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DEV	DEVELOPMENT ASSESSMENT REPORT		
Application No.	DA/2020/0486		
Address	54 Ferris Street ANNANDALE NSW 2038		
Proposal	Garage with Studio		
Date of Lodgement	25 June 2020		
Applicant	Mr Andrew Colangelo		
Owner	Mr Andrew Colangelo		
	Mrs Marie L Colangelo		
Number of Submissions	Two (2)		
Value of works	\$2,000,000.00		
Reason for determination at			
Planning Panel	Clause no variation excesses 1070		
Main Issues	Non-compliance with the maximum floor space ratio per		
	Clause 4.4 of the LLEP 2013		
	Neighbouring amenity impacts (Solar Access)		
	Flooding		
	Parking		
Recommendation	Refusal		
Attachment A			
	Reasons for refusal		
Attachment B	Without Prejudice Conditions (if not refused)		
Attachment C Attachment D	Plans of proposed development		
36 34 32 32 30 26 24	ny injury, loss or damage arising from re is taken to ensure a high degree of pancies. Created in 11/4/2020		
L	LOCALITY MAP		
Subject Site	Objectors N		
Notified Area	Supporters		

1. Executive Summary

This report is an assessment of the application submitted to Council for construction of a garage with studio at 54 Ferris Street, Annandale. The application was notified to surrounding properties and 2 submissions were received in response.

The main issues that have arisen from the assessment of the application include:

- Non-compliance with the maximum permitted floor space ratio
- Neighbouring amenity impacts (Solar Access)
- Flooding
- Parking

A formal written request for an exception to the floor space ratio development standard under Clause 4.6 of the LLEP 2013 has been submitted. However, insufficient environmental planning grounds have been provided justifying the non-compliance with the development standard and it is considered that the proposal results in adverse amenity impacts in terms of solar access. As a result, the application is recommended for refusal.

2. Proposal

The application involves the demolition of the existing clad carport at the rear of the site and the construction of a new garage with a first floor studio.

3. Site Description

The subject site is located on the western side of Ferris Street, between Clark Street and Reserve Street. The site consists of 1 allotment and is generally rectangularly-shaped with a total area of 156.1 sqm and is legally described as Lot A in DP 375883.

The site has a frontage to Ferris Street of 4.16 metres. The site supports a two storey brick dwelling and carport. The adjoining properties support a mix of one and two storey dwellings.

The property is located within a conservation area and is identified as a flood prone lot.

The following trees are located on the site and within the vicinity.

- Jacaranda mimosifolia (Jacaranda) located on adjoining property at No. 52 Ferris Street.
- Elaeocarpus reticulatus (Blueberry Ash) located on adjoining property at No. 52 Ferris Street.

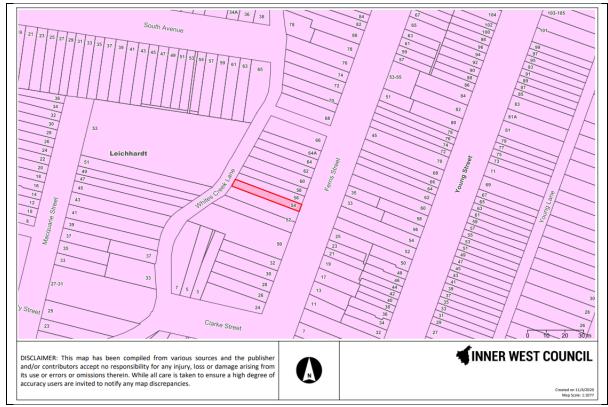


Figure 1: Zoning Map

4. Background

4(a) Site history

The following application outlines the relevant development history of the subject site and any relevant applications on surrounding properties.

Subject Site

Application	Proposal	Decision & Date
D/2005/207	Development Application - Alterations and additions to an existing dwelling including new first floor and new carport at rear.	
M/2007/27	Section 96(1a) modification of development consent D/2005/207. Modification requesting an external dilapidation report instead of internal report.	

Surrounding properties

56 Ferris Street

Application	Proposal	Decision & Date
D/2012/560	Substantial demolition, retention of front of the existing dwelling and construction of ground and first floor additions to the rear and a new detached garage. SEPP	
	1 Objections for FSR and Landscaped Area.	

4(b) Application history

The following table outlines the relevant history of the subject application.

Date	Discussion / Letter / Additional Information		
25 June 2020	Lodged		
02 July 2020 – 16 July 2020	Notification		
21 September 2020	Council wrote to the applicant advising as follows; - The proposal exceeds the FSR development standard; - A Clause 4.6 must be submitted; - Notwithstanding, additional concerns regarding; o Solar access to the neighbouring property at 52 Ferris Street; o Parking; o Flooding; and, o Heritage impacts (materials and finishes).		
26 October 2020	The applicant provided amended plans which included a stormwater management plan, flood risk management plan, hourly shadow diagrams, and vehicular turning diagrams. The amended plans did not include a reduction in gross floor area or changes to the upper level studio to reduce overshadowing. As such, the proposal still exceeds the FSR development standard.		

As per Councils Development Advisory and Assessment Policy, no further opportunities to submit amended plans were provided, and the current assessment is based on the amended plans/additional information provided by the applicant on the 26 October 2020.

5. Assessment

The following is a summary of the assessment of the application in accordance with Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

5(a) Environmental Planning Instruments

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- State Environmental Planning Policy No. 55—Remediation of Land
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- Leichhardt Local Environmental Plan 2013 (LLEP 2013)

The following provides further discussion of the relevant issues:

5(a)(i) State Environmental Planning Policy No 55—Remediation of Land

State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55) provides planning guidelines for remediation of contaminated land. LDCP 2013 provides controls and guidelines for remediation works. SEPP 55 requires the consent authority to be satisfied that "the site is, or can be made, suitable for the proposed use" prior to the granting of consent.

The site has not been used in the past for activities which could have potentially contaminated the site. It is considered that the site will not require remediation in accordance with SEPP 55.

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

A BASIX Certificate was submitted with the application and can be referenced in the event that consent is granted.

5(a)(iii) Leichhardt Local Environment Plan 2013 (LLEP 2013)

The application was assessed against the following relevant clauses of *the Leichhardt Local Environmental Plan 2013*:

Clause 1.2 - Aims of the Plan

Clause 2.3 - Zone objectives and Land Use Table

Clause 2.7 - Demolition

Clause 4.3A - Landscaped areas for residential accommodation in Zone R1

Clause 4.4 – Floor Space Ratio

Clause 4.5 - Calculation of floor space ratio and site area

Clause 4.6 - Exceptions to development standards

Clause 5.10 - Heritage Conservation

Clause 6.1 - Acid Sulfate Soils

Clause 6.2 - Earthworks

Clause 6.3 - Flood Planning

Clause 6.4 - Stormwater management

Clause 6.8 - Development in areas subject to aircraft noise

(i) Clause 2.3 - Land Use Table and Zone Objectives

The site is zoned R1- General Residential under the LLEP 2011.

The *LLEP 2013* defines the development as a semi-detached dwelling and the development is permitted with consent within the zone. Given the overshadowing impacts created as a result of the FSR variation, the proposal is considered to be inconsistent with the following objectives of the R1 zone:

- To protect and enhance the amenity of existing and future residents and the neighbourhood.

The following table provides an assessment of the application against the development standards:

Standard	Proposal	non compliance	Complies
Floor Space Ratio Maximum permissible: 0.8:1 or 124.88 sqm	0.98:1 or 153.18 sqm	28.3 sqm or 22.6%	No
Landscape Area Minimum permissible: 15% or 23.42sqm	5.28% or 8.24sqm	15.20 sqm or 64.81%	No (existing)
Site Coverage Maximum permissible: 60% or 93.66sqm	70.24% or 109.65sqm	16sqm or 17.07%	No (existing)

Clause 4.6 Exceptions to Development Standards

As outlined in table above, the proposal results in a breach of the following development standard/s:

• Clause 4.4 – Floor Space Ratio

The applicant seeks a variation to the Floor Space Ratio development standard under Clause 4.4 of the Leichhardt Local Environmental Plan by 22.6% (28.3sqm).

Clause 4.6 allows Council to vary development standards in certain circumstances and provides an appropriate degree of flexibility to achieve better design outcomes.

In order to demonstrate whether strict numeric compliance is unreasonable or unnecessary in this instance, the proposed contravention of the development standard has been assessed against the objectives and provisions of Clause 4.6 of the LLEP 2013 below.

A written request has been submitted to Council in accordance with Clause 4.6(3) of the LLEP 2013 justifying the proposed contravention of the development standard which is summarised as follows:

- 1. The additional floor space is situated at the rear in the proposed new studio situated above a new garage that is replacing an existing garage.
- 2. The studio addition is moderate, only 6.00m at the high point of the roof. The owners have interceded with both neighbours to create a design that is satisfactory to all relevant parties.
- 3. Although the proposal will result in a two-storey dwelling, a new garage with studio it is not inconsistent with the locality as the building forms are diverse in Whites Creek Lane and there are many examples of garages with studios.
- 4. The proposed FSR is not excessive in comparison to development in the immediate locality.
- 5. The proposed increase in floor space ratio is very moderate. An increase of 16.59m2
- 6. 54 Ferris Street falls very close to the 150m2 cut off point for a 1:1 FSR in which case it would comply. If the land area was slightly larger it would comply if it were slightly smaller it would comply. The current owners and any future owners are being dammed to a living standard that is at odds with the objectives of the LEP "to protect and enhance the amenity, vitality and viability of the residents of the Leichhardt municipality"
- 7. There are many examples of garages with studios above in Whites Creek Lane, Ferris Street and throughout the Annandale locality. From the northern end of the of the Lane (at Reserve Street) to the property next door at No 52 Ferris Street, this type of development evident. Common sense would inform us that the residents that most require this form of additional accommodation are those with small living areas like the owners of No 54 Ferris Street. Nevertheless, the unreasonable interpretation of council regulations will allow owners of larger blocks to build the studio over the garage while those on small blocks with very limited living arrangements have their applications rejected.
- 8. The first-floor studio results in no adverse impact to adjoining properties.

The applicant's written rationale has not adequately demonstrated that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, or that there are sufficient environmental planning grounds to justify contravening the development standard.

The objectives of the R1 – General Residential zone are outlined below:

- To provide for the housing needs of the community.
- To provide housing that is compatible with the character, style, orientation and pattern
 of surrounding buildings, streetscapes, works and landscaped areas.

- To ensure that subdivision creates lots of regular shapes that are complementary to, and compatible with, the character, style, orientation and pattern of the surrounding area.
- To protect and enhance the amenity of existing and future residents and the neighbourhood

The objectives of the FSR development standard, as set out in the LLEP 2013, are outlined below:

- a) to ensure that residential accommodation:
- (ii) is compatible with the desired future character of the area in relation to building bulk, form and scale, and
- (iii) provides a suitable balance between landscaped areas and the built form, and
- (iv) minimises the impact of the bulk and scale of buildings.

It is considered the development is not in the public interest because it is inconsistent with the objectives of the R1 – General Residential zone and the objectives of the FSR development standard for the following reasons:

- The proposed development is not compatible with the desired future character of the Heritage Conservation Area in relation to building bulk, massing, scale and form;
- The additional floor space results in adverse amenity impacts (solar access and overshadowing) on neighbouring properties.

The proposal thereby does not comply with the objective in Clause 4.6(1)(b) and requirements of Clause 4.6(3)(b) of the applicable local environmental plan. For the reasons outlined above, there are insufficient environmental planning grounds to justify the departure from the development standard and it is recommended the Clause 4.6 exception not be supported.

5(b) Draft Environmental Planning Instruments

<u>Draft Inner West Local Environmental Plan 2020 (Draft IWLEP 2020)</u>

The Draft IWLEP 2020 was placed on public exhibition commencing on 16 March 2020 and accordingly is a matter for consideration in the assessment of the application under Section 4.15(1)(a)(ii) of the *Environmental Planning and Assessment Act 1979*.

The Draft IWLEP 2020 contains provisions for the amendments to the zone objectives of the zone R2 - Low Density Residential, as well as new objectives of Clause 4.4 Floor Space Ratio. Given the overshadowing impacts created as a result of the FSR variation, the proposal is considered to be inconsistent with the following draft objectives to the R1 zone:

- To protect and enhance the amenity of existing and future residents and the neighbourhood.

5(c) Development Control Plans

The application has been assessed and the following provides a summary of the relevant provisions of Leichhardt Development Control Plan 2013.

LDCP2013	Compliance
Part A: Introductions	
Section 3 – Notification of Applications	Yes
Section 5 – Notification of Applications	res
Part B: Connections	
B1.1 Connections – Objectives	Yes
B2.1 Planning for Active Living	N/A
B3.1 Social Impact Assessment	N/A
B3.2 Events and Activities in the Public Domain (Special	N/A
Events)	IN/A
Lvenis)	
Part C	
C1.0 General Provisions	No - see discussion
C1.1 Site and Context Analysis	Yes
C1.2 Demolition	Yes
C1.3 Alterations and additions	Yes
C1.4 Heritage Conservation Areas and Heritage Items	No - see discussion
C1.5 Corner Sites	N/A
C1.6 Subdivision	N/A
C1.7 Site Facilities	Yes
C1.8 Contamination	Yes
C1.9 Safety by Design	Yes
C1.10 Equity of Access and Mobility	Yes
C1.11 Parking	No – see discussion
C1.12 Landscaping	Yes
C1.13 Open Space Design Within the Public Domain	N/A
C1.14 Tree Management	Yes
C1.15 Signs and Outdoor Advertising	N/A
C1.16 Structures in or over the Public Domain: Balconies,	N/A
Verandahs and Awnings	IN/A
C1.17 Minor Architectural Details	N/A
C1.18 Laneways	No – see discussion
C1.19 Rock Faces, Rocky Outcrops, Cliff Faces, Steep Slopes	N/A
and Rock Walls	IN/A
C1.20 Foreshore Land	N/A
C1.21 Green Roofs and Green Living Walls	N/A
OT.21 OFECT NOOIS AND OFECT LIVING WAIIS	11/7
Part C: Place – Section 2 Urban Character	
C.2.2.1.1: Young Street Distinctive Neighbourhood	No – see discussion
5.2.2. The roung of our bloth of Weighbourhood	110 000 41004001011
Part C: Place – Section 3 – Residential Provisions	
C3.1 Residential General Provisions	No – see discussion
C3.2 Site Layout and Building Design	Yes
C3.3 Elevation and Materials	Yes
C3.4 Dormer Windows	N/A
C3.5 Front Gardens and Dwelling Entries	Yes
C3.6 Fences	Yes
C3.7 Environmental Performance	Yes
C3.8 Private Open Space	Yes
C3.9 Solar Access	No – see discussion
C3.10 Views	Yes
C3.11 Visual Privacy	Yes
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C3.12 Acoustic Privacy	Yes
C3.13 Conversion of Existing Non-Residential Buildings	N/A
C3.14 Adaptable Housing	N/A
Part C: Place – Section 4 – Non-Residential Provisions	N/A
Part D: Energy	
Section 1 – Energy Management	Yes
Section 2 – Resource Recovery and Waste Management	
D2.1 General Requirements	Yes
D2.2 Demolition and Construction of All Development	Yes
D2.3 Residential Development	Yes
D2.4 Non-Residential Development	N/A
D2.5 Mixed Use Development	N/A
Part E: Water	
Section 1 – Sustainable Water and Risk Management	
E1.1 Approvals Process and Reports Required With Development Applications	N/A
E1.1.1 Water Management Statement	N/A
E1.1.2 Integrated Water Cycle Plan	Yes
E1.1.3 Stormwater Drainage Concept Plan	Yes
E1.1.4 Flood Risk Management Report	Yes
E1.1.5 Foreshore Risk Management Report	N/A
E1.2 Water Management	Yes
E1.2.1 Water Conservation	N/A
E1.2.2 Managing Stormwater within the Site	Yes
E1.2.3 On-Site Detention of Stormwater	N/A
E1.2.4 Stormwater Treatment	N/A
E1.2.5 Water Disposal	Yes
E1.2.6 Building in the vicinity of a Public Drainage System	N/A
E1.2.7 Wastewater Management	N/A
E1.3 Hazard Management	N/A
E1.3.1 Flood Risk Management	No – see discussion
E1.3.2 Foreshore Risk Management	N/A

The following provides discussion of the relevant issues:

C1.0 General Provisions and C3.1 Residential General Provisions

The relevant objectives and controls are as follows:

- O3 To ensure that alterations, additions to residential buildings and new residential development are compatible with the established setting and character of the suburb and neighbourhood and compatible with the desired future character and heritage significance of the place and its setting.
- O4 To ensure that all residential development is compatible with the scale, form, siting and materials of existing adjacent buildings.
- O7 To ensure that the amenity, including solar access and visual privacy, of the development and adjacent properties is not adversely impacted.
- C1 Residential development is not to have an adverse effect on:
 b. the relationship of any Heritage Item or Heritage Conservation Area to its place, setting and cultural significance.

The proposal results in unacceptable amenity impacts on adjoining neighbours particularly in regard to solar access and overshadowing – refer to the detailed discussion under Clause C3.9. The Proposal is also uncharacteristic of the Heritage Conservation Area and does not provide a sympathetic addition to the streetscape – refer to the discussion under Clause C1.4.

C1.4 Heritage Conservation Areas and Heritage Items

C8 of Part C1.4 of the DCP requires that new development demonstrate respect for the form, scale and siting of the immediate area. C9 of Part C1.4 of the DCP requires that new development comply with Part C Section 1.0; which requires that new development make a positive contribution to the character, scale, form, sitting, materials, colour and detailing within the streetscape.

C5 of Part C2.2.1.1 of the DCP requires that upper floors are contained within the roof form, so as not to be visible from the street frontage. C15 of Part C1.3 of the DCP states that appropriate roof forms depend on the context of the site, and may include pitched roof forms to match the predominant roof forms of the original property and its context.

C7 of Part C2.2.1.1 of the DCP requires that the harmony and character of the neighbourhood is maintained by ensuring development is complementary in form and materials, and reflects the cohesiveness of the streetscape.

<u>Comment</u>: The height of the proposed building is 6m, with a floor to ceiling height of 2.7m in both the garage and studio. The floor to ceiling height on both levels, in addition to the roof form, contribute to the overall visual bulk of the development which is inconsistent with the predominant scale of development on the vicinity. Most garage roof forms in the vicinity are recessive skillion or gable while more substantial buildings contain pitched roof forms.

The proposal has not been designed to have a gable roof form, or gable end to the laneway, with a low pitching point to create a "one and a half storey" form, with the studio located wholly within the roof form which would better relate to the scale of development within the laneway.

The proposed snaplock Colorbond cladding and Monument colour scheme are not a characteristic in the laneway and the choice of materials, finishes, textures and colours are not complementary to the colour schemes of contributory dwellings within the streetscape.

Overall, the development is not in accordance with Clause 5.10 Objectives 1(a) and (b) in the Leichhardt LEP 2013 and the relevant objectives and controls in the Leichhardt DCP 2013 and as such, the proposal will detract from the heritage significance of the Annandale Heritage Conservation Area.

C1.11 Parking

The proposal involves demolition of the existing carport at the rear of the site and construction of a new garage with studio above. The additional information submitted as part of the application has failed to demonstrate compliance with the Australian Standard AS/NZS 2890.1 Parking facilities and Council's parking requirements under this Clause. In particular, the below requirements:

- a) A minimum of 2200mm headroom must be provided throughout the access and parking facilities, measured at the lowest projection from the ceiling, such as lighting fixtures, and to open garage doors. Long section plans demonstrating compliance with this requirement do not accompany the application.
- b) The garage/parking space must have minimum clear internal dimensions of 6000mm x 3000 mm (length x width) and a door opening width of 2800 mm at the street frontage. The

dimensions must be exclusive of obstructions such as walls, doors and columns, except where they do not encroach inside the design envelope specified in Section 5.2 of AS/NZS 2890.1-2004.

- c) A plan of the proposed access and adjacent road, at an appropriate scale, demonstrating that vehicle manoeuvrability for entry and exit to the parking space complies with swept paths from AS/NZS 2890.1:2004, including existing on-street parking spaces has not been prepared to accompany the application.
- d) The maximum gradients within the parking module must not exceed 1 in 20 (5%), measured parallel to the angle of parking and 1 in 16 (6.25%), measured in any other direction in accordance with the requirements of Section 2.4.6 of AS/NZS 2890.1-2004.

As such, it is considered the proposal is unacceptable and fails to satisfy the relevant objectives and controls.

C1.18 Laneways and C.2.2.1.1: Young Street Distinctive Neighbourhood

The relevant objectives and controls are as follows:

- C6 Where fronting a Medium Lane... development shall comply with a laneway envelope that has:
 - a. a maximum side wall height of 3.6m;
 - b. a 45° building envelope taken from the top of the side wall; and
 - c. a maximum roof height of 6m.

The proposal does not incorporate a hipped or gabled roof form and proposes a two storey form and a 6m wall height with a nil setback to the Whites Creek Lane. As such, the proposal is not considered satisfactory for development fronting a rear laneway and fails to satisfy the relevant objectives and controls under this Clause.

C3.9 Solar Access

The relevant objectives and controls are as follows:

- C12 Where the surrounding allotments are orientated east/west, main living room glazing must maintain a minimum of two hours solar access between 9am and 3pm during the winter solstice.
- C18 Where surrounding dwellings have east/west facing private open space, ensure solar access is retained for two and a half hours between 9am and 3pm to 50% of the total area (adjacent to living room) during the winter solstice.
- C19 Where surrounding dwellings currently receive less than the required amount of solar access to their private open space between 9am and 3pm during the winter solstice, no further reduction of solar access is permitted.

The adjoining property at No. 52 Ferris Street currently receives the requisite two and a half hours of solar access to their rear yard in mid-winter between 11am and 3pm. The proposal results in additional overshadowing to this adjoining property at each hour between 9am and 3pm in mid-winter. The extent of overshadowing would be contrary to the controls above and would result in the adjoining property receiving less that two and half hours of solar access as required.

It should be noted that additional information was requested requiring the internal floor to ceiling heights of the garage and studio to be reduced and for further amendments to be undertaken to improve the solar access to the rear yard of No. 52 Ferris Street. The additional information submitted to Council failed to demonstrate an improved outcome or a reduction in overshadowing to this neighbouring property.

As such, it is considered that the proposal results in adverse and undue overshadowing impacts and has not been designed in accordance with the objectives and controls of this Clause

E1.3.1 Flood Risk Management

The relevant objectives and controls are as follows:

- C1 Applications submitted for a flood control lot must be accompanied by a Flood Risk Management Report supported by a flood study prepared by a relevantly qualified civil engineer. The report must establish the Hazard Category of the site.
- C9 The floor level of new enclosed garages must be at or above the Flood Planning Level.
 Consideration may be given to a floor level at a lower level, within 500mm of the Flood
 Planning Level, where it can be demonstrated that providing the floor level at the Flood
 Planning Level is not practical within the constraints of compliance with Australian
 Standard AS/NZS 2890.1 Parking facilities as amended.

The floor levels of open car park areas and carports are permissible below the Flood Planning Level, subject to being raised as high as practical within the constraints of compliance with Australian Standard AS/NZS 2890.1 Parking facilities as amended. Basement (below natural ground level) car parking must have all access and potential water entry points above the Probable Maximum Flood Level or Flood Planning Level whichever is the higher, and a clearly signposted flood free pedestrian evacuation route from the basement area separate to the vehicular access ramps.

The subject site is located close to Whites Creek and identified as a flood control lot. The Flood Certificate issued by Council for indicates the 1 in 100 year flood level at the rear of the site is 17.35 m AHD and the existing surface ground level of 16.35m AHD shows a 1000 mm depth of water in 1 in 100 year flood. Council's Flood Study also identifies White Creek Lane and the rear of the subject site as high hazard areas.

The proposal has not been designed to be at or above the Flood Planning Level. While consideration may be given to a floor level at a lower level, the proposed floor level of 16.47m AHD is considered unacceptable for managing or mitigating flood risk on the site.

The Flood Risk Management Report prepared by HYDRO CIVIL ENGINEERS and dated 23 October 2020 has also failed to demonstrate that providing the floor level at the Flood Planning Level is not practical within the constraints of compliance with Australian Standard AS/NZS 2890.1: Parking facilities.

As such, it is considered the proposal is unacceptable and fails to satisfy the relevant objectives and controls.

5(e) The Likely Impacts

The assessment of the Development Application demonstrates that the proposal will have an adverse impact on the locality in terms of bulk and scale, heritage, flooding, and amenity impacts upon neighbouring properties.

5(f) The suitability of the site for the development

It is considered that the proposal will have an adverse impact on the adjoining properties and therefore it is considered that the site is unsuitable to accommodate the proposed development.

5(g) Any submissions

The application was notified in accordance with the Leichhardt Development Control Plan 2013 for a period of 14 days to surrounding properties.

2 submissions were received in response to the initial notification.

The following issues raised in submissions have been discussed in this report:

- Overall height and visual bulk and scale See Section 5(c)
- Excessive floor to ceiling heights See Section 5(c)

In addition to the above issues, the submissions raised the following concerns which are discussed under the respective headings below:

<u>Issue</u>: Overlooking and loss of privacy to No. 52 and No. 56 Ferris Street <u>Comment</u>: The proposal has been amended by way of additional information which has amended the size and location of the eastern and western facing windows of the studio. Irrespective, the controls prescribed under Clause C3.11 - Visual Privacy of the LDCP 2013 protect sightlines between main living areas and private open space. As such, the proposal is considered acceptable in this regard, given the proposed windows service a studio.

5(h) The Public Interest

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

In light of the identified impacts and non-compliances, granting consent to the proposal is considered contrary to the public interest.

6 Referrals

6(a) Internal

The application was referred to the following internal sections/officers and issues raised in those referrals have been discussed in section 5 above.

- Development Engineer Application not supported (refer to Section 5(c))
- Heritage Application not supported (refer to Section 5(c))
- Landscape/Urban Forests No objections to proposal, subject to conditions being imposed.

6(b) External

No external referrals applicable.

7. Section 7.11 Contributions/7.12 Levy

The carrying out of the proposed development would result in an increased demand for public amenities and public services within the area. A condition requiring that contribution to be paid should be imposed on any consent granted.

8. Conclusion

It is noted that there are conflicts between the bulk and scale of the development and the flooding and parking requirements for the site. These concerns were raised in Council's addinfo letter dated 21st September 2020 which requested a modest scale development be pursued, however the proposal has not been amended accordingly and has failed to adequately address these concerns. The scope of development which is achievable on the site is likely limited to a garage or studio only, given the constraints of the site, however, in light of the information submitted to Council:

- The proposal does not comply with the aims, objectives and design parameters contained in Leichhardt Local Environmental Plan 2013 and Leichhardt Development Control Plan 2013.
- The development would result in significant impacts on the amenity of the adjoining properties and the streetscape and is not considered to be in the public interest.
- The application is considered unsupportable and in view of the circumstances, refusal of the application is recommended.

9. Recommendation

- A. The applicant has made a written request pursuant to Clause 4.6 to vary Clause 4.4 of the *Leichhardt Local Environmental Plan 2013*. After considering the request, the Panel is not satisfied that compliance with the standard is unnecessary in the circumstance of the case and that there are sufficient environmental planning grounds to support the variation. The proposed development will not be in the public interest because the exceedance is inconsistent with the objectives of the standard and of the zone in which the development is to be carried out.
- B. That the Inner West Local Planning Panel exercising the functions of the Council as the consent authority, pursuant to s4.16 of the *Environmental Planning and Assessment Act 1979*, refuse Development Application No. DA/2020/0486 for demolition of a carport and construction of a garage with studio at 54 Ferris Street ANNANDALE NSW 2038 for the following reasons.

Attachment A - Reasons for refusal

REASONS FOR REFUSAL

- 1. The proposal has not demonstrated compliance with the following Clauses of the Leichhardt Local Environmental Plan 2013 pursuant to Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979:
 - a. Clause 1.2 Aims of Plan
 - b. Clause 2.3 Zone objectives and Land Use Table (Zone R1 General Residential)
 - c. Clause 4.4 Floor Space Ratio
 - d. Clause 4.6 Exceptions to development standards
 - e. Clause 5.10 Heritage Conservation
 - f. Clause 6.3 Flood Planning
- 2. The Clause 4.6 request submitted with the application has failed to demonstrate that compliance with the Floor Space Ratio development standard is unreasonable or unnecessary in the circumstances of the case, or that there are sufficient environmental planning grounds to justify contravening the development standard; and, further, the proposed development will not be in the public interest because the FSR variation is inconsistent with the objectives of the standard and of the zone in which the development is to be carried out.
- 3. The proposal is considered to result in adverse environmental impacts on the built environment pursuant to Section 4.15(1)(b) of the Environmental Planning and Assessment Act 1979.
- 4. The proposal is not considered suitable for the site pursuant to Section 4.15(1)(c) of the Environmental Planning and Assessment Act 1979.
- 5. The public submissions raised valid grounds of objection and approval of this application is considered contrary to the public interest, pursuant to Section 4.15 (1)(d) and (e) of the Environmental Planning and Assessment Act 1979.
- 6. The proposal has not demonstrated compliance with the following Parts of the Leichhardt Development Control Plan 2013, pursuant to Section 4.15(1)(a)(iii) of the Environmental Planning and Assessment Act 1979:
 - a. Part C Section 1 C1.0 General Provisions
 - b. Part C Section 1 C1.4 Heritage Conservation Areas and Heritage Items
 - c. Part C Section 1 C1.11 Parking
 - d. Part C Section 1 C1.18 Laneways
 - e. Part C Section 2 C.2.2.1.1: Young Street Distinctive Neighbourhood
 - f. Part C Section 3 C3.1 Residential General Provisions
 - g. Part C Section 3 C3.9 Solar Access
 - h. Part E Section 1 E1.3.1 Flood Risk Management
- 7. The proposed development is inconsistent and has not demonstrated compliance with the *Draft Inner West Local Environmental Plan 2020*, pursuant to Section 4.15 (1)(a)(i) of the *Environmental Planning and Assessment Act 1979*:
 - a. Clause 3.2 Zoning Objectives and Land Use Table

Attachment B – Draft Conditions (if not refused)

CONDITIONS OF CONSENT

DOCUMENTS RELATED TO THE CONSENT

1. Documents related to the consent

The development must be carried out in accordance with plans and documents listed below:

Plan, Revision and Issue No.	Plan Name	Date Issued	Prepared by
Dr No 341/02/2020	Proposed Architectural Drawings (Floor Plans, Elevations and Sections)	06 October 2020	A.D Practique
Dr No 341/02/2020	Compliance with AS/NZ 2890.1.2004	23 October 2020	A.D Practique
	Flood Risk Management Report	23 October 2020	HYDRO CIVIL ENGINEERS
Drawing Mo. FS54	Stormwater Management Plan	07 October 2020	HYDRO CIVIL ENGINEERS
BASIX Certificate No.:	BASIX Certificate	14 June 2020	A.D Practique

As amended by the conditions of consent.

FEES

2. Section 7.12 (formerly section 94A) Development Contribution Payments

Prior to the issue of a Construction Certificate, written evidence must be provided to the Certifying Authority that a monetary contribution to the Inner West Council has been paid, towards the provision of infrastructure, required to address increased demand for local services generated by additional development within the Local Government Area (LGA). This condition is imposed in accordance with Section 7.12 of the *Environmental Planning and Assessment Act 1979* and in accordance with *Former Leichhardt Local Government Area Section 7.12 Development Contributions Plan 2020*.

Note:

Copies of these contribution plans can be inspected at any of the Inner West Council Service Centres or viewed online at https://www.innerwest.nsw.gov.au/develop/planning-controls/section-94-contributions

Payment amount*:

\$20,000.00

*Indexing of the Section 7.12 contribution payment:

The contribution amount to be paid to the Council is to be adjusted at the time of the actual payment in accordance with the provisions of the relevant contributions plan. In this regard, you are recommended to make contact with Inner West Council *prior to arranging your payment method* to confirm the correct current payment amount (at the expected time of payment).

Payment methods:

The required contribution must be paid either in cash; by unendorsed bank cheque (from an Australian Bank only); via EFTPOS (Debit only); or credit card (to a maximum of \$10,000 - Note: A 1% credit card transaction fee applies to all credit card transactions). It should be noted that personal cheques or bank guarantees cannot be accepted for the payment of these contributions. The contribution must be paid either in cash, by unendorsed bank cheque (from an Australian Bank only), via EFTPOS (Debit only) or credit card*. Prior to payment contact Council's Planning Team to review charges to current indexed quarter, please allow a minimum of 2 business days for the invoice to be issued before payment can be accepted.

3. Long Service Levy

Prior to the issue of a Construction Certificate, written evidence must be provided to the Certifying Authority that the long service levy in accordance with Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* has been paid at the prescribed rate of 0.35% of the total cost of the work to either the Long Service Payments Corporation or Council for any work costing \$25,000 or more.

4. Security Deposit - Standard

Prior to the commencement of demolition works or issue of a Construction Certificate, the Certifying Authority must be provided with written evidence that a security deposit and inspection fee has been paid to Council to cover the cost of making good any damage caused to any Council property or the physical environment as a consequence of carrying out the works and as surety for the proper completion of any road, footpath and drainage works required by this consent.

Security Deposit:	\$2,209.00
Inspection Fee:	\$236.70

Payment will be accepted in the form of cash, bank cheque, EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee. Bank Guarantees must not have an expiry date.

The inspection fee is required for the Council to determine the condition of the adjacent road reserve and footpath prior to and on completion of the works being carried out.

Should any of Council's property and/or the physical environment sustain damage during the course of the demolition or construction works, or if the works put Council's assets or the environment at risk, or if any road, footpath or drainage works required by this consent are not completed satisfactorily, Council may carry out any works necessary to repair the damage, remove the risk or complete the works. Council may utilise part or all of the security deposit to restore any damages, and Council may recover, in any court of competent jurisdiction, any costs to Council for such restorations.

A request for release of the security may be made to the Council after all construction work has been completed and a final Occupation Certificate issued.

The amount nominated is only current for the financial year in which the initial consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.

GENERAL CONDITIONS

5. Tree Protection

No trees on public property (footpaths, roads, reserves etc.) are to be removed or damaged during works unless specifically approved in this consent or marked on the approved plans for removal.

Prescribed trees protected by Council's Management Controls on the subject property and/or any vegetation on surrounding properties must not be damaged or removed during works unless specific approval has been provided under this consent.

Any public tree within five (5) metres of the development must be protected in accordance with Council's *Development Fact Sheet—Trees on Development Sites*.

No activities, storage or disposal of materials taking place beneath the canopy of any tree (including trees on neighbouring sites) protected under Council's Tree Management Controls at any time.

6. Waste Management Plan

Prior to the commencement of any works (including any demolition works), the Certifying Authority is required to be provided with a Recycling and Waste Management Plan (RWMP) in accordance with the relevant Development Control Plan.

7. Erosion and Sediment Control

Prior to the issue of a commencement of any works (including any demolition works), the Certifying Authority must be provided with an erosion and sediment control plan and specification. Sediment control devices must be installed and maintained in proper working order to prevent sediment discharge from the construction site.

8. Standard Street Tree Protection

Prior to the commencement of any work, the Certifying Authority must be provided with details of the methods of protection of all street trees adjacent to the site during demolition and construction.

9. Works Outside the Property Boundary

This development consent does not authorise works outside the property boundaries on adjoining lands.

PRIOR TO ANY DEMOLITION

10. Dilapidation Report

Prior to any works commencing (including demolition), the Certifying Authority and owners of identified properties, must be provided with a colour copy of a dilapidation report prepared by a suitably qualified person. The report is required to include colour photographs of all the adjoining property/ies to the Certifying Authority's satisfaction. In the event that the consent of the adjoining property owner cannot be obtained to undertake the report, copies of the letter/s that have been sent via registered mail and any responses received must be forwarded to the Certifying Authority before work commences.

11. Advising Neighbors Prior to Excavation

At least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.

12. Construction Fencing

Prior to the commencement of any works (including demolition), the site must be enclosed with suitable fencing to prohibit unauthorised access. The fencing must be erected as a barrier between the public place and any neighbouring property.

PRIOR TO CONSTRUCTION CERTIFICATE

13. Sydney Water - Tap In

Prior to the issue of a Construction Certificate, the Certifying Authority is required to ensure approval has been granted through Sydney Water's online 'Tap In' program to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

Note: Please refer to the web site http://www.sydneywater.com.au/tapin/index.htm for details on the process or telephone 13 20 92

DURING DEMOLITION AND CONSTRUCTION

14. Canopy Pruning

Canopy pruning of the following trees which is necessary to accommodate the approved building works must be undertaken by a minimum AQF Level 3 Arborist.

Tree No.	Botanical/Common Name	Allowable Pruning.
1	Jacaranda mimosifolia (Jacaranda) located on adjoining property.	Prune to reduce minor branches back to appropriate supporting branches.
2	Elaeocarpus reticulatus (Blueberry Ash) located on adjoining property.	Prune to reduce minor branches back to appropriate supporting branches.

The person acting on this consent has approval under Council's Tree Management Controls to; prune to reduce minor branches to achieve a clearance of the structure. Pruning is limited to those branches that will come into direct contact the built structure and where branch diameter (at its point of attachment) does not exceed 100 mm.

15. Construction Hours - Class 1 and 10

Unless otherwise approved by Council, excavation, demolition, construction or subdivision work are only permitted between the hours of 7:00am to 5.00pm, Mondays to Saturdays (inclusive) with no works permitted on, Sundays or Public Holidays.

16. Survey Prior to Footings

Upon excavation of the footings and before the pouring of the concrete, the Certifying Authority must be provided with a certificate of survey from a registered land surveyor to verify that the structure will not encroach over the allotment boundaries.

ADVISORY NOTES

Consent of Adjoining property owners

This consent does not authorise the applicant, or the contractor engaged to do the tree works to enter a neighbouring property. Where access to adjacent land is required to carry out approved tree works, Council advises that the owner's consent must be sought. Notification is the responsibility of the person acting on the consent. Should the tree owner's refuse access to their land, the person acting on the consent must meet the requirements of the *Access To Neighbouring Lands Act 2000* to seek access.

Arborists standards

All tree work must be undertaken by a practicing Arborist. The work must be undertaken in accordance with AS4373—*Pruning of amenity trees* and the Safe Work Australia Code of Practice—*Guide to Managing Risks of Tree Trimming and Removal Work.* Any works in the vicinity of the Low Voltage Overhead Network (including service lines—pole to house connections) must be undertaken by an approved Network Service Provider contractor for the management of vegetation conflicting with such services. Contact the relevant Network Service Provider for further advice in this regard.

Tree Protection Works

All tree protection for the site must be undertaken in accordance with Council's *Development Fact Sheet—Trees on Development Sites* and AS4970—*Protection of trees on development sites*

Prescribed Conditions

This consent is subject to the prescribed conditions of consent within clause 98-98E of the *Environmental Planning and Assessment Regulations 2000.*

Notification of commencement of works

At least 7 days before any demolition work commences:

- a. the Council must be notified of the following particulars:
 - the name, address, telephone contact details and licence number of the person responsible for carrying out the work; and
 - ii. the date the work is due to commence and the expected completion date; and
- a written notice must be placed in the letter box of each directly adjoining property identified advising of the date the work is due to commence.

Storage of Materials on public property

The placing of any materials on Council's footpath or roadway is prohibited, without the prior consent of Council.

Toilet Facilities

The following facilities must be provided on the site:

- a. Toilet facilities in accordance with WorkCover NSW requirements, at a ratio of one toilet per every 20 employees; and
- b. A garbage receptacle for food scraps and papers, with a tight fitting lid.

Facilities must be located so that they will not cause a nuisance.

Infrastructure

The developer must liaise with the Sydney Water Corporation, Ausgrid, AGL and Telstra concerning the provision of water and sewerage, electricity, natural gas and telephones respectively to the property. Any adjustment or augmentation of any public utility services including Gas, Water, Sewer, Electricity, Street lighting and Telecommunications required as a result of the development must be undertaken before occupation of the site.

Other Approvals may be needed

Approvals under other acts and regulations may be required to carry out the development. It is the responsibility of property owners to ensure that they comply with all relevant legislation. Council takes no responsibility for informing applicants of any separate approvals required.

Failure to comply with conditions

Failure to comply with the relevant provisions of the Environmental Planning and Assessment Act 1979 and/or the conditions of this consent may result in the serving of penalty notices or legal action.

Other works

Works or activities other than those approved by this Development Consent will require the submission of a new Development Application or an application to modify the consent under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

Obtaining Relevant Certification

This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):

- a. Application for any activity under that Act, including any erection of a hoarding;
- Application for a Construction Certificate under the Environmental Planning and Assessment Act 1979;
- Application for an Occupation Certificate under the Environmental Planning and Assessment Act 1979;
- d. Application for a Subdivision Certificate under the Environmental Planning and Assessment Act 1979 if land (including stratum) subdivision of the development site is proposed;
- e. Application for Strata Title Subdivision if strata title subdivision of the development is proposed;
- f. Development Application for demolition if demolition is not approved by this consent;
- Development Application for subdivision if consent for subdivision is not granted by this consent.

National Construction Code (Building Code of Australia)

A complete assessment of the application under the provisions of the National Construction Code (Building Code of Australia) has not been carried out. All building works approved by this consent must be carried out in accordance with the requirements of the National Construction Code.

Notification of commencement of works

Residential building work within the meaning of the *Home Building Act 1989* must not be carried out unless the PCA (not being the council) has given the Council written notice of the following information:

- 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.
- b. In the case of work to be done by an owner-builder:
 - i. The name of the owner-builder; and
 - If the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

Dividing Fences Act

The person acting on this consent must comply with the requirements of the *Dividing Fences Act 1991* in respect to the alterations and additions to the boundary fences.

Permits from Council under Other Acts

Where it is proposed to occupy or carry out works on public roads or Council controlled lands, the person acting on this consent must obtain all applicable Permits from Council in accordance with Section 68 (Approvals) of the *Local Government Act 1993* and/or Section 138 of the *Roads Act 1993*. Permits are required for the following activities:

- a. Work zone (designated parking for construction vehicles). Note that a minimum of 2 months should be allowed for the processing of a Work Zone application;
- b. A concrete pump across the roadway/footpath;
- c. Mobile crane or any standing plant;
- d. Skip bins;
- e. Scaffolding/Hoardings (fencing on public land);
- Public domain works including vehicle crossing, kerb & guttering, footpath, stormwater, etc.;
- g. Awning or street verandah over footpath;
- h. Partial or full road closure; and
- i. Installation or replacement of private stormwater drain, utility service or water supply.

Contact Council's Road Access team to ensure the correct Permit applications are made for the various activities. A lease fee is payable for all occupations.

Noise

Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and guidelines contained in the New South Wales Environment Protection Authority Environmental Noise Control Manual.

Amenity Impacts General

The use of the premises must not give rise to an environmental health nuisance to the adjoining or nearby premises and environment. There are to be no emissions or discharges from the premises, which will give rise to a public nuisance or result in an offence under the *Protection of the Environment Operations Act 1997* and Regulations. The use of the premises and the operation of plant and equipment must not give rise to the transmission of a vibration nuisance or damage other premises.

Construction of Vehicular Crossing

The vehicular crossing and/or footpath works are required to be constructed by your own contractor. You or your contractor must complete an application for *Construction of a Vehicular Crossing & Civil Works* form, lodge a bond for the works, pay the appropriate fees and provide evidence of adequate public liability insurance, prior to commencement of works.

Lead-based Paint

Buildings built or painted prior to the 1970's may have surfaces coated with lead-based paints. Recent evidence indicates that lead is harmful to people at levels previously thought safe. Children particularly have been found to be susceptible to lead poisoning and cases of acute child lead poisonings in Sydney have been attributed to home renovation activities involving the removal of lead based paints. Precautions should therefore be taken if painted surfaces are to be removed or sanded as part of the proposed building alterations, particularly where children or pregnant women may be exposed, and work areas should be thoroughly cleaned prior to occupation of the room or building.

Dial before you dig

Contact "Dial Prior to You Dig" prior to commencing any building activity on the site.

Useful Contacts

BASIX Information 1300 650 908 weekdays 2:00pm - 5:00pm

www.basix.nsw.gov.au

Department of Fair Trading 13 32 20

www. fair trading. nsw. gov. au

Enquiries relating to Owner Builder Permits and

Home Warranty Insurance.

Dial Prior to You Dig 1100

www.dialprior toyoudig.com.au

9841 8660 Landcom

To purchase copies of Volume One of "Soils and

Construction"

Service Long

Corporation

131441 **Payments**

www.lspc.nsw.gov.au

NSW Food Authority 1300 552 406

www.foodnotify.nsw.gov.au

NSW Government www.nsw.gov.au/fibro

www.diysafe.nsw.gov.au

Information on asbestos and safe work

practices.

NSW Office of Environment and

Heritage

131 555

www.environment.nsw.gov.au

Sydney Water 13 20 92

www.sydneywater.com.au

Waste Service SITA 1300 651 116

Environmental Solutions

www.wasteservice.nsw.gov.au

Water Efficiency Labelling and www.waterrating.gov.au

Standards (WELS)

13 10 50

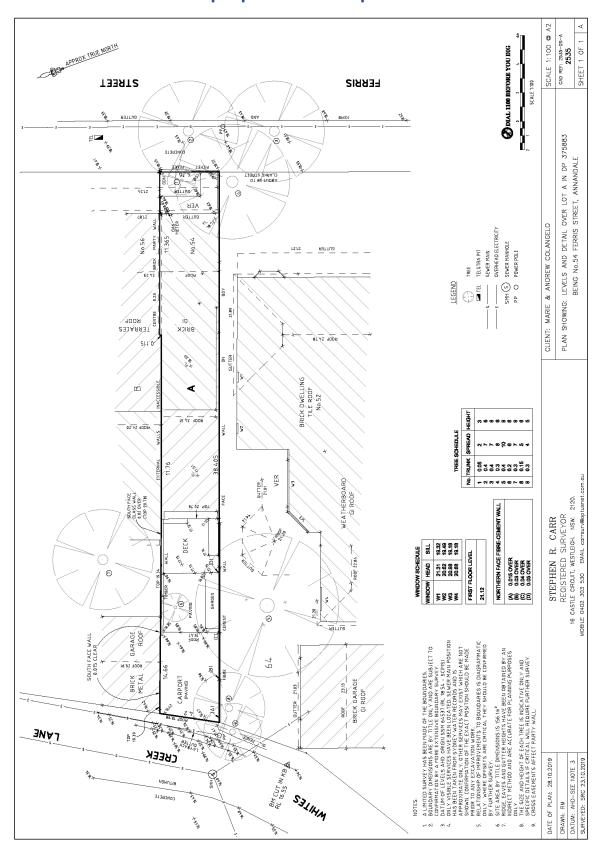
WorkCover Authority of NSW

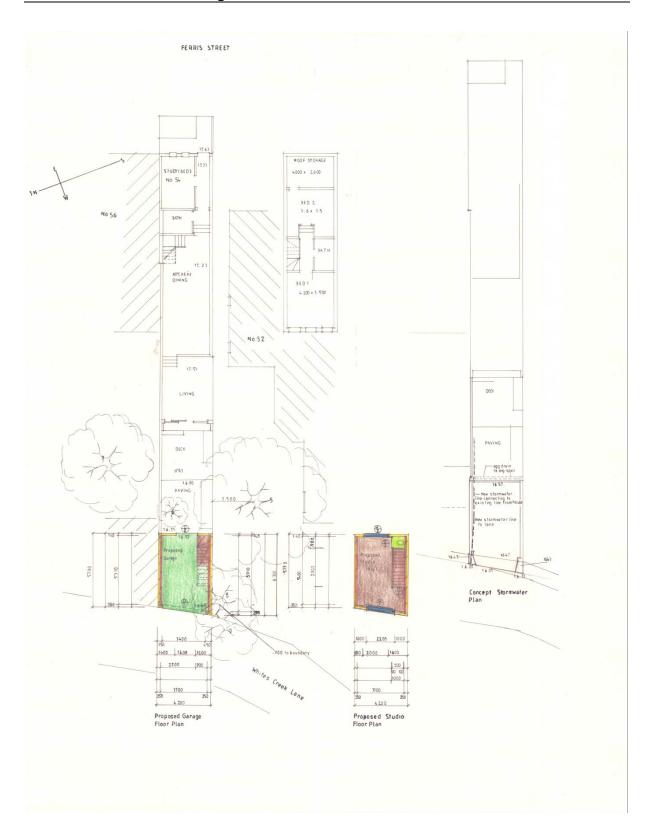
www.workcover.nsw.gov.au

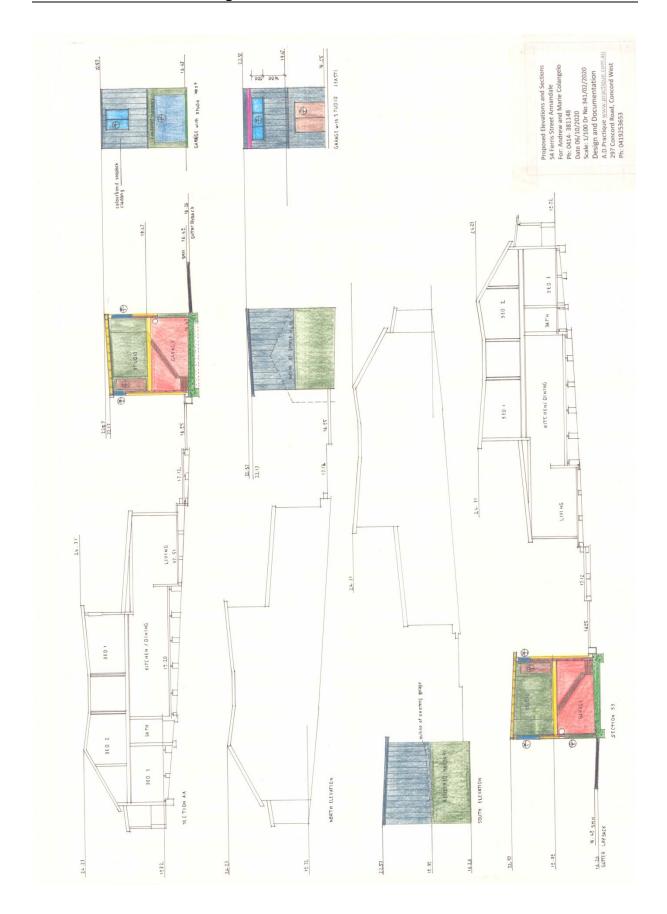
Enquiries relating to work safety and asbestos removal and disposal.

Street Numbering If any new street numb are required, a separate before being displayed	ers or change to street numbers (this application must be lodged with and	includes unit and shop numbers) approved by Council's GIS Team

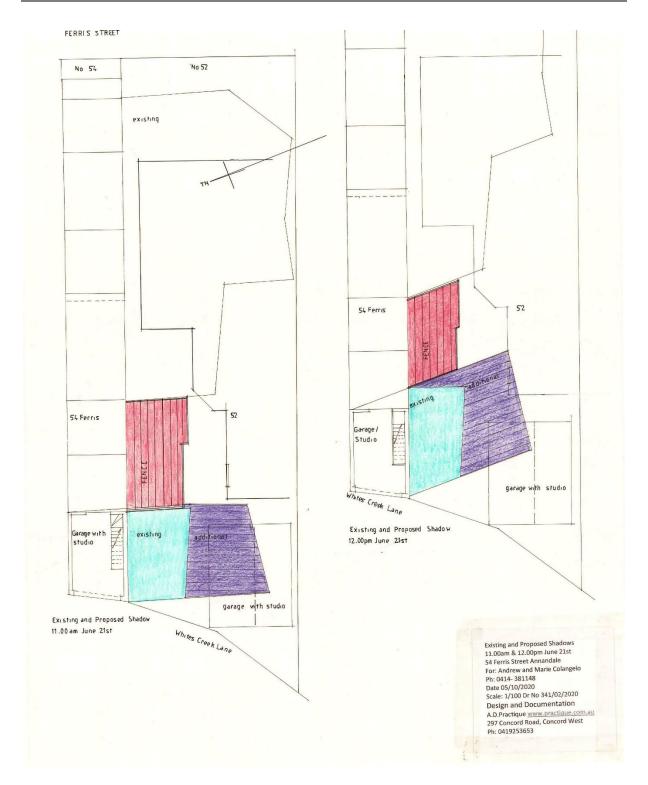
Attachment C- Plans of proposed development



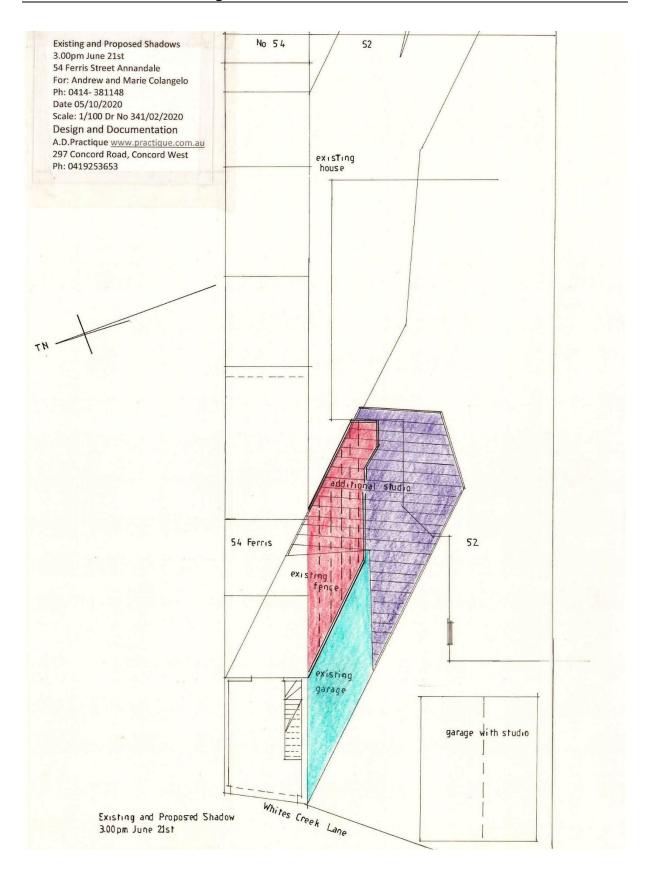


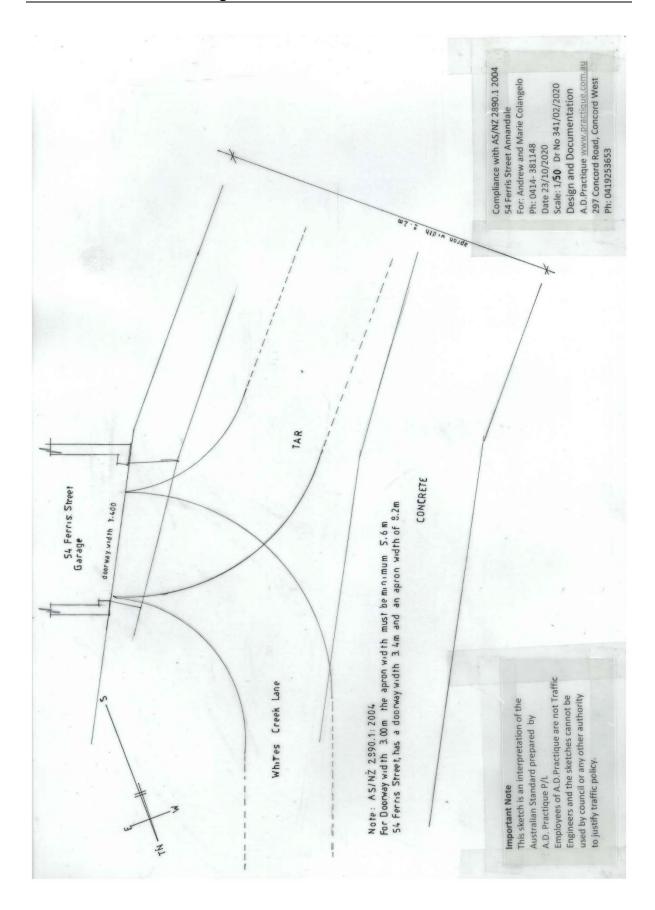


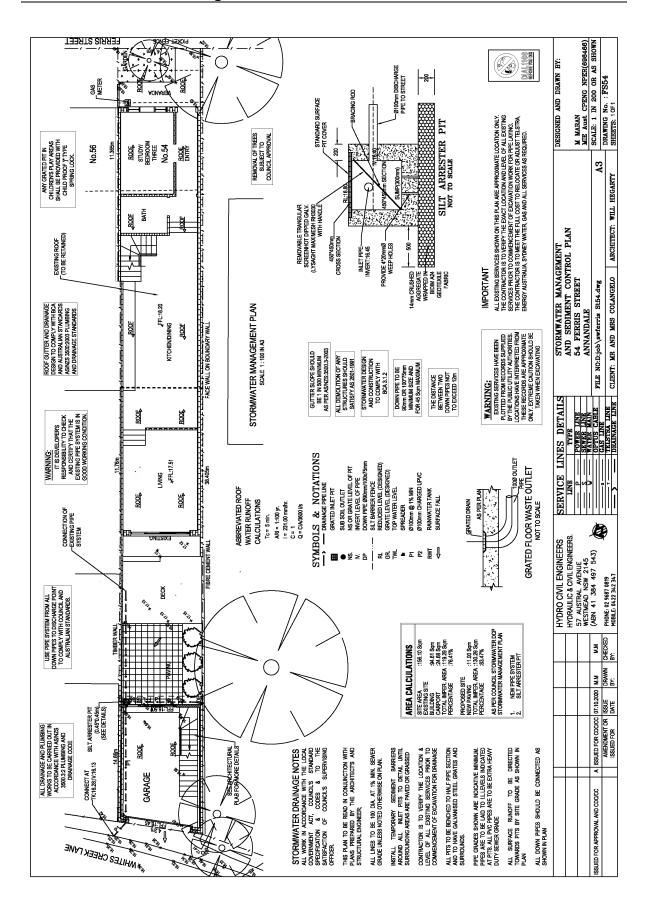












Attachment D – Clause 4.6 Exception to Development Standards

DA/2020/0486 **Supplementary Information No.01**

Proposed Garage with Studio at existing residence at 54 Ferris Street, Annandale, New South Wales

Prepared by: Andrew Colangelo

54 Ferris Street Annandale NSW 2038 Telephone: 0414381148 **Andrew Colangelo** Issue A, dated 23rd October 2020

Contact:

Issue:

Supplementary Information No.01 for Proposed Garage with Studio at existing residence at 54 Ferris Street, Annandale, New South Wales

Applicant's Name:	Mrs Marie Colangelo and Mr Andrew Colangelo
Applicant's Address:	54 Ferris Street, Annandale, New South Wales
Proposed Development:	Proposed Garage with Studio at existing residence at 54 Ferris Street, Annandale, New South Wales
Application Number:	DA/2020/0486
Supplementary Information No.01 Date:	23 rd October 2020
Purpose of this document:	The purpose of this document is to provide supplementary information to support the Development Application (DA/2020/0486) in response to the letter received from Inner West Council (dated 21st September 2020).
Consideration of Exemptions to Development Standards	Council may approve an application that does not comply with a development standard if it is satisfied that the objections are well founded and is of the opinion that approval would be consistent with the aims of the Policy; that is, to allow development where compliance would be unreasonable or unnecessary or would tend to hinder the attainment of the objects of the Act.
	In this case the proposed additions to the dwelling are not of unreasonable scale compared with the existing and surrounding buildings and would have minimal adverse impacts on neighbouring properties. The rationale and justifications identified in this report demonstrate the compliance with the numerical standards for FSR and landscaped area is unreasonable to achieve the objectives of the planning controls, and it would therefore be unreasonable to require compliance.
Appendices	Appendix A: Solar Access Diagramme Appendix B: Vehicle Turning Diagrammes Appendix C: Flood Risk Management Report Appendix D: Revised Architectural Drawings Appendix E: Stormwater Drainage Concept Plan
Council Clarification	Response
Design Concern – Non-compliance with the Leichhardt Local Environmental Plans 2013 - Floor Space Ratio (FSR) and Site Coverage Development Standards	Response to 1: Design Concern FSR and Site Coverage Refer to Response 2.B and 2.C
Council has calculated the proposed development will result in Site Coverage of 70.24% (109.65m2) – thus resulting in a variation to the Leichhardt Local Environmental Plan 2013 (LLEP 2013) Development Standard of 28.3m2 (17.07%).	
Council has also calculated the proposed development will result in an FSR of 0.98:1 (153.18m2) – thus resulting in a variation to the	

Leichhardt Local Environmental Plan 2013 (LLEP 2013) Development Standard of 28.3m2 (22.66%).

Given Council has recently increased FSR's across the LGA, the variation to the FSR development standard is not supported on the site. The proposed garage and studio have not been designed with consideration to the objectives of the R1 — General Residential Zone and the provisions of the Leichhardt Development Control Plan 2013 (LDCP 2013). You are advised that the garage and studio, including stairs on both levels is included as gross floor area. Given the number of noncompliances to the controls contained within the LDCP 2013 there is no reasonable explanation as to why a high-quality design that complies with the FSR development standard cannot be achieved

In this regard, the proposal is to be amended to provide either a garage or a studio, not both (refer to sections below for discussion).

2. Clause 4.6 Exceptions to Development Standards

A formal request for an exception under the provisions of Clause 4.6 of the Local Environmental Plan is required where you seek consent for works that do not comply with a development standard. Council is unable to approve an application for such works without such formal request. Care should be taken to sufficiently address the requirements of Clause 4.6 and the objectives of the standard. A preliminary review of the application has revealed that the proposal does not comply with the following development standard and therefore a Clause 4.6 Exception to Development Standard is required.

Leichhardt Local Environmental Plan Cl.4.3A Landscape Area Cl 4.3A Site Coverage Cl 4.4 Floor Space Ratio

As discussed in the previous section, you are advised that the extent of the proposed variation to the FSR development standard is not supported. A minor variation may be considered to provide either a garage or a studio.

However, this would be dependent on the noncompliances to the LDCP2013 raised in this letter, being addressed.

Response to Item 2: Exceptions to Development Standards

Response 2.A: Landscaping Area

Development Standards

"In residential areas landscaping is used to shade private open space, grow food, assist in providing privacy, recreation, keep domestic animals and increase native fauna.

Landscaping includes both soft in the form of planted grassed areas and hard in the form of paving and outdoor furniture."

Landscaped Area 54 Ferris Street Annandale

4.3A Subclause (3) sets a minimum landscaped area of 15% of the total site area where the lot size is equal to or less than 235m². The lot size of 54 Ferris Street is 156.1m², this means that 23.41m² should be open landscaping.

The area of open landscaping at 54 Ferris Street is 43.0m². This is equal to 27% of the site area. The landscaping complies with the requirements of both the LEP and the DCP

Response 2.B: Site Coverage

Development Standard

Part 4.0 of the Leichhardt Environmental Plan 2013 sets out Principal Development Standards for Residential development.

Clause 4.3 Applies to development for the purpose of residential development.

Part 3 (b) of the LEP says that site coverage should not exceed 60 % of the site.

The existing site coverage for 54 Ferris Street is 77%.

Because the area does not comply with the development standard for site coverage an Exemption to Development Standard is required. This exemption should show that the standards are unreasonable and unnecessary in the circumstances

The objections specify the grounds for objection with reference to the objectives of the standard.

The objectives of 4.3A are to:

- a) to provide landscaped areas that are suitable for substantial tree planting and for the use and enjoyment of residents,
- e) to control site density,
- to limit building footprints to ensure that adequate provision is made for landscaped areas and private open space.

Grounds for Objection

The site coverage does not increase with this proposal. The site coverage was approved of in a previous application and nothing changes.

As already stated above the land area is very small, 156.1m². Sixty per cent of 156.1m² is 93.66m².

Once more a numerical development standard can be a poor expression of the planning objectives for an area, particularly in circumstances where there is a variety of built form and the primary objectives are that new development be compatible with existing and provide good levels of amenity and ecological sustainability.

Response 2C: Floor Space Ratio

Development Standards

Clause (2B) on the Floor Space Ratio map edged red or green in the case of development with an area greater than 150m² but less than 300m² the FSR is .9:1 which on the site area of 156.1 allows a gross floor area of 140.49m². Currently the dwelling has 136.67m² and complies with the control. The total gross floor area resulting from the additions will be 153.26m². As the proposal does not comply with the Floor Space Ratio control an Exemption from development standards is required

4.3A sets a maximum site coverage area of 60% of the total site area; that is, 93.66m². The existing landscaped area is 33% Including the area in front of the building, the landscaped area proposed is 35.66m², or 33% of the site area. As the proposal does not comply with the Site Area control an Exemption to Development standards is required.

Because the proposal does not comply with the development standards for floor space ratio and site Area objections are lodged under Exemptions to Development Standards that the standards are unreasonable and unnecessary in the circumstances.

The objections specify the grounds for objection with reference to the objectives of the standard.

- (1) The aims of this Plan are as follows:
 - a) to ensure that development applies the principles of ecologically sustainable development,
 - d) to promote a high standard of urban design in the public and private domains
 - to protect and enhance the amenity, vitality and viability of Leichhardt for existing and future residents, and people who work in and visit Leichhardt,
 - to ensure that development is compatible with the character, style, orientation and pattern of surrounding buildings, streetscape, works and landscaping and the desired future character of the area,

"The general objective for the FSR Clause built and natural environment

and amenity is to encourage the design of buildings, structures and spaces which are compatible with the character, form and scale of the area to:"

- a) to ensure that residential accommodation:
 - is compatible with the desired future character of the area in relation to building bulk, form and scale, and
 - provides a suitable balance between landscaped areas and the built form, and
 - III. minimises the impact of the bulk and scale of buildings,
- to ensure that non-residential development is compatible with the desired future character of the area in relation to building bulk, form and

Grounds for Objection

- The additional floor space is situated at the rear in the proposed new studio situated above a new garage that is replacing an existing garage.
- The studio addition is moderate, only 6.00m at the high point of the roof. The owners have interceded with both neighbours to create a design that is satisfactory to all relevant parties.
- Although the proposal will result in a two-storey dwelling, a new garage with studio it is not inconsistent with the locality as the building forms are diverse in Whites Creek Lane and there are many examples of garages with studios.
- The proposed FSR is not excessive in comparison to development in the immediate locality.
- The proposed increase in floor space ratio is very moderate. An increase of 16.59m².
- 6) 54 Ferris Street falls very close to the 150m² cut off point for a 1:1 FSR in which case it would comply. If the land area was slightly larger it would comply if it were slightly smaller it would comply. The current owners and any future owners are being dammed to a living standard that is at odds with the objectives of the LEP "to protect and enhance the amenity, vitality and viability of the residents of the Leichhardt municipality"
- 7) There are many examples of garages with studios above in Whites Creek Lane, Ferris Street and throughout the Annandale locality. From the northern end of the of the Lane (at Reserve Street) to the property next door at No 52 Ferris Street, this type of development evident. Common sense would inform us that the residents that most require this form of additional accommodation are those with small living areas like the owners of No 54 Ferris Street. Nevertheless, the unreasonable interpretation of council regulations will allow owners of larger blocks to build the studio over the garage while those on small blocks with very limited living arrangements have their applications rejected.
- The first-floor studio results in no adverse impact to adjoining properties as discussed below:
 - a) Adjoining to the north of No 54 is No 56 Ferris Street. Adjoining to the proposal is a garage. There is no impact to the building to the north. The garage provides off-street parking for one dwelling and a second component of open space for the dwelling at the rear which is currently occupied by an outdoor dining setting.
 - b) The proposal includes shadow diagrams, illustrating the impact of shadowing in plan. The shadow diagrams show there is no impact from shadowing on the property known as 76 Ferris Street Annandale.
 - Adjoining to the south is No 52 Ferris Street. This is a large double fronted property with extensive structures from the front of the property to the rear. No 52 is approximately 12.2m wide by 30.48 m deep. At the rear of No 52 Ferris Street is a

large two storey garage with accommodation above. Closer to the rear of the house is a large entertaining rotunda type structure that dwarfs the rear of No 74 Ferris Street. As result of the large rotunda with an elevated floor level the fences between No 52 and 54 were built to 2.8m high to provide a modicum of privacy for the owners of No 54. (The height of the fences will become relevant when discussing the Shadowing).

- The proposed garage with studio is located on the boundary.
 There are no first-floor windows on either side of the elevation.
- e) Although the proposal has two windows at studio level, only one window will have an impact on the privacy of the neighbours. This window is on the Eastern elevation and after consultations with both neighbours the window has been elevated to 1.6 off finished floor level to prevent overlooking.
- f) The proposal includes shadow diagrams, illustrating the impact of shadowing in plan on No 52 Ferris Street at 9.00am, 10.00am, 11.00am, 12.00pm, 1.00pm, 2.00pm and 3.00pm on 21st June (Winter Solstice). Refer to Response to Item 3 in this report.

3. Solar Access and Overshadowing

The proposal will result in additional overshadowing to the private open space of adjoining properties to the south, in particular No.52 Ferris Street.

It is noted that this adjoining property currently does not receive the minimum solar access requirements as prescribed in Clause C3.9 of the Leichhardt Development Control Plan 2013 (LDCP2013). As such, further works are required to minimise (or preferably eliminate) additional overshadowing to the adjoining properties created from this proposal.

Given the extent of the FSR variation, the proposal is to be amended to provide either a garage or a studio which employs minimal floor to ceiling heights.

Response to Item 3: Solar Access and Overshadowing

Appraisal of Shadow Drawings

Reference: Appendix A: Impact on 52 Ferris Street Annandale

21st June, 9.00am and 10.00am

An appraisal of the shadow drawings would suggest at 9.00am and 10.00am on June 21st the open areas at the rear of No 52 are already in shadow from the elevated fence and the existing garage. Any additional shadowing falls over the existing two storey garage which has no side windows facing north.

21st June, 11.00am and 12.00pm

At 11.00am and 12.00pm the shadows are moving towards the southeast. There is already significant overshadowing from the existing garage and elevated fence. At eleven am there is impact from the proposed studio and the same applies for 12.00pm. However, there are also similar areas that have no impact from the additional or existing overshadowing.

21st June, 1.00pm and 2.00pm

At 1.00pm and 2.00pm the angle of the shadow moves further southeast. There is less impact from the existing garage and fence and some impact from the studio. However, at 1.00pm and 2.00pm there are areas of no impact outside the living areas of the house and furthermore there are larger areas opening on the north western side of the garden where there is no impact from overshadowing.

21st June, 3.00pm

At 3.00pm the angle of the shadow is directly south-east. There is still impact from the existing garage and elevated fence. There is late afternoon shadowing of a small section of the house and the open areas in this section of the house. At the rear of no 52 Ferris there is a significant open area that has no impact from overshadowing.

Impact to Solar Access to No.52 Ferris Street Private Open Space There is no impact on No 52 Ferris Street from overshadowing either before or after the proposed development.

The shadow drawings show the shadows on the winter solstice

moving from the edge of the laneway across the open areas of No 52 to the rear of the house at 3.00pm.

C14 requires a minimum of two hours of solar access between 9.00am and 3.00pm. Due to the large areas of open landscaped areas in No 52 there are significant clear areas from shadow between 9.00am and 12.00pm and between 12.00pm and 3.00pm. As far as the requirements of the DCP the proposal complies with the solar access requirements

- 1) Using June 21st to determine the impact of overshadowing is misleading of the overall impact. If shadow drawings were produced a month either side of June 21st they would show the shadows had decreased significantly. The impact three months either side of June 21st, (September 21st and March 21st) once more would present a totally different picture of the overall impact of overshadowing. There are 365 days in a year but some reason we are using the shortest, darkest day of the year in terms of the amount of sunlight to determine the viability of a design proposal.
- 2) Grounds 1-4 above confirm that the proposal satisfies housing objective 17(c) the density and landscaped areas of new housing reflect the existing residential development of the locality. New housing should complement and be compatible with the style, orientation and pattern of surrounding buildings, works and landscaped areas.
- The proposed additions will improve the amenity for the occupants and will maintain a good standard of amenity for neighbours.
- 4) The proposed dwelling will provide a visually stimulating environment, whilst being easy to manage and maintain.
- 5) The proposed building will accommodate the existing and future needs of the occupants without unreasonably compromising those of its neighbours.

4. Shadow Diagrams

Compliance with Part C3.9 of the Leichhardt DCP has not been adequately demonstrated with regard to additional overshadowing impacts to adjoining properties.

Shadow diagrams are to be provided which show the effect in plan of existing and proposed overshadowing for 21 June, at hourly intervals between 9am and 3pm. The shadow diagrams shall indicate:

 a) the location of adjoining buildings and property boundaries, including the location of any windows, skylights, yard areas and clothes drying areas, drying areas, where windows are impacted by the proposal the identification of the use of the room,
 b) details on the use of the rooms that have windows or skylights that are impacted on by the development;

c) including shadows cast by fences and

adjoining structures;

d) excluding shadows cast by trees and other vegetation;

e) at a scale of 1:100; and

f) the true north point (not magnetic north).

Response to Item 4: Shadow Diagrammes

Refer to Appendix A for detailed shadow diagrammes.

The shadow diagrams previously submitted to the Council are insufficient to enable a satisfactory assessment of the impacts of overshadowing on the adjoining properties.

The protection of residential amenity needs to be carefully considered and, in addition to further shadow diagram analysis, an assessment against Part C3.9 of the Leichhardt DCP should be submitted, demonstrating compliance / addressing any non-compliance.

5. Heritage and Conservation

The proposal is generally acceptable from a heritage perspective as it will not detract from the heritage significance of the Annandale Heritage Conservation Area providing the design changes below are implemented to ensure the development is in accordance with Clause 5.10 Objectives 1(a) and (b) in the Leichhardt LEP 2013 and the relevant objectives and controls in the Leichhardt DCP 2013.

The following design changes are to be incorporated:

a) Openings must be vertically proportioned, employing traditional design (timber sash or French doors) and materials (timber frame), e.g. the window in the proposed western elevation. Dominancy must be given to masonry/solid elements rather than glazed areas. Blank unarticulated walls should also be avoided if visible from the public domain.

A colours and materials schedule will need to be submitted for consideration and in accordance with the following:

 a) replace the proposed snaplock Colorbond cladding to the first floor with horizontal timber weatherboards, or FC cladding with the same profile;

 b) greys and blacks are not acceptable and must be avoided. Light, warm, earthy, tones are to be used; and

c) a pre-coloured traditional corrugated steel shall be used for the roofing, finished in a colour equivalent to Colorbond colours "Windspray" or "Wallaby".

Response to Item 5: Heritage and Conservation

Response 5.A: Form and Fenestrations

The following design amendments are proposed in this submission:

- Western Window: The western window has been amended to be a vertically proportioned, timber framing with a retractable and operable external louvre to provide operable shading to the western sun.
- Eastern Window: The eastern window has been amended to be horizontally proportioned and at high level to ensure privacy is maintained (viewing into the internal space from the neighbours and overlooking to the neighbouring properties.
- The north and south walls are solid with no fenestrations to ensure fire separation is maintained.

Response 5.B: Materials and Colours

The materials and colours proposed are consistent with the context of the laneway, consistent and integrated with the existing finishes of the existing residence and are of high and durable quality.

It is also noted the materials are required to be durable, textured and of darker hues due to the high levels of vandalism in the lane.

The following materials are proposed:

- Ground level walls: masonry (brick) finish similar to rendered finish painted colour, similar to Dulux 'Windspray'.
- Level 1 external walls cladding: Snaplock Colorbond 'Monument' (matt finish).
- 3) Garage Door: Roller door, Colorbond 'Monument' (matt finish).

Reference Image (Below): Example of retractable louvre to the Western Window.



Precedent Image (Below): Rear (Young Lane) 76 Annandale Street, Annandale.

Note: The face brickwork is not applicable to this application





6. Parking

It is unclear whether the garage/parking space would comply with the Australian Standard AS/NZS 2890.1 Parking facilities and Council's DCP requirements. As such, the following is to be submitted:

- a) A minimum of 2200mm headroom must be provided throughout the access and parking facilities. Note that the headroom must be measured at the lowest projection from the ceiling, such as lighting fixtures, and to open garage doors.
- b) Longitudinal sections along each outer edge of the access and parking facilities, extending to the centerline of the road carriageway must be provided at a natural scale of 1:25, demonstrating compliance with the above requirements.
- c) The garage/parking space must have minimum clear internal dimensions of 6000mm x 3000 mm (length x width) and a door opening width of 2800 mm at the street frontage. The dimensions must be exclusive of obstructions such as walls, doors and columns, except where they do not encroach inside the design envelope specified in Section 5.2 of AS/NZS 2890.1-2004. d) A plan of the proposed access and adjacent road, drawn at a 1:200 scale, demonstrating that vehicle maneuverability for entry and exit to the parking space complies with swept paths from AS/NZS 2890.1:2004. The plan must include any existing on-street parking spaces.
- e) The maximum gradients within the parking module must not exceed 1 in 20 (5%), measured parallel to the angle of parking and 1 in 16 (6.25%), measured in any other direction in accordance with the requirements of Section 2.4.6 of AS/NZS 2890.1-2004.

Response to Item 6: Parking

The current garage (with existing access from White Creek Lane) is used for private vehicle parking. The usage of the garage is on a daily basis

The current movement of the vehicle entering and existing the garage is in a single movement, without any difficulty.

The responses are as follows:

- The design complies with a minimum headroom clearance of 2200mm.
- 2) Refer to Appendix B for vehicle turning diagrammes.
- The stated dimensions in the council response is in contradiction to the spatial requirements in AS2890.1. In addition, application of the council requirements would render the current garage as conconforming, irrespective of the current functional use. The spatial requirements for private off-street parking is 2400mm wide and 5400mm depth. The current design shall comply with AS2890.1. The door opening complies with the minimum opening width of 2800mm.
- All other dimensions, including gradients shall comply with AS2890.1.
- The current design complies with the turning movement in accordance with AS2890.1

7. Flooding

The subject site is identified as flood control lot in accordance with Section E1.1.4 of Council's DCP 2013. A Flood Risk Management Report prepared by a qualified practicing Civil Engineer must be provided to Council with the development application.

The Flood Risk Management Report must establish the Flood Planning Level (FPL), the Maximum Probable Flood level (PMF), the hazard category and an on-site response and evacuation plan. The flood impacts on the site shall be assessed for the 100-year ARI and Probable Maximum Flood (PMF) storm events.

The structural integrity of all existing and proposed structures from immersion and/or impact of velocity and debris including demonstrating that the proposed building will be able to withstand the forces of flood waters during a probable maximum flood event must be

Response to Item 7: Flooding

Refer to Appendix C: Flood Risk Management Report

assessed and prepared by a qualified practicing Structural Engineer.

An application for Flood Certificate can be made to Council to obtain information on flooding of the subject site and surrounds. The information within the Flood Certificate can be utilised to inform the preparation of the Flood Risk Management Report.

Garage Floor Level

The floor level of new enclosed garages must be at or above the Flood Planning Level.
Consideration may be given to a floor level at a lower level, within 500mm of the Flood Planning Level, where it can be demonstrated that providing the floor level at the Flood Planning Level is not practical within the constraints of compliance with Australian Standard AS/NZS 2890.1 Parking facilities as amended.

8. Stormwater Drainage Concept Plan

Response to Item 8: Stormwater Drainage Concept Plan

A Stormwater Drainage Concept Plan prepared in accordance with the Development Control Plan is required to be submitted. The plan is to demonstrate how stormwater will be managed on the site and at a minimum show how it will be collected, conveyed and disposed from the site. The Plan must be to an adequate level of detail to demonstrate that those measures can be achieved and how they will be integrated into the development.

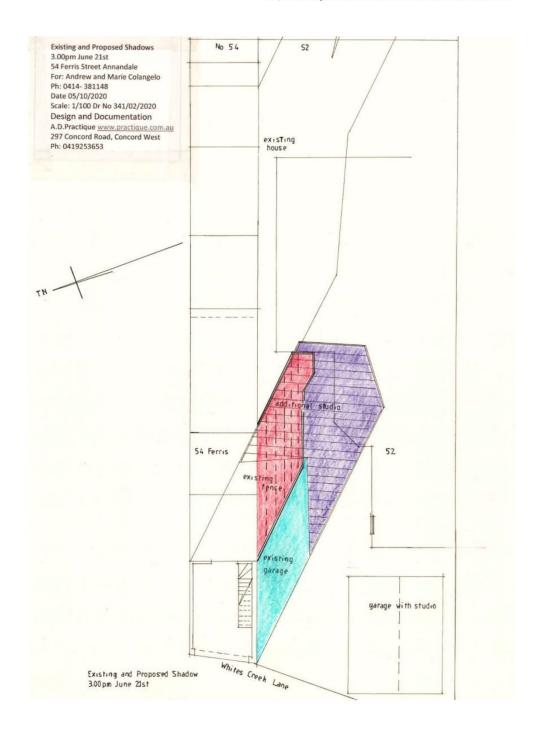
Refer to Appendix E: Stormwater Drainage Concept Plan

Appendix A: Solar Access Diagramme Drawings Separately Submitted

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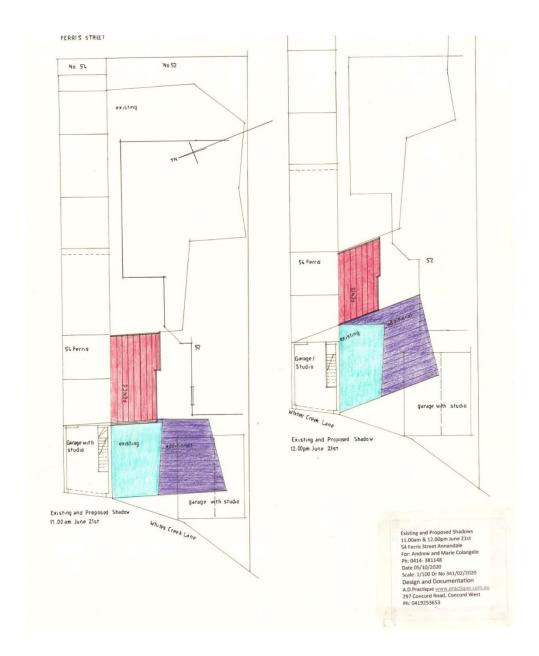


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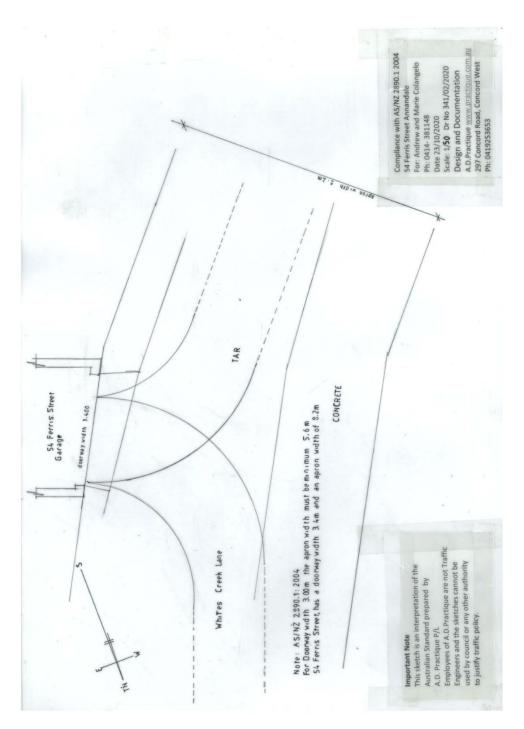
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Appendix B: Vehicle Turning Diagrammes Note: Drawing Separately Submitted

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Appendix C: Flood Risk Management Report

Flood Risk Management Report

54 Ferris Street Lot A; DP: 375883

Annandale

Works : Proposed Garage Development

Council : Inner West

DA No. : N/A



PREPARED BY: HYDRO CIVIL ENGINEERS

57 Austral Avenue Westmead NSW 2145

DATE: 23 October 2020

 $\operatorname{FN}\colon 1$

Executive Summary

The property is in R1 – General residential Zone, located at 54 Ferris St, Annandale between Ferris Street and Whites Creek Lane, and in upstream of the Whites Creek catchment. As per Inner West Council records, the Whites Creek is identified as a significant natural low point and major flow path.

Inner West Council requires a flood analyse and risk management plan as part of the proposed garage development. As requested by Council for the purpose of proposed development, the developer is required to fulfil the requirement of this Flood Analysis and Risk Management Report. A flood evacuation plan is also included with this report.

The location of the site is shown in Figure: 1 below.

Site location



Figure: 1 SITE LOCATION

fn:2

Drainage issue at site

The Inner West Council has engaged Cardno for the hydraulic flood study and got Leichhardt Flood Study report. This Flood Study dated on November 2017 identified the areas which are flood control lots.

As per flood certificate received from Inner West Council, reference No: ENCF/2020/0070 and dated on 19/10/20, the Whites Creek Lane is in 1 in 100 flood zone and this is site is a flood prone area.

The copy of this report is attached in figure 2. The rear section of site is adjacent to Whites Creek Lane. This lane is parallel to Ferris St.

Flood Control Lot Maps



Inner West Flood Control Lot Map Figure: 2

Compliance Statement

Site address : 54 Ferris Street, Annandale

Local Government area : Inner West

Scope of Works : Proposed Garage Development

Project Description

Modifying existing carport into garage

- Internal adjustment in proposed garage
- · Building second floor for a studio

This project is planned to maintain existing floor level of the carport for proposed garage also.

Flood Level Information Report prepared by Cardno and dated on November 2017, the subject site is in 1 in 100 flooding zone. On the base of Council requirements, the future development shall satisfy Council DCP requirements on flood controlling.

This Flood Risk Management Report is required by Council and has been prepared in accordance Inner West Council DCP – Appendix E water Guidelines.

The Flood Risk Management Report establishes the following:

- The Flood Storage area
- The Flood Planning Level
- Floodway area
- Flow path
- The Probable Maximum Flood Level;
- The Hazard Category; and
- Risk area and
- An on-site response and evacuation plan.

Any future application must be accompanied by the above report.

Statement Certification

I, Maran Muthiah, practicing Civil Engineer, can advise I am of the opinion that the scope of works described above and depicted in the Referenced Plans below, shall comply with requirements of clause 3A.38-Development standards for flood control lots of Statement Environmental Planning Policy (Except and Complying Development Codes) 2008.

Flood planning level:

As per flood level information record received from Inner West Council and Appendix E of Council DCP, the flood planning level is 1 in 100 flood level plus 500mm of free board for habitable area and 300mm of free board for non habitable area. This is applicable for any new development near or within flood prone area. This site is in flood prone zone as per relevant documents available in Inner West Council.

As per Inner West Council's DCP Part E2.1, flood planning map is near in a flooding zone. There is a major flow path in Whites Creek Lane at the rear of the site.

Since the site is within or near 1 in 100 flow path, planning level is determined by raising floor level 500mm above 1 in 100 flood level given by flood certificate if there is a new building work proposed. But this development is a modification of existing carport into garage and addition of second floor. This works is within the footprint of the existing carport and maintaining existing floor level of the carport. There are habitable or non-habitable areas included.

The floor level for non-habitable area is 1 in 100 flood level plus 300mm free board.

As long as the developer (resident) shall implement following flood risk management plan, this planning level is appropriate.



Maran Muthiah B Eng, MIEAust, CPEng, APEC IntPE(Aus) Chartered Professional Engineer (NER 696466) Director Hydro Civil Engineers 57 Austral Avenue Westmead NSW 2145 Phone: 0422 342 347

The Flood Levels

As per flood level report received from Council, 1 in 100 flood level in three locations are analysed as shown below in figure 3.

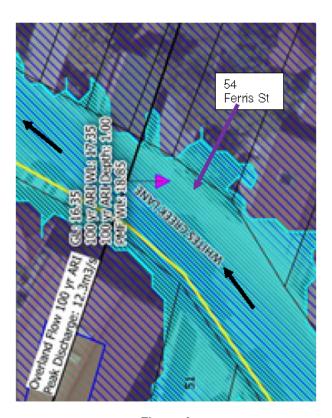


Figure: 3 Flooding location at rear of site

Flood Levels of 1 in 100 yr ARI storm event for the locations of the site at 54 Ferris Street, Annandale are as follows.

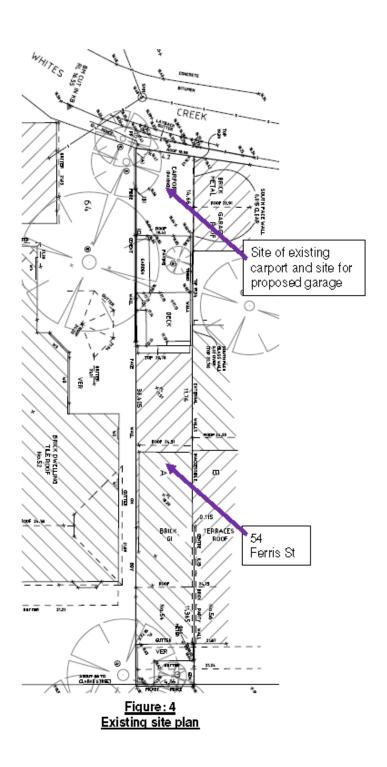
Whites Creek Lane:

1 in 100 flood level : 17.35 m; PMF flood level : 18.85 m

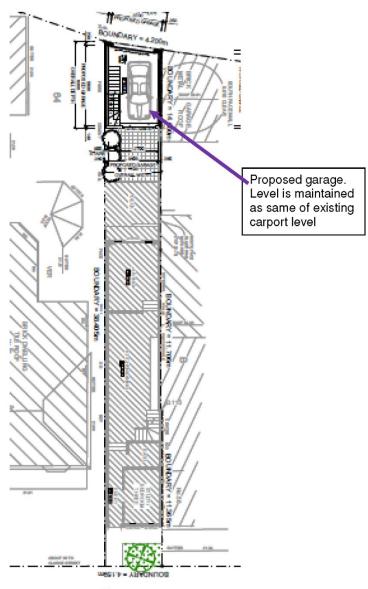
Planning level : 17.85 m (for habitable area)

: 17.65 m (for non-habitable area)

For the safety of any new development, the above planning levels equivalent to 1 in 100 flood level plus free board are considered. But this development is includes reuse of existing carport into a garage. The habitable area is first floor of this garage.



fn: 7



<u>Figure: 5</u> <u>Proposed garage level</u>

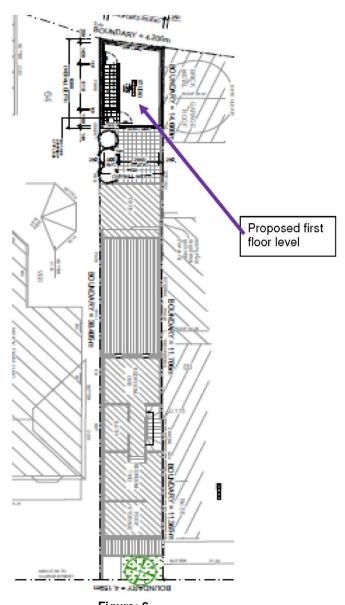


Figure: 6
Proposed garage level

The Flood Storage area

As per site inspection, the proposed building is in existing carport and the site is sloping towards Whites Creek Lane. There is no flood storage area within this site. By considering the proposed work, this does not involve any filling at site.

The resident is maintaining the site as it is sloped towards Whites Creek Lane. This directs any runoff from site to reach this lane without any interruptions. The developer ensures that there is no future flood storage area will be within site.

The Flood Planning Level

The approximate locations of development are shown in figure 5 and 6. The flood planning levels required for this development area as follows. As per Council flooding information, the rear section is in 1 in 100 flood level of 17.35m

Planning level : 17.85m (for habitable area)

: 17.65m (for non-habitable area)

The proposed level in architectural plan is 16.45m at front gate and 16.85m at end entrance of the garage. 18.50m. These levels are matching existing carport levels. The developer has not raised floor levels. This is satisfying Council and Australian standards.

Floodway area

The site for the proposed garage development is close to Whites Creek Lane. This lane is appearing as a flow path towards Whites Creek.

This lane is lower than site. This indicates that any runoff from site easily reach this lane way.

The proposed development is within this site. The resident has determined to keep the rear yard between garage and existing house clean and never be used for the purpose of any storage.

Flow path

As per Council record, the flow path is along the Whites Creek Lane. The proposed development is almost on footprint of existing carport and this proposal will not give adverse impact to existing flow pattern within Whites Creek Lane.

As per site inspection, there are similar garage developments are along the line of Whites Creek Lane. While comparing this proposed development with others, this development is better and without any interruption to flow path.

The Probable Maximum Flood Level

As per flood mapping, the probable maximum flood levels is 18.85m. The proposed first floor level is 19.39m and existing house level are above the PMF flood level.

The Hazard Category

The hazard category is not given by Council. However the Council report says that the area within 1 in 100 flood level is medium hazard category.

The existing house and the second floor of the proposed garage are above the 1 in 100 flood zone. Whatever flood hazard category around proposed development, it will not create any dangerous situation for residents in existing house and second floor level which are higher than 1 in 100 flood level plus free board, and PMF flood level. So the hazards expected in these levels are minimised by providing these floor levels.

Risk area

The habitable areas in the new dwelling are in second floor level and non habitable area is garage area in ground level. The habitable area is higher than 1 in 100 flood and free board zone. Because of this proposed level of the second floor level, the hazards and risks expected in this level are at minimum level. However, the resident should take extreme caution while they are using ground level during heavy rainfall events.

An on-site response and evacuation plan.

The existing house and second floor of proposed garage are above 1 in 100 flood level plus free board, and PMF flood level. All members of resident and visitors can be evacuated to these places in case of emergency. Details are shown in figure 7.

Flood evacuation strategy

Since the existing house and the proposed first floor level of the garage are above 1 in 100 flood level plus free board, these levels could be used as evacuation place in order to maintain safety. The developer should be able to provide free walkway to these places where it is higher than 1 in 100 flood level. The proposed first floor of this garage can be used as evacuation place as a quick option.

The detailed flood evacuation plan is shown in figure: 7 below.

The resident should advise to the people at this site about the flooding from time to time and the emergency process.

Type of building material

Developer must make sure that all materials are checked and certified as it is approved Australian Standards material. These materials must have structural integrity of the structure to immersion and impact of flow velocity and debris. These materials are to be certified accordingly to with stand the flood impact by a structural engineer.

Clean up flow path

The residents must cooperate with the Council to clean up their assets and property area of open space in flow path to restore after every heavy storm. They could also approach Council assistance to clean up debris and flood mess up if blockage is due to adjacent property mess.

Dangerous substances in flooding

The resident should be aware of toxic or chemical substances usually come with flooding. They have to handle these substances by using licensed professionals; otherwise they have to reach Council for appropriate advice. This will help to maintain water quality and protect the environment. They can participate to any relevant community awareness program to get more understanding of dangerous substances in flooding.

Flow by seepage or leakage

If there is stream flow or seepage flow found within the site, the resident should inform it to the Council and get it fixed without delay. Even if the resident may find any leak in the water supply line at his/her property or neighbouring house, he/she should take appropriate action to fix it soon.

Managing domestic pets

The developer should take care of his domestic pets and companion animals during flooding. They have to contact Council or relevant authorities to protect pets and companion animals.

Yours faithfully,



Maran Muthiah B Eng, MIEAust, CPEng, APEC IntPE(Aus) Chartered Professional Engineer (NER 696466) Director Hydro Civil Engineers 57 Austral Avenue Westmead NSW 2145 Phone: 0422 342 347

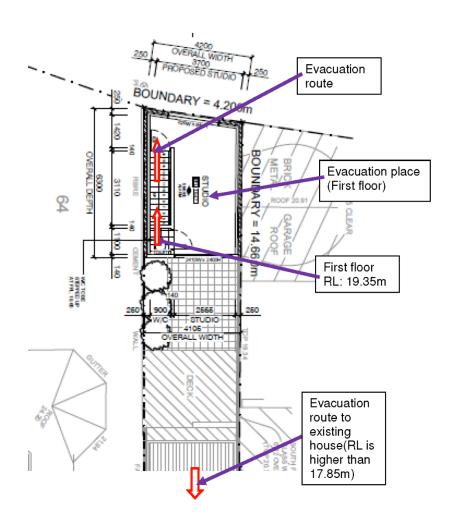
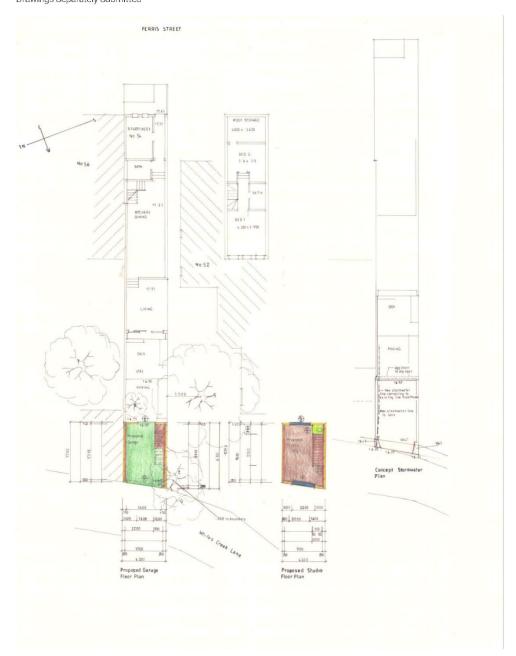


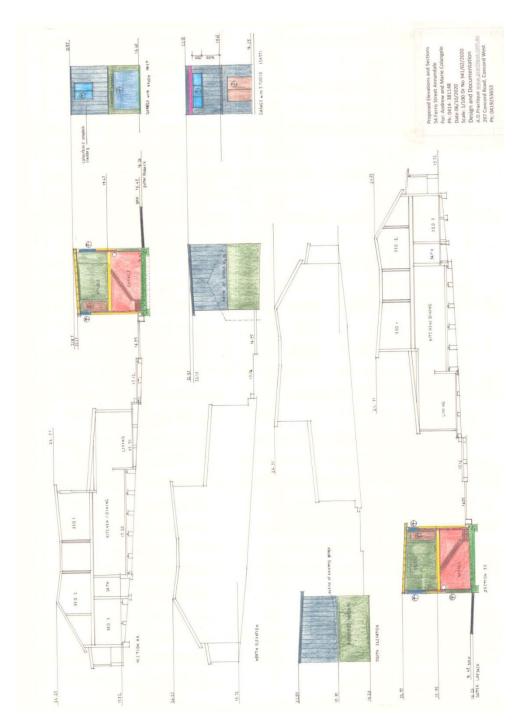
Figure: 7
Flood Evacuation Plan

 $\mathrm{FN:}\,13$

Appendix D: Revised Architectural Drawings Drawings Separately Submitted



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Proposed Garage with Studio at 54 Ferris Street, Annandale NSW 2038



Appendix E: Stormwater Drainage Concept Plan Note: Drawing Separately Submitted

