20 YOUNG ST, NEUTRAL BAY, NSW 2089
TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 130

SUBSET:
DEMOLITION

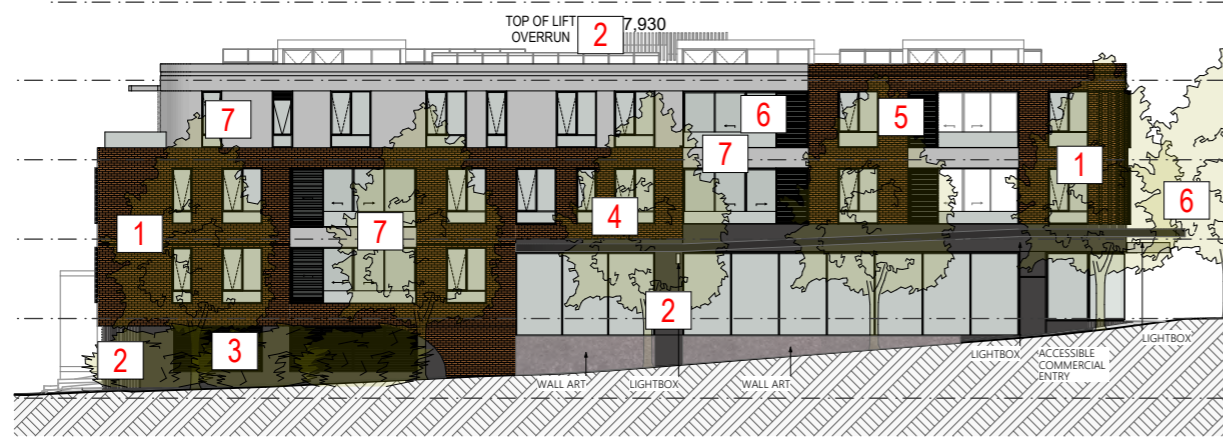
DRAWN BY: WH

FILE: WILL129

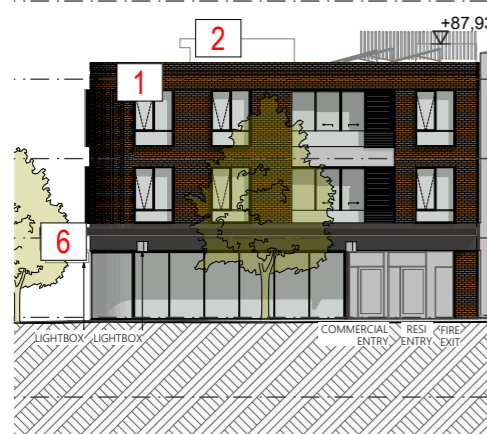
DA 1301

ISSUE

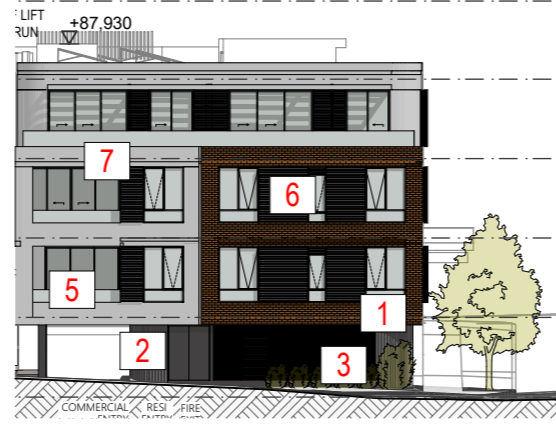
B



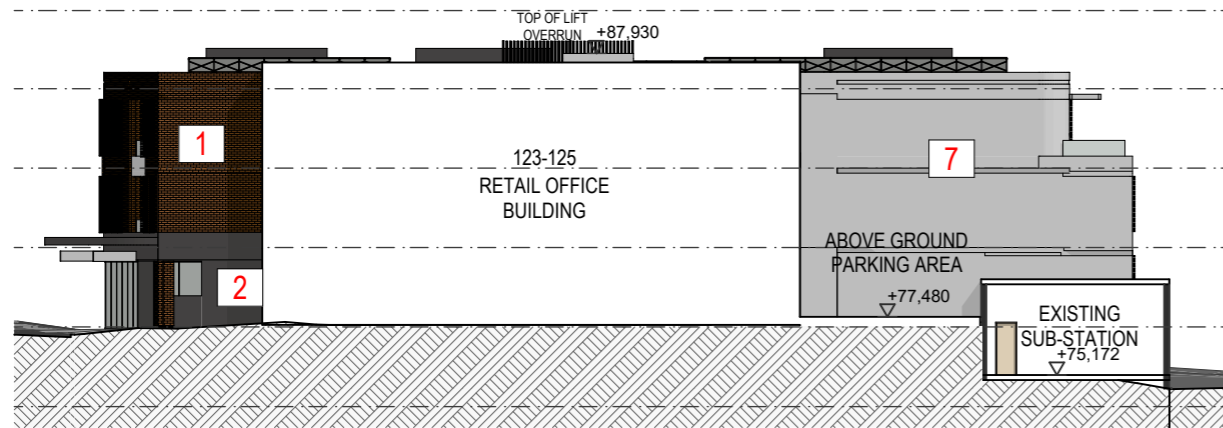
E-01 NORTH ELEVATION
1:300



E-04 WEST ELEVATION
1:300

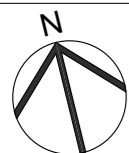


E-02 EAST ELEVATION
1:300



E-03 SOUTH ELEVATION
1:300

CODE	LOCATION	TYPE	SAMPLE
1	EXTERNAL WALLS	BOWRAL BROWN BRICKS	
2	EXTERNAL WALLS	DULUX - MONUMENT PAINT	
3	METAL LOUVERS	MONUMENT POWDERCOAT FINISH	
4	BALUSTRADE	CLEAR GLAZED	
5	BALCONY CEILING AWNING SOFFIT	ALUMINIUM BATTENS WITH TIMBER PRINT	
6	METAL ELEMENTS - BALCONY	MONUMENT POWDERCOAT FINISH	
7	EXTERNAL WALLS	DULUX - MENISCUS	



General Notes
The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey

Printed 20/06/2022

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24/WILL129

ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE	ISSUE	REVISIONS	COUNCIL BUILDER OTHERS	DATE
	B		20.06.22		UPDATE TO COUNCIL GUIDELINES		
	A		10.12.21		ORIGINAL ISSUE		

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
LOT 2 DP 933485

BUILDING PRACTITIONER: GEORGE REVAY
QUALIFICATION: ARCHITECT (Reg No. 3954)

LIST OF MATERIALS AND FINISHES

SCALE: AS SHOWN
PA STUDIO
LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

DRAWING SET ID:

DA 40

SUBSET: MATERIALS & FINISHES

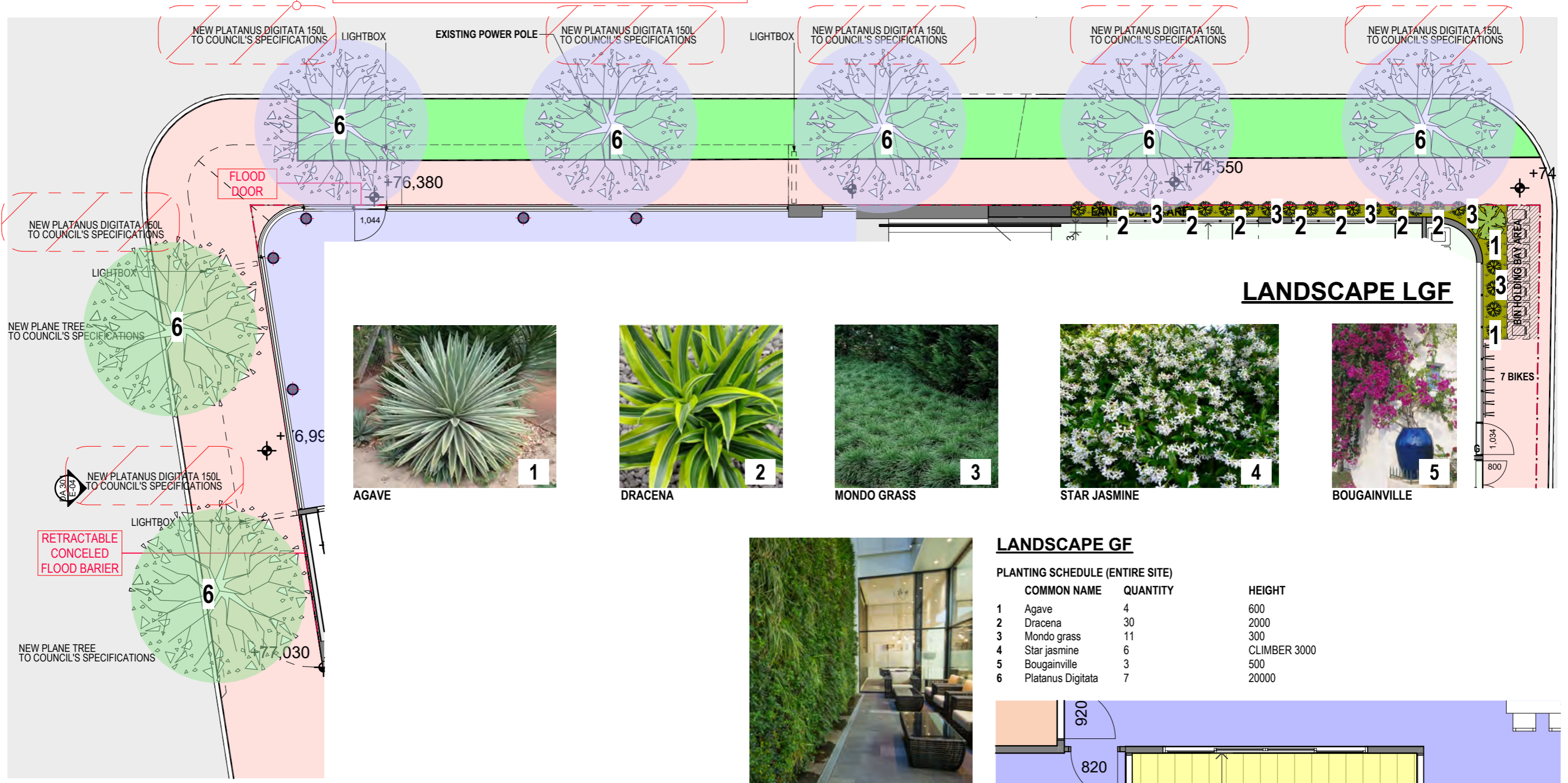
DA 401

DRAWN BY: WH

FILE: WILL129

ISSUE

B



1 AGAVE



2 DRACENA



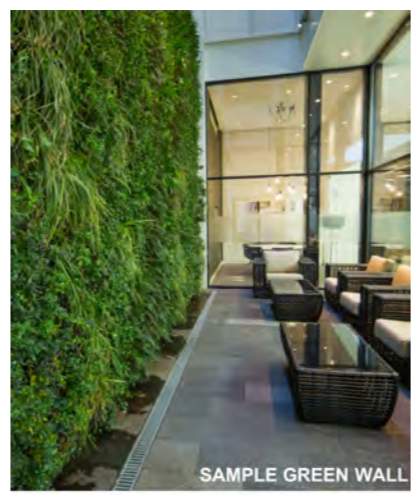
3 MONDO GRASS



4 STAR JASMINE



5 BOUGAINVILLE

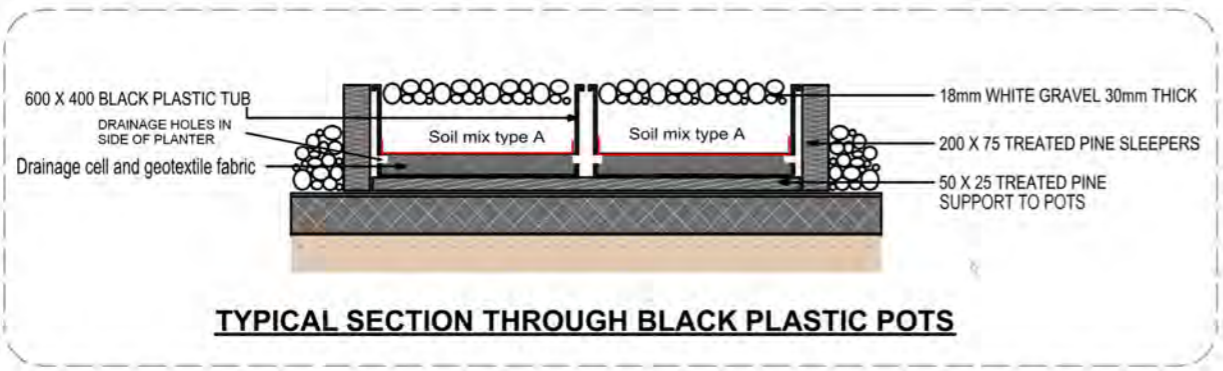


SAMPLE GREEN WALL

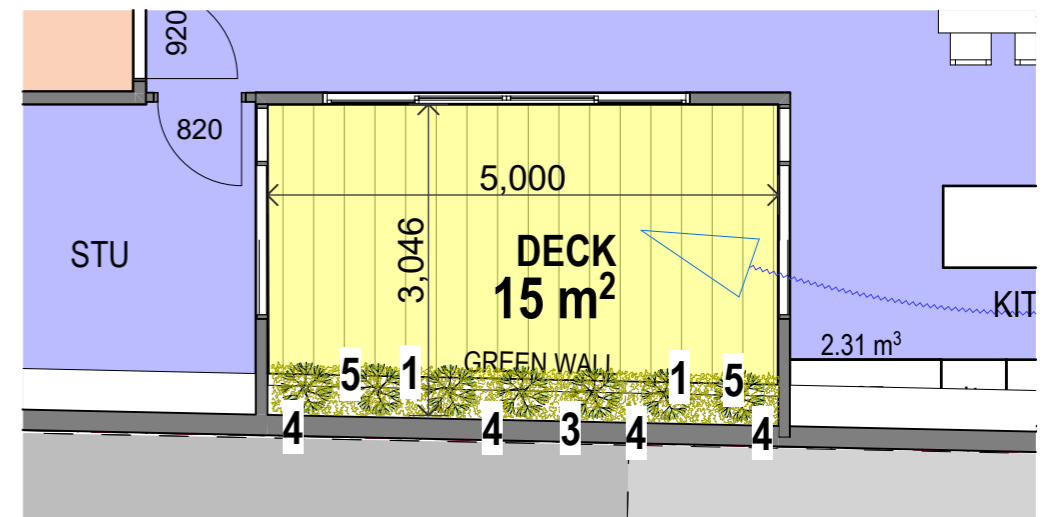
LANDSCAPE GF

PLANTING SCHEDULE (ENTIRE SITE)

COMMON NAME	QUANTITY	HEIGHT
1 Agave	4	600
2 Dracena	30	2000
3 Mondo grass	11	300
4 Star jasmine	6	CLIMBER 3000
5 Bougainville	3	500
6 Platanus Digitata	7	20000



TYPICAL SECTION THROUGH BLACK PLASTIC POTS



GREEN WALL (GF)

General Notes
 The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey.

FILE PATH: BIMcloud: BIMcloud - BIMcloud Basic for ARCHICAD 24/WILL129

Printed 20/06/2022

ISSUE	REVISIONS	DATE	ISSUE	REVISIONS	DATE
	B	20.06.22	UPDATE TO COUNCIL GUIDELINES		
	A	10.12.21	ORIGINAL ISSUE		

MIXED USE DEVELOPMENT AT 127-29 WILLOUGHBY ROAD, CROWS NEST
 LOT 2 DP 933485
 BUILDING PRACTITIONER: GEORGE REVAY
 QUALIFICATION: ARCHITECT (Reg No. 3954)

LANDSCAPE

SCALE: AS SHOWN

PA STUDIO
 LEVEL 2, 20 YOUNG ST. NEUTRAL BAY, NSW 2089
 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288

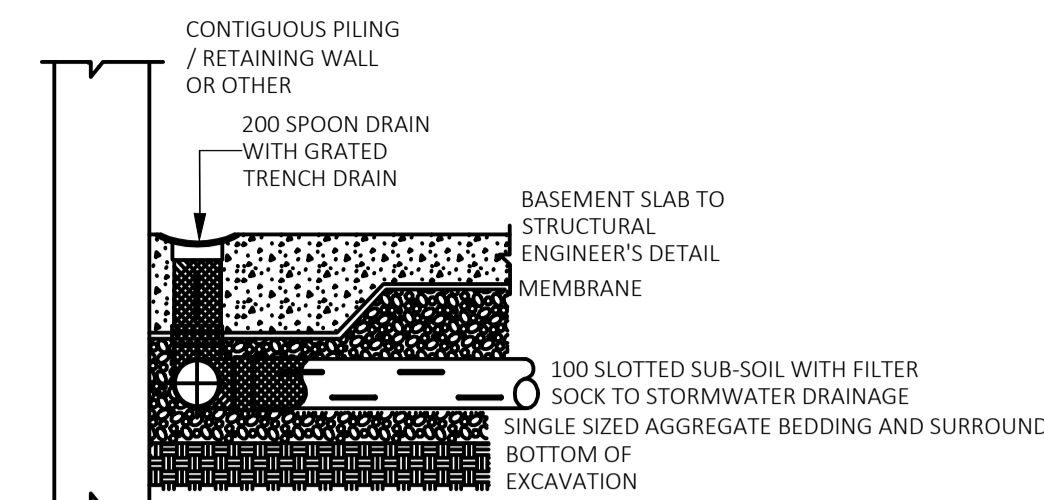
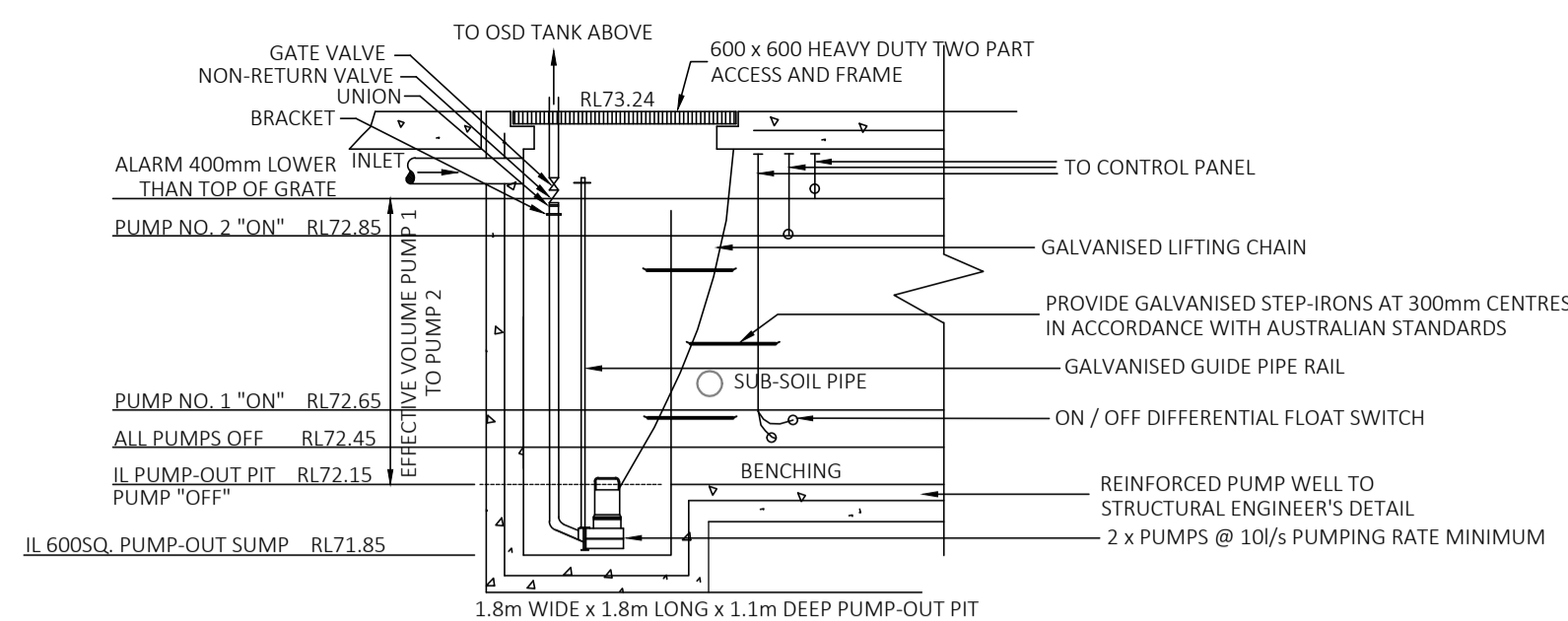
DRAWING SET ID: DA 110
 SUBSET: LANDSCAPE
 DRAWN BY: WH
 FILE: WILL129

DA 1101
 B

BASEMENT PUMP-OUT SYSTEM NOTES

THE PUMP-OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED AS FOLLOWS :

1. A MINIMUM OF TWO PUMPS ARE TO BE PROVIDED - ONE DUTY PUMP AND ONE STAND-BY PUMP.
2. THE PUMPS SHALL BE PROGRAMMED TO OPERATE ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATIONAL LOAD AND PUMP LIFE.
3. A LOW-LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE UNDERGROUND TANK. THE FLOAT SHALL FUNCTION AS AN "OFF" SWITCH FOR THE PUMP.
4. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, WHICH IS APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, IN WHICH ONE OF THE PUMPS WILL OPERATE AND DRAIN THE UNDERGROUND TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.
5. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY 300mm ABOVE THE SECOND FLOAT. THIS FLOAT SHALL BE DESIGNED TO START THE STAND-BY PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
6. AN ALARM WARNING SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT, SIREN AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT. THE ALARM WARNING SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURES.

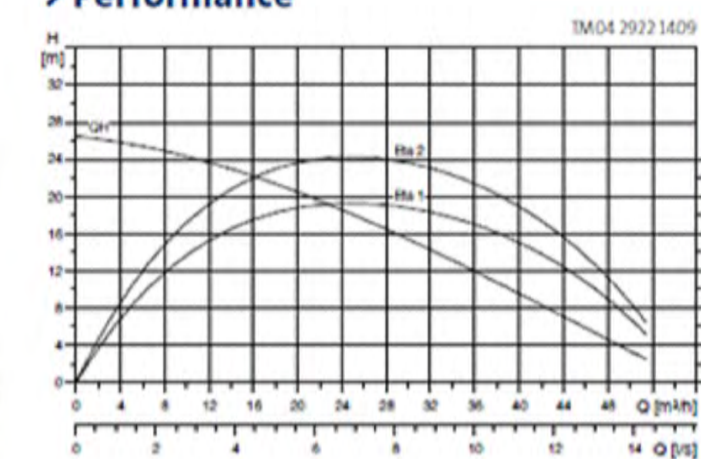


BASEMENT PERIMETER DRAINAGE WITH SPOON DRAIN OUTLET (SDO) NOT TO SCALE

SECTION A - A 3.24m³ SUB-SOIL BASEMENT PUMP-OUT TANK DETAIL NOT TO SCALE

DWK.0.6.80.22.5.0D.R

Performance



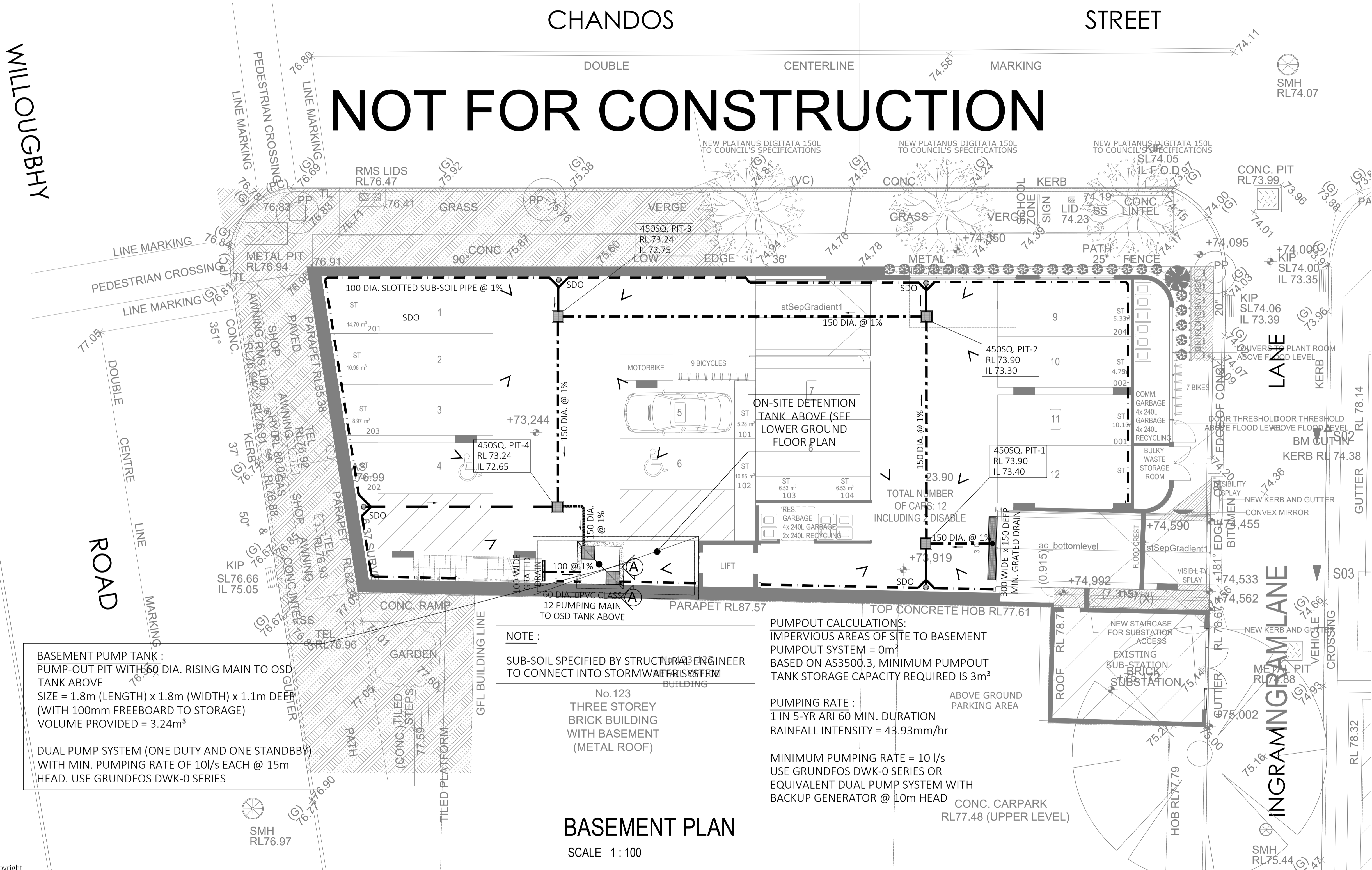
Technical Information

Part Number	3 x 380 - 415 V, 50 Hz
96922727	
Maximum shut off head	26.5 m
Flow head @ BEP	18 L/s @ 7.1 m
Maximum flow @ low head	14.3 L/s @ 2.5 m
Pump power rating	2.2 kW
Full load current	5.1 A
Outlet size	3" / 80 mm Hose tail
Pump weight	45 kg
Can operate partially submerged	No
Cooling jacket included / material	No / NA
Motor enclosure material	Cast iron GG20
Pump casing material	Cast iron GG20
Impeller type & material	Open style high chrome stainless steel
Free passage size solids	6 mm
Mechanical seal configuration and materials	Double in oil bath Pump side - silicon carbide Motor side - silicon carbide
Strainer material	400 Stainless steel
Cable length	10 m
Insulation protection	Class F / IP68
Liquid temperature range	0 °C to 40 °C
Aluminium present in pump	Yes

WARNING
PUMP-OUT SYSTEM
FAILURE IN BASEMENT
WHEN SIREN IS
SOUNDING

COLOURS :
"WARNING" - RED
BORDER - BLACK
WORDING - BLACK

BASEMENT PUMP-OUT FAILURE WARNING SIGN NOT TO SCALE



BASEMENT PUMP TANK :
PUMP-OUT PIT WITH 150 DIA. RISING MAIN TO OSD TANK ABOVE
SIZE = 1.8m (LENGTH) x 1.8m (WIDTH) x 1.1m DEEP (WITH 100mm FREEBOARD TO STORAGE)
VOLUME PROVIDED = 3.24m³

DUAL PUMP SYSTEM (ONE DUTY AND ONE STANDBY)
WITH MIN. PUMPING RATE OF 10l/s EACH @ 15m HEAD. USE GRUNDFOS DWK-0 SERIES

NOTE :
SUB-SOIL SPECIFIED BY STRUCTURAL ENGINEER TO CONNECT INTO STORMWATER SYSTEM BUILDING

PUMPOUT CALCULATIONS:
IMPERVIOUS AREAS OF SITE TO BASEMENT PUMPOUT SYSTEM = 0m²
BASED ON AS3500.3, MINIMUM PUMPOUT TANK STORAGE CAPACITY REQUIRED IS 3m³

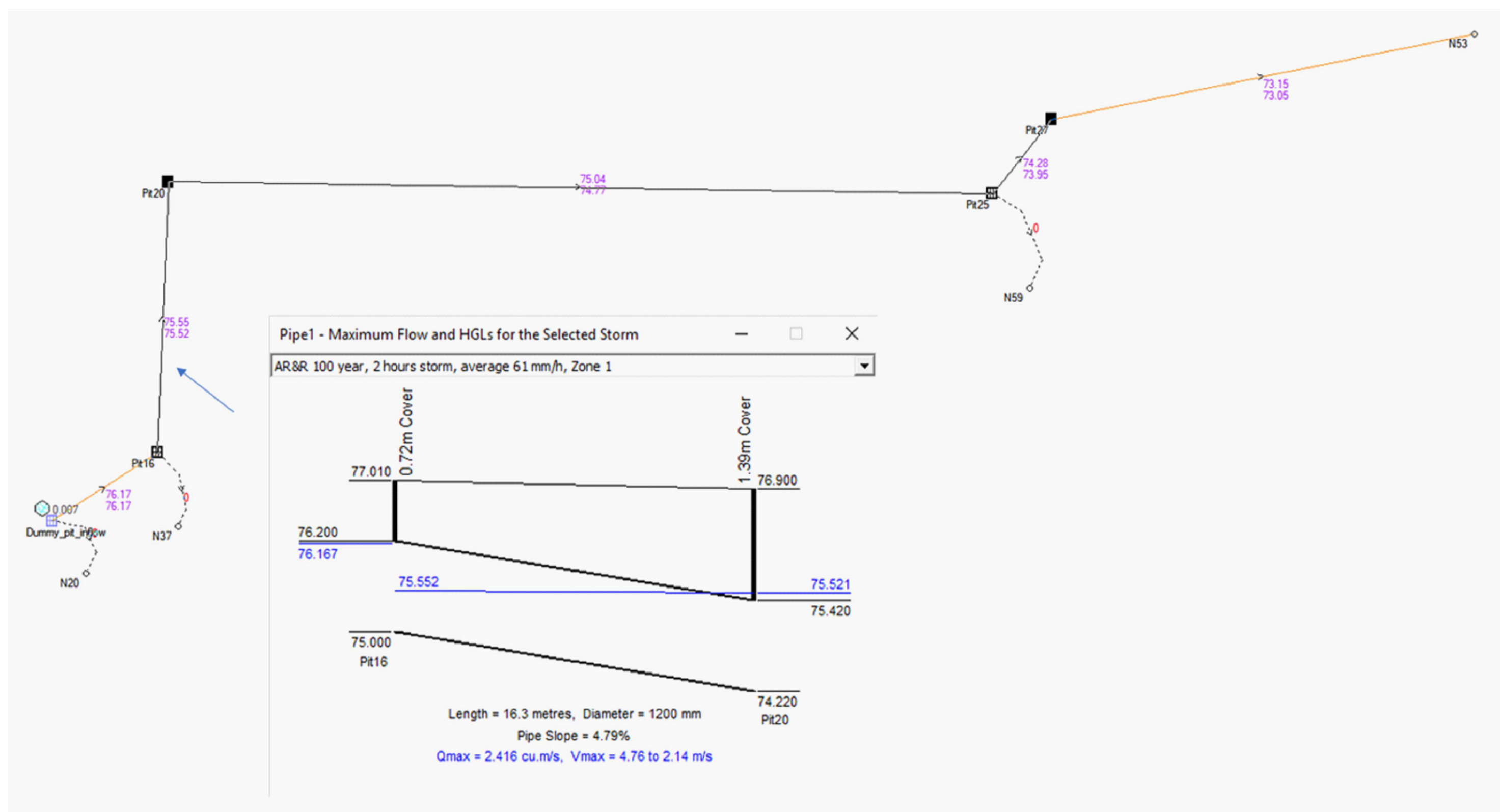
PUMPING RATE :
1 IN 5-YR ARI 60 MIN. DURATION
RAINFALL INTENSITY = 43.93mm/hr

MINIMUM PUMPING RATE = 10 l/s
USE GRUNDFOS DWK-0 SERIES OR EQUIVALENT DUAL PUMP SYSTEM WITH BACKUP GENERATOR @ 10m HEAD

BASEMENT PLAN
SCALE 1:100

LEGEND

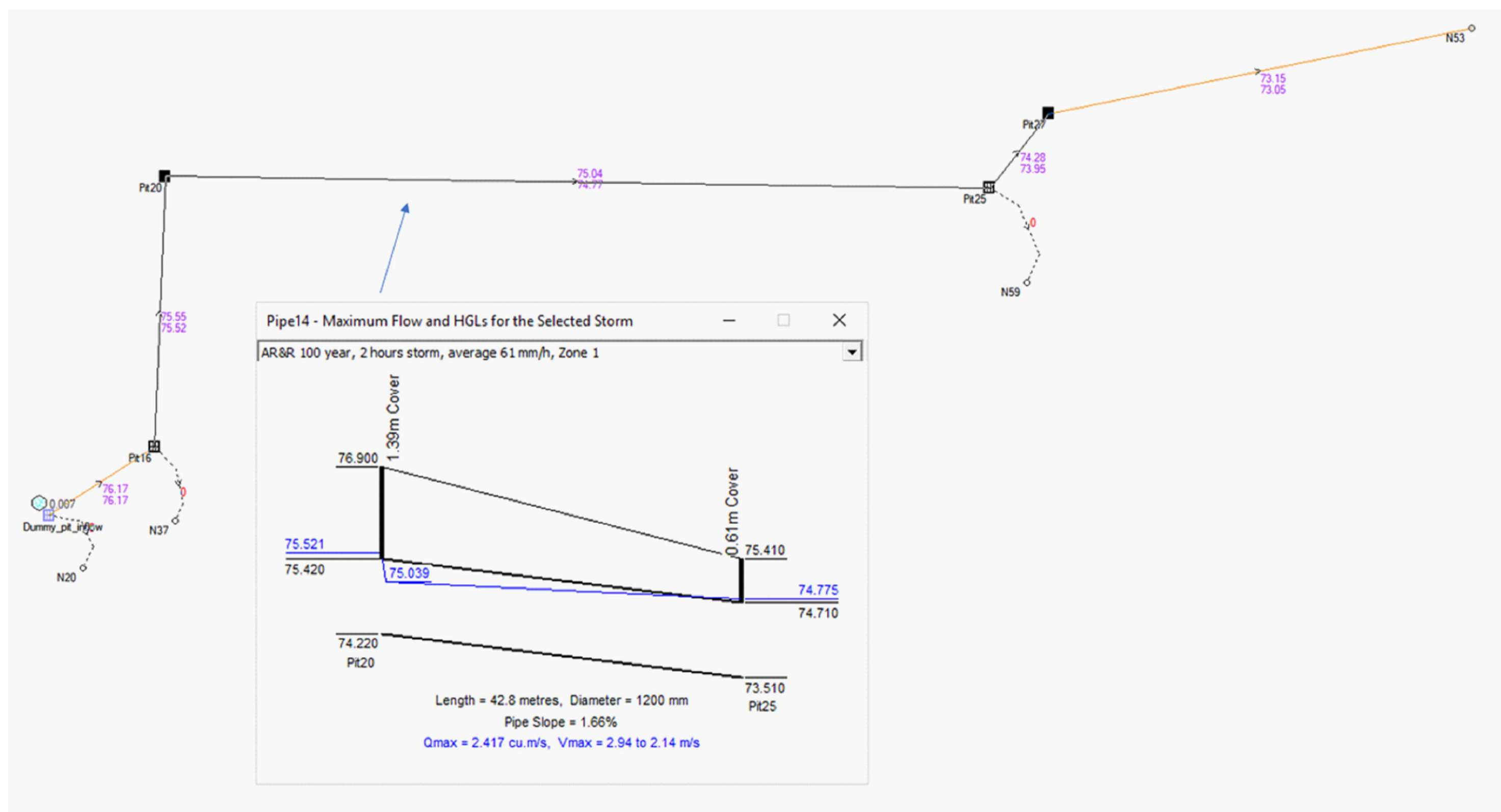
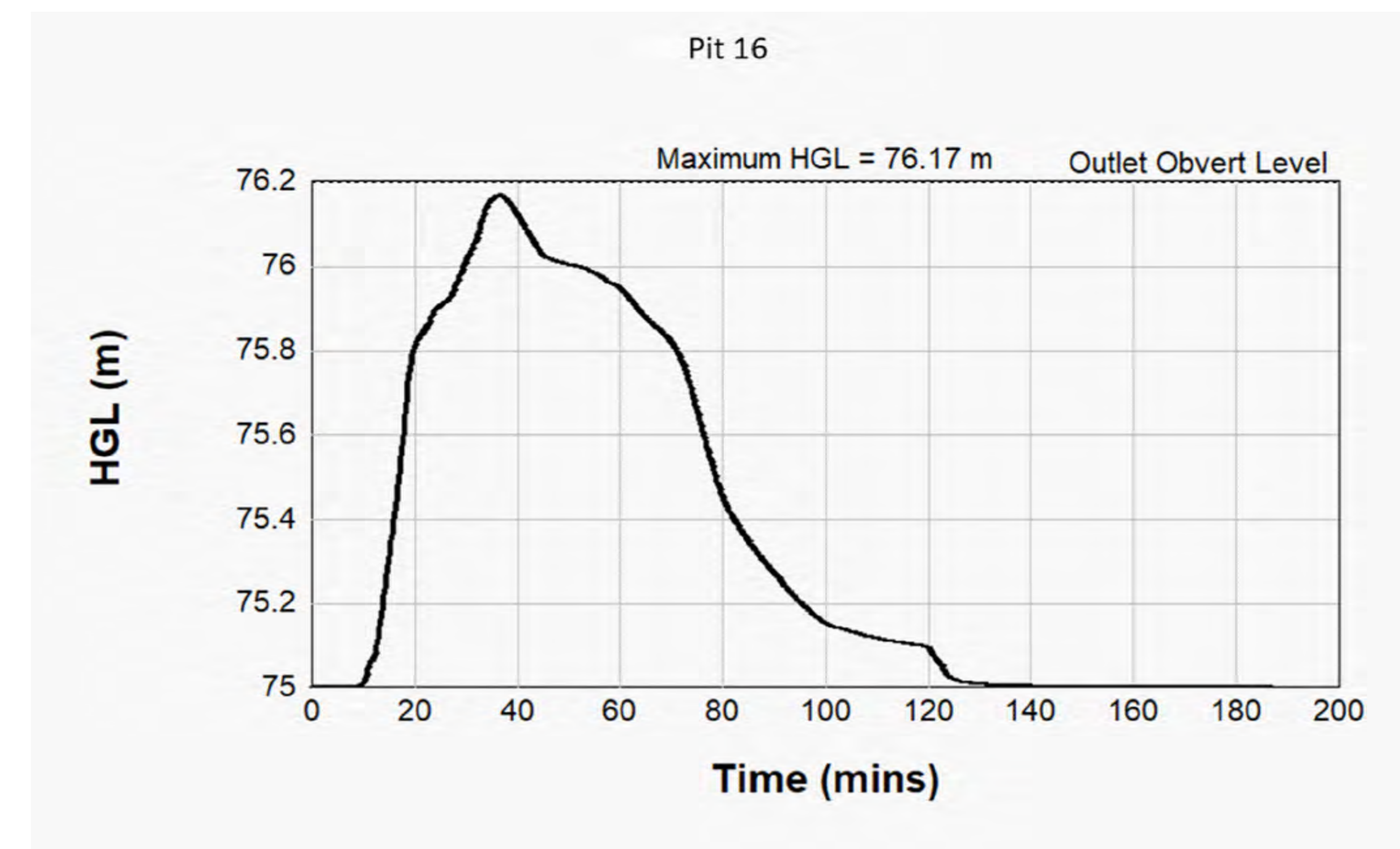
PIPEWORK:	ABBREVIATIONS:
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 DIA. SLOTTED SUB-SOIL PIPE @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
150 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 DIA. @ 1%	UPVC UNPLASTICIZED POLYMER CHLORIDE
60 DIA. UPVC CLASS 3	UPVC UNPLASTICIZED POLYMER CHLORIDE
100 WIDE GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CHLORIDE
12 PUMPING MAIN TO OSD TANK ABOVE	UPVC UNPLASTICIZED POLYMER CHLORIDE
300 WIDE x 150 DEEP MIN. GRATED DRAIN	UPVC UNPLASTICIZED POLYMER CH



PIPE 1 LONGITUDINAL SECTION AND HGL

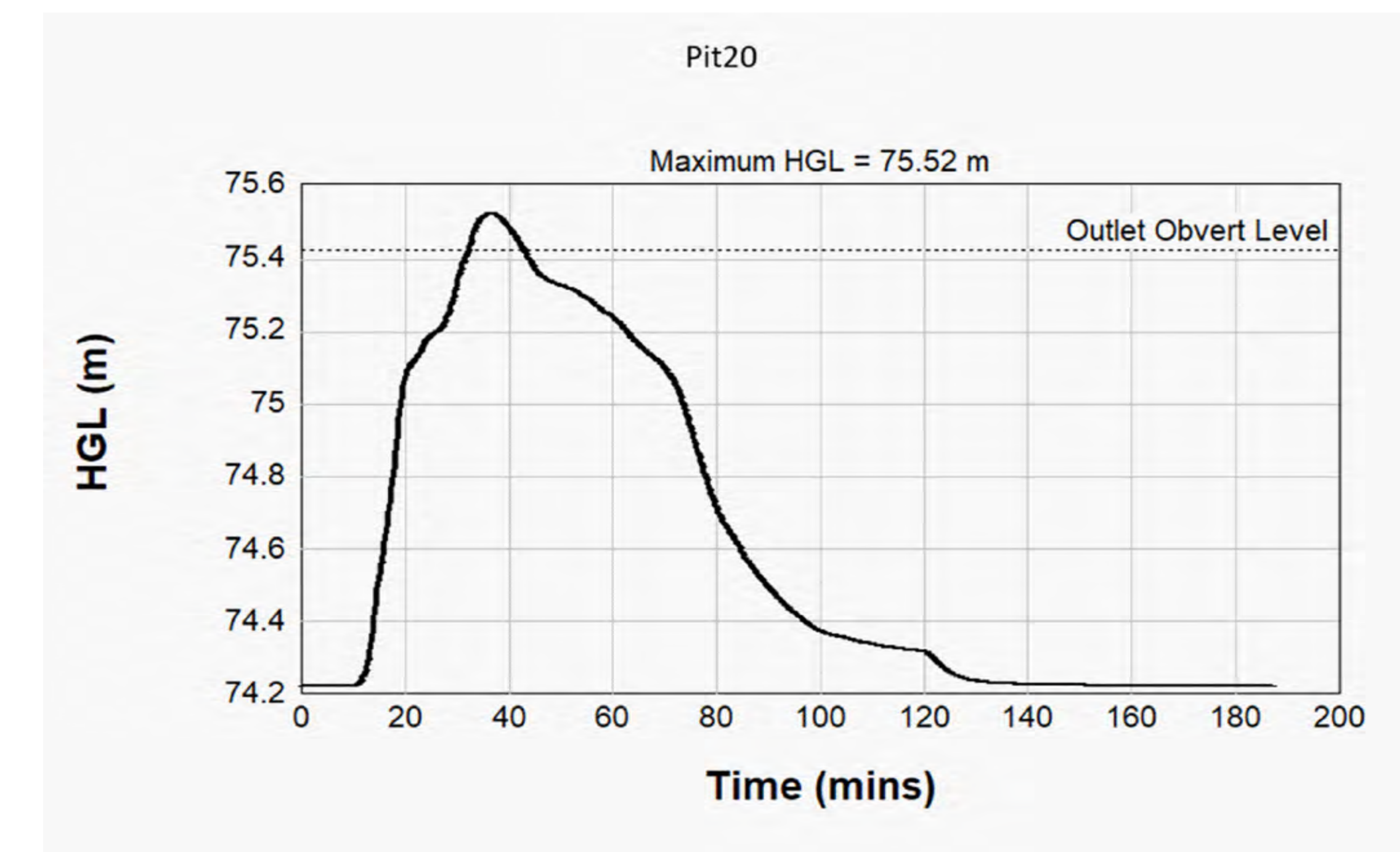
NOT TO SCALE

NOT FOR CONSTRUCTION

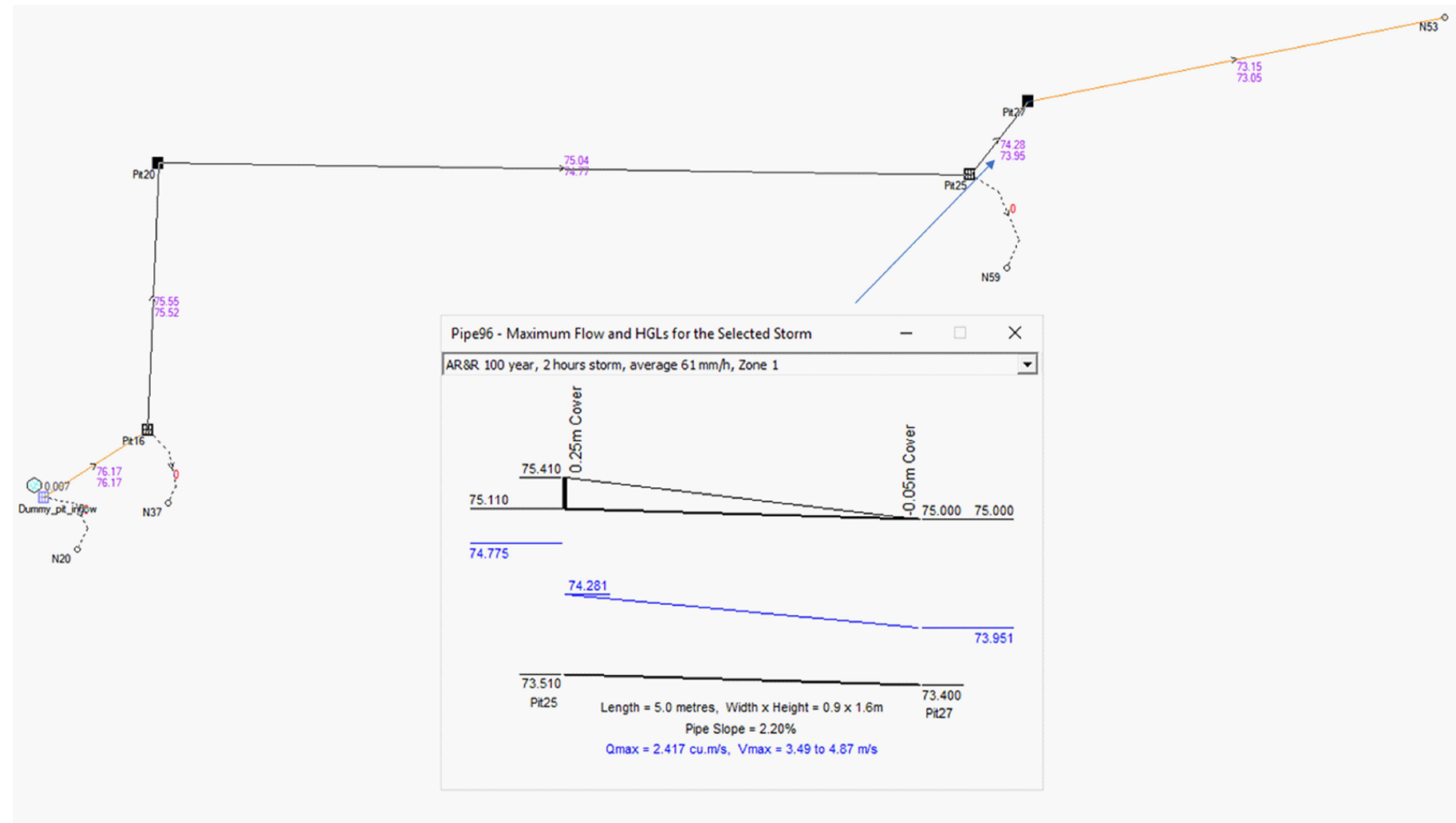


PIPE 2 LONGITUDINAL SECTION AND HGL

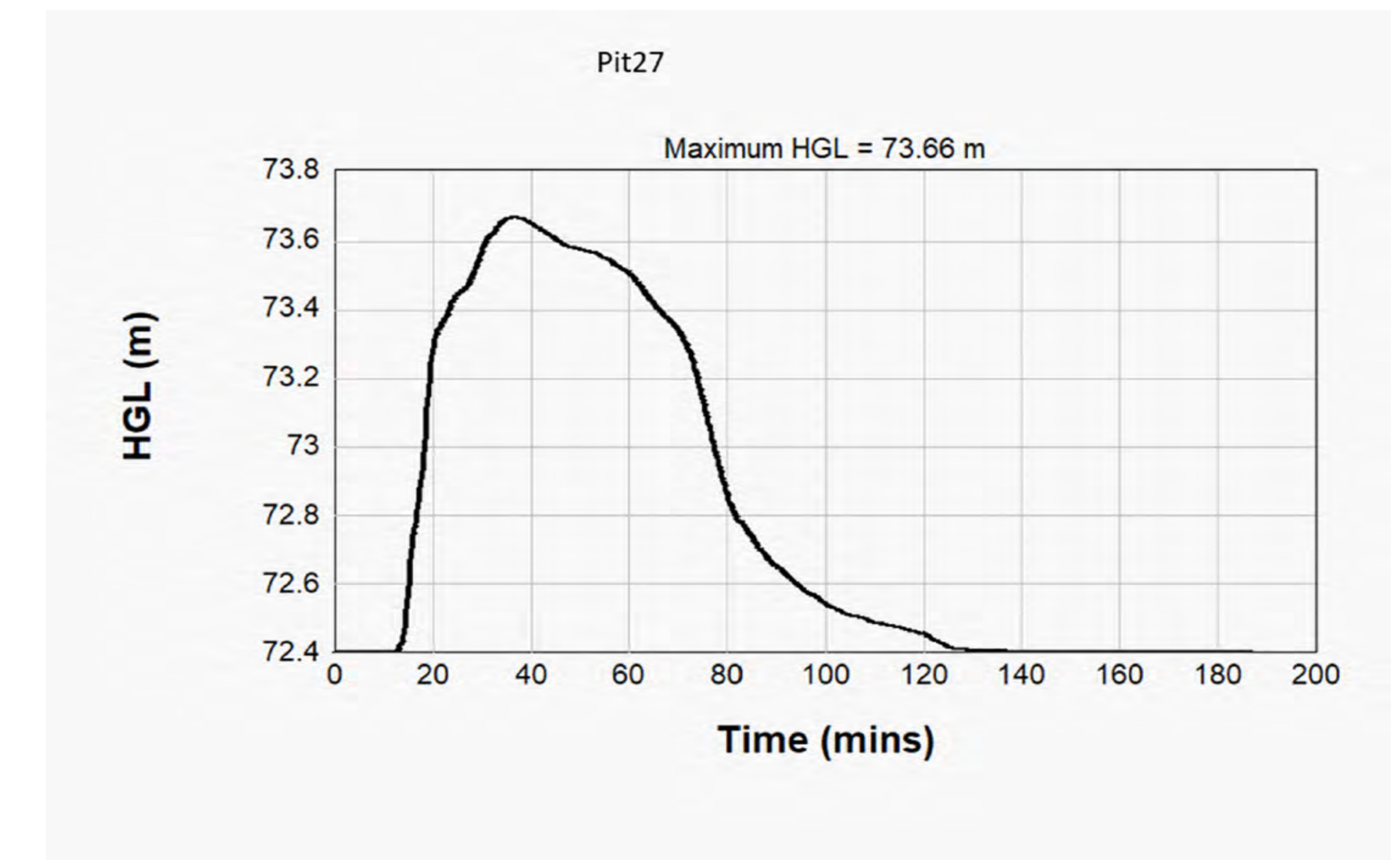
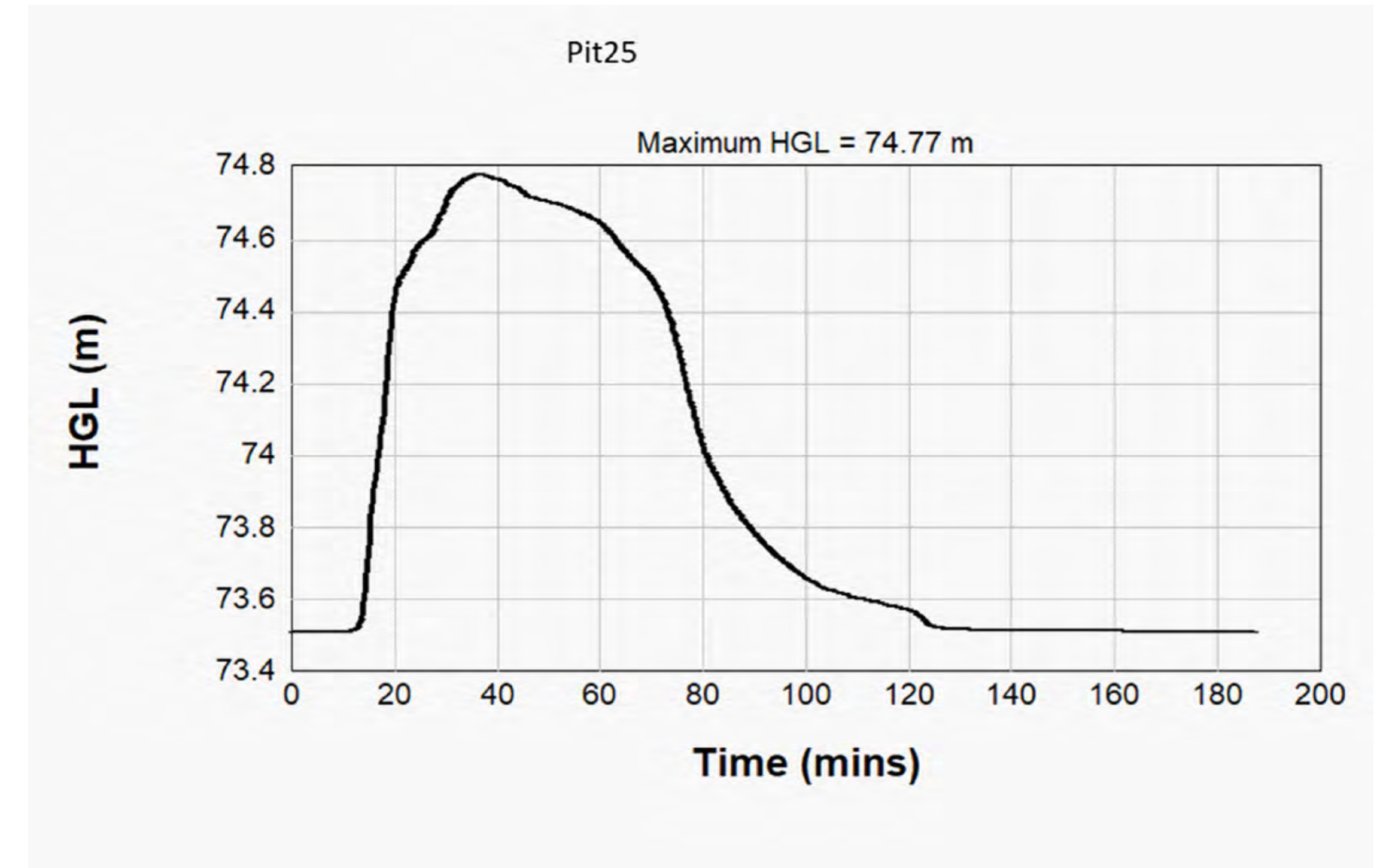
NOT TO SCALE



			Drawn & Designed by: K. Koh	Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development	Drawing Title Pipe Longitudinal Sections and Hydraulic Grade Lines		
			Checked by: N. Evans		At 127 - 129 Willoughby Road Crows Nest NSW 2065	Date December 2021	Scale As Shown @ A1	
B	Omission of Level 3	13 June 2022	Approved by: Kenneth T. NG <i>K.T. NG</i>		Client	Project No. 341112021DA	Drawing & Sheet No./Issue 34111-06/12 / B	
A	Development Application	13 Dec. 2021						
Issue	Description	Date						



PIPE 3 LONGITUDINAL SECTION AND HGL
NOT TO SCALE



NOT FOR CONSTRUCTION

Copyright
This document is & shall remain the property of ING Consulting Engineers Pty Ltd. The document may only be used for the purpose for which it was commissioned. They must not be used, reproduced, or copied in whole or in part without prior written consent of that company.

VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT/ MANAGER PRIOR TO PROCEEDING WITH ANY WORKS. Do not scale off drawings.

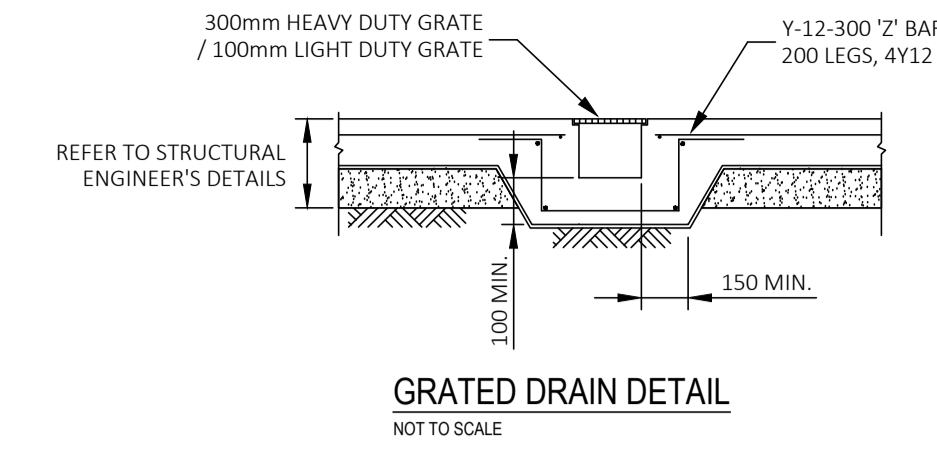
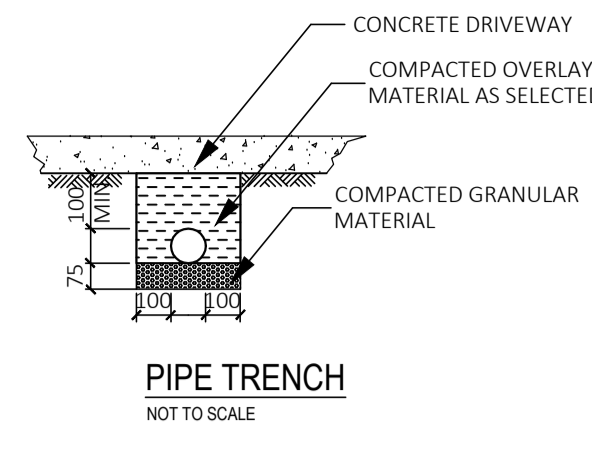
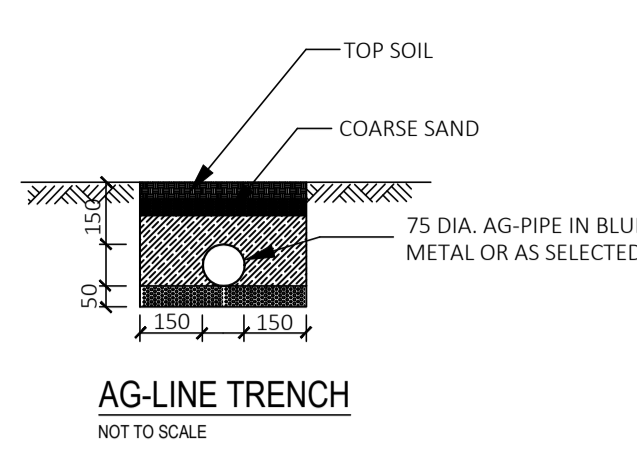
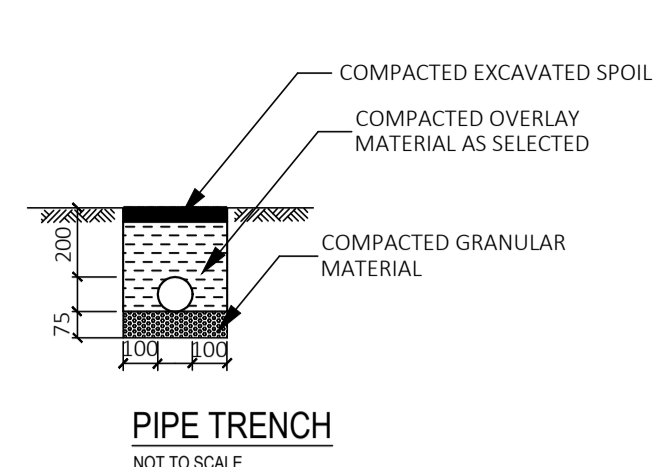
			Drawn & Designed by: K. Koh	Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development	Drawing Title Pipe Longitudinal Section 2 and Hydraulic Grade Lines 2		
			Checked by: N. Evans			At 127 - 129 Willoughby Road Crows Nest NSW 2065	Date December 2021	Scale As Shown @ A1
B	Omission of Level 3	13 June 2022	Approved by: Kenneth T. NG MIEAust CPEng NER APEC Engineer INPE(Aus) (Reg. No. 2206352) RPCE2 Registered Certifier (Hydraulic (stormwater), Road & Drainage and Stormwater) (Reg. No. BDC0827) Registered Design Practitioner (Drainage & Civil Engineering) (Reg. No. DEPO000592) & Professional Engineer (Civil) (Reg. No. DEPO000630) NSW Fair Trading			Client	Project No. 341112021DA	Drawing & Sheet No./Issue 34111-07/12 / B
A	Development Application	13 Dec. 2021						
Issue	Description	Date						

GENERAL NOTES

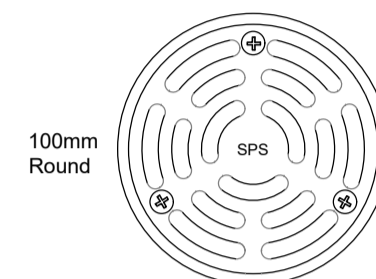
1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. ALL WORKS ARE TO BE CARRIED OUT TO THE DETAILS SHOWN ON THE DRAWINGS.
3. THESE PLANS ARE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
4. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR SERVICES. NO MECHANICAL EXCAVATION ARE TO BE UNDERTAKEN OVER TELECOMMUNICATION OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS ONLY.
5. DIAL 1100 BEFORE YOU DIG FOR LOCATION OF UNDERGROUND SERVICES PRIOR TO ANY CONSTRUCTION WORKS.
6. SERVICES HAVE NOT BEEN SHOWN ON THIS PLAN. FIELD INVESTIGATIONS ARE TO BE CARRIED OUT SEPARATELY TO DETERMINE EXACT POSITIONS OF SERVICES OR INFORMATION IS TO BE PROVIDED BY THE PROPERTY PROPRIETOR. NOT WITSTANDING THIS, ALL INFORMATION PROVIDED SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
7. THESE DRAWINGS ARE ONLY APPROVED WHEN THEY ARE SIGNED WITH AN ORIGINAL SIGNATURE BY THE ENGINEER.

STORMWATER DRAINAGE

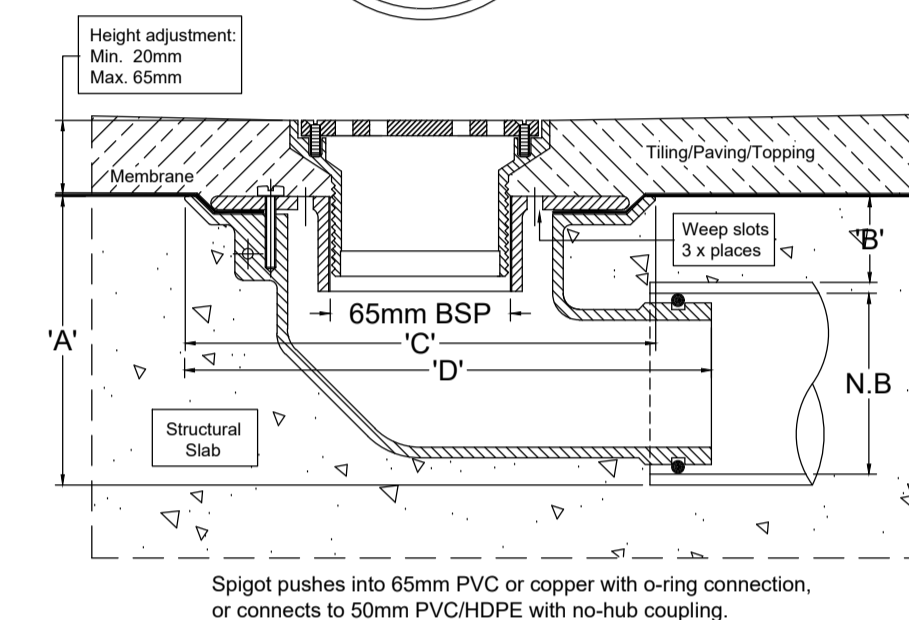
8. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES.
9. ALL GUTTERS TO BE 100 x 75 MIN. AND DOWNPIPES TO BE 100 x 75 (76 DIA.) UNLESS OTHERWISE NOTED.
10. ALL PIPES TO BE 100mm uPVC SEWER GRADE UNLESS NOTED OTHERWISE.
11. ALL GRADIENTS FOR STORMWATER PIPES TO BE NOT LESS THAN 1.0% UNLESS NOTED OTHERWISE.
12. THE INVERTS OF ALL OUTLET PIPES ARE TO BE INSTALLED FLUSH WITH THE BASE OF ALL STORMWATER/RAINWATER PIT.
13. ALL FENCES SHALL BE KEPT AT LEAST 100mm ABOVE THE GROUND LEVEL TO FACILITATE THE FREE PASSAGE FOR STORMWATER OVERLAND FLOW.
14. MANUFACTURER'S CERTIFICATE SHALL BE OBTAINED BY THE BUILDER FOR PIPES, PRE-CAST PITS AND GRATES FOR THE STRUCTURAL ADEQUACY RELATING TO ITS LOCATION.
15. AREAS SPREAD WITH BARK SHALL BE BARRICADED TO PREVENT BARK GETTING INTO THE PITS AND STORMWATER SYSTEMS.
16. MINIMUM SLOPE FOR PAVED AREAS SHALL BE 0.5%, FOR LANDSCAPED AREAS MINIMUM SLOPE SHALL BE 1% AND GRADED TOWARDS THE GRATED PITS.
17. ALL EXCAVATIONS WITHIN THE INFLUENCE OF BUILDINGS AND SERVICES SHALL BE UNDERTAKEN WITH THE KNOWLEDGE OF THE HYDRAULIC AND STRUCTURAL ENGINEER.
18. THE DETENTION AND DRAINAGE SYSTEM SHALL BE MAINTAINED AT REGULAR INTERVALS AND THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS.
19. CONNECTION OF DISCHARGE PIPE TO EXISTING COUNCIL KERB AND GUTTER, PIPE OR KERB INLET PIT SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
20. PROVIDE STEP-IRONS 'MASCOT S1:104' OR SIMILAR STAGGERED TO GIVE SPACING 300 VERTICAL AND 220 HORIZONTAL TO ALL PIT DEEPER THAN 1m.
21. SUITABLE AG-LINES SHALL BE PROVIDED AND CONNECTED TO STORMWATER SYSTEM OR AS INSTRUCTED BY THE ENGINEER ON SITE PRIOR TO BACKFILLING.



Specification code:
 R100B/C90 (brass grate, ABS lower body)
 R100N/C90 (nickel bronze grate, ABS lower body)
 R100S4/C90 (polished 304 stainless steel, ABS lower body)
 R100S/C90 (satin 316 stainless steel grate, ABS lower body)



- Round grate available in nickel bronze, 304 & 316 stainless Steel. Bronze non-stock option.
- ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

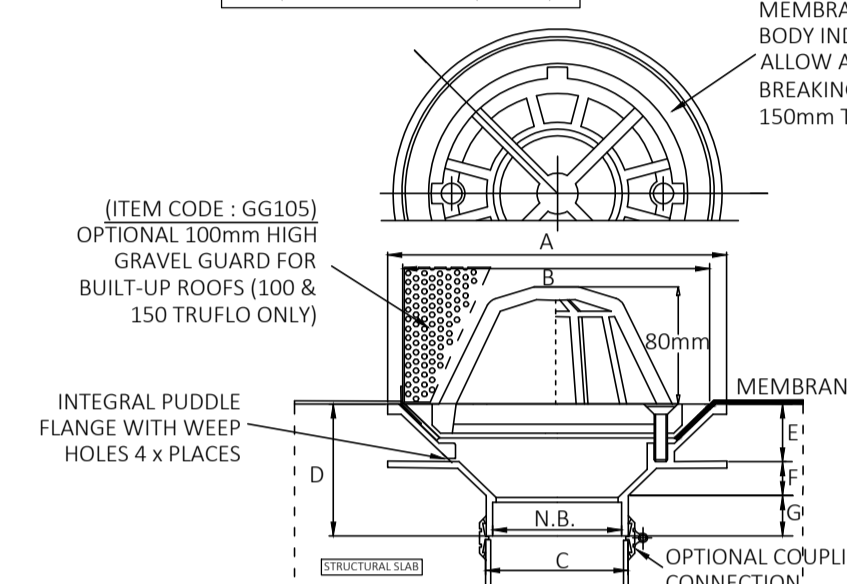


N.B.	A	B	C	D
50	100	40	180	200
65	105	37	180	200

RAINWATER OUTLET (RWO) (TERRACE AND COURTYARDS)
NOT TO SCALE

SPS TRUFLO & SUPERFLO DOME GRATE RWO (2-PIECE DOME GRATE, MEMBRANE CLAMP)

ITEM CODE: GC105
 OPTIONAL 100mm HIGH GRAVEL GUARD FOR BUILT-UP ROOFS (100 & 150 TRUFLO ONLY)



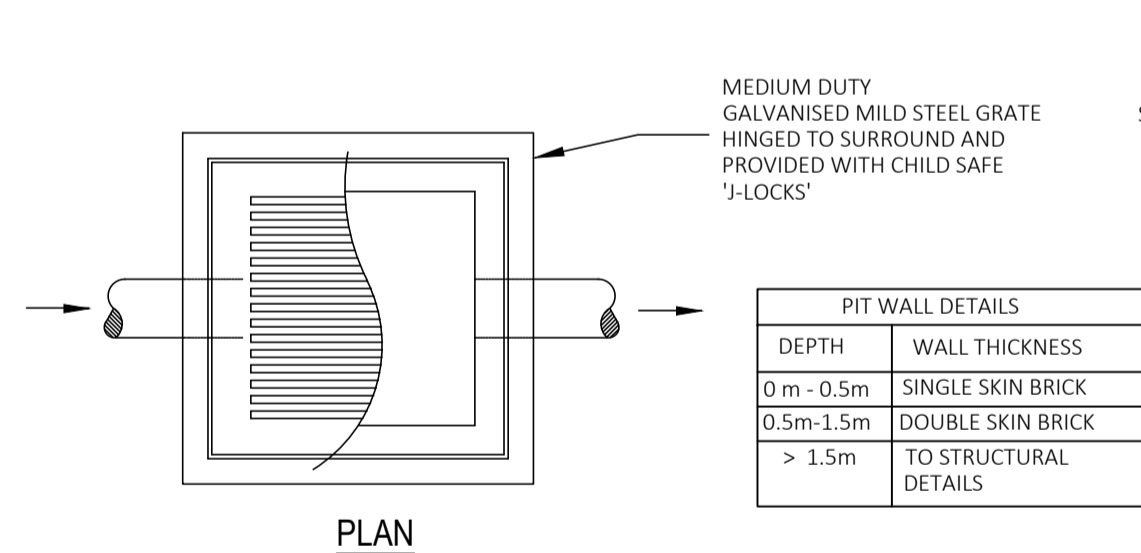
N.B.	A	B	C	D	E	F	G	REF. TS
100	200	180	85	80	73	22	25	
150	250	220	110	95	144	26	25	8.2
200	300	270	140	80	158	4	28	12.25
250	350	320	170	125	166	39	38	22

SPECIALITY PLUMBING SUPPLIES PTY LTD
 TEL: (02) 9416 8031 FAX: (02) 9416 7814 E-MAIL: SPS@BGPOND.NET.AU

ROOF RAINWATER WATER OUTLET (RWO) 100 TRUFLOW
NOT TO SCALE

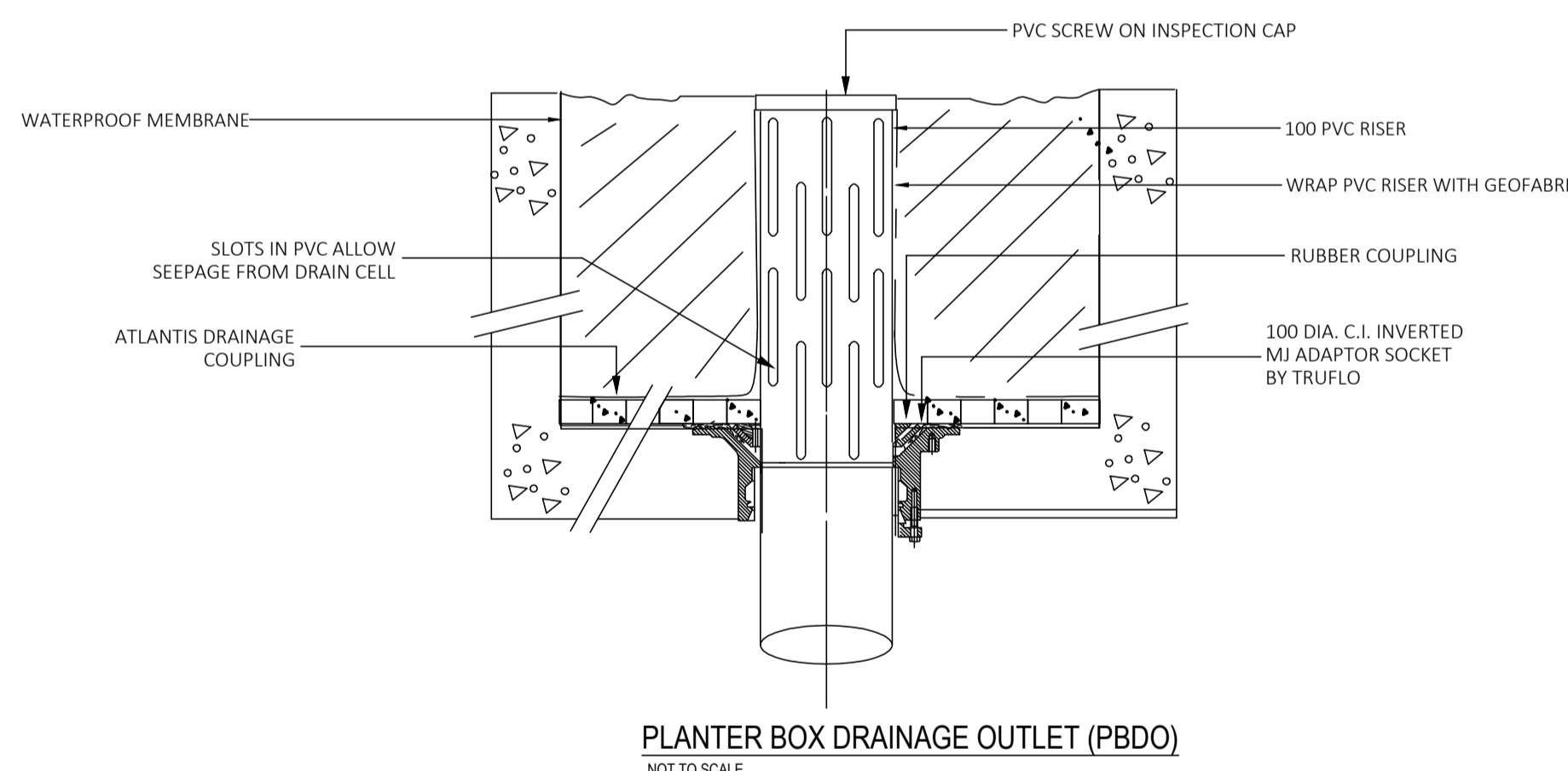
PIT SCHEDULE

1. PROVIDE LIGHT DUTY GRATES FOR NON VEHICULAR TRAFFICKED AREAS.
2. PROVIDE HEAVY DUTY GRATES FOR VEHICULAR TRAFFICKED AREAS.
3. PROVIDE 450 x 450 CLEAR OPENING FOR PIT DEPTHS UP TO 600mm U.N.O.
4. PROVIDE 600 x 600 CLEAR OPENING FOR PIT DEPTHS UP TO 900mm U.N.O.
5. PROVIDE 900 x 900 CLEAR OPENING FOR PIT DEPTHS GREATER THAN 900mm U.N.O.
6. ALL REINFORCED CONCRETE PIPES SHALL BE OF RUBBER RING JOINTS
7. ALL DISCHARGE CONTROL PITS SHALL HAVE A MINIMUM OF 900 x 900 CLEAR OPENING U.N.O.
8. ALL GRATED TRENCH SHALL BE A MINIMUM OF 150(W) x 200(H) U.N.O.



DEPTH	WALL THICKNESS
0 m - 0.5m	SINGLE SKIN BRICK
0.5m-1.5m	DOUBLE SKIN BRICK
> 1.5m	TO STRUCTURAL DETAILS

TYPICAL INLET PIT DETAIL
NOT TO SCALE



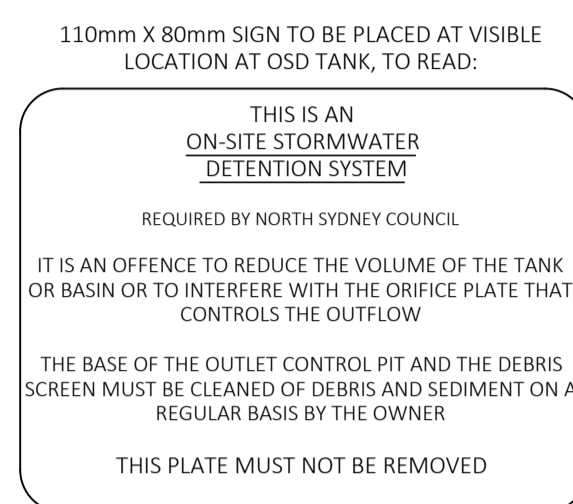
PLANTER BOX DRAINAGE OUTLET (PBDO)
NOT TO SCALE

NOT FOR CONSTRUCTION

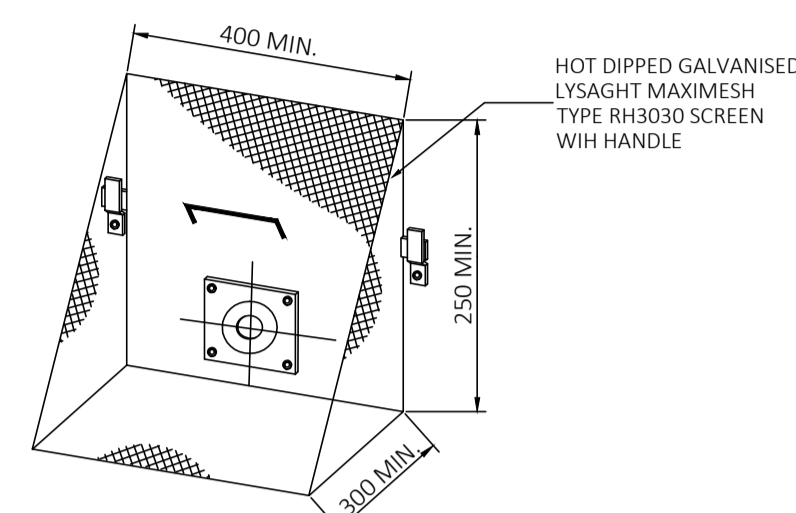
Drawn & Designed by: K. Koh		Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development		Drawing Title Notes & Details	
Checked by: N. Evans			At 127 - 129 Willoughby Road Crows Nest NSW 2065		Date December 2021	Scale As Shown @ A1
B	Omission of Level 3	13 June 2022	Client		Project No. 341112021DA	Drawing & Sheet No./Issue 34111-08/12 / B
A	Development Application	13 Dec. 2021				
Issue	Description	Date				



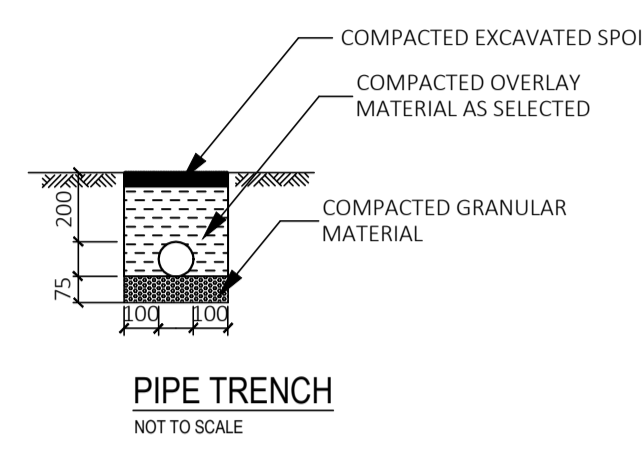
CONFINED SPACE SIGNAGE
NOT TO SCALE



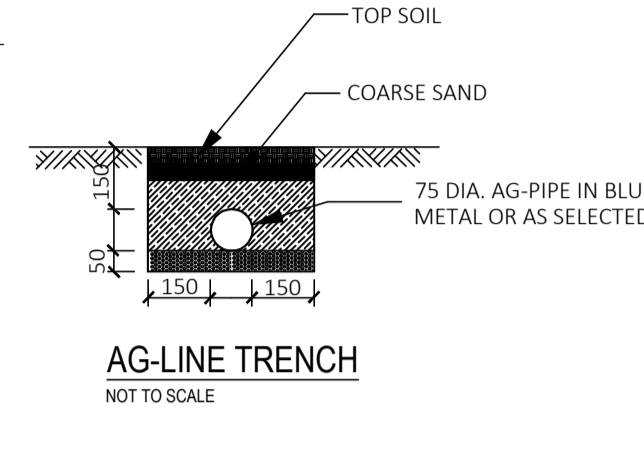
OSD SIGNAGE
NOT TO SCALE



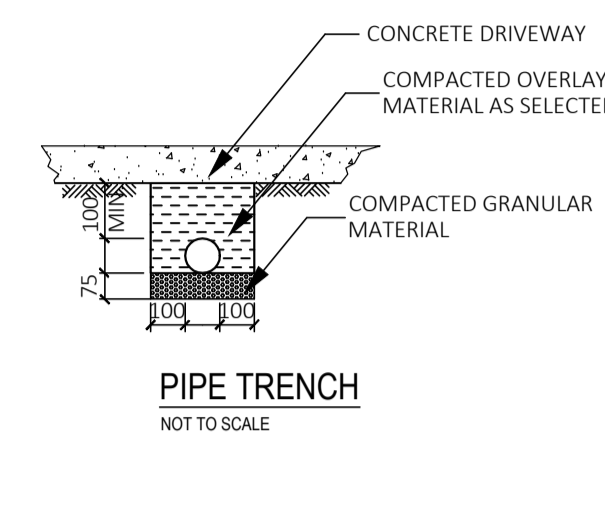
TRASH SCREEN DETAIL
NOT TO SCALE



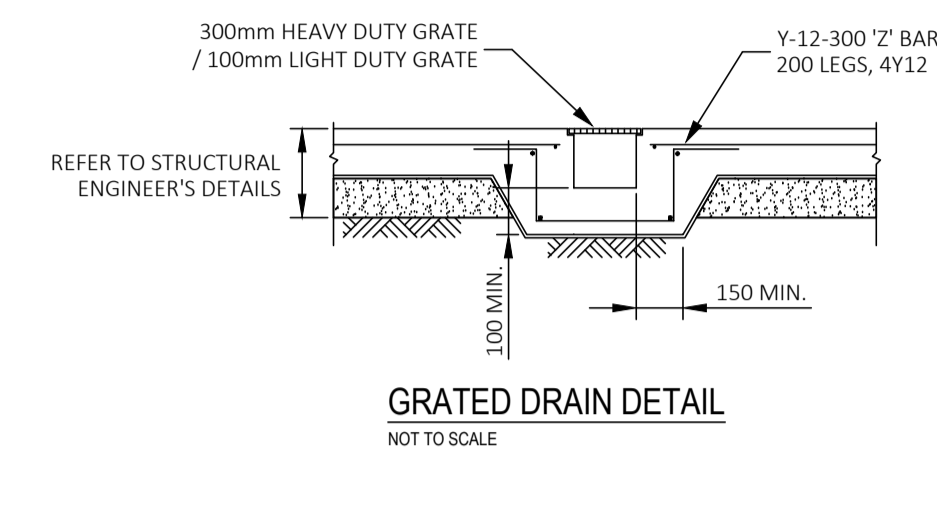
PIPE TRENCH
NOT TO SCALE



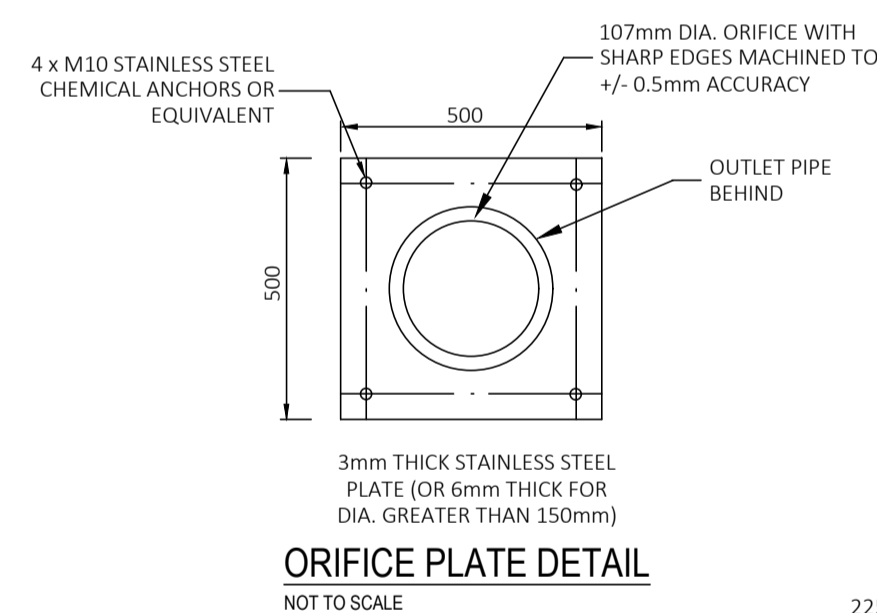
AG-LINE TRENCH
NOT TO SCALE



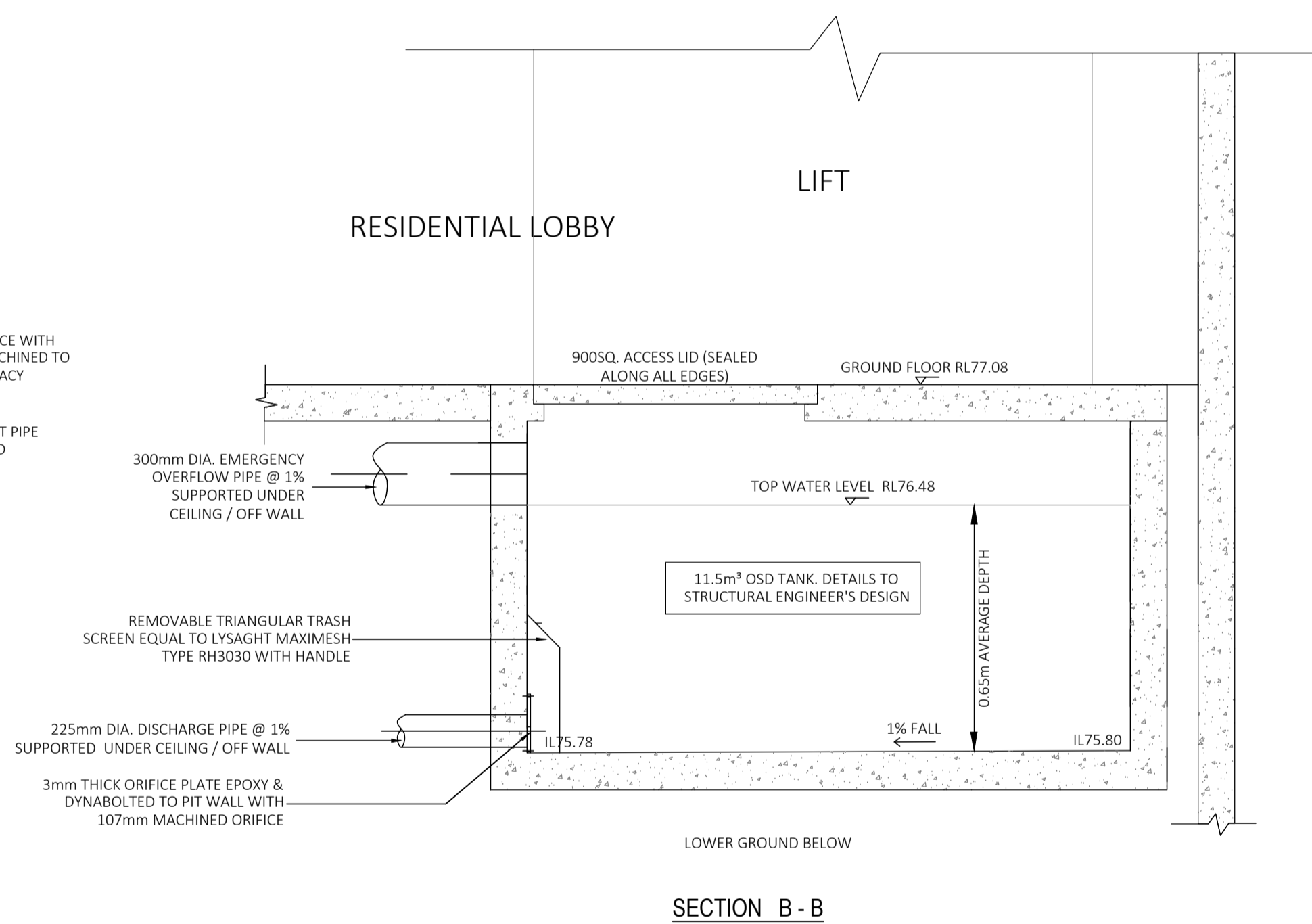
PIPE TRENCH
NOT TO SCALE



GRADED DRAIN DETAIL
NOT TO SCALE

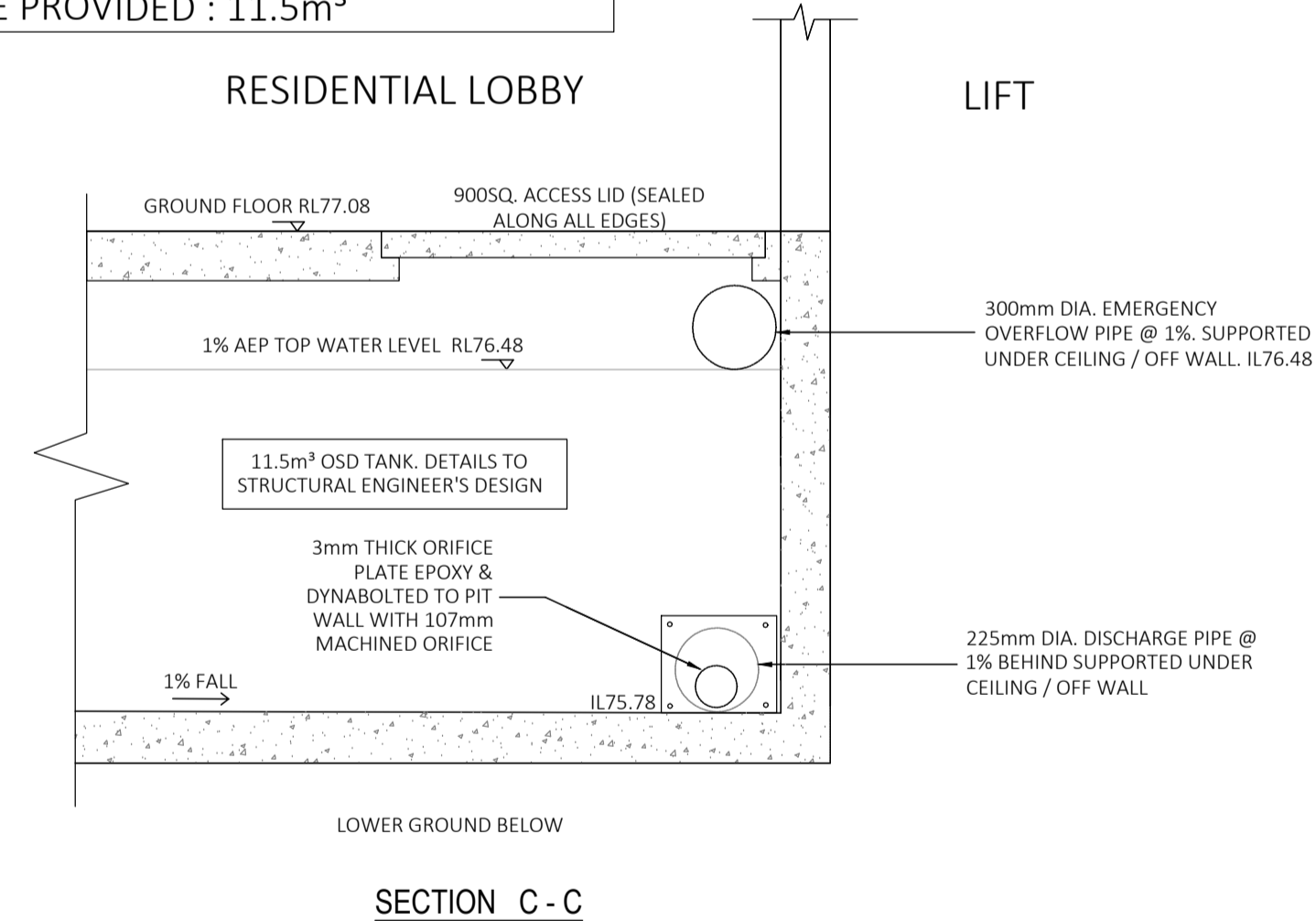


ORIFICE PLATE DETAIL
NOT TO SCALE



SECTION B - B

DETENTION TANK INTERNAL DIMENSIONS (INTERNAL):
WIDTH : 2.4m
LENGTH : 7.4m
AVERAGE STORAGE DEPTH : 0.65m
VOLUME PROVIDED : 11.5m³



SECTION C - C

ON-SITE DETENTION TANK
NOT TO SCALE

NOT FOR CONSTRUCTION

Copyright
This document is & shall remain the property of ING Consulting Engineers Pty Ltd. The document may only be used for the purpose for which it was commissioned. They must not be used, reproduced, or copied in whole or in part without prior written consent of that company.

VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT/ MANAGER PRIOR TO PROCEEDING WITH ANY WORKS. Do not scale off drawings.

			Drawn & Designed by: K. Koh	Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development At 127 - 129 Willoughby Road Crows Nest NSW 2065 Client	Drawing Title Notes & Details 2	
			Checked by: N. Evans			Date December 2021	Scale As Shown @ A1
B	Omission of Level 3	13 June 2022	Approved by: Kenneth T. NG MIE(Aust) CPEng NER APEC Engineer INPE(Aust) (Reg. No. 2206352) RPFCQ Registered Certifier (Hydraulic (stormwater), Road & Drainage and Stormwater) (Reg. No. BDC0827) Registered Design Practitioner (Drainage & Civil Engineering) (Reg. No. DEP0000692) & Professional Engineer (Civil) (Reg. No. DEP0000630) NSW Fair Trading			Project No. 341112021DA	Drawing & Sheet No./Issue 34111-09/12 / B
A	Development Application	13 Dec. 2021					
Issue	Description	Date					

GENERAL NOTES (STORMWATER):

- THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
- ALL WORKS ARE TO BE CARRIED OUT TO THE DETAILS SHOWN ON THE DRAWINGS.
- THESE PLANS ARE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR SERVICES. NO MECHANICAL EXCAVATION ARE TO BE UNDERTAKEN OVER TELECOMMUNICATION OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS ONLY.
- DIAL 1100 BEFORE YOU DIG FOR LOCATION OF UNDERGROUND SERVICES PRIOR TO ANY CONSTRUCTION WORKS.
- SERVICES HAVE NOT BEEN SHOWN ON THIS PLAN. FIELD INVESTIGATIONS ARE TO BE CARRIED OUT SEPARATELY TO DETERMINE EXACT POSITIONS OF SERVICES OR INFORMATION IS TO BE PROVIDED BY THE PROPERTY PROPRIETOR. NOT WITSTANDING THIS, ALL INFORMATION PROVIDED SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
- THESE DRAWINGS ARE ONLY APPROVED WHEN THEY ARE SIGNED WITH AN ORIGINAL SIGNATURE BY THE ENGINEER.

STORMWATER DRAINAGE

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES.
- ALL GUTTERS TO BE 100 x 75 MIN. AND DOWNPIPES TO BE 100 x 75 (76 DIA.) UNLESS OTHERWISE NOTED.
- ALL PIPES TO BE 100mm uPVC SEWER GRADE UNLESS NOTED OTHERWISE.
- ALL GRADIENTS FOR STORMWATER PIPES TO BE NOT LESS THAN 1.0% UNLESS NOTED OTHERWISE.
- THE INVERTS OF ALL OUTLET PIPES ARE TO BE INSTALLED FLUSHED WITH THE BASE OF ALL STORMWATER/RAINWATER PIT.
- ALL FENCES SHALL BE KEPT AT LEAST 100mm ABOVE THE GROUND LEVEL TO FACILITATE THE FREE PASSAGE FOR STORMWATER OVERLAND FLOW.
- MANUFACTURER'S CERTIFICATE SHALL BE OBTAINED BY THE BUILDER FOR PIPES, PRE-CAST PITS AND GRATES FOR THE STRUCTURAL ADEQUACY RELATING TO ITS LOCATION.
- AREAS SPREAD WITH BARK SHALL BE BARRICADED TO PREVENT BARK GETTING INTO THE PITS AND STORMWATER SYSTEMS.
- MINIMUM SLOPE FOR PAVED AREAS SHALL BE 0.5%, FOR LANDSCAPED AREAS MINIMUM SLOPE SHALL BE 1% AND GRADED TOWARDS THE GRATED PITS.
- ALL EXCAVATIONS WITHIN THE INFLUENCE OF BUILDINGS AND SERVICES SHALL BE UNDERTAKEN WITH THE KNOWLEDGE OF THE HYDRAULIC AND STRUCTURAL ENGINEER.
- THE DETENTION AND DRAINAGE SYSTEM SHALL BE MAINTAINED AT REGULAR INTERVALS AND THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS.
- CONNECTION OF DISCHARGE PIPE TO EXISTING COUNCIL KERB AND GUTTER, PIPE OR KERB INLET PIT SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
- PROVIDE STEP-IRONS 'MASCOT S1:104' OR SIMILAR STAGGERED TO GIVE SPACING 300 VERTICAL AND 220 HORIZONTAL TO ALL PIT DEEPER THAN 1m .
- SUITABLE AG-LINES SHALL BE PROVIDED AND CONNECTED TO STORMWATER SYSTEM OR AS INSTRUCTED BY THE ENGINEER ON SITE PRIOR TO BACKFILLING.

GENERAL NOTES:

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER DRAWINGS, SPECIFICATIONS AND WITH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT OR ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING STRUCTURAL DRAWINGS.
- ALL LEVELS AND SETTING OUT DIMENSIONS SHALL BE VERIFIED BY THE BUILDER.
- DURING CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PARTS SHALL BE OVERSTRESSED. MASONRY WALLS SHALL BE ADEQUATELY BRACED AGAINST WIND FORCES.
- THE STRUCTURAL ELEMENTS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR LIVE LOADS IN ACCORDANCE WITH CURRENT SAA LOADING CODES UNLESS NOTED OTHERWISE.
- CONSTRUCTION OF BRICK WALL SHALL BE ARTICULATED IN ACCORDANCE WITH RECOMMENDATIONS IN "ARTICULATED WALLING" PUBLISHED BY AUSTRALIAN CONCRETE AND CEMENT ASSOCIATION.
- THE DESIGN ASSUMED THAT THE EXISTING STRUCTURE ELEMENTS (I.E. WALL TIES, LINTELS ETC.) ARE IN SOUND CONDITIONS AS IT IS UNABLE TO BE CONFIRMED AT THE DESIGN STAGE. ANY ELEMENTS FOUND TO BE UNSOUND DURING CONSTRUCTION WILL HAVE TO BE REPAIRED OR REPLACED.

BRICKWORK

- ALL LOAD-BEARING BRICKWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT AS BRICKWORK CODE.
- MINIMUM COMPRESSIVE STRENGTH OF BRICK SHALL BE 20MPA
- MORTAR TO BRICKWORK SHALL BE STRICTLY IN ACCORDANCE WITH APPROPRIATE AS OR WITH MANUFACTURERS RECOMMENDATIONS; HOWEVER THE STRENGTH SHALL BE AS FOLLOWED:
 - 11MPA FOR RETAINING WALL AND ALL BRICKWORK BELOW GROUND
 - 4MPA FOR OTHER LOAD-BEARING WORK
- WHERE BRICKWORK SUPPORTS CONCRETE SLAB, TOP COURSE SHALL BE LAID FROG DOWN AND COVERED WITH MALTHOID OR GALVANISED IRON STRIPS.
- WHERE WALLS ARE NOT LOAD-BEARING, THEY SHALL BE SEPARATED FROM THE CONCRETE COVER BY 20MM THICK CANEITE OR EXPANDED POLYSTYRENE.
- ALL STEEL LINTEL SHALL BE HOT-DIP GALVANISED WITH 150MM MINIMUM BEARING AT EACH END.

FOUNDATIONS

- EXCAVATION SHALL BE TAKEN INTO UNIFORM NATURAL VIRGIN MATERIAL.
- FOUNDATIONS REQUIRE GROUND CONDITIONS WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 250 KPa
- THE STANDARDS SPECIFIED IN ITEMS F1 AND F2 ABOVE SHALL BE CONFIRMED ON SITE DURING EXCAVATION. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE. ADVISE ENGINEER IF STANDARDS ARE NOT MET, OR IF EXCAVATION EXPOSES ANY UNCOMPACTED FILLING, WEAK OR EXPANSIVE CLAYS OR ANY OTHERWISE SUSPECT MATERIAL.
- ANY FILLING UNDER THE BUILDINGS SHALL BE AN APPROVED GRANULAR MATERIAL PARTIALLY COMPACTED IN LAYERS OF 200mm MAXIMUM THICKNESS.
- ALL LOOSE MATERIAL OR ANY MUD TO BE THOROUGHLY REMOVED FROM TRENCHES AND REINFORCEMENT. DO NOT POUR FOOTINGS WHILST GROUND IS IN SATURATION STATE.
- AVOID GARDEN BEDS DIRECTLY AGAINST THE EXTERNAL WALLS OF THE BUILDINGS. KEEP ANY TREES, ESPECIALLY LARGER VARIETIES, WELL AWAY FROM THE ACTUAL BUILDING.
- OTHER GENERAL CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH AS 2870-1996, PART 1 "RESIDENTIAL SLABS AND FOOTINGS".
- TRENCHES SHALL BE CLEAN, LEVEL AND DEWATERED PRIOR TO THE PLACEMENT OF THE REINFORCEMENTS.

STRUCTURAL STEEL

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY CONTRACT DOCUMENTS.
- WELD SHALL BE 6MM CONTINUOUS FILLET, ALL BOLTS M12, ALL GUSSET PLATES 6MM THICK UNLESS NOTED OTHERWISE.
- CONCRETE ENCASED STEELWORK SHALL BE WRAPPED WITH 4MM WIRE AT 100MM CNT AND SHALL HAVE A MINIMUM 50mm COVER OF CONCRETE UNLESS NOTED OTHERWISE.

TIMBERWORK

- ALL TIMBERWORK SHALL BE IN ACCORDANCE WITH CURRENT SAA 1684 "TIMBER FRAMING CODE" AND SAA 1720 "TIMBER ENGINEERING CODE" AND THEIR AMENDMENTS.

FORMWORK

- ALL FORMWORK SHALL BE STANDARD FORMWORK WITH CLASS 4 FINISH.

FW2. THE STRIPPING OF FORMS AND THE REMOVAL OF FORMWORK SUPPORTS SHALL COMPLY WITH THE FOLLOWING :

- FORMS SHALL NOT BE STRIPPED OR ANY FORMWORK SUPPORTS REMOVED UNTIL THE PART OF THE MEMBER THAT WILL BE LEFT UNSUPPORTED HAS ATTAINED SUFFICIENT STRENGTH TO SUPPORT, WITH SAFETY AND WITHOUT DETRIMENT TO ITS INTENDED USE, ITS OWN WEIGHT AND ANY SUPERIMPOSED LOADS DUE TO CONCURRENT OR SUBSEQUENT CONSTRUCTION WORKS
- REMOVAL OF FORMWORK SUPPORTS SHALL BE CARRIED OUT IN A PLANNED SEQUENCE SO THE CONCRETE STRUCTURE WILL NOT BE SUBJECT TO ANY UNNECESSARY DEFORMATION, IMPACT, OR ECCENTRIC LOADING DURING THE PROCESS
- FORMWORK SHALL NOT BE REMOVED FROM VERTICAL SURFACES UNLESS THE CONCRETE IN THE MEMBER HAS ACHIEVED SUFFICIENT STRENGTH TO WITHSTAND POTENTIAL DAMAGE TO ITS SURFACES. WHEN FORMWORK IS STRIPPED AT LESS THAN 18 HOURS AFTER CASTING, EXTRA CARE SHALL BE EXERCISED TO AVOID SURFACE DAMAGE DURING STRIPPING
- REMOVAL OF FORMWORK SUPPORTS FROM THE SOFFITS OF REINFORCED SLABS OR BEAMS NOT SUPPORTING STRUCTURES ABOVE SHALL BE CARRIED OUT IN ACCORDANCE WITH :

AVERAGE AMBIENT TEMPERATURE OVER THE PERIOD (T) DEG C	PERIOD OF TIME BEFORE REMOVAL OF ALL FORMWORK SUPPORTS FROM REINFORCED MEMBERS DAYS
T > 20	12
20 ≥ T > 12	18
12 ≥ T > 5	24

CONCRETE

- DESIGN LIVE LOAD = 2.5KPA
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE SAA CONCRETE STRUCTURES CODE CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT.
- SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED WITH THE APPROVAL OF THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE SCABBLED OVER THE WHOLE FACE AND ANY UNSOUND MATERIAL REMOVED. THE SURFACES OF PREVIOUSLY PLACED CONCRETE AT CJS SHALL BE ROUGHENED BY REMOVING ALL LAITANCE AND SUFFICIENT MORTAR TO EXPOSE TO A DEPTH OF 3mm. CORSE AGGREGATE WHICH DO NOT REMAIN FIRMLY EMBEDDED IN MORTAR MATRIX AND LAITANCE FROM PROJECTING REINFORCEMENT FROM PREVIOUS POUR SHALL BE REMOVED. IMMEDIATELY PRIOR TO PLACEMENT OF ADJOINING CONCRETE, THE SURFACE OF THE CJ AND THE PROJECTING REINFORCEMENTS SHALL BE WASHED CLEAN, AND THE CONCRETE SURFACE SHALL BE SATURATED WITH WATER, FOLLOWING WHICH ALL EXCESS WATER AND LOOSE MATERIAL SHALL BE REMOVED

- NO HOLES OR CHASES OTHER THAN THOSE SHOWN IN THE DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER. REINFORCEMENTS SHALL NOT BE CUT AT HOLES BUT SHALL BE DISPLACED.
- THE MIX PROPORTIONS AND CHARACTERISTICS FOR ALL CLASSES OF CONCRETE SHALL COMPLY WITH THE FOLLOWING :

CONCRETE MIX PROPORTIONS PROPORTIONS CONCRETE CLASS	CHARACTERISTIC STRENGTH (Fc) AT 28 DAYS	MINIMUM CEMENT CONTENT	CEMENT TYPE	MAX. W/C RATIO	MAX. SHRINKAGE AT 56 DAYS	SLUMP AT POINT OF
N15 (BINDING LAYERS)	15MPa	-	GP	-	-	(EXCEPT FOR TREMIE CONCRETE)
N25 (BENCHING)	25MPa	300 KG/M3	GP	0.60	900 x 10 -6	80 - 120 mm (EXCEPT FOR TREMIE CONCRETE)
S40	40MPa	450 KG/M3	SL	0.45	600 x 10 -6	80 - 120 mm (EXCEPT FOR TREMIE CONCRETE)

- ALL REINFORCEMENTS SHALL BE D500N DEFORMED BAR TO AS4671-2001 AND TO FIRMLY SUPPORTED ON PLASTIC CHAIRS GENERALLY NOT GREATER THAN 750mm CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- WHERE TRANSVERSE TIE-BARS ARE NOT SHOWN, PROVIDE N12 @ 300, SPLICE 500mm WHERE NECESSARY.
- SPLICES IN REINFORCEMENTS SHALL BE MADE IN THE POSITIONS SHOWN AND SHALL BE + 500mm FOR FABRICS UNLESS NOTED OTHERWISE + 40 BAR DIAMETER UNLESS NOTED OTHERWISE
- CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE MINIMUM 70mm

C11. CURING OF CONCRETE**1. GENERAL**

FRESHLY PLACED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVE HOT OR COLD TEMPERATURES. THE CONCRETE SHALL BE MAINTAINED AT A REASONABLY CONSTANT TEMPERATURE WITH MINIMUM MOISTURE LOSS FOR THE DURATION OF THE CURING PERIOD. IN WINDY CONDITIONS, WINDBREAKS SHALL BE ERRECTED TO SHIELD THE CONCRETE SURFACES DURING AND AFTER PLACEMENT. FRESHLY PLACED CONCRETE SHALL NOT BE SUBJECT TO EXTERNAL VIBRATION SUCH AS PILE DRIVING OR DYNAMIC GROUND COMPACTION.

2. CURING PERIODS

UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS, THE MINIMUM CURING PERIOD SHALL BE AS FOLLOWS :-

- NORMAL CLASS CONCRETE : 4 DAYS
- SPECIAL CLASS CONCRETE : 7 DAYS OF MOIST CURING AT 100% RELATIVE HUMIDITY.

THE CURING PERIOD WHEN AN APPROVED CURING COMPOUND IS USED SHALL NOT BE LESS THAN 14 DAYS.

3. CURING METHODS

UNFORMED SURFACES, AND FORMED SURFACES AFTER THE FORMWORK IS STRUCK OFF, SHALL BE CURED BY ONE OF THE FOLLOWING METHODS:

- PONDING OR CONTINUOUS SPRINKLING USING CLEAN WATER.
- THE USE OF AN ABSORPTIVE COVER KEPT CONTINUOUSLY WET.
- LOW PRESSURE STEAM CURING.
- IMPERMEABLE MEMBRANE FIXED AND LAPPED OVER THE MOISTENED CONCRETE SURFACE TO EXCLUDE AIR CIRCULATION.
- MEMBRANE CURING COMPOUND.

4. CURING COMPOUNDS

CURING COMPOUNDS SHALL CONFORM TO THE REQUIREMENTS OF AS3799. THE CURING COMPOUND SHALL BE SPRAYED TO GIVE A UNIFORM COVER. THE SPRAYER SHALL INCORPORATE A DEVICE FOR CONTINUOUS AGITATION AND MIXING OF THE CMPOUND IN ITS CONTAINER DURING SPRAYING. THE CONTRACTOR SHALL SUBMIT TO THE PRINCIPAL A CERTIFICATE OF CONFORMITY FROM THE SUPPLIER, SUPPORTED BY TEST CERTIFICATES FROM A NATA APPROVED LABORATORY CERTIFYING THAT THE CURING COMPOUND CONFORMS TO THE SPECIFICATION. THE CURING COMPOUND SHALL BE APPLIED USING A FINE SPRAY AT THE RATE STATED ON THE CERTIFICATE OF CONFORMITY, OR AT A RATE OF 0.2 LITRES/m², WHICHEVER IS GREATER. A MINIMUM OF TWO COATS SHALL BE APPLIED AT THE FULL RATE. THE TIME BETWEEN THE FIRST COAT AND THE SECOND COAT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION, OR ON THE BASIS OF TRIAL APPLICATION. THE CURING COMPOUND SHALL BE APPLIED TO UNIFORMED SURFACES IMMEDIATELY AFTER COMPACTION OF ALL FINISHING OPERATIONS, AND TO FORMED SURFACES WITHIN HALF AN HOUR OF THE REMOVAL OF FORMWORK FROM THE SECTION. THE CURING MEMBRANE SHALL BE MAINTAINED INTACT AFTER ITS APPLICATION FOR THE REQUIRED PERIOD. ANY DAMAGE TO THE CURING MEMBRANE SHALL BE MADE GOOD BY RESPRAYING OF THE AFFECTED AREAS.

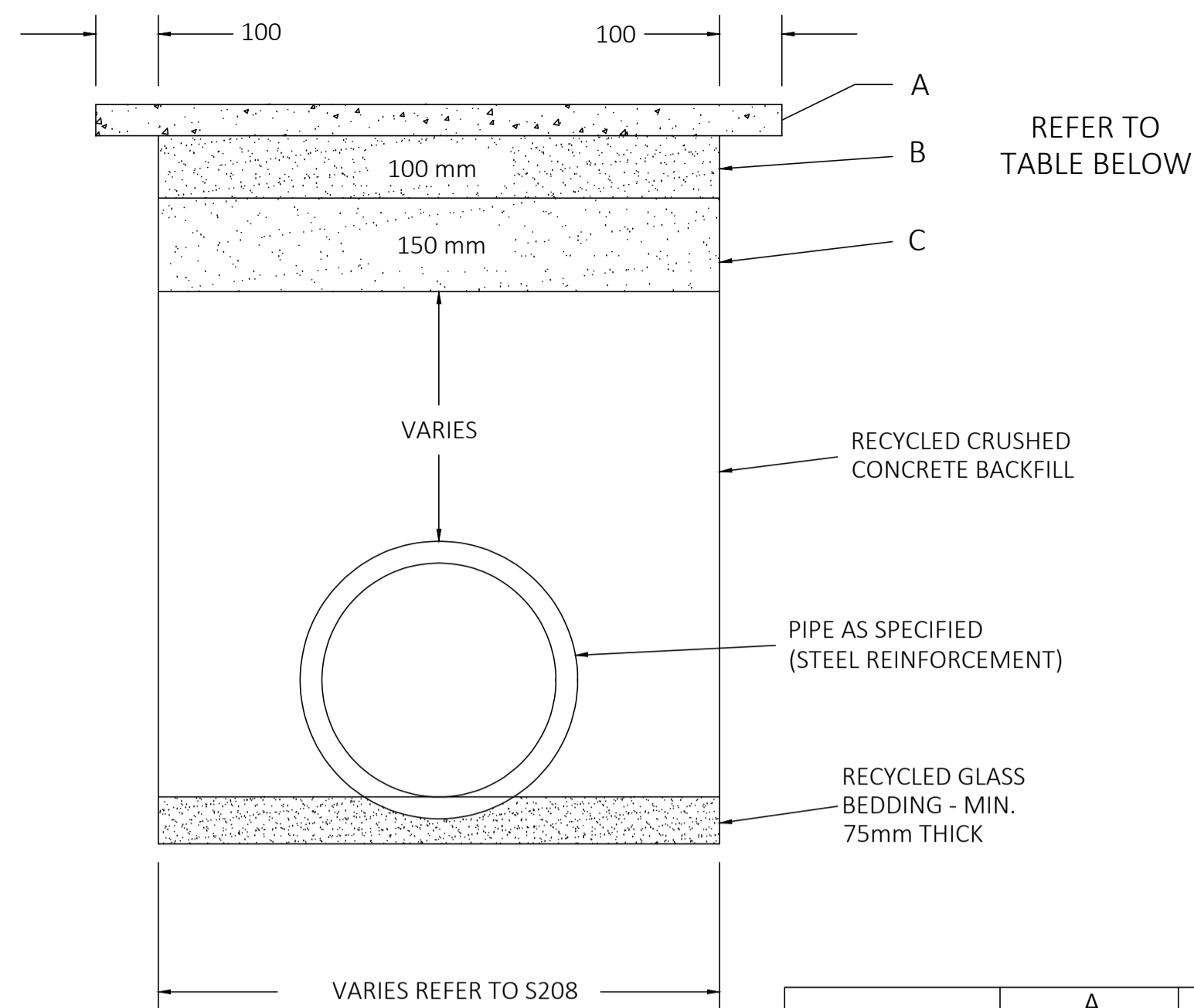
C12. COMPACTION

CONCRETE SHALL BE COMPACTED IMMEDIATELY AFTER PLACING BY MEANS OF INTERNAL AND / OR EXTERNAL VIBRATION. VIBRATION SHALL BE CARRIED OUT IN A REGULAR AND SYSTEMATIC MANNER TO ENSURE THAT ALL CONCRETE IS THOROUGHLY COMPACTED. VIBRATION SHALL BE APPLIED TO THE FULL DEPTH OF EACH LAYER AND EXTENDED INTO THE TOP 100mm OF THE UNDERLYING LAYER. CONCRETE SHALL NOT BE VIBRATED TO THE EXTENT WHERE SEGREGATION OF THE INGREDIENTS OCCURS. VIBRATORS SHALL BE OF THE ROTARY OUT OF BALANCE TYPE AND SHALL BE CHECKED PRIOR TO USE TO ENSURE PROPER WORKING ORDER. INTERNAL VIBRATORS SHALL HAVE A MINIMUM DIAMETER OF 50mm AND AN OPERATING FREQUENCY RANGE OF BETWEEN 130 Hz AND 200 Hz.

THE NUMBER OF WORKING INTERNAL VIBRATORS IN USE FOR COMPACTING CONCRETE DURING A CONCRETE POUR SHALL NOT BE LESS THAN ONE FOR EACH 10m³ OF CONCRETE PLACED PER HOUR, WITH A MINIMUM OF TWO. THE NUMBER OF STANDBY VIBRATORS SHALL NO BE LESS THAN ONE QUARTER OF THE NUMBER OF VIBRATORS IN USE WITH A MINIMUM OF ONE. VIBRATOR USED FOR SPREADING CONCRETE SHALL NOT BE COUNTED IN THE NUMBER OF VIBRATORS USED FOR COMPACTION. INTERNAL VIBRATORS SHALL BE INSERTED VERTICALLY AT SPACING NOT EXCEEDING 350mm. THE VIBRATOR SHALL BE LEFT IN PLACE FOR AT LEAST 7 SECONDS UNTIL THE AIR BUBBLES CEASE BREAKING THE SURFACE, AND THEN WITHDRAWN SLOWLY. VIBRATORS SHALL NOT BE ALLOWED TO REST ON THE REINFORCEMENT. IN REGIONS OF CLOSELY SPACED REINFORCEMENT, FULL COMPACTION OF CONCRETE DIRECTLY BENEATH THE CLOSELY SPACED HORIZONTAL REINFORCEMENT SHALL BE ACHIEVED PRIOR TO ENCASING THE REINFORCEMENT WITH CONCRETE.

NOT FOR CONSTRUCTION

			Drawn & Designed by: K. Koh	Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development	Drawing Title Notes & Details (Public Domain)		
			Checked by: N. Evans		At 127 - 129 Willoughby Road Crows Nest NSW 2065	Date December 2021	Scale As Shown @ A1	
B	Omission of Level 3	13 June 2022	Approved by: Kenneth T. NG MIE(Aust) CPEng NER APEC Engineer INPE(Aust) (Reg. No. 2206352) 19PE2 Registered Certifier (Hydraulic (stormwater), Road & Drainage and Stormwater) (Reg. No. BDC0827) Registered Design Practitioner (Drainage & Civil Engineering) (Reg. No. DEP0000692) & Professional Engineer (Civil) (Reg. No. DEP0000630) NSW Fair Trading		Client	Project No. 341112021DA	Drawing & Sheet No./Issue 34111-10/12 / B	
Issue	Description	Date						



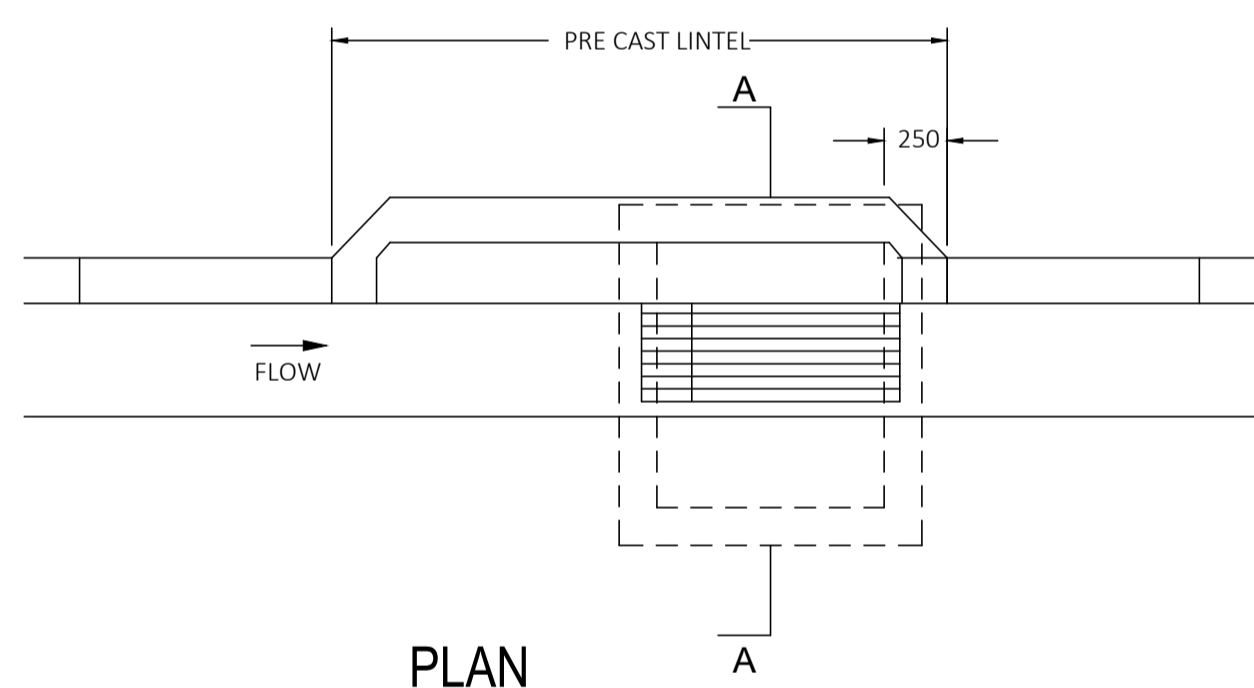
	A	B	C
ROAD WAY	AC10 - 50mm THICK	DGB20	DGB40
FOOTPATH	CONCRETE - 75mm THICK	DGB20	-
PARK / GRASS VERGE	TURF	TOP SOIL	TURF UNDERLAY

NOT FOR CONSTRUCTION

- NOTES:
 1. COMPACTION : REFER TO COUNCIL SPECIFICATIONS.
 2. TRENCH WIDTH REFER TO DRAWING NUMBER S208

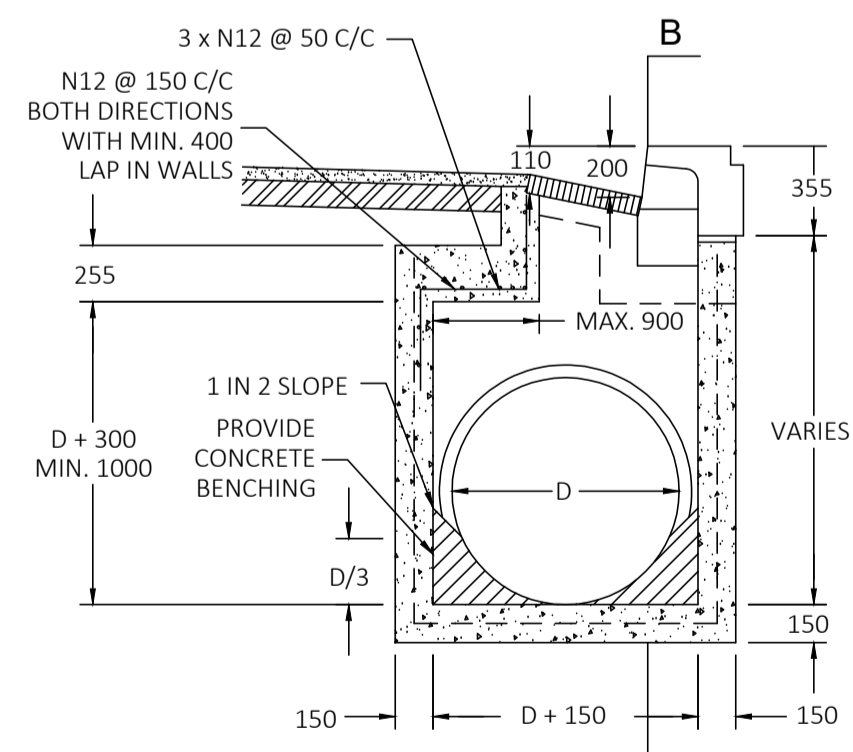
TYPICAL BACKFILL CROSS SECTION (NORTH SYDNEY COUNCIL DRAWING NO. S207)

NOT TO SCALE

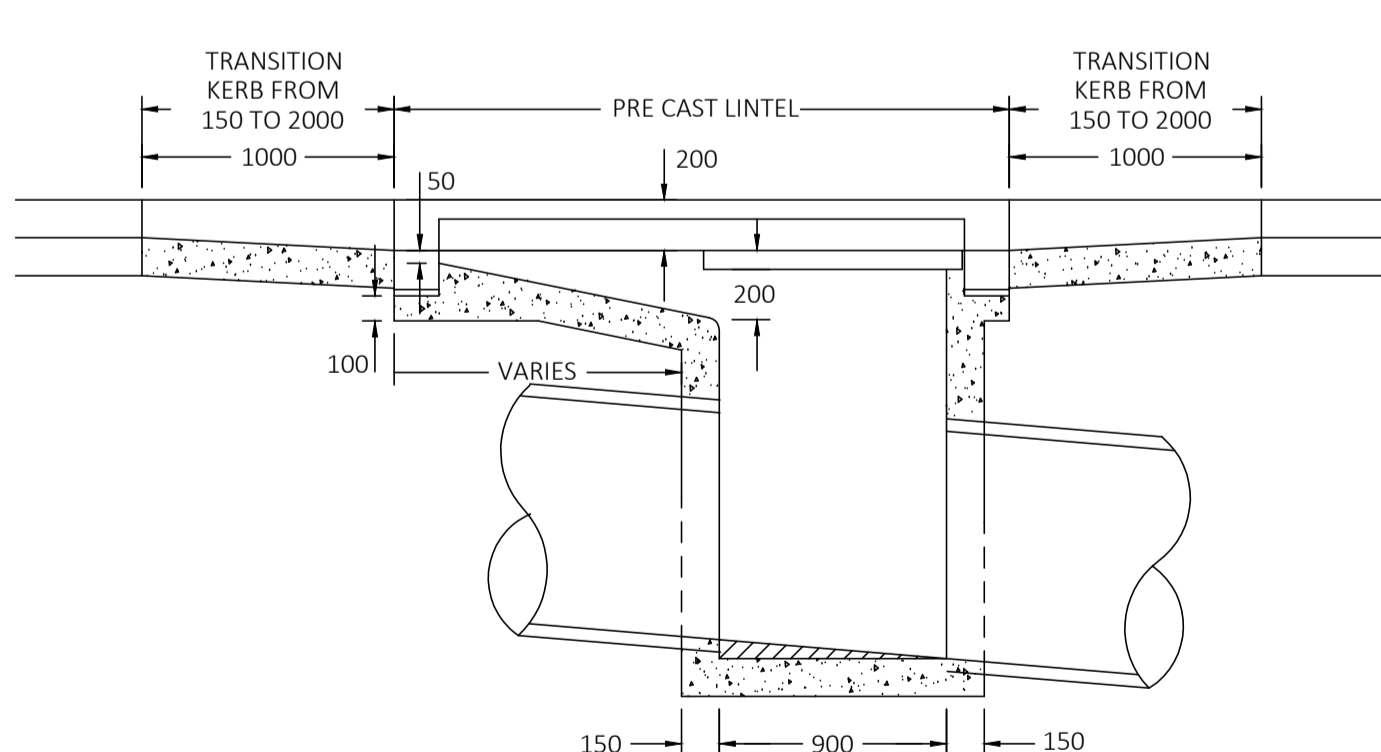


PLAN

- NOTES:
 1. MAXIMUM PIPE IS 1600mm.
 2. COMPRESSIVE STRENGTH Fc FOR CAST IN-SITU CONCRETE TO BE MINIMUM 32MPa AT 28 DAYS.
 3. COVER TO BE WELDL0K GG50D OR APPROVED EQUIVALENT.
 4. PROVIDE SL82 MESH CENTRALLY PLACED TO WALLS AND BASE FRO ALL PITS GREATER OR EQUAL 1500 DEEP. MINIMUM 50 COVER. RETURN MESH MIN. 300 INTO BASE AND SIDES.
 5. PIT NOT TO EXCEED 2500 DEPTH.
 6. STEP IRONS TO BE PROVIDED FOR PITS GREATER THAN 1m DEEP. REFER TO S206.
 7. ALL PIPES SHALL BE AS SPECIFIED ON PLANS AND SHALL BE STEEL REINFORCED.
 8. PROVIDE A 2m LENGTH SLOTTED AG-PIPE WITH FILTER SOCK AT THE UPSTREAM END OF THE PIT.
 9. ALL PITS ARE TO BE CAST IN-SITU UNLESS DIRECTED OTHERWISE.



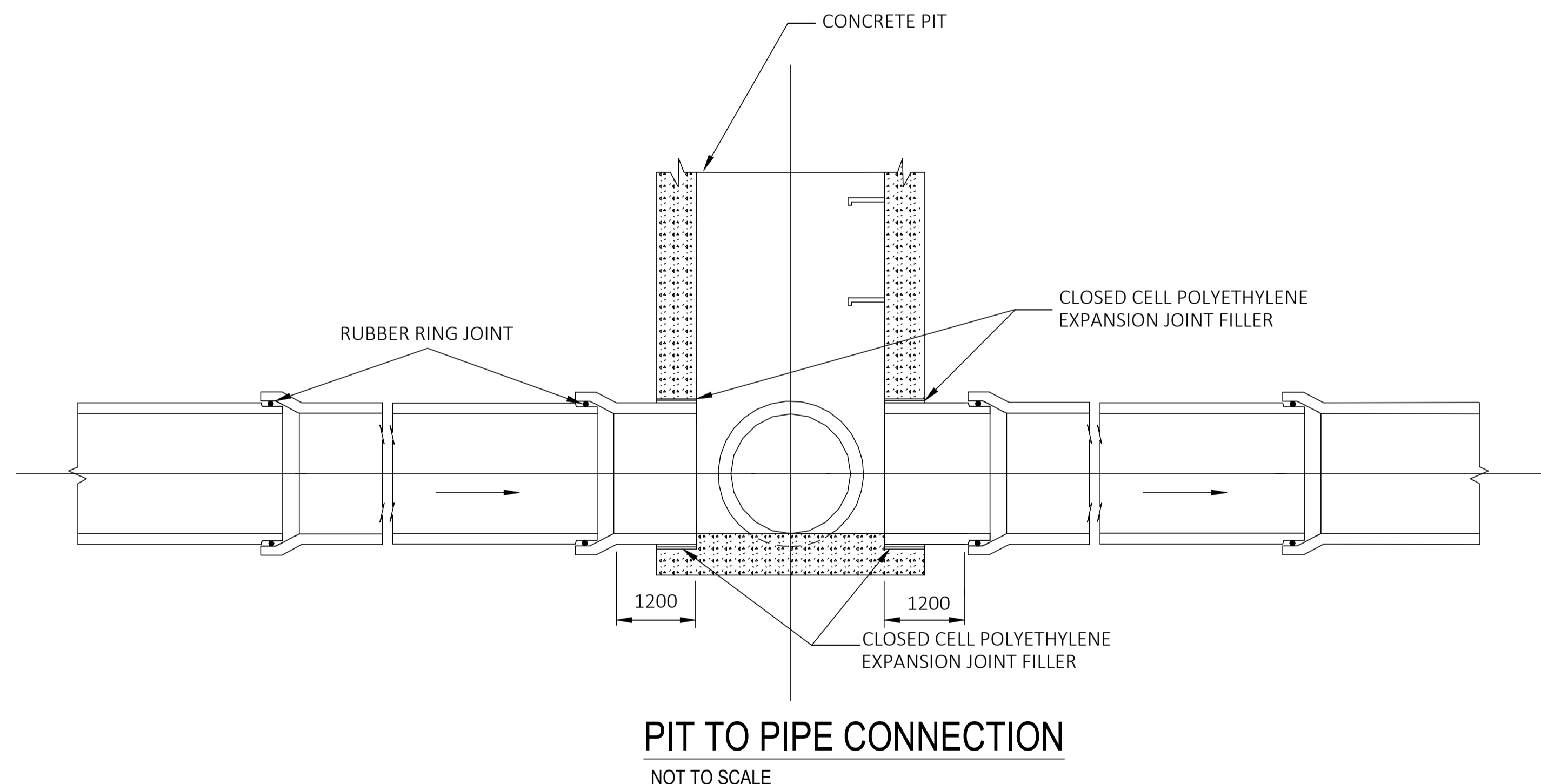
SECTION A - A



SECTION B - B

HAUNCHED GRATED GULLY PIT WITH PRECAST EKI DETAIL (NORTH SYDNEY COUNCIL DRAWING NO. S204)

NOT TO SCALE



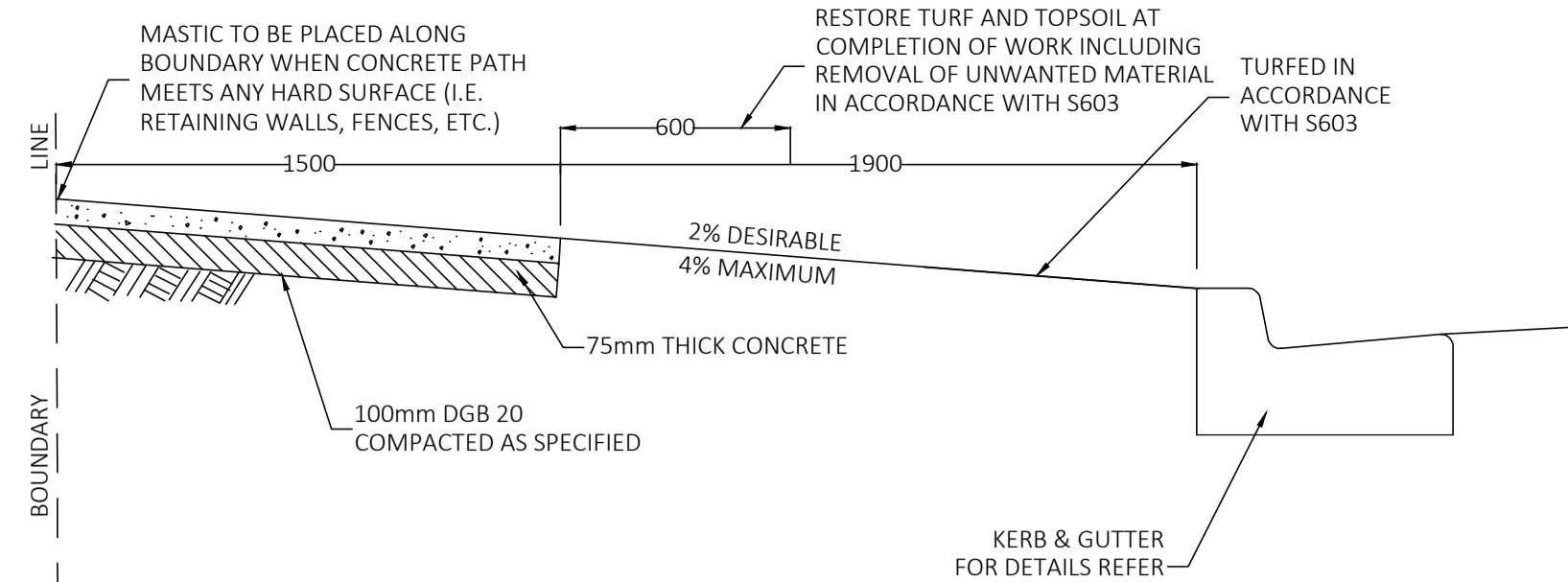
PIT TO PIPE CONNECTION

NOT TO SCALE

Copyright
 This document is & shall remain the property of ING Consulting Engineers Pty Ltd. The document may only be used for the purpose for which it was commissioned. They must not be used, reproduced, or copied in whole or in part without prior written consent of that company.

VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT/ MANAGER PRIOR TO PROCEEDING WITH ANY WORKS. Do not scale off drawings.

		Drawn & Designed by: K. Koh	Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development		Drawing Title Notes & Details (Public Domain 2)	
		Checked by: N. Evans		At 127 - 129 Willoughby Road Crows Nest NSW 2065		Date December 2021	Scale As Shown @ A1
B	Omission of Level 3	13 June 2022	Approved by: Kenneth T. NG MIEAust CPEng NER APEC Engineer INPEAust (Reg. No. 2206352) RPEQ Registered Certifier (Hydraulic (stormwater), Road & Drainage and Stormwater) (Reg. No. BDC0827) Registered Design Practitioner (Drainage & Civil Engineering) (Reg. No. DEP000092) & Professional Engineer (Civil) (Reg. No. DEP0000630) NSW Fair Trading	Client		Project No. 341112021DA	Drawing & Sheet No./Issue 34111-11/12 / B
A	Development Application	13 Dec. 2021					
Issue	Description	Date					

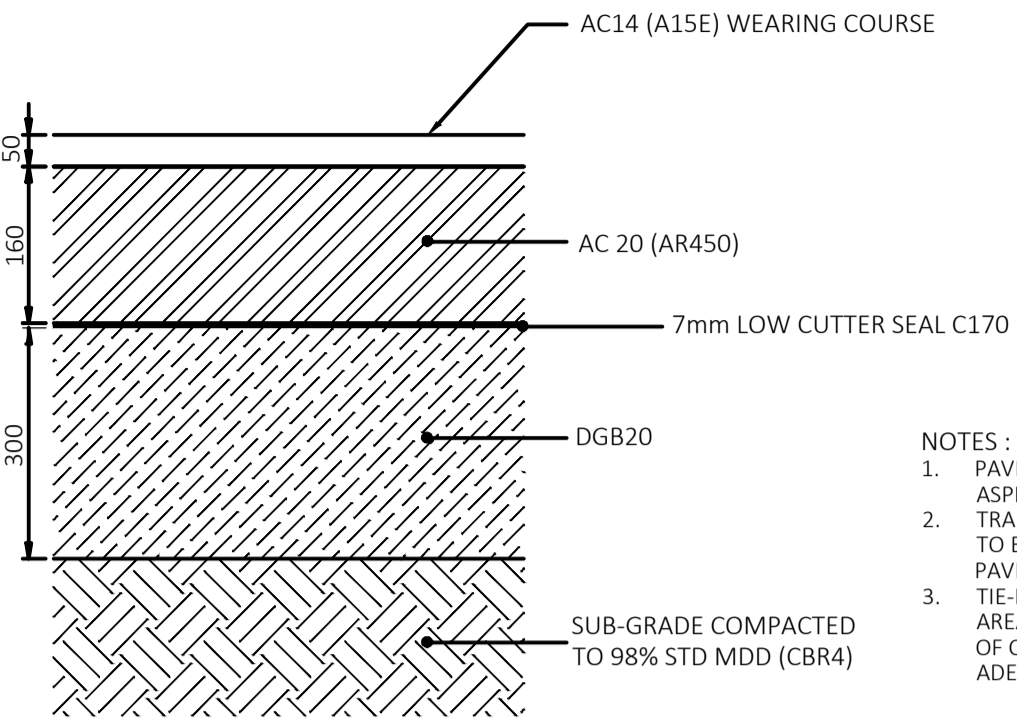


NOTES

- FOOTPATH WIDTH 1500mm OR AS SPECIFIED.
- TURF TO BE SELECTED BUFFALO OR COUCH AS DIRECTED.
- TOPSOIL AS PER SECTION 18 OF COUNCIL'S SPECIFICATIONS.
- AT FOOTPATH CROSSING, FOOTPATH TO BE CONSTRUCTED AS PER COUNCIL STANDARD VEHICULAR CROSSING, KERB AND GUTTER DETAIL DRAWING NO. S101A AND S101B.
- FOR FOOTPATH PAVERS REFER TO PUBLIC DOMAIN MANUAL (PDM).
- FOOTPATH TO BE CONSTRUCTED IN ACCORDANCE WITH COUNCIL SPECIFICATION (REFER TO PDM).
- CONSTRUCTION JOINTS EVERY 1.5m.
- EXPANSION JOINTS EVERY 6m USING BITUMEN IMPREGNATED PREFORMED JOINTING MATERIAL.
- CONCRETE SURFACE SHALL BE FINISHED ACCORDING TO SPECIFICATION.
- TO BE READ IN CONJUNCTION WITH STANDARD TURFING DETAIL S606.

STANDARD CONCRETE FOOTPATH DETAIL (NORTH SYDNEY COUNCIL DRAWING NO. S104A)

NOT TO SCALE

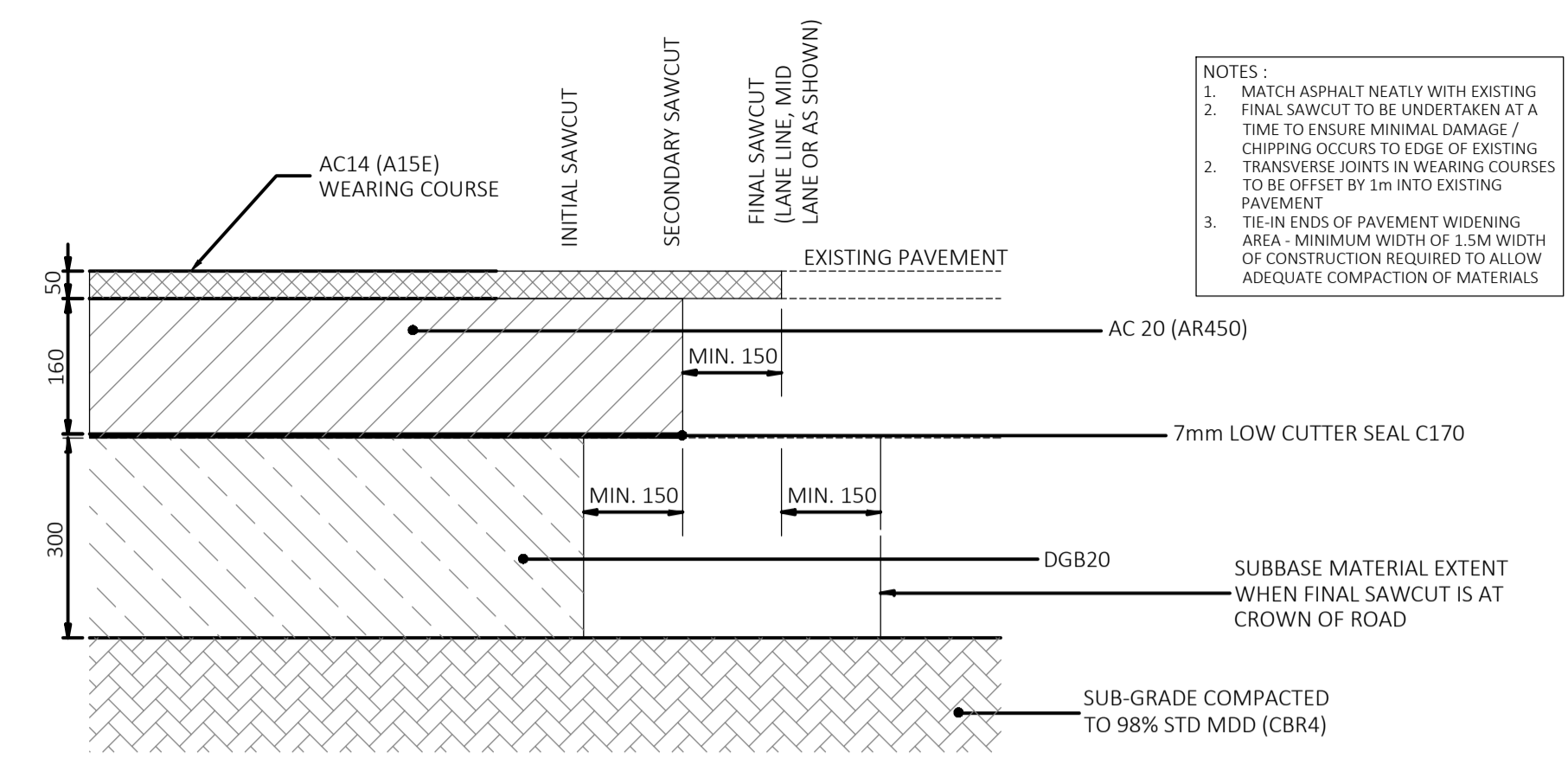


NOTES :

- PAVEMENT JOINT SECTION - LONGITUDINAL ASPHALT LATER OFFSETS TO BE 150mm
- TRANSVERSE JOINTS IN WEARING COURSES TO BE OFFSET BY 1m INTO EXISTING PAVEMENT
- TIE-IN ENDS OF PAVEMENT WIDENING AREA - MINIMUM WIDTH OF 1.5M WIDTH OF CONSTRUCTION REQUIRED TO ALLOW ADEQUATE COMPACTION OF MATERIALS

ROAD PAVEMENTS (AS PER RMS' REQUIREMENT)

NOT TO SCALE

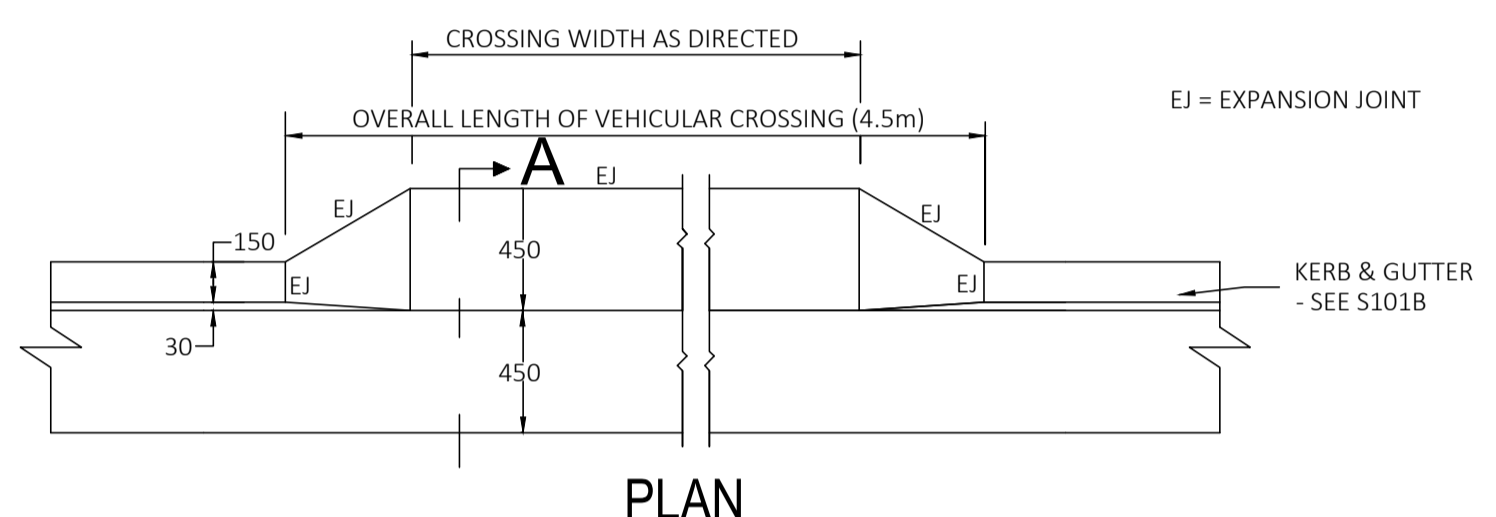


- NOTES :**
- MATCH ASPHALT NEATLY WITH EXISTING
 - FINAL SAWCUT TO BE UNDERTAKEN AT A TIME TO ENSURE MINIMAL DAMAGE / CHIPPING OCCURS TO EDGE OF EXISTING
 - TIE-IN ENDS OF PAVEMENT WIDENING AREA - MINIMUM WIDTH OF 1.5M WIDTH OF CONSTRUCTION REQUIRED TO ALLOW ADEQUATE COMPACTION OF MATERIALS

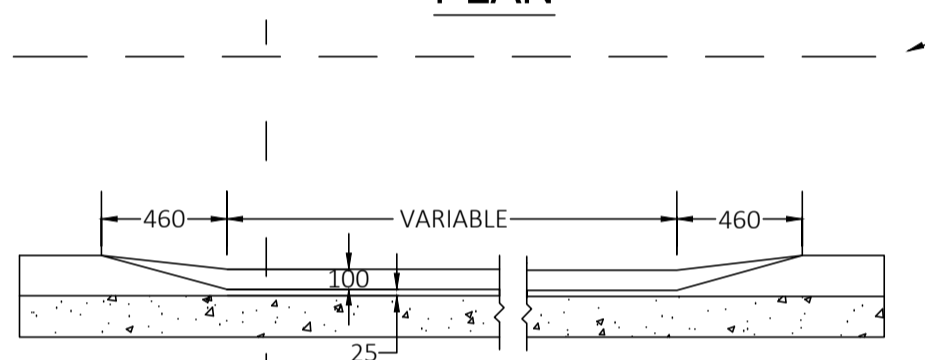
ROAD PAVEMENTS (AS PER RMS' REQUIREMENT)

NOT TO SCALE

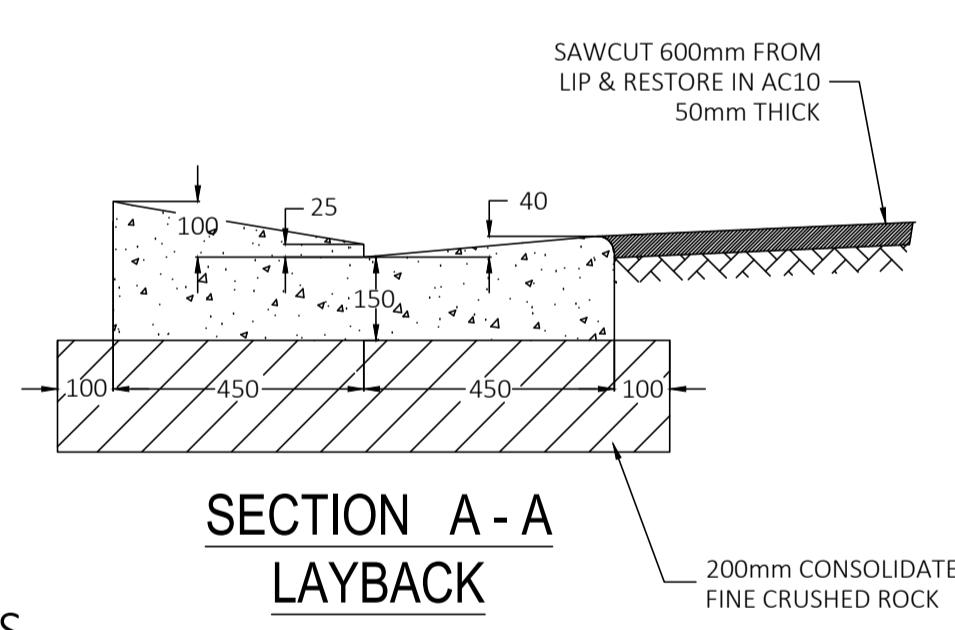
NOT FOR CONSTRUCTION



PLAN



ELEVATION AT KERB FACE



SECTION A-A LAYBACK

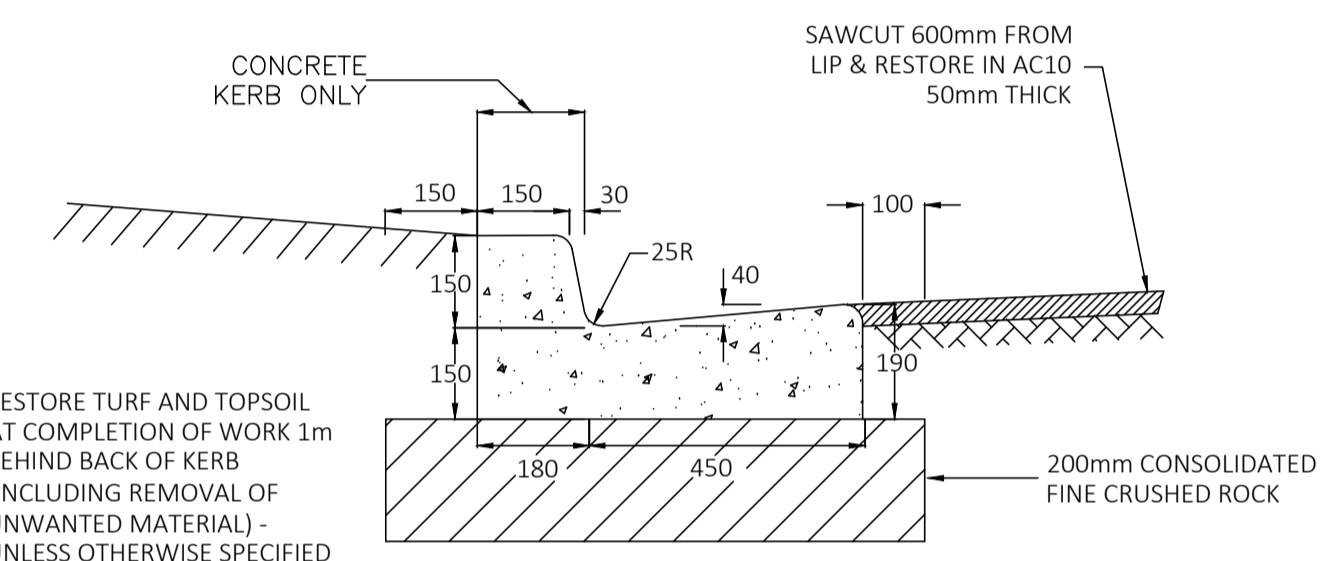
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH S101B

SPECIFICATIONS

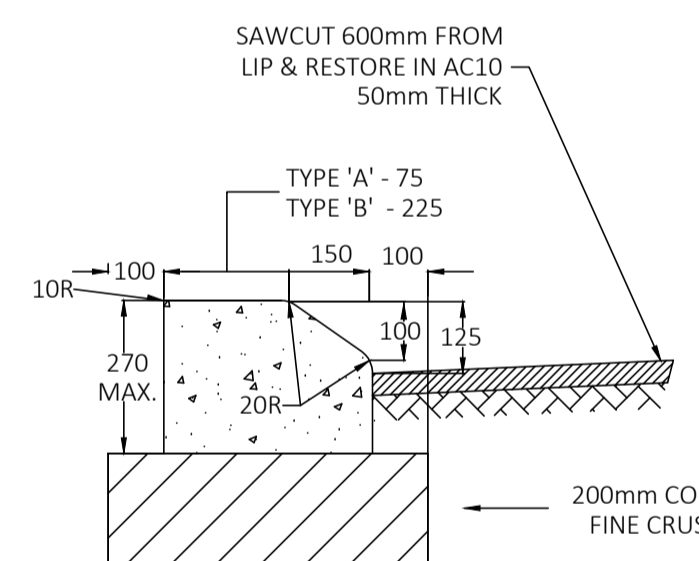
- SLAB THICKNESS AND REINFORCEMENT**
RESIDENTIAL : SINGLE DWELLING - 130mm SL82 REO MESH.
MULTIPLE DWELLING - 180mm SL82 REO MESH.
COMMERCIAL : 180mm SL92 REO MESH. (TO BE LOCATED WITH 40mm COVER FROM BOTTOM OF SLAB).
ALL CONCRETE F'c 32 MPA.
- BASE COURSE**
CONSOLIDATED FINE CRUSHED ROCK TO COUNCIL'S SPECIFICATIONS.
- CONCRETE FINISH**
A. ALL EDGES SHALL BE TOOL FINISHED WITH 12mm RAD. 50mm WIDE EDGING TOOL.
B. GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL.
C. DRIVEWAY SLAB TO BE FINISHED WITH A WOOD FLOAT.
- EXPANSION JOINTS**
EXPANSION JOINTS SHALL BE PLACED AT 6m INTERVALS AND AT OUTSIDE ENDS OF WINGS.
- CONTRACTORS SHALL CONFORM TO COUNCIL'S STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSING / CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL.
- SITE OF WORK**
DURING AND ON COMPLETION OF WORK, ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
- ALL PLAN DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- AC10MM ADJUSTMENT**
PROVIDE 600mm AC10 CORRECTION COURSE LAYER 50mm THICK AS SHOWN.

STANDARD VEHICULAR CROSSING AND LAYBACK DETAIL (NORTH SYDNEY COUNCIL DRAWING NO. S101A)

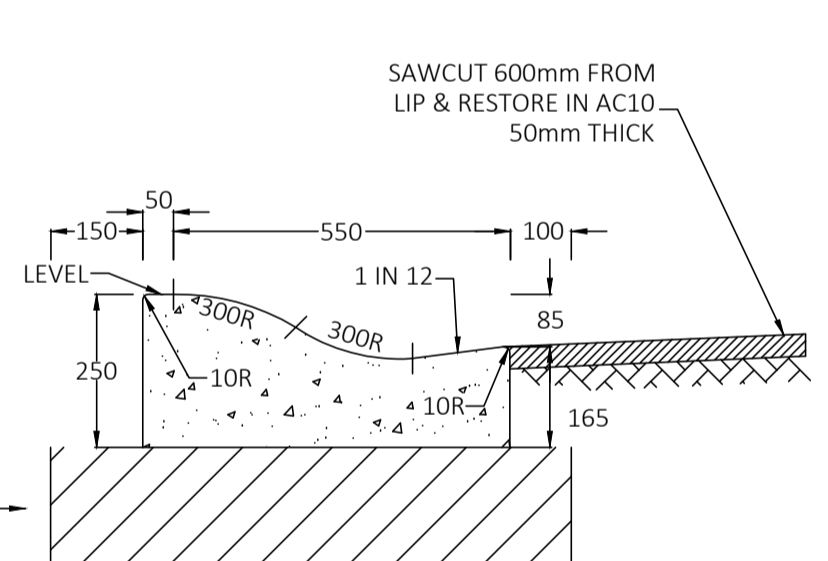
NOT TO SCALE



BARRIER KERB



MOUNTABLE KERB



ROLL KERB

SPECIFICATIONS

- BASE COURSE**
CONSOLIDATED FINE CRUSHED ROCK TO COUNCIL'S SPECIFICATIONS.
- CONCRETE FINISH**
A. ALL EDGES SHALL BE TOOL FINISHED WITH 12mm RAD. 50mm WIDE EDGING TOOL.
B. GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL.
C. DRIVEWAY SLAB TO BE FINISHED WITH A WOOD FLOAT.
- EXPANSION JOINTS**
EXPANSION JOINTS SHALL BE PLACED AT 6m INTERVALS.
- CONTRACTORS SHALL CONFORM TO COUNCIL'S STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSING / CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL.
- SITE OF WORK**
DURING AND ON COMPLETION OF WORK, ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
- ALL PLAN DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- AC10mm ADJUSTMENT**
PROVIDE 600mm AC10 CORRECTION COURSE LAYER 50mm THICK AS SHOWN.
- RESTORATION OF TURF**
RESTORE TURF & TOPSOIL AT COMPLETION OF WORK UP TO 1m BEHIND BACK OF KERB (REMOVE UNWANTED MATERIAL).

STANDARD KERB & GUTTER DETAIL (NORTH SYDNEY COUNCIL DRAWING NO. S101B)

NOT TO SCALE

Copyright
This document is & shall remain the property of ING Consulting Engineers Pty Ltd. The document may only be used for the purpose for which it was commissioned. They must not be used, reproduced, or copied in whole or in part without prior written consent of that company.

VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT MANAGER PRIOR TO PROCEEDING WITH ANY WORKS. Do not scale off drawings.

Drawn & Designed by: K. Koh		Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Project Proposed Development		Drawing Title Notes & Details (Public Domain 3)	
Checked by: N. Evans			At 127 - 129 Willoughby Road Crows Nest NSW 2065		Date December 2021	Scale As Shown @ A1
B	Omission of Level 3	13 June 2022	Client		Project No. 341112021DA	Drawing & Sheet No./Issue 34111-12/12 / B
A	Development Application	13 Dec. 2021				
Issue	Description	Date				

ATTACHMENT A

Request to Vary the Building Height Control

INTRODUCTION

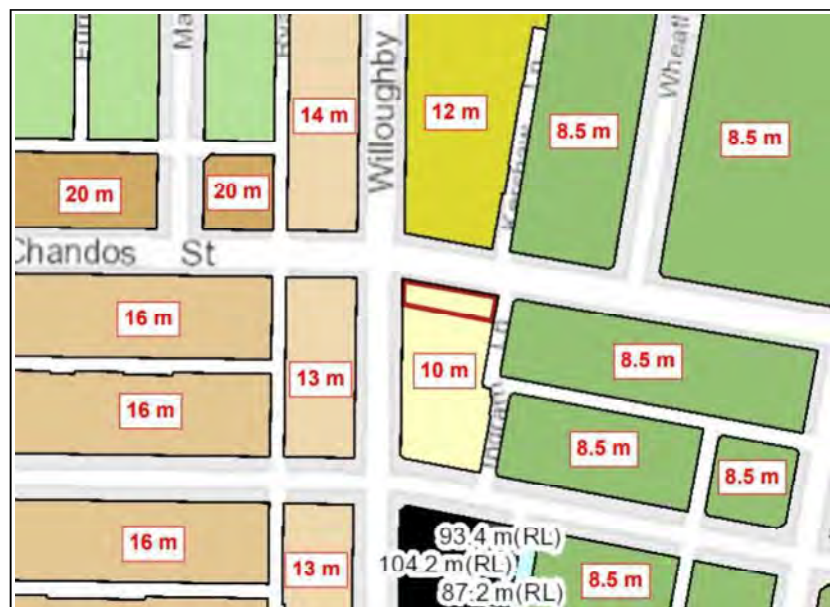
Clause 4.3 of the North Sydney Local Environmental Plan (LEP) 2013 specifies a maximum building height of 10 metres.

The proposed development extends to a maximum height of approximately 12.8 metres measured to the eastern upper roof level, and 12.5 metres measured to the top of the lift overrun (refer to Section 02).

The portion of the building that extends above the building height control is identified on the plan extract below.



The building height controls that apply in the surrounding area are identified on the map extract below.



In the circumstances, this “*written request*” has been prepared to vary the building height control pursuant to Clause 4.6 of the LEP.

The building height control is a development standard and is not excluded from the operation of Clause 4.6 of the LEP.

CLAUSE 4.6 OF THE NORTH SYDNEY LEP 2013

Clause 4.6(1) is facultative and is intended to allow flexibility in applying development standards in appropriate circumstances.

Clause 4.6 does not directly or indirectly establish a test that non-compliance with a development standard should have a neutral or beneficial effect relative to a complying development (Initial at 87).

Clause 4.6(2) of the LEP specifies that “*development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument*”.

Clause 4.6(3) specifies that development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
- (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

The requirement in Clause 4.6(3)(b) is that there are sufficient environmental planning grounds to justify contravening the development standard, not that the development that contravenes the development standard has a better environmental planning outcome than a development that complies with the development standard (Initial at 88).

Clause 4.6(4) specifies that development consent must not be granted for development that contravenes a development standard unless:

- (a) *the consent authority is satisfied that:*
- (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
- (b) *the concurrence of the Secretary has been obtained.*

Clause 4.6(5) specifies that in deciding whether to grant concurrence, the Secretary must consider:

- (a) *whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and*
- (b) *the public benefit of maintaining the development standard, and*
- (c) *any other matters required to be taken into consideration by the Secretary before granting concurrence.*

CONTEXT AND FORMAT

This "written request" has been prepared having regard to "Varying development standards: A Guide" (August 2011), issued by the former Department of Planning, and relevant principles identified in the following judgements:

- *Winten Property Group Limited v North Sydney Council [2001] NSWLEC 46;*
- *Wehbe v Pittwater Council [2007] NSWLEC 827;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 1009;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWCA 248;*
- *Randwick City Council v Micaul Holdings Pty Ltd [2016] NSWLEC 7;*
- *Moskovich v Waverley Council [2016] NSWLEC 1015;*
- *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118;*
- *Hansimikali v Bayside Council [2019] NSWLEC 1353;*

- *Big Property Group Pty Ltd v Randwick City Council [2021] NSWLEC 1161.*
- *HPG Mosman Projects Pty Ltd v Mosman Municipal Council [2021] NSWLEC 1243.*

“*Varying development standards: A Guide*” (August 2011) outlines the matters that need to be considered in DA’s involving a variation to a development standard. The Guide essentially adopts the views expressed by Preston CJ, in *Wehbe v Pittwater Council [2007] NSWLEC 827* to the extent that there are effectively five (5) different ways in which compliance with a development standard can be considered unreasonable or unnecessary as follows:

1. The objectives and purposes of the standard are achieved notwithstanding non-compliance with the development standard.
2. The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary.
3. The underlying objective or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable.
4. The development standard has been ‘virtually abandoned or destroyed’ by the Councils own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable.
5. The zoning of the particular land is unreasonable or inappropriate so that a development standard appropriate for that zoning is also unreasonable and unnecessary as it applies to the land and compliance with the standard would be unreasonable or unnecessary. That is, the particular parcel of land should not have been included in the particular zone.

As Preston CJ, stated in *Wehbe*, the starting point with a SEPP No. 1 objection (now a Clause 4.6 variation) is to demonstrate that compliance with the development standard is unreasonable or unnecessary in the circumstances. The most commonly invoked ‘way’ to do this is to show that the objectives of the development standard are achieved notwithstanding non-compliance with the numerical standard. The Applicant relies upon ground 1 in *Wehbe* to support its submission that

compliance with the development standard is both unreasonable and unnecessary in the circumstances of this case.

In that regard, Preston CJ, in *Wehbe* states that "... development standards are not ends in themselves but means of achieving ends". Preston CJ, goes on to say that as the objectives of a development standard are likely to have no numerical or qualitative indicia, it logically follows that the test is a qualitative one, rather than a quantitative one. As such, there is no numerical limit which a variation may seek to achieve.

The above notion relating to 'numerical limits' is also reflected in Paragraph 3 of Circular B1 from the former Department of Planning which states that:

As numerical standards are often a crude reflection of intent, a development which departs from the standard may in some circumstances achieve the underlying purpose of the standard as much as one which complies. In many cases the variation will be numerically small in others it may be numerically large, but nevertheless be consistent with the purpose of the standard.

It is important to emphasise that in properly reading *Wehbe*, an objection submitted does not necessarily need to satisfy all of the tests numbered 1 to 5, and referred to above. This is a common misconception. If the objection satisfies one of the tests, then it may be upheld by a Council, or the Court standing in its shoes. Irrespective, an objection can also satisfy a number of the referable tests.

In *Wehbe*, Preston CJ, states that there are three (3) matters that must be addressed before a consent authority (Council or the Court) can uphold an objection to a development standard as follows:

1. The consent authority needs to be satisfied the objection is well founded;
2. The consent authority needs to be satisfied that granting consent to the DA is consistent with the aims of the Policy; and
3. The consent authority needs to be satisfied as to further matters, including non-compliance in respect of significance for State and regional planning and the public benefit of maintaining the planning controls adopted by the environmental planning instrument.

Further, it is noted that the consent authority has the power to grant consent to a variation to a development standard, irrespective of the numerical extent of variation (subject to some limitations not relevant to the present matter).

The decision of Pain J, in *Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90* suggests that demonstrating that a development satisfies the objectives of the development standard is not necessarily sufficient, of itself, to justify a variation, and that it may be necessary to identify reasons particular to the circumstances of the proposed development on the subject site.

Further, Commissioner Tuor, in *Moskovich v Waverley Council [2016] NSWLEC 1015*, considered a DA which involved a relatively substantial variation to the FSR (65%) control. Some of the factors which convinced the Commissioner to uphold the Clause 4.6 variation request were the lack of environmental impact of the proposal, the characteristics of the site such as its steeply sloping topography and size, and its context which included existing adjacent buildings of greater height and bulk than the proposal.

The decision suggests that the requirement that the consent authority be satisfied the proposed development will be in the public interest because it is “consistent with” the objectives of the development standard and the zone, is not a requirement to “achieve” those objectives. It is a requirement that the development be ‘compatible’ with them or ‘capable of existing together in harmony’. It means “something less onerous than ‘achievement’”.

In *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118*, Preston CJ found that it is not necessary to demonstrate that the proposed development will achieve a “better environmental planning outcome for the site” relative to a development that complies with the development standard.

In *Hansimikali v Bayside Council [2019] NSWLEC 1353*, Commissioner O’Neill found that it is not necessary for the environmental planning grounds relied upon by the Applicant to be unique to the site.

Finally, in *Big Property Group Pty Ltd v Randwick City Council [2021] NSWLEC 1161*, Commissioner O’Neill found that “The desired future

character of an area cannot be determined by the applicable development standards for height and FSR along”.

Further, Commissioner O’Neill found that *“The presumption that the development standards that control building envelopes determine the desired future character of an area is based upon a false notion that those building envelopes represent, or are derived from, a fixed three-dimensional masterplan of building envelopes for the area and the realisation of that masterplan will achieve the desired urban character”.*

Similarly, in *HPG Mosman Projects Pty Ltd v Mosman Municipal Council [2021] NSWLEC 1243*, Commissioner O’Neill found that *“The desired future character of an area is not determined and fixed by the applicable development standards for height and FSR, because they do not, alone, fix the realised building envelope for a site. The application of the compulsory provisions of cl 4.6 further erodes the relationship between numeric standards for building envelopes and the realised built character of a locality (SJD DB2 at [62]-[63]). Development standards that determine building envelopes can only contribute to shaping the character of the locality (SJD DB2 at [53]-[54] and [59]-[60])”.*

ASSESSMENT

Is the requirement a development standard?

The building height control is a development standard and is not excluded from the operation of Clause 4.6 of the LEP.

What is the underlying object or purpose of the standard?

The objectives of the building height control are expressed as follows:

- (a) *to promote development that conforms to and reflects the natural landforms, by stepping development on sloping land to follow the natural gradient,*
- (b) *to promote the retention and, if appropriate, sharing of existing views,*
- (c) *to maintain solar access to existing dwellings, public reserves and streets, and to promote solar access for future development,*

- (d) *to maintain privacy for residents of existing dwellings and to promote privacy for residents of new buildings,*
- (e) *to encourage compatibility between development, particularly at zone boundaries,*
- (f) *to encourage an appropriate scale and density of development that is in accordance with, and promotes the character of an area,*
- (g) *to maintain a built form of mainly 1 or 2 storeys in Zone R2 Low Density Residential, Zone R3 Medium Density Residential and Zone E4 Environmental Living.*

In relation to objective (a), the proposed development has been carefully designed to negotiate the topographical conditions of the site, with the building from stepping down the site to reflect the level change from the Willoughby Road frontage to the Ingram Lane frontage.

Further, the building form provides horizontal and vertical articulation, and the architectural expression of the building provides a primary 3-storey form, and generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the building stepping down the site to reflect the topographical fall towards the rear (east).

In relation to objective (b), the proposed development will have no significant or adverse impact on any existing public or private views.

In relation to objective (c), the shadows cast by the proposed building will predominately fall within the shadows cast by the existing and surrounding building. Further, the impact on the residential properties to the east (on the opposite side of Ingram Lane) is limited to a period of approximately 1.5 hours between 1.30pm and 3.00pm in mid-winter.

In relation to objective (d), the surrounding road carriageways provide spatial to the north, east and west, and there are no window openings orientated towards the south.

Further, the most proximate residential property to the east (on the opposite side of Ingram Lane), maintains separation distances from the residential apartments of approximately 9 metres, and the existing dwelling has private open space to the south-west, providing further

spatial separation, and an off-set alignment in the relative position of the private open space.

In relation to objective (e), the surrounding land to the west (on the opposite side of Willoughby Road) is subject to specifies a 13 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey mixed-use buildings.

The surrounding development to the north (on the opposite side of Chandos Street) is subject to a 12 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey residential flat buildings.

Further, the proposed development generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the building stepping down the site to reflect the topographical fall towards the rear (east).

In the circumstances, the bulk and scale of the building when viewed from Willoughby Road is generally consistent with the building height control, and compatible with the existing and likely future development along both sides of Willoughby Road, and the opposite side of Chandos Street.

In relation to objective (f), the bulk and scale of the building when viewed from Willoughby Road is generally consistent with the building height control, and compatible with the existing and likely future development along both sides of Willoughby Road, and the opposite side of Chandos Street.

Further, the site occupies a corner location where additional bulk and scale can be best accommodated, and the road carriageways provide physical and spatial separation beyond that which it is typical of other sites subject to the same control.

In relation to objective (g), the site is zoned B4 – Mixed Use, circumstances in which objective (g) is not relevant to the proposed development.

In summary, the proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.

Is compliance with the development standard unreasonable or unnecessary in the circumstances of the case?

The Department of Planning published “*Varying development standards: A Guide*” (August 2011), to outline the matters that need to be considered in Development Applications involving a variation to a development standard. The Guide essentially adopts the views expressed by Preston CJ in *Wehbe v Pittwater Council [2007] NSWLEC 827* to the extent that there are five (5) different ways in which compliance with a development standard can be considered unreasonable or unnecessary.

1. *The objectives of the standard are achieved notwithstanding non-compliance with the standard;*

The proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.

2. *The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary;*

The objectives and purpose of the building height control remain relevant, and the proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.

3. *The underlying object or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable;*

The proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.

Further, strict compliance with the building height control would effectively require the removal of parts of the upper level of the building in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties.

4. *The development standard has been virtually abandoned or destroyed by the council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable;*

The building height control has not specifically been abandoned or destroyed by the Council's actions. Irrespective, the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the building height control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations.

In that regard, the Council has approved approximately 69 DA's involving variations to the building height control for the most recent reporting period of January 2019 to September 2021.

In addition, a series of DA's were approved with variations to the building height control between 2014 and 2018, including the following properties:

- 84 – 90 Atchison Street, Crows Nest;
- 160 Willoughby Road, Crows Nest;
- 162 – 166 Willoughby Road, Crows Nest;
- 104 – 106 Alexander Street, Crows Nest;
- 88 – 90 Alexander Street, Crows Nest;
- 41 – 49 Atchison Street, Crows Nest;
- 53 – 57 Atchison Street, Crows Nest;
- 7 – 19 Albany Street, Crows Nest;
- 101 – 111 Willoughby Road, Crows Nest; and
- 137 – 139 Alexander Street, Crows Nest.

Further, the objectives of Clause 4.6 of the LEP includes to provide “*an appropriate degree of flexibility in applying certain development standards to particular development*”.

5. *Compliance with the development standard is unreasonable or inappropriate due to existing use of land and current environmental character of the particular parcel of land. That is, the particular parcel of land should not have been included in the zone.*

The zoning of the land remains relevant and appropriate. Irrespective, strict compliance with the building height control would effectively require the removal of the upper level of the building (and portions of the level below) in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties.

Are there sufficient environmental planning grounds to justify contravening the development standard?

The adjectival phrase “*environmental planning*” is not defined, but would refer to grounds that relate to the subject matter, scope and purpose of the *Environmental Planning and Assessment Act 1979*, including the objects set out in Section 1.3 (Initial at 23).

The objects of the Act are expressed as follows:

- (a) *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State’s natural and other resources,*
- (b) *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
- (c) *to promote the orderly and economic use and development of land,*
- (d) *to promote the delivery and maintenance of affordable housing,*
- (e) *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
- (f) *to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
- (g) *to promote good design and amenity of the built environment,*
- (h) *to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*
- (i) *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,*
- (j) *to provide increased opportunity for community participation in environmental planning and assessment.*

The proposed numerical variation to the building height control is reasonable and appropriate in the particular circumstances on the basis that:

- the proposed development has been carefully designed to negotiate the topographical conditions of the site, with the building from stepping down the site to reflect the level change from the Willoughby Road frontage to the Ingram Lane frontage;
- the building form provides horizontal and vertical articulation, and the architectural expression of the building provides a primary 3-storey form;
- the proposed development will have no significant or adverse impact on any existing public or private views;
- the shadows cast by the proposed building will predominately fall within the shadows cast by the existing and surrounding building. Further, the impact on the residential properties to the east (on the opposite side of Ingram Lane) is limited to a period of approximately 1.5 hours between 1.30pm and 3.00pm in mid-winter;
- the surrounding road carriageways provide spatial to the north, east and west, and there are no window openings orientated towards the south;
- the most proximate residential property to the east (on the opposite side of Ingram Lane), maintains separation distances from the residential apartments of approximately 9 metres, and the existing dwelling has private open space to the south-west, providing further spatial separation, and an off-set alignment in the relative position of the private open space;
- the surrounding land to the west (on the opposite side of Willoughby Road) is subject to specifies a 13 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey mixed-use buildings;
- the surrounding development to the north (on the opposite side of Chandos Street) is subject to a 12 metre building height control, circumstances in which the desired future character of that land generally comprises 4-storey residential flat buildings;
- the proposed development generally complies with the 10 metre building height control measured to the top of the parapet at the Willoughby Road frontage of the site, with the upper level apartment recessed behind the alignment of the levels below;

- the bulk and scale of the building when viewed from Willoughby Road is generally consistent with the building height control, and compatible with the existing and likely future development along both sides of Willoughby Road, and the opposite side of Chandos Street;
- the site occupies a corner location where additional bulk and scale can be best accommodated, and the road carriageways provide physical and spatial separation beyond that which is typical of other sites subject to the same controls;
- the building form is capable of being accommodated on the site without imposing and significant or adverse impacts on the amenity of surrounding land;
- the proposed development has been carefully designed to achieve a very high standard of architectural presentation to the public domain, with the building designed to address the street frontages, with active uses at the ground floor level, and a refined palette of external materials and finishes;
- strict compliance with the building height control would require the removal of the portions of the upper level of the building in circumstances where the proposed development is compatible with the desired future character of the locality, and will not impose any significant or unreasonable impacts on the visual character of the public domain, or the amenity of surrounding properties;
- the proposed development will promote good design and the amenity of the built environment which is a recently incorporated object of the Act: *“(g) to promote good design and amenity of the built environment”*;
- the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the building height control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations;
- the proposed development is consistent with, or not antipathetic to, the relevant objectives of the B4 – Mixed Use zone; and
- the proposed development is generally consistent with, or not antipathetic to, the objectives of the building height control, notwithstanding the numerical variation.

Are there any matters of State or regional significance?

The proposed numerical variation to the building height control does not raise any matters of State or regional significance.

What is the public benefit of maintaining the standard?

The proposed development is generally consistent with the objectives of the building height control, notwithstanding the numerical variation.

In the circumstances, the proposed development does not affect the public benefit of maintaining compliance with the building height control in other instances.

In that regard, the objectives of Clause 4.6 of the LEP includes to provide *"an appropriate degree of flexibility in applying certain development standards to particular development"*.

Any other matters?

There are no further matters of relevance to the proposed variation to the building height control.

Zone Objectives and Public Interest

The objectives of the B4 – Mixed Use zone are expressed as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To create interesting and vibrant mixed use centres with safe, high quality urban environments with residential amenity.*
- *To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses on the lower levels and residential uses above those levels.*

The proposed development is generally consistent with (or not antipathetic to) the objectives of the B4 – Mixed Use zone on the basis that:

- the proposed development provides a mix of compatible non-residential and residential land uses;
- the site is well serviced by public transport which provide convenient access to the North Sydney Central Business District (CBD), St Leonards, Chatswood and beyond;
- the proposed development will contribute to a safe and vibrant urban environment offering a good level of residential amenity; and
- the proposed development maintains non-residential floor space at the lower level, with the residential apartments occupying the floor levels above.

Further, the proposed development will serve the public interest in terms of contributing to a diverse range of residential and non-residential activities within an established mixed-use precinct.

CONCLUSION

The purpose of this submission is to formally request a variation in relation to the building height control in Clause 4.3 of the North Sydney LEP 2013.

In general terms, strict compliance with the building height control is unreasonable and unnecessary in the particular circumstances, and there are sufficient environmental planning grounds to justify the numerical variation.

ATTACHMENT B

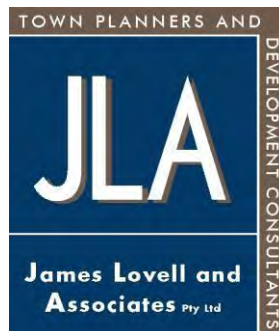
Mixed-Use Development

127 – 129 Willoughby Road, Crows Nest

**Request to Vary the Non-Residential
Floor Space Ratio Control**

17 February 2023

Ref: 20144/DA2/v2/4.6NRFSR



INTRODUCTION

Clause 4.4A of the North Sydney Local Environmental Plan (LEP) 2013 specifies a minimum non-residential floor space ratio (FSR) of 0.5:1.

The proposed development provides a non-residential floor area of approximately 310m², representing a non-residential FSR of 0.47:1. The non-compliance is represented by a floor area of 16.9m².

In the circumstances, this *“written request”* has been prepared to vary the non-residential FSR control pursuant to Clause 4.6 of the LEP.

The non-residential control is a development standard and is not excluded from the operation of Clause 4.6 of the LEP.

CLAUSE 4.6 OF THE NORTH SYDNEY LEP 2013

Clause 4.6(1) is facultative and is intended to allow flexibility in applying development standards in appropriate circumstances.

Clause 4.6 does not directly or indirectly establish a test that non-compliance with a development standard should have a neutral or beneficial effect relative to a complying development (Initial at 87).

Clause 4.6(2) of the LEP specifies that *“development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument”*.

Clause 4.6(3) specifies that development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
- (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

The requirement in Clause 4.6(3)(b) is that there are sufficient environmental planning grounds to justify contravening the development standard, not that the development that contravenes the development standard has a better environmental planning outcome than a development that complies with the development standard (Initial at 88).

Clause 4.6(4) specifies that development consent must not be granted for development that contravenes a development standard unless:

- (a) *the consent authority is satisfied that:*
 - (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
- (b) *the concurrence of the Secretary has been obtained.*

Clause 4.6(5) specifies that in deciding whether to grant concurrence, the Secretary must consider:

- (a) *whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and*
- (b) *the public benefit of maintaining the development standard, and*
- (c) *any other matters required to be taken into consideration by the Secretary before granting concurrence.*

CONTEXT AND FORMAT

This "written request" has been prepared having regard to "Varying development standards: A Guide" (August 2011), issued by the former Department of Planning, and relevant principles identified in the following judgements:

- *Winten Property Group Limited v North Sydney Council [2001] NSWLEC 46;*

- *Wehbe v Pittwater Council [2007] NSWLEC 827;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 1009;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90;*
- *Four2Five Pty Ltd v Ashfield Council [2015] NSWCA 248;*
- *Randwick City Council v Micaul Holdings Pty Ltd [2016] NSWLEC 7;*
- *Moskovich v Waverley Council [2016] NSWLEC 1015;*
- *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118;*
- *Hansimikali v Bayside Council [2019] NSWLEC 1353;*
- *Big Property Group Pty Ltd v Randwick City Council [2021] NSWLEC 1161.*
- *HPG Mosman Projects Pty Ltd v Mosman Municipal Council [2021] NSWLEC 1243.*

"Varying development standards: A Guide" (August 2011) outlines the matters that need to be considered in DA's involving a variation to a development standard. The Guide essentially adopts the views expressed by Preston CJ, in *Wehbe v Pittwater Council [2007] NSWLEC 827* to the extent that there are effectively five (5) different ways in which compliance with a development standard can be considered unreasonable or unnecessary as follows:

1. The objectives and purposes of the standard are achieved notwithstanding non-compliance with the development standard.
2. The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary.
3. The underlying objective or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable.
4. The development standard has been 'virtually abandoned or destroyed' by the Councils own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable.
5. The zoning of the particular land is unreasonable or inappropriate so that a development standard appropriate for that zoning is also unreasonable and unnecessary as it applies to the land and compliance with the standard would be unreasonable or unnecessary. That is, the particular parcel of land should not have been included in the particular zone.

As Preston CJ, stated in *Wehbe*, the starting point with a SEPP No. 1 objection (now a Clause 4.6 variation) is to demonstrate that compliance with the development standard is unreasonable or unnecessary in the circumstances. The most commonly invoked 'way' to do this is to show that the objectives of the development standard are achieved notwithstanding non-compliance with the numerical standard. The Applicant relies upon ground 1 in *Wehbe* to support its submission that compliance with the development standard is both unreasonable and unnecessary in the circumstances of this case.

In that regard, Preston CJ, in *Wehbe* states that "... *development standards are not ends in themselves but means of achieving ends*". Preston CJ, goes on to say that as the objectives of a development standard are likely to have no numerical or qualitative indicia, it logically follows that the test is a qualitative one, rather than a quantitative one. As such, there is no numerical limit which a variation may seek to achieve.

The above notion relating to 'numerical limits' is also reflected in Paragraph 3 of Circular B1 from the former Department of Planning which states that:

As numerical standards are often a crude reflection of intent, a development which departs from the standard may in some circumstances achieve the underlying purpose of the standard as much as one which complies. In many cases the variation will be numerically small in others it may be numerically large, but nevertheless be consistent with the purpose of the standard.

It is important to emphasise that in properly reading *Wehbe*, an objection submitted does not necessarily need to satisfy all of the tests numbered 1 to 5, and referred to above. This is a common misconception. If the objection satisfies one of the tests, then it may be upheld by a Council, or the Court standing in its shoes. Irrespective, an objection can also satisfy a number of the referable tests.

In *Wehbe*, Preston CJ, states that there are three (3) matters that must be addressed before a consent authority (Council or the Court) can uphold an objection to a development standard as follows:

1. The consent authority needs to be satisfied the objection is well founded;

2. The consent authority needs to be satisfied that granting consent to the DA is consistent with the aims of the Policy; and
3. The consent authority needs to be satisfied as to further matters, including non-compliance in respect of significance for State and regional planning and the public benefit of maintaining the planning controls adopted by the environmental planning instrument.

Further, it is noted that the consent authority has the power to grant consent to a variation to a development standard, irrespective of the numerical extent of variation (subject to some limitations not relevant to the present matter).

The decision of Pain J, in *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 90 suggests that demonstrating that a development satisfies the objectives of the development standard is not necessarily sufficient, of itself, to justify a variation, and that it may be necessary to identify reasons particular to the circumstances of the proposed development on the subject site.

Further, Commissioner Tuor, in *Moskovich v Waverley Council* [2016] NSWLEC 1015, considered a DA which involved a relatively substantial variation to the FSR (65%) control. Some of the factors which convinced the Commissioner to uphold the Clause 4.6 variation request were the lack of environmental impact of the proposal, the characteristics of the site such as its steeply sloping topography and size, and its context which included existing adjacent buildings of greater height and bulk than the proposal.

The decision suggests that the requirement that the consent authority be satisfied the proposed development will be in the public interest because it is "consistent with" the objectives of the development standard and the zone, is not a requirement to "achieve" those objectives. It is a requirement that the development be 'compatible' with them or 'capable of existing together in harmony'. It means "something less onerous than 'achievement'".

In *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118, Preston CJ found that it is not necessary to demonstrate that the proposed development will achieve a "better environmental planning

outcome for the site” relative to a development that complies with the development standard.

In *Hansimikali v Bayside Council [2019] NSWLEC 1353*, Commissioner O’Neill found that it is not necessary for the environmental planning grounds relied upon by the Applicant to be unique to the site.

Finally, in *Big Property Group Pty Ltd v Randwick City Council [2021] NSWLEC 1161*, Commissioner O’Neill found that *“The desired future character of an area cannot be determined by the applicable development standards for height and FSR along”*.

Further, Commissioner O’Neill found that *“The presumption that the development standards that control building envelopes determine the desired future character of an area is based upon a false notion that those building envelopes represent, or are derived from, a fixed three-dimensional masterplan of building envelopes for the area and the realisation of that masterplan will achieve the desired urban character”*.

Similarly, in *HPG Mosman Projects Pty Ltd v Mosman Municipal Council [2021] NSWLEC 1243*, Commissioner O’Neill found that *“The desired future character of an area is not determined and fixed by the applicable development standards for height and FSR, because they do not, alone, fix the realised building envelope for a site. The application of the compulsory provisions of cl 4.6 further erodes the relationship between numeric standards for building envelopes and the realised built character of a locality (SJD DB2 at [62]-[63]). Development standards that determine building envelopes can only contribute to shaping the character of the locality (SJD DB2 at [53]-[54] and [59]-[60])”*.

ASSESSMENT

Is the requirement a development standard?

The non-residential FSR control is a development standard and is not excluded from the operation of Clause 4.6 of the LEP.

What is the underlying object or purpose of the standard?

The objectives of the non-residential FSR control are expressed as follows:

- (a) *to provide for development with continuous and active street frontages on certain land in Zone B1 Neighbourhood Centre, Zone B4 Mixed Use and Zone SP2 Infrastructure,*
- (b) *to encourage an appropriate mix of residential and non-residential uses,*
- (c) *to provide a level of flexibility in the mix of land uses to cater for market demand,*
- (d) *to ensure that a suitable level of non-residential floor space is provided to promote employment and reflect the hierarchy of commercial centres.*

In relation to objective (a), the proposed development includes 310m² of commercial floor space extending along the Willoughby Road and Chandos Street frontages to the point at which the sloping topography necessarily elevates the internal floor level well above the adjacent footpath level.

In the circumstances, the proposed development will provide a continuous and active street frontage. Further, the proposed development will materially improve the activation of the street frontages relative to the existing buildings on the site.

In relation to objective (b), the proposed development will provide an appropriate (and improved) mix of residential and commercial floor space on the site, consistent with the location of the site at the northern edge of the main commercial centre.

In relation to objective (c), the commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building.

Further, the size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre.

In relation to objective (d), the commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building.

Further, the size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre.

In summary, the proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.

Is compliance with the development standard unreasonable or unnecessary in the circumstances of the case?

The Department of Planning published "*Varying development standards: A Guide*" (August 2011), to outline the matters that need to be considered in Development Applications involving a variation to a development standard. The Guide essentially adopts the views expressed by Preston CJ in *Wehbe v Pittwater Council [2007] NSWLEC 827* to the extent that there are five (5) different ways in which compliance with a development standard can be considered unreasonable or unnecessary.

1. *The objectives of the standard are achieved notwithstanding non-compliance with the standard;*

The proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.

2. *The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary;*

The objectives and purpose of the non-residential control remain relevant, and the proposed development is generally consistent with the objectives of the control, notwithstanding the numerical variation.

3. *The underlying object or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable;*

The proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.

Further, strict compliance with the non-residential FSR control would effectively require parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street

frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site.

4. *The development standard has been virtually abandoned or destroyed by the council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable;*

The non-residential FSR control has not specifically been abandoned or destroyed by the Council's actions. Irrespective, the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the non-residential FSR control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations.

Further, the objectives of Clause 4.6 of the LEP includes to provide "an appropriate degree of flexibility in applying certain development standards to particular development".

5. *Compliance with the development standard is unreasonable or inappropriate due to existing use of land and current environmental character of the particular parcel of land. That is, the particular parcel of land should not have been included in the zone.*

The zoning of the land remains relevant and appropriate. Irrespective, strict compliance with the non-residential FSR control would effectively require parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site.

Are there sufficient environmental planning grounds to justify contravening the development standard?

The adjectival phrase "environmental planning" is not defined, but would refer to grounds that relate to the subject matter, scope and purpose of the *Environmental Planning and Assessment Act 1979*, including the objects set out in Section 1.3 (Initial at 23).

The objects of the Act are expressed as follows:

- (a) *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*
- (b) *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
- (c) *to promote the orderly and economic use and development of land,*
- (d) *to promote the delivery and maintenance of affordable housing,*
- (e) *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
- (f) *to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
- (g) *to promote good design and amenity of the built environment,*
- (h) *to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*
- (i) *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,*
- (j) *to provide increased opportunity for community participation in environmental planning and assessment.*

The proposed numerical variation to the non-residential FSR control is reasonable and appropriate in the particular circumstances on the basis that:

- the proposed development has been carefully designed to negotiate the topographical conditions of the site, with the building from stepping down the site to reflect the level change from the Willoughby Road frontage to the Ingram Lane frontage;
- the proposed development includes 310m² of commercial floor space extending along the Willoughby Road and Chandos Street frontages, beyond the point at which the sloping topography necessarily elevates the internal floor level above the adjacent footpath level;
- the non-compliance is numerically minor, with the non-compliance represented by a floor area of 16.9m²;
- the proposed development will provide a continuous and active street frontage, and materially improve the activation of the street frontages relative to the existing buildings on the site;

- the commercial floor space is accommodated within a relatively large and regular shaped tenancy, providing considerable flexibility in the range of commercial related uses that could be accommodated within the building;
- the size of the commercial tenancy is consistent with the location of the site at the northern edge of the main commercial centre;
- strict compliance with the non-residential FSR control would effectively require additional parts of the building above the footpath level to provide non-residential floor space, in circumstances where that additional non-residential floor space would not activate the street frontage, and would diminish the number of high quality residential apartments that could be accommodated on the site;
- the proposed development will promote good design and the amenity of the built environment which is a recently incorporated object of the Act: *"(g) to promote good design and amenity of the built environment"*;
- the Council has consistently adopted an orderly but flexible approach to the implementation of development standards (including the non-residential FSR control) in appropriate circumstances, including when the objectives of the standard are achieved, notwithstanding numerical variations;
- the proposed development is consistent with, or not antipathetic to, the relevant objectives of the B4 – Mixed Use zone; and
- the proposed development is generally consistent with, or not antipathetic to, the objectives of the non-residential FSR control, notwithstanding the numerical variation.

Are there any matters of State or regional significance?

The proposed numerical variation to the non-residential FSR control does not raise any matters of State or regional significance.

What is the public benefit of maintaining the standard?

The proposed development is generally consistent with the objectives of the non-residential FSR control, notwithstanding the numerical variation.

In the circumstances, the proposed development does not affect the public benefit of maintaining compliance with the non-residential FSR control in other instances.

In that regard, the objectives of Clause 4.6 of the LEP includes to provide *"an appropriate degree of flexibility in applying certain development standards to particular development"*.

Any other matters?

There are no further matters of relevance to the proposed variation to the non-residential FSR control.

Zone Objectives and Public Interest

The objectives of the B4 – Mixed Use zone are expressed as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To create interesting and vibrant mixed use centres with safe, high quality urban environments with residential amenity.*
- *To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses on the lower levels and residential uses above those levels.*

The proposed development is generally consistent with (or not antipathetic to) the objectives of the B4 – Mixed Use zone on the basis that:

- the proposed development provides a mix of compatible non-residential and residential land uses;
- the site is well serviced by public transport which provide convenient access to the North Sydney Central Business District (CBD), St Leonards, Chatswood and beyond;
- the proposed development will contribute to a safe and vibrant urban environment offering a good level of residential amenity; and
- the proposed development maintains non-residential floor space at the lower level, with the residential apartments occupying the floor levels above.

Further, the proposed development will serve the public interest in terms of contributing to a diverse range of residential and non-residential activities within an established mixed-use precinct.

CONCLUSION

The purpose of this submission is to formally request a variation in relation to the non-residential FSR control in Clause 4.4A of the North Sydney LEP 2013.

In general terms, strict compliance with the non-residential FSR control is unreasonable and unnecessary in the particular circumstances, and there are sufficient environmental planning grounds to justify the numerical variation.