

# Wollongong Local Planning Panel Assessment Report | 5 September 2018

<b>WLPP No.</b>	Item 2
<b>DA No.</b>	DA-2018/533
<b>Proposal</b>	Residential - dual occupancy and Subdivision - Strata title - two (2) lots
<b>Property</b>	7A Cochrane Road, THIRROUL NSW 2515 Lot 12 DP 1188169
<b>Applicant</b>	Plannex Environmental Planning
<b>Responsible Team</b>	Development Assessment and Certification – City Wide Team (JW & VL)

## ASSESSMENT REPORT AND RECOMMENDATION

### Executive Summary

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#### Reason for consideration by Wollongong Local Planning Panel - Advice

The proposal has been referred to the Wollongong Local Planning Panel (WLPP) for advice pursuant to Council's resolution of 25 June 2018 and Part 4 of the draft Wollongong City Council Submissions Policy as the Development Application is deemed to be of significant community interest or identified as a significant planning policy matter by the General Manager and the Director Planning and Environment.

#### Proposal

The proposal seeks consent for the construction of an attached dual occupancy with associated on site car parking, landscaping and subsequent strata subdivision.

#### Permissibility

The proposed dual occupancy is permissible in the R2 Low Density Residential zone of the Wollongong Local Environmental Plan (WLEP) 2009.

#### Consultation

The proposal was notified in accordance with Council's Notification Policy and received 1 submission. The concerns raised in the submission are discussed at section 1.5 of this report.

The proposal has been referred to Council's Stormwater, Traffic, and Subdivision Officers with conditionally satisfactory referral advice provided in each instance.

#### Main Issues

The main issues arising from the assessment process are related to WDCP non-compliances and consequent impacts:

- Two storey dwellings within a battle-axe allotment
- Overshadowing
- Side setbacks
- Landscaping /Deep soil planting
- Privacy and amenity impacts

#### Advice Sought

It is recommended development Application DA-2018/533 to be determined by way of refusal for the reasons as identified at Attachment 6.

## 1 APPLICATION OVERVIEW

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### 1.1 PLANNING CONTROLS

The following planning controls apply to the proposal:

State Environmental Planning Policies:

- SEPP No. 55 – Remediation of Land
- SEPP (Vegetation in Non-Rural Areas) 2017
- SEPP (Coastal Management) 2018
- SEPP (Building Sustainability Index: BASIX) 2004

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan (WDCP) 2009

Other policies

- Wollongong City Wide Development Contributions Plan 2018

### 1.2 DETAILED DESCRIPTION OF PROPOSAL

The proposal comprises the construction of a two (2) storey attached dual occupancy and subsequent two (2) lot strata subdivision.

The dwellings have been designed to be positioned in the centre of the property, with the driveway and garage areas on the south western elevation. On Site Detention (OSD) is proposed within the driveway, and a deep soil zone is proposed on the north eastern portion of the site.

The proposal involves the removal of one (1) tree on the south eastern corner of the property.



**Figure 1:** Driveway Perspective (entering from Cochrane Road)

### 1.3 BACKGROUND

The subject site was created by the current owner via DA-2011/1294 for a two lot subdivision approved in 2013 with subsequent modifications.

A pre-lodgement meeting was held in May 2017 for a two storey attached dual occupancy and subdivision in PL-2017/54.

Subsequently, DA-2017/980 was lodged in August 2017 for the same development however, matters were raised relating to the number of storeys, side setbacks, landscaped area, deep soil zones, private open space, privacy impacts, solar access, view sharing, fencing and access/manoeuvring. The applicant chose to withdraw the application.

Following this, the current application DA-2018/533 was lodged in May 2018, with the design and bulk/form of the dwelling remaining similar to the previous application, DA-2017/980. The following minor changes noted made to the previous design in DA-2017/980 in the current application are:

- Unit 1 ground floor living/dining area finished floor level has been lowered 688mm and connecting private open space 860mm
- Unit 2 ground floor living/dining area finished floor level and the connecting private open space has been lowered also 688mm

This results in both private open space areas to be set closer to the existing natural ground level of the land.

- Unit 1 living dining room setback increased by 355mm to the SE boundary
- Unit 2 first floor setback to the SE boundary increased by 280mm
- A slight reduction in the gross floor area for the dual occupancy by 6sqm

As outlined below the matters raised in the assessment of the current application are similar to those in the previous application and remain unresolved.

#### Current DA history:

The subject development application was lodged on 3 May 2018 and notified from 7 May – 21 May 2018. The applicant was provided with a request to withdraw the application in a letter dated 28 June 2018, with concerns in relation to number of storeys, setbacks, landscaping, deep soil planting, site coverage, solar access, BASIX interpretations.

The applicant provided a response the matters raised in Council's letter, where BASIX interpretations were rectified, however the remaining matters were not considered to be satisfactorily addressed as the response provided only made reference to the existing submitted statement of environmental effects and variation statements. No amended plans were provided.

Following the review of the additional information/response received, a further request to withdraw the application was provided to the applicant on 19 July, which stated that the matters raised in the Status of Application letter dated 28 June 2018 remain outstanding. No further information has been submitted by the applicant to date.

The development history of the site is as follows:

Application No	Description	Date	Decision
<u>7 Cochrane Road</u>			
DA-2011/1294	Subdivision - torrens title - two (2) residential lots and demolition of existing garage	15/02/2012	Deferred Commencement
		3/07/2013	Approved

DA-2011/1294/A	Subdivision - torrens title - two (2) residential lots and demolition of existing garage - modification to extend lapsing period for one (1) year	4/02/2013	Rejected
DA-2011/1294/B	Subdivision - torrens title - two (2) residential lots and demolition of existing garage - modification to extend lapsing period for one (1) year	4/02/2013	Rejected
DA-2011/1294/C	Subdivision - torrens title - two (2) residential lots and demolition of existing garage Modification C - to extend lapsing period for one (1) year - activation of consent	14/02/2013 3/07/2013	Deferred Commencement Approved
CS-2013/17	Subdivision - torrens title - two (2) residential lots and demolition of existing garage	7/01/2014	Approved
DC-2014/23	Driveway crossing	20/01/2014	Approved
CS-2013/17/A	Subdivision - torrens title - two (2) residential lots and demolition of existing garage	30/05/2014	Approved
SC-2014/73	Subdivision – torrens title – two (2) residential lots	16/10/2014	Approved
<u>7A Cochrane Road</u>			
PL-2017/54	Proposed dual occupancy	1/06/2017	Completed
DA-2017/980	Residential - dual occupancy and Subdivision - strata title - two (2) lots	18/10/2017	Withdrawn
DA-2018/533	Residential - dual occupancy and Subdivision - Strata title - two (2) lots		Current - Under Assessment

#### Customer service actions:

There are no outstanding customer service requests of relevance to the properties.

#### **1.4 SITE DESCRIPTION**

The site is located at 7A Cochrane Road, Thirroul and the title reference Lot 12 DP 1188169. The site is a battle-axe allotment currently vacant with a transportable storage container on site.

The lot has access to Cochrane Road and slopes from the south west to the north west corner with a cross fall of approximately 2m.

In total, the development site has an area of 579m<sup>2</sup>. Vehicle access is obtained from Cochrane Road by the existing constructed 3m wide access handle.

The site is surrounded by a mix of residential properties including single dwelling houses and other multi dwelling housing developments. The immediate adjoining property to the south west No. 7 Cochrane Road, Lot 11 DP 1188619 is a two storey dwelling house. The adjoining development to the south east is a multi-dwelling housing comprising of five (5) villas and to the north- north west a townhouse development. The local character of the area is a mix of residential properties.

#### Property constraints

- Acid Sulfate Soils – Class 5
- Uncategorised Flood Risk Precinct

- SEPP Coastal Use Zone
- Filled affected land

The site is identified as being affected by a stormwater easement, restriction on the use of land and a positive covenant for on-site stormwater detention system.

Easements to drain water are 1 and 3.055 meters wide are located along the NW side boundary for the benefit of Lot 11, the adjoining property south west of the site No. 7 Cochrane Road. The Restriction on the use of land relates to the on-site stormwater detention system and a positive covenant for on-site stormwater detention system relates to the land owner being responsible for the upkeep and regular maintenance of the OSD system. It is noted the subject site also benefits from an existing easement to drain water wide located on adjoining rear property on Lot 67 DP 862606 (SP 52969) known as 11 Cochrane Road.



**Figure 2:** Aerial photograph (2018)

## 1.5 SUBMISSIONS

The application notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising, during 7 -21 May 2018. One (1) submission was received during this period.

The issues identified are discussed below.

**Table 1: Submissions**

Concern	Comment
<p>1. <u>Inconsistency with Clause 4.1 of Chapter B1</u></p> <p>The proposal is inconsistent against the objectives of the clause providing a double storey dual occupancy on a battle-axe allotment which will cause adverse impacts on adjoining</p>	<p>The application included a variation statement to Clause 4.1 of the WDCP 2009. However, this variation statement only relates to the two (2) storeys 8m rear</p>

<p>properties relating to overshadowing and privacy impacts.</p>	<p>setback variation.</p> <p>However, the restriction of one storey development on a battleaxe lot is considered to apply to the proposal. It is considered the proposal does not comply with the requirements of Clause 4.1 in Chapter B1 of WDCP 2009 and results in amenity impacts.</p> <p>Further discussion is provided within this report at section 2.3.1 and Attachment 2.</p>
<p>2. <u>Clause 4.3 Side and Rear Setbacks of Chapter B1 and associated amenity impacts, overshadowing, overlooking on adjoining properties and view loss</u></p> <p>The submission of the expert opinion quotes the incorrect DA number, and the 3D imaging models presented do not give a good indication of the overshadowing. The previous submitted application was accompanied by overshadowing diagrams which clearly showed overshadowing.</p> <p>The proposal will look directly into adjoining residences with the eastern elevations windows, and overshadow their main living rooms and private open space areas.</p> <p>The proposal will also block views of the escarpment from the eastern adjoining property.</p>	<p>Concerns are raised with the potential overshadowing impacts on the adjoining properties at No. 5 Cochrane Road. Where is it considered insufficient information has been provided to demonstrate the proposal will not give rise to adverse solar access impacts on the affected adjoining properties.</p> <p>Further discussion on the proposal relating to overshadowing, overlooking and impact on views is provided within this report in section 2.3.1 and at Attachment 2.</p>
<p>3. <u>Clause 4.4 Site coverage</u></p> <p>The site coverage and area calculations have discrepancies.</p> <p>The site coverage for the proposal exceeds the maximum 50% of the lot area allowed.</p> <p>The calculation of the site area also is inconsistent.</p>	<p>The discrepancies in the site area are noted. This has been acknowledged in discussion in Clause 4.4 of WLEP 2009 in section 2.1.6 of the report. Using the site area of 579sqm the proposed site coverage is less than 50%.</p> <p>See further discussion regarding this matter within Chapter B1 of WDCP.</p>
<p>4. <u>Clause 4.7 Solar Access</u></p> <p>The submitted plans indicate that there will be significant loss of sunlight to the Private Open Space and living areas of the adjoining dwelling.</p> <p>The adjoining lot does not receive sunlight until midday, which is when the proposed dwelling overshadows the private open space and main living areas of the adjoining dwelling. The adjoining dwelling will be shadowed completely</p>	<p>Comments noted. It is considered the proposal has not adequately demonstrated there will not be adverse impacts on the adjoining properties in regards to solar access. Refer to further discussion regarding overshadowing matters within Chapter B1 at Attachment 2.</p>



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by 3pm.

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5. Clause 5.4.2 Setback

The concerns raised relate to setbacks for multi-unit dwellings whereby setbacks should be 2.19m.

This clause in Section 5 of Chapter B1 of WDCP 2009 applies to multi-dwelling housing development. The proposal is for a dual occupancy where this clause does not apply.

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## 1.6 CONSULTATION

### 1.6.1 INTERNAL CONSULTATION

Council's Stormwater, Subdivision and Traffic Officers have reviewed the application submission and provided satisfactory referral comments. Conditions of consent were recommended in each instance.

### 1.6.1 EXTERNAL CONSULTATION

None required

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## 2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 – 4.15 EVALUATION

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### 2.1 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

#### 2.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

#### **7 Contamination and remediation to be considered in determining development application**

- (1) *A consent authority must not consent to the carrying out of any development on land unless:*
- (a) it has considered whether the land is contaminated, and*
  - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
  - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

A desktop audit of previous land uses does not indicate any historic use that would contribute to the contamination of the site, with the properties being used for residential purposes since prior to 1961. Earthworks are proposed as part of the development and the proposal does not comprise a change of use. The lot was created in the subdivision application in DA-2011/1294 for a residential use it is considered that the site is suitable for the proposed use.

It is noted that the application submission did not address SEPP 55.

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

Under Clause 7 of State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 a person must not clear any vegetation in any non-rural area of the State to which Part 3 applies without the authority conferred by a permit granted by the council under that Part.

Clause 9 of Part 3 indicates that this Part applies to vegetation in any non-rural area of the State that is declared by a development control plan to be vegetation to which this Part applies.

The subject site is zoned R2 Low Density Residential, a non-rural area. It is considered that the vegetation proposed to be removed is vegetation declared by a development control plan, WDCP 2009 Chapter E17 Preservation and Management of Trees and Vegetation, to which Part 9 would apply.

The proposal involves the removal of a frangipani tree of approximately 3m in height. The frangipani tree is not an exempt species as part of this chapter. Whilst no arborists report was submitted with the application it is considered that the removal of tree will not result in adverse impacts on the adjoining properties or biodiversity of the site. Conditions could be recommended in regard to appropriate compensatory planting.

#### 2.1.4 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The proposal is BASIX affected development to which this policy applies. In accordance with Schedule 1, Part 1, 2A of the Environmental Planning and Assessment Regulation 2000, a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

The BASIX certificate was issued no earlier than 3 months before the date on which the development application was lodged.

#### 2.1.5 STATE ENVIRONMENTAL PLANNING POLICY (COASTAL MANAGEMENT) 2018

The site is within the Coastal Environment Area and the Coastal Use Area. The proposal addressed the aims and objects of Clause 13 and 14 of the SEPP Coastal Management 2018.

An assessment of the development against the aims and matters for consideration of the policy are provided below.

##### Clause 13 – Coastal Environment Area

Development on land within the coastal environment area

Matter	Comment
(1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:	The development would not be expected to result in adverse impacts on the attributes of the NSW coast.
(a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,	It is considered that the development will not have an adverse impact in this regard. The proposal involves stormwater disposal to connect into an existing system, and does not allow for dispersion into the hydrological cycles of the local environment.
(b) coastal environmental values and natural coastal processes,	It is considered that the development will not have an adverse impact in this regard.
(c) the water quality of the marine estate (within the meaning of the <i>Marine Estate Management Act 2014</i> ), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,	The development would not be expected to result in any impacts on water quality, with stormwater and runoff being directed into existing stormwater systems.
(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,	The development is not within close proximity to the coast, and as such does not come into contact with marine vegetation, or undeveloped headlands and rock platforms. The proposal is not expected to have adverse impacts on native vegetation and fauna or their habitats.



(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	The development would not result in adverse impacts on public or beach areas.
(f) Aboriginal cultural heritage, practices and places,	The development would not be expected to result in adverse impacts on aboriginal cultural heritage, practices or places.
(g) the use of the surf zone.	The development would not be expected to result in adverse impacts on the surf zone due to its distance from the marine environment.
(2) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:	
(a) the development is designed, sited and will be managed to avoid an adverse impact referred to in subclause (1), or	The development is considered to be designed and sited so as to avoid adverse impacts referred to in subclause (1)
(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or	No adverse impacts are expected from the development.
(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.	No adverse impacts are expected from the development.

Conclusion:

The proposal is considered to be generally consistent with the matters for consideration in Clause 13 of the Coastal Management SEPP 2018.

Clause 14 – Coastal Use Area

Development on land within the coastal use area:

<i>Matter</i>	<i>Comment</i>
(1) Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:	
(a) has considered whether the proposed development is likely to cause an adverse impact on the following:	
(i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	The proposal is not within proximity to beach access; as such no impact is expected.
(ii) overshadowing, wind funnelling and the loss of views from public places to foreshores,	The proposal will not cause overshadowing, wind funnelling or the loss of views from public places to foreshores.
(iii) the visual amenity and scenic qualities of the	The proposal is not expected to detrimentally

coast, including coastal headlands,	affect coastal views.
(iv) Aboriginal cultural heritage, practices and places,	The proposal is not expected to impact on Aboriginal cultural heritage values, practices or places.
(v) cultural and built environment heritage, and	It is considered that the proposal will not impact upon the cultural and built environmental heritage of the area.
(b) is satisfied that:	
(i) the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or	It is considered that the proposal has been designed and sited to avoid adverse impacts referred to in paragraph (a)
(ii) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or	The proposal is not expected to impact on or be affected by any coastal processes or hazards.
(iii) if that impact cannot be minimised—the development will be managed to mitigate that impact, and	No adverse impacts are expected from the development.
(c) has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.	No adverse impacts are expected from the development.

### Conclusion

The application is considered to be generally consistent with the clause 14 matters for consideration.

### 15 Development in coastal zone generally—development not to increase risk of coastal hazards

Development consent must not be granted to development on land within the coastal zone unless the consent authority is satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land.

The proposal is not expected to cause an increased risk of coastal hazards on the land or other land.

### 16 Development in coastal zone generally—coastal management programs to be considered

Development consent must not be granted to development on land within the coastal zone unless the consent authority has taken into consideration the relevant provisions of any certified coastal management program that applies to the land.

The proposal has been considered against the coastal management plan applicable to the land (Wollongong Coastal Zone Management Plan). The proposal is not affected by any coastal impacts or risks.

### **NSW Coastal Management Act 2016 and Wollongong Coastal Zone Management Plan**

On 30 October 2017, Council endorsed the final draft of the Wollongong Coastal Zone Management Plan for resubmission to the NSW Minister for Environment for certification. The draft Plan was certified on 20 December 2017.

At the Council meeting of 19 February 2018, Council resolved that the certified final draft be adopted. Council's Notice was published in the NSW Gazette No 25 of 9 March 2018 and a

community briefing on the implications arising from Council adopting and gazetting the plan have been undertaken.

The NSW Coastal Management Act 2016 came into force on 3 April 2018. Under the Act any existing certified CZMP's continue in force until 2020.

A review of Council's associated CZMP coastal hazard mapping extents identifies that the subject site and specifically the building envelope is not impacted by coastal inundation/ coastal geotechnical risk/ reduced foundation capacity at the 2010/ 2015/2100 timeline.

Minimal adverse impact on the coastal environment is anticipated as a result of the proposed development.

Minimal adverse impacts on the development are expected as a result of coastal processes.

The proposal is therefore considered satisfactory with regard to the aims outlined in clause 3 of this policy and the matters outlined for consideration.

#### 2.1.6 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

##### **Part 2 Permitted or prohibited development**

##### Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned R2 Low Density Residential, as demonstrated by Figure 3 below.

##### Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

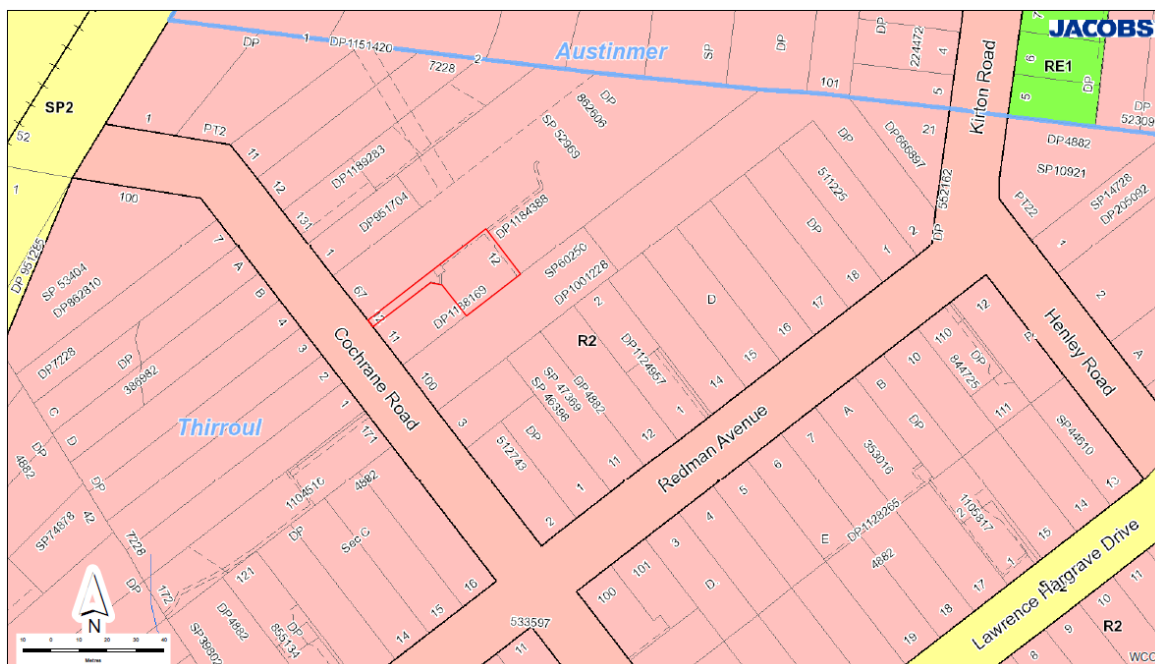
- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposal would be considered satisfactory with regard to the above objectives as it would provide for additional housing opportunities.

The land use table permits the following uses in the zone.

*Attached dwellings; Bed and breakfast accommodation; Boarding houses; Boat launching ramps; Centre-based child care facilities; Community facilities; **Dual occupancies**; Dwelling houses; Environmental facilities; Exhibition homes; Exhibition villages; Group homes; Health consulting rooms; Home-based child care; Hospitals; Hostels; Information and education facilities; Jetties; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Shop top housing; Signage; Veterinary hospitals*

The proposal is categorised as **Dual occupancy** as defined below and is permissible in the zone with development consent.



**Figure 3:** WLEP 2009 zoning map

#### Clause 1.4 Definitions

**dual occupancy** means a dual occupancy (attached) or a **dual occupancy (detached)**.

**dual occupancy (attached)** means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.

**Subdivision** is not specifically defined within the Plan. Clause 4B of the Act however defines the ‘subdivision of land’ as the division of land into two or more parts that, after the division, would be obviously adapted for separate occupation, use or disposition. The division may (but need not) be effected:

- by conveyance, transfer or partition, or
- by any agreement, dealing, plan or instrument rendering different parts of the land available for separate occupation, use or disposition.

The proposal includes Torrens Title subdivision which falls within this definition.

#### Clause 2.6 Subdivision—consent requirements

Land may be subdivided, but only with development consent. Consent is sought as part of the subject application.

### **Part 4 Principal development standards**

#### Clause 4.1 Minimum subdivision lot size

The proposal seeks the strata subdivision after the construction of the dual occupancy development and this clause does not apply under subclause (4)(a).

#### Clause 4.3 Height of buildings

The proposed building height of 8.07m does not exceed the maximum of 9m permitted for the site.

#### Clause 4.4 Floor space ratio

Maximum FSR permitted for the zone:	<b>0.5:1</b>
Site area:	<b>579m<sup>2</sup></b>

GFA:	<b>Unit 1</b>	
	GFA	127m <sup>2</sup> (163-36 garage exclusion)
	<b>Unit 2</b>	
	GFA	149m <sup>2</sup> (185-36 garage exclusion)
	<b>Total GFA</b>	276 m <sup>2</sup>
FSR:	0.48:1 (276/579 = 0.4766)	

The proposal does not exceed the floor space ratio for the land.

\*Note: The Deposited Plan and Survey Plan submitted by the applicant shows the site to have an area of 584m<sup>2</sup> however, the architectural plans and SEE refers to the site area of 579m<sup>2</sup>. This matter has not been raised with the applicant however, for the purposes of calculating the floor space ratio for the proposal if either site areas were used the development would not exceed the floor space ratio for the land.

## **Part 7 Local provisions – general**

### Clause 7.1 Public utility infrastructure

The site is already serviced by electricity, water and sewage services.

### Clause 7.3 Flood planning area

The site is identified to be flood affected in an uncategorised flood risk precinct. The application was accompanied by a flood study and the application was reviewed by Council's Stormwater Officer that provided conditionally satisfactory referral advice.

The proposed levels are above the 1 in 100 and PMF flood extents. The proposal is therefore not expected to unreasonably impact on flood behaviour, or result in an increased flood risk to adjoining properties.

### Clause 7.5 Acid Sulfate Soils

The proposal is identified as being affected by class 5 acid sulphate soils. An acid sulfate soils management plan is not required in accordance with the requirements of this clause.

### Clause 7.6 Earthworks

The proposal would require minor excavation into the site in relation to general construction of the dwellings. It is not anticipated for the earthworks to have an adverse impact on the environmental functions and processes, neighbouring properties or features on surrounding land.

## **2.2 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT**

Nil

## **2.3 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN**

### **2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009**

#### **CHAPTER A1 – INTRODUCTION**

The development has been assessed against the relevant chapters of WDCP2009 and found to be unsatisfactory. A full compliance table is provided at Attachment 2 to this report and variation requests are discussed below:

### **8 Variations to development controls in the DCP**

The application has sought variations to WDCP 2009 as relates to two storey development within the 8m rear setback, side setback and deep soil zone size. Variation request statements have been submitted to address these non-compliances and are provided at Attachment 3 to this report.

It is noted that, it is considered the proposal also presents non-compliances with the one storey restriction on a battleaxe lot, landscaping, private open space and solar access requirements. However, these non-compliances have not been identified by the applicant and therefore variation requests have not been sought, however these matters are discussed in detail in Attachment 2.

The following outlines Council's consideration of the requested variations against the requirements of the DCP;

## **Chapter B1: Residential Development**

### **Part 4.1 Number of storeys**

Part 4.1.2.4 requires that development of two storeys be provided with a setback of 8m from the rear boundary. The subject development seeks two storeys for a portion of the first floor of Unit 1 containing proposed bedroom 3 and part of the living room and bedroom 2 in Unit 2.

Unit 1 has a 5.2m rear setback for the two storey element and Unit 2, 7.16m for Unit 2 that presents an encroachment of the required 8m setback, 2.8m and 840mm respectively.

<b>Control</b>	<b>Comment</b>
1. The variation statement must address the following points:	
a) The control being varied; and	The variation request statement identifies the control being varied as 4.1.2.4.
b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and	<p>The variation is requested on the basis that the adjoining site is two storeys. The request states that privacy is mitigated due to the windows on the northern elevation being low activity areas. The applicant has stated that the development would not result in unreasonable overshadowing of the adjoining properties.</p> <p>The statement also indicates that the variation relates to only a small portion of Units 1 and 2.</p> <p>The statement indicates that the variation should be permitted as the building is articulated and does not result in adverse overshadowing or privacy impacts, and the design has sympathetically utilised varying elevational forms and varying setbacks to mitigate any negative impacts relating to the bulk and scale.</p> <p>The applicant considers the proposal maintains the existing solar access received by the adjoining properties located at 5 Cochrane Road.</p>
c) Demonstrate how the objectives are met with the proposed variations; and	<p>The objectives of the control are as follows:</p> <p><i>a) To encourage buildings which integrate within the streetscape and the natural setting whilst maintaining the visual amenity of the area.</i></p> <p><i>b) To minimise the potential for overlooking on adjacent dwellings and open space areas.</i></p> <p><i>c) To ensure that development is sympathetic to and addresses site constraints.</i></p> <p><i>d) To encourage split level stepped building solutions on steeply sloping sites.</i></p> <p><i>e) To encourage a built form of dwellings that does not</i></p>

	<p><i>have negative impact on the visual amenity of the adjoining residences.</i></p> <p><i>f) To ensure ancillary structures have appropriate scale and are not visually dominant compared to the dwelling.</i></p> <p><i>g) To ensure appropriate correlation between the height and setbacks of ancillary structures.</i></p> <p><i>h) To encourage positive solar access outcomes for dwellings and the associated private open spaces.</i></p> <p>The applicant has indicated that they consider the development consistent with the above objectives.</p> <p><u>Council comment:</u> The proposal has not been designed to address the site constraints in the context of the adjoining properties. The built form is considered to adversely impact the adjoining properties at 5 Cochrane Road in regards overshadowing. As discussed in further detail at Attachment 2 Clause 4.7 Solar Access of Chapter B1 in WDCP 2009; the proposal has not clearly demonstrated that the adjoining properties will meet the solar access requirements or that the proposal will allow their existing solar access to be unaffected and maintained. It is also considered that the non-compliant side setback may likely contribute to overshadowing impacts and will have a negative impact on the visual amenity of adjoining properties at No. 5 and 7 Cochrane Road.</p>
d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.	<p><u>Council comment:</u> The development is considered likely to result in adverse impacts as a result of the variation if granted.</p>
<p>Comment:</p> <p>The requested variation has been considered and is not supported.</p>	

## **Chapter B1: Residential Development**

### **Part 4.3 Side and Rear Setbacks**

Clause 4.3.2.1 requires that walls must be setback at least 900mm from any side or rear property boundary and eaves/gutters must be setback at least 450mm from the side and rear property boundaries. The subject development seeks consent for a variation to the side setback with the garage wall of proposed Unit 2 to be setback 500mm to the SW boundary of the site, rather than the required 900mm.

<b>Control</b>	<b>Comment</b>
1. The variation statement must address the following points:	
a) The control being varied; and	The variation request statement identifies the control to be varied as control 4.3.2.1



<p>b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and</p>	<p>The statement requests the variation of the south western side setback of 400mm (where a 500mm setback is provided).</p> <p>The proposal is justified by the applicant as being acceptable due to the wall being a garage wall with no windows, and screening by a 1.8m high colorbond metal fence being provided.</p> <p>The 2<sup>nd</sup> storey of the dwelling is setback 3.65m from the boundary.</p> <p>The proposed variation will not create detrimental overshadowing of adjoining property No. 7 Cochrane Road.</p> <p>BCA requirements are met with respect to materials and guttering being satisfactory.</p>
<p>c) Demonstrate how the objectives are met with the proposed variations; and</p>	<p>The objectives of the control are as follows:</p> <ul style="list-style-type: none"> <li><i>(a) To create a consistent pattern of building separation along streets.</i></li> <li><i>(b) To provide adequate setbacks from boundaries to retain privacy levels and minimise overlooking/overshadowing.</i></li> <li><i>(c) To ensure that buildings are appropriately sited having regard to site constraints.</i></li> <li><i>(d) To control overshadowing of adjacent properties and private or shared open space.</i></li> <li><i>(e) To ensure improved visual amenity outcomes for adjoining residences.</i></li> </ul> <p>The applicant has indicated that they consider the development consistent with the above objectives.</p> <p>In addition, Clause 4.3.2.7 allows side setback controls may only be varied where the following is demonstrated to Council's satisfaction:</p> <ul style="list-style-type: none"> <li><i>(a) The objectives of 4.4.1 are met.</i></li> <li><i>(b) The walls and footings are located wholly on the subject land.</i></li> <li><i>(c) There are no windows facing the adjoining property that enable overlooking.</i></li> <li><i>(d) Walls provide articulation so as to not impact the amenity of adjoining dwellings.</i></li> <li><i>(e) Landscaping is appropriately provided to screen development.</i></li> </ul> <p><u>Council comment:</u></p> <p>The proposal has not clearly demonstrated that the adjoining properties at No 5 and 7 Cochrane Road will receive the required solar access to their private open space and living room windows as required under</p>

	<p>Chapter B1 in WDCP 2009 or result in their solar access to be unaffected and maintained as existing as discussed in detail at Attachment 2.</p> <p>It is considered that the non-compliant side setback may likely contribute to overshadowing impacts on these adjoining properties.</p> <p>Whilst the reduced setback of the built form will not be visible from the streetscape, it is considered the design will not be consistent with the desired and existing pattern of building separation for the surrounding development in the locality.</p> <p>The lack of separation also inhibits the ability for suitable landscaping/planting along site boundaries for the provision of a suitable buffer to adjoining properties to improve the amenity outcomes of adjoining properties at No. 5 and 7 Cochrane Road.</p> <p>Overall, it is considered that the building has not been appropriately sited having regard to site constraints and the proposal is inconsistent with objectives of this clause.</p>
d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.	<p><u>Council comment:</u></p> <p>Considering the requested variation in conjunction with the other non-compliances as outlined throughout this report, the development is considered likely to result in adverse impacts should the variation be granted.</p>
<p>Comment:</p> <p>The requested variation has been considered and is not supported.</p>	

## **Chapter B1: Residential Development**

### **Clause 4.23 Additional Controls for Dual Occupancy's - Deep Soil Planting**

Part 4.23.2.1 requires that a minimum of half of the landscaped area (i.e. 10% of the site, as 20% of the site is required to be landscaped area) must be provided as deep soil zone. The deep soil zone may be located in any position of the site, subject to this area having a minimum dimension of 3m. The deep soil zone must be located outside the minimum private open space required.

The subject development seeks a variation to the amount of deep soil zone provided, proposing 40.7sqm that is 17.2sqm deficient of the required 57.9sqm.

<b>Control</b>	<b>Comment</b>
1. The variation statement must address the following points:	
a) The control being varied; and	The variation request statement identifies the control to be varied as control 4.23.2.1
b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and	The variation is requested on the basis that the landscaping for the site is an area greater than that required by 4.5.2.2 with 121sqm exceeding the requirement by 5.2sqm.

	<p>The statement also indicates that the variation relates to the site constraint of a 1.3m wide drainage easement in the form of an open grass swale running along the rear boundary.</p> <p>The statement indicates that the proposed deep soil zone would meet the objectives of the WDCP 2009.</p>
<p>c) Demonstrate how the objectives are met with the proposed variations; and</p>	<p>The objectives of the control are as follows:</p> <p><i>(a) To protect existing mature trees on a site and encourage the planting of additional significant vegetation.</i></p> <p><i>(b) To encourage the linkage of adjacent deep soil zones on development sites, to provide habitat for native indigenous plants and birdlife.</i></p> <p><i>(c) To allow for increased water infiltration.</i></p> <p><i>(d) To contribute to biodiversity.</i></p> <p>The applicant has indicated that they consider the development consistent with the above objectives.</p> <p><u>Council comment:</u></p> <p>The development is not considered to be consistent with the deep soil zone requirements. The control requires 57.9sqm of deep soil zone.</p> <p>The proposal does not exceed the minimum required landscaping, providing only 110sqm that deficient of the minimum 115.8sqm required.</p> <p>The 1.3m wide drainage easement should have been considered as part of the design and is not considered to be adequate justification for a variation of the deep soil zone, as it demonstrates that the proposal has failed to fully consider site constraints.</p> <p>Whilst the subject site and surrounding area are not considered or mapped to have any special biodiversity value, locating the deep soil zone towards the rear of the site (separate the drainage easement) rather along the SW boundary could encourage linkage of adjacent deep soil zone on the adjoining rear property No. 11 Cochrane Road.</p> <p>Overall, the deep soil zone is not considered to meet the objectives as it does not encourage a linkage of adjacent deep soil zones, and does not contribute to the biodiversity of the area, with introduced species and out of character specimens proposed.</p>
<p>d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.</p>	<p><u>Council comment:</u></p> <p>Considering the requested variation in conjunction with the other non-compliances as outlined throughout this report, the development is considered likely to result in adverse impacts should the variation</p>

	be granted.
<p>Comment:</p> <p>The requested variation has been considered and is not supported.</p>	

### 2.3.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN (2018)

The estimated cost of works is >\$100,000 (\$600,000.00) and a levy of 1% would therefore be applicable under this plan as the threshold value is \$100,000.

However this is not applicable in this case as the proposed development is recommended for refusal.

### 2.4 SECTION 4.15(1)(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development

### 2.5 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

The proposal does not involve demolition.

93 Fire safety and other considerations

Not applicable.

94 Consent authority may require buildings to be upgraded

Not applicable.

### 2.6 SECTION 4.15(A)(V) ANY COASTAL ZONE MANAGEMENT PLAN (WITHIN THE MEANING OF THE COASTAL PROTECTION ACT

REPEALED

### 2.7 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

#### Context and Setting:

In regard to the matter of context, the planning principle in Project Venture Developments v Pittwater Council [2005] NSWLEC 191 is relevant in that it provides guidance in the assessment of compatibility. The two major aspects of compatibility are physical impact and visual impact. In assessing each of these the following questions should be asked:

- Are the proposals physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.
- Is the proposals appearance in harmony with the buildings around it and the character of the street?

The locality immediately surrounding the site is comprised of a mix of residential developments, ranging from single residential dwellings to multi dwelling developments.

In response to the first question, matters such as overshadowing, bulk scale and setbacks are relevant. The development will result in overshadowing of the development to the south east and it is considered that this impact is exacerbated by the requested variation to the number of storeys

and setbacks.

Whilst the development will be barely visible from the street, it is considered that the reduced setback will be inconsistent with the desired and existing pattern building separation for the surrounding development in the locality. The proposal has not been appropriately design and sited having regard to site constraints and will affect the visual amenity of the adjoining properties that will not be in harmony with the development within the locality.

In summary, the proposal has been assessed with regard to the amenity impacts from the development, the zoning, permissible height and FSR for the land, and existing and future character of the area, and is not considered to be compatible with the local area.

Access, Transport and Traffic:

The development provides for the required number of car parking spaces and adequate manoeuvring within the site. The proposal and its associated additional travel movements is considered not to result in traffic generation that will adversely impact the local road network Council's Traffic Officer has considered the development and satisfactory referral advice was provided.

Public Domain:

The proposal is not envisaged to adversely impact the public domain.

Utilities:

The proposal would not be envisaged to place an unreasonable demand on utilities supply.

Heritage:

No heritage items will be impacted by the proposal.

Other land resources:

The proposal would not be envisaged to impact upon any valuable land resources.

Water:

The site is presently serviced by Sydney Water, which could be readily extended to meet the requirements of the proposed development.

The proposal would not be envisaged to have unreasonable water consumption.

Soils:

The proposal is not envisaged to adversely affect the soil quality of the land. The site is affected by acid sulfate soils Class 5 however, due to the nature of the proposal would not trigger works that require an acid sulfate management plan.

Air and Microclimate:

The proposal would not be expected to result in negative impact on air or microclimate.

Flora and Fauna:

The proposal will involve tree removal. A landscape plan has been submitted with the application. No significant flora and fauna are affected by the proposal.

Waste:

A condition could be attached to any consent granted that an appropriate receptacle be in place for any waste generated during the construction.

<p><u>Energy:</u></p> <p>The proposal would not be expected to have unreasonable energy consumption.</p>
<p><u>Noise and vibration:</u></p> <p>A condition could be attached to any consent granted that nuisance be minimised during any construction, demolition, or works.</p>
<p><u>Natural hazards:</u></p> <p>There are no natural hazards affecting the site that would prevent the proposal.</p> <p>Council records list the site as uncategorised flood affected. The application was accompanied by a flood study, and the application was reviewed by Council's Stormwater Officer and provided conditionally satisfactory referral advice.</p> <p>The proposal is considered to not create an adverse impact on the catchment, and the proposal will be constructed above the 1 to 100 year flood planning levels.</p>
<p><u>Technological hazards:</u></p> <p>Council records list the site as acid sulfate soil affected. The site is affected by acid sulfate soils Class 5 however, due to the nature of the proposal would not trigger works that require an acid sulfate management plan.</p>
<p><u>Safety, Security and Crime Prevention:</u></p> <p>The proposal does not raise concerns in relation to safety or crime prevention.</p>
<p><u>Social Impact:</u></p> <p>The proposal would not be envisaged to result in negative social impacts.</p>
<p><u>Economic Impact:</u></p> <p>The proposal would not be envisaged to result in negative economic impacts.</p>
<p><u>Site Design and Internal Design:</u></p> <p>The application results in variations to WDCP 2009 with regard to maximum number of storeys, setbacks, landscaping and deep soil zone requirements. Concerns are also raised with solar access received by adjoining properties and compliance with private open space requirements.</p>
<p><u>Construction:</u></p> <p>Conditions of consent could be recommended in relation to construction impacts such as hours of work, erosion and sedimentation controls, works in the road reserve, excavation, demolition and use of any crane, hoist, plant or scaffolding.</p> <p>A condition would be attached to any consent granted that all works are to be in compliance with the Building Code of Australia.</p>
<p><u>Cumulative Impacts:</u></p> <p>Considering the matters outlined throughout this report, the proposal is considered likely to result in adverse cumulative impacts.</p>

## 2.8 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR DEVELOPMENT

### Does the proposal fit in the locality?

Although a dual occupancy is considered an appropriate type of development with regard to the zoning of the site, the proposal is expected to have potential negative impacts on the amenity of the

locality and adjoining developments as described throughout the report and is considered an overdevelopment of the site.

Are the site attributes conducive to development?

There are no site constraints that would prevent a dual occupancy proposal in principle.

## **2.9 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS**

See section 1.5 of this report.

## **2.10 SECTION 4.15(1)(E) THE PUBLIC INTEREST**

The application is considered likely to result in negative impacts on the environment and the amenity of the locality. Despite a dual occupancy being permissible in the zone it is considered the design of the proposal inappropriate with consideration to site constraints, contrary to the relevant planning controls and in the current form, approval would not be considered to be in the public interest.

## **3 CONCLUSION**

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This application has been assessed having regard to the Heads of Consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979.

The proposal presents a number of non-compliances with WDCP 2009 as relates to maximum number of storeys within a battle-axe allotment, setbacks, private open space, landscaping and deep soil zone provision and the cumulative impacts results in the development as presented to have adverse impacts.

Internal referrals from Councils Stormwater, Traffic, and Subdivision Officers have returned satisfactory advice.

Matters raised including those identified within the submission received remain unresolved.

It is not considered that the proposed development has been designed appropriately given the constraints and characteristics of the site, and has the potential to result in significant adverse impacts on the amenity of the surrounding area.

## **4 ADVICE SOUGHT**

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It is recommended development Application DA-2018/533 to be determined by way of refusal for the reasons as identified at Attachment 6.

## **5 ATTACHMENTS**

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- |    |   |
|----|---|
| 1  | Plans   |
| 2  | Compliance table for Wollongong Development Control Plan 2009 |
| 3  | WDCP Variation Request Statements                             |
| 4a | Overshadowing Analysis  |
| 4b | Excerpt from submitted SEE on solar access                    |
| 5  | Shadow diagrams from previous application DA-2017/980         |
| 6  | Reasons for Refusal   |



COCHRANE ROAD

Up 10.27

DATUM A.H.D.  
SCALE 1:100 @A1  
JANUARY 2018  
REF 17-027

HELENSBURGH SURVEYING SERVICES  
PO BOX 2004 TARRAWANNA NSW 2518  
PHONE/FAX (02)42838518  
MOBILE 0418410771  
EMAIL - boo21@bigpond.net.au



NORTH

COCHRANE ROAD

S.

P.

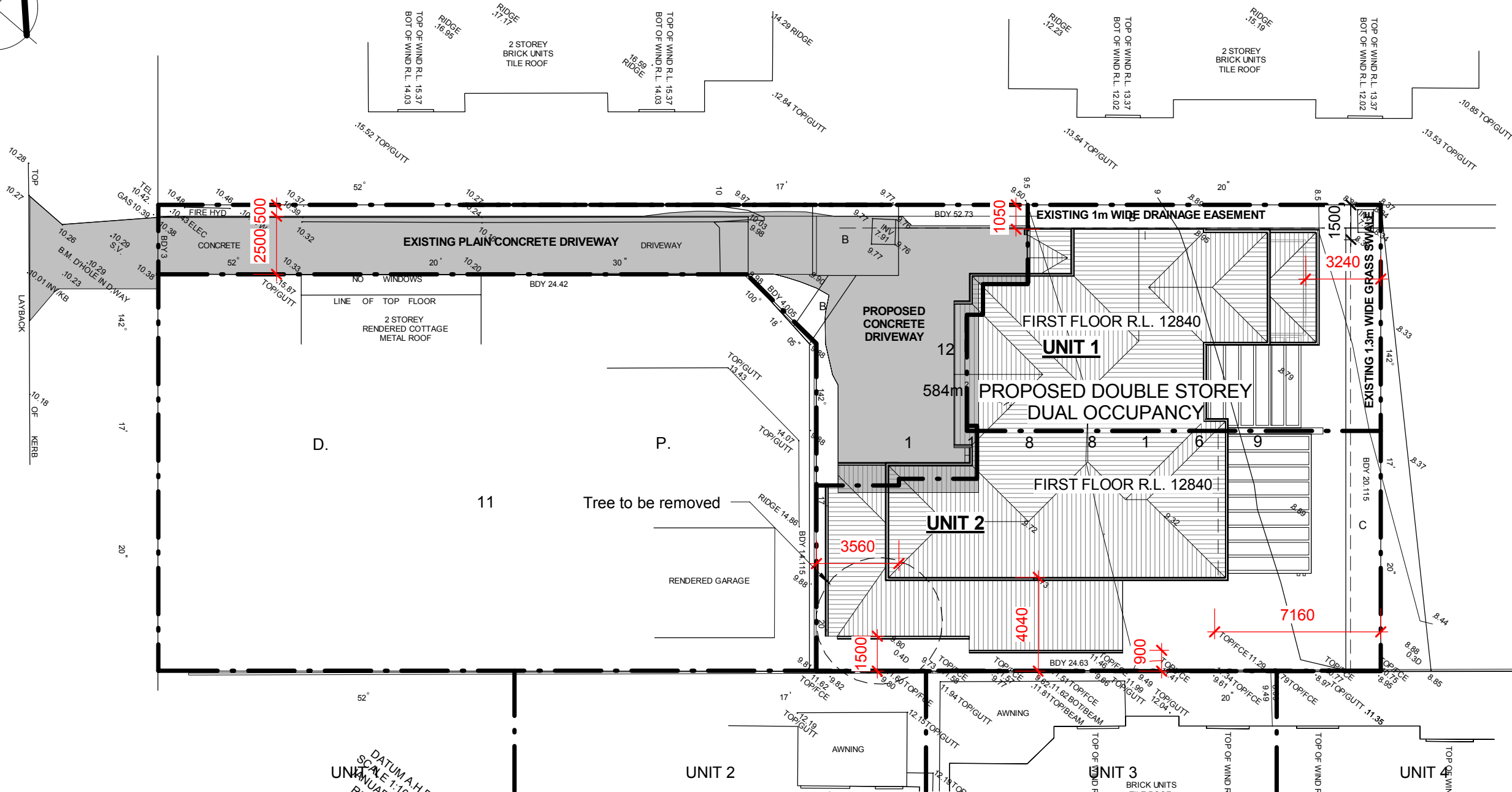
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1

## Site Plan

1 : 200

### FSR Calculations

Site Area(including handle)	579m <sup>2</sup>
Unit 1	127m <sup>2</sup>
Unit 1 Garage	36m <sup>2</sup>
Unit 2	149m <sup>2</sup>
Unit 2 Garage	36m <sup>2</sup>
Total	348m <sup>2</sup>
Deductions (U1 - 36m <sup>2</sup> / U2 - 36m <sup>2</sup> )	276m <sup>2</sup> (47.7%)

### Site Coverage

Site Area(including handle)	579m <sup>2</sup>
Total Site Coverage area	216.1m <sup>2</sup> (37.3%)

### Landscape area

Site Area(including handle)	579m <sup>2</sup>
Landscape area	80.3m <sup>2</sup>
Deep soil zone	40.7m <sup>2</sup>
Total	121m <sup>2</sup> (20.8%)

#### AMENDMENTS:

No:	DATE:	COMMENTS:	DWN:

#### GENERAL NOTES:

- Dimensions in preference to scale
- All ground lines are approximate
- Window & Door sizes as shown - Nominal
- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities
- Wind Rating refer to framing manufacturer's specification

#### DRAWING: Site Plan

PROJECT: **PROPOSED DUAL OCCUPANCY & STRATA SUBDIVISION**

SUBJECT: **DEVELOPMENT APPLICATION**

CLIENT: **L. STIPCEVIC**

SITE: **7A Cochrane Rd Thirroul**

JOB No.: **00172017**

DATE: **29.01.18**

DRAWN: **J.HARB**

SCALE: **1 : 200**

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Suite 14, 2 Memorial Dr, Shellharbour City Center  
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PAGE No.:  
**SH-02**

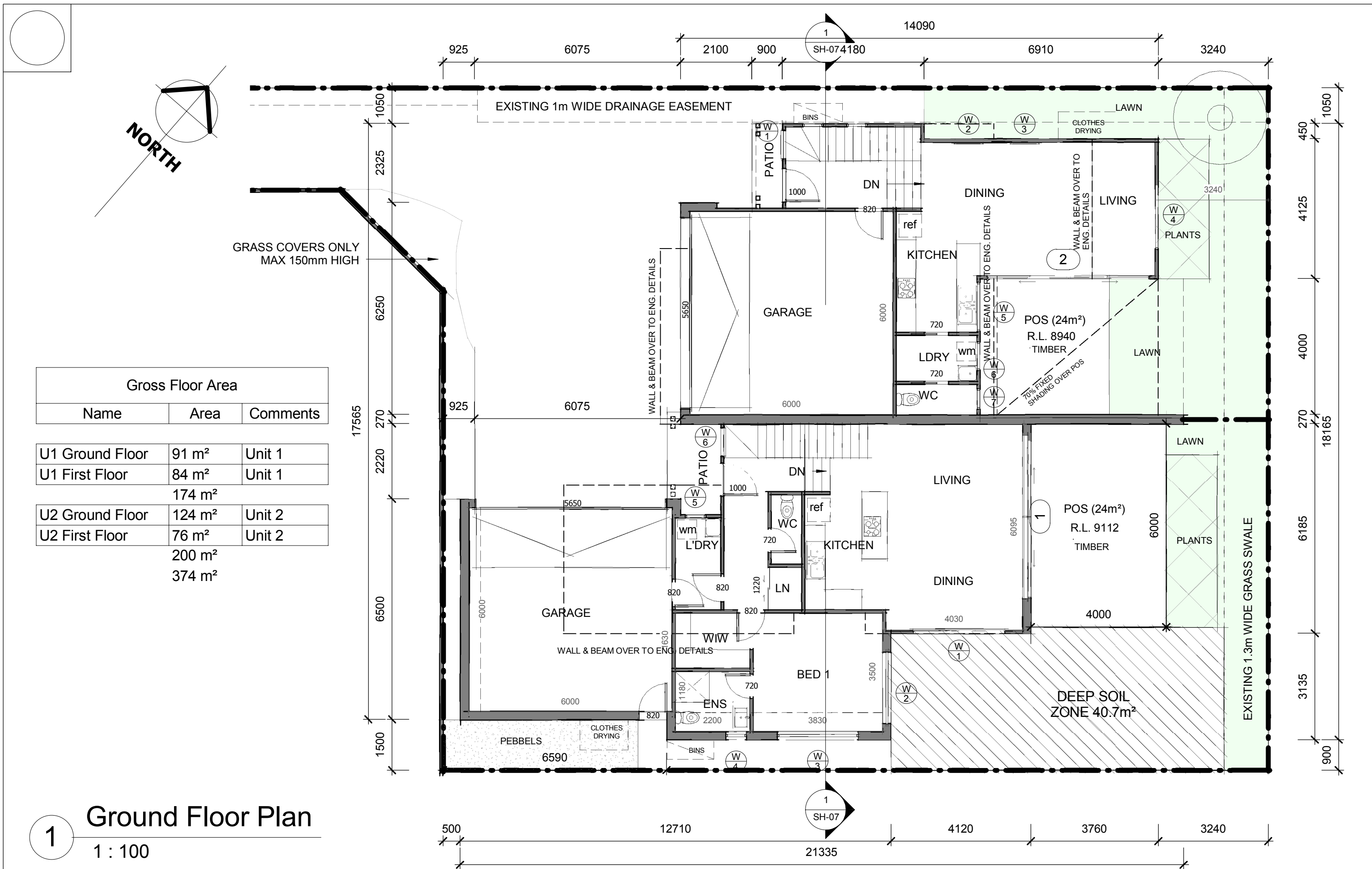


Gross Floor Area		
Name	Area	Comments
U1 Ground Floor	91 m <sup>2</sup>	Unit 1
U1 First Floor	84 m <sup>2</sup>	Unit 1
	174 m <sup>2</sup>	
U2 Ground Floor	124 m <sup>2</sup>	Unit 2
U2 First Floor	76 m <sup>2</sup>	Unit 2
	200 m <sup>2</sup>	
	374 m <sup>2</sup>	

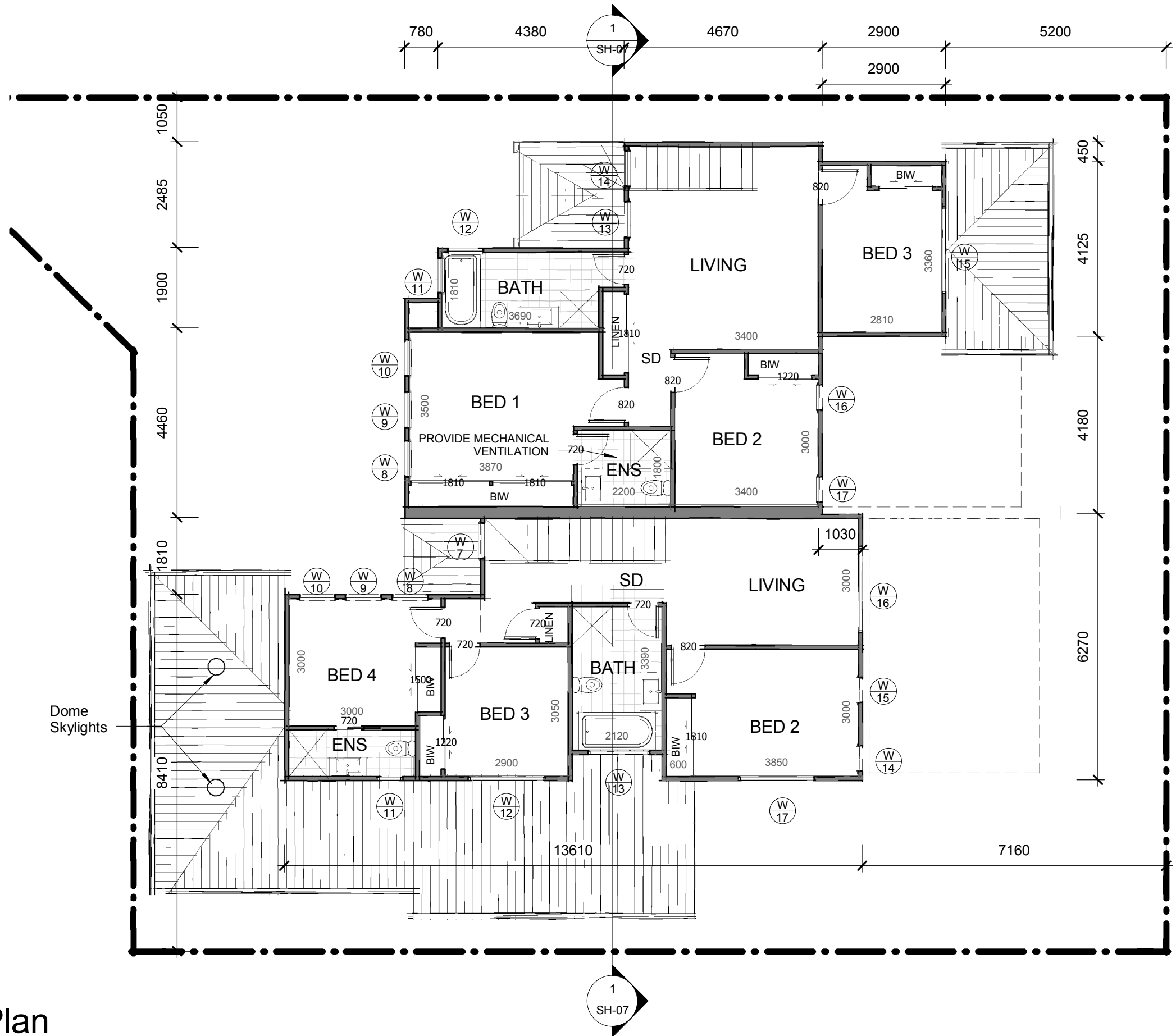
# 1 Ground Floor Plan

1 : 100

AMENDMENTS:				GENERAL NOTES:	DRAWING: <b>Ground Floor Plan</b>	CLIENT: <b>L. STIPCEVIC</b>	JOB No.: <b>00172017</b>	JH BUILDING DESIGNS	bda
No:	DATE:	COMMENTS:	DWN:						
				- Dimensions in preference to scale	PROJECT: <b>PROPOSED DUAL OCCUPANCY &amp; STRATA SUBDIVISION</b>	SITE: <b>7A Cochrane Rd Thirroul</b>	DATE: <b>29.01.18</b>	ABN: 37 164 783 108 PH: 4295 4433	PAGE No.: <b>SH-03</b>
				- All ground lines are approximate	SUBJECT: <b>DEVELOPMENT APPLICATION</b>		DRAWN: <b>J.HARB</b>	Suite 14, 2 Memorial Dr, Shellharbour City Center	
				- Window & Door sizes as shown - Nominal			SCALE: <b>1 : 100</b>	© 2014 JH BUILDING DESIGN PTY LTD	
				- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities					
				- Wind Rating refer to framing manufacturer's specification					



NORTH



# First Floor Plan

1

1 : 100

## AMENDMENTS:

No:	DATE:	COMMENTS:	DWN:

## GENERAL NOTES:

- Dimensions in preference to scale
- All ground lines are approximate
- Window & Door sizes as shown - Nominal
- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities
- Wind Rating refer to framing manufacturer's specification

DRAWING: **First Floor Plan**

PROJECT: **PROPOSED DUAL OCCUPANCY & STRATA SUBDIVISION**

SUBJECT: **DEVELOPMENT APPLICATION**

CLIENT: **L. STIPCEVIC**

SITE: **7A Cochrane Rd Thirroul**

JOB No.: **00172017**

DATE: **29.01.18**

DRAWN: **J.HARB**

SCALE: **1 : 100**

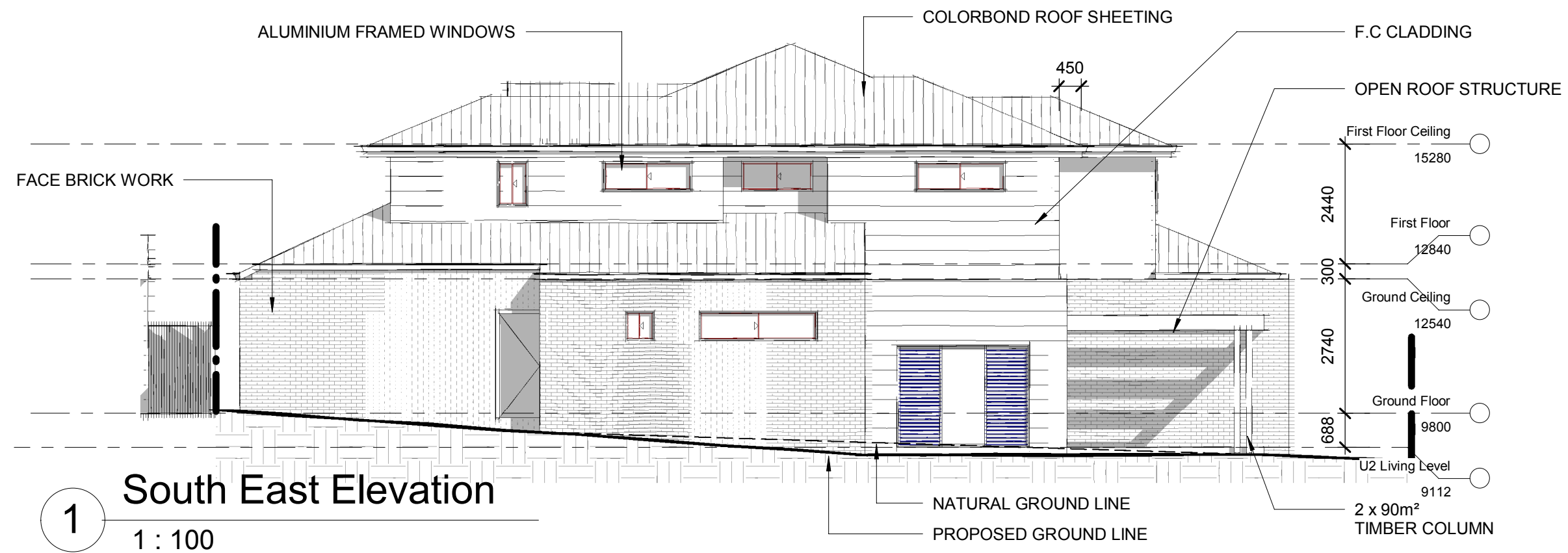
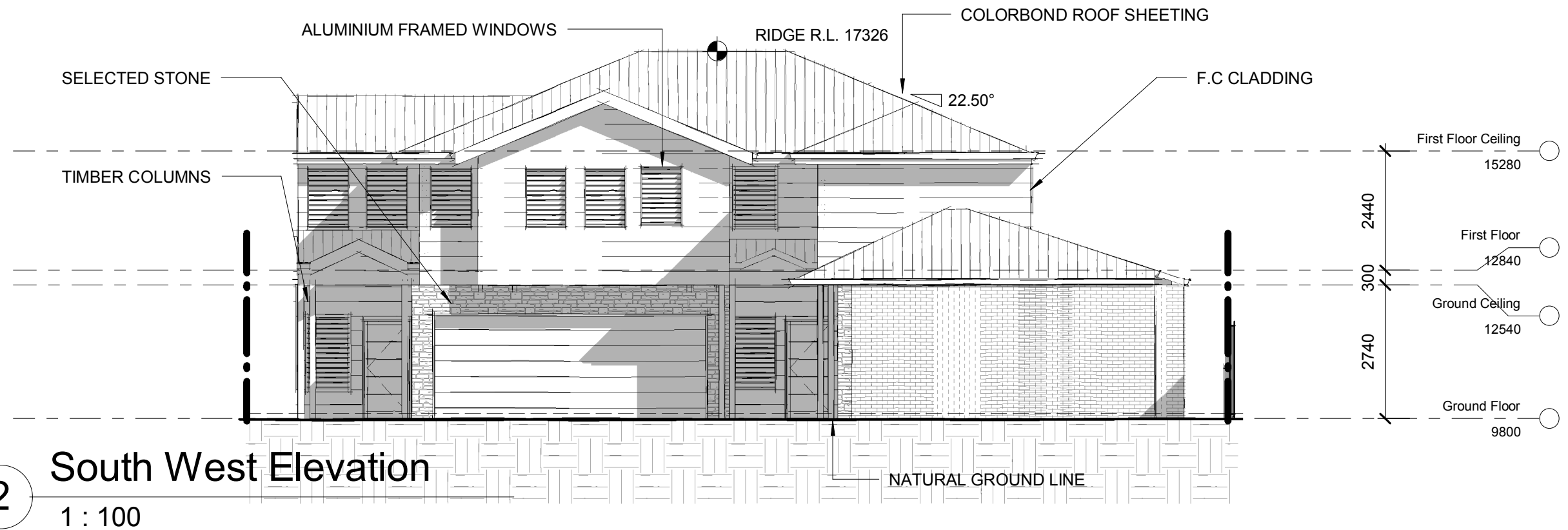
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PAGE No.:  
**SH-04**





AMENDMENTS:			
No:	DATE:	COMMENTS:	DWN:

**GENERAL NOTES:**

- Dimensions in preference to scale
- All ground lines are approximate
- Window & Door sizes as shown - Nominal
- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities
- Wind Rating refer to framing manufacturer's specification

**DRAWING: Elevations**  
**PROJECT: PROPOSED DUAL OCCUPANCY & STRATA SUBDIVISION**  
**SUBJECT: DEVELOPMENT APPLICATION**

**CLIENT: L. STIPCEVIC**  
**SITE: 7A Cochrane Rd Thirroul**

**JOB No.: 00172017**  
**DATE: 29.01.18**  
**DRAWN: J.HARB**  
**SCALE: 1 : 100**

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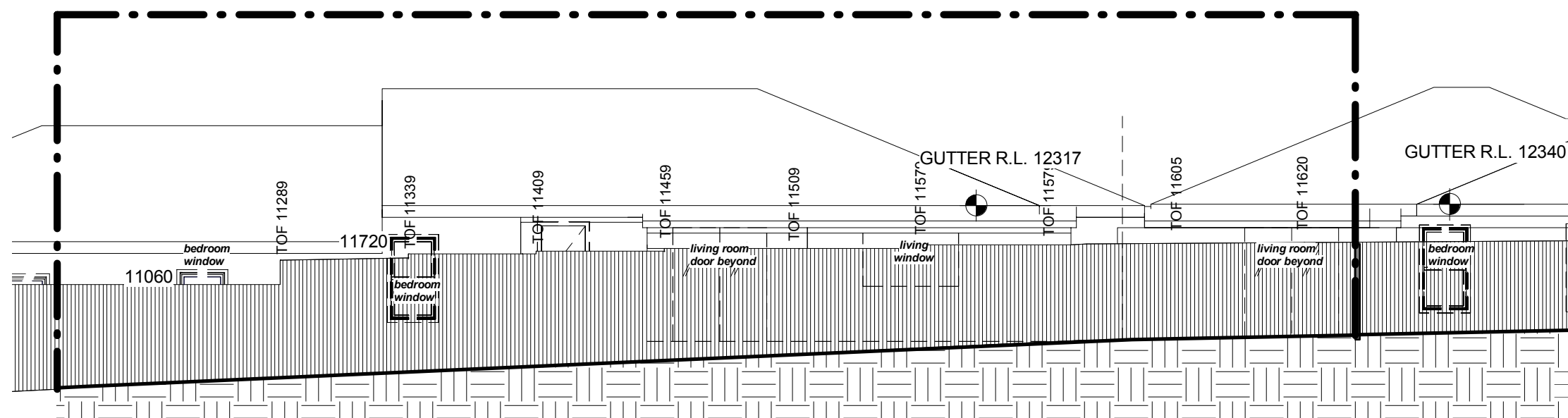


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<b>AMENDMENTS:</b>				<b>GENERAL NOTES:</b> - Dimensions in preference to scale - All ground lines are approximate - Window & Door sizes as shown - Nominal - All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities - Wind Rating refer to framing manufacturer's specification	<b>DRAWING: Elevations</b>  <b>PROJECT: PROPOSED DUAL OCCUPANCY &amp; STRATA SUBDIVISION</b>  <b>SUBJECT: DEVELOPMENT APPLICATION</b>	<b>CLIENT: L. STIPCEVIC</b>  <b>SITE: 7A Cochrane Rd Thirroul</b>	<b>JOB No.: 00172017</b>  <b>DATE: 29.01.18</b>  <b>DRAWN: J.HARB</b>  <b>SCALE: 1 : 100</b>	 ABN: 37 164 783 108 PH: 4295 4433 Suite 14, 2 Memorial Dr, Shellharbour City Centre © 2014 JIH BUILDING DESIGN PTY LTD	 <b>PAGE No.: SH-06</b>
No:	DATE:	COMMENTS:	DWN:						





## 1

1 : 100

<b>AMENDMENTS:</b>				<b>GENERAL NOTES:</b> - Dimensions in preference to scale - All ground lines are approximate - Window & Door sizes as shown - Nominal - All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities - Wind Rating refer to framing manufacturer's specification	<b>DRAWING:</b> <i>Neighbour elevation</i> <b>PROJECT:</b> <b>PROPOSED DUAL OCCUPANCY &amp; STRATA SUBDIVISION</b> <b>SUBJECT:</b> <b>DEVELOPMENT APPLICATION</b>	<b>CLIENT:</b> <b>L. STIPCEVIC</b> <b>SITE:</b> <b>7A Cochrane Rd Thirroul</b>	<b>JOB No.:</b> <b>00172017</b> <b>DATE:</b> <b>29.01.18</b> <b>DRAWN:</b> <b>Author</b> <b>SCALE:</b> <b>1 : 100</b>	 ABN: 37 164 783 108 PH: 4295 4433 Suite 14, 2 Memorial Dr, Shellharbour City Center © 2014 JIH BUILDING DESIGN PTY LTD	 <b>PAGE No.:</b> <b>SH-11</b>
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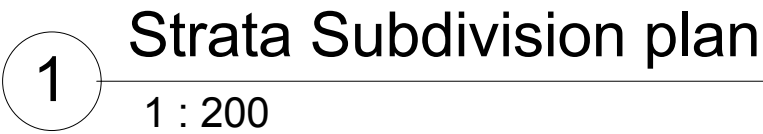




1 3D View 1



2 3D View 2

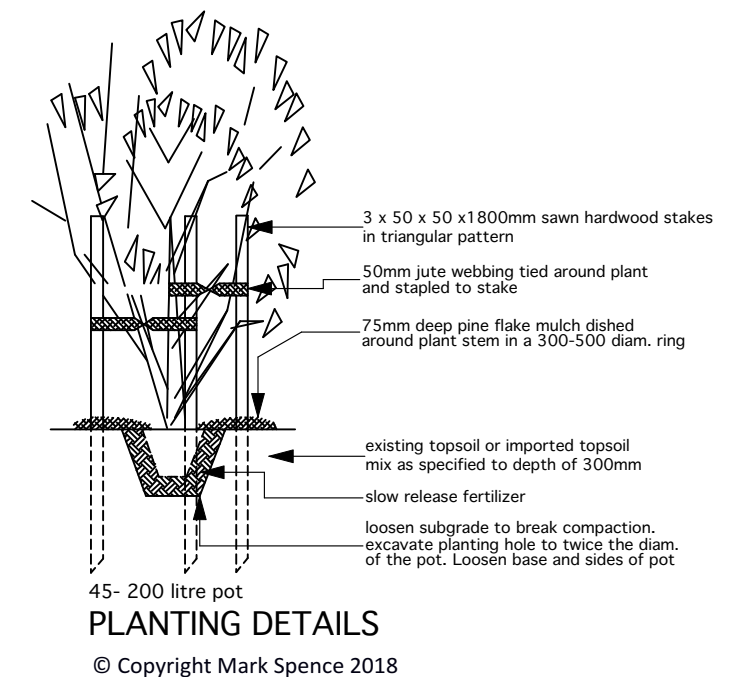
AMENDMENTS:				DWN:	GENERAL NOTES:	DRAWING: <i>Perspectives</i>	CLIENT: <b>L. STIPCEVIC</b>	JOB No.: <b>00172017</b>	bda BUILDING DESIGNERS AUSTRALIA	PAGE No.: <b>SH-08</b>
No:	DATE:	COMMENTS:								
					- Dimensions in preference to scale	PROJECT: <b>PROPOSED DUAL OCCUPANCY &amp; STRATA SUBDIVISION</b>	SITE: <b>7A Cochrane Rd Thirroul</b>	DATE: <b>29.01.18</b>	<div> <div>J H</div> <div>BUILDING DESIGNERS</div> </div> <div>           ABN: 37 164 783 108 PH: 4295 4433            Suite 14, 2 Memorial Dr, Shellharbour City Center            © 2014 J H BUILDING DESIGN PTY LTD         </div>	
					- All ground lines are approximate			DRAWN: <b>J.HARB</b>		
					- Window & Door sizes as shown - Nominal	SUBJECT: <b>DEVELOPMENT APPLICATION</b>		SCALE:		
					- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities					
					- Wind Rating refer to framing manufacturer's specification					



AMENDMENTS:				<p>GENERAL NOTES:</p> <ul style="list-style-type: none"> <li>- Dimensions in preference to scale</li> <li>- All ground lines are approximate</li> <li>- Window &amp; Door sizes as shown - Nominal</li> <li>- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities</li> <li>- Wind Rating refer to framing manufacturer's specification</li> </ul>	<p>DRAWING: <b>Strata Plan</b></p> <p>PROJECT: <b>PROPOSED DUAL OCCUPANCY &amp; STRATA SUBDIVISION</b></p> <p>SUBJECT: <b>DEVELOPMENT APPLICATION</b></p>	<p>CLIENT: <b>L. STIPCEVIC</b></p> <p>SITE: <b>7A Cochrane Rd Thirroul</b></p>	<p>JOB No.: <b>00172017</b></p> <p>DATE: <b>29.01.18</b></p> <p>DRAWN: <b>J.HARB</b></p> <p>SCALE: <b>1 : 200</b></p>	 <p>ABN: 37 164 783 108 PH: 4295 4433 Suite 14, 2 Memorial Dr, Shellharbour City Center</p> <p>© 2014 JIH BUILDING DESIGN PTY LTD</p>	 <p>PAGE No.: <b>SH-10</b></p>
No:	DATE:	COMMENTS:	DWN:						







- 1- **PLANT MATERIAL.** Shall be pest and disease free and of correct shape and form. Plants should be well advanced in the growing container but not potbound.
- 2- **STAKING** Shall be hardwood timber stakes measuring 38x38x1200mm, three stakes per tree. Jute webbing or similar should be used to fix tree species to the stakes.
- 3- **MULCHING.** Is to be placed in all areas of planting to a depth of 75mm. Mulch should be of shredded cypress pine flake or similar. A consistent depth of mulch is to be maintained for a period of 12 months following initial landscape installation.

- 4- WATERING. Planted areas shall be watered regularly to ensure continuous and healthy growth. Water shall be frequently applied in the initial period following planting to the extent that healthy plant growth continues and establishment is rapid. Water shall be made available to all new plantings on as need basis, this is a climate dependant variable.
- 5- TURF. If required should be quality kikuyu, buffalo or varietal couch grass that is weed, pest and disease free. Turf shall be maintained at regular intervals with fortnightly cutting in the growing season and monthly cutting in the cool season months for the maintenance period. Cutting height shall ensure that turf is not scalped or damaged by mowing.
- 6- MAINTENANCE PERIOD. Shall be for a period of 12 months commencing from completion of initial landscape works.

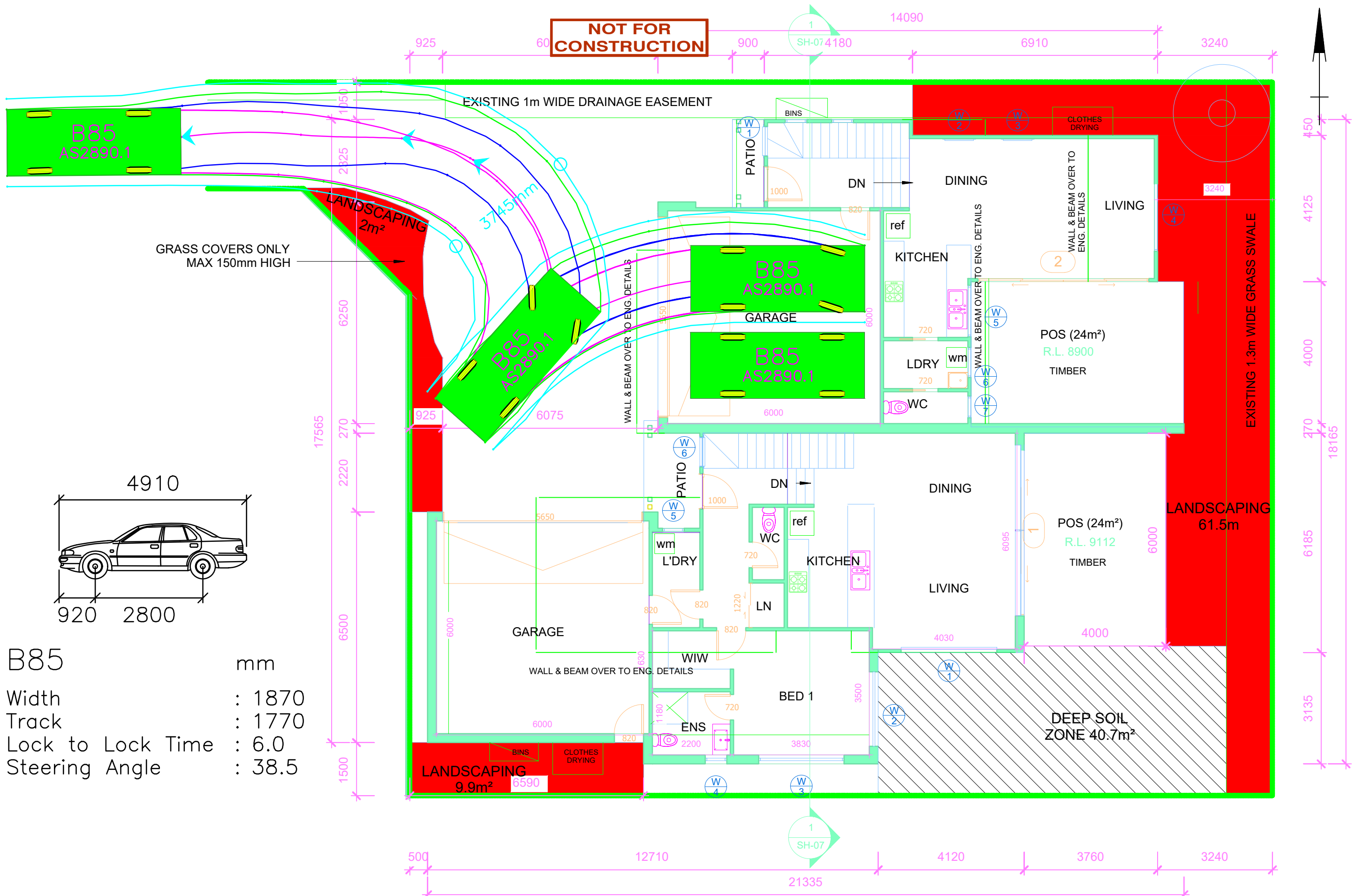
BOTANIC NAME	COMMON NAME	(H) x (W)	SIZE	QTY	STAKING
1 Acmena smithii 'Cherry Surprise'	Cherry Surprise Lily Pily	2.5 m x 1.5 m	200 mm	7	NO
2 Banksia ericifolia	Heath Banksia	1.5 m x 1.5 m	200 mm	4	NO
3 Lomandra hystrix	Mat Rush	1.5 m x 1.5 m	200 mm	9	NO
4 Doryanthes excelsa	Gymea Lily	1.5 m x 1.2 m	200 mm	6	NO
5 Callistemon 'White Anzac'	Dwarf Bottlebrush	0.8 m x 1 m	200 mm	3	NO
6 Lomandra 'Tanika'	Tanika Lomandra	0.8 m x 0.8 m	200 mm	10	NO
7 Lomandra confertifolia 'Little Con'	Little Con Lomandra	0.3 m x 0.5 m	200 mm	46	NO
8 Archontophoenix cunninghamiana	Balgallow Palm	8 m x 3.5 m	45 litre	2	YES



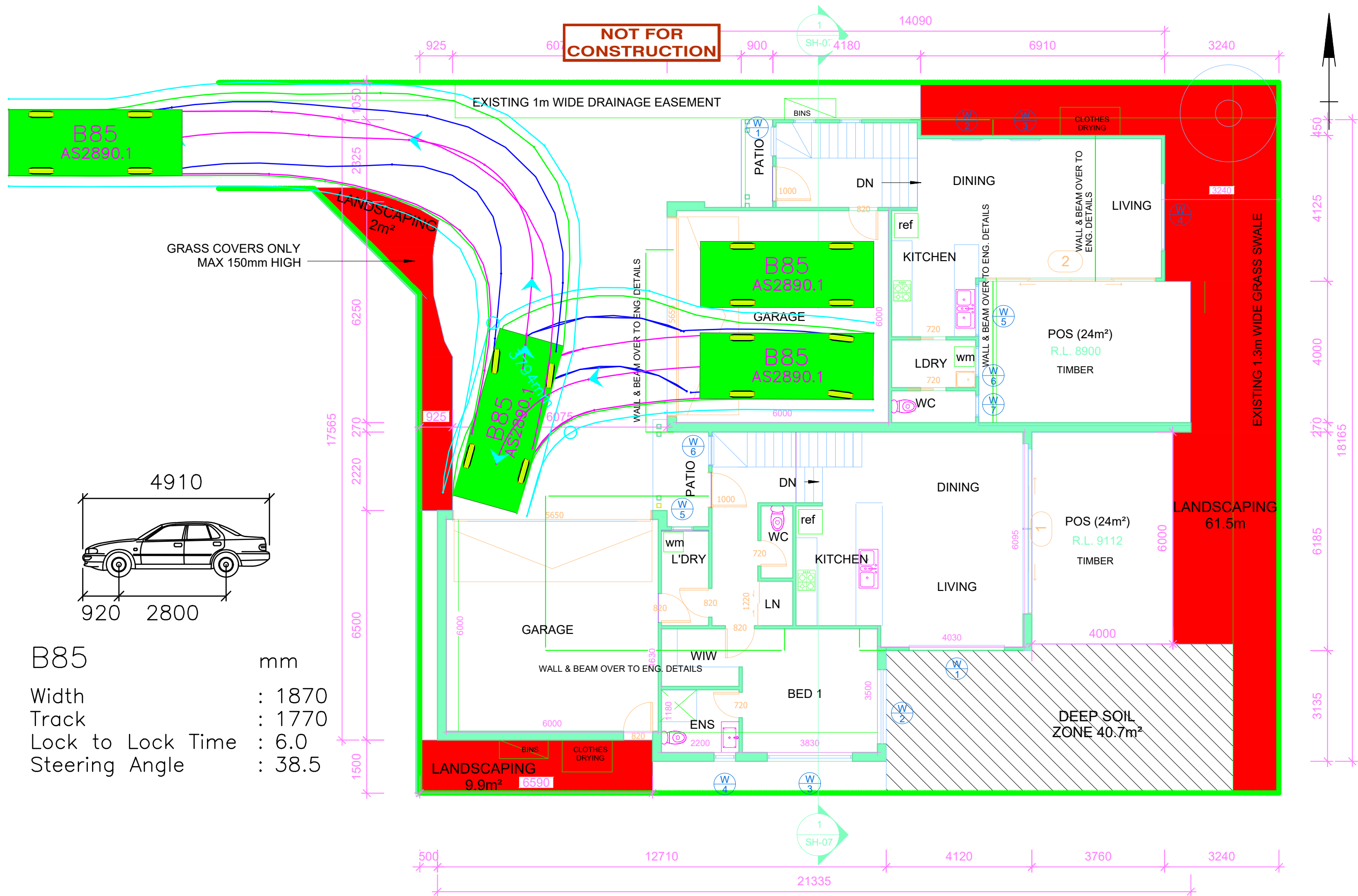
ABN: 18 308 089 059

NO.	DATE	REVISION DETAILS	BY	PROJECT	CLIENT	PROJECT #	MS2017059
A	01/08/17	REVISED PLANTING	MS	LANDSCAPE DESIGN	JIH BUILDING DESIGNS	DWG DATE	10 / 04 / 2018
B	10/04/18	REVISED PLANTING	MS			SCALE @ A3	1 : 200
				ADDRESS	STIPCEVIC	DRAWN BY	MARK SPENCE
				7A COCHRANE ROAD, THIRROUL		FILE NAME	00172017
						PAGE #	PAGE 1 OF 1

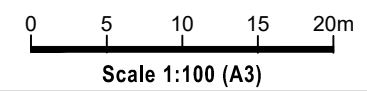
NOT FOR  
CONSTRUCTION



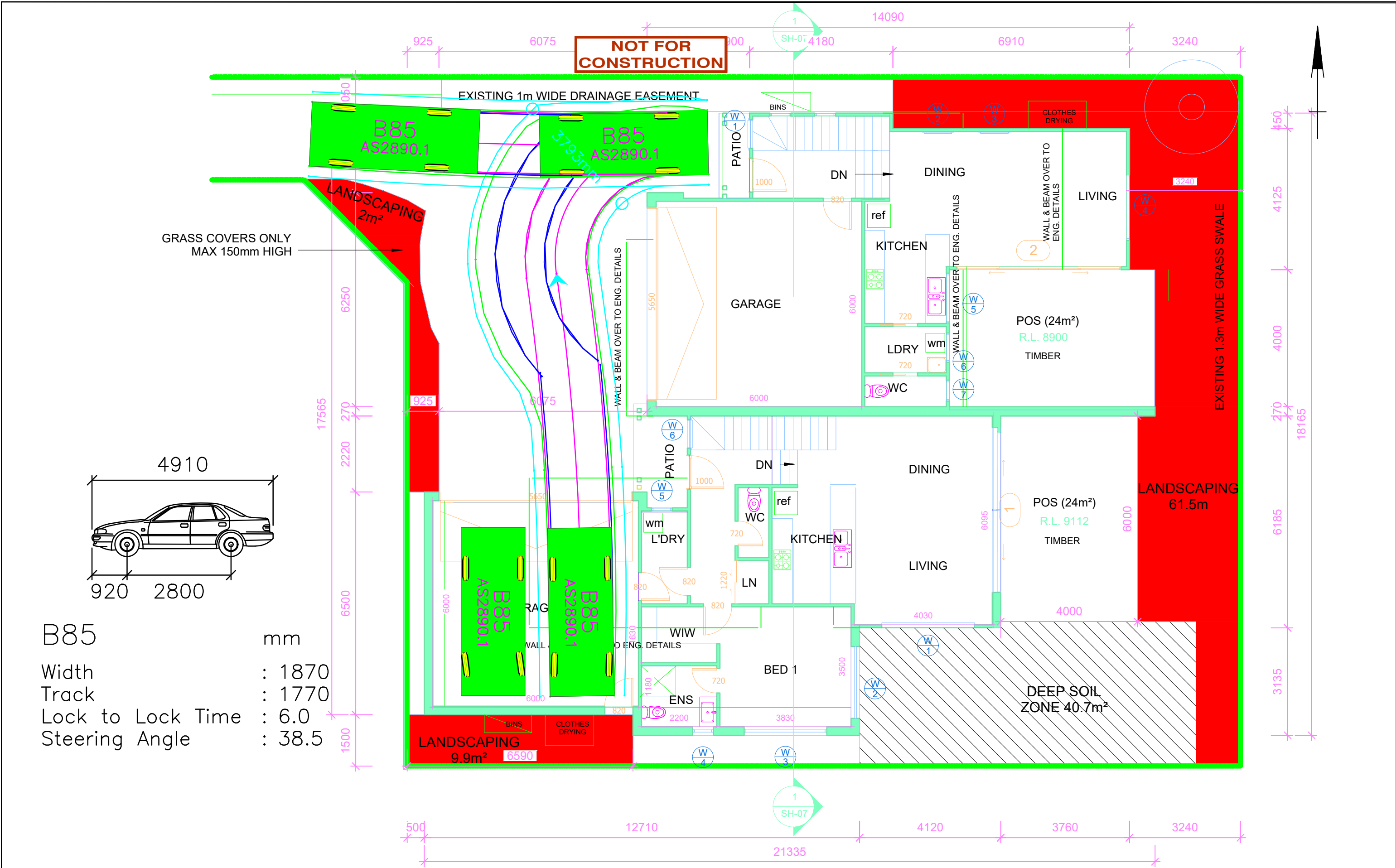
B85  
Width : 1870  
Track : 1770  
Lock to Lock Time : 6.0  
Steering Angle : 38.5



Date: 16/02/18	Drawing Name: Swept Path Assessment - Unit 1 Bay 2	<b>BITZIOS</b> -consulting Sheet 2 Version A
Project No: P3516	Project Name: 7 Cochrane Road Thirroul	







B85  
Width : 1870  
Track : 1770  
Lock to Lock Time : 6.0  
Steering Angle : 38.5



## **Attachment 2: WDCP 2009 Compliance Table**

### **CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

Development controls to improve the sustainability of development throughout Wollongong are integrated into the relevant chapters of this DCP.

Generally speaking, the proposal could be considered to be consistent with the principles of Ecologically Sustainable Development.

### **CHAPTER B1 – RESIDENTIAL DEVELOPMENT**

This Chapter applies to all residentially zoned land in the LGA. Section 4 provides general residential controls which apply to all dwelling houses, dual occupancies, secondary dwellings, ancillary structures and semi-detached dwellings.

#### **4.0 General Residential controls**

<i>Controls/objectives</i>	<i>Comment</i>	<i>Compliance</i>
<b>4.1 Maximum Number of Storeys</b>		
<p>Section 4.1.2.1 provides that dwelling houses on battleaxe allotments are restricted to 1 storey unless it can be demonstrated that the proposed development achieves the objectives in Clause 4.1.1 and complies with the maximum height maps in the LEP.</p> <p>The application involves the construction of a two storey dual occupancy of a battleaxe allotment.</p> <p>The applicant provides in their additional information response that the wording of the control with the single storey height limit only applies to “dwelling houses” which are a separately defined land use to “dual occupancy”. Thus this specific control does not apply to the proposal. Hence, no variation request was sought.</p> <p>In Appendix 4: Definitions of WDCP 2009 the following are defined as:</p> <p><i>Dwelling House means a building containing only one dwelling.</i></p> <p><i>Dwelling: Means a room or suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.</i></p> <p><i>Dual Occupancy: Means 2 dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme), but does not include a secondary dwelling.</i></p> <p>Despite the applicant’s interpretation, in reviewing the definitions as provided above, it is considered that a dual occupancy comprises of two dwellings and therefore the one storey restriction applies to the development.</p> <p>Whilst the proposal complies with the 9m maximum building height in WLEP 2009 at 8.07m. Notwithstanding the above, the control can be varied subject to the proposed development demonstrating it achieves the objectives of Clause 4.1.1. As discussed in Chapter A1 above, it is considered the proposal does not meet these objectives.</p> <p>For that reason the proposal presents a non-compliance to this control.</p> <p>Clause 4.1.2.4 applies to proposal as site is zoned R2 and the proposal seeks</p>		No – Variations not supported

<p>two storey development located within the 8m rear setback.</p> <p>The proposal provides a rear setback of 5.2m to the double storey element on Unit 1 and 7.16m for Unit 2. Presenting an encroachment of 2.8m and 840mm respectively.</p> <p>A variation for the non-compliance in relation to two storey 8m rear setback requirements has been sought, as discussed at Chapter A1 above where the variation is not supported in this case.</p>		
<u>4.2 Front Setbacks</u>	<p>The proposal has street frontage to Cochrane Road however, in the form of a battleaxe handle. Both dwellings and associated garages are setback greater than 6m from the front property boundary.</p>	Yes
<u>4.3 Side and Rear Setbacks</u>		
<p>The setbacks for the dwellings are:</p> <p><u>Unit 1</u></p> <p><i>Side setbacks (NW)</i></p> <p>Ground floor 1.05m</p> <p>First floor 1.05m</p> <p><i>Rear setbacks (NE)</i></p> <p>Ground floor 3.24m</p> <p>First floor 5.2m</p> <p><u>Unit 2</u></p> <p><i>Side setbacks (SE)</i></p> <p>Ground floor 0.9m</p> <p>First floor 4.04m</p> <p><i>Rear setbacks (NE)</i></p> <p>Ground floor 7.16m</p> <p>First floor 7.16m</p> <p>The proposed walls of the dwellings are setback the minimum 900mm from the side and rear setbacks. With the exception to the side setback for the garage of Unit 2 discussed below.</p> <p>All eaves and gutters meet the required 450mm minimum.</p> <p>The SW boundary for the allotment shared with 7 Cochrane Road has been considered as a side boundary.</p> <p>The proposal seeks a variation to the SW side setback for the attached garage of Unit 2. The garage is setback 500mm from the side boundary and does not comply with the required 900mm.</p> <p>A variation request statement has been submitted addressing this control and is not supported in this case, as discussed at Chapter A1 above.</p> <p>The wall of Unit 1 along the north west elevation that contains the first floor living room has an overall height greater than 7m. This requires a setback of at</p>		<p>No –</p> <p>Variations not supported</p>

least 3m from the side boundary. This component of the dwelling is setback 1.05m less than requirement width. This variation has not been identified by the applicant and no variation request has been provided.

Privacy impacts

Concerns have been raised in regards to the potential privacy impacts from the proposal on adjoining properties.

Concern for potential overlooking from the two (2) proposed dining room windows on the north west elevation of Unit 1 to the adjoining properties to the north west, Unit 3 & 4 of No. 11 Cochrane Road. This is due to the difference in the natural ground levels between the site and No. 11, where this adjoining property is situated higher than the southern elevation and associated private open space of the existing units 3 & 4 are clearly visible when viewed at ground level from the subject site.

Limited information has been provided to clarify the height of the existing common boundary fence to assess whether the dining windows could give rise to overlooking to units 3 & 4 at No. 11 Cochrane Road. It appears that this matter has not been specifically addressed within the submitted SEE. It is noted that this matter was raised in the previous application DA-2017/980.

Concerns have been raised in regards to potential overlooking from the two storey component of the proposed dwellings.

The first floor windows located on the south east elevation for Unit 2 could have potential overlooking impacts on the units located at No. 5 Cochrane Road, primarily Unit 3. The windows proposed on this elevation comprise of 2 bathroom windows and 2 bedroom windows. The bedroom windows appear to have a sill height of approximately 1.5m. Whilst not shown on the submitted plans, the proposed bathroom windows could be conditioned to be obscured. This elevation is also setback 4m from the side boundary. Due to the height of the proposed first floor, setback, sill height of the windows and ability to be obscured as outlined above, it is considered that the line of sight of a person standing from these windows would look over the roof of the adjoining villas at No. 5 Cochrane Road and not into their dwellings or associated private open space areas.

The first floor windows on the north east elevation are for Unit 1 is limited with a bathroom window that could be conditioned to be obscured. The remaining windows on this elevation are for a bedroom in Unit 2 setback over 10m from the NE side boundary.

The first floor north east elevation contains a number of windows for both dwellings associated with bedrooms and a living area. The adjoining property to the rear No. 11 Cochrane Road, contains a single storey outbuilding and landscaping, uses that if overlooking occurred is considered not to give rise to adverse amenity impacts. Due to the nature of the rear adjoining property, it is considered the ground floor components of both dwellings will also unlikely cause privacy impacts.

In regards to the ground floor south east elevation of Unit 2, due to the levels of the proposed dwelling and the height of the existing boundary fence, this structure will prevent overlooking into the adjoining properties at No. 5 Cochrane Road.

<u>4.4 Site Coverage</u>	<p>The lot as a site area of 579sqm and the maximum site coverage for the dual occupancy is 50%.</p> <p>The proposal provides a total site coverage area of approximately 250sqm which equates to site coverage of 43%. The proposal does not exceed the maximum site coverage requirement.</p>	<p>Yes</p>
<u>4.5 Landscaped Area</u>	<p>The site has an area of 579sqm where the minimum required landscaped area is 20% equating to 115.8sqm.</p> <p>The applicant provides that 121sqm of landscaped area is provided which is 20.8% of the site however, it appears that areas less than 1.5m wide have been included.</p> <p>Landscaped area requires to be a minimum width of 1.5m as defined in Chapter E6 of WDCP 2009 to be included in landscaping calculations.</p> <p>Based on the above, the proposal provides 110sqm landscaped area which is 5sqm less than the minimum requirement.</p> <p>Whilst the landscaping proposed just east where of the access handle widens has not been included in the calculations by Council, it is noted that the swept path plans at Attachment 1 show that vehicles required to overhang into this grassed area for manoeuvring to leave the site in a forward direction.</p> <p>The applicant was advised on this non-compliance. No variation request statement was submitted.</p> <p>The proposal does not comply with the required landscaped area.</p>	<p>No</p>
<u>4.6 Private Open Space</u>	<p>Private open space is provided for each dwelling with an area of 24sqm and width of 4m, directly connected to the living areas.</p> <p>The private open space for Unit 1 is provided part timber deck and part lawn. The site falls to the rear of the boundary and as shown on the plans submitted there appears to be a slight change in the finished floor and natural ground levels for the proposal. It is unclear if the private open space for Unit 1 complies with the requirements to be no steeper than 1:50.</p>	<p>No</p>
<u>4.7 Solar Access</u> <ul style="list-style-type: none"> <li>• Windows to living rooms of adjoining dwellings must receive at least 3hrs</li> </ul>	<p>The application submission included an overshadowing analysis report with views from the sun as presented at Attachment 4a. Further discussion is provided within the submitted SEE regarding solar access at Attachment 4b.</p>	<p>No</p>

<p>continuous sunlight between 9.00am - 3.00pm on 21 June.</p> <ul style="list-style-type: none"> <li>• At least 50% of the private open areas of adjoining residential properties must receive at least 3hrs continuous sunlight between 9.00am - 3.00pm on June 21.</li> <li>• Shadow diagrams will be required by Council for 9am, 12pm, 3pm for the 21 June for two storey dwellings.</li> <li>• Dwellings should be designed to maximise natural sunlight to main living areas and the private open space.</li> </ul>	<p>Separate to this document, no shadow diagrams were submitted with the application.</p> <p>The overshadowing analysis identifies that the proposal will affect the adjoining properties along the south eastern boundary of the site at No. 5 Cochrane Road, Thirroul. Located on this property is an existing multi dwelling development that comprises a number of five (5) single storey dwellings.</p> <p>In the review of the overshadowing analysis and discussion provided in the SEE , it is considered difficult to clearly determine the solar access impacts on the adjoining properties in the context of the controls of Clause 4.7. The specific units of the adjoining property at No. 5, their associated private open space and living room windows are not clearly identified. Details of the existing overshadowing that the adjoining units may currently experience from the boundary fencing/awnings etc have not been provided. Based on the lack of supporting information with the submitted overshadowing analysis, it is difficult to compare and quantify the solar impacts of the proposal to be assessed under this clause.</p> <p>Details have not been provided to support the summary of the overshadowing analysis clearly outlining how the proposal complies with clause 4.7 such that the adjoining dwellings at No. 5 Cochrane Road will receive the required solar access on June 21 between 9am and 3pm or their existing solar access with unaffected and maintained as currently enjoyed.</p> <p>In addition, the overshadowing analysis report identifies it is based on architectural plans issue dated 13 March 2018. These plans referenced do not appear to correspond with the plans lodged with the application dated 29 January 2018. It is unclear if the report is then reflective of the plans that accompany the application as submitted to Council.</p> <p>As mentioned previously in section 1.3 above, this current application is very similar to the previous application lodged for the site DA-2017/980 with only minor changes made in this current proposal. Due to the insufficient information and likeliness of the proposal to the previous development application for the site, a merit assessment using the previous shadow diagrams in DA-2017/980 at Attachment 5 have been referred to, to assist in</p>	
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	<p>understanding the potential impacts on the adjoining properties in regards to solar access.</p> <p>Based on the previous application's shadow diagrams at Attachment 5, it appears the proposal could likely overshadow the private open space and living room windows of the adjoining dwellings, Unit 2 &amp; 3 of No. 5 Cochrane Road. Such that the living room windows and private open space of these two adjoining units do not appear to receive the required 3 hours of continuous sunlight during June 21. It is noted that a bedroom window of Unit 4 of No. 5 Cochrane Road is affected however, not their living area/private open space.</p> <p>Whilst it is acknowledged that these specific areas on the adjoining properties already experience overshadowing, it appears the proposal results in additional overshadowing such that the proposal would not meet the solar access requirements Clause 4.7.</p> <p>Overall, due to insufficient information provided as outlined above, it is considered the application fails to demonstrate that the proposal will not result in adverse amenity impacts on the adjoining properties in regards to solar access.</p>	
<u>4.8 Building Character and Form</u>	It is considered the development does not appropriately respond to its site context and has not been designed to minimise the scale and bulk of the development. The building design does not minimise the amenity impacts on the adjoining properties. Therefore the proposed development is not considered to be consistent with the future desired character of the suburb.	No
<u>4.9 Fences</u>	The proposal does not involve the installation of any fences. The site is already fenced on all boundaries	NA
<u>4.10 Car parking and Access</u>	<p>The proposal requires 2 car parking spaces per dwelling and a double garage is provided for each that comply with the minimum internal dimensions of 6m by 6m.</p> <p>The site is located on an existing battleaxe allotment and utilises the existing driveway.</p> <p>The application was referred to Council's Traffic Officer who reviewed the application and provided a satisfactory referral.</p>	Yes
<u>4.11 Storage Facilities</u>	The proposal provides adequate storage facilities within the proposed dwellings.	Yes



<u>4.12 Site Facilities</u>	<p>The proposal is considered to provide adequate room to provide site facilities, with the clothes drying area indicated on the submitted plans.</p> <p>The proposal is not visible from the street, notwithstanding this, site facilities are provided within the rear setback that will not impact on the streetscape.</p>	Yes
<u>4.13 Fire Brigade Servicing</u>	There is an existing fire hydrant within the site located towards the front boundary. Fire brigade servicing will remain as per existing arrangements.	Yes
<u>4.14 Services</u>	The required services are available to the site and can be made to adequately service the proposal.	Yes
<u>4.15 Development near the coastline</u>	The proposal is not located near the coastline.	N/A
<u>4.16 View sharing</u>	<p>Yes</p> <ul style="list-style-type: none"> <li>To protect and enhance view sharing, significant view corridors</li> <li>A range of view sharing measures to be considered for building design</li> </ul> <p>A visual assessment has been undertaken in accordance with the guidelines identified by Roseth SC in line within the judgement of Tenacity v Warringah Council [2004] in relation to the impact the proposal will have on views available from Units 2, 3 &amp; 4 at 5 Cochrane Road and 7 Cochrane Road.</p> <p>The location of the potentially affected properties with respect to the subject development site is demonstrated by the figure below.</p>	



**Step 1: assessment of views that the proposal will affect.**

In assessing the views that are likely to be affected is the adjoining properties Units 2, 3 & 4 of 5 Cochrane Road south east of the site and 7 Cochrane Road, south west of the site. The views are towards the escarpment.

**Step 2: consider how reasonable it is to expect to retain these views.**

Some of the views are obtained across the side boundary and it is acknowledged that these views are more difficult to retain than the protection of views from front and rear boundaries.

**5 Cochrane Road**

Units 2, 3 & 4 of 5 Cochrane Road may gain some views looking across their north west boundary (common boundary with subject site) from their private open space, living and bedroom windows.

For Units 2 & 3 it is considered that a limited view of the escarpment may be possible between the gap of the existing boundary fence and upper most part from the windows, in a sitting or standing position and a potential limited view from the private open space in a standing position. It is considered unlikely to obtain a view in a sitting position due to the height and proximity of the existing boundary fence. However, there could be some views through this gap, though considered would be limited if any.

**7 Cochrane Road**

7 Cochrane Road would gain views of the escarpment from the NE first floor facing window and private open space however, looking north across the access handle of the subject site

and No. 11 Cochrane Road.

**Step 3: assess the extent of the impact.**

The Tenacity principles state that the assessment of the impact of the proposal should be undertaken for the whole property, not just the views that are affected.

**5 Cochrane Road**

It is considered due to the height of these dwellings with the associated awning structures, the existing boundary fence (refer to adjacent dwelling elevation plan at Attachment 1), would predominantly block views from the windows and private open space. The proposal is considered likely to result in some or all of the limited views if any from Units 2 & 3 and partially the view from the NW bedroom window of Unit 4.

In the instance of Unit 4, views gained across the site would be the NW bedroom window as the living area windows/private open space share a common boundary with No. 11 Cochrane Road, rather than the subject site and these views will not be impeded by the proposed development.

**7 Cochrane Road**

It is considered the development on the site would not obscure views currently enjoyed.

Summary: Considering the extent of the views available, the extent of view loss expected is considered to be negligible to minor.

**Step 4: assess the reasonableness of the proposal that is causing the impact.**

The proposal does seek a variation to the single storey restriction on a battlaxe allotment, two storeys within the 8m rear setback and reduced side setbacks.

Despite the proposal not being non-compliant with a number of controls in Chapter B1 WDCP 2009 it is considered the proposal will not have an adverse impact on the views currently enjoyed by the nearby residents.

It is noted that if any existing views are obtained from the adjoining units 2 & 3 of No. 5 Cochrane Road beyond the height of existing boundary fence due to the siting of these existing dwellings, it is considered these views would difficult to retain with any compliant single storey development proposed on the subject site.

Overall it is considered the proposal will not have an adverse impact on the views currently enjoyed by the nearby residents.

However, it is noted that the applicant in the SEE did not set out their discussion in regards to view impact assessment providing the steps in the above planning principles and or photos of existing views provided.

<b><u>4.17. Retaining walls</u></b>	No retaining walls are proposed.	N/A
<b><u>4.18 Swimming pools and spas</u></b>	The development does not include any proposed swimming pools or spas.	N/A
<b><u>4.19 Development near railway corridors and major road</u></b>	The site is not considered to be located in close proximity to any classified road or railway corridor.	N/A
<b><u>4.20 Additional controls for semi-detached dwellings</u></b>	The proposal does not consist of semi-detached dwellings.	
<b><u>4.21 Additional controls</u></b>	The site once beyond the battleaxe handle where	No

<u>for Dual Occupancies minimum site width</u>	<p>the proposed dual occupancy is proposed has a width of approximately 20.115m that is greater than the 15m requirement.</p> <p>Despite the site complying with the minimum width where the proposal is to be sited, the proposal does not comply with solar access, private open space, built form, landscaping and deep soil zone requirements as outlined above. Therefore it is considered the proposal has not adequately demonstrated that a dual occupancy is suitable for the site without adversely impacting the amenity of the surrounding development.</p>	
<u>4.22 Additional controls for Dual Occupancies – building character and form</u>	The proposal provides articulation of the garages from the front façade.	Yes
<u>4.23 Additional Controls for Dual Occupancy's – Deep Soil Zones</u>	<p>The nominated deep soil zone is located outside the private open space with a minimum dimension of the 3m wide. After the strata subdivision of the development the deep soil zone will be allocated to Unit 2 which this adjoins this dwelling.</p> <p>However, the proposal seeks a variation to the minimum required area of deep soil zone 57.9sqm, providing only 40.7sqm.</p> <p>A variation request statement has been submitted addressing this control and is not supported in this case, as discussed at Chapter A1 above.</p>	No – Variation requested and not supported

## CHAPTER B2 RESIDENTIAL SUBDIVISION

The proposal seeks the strata subdivision of the development in to two (2) lots after the completion of the dual occupancy development. A strata plan has been submitted with the application and reviewed by Council's Subdivision Officer with satisfactory referral advice provided.

## CHAPTER D1 CHARACTER STATEMENTS

### Thirroul

Whilst it is acknowledged that proposal is low density in nature, the development is not considered to have been designed to minimise the scale and bulk of the development to minimise adverse amenity impacts on the adjoining properties. Therefore the proposed development is not considered to be consistent with the future desired character of the suburb.

## CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

Council's Traffic Officer has assessed the proposal and provided conditionally satisfactory referral advice.

Each dwelling is greater than 125sqm and requires 2 car parking spaces. The spaces are provided for in the form an attached double garage for each dwelling. Swept path analysis has been provided to show that vehicles can adequately manoeuvre within the site from each garage parking spaces to be able to enter and exit the site in a forward direction.

#### **CHAPTER E6: LANDSCAPING**

A landscape concept plan was submitted with the application. The proposal however does not provide the minimum required landscaping area required as discussed in Chapter B1 compliance table.

#### **CHAPTER E7: WASTE MANAGEMENT**

Site Waste Minimisation and Management Plan provided, conditions could be imposed on a consent to ensure compliance with the plan.

#### **CHAPTER E13 FLOODPLAIN MANAGEMENT**

The site is identified to be flood affected in an uncategorised flood risk precinct. The application was accompanied by a flood study, and the application was reviewed by Council's Stormwater Officer and provided conditionally satisfactory referral advice.

The proposal is considered to not create an adverse impact on the catchment, and the proposal will be constructed above the 1 to 100 year flood planning levels.

#### **CHAPTER E14 STORMWATER MANAGEMENT**

A stormwater concept plan was submitted with the application where an onsite detention system is proposed for the development. Council's Stormwater Officer has assessed the proposal against the requirement of this chapter and satisfactory referral advice was provided.

#### **CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION**

The proposal involves the removal of a frangipani tree of approximately 3m in height. The frangipani tree is not an exempt species as part of this chapter. Whilst no arboriculture report was submitted with the application it is considered that the removal of tree will not result in adverse impacts on the adjoining properties or biodiversity of the site. Conditions could be recommended in regard to appropriate compensatory planting.

#### **CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)**

Land re-shaping works proposed are minor in nature. The proposal earthworks are considered reasonable associated with the construction of a dual occupancy. The earthworks themselves are not expected to result in unreasonable impacts on environmental functions and processes, neighbouring properties or the features surrounding land. Conditions could be recommended to manage any impacts.

#### **CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL**

Conditions could be recommended in regard to appropriate sediment and erosion control measures to be in place during works.

# APPENDIX B

Variation to WDCP 2009

Chapter B1 - Clause 4.1

## 1.0 PLANNING CONTROL TO BE VARIED

Clause 4.1.2 of Chapter B1 of Wollongong Development Control Plan 2009 (WDCP 2009) contains planning controls relating to building heights, including the following control relating to rear boundary setbacks in the R2 Low Density Residential zone:-

- 4. In R2 Low Density Residential zones, where development occurs within the 8m rear setback the development is limited to single storey, so as to not adversely impact on the amenity of the adjoining property.*

The first floor of Unit 1 has adopted a setback of 5.2m to the rear boundary, while the first floor of Unit 2 has adopted a 7.16m rear setback. This represents encroachments of 2.8m (for Unit 1) and 840mm (for Unit 2).

## 2.0 OBJECTIVES OF THE PLANNING CONTROL

The planning control at clause 4.1.2(4) contains its own explanation as to its objective, namely *“so as to not adversely impact on the amenity of the adjoining property”*.

The types of *“amenity”* impacts which the planning control seeks to overcome are not listed. However, having regard to the effect of the planning control, it is anticipated that such amenity issues are likely to include privacy impacts, overshadowing, view loss, and visual bulk.

### 3.0 ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

Subsection 4.15(3A) of the Environmental Planning and Assessment Act, 1979, advocates the flexible application of the provisions set by development control plans, as follows:-

**(3A) Development control plans**

*If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority:*

- (a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards – is not to require more onerous standards with respect to that aspect of the development, and*
- (b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards – is to be flexible in applying those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and*
- (c) may consider those provisions only in connection with the assessment of that development application.*

*In this subsection, **standards** include performance criteria.*

Consistent with subsection 4.15(3A)(b) of the Act, clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the provisions of that DCP, subject to the submission of a variation statement for Council's consideration. This submission has been prepared to facilitate Council's consideration of the proposed variation.



## 4.0 JUSTIFICATION IN SUPPORT OF THE VARIATION

Council's support for the proposed variation, to allow the incursion of parts of the upper level within 8m of the rear boundary, is requested on the following grounds:-

- The two-storey form of the development proposal is not foreign within the locality. As shown in the image below, the neighbouring multi dwelling residential development to the west of the site (No.11 Cochrane Road) includes a two-storey building (containing two (2) two-storey dwellings) extending beyond the rear building alignment adopted by the proposed development.



- In terms of potential privacy impacts, the encroaching element of Unit 1 contains only a bedroom with a single, north-facing window. Being a bedroom, there is minimal risk of the privacy of the land to the rear being compromised, particularly considering that land is occupied by an outbuilding and mature trees. The encroaching elements of Unit 2 are a secondary living area and a bedroom. As is the case with Unit 1, the bedroom is not expected to give rise to any negative privacy impacts. The secondary living area only has one north-facing window which has the same outlook over the land to the rear as Unit 1, accordingly privacy is not expected to be an issue.
- With regard to shadowing, the detailed shadow analysis (Appendix E to the statement of environmental effects) has demonstrated that the proposed development will not result in an adverse shadowing impact on the windows or private open space areas of the neighbouring residential development at No.5 Cochrane Road. It is noted that the greatest encroachment into the rear boundary setback (2.8m) occurs in respect of Unit 1, which is located on the western side of the site and which does not impact on No.5 Cochrane Road in any way. The 840mm encroachment of Unit 2 into the rear setback area has little effect on the extent of shadows being cast on to neighbouring properties as this section of the building has adopted a 4.04m side boundary setback.

- As discussed in the statement of environmental effects, views across the site from the units at No.5 Cochrane Road are hampered by the low-profile single storey of that development and are limited by various existing obstacles including existing vegetation, boundary fencing, and awnings attached those units. As the extent of views is already restricted, it is considered that the projection of the first floor level of the proposed development beyond the 8m rear setback line will not have any further detrimental impacts.
- The rear elevation of the proposed building, which includes the encroachments into the 8m rear setback, is well-articulated and avoids a visually bulky form (see perspective view below). The development will not contribute to a poor visual outcome when viewed from any of the neighbouring properties.



## 5.0 CONCLUSION

Clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the planning controls contained within the DCP and advises that variations will be considered on a case by case basis, and subject to Council's consideration of a variation statement.

Clause 4.1.2(4) of Chapter B1 of WDCP 2009 imposes an 8m rear boundary setback to the first floor level of development erected in an R2 zone to protect the amenity of the adjoining properties. This submission has demonstrated that the proposed dual occupancy development will not have any detrimental impacts upon the amenity of neighbouring properties as a result of the encroachments into the 8m rear setback area, and therefore satisfies the underpinning objective of that setback requirement. Accordingly, Council is requested to be flexible in the application of the 8m setback requirement under the circumstances of this case, as advocated by subsection 4.15(3A)(b) of the EP&A Act, and permit the proposed variation.

# APPENDIX C

Variation to WDCP 2009

Chapter B1 - Clause 4.3

## 1.0 PLANNING CONTROL TO BE VARIED

Clause 4.3 of Chapter B1 of Wollongong Development Control Plan 2009 (WDCP 2009) imposes certain controls in relation to the setback of buildings to side and rear boundaries, including the following:-

1. *Walls must be setback at least 900mm from any side or rear property boundary and eaves/gutters must be setback at least 450mm from the side and rear property boundaries.*

The garage wall of proposed Unit 2 has been positioned with a setback of 500mm to the south-western boundary of the site.

## 2.0 OBJECTIVES OF THE PLANNING CONTROL

The objectives for the side boundary setback control is stated in clause 4.3.1 as:-

- (a) *To create a consistent pattern of building separation along streets.*
- (b) *To provide adequate setbacks from boundaries to retain privacy levels and minimise overlooking/overshadowing.*
- (c) *To ensure that buildings are appropriately sited having regard to site constraints.*
- (d) *To control overshadowing of adjacent properties and private or shared open space.*
- (e) *To ensure improved visual amenity outcomes for adjoining residences.*

In addition to the above objectives, sub-clause 4.3.2(7) states that side and rear setback controls may only be varied where the following is demonstrated to Council's satisfaction:-

- (a) *The objectives of 4.4.1 are met.*
- (b) *The walls and footings are located wholly on the subject land.*
- (c) *There are no windows facing the adjoining property that enable overlooking.*
- (d) *Walls provide articulation so as to not impact the amenity of adjoining dwellings.*
- (e) *Landscaping is appropriately provided to screen development.*

### 3.0 ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

Subsection 4.15(3A) of the Environmental Planning and Assessment Act, 1979, advocates the flexible application of the provisions set by development control plans, as follows:-

**(3A) Development control plans**

*If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority:*

- (a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards – is not to require more onerous standards with respect to that aspect of the development, and*
- (b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards – is to be flexible in applying those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and*
- (c) may consider those provisions only in connection with the assessment of that development application.*

*In this subsection, **standards** include performance criteria.*

Consistent with subsection 4.15(3A)(b) of the Act, clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the provisions of that DCP, subject to the submission of a variation statement for Council's consideration. This submission has been prepared to facilitate Council's consideration of the proposed variation.

## 4.0 JUSTIFICATION IN SUPPORT OF THE VARIATION

Council's support for the proposed variation, to allow the construction of the dual occupancy with a setback of 500mm to the site's south-western boundary, as proposed, is requested on the following grounds:-

- The side wall of the garage of Unit 2 has an overall length of 6.5m and is 2.74m in height. Much of the garage wall will be screened from view from No.7 Cochrane Road by the existing 1.8m high Colorbond metal fence.
- Notwithstanding that the garage is a non-habitable part of the dwelling, there are no windows within the garage wall facing No.7 Cochrane Road that might otherwise allow for views into the rear yard of that property (even though the height of the Colorbond boundary fence would block views from any such windows).
- The first floor level above the garage has been setback 3.56m from the boundary with No.7 Cochrane Road. This allows for visual separation, articulation of the building's south-western elevation, and reduces shadowing impacts.
- Shadow diagrams prepared for the development proposal demonstrate that the proposed building will not have a detrimental shadowing impact on No.7 Cochrane Road despite the proposed 500mm side boundary setback.
- It is understood that that part of the dwelling house at No.7 Cochrane Road which extends towards the common boundary with the subject site is a storage room and therefore the proposed development is not likely to give rise to any amenity issues.
- The development proposal will be consistent with each of the objectives relating to the side boundary setback planning control. In this regard:-
  - the reduced setback will not be seen from the street and will therefore not disrupt the pattern of building separation along the street.
  - the 500mm setback proposed to the garage wall is sufficient to maintain privacy and adequate solar access to No.7 Cochrane Road.
  - the proposed building has been appropriately sited having regard to the drainage easements and flooding constraints affecting the site.
  - shadow diagrams have demonstrated that adequate solar access will be provided to the rear yard private open space area of No.7 Cochrane Road.
  - the visual amenity of No.7 Cochrane Road will not be upset as the proposed development incorporates articulation of the south-western façade of Unit 2 with increased setbacks to the first floor level, variation in wall lengths, variation in wall finishes, and the use of hipped roof forms.

- The garage wall will be constructed of face brickwork and will have metal fascia and guttering. The use of non-combustible materials within 900mm of the boundary will satisfy the requirements of the Building Code of Australia.

In addition, the provisions of sub-clause 4.3.2(7) have been satisfied in the following manner:-

- The objectives outlined in sub-clause 4.4.1 of Chapter B1 are as follows:
  - (a) To limit the building footprint and ensure adequate provision is made for landscaped areas, deep soil zones, permeability and private open space.*
  - (b) To control site density.*
  - (c) To minimise adverse impacts arising from large dwellings and ancillary structures on the amenity of adjoining and adjacent properties.*

The development proposal is consistent with these objectives as the site coverage of the development is just 37.3% (whereas the maximum allowable site coverage is 50%); the density of the development is acceptable in both the number of dwellings proposed and FSR (which at 0.476:1 is less than the maximum allowable FSR of 0.5:1); and, it has been demonstrated throughout the statement of environmental effects and supporting documentation that the proposal will not result in any adverse amenity impacts for adjoining and adjacent properties.

- The footings of the garage will be setback from the side boundary and positioned wholly within the subject site.
- There are no windows located within the garage wall facing the neighbouring property at No.7 Cochrane Road.
- The side wall of the proposed garage is only 6.5m in length and 2.74m high. Much of the wall is screened from the rear yard of No.7 Cochrane Road by the existing 1.8m high Colorbond metal boundary fence. The first floor level above the garage is setback 3.56m from the boundary and provides adequate articulation to this elevation of the building.
- Provision has been made for landscaping either end of the garage wall.

## **5.0 CONCLUSION**

Clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the planning controls contained within the DCP and advises that variations will be considered on a case by case basis, and subject to Council's consideration of a variation statement.

Given the absence of any detrimental shadowing, privacy or visual impacts on the neighbouring dwelling house, the proposed reduced (500mm) setback to the south-western side boundary is considered to be reasonable. This submission has demonstrated that the proposal is consistent with the objectives for building setbacks and will satisfy the provisions of sub-clause 4.3.2(7). Accordingly, the proposed variation is submitted for Council's consideration and approval.



# APPENDIX D

Variation to WDCP 2009

Chapter B1 - Clause 4.23

## 1.0 PLANNING CONTROL TO BE VARIED

Clause 4.23 of Chapter B1 of Wollongong Development Control Plan 2009 (WDCP 2009) establishes deep soil zone landscaping requirements for dual occupancy developments, and includes the following provision relating to the area of deep soil zone required:-

1. *A minimum of half of the landscaped area must be provided as a deep soil zone...*

In accordance with the provisions of clause 4.5 of Chapter B1 of WDCP 2009 The subject site is required to have a minimum landscaped area of 115.8m<sup>2</sup>, meaning the deep soil zone must be at least 57.9m<sup>2</sup>. The development proposal provides a 40.7m<sup>2</sup> deep soil zone (or 35.1% of the required landscaped area).

## 2.0 OBJECTIVES OF THE PLANNING CONTROL

The objectives for the deep soil zone planning control is stated in clause 4.23.1 as:-

- (a) *To protect existing mature trees on a site and encourage the planting of additional significant vegetation.*
- (b) *To encourage the linkage of adjacent deep soil zones on development sites, to provide habitat for native indigenous plants and birdlife.*
- (c) *To allow for increased water infiltration.*
- (d) *To contribute to biodiversity.*

### 3.0 ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

Subsection 4.15(3A) of the Environmental Planning and Assessment Act, 1979, advocates the flexible application of the provisions set by development control plans, as follows:-

**(3A) Development control plans**

*If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority:*

- (a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards – is not to require more onerous standards with respect to that aspect of the development, and*
- (b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards – is to be flexible in applying those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and*
- (c) may consider those provisions only in connection with the assessment of that development application.*

*In this subsection, **standards** include performance criteria.*

Consistent with subsection 4.15(3A) of the Act, clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the provisions of that DCP, subject to the submission of a variation statement for Council's consideration. This submission has been prepared to facilitate Council's consideration of the proposed variation.

## 4.0 JUSTIFICATION IN SUPPORT OF THE VARIATION

Council's support for the proposed variation, to allow the deep soil zone to be less than 50% of the landscaped area, is requested on the following grounds:-

- The total landscaped area provided (in accordance with Council's definition of "*landscaped area*") is 121m<sup>2</sup>, which exceeds the minimum 115.8m<sup>2</sup> required. In addition, there are other areas of landscaping (eg to the edges of the driveway) which will be planted with shrubs and groundcovers to enhance the development, but which do not qualify as "*landscaped area*" as they are less than 1.5m wide. These areas do assist in achieving the aesthetic objectives of landscaping.
- There is an existing 1.3m wide drainage easement running across the entire length of the site's rear boundary. This area must be maintained as a grassed swale to allow for overland flows and cannot be intensively planted with trees and shrubs. If this area could be planted, then the development would have in excess of 57.9m<sup>2</sup> of deep soil zone as the 1.3m wide easement and adjoining areas between the swale and the building would then form part of the deep soil zone.
- The development proposal will achieve consistency with the objectives for deep soil zones, despite failing to meet the minimum requirement as:-
  - the landscape plan makes provision for the planting of trees and shrubs throughout the site, including two (2) Bangalow Palms (eventually up to 8m in height);
  - the deep soil zone has been positioned on the subject site in a location which provides for a linkage with the substantial deep soil zone on the neighbouring property to the north-east;
  - at 37.3% the site coverage of the development is significantly less than the maximum allowable 50%, which is indicative that the development provides ample pervious area within the site to encourage water infiltration; and
  - the plant species chosen include Callistemon and Banksia species which will attract native birdlife, thereby contributing to the local biodiversity.

## **5.0 CONCLUSION**

Clause 8 of Chapter A1 of WDCP 2009 enables Council to consider variations to the planning controls contained within the DCP and advises that variations will be considered on a case by case basis, and subject to Council's consideration of a variation statement.

This submission has demonstrated that if it were not for the limitation imposed on landscape planting by the drainage swale, a compliant deep soil zone could be easily achieved on the site. It has also been demonstrated that, despite being of less area than required, the proposed deep soil zone will achieve the objectives required of deep soil zones. On this basis, Council is requested to exercise flexibility in the strict application of the planning control as encouraged by s4.15(3A)(b) of the Act.

SUMMARY EXPERT OPINION  
**INDEPENDENT VERIFICATION:  
OVERSHADOWING ANALYSIS**

**APPLICATION DA-2017/980**  
**7A Cochrane St Thirroul**

**16 March 2018**

Signed,



.....  
Steve King

**1.0 PRELIMINARIES**

1.1 I supply the following independent expert opinion. The scope of my analysis and opinion is limited to an evaluation of the projected overshadowing impact of the proposed development at 7A Cochrane Road, THIRROUL.

1.2 I refer to the materials listed in *2.0 Documents* and to the discussion in *3.0 Analysis* and *4.0 Discussion* below.

**1.0 CREDENTIALS**

I have been teaching architectural design, thermal comfort and building services at the Universities of Sydney, Canberra and New South Wales since 1971. From 1992, I was a Research Project Leader in SOLARCH, the National Solar Architecture Research Unit at the University of NSW. Until its disestablishment in November 2006, I was the Associate Director, Centre for Sustainable Built Environments, UNSW.

My research and consultancy includes work in solar access, energy simulation and assessment for houses and multi-dwelling developments, building assessments under the NSW SEDA Energy Smart Buildings program, appropriate design and alternative technologies for museums and other cultural institutions, and asthma and domestic building design. I am the principal author of *SITE PLANNING IN AUSTRALIA: Strategies for energy efficient residential planning*, funded by the then Department of Primary Industry and Energy, and published by AGPS, and of the *RAIA Environment Design Guides* on the same topic.

SOLARCH/UNISEARCH were the contractors to SEDA NSW for the setting up and administration of the House Energy Rating Management Body (HMB), which accredits assessors under the Nationwide House Energy Rating Scheme (NatHERS), NSW. I was the technical supervisor of the HMB, with a broad overview of the dwelling thermal performance assessments carried out in NSW over five years. I have been a member of the NSW BRAC Energy Subcommittee, and also a member of the AGO Technical Advisory Committee on the implementation of AccuRate, the new mandated software tool under NatHERS. I

**STEVE KING**

CONSULTANT ARCHITECT

11 Clovelly Road Randwick NSW 2031 Australia

PHONE 0414385485

undertook the Expert Review for the NSW Department of Planning, of the comparison of NatHERS and DIY methods of compliance for Thermal Comfort under BASIX, and was subsequently a member of a three person expert panel advising on the implementation of AccuRate in BASIX.

Through UNISEARCH, NEERG Seminars and Linarch Design, I conduct training in solar access and overshadowing assessment for Local Councils. I have delivered professional development courses on topics relating to energy efficient design both in Australia and internationally. I contributed the key papers in the general area of assessment of ventilation and solar access performance and compliance for NEERG Seminars, cited by Commissioners of the LEC. Senior Commissioner Moore cited my assistance in reframing of the Planning Principle related to solar access (formerly known as the Parsonage Principle) in *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082.

I practiced as a Registered Architect from 1971-2014, and now maintain a specialist consultancy practice advising on sustainability and amenity issues, particularly for multi-residential developments. I regularly assist the Land and Environment Court as an expert witness in related matters.

## **2.0 DOCUMENTS**

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3.1 I base my report on the following documents issued to me by the Applicant.

(a) Amended DA architectural plans (undated) issue dated 13 March 2018:

- 00172017 - STRIPCEVIC DA-Floor Plan - Site Plan.dwg
- 00172017 - STRIPCEVIC DA-Floor Plan - First Floor Plan.dwg
- 00172017 - STRIPCEVIC DA-Floor Plan - Ground Floor Plan.dwg

(b) Survey by Helensburgh Surveying Services (undated).

(c) Documents from Council:

- DA Objection - Mr J and Mrs J Dryden (1st submission).pdf
- DA Objection - Mr J and Mrs J Dryden (2nd submission).pdf
- DA Objection - Jean Air.pdf
- Letter from Plannex Environmental Planning dated 4 October 2017 DA 2017 980 - Letter - 041017.pdf

d) Digital copy of 3D Model prepared in Autodesk Revit software by JH Building Designs:

- 00172017 - STRIPCEVIC DA - 3D View.dwg.

## **3.0 ANALYSIS**

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### **3.1 Introduction**

3.1.1 I take as the scope of my expert opinion to independently confirm the overshadowing impact of the proposal on neighbouring properties at 5 Cochrane Road Thirroul.

I note that interpretation of conventional plan and elevation shadow diagrams previously submitted with the development application is generally inadequate to conclusively quantify such overshadowing impact. Therefore, I present the analysis outcome in the form of 3D projections which clarify the information.

I do this by undertaking my own independent analysis using a 3D digital model of the proposed development.

### 3.2 3D digital model

3.2.1 Analysis of overshadowing impact on neighbours has been carried out by use of a 3D digital model.

3.2.2 I have been supplied by the architect with a copy of the 3D digital model exported from the CAD application. I have been advised that the model has been amended to incorporate detailed survey information relating to the RLs of the fence line and eaves of No.5.

I have imported the supplied model file into Trimble SketchUp v2018 for my analysis. I have independently geo-located the model and verified the direction of North, by reference to the cadastral grid north.

3.2.3 I have summarily checked key topographical and building dimensions that might otherwise give rise to any errors, by reference to figured RL dimensions.

I corrected the shape of the roof of number 5 Cochrane Road, maintaining the surveyed RL of the relevant eaves. Having established the accuracy of the key points, I rely on the general accuracy of the modelling.

### 3.3 Independent analysis: methodology

3.3.1 The SketchUp software prepares the shadow projections by reference to accurate solar geometry. Because of the complexity of demonstrating the quantification of solar access to glazing and private open space of various orientations, my detailed analysis is performed primarily by using projections known as 'View from the Sun'.

A view from the sun shows all sunlit surfaces at a given time and date. It therefore allows a very precise count of sunlight hours on any glazing or horizontal surface, with little or no requirement for secondary calculations or interpolation. The technique is illustrated in Figure 1. *Note that the views from the sun do not show any shadows. Shadows are those areas exactly coinciding with objects in the foreground.*

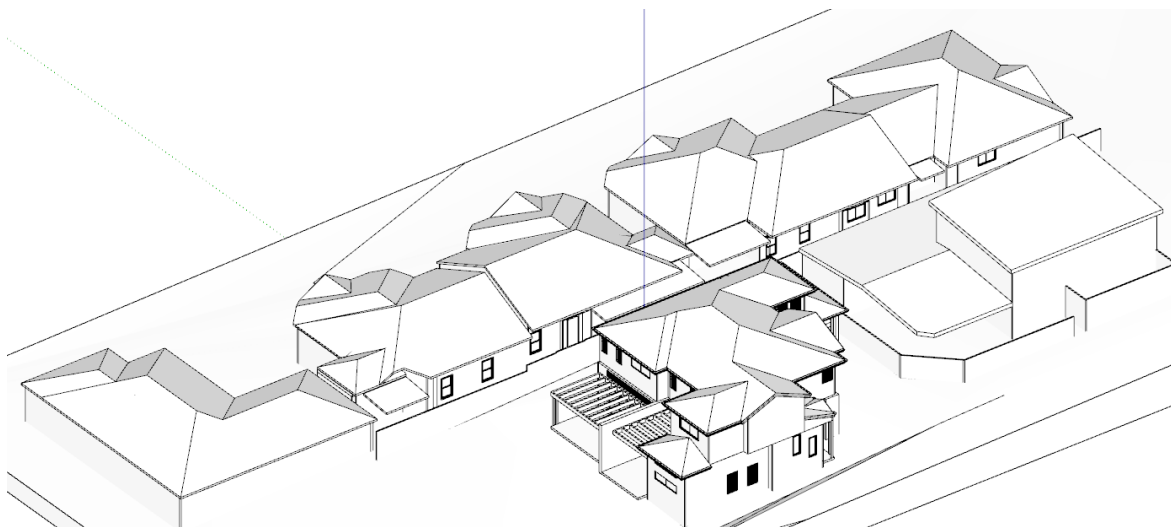


Figure 1: View from the sun 12 noon June 21

### 3.4 Projected solar access for potentially affected dwellings

#### 3.4.1 Affected dwellings

The potentially impacted dwellings are single storey brick townhouses at 5 Cochrane Road, bordering the south boundary of the subject site.

#### 3.4.2 Retained solar access

My complete tabulation of the views from the sun on a half-hourly basis is included as Appendix A.

In interpreting the views from the sun, I observe the condition illustrated in Figure 2:



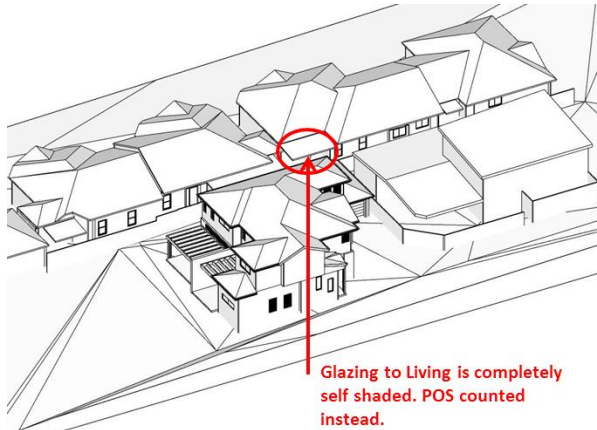


Figure 2: Self shaded glazing, with sun access to covered POS

***Summary inspection of the views from the sun lets me conclude that all potentially impacted glazing at No.5 retains complying amounts of solar access at least from 9:30 AM till 12:30 PM.***

With the exception of the covered private open space highlighted in Figure 2 all other outdoor space at ground level is completely self shaded in winter by the boundary fence. The proposed design appears to have been carefully configured to cast approximately the same shadow as the fence.

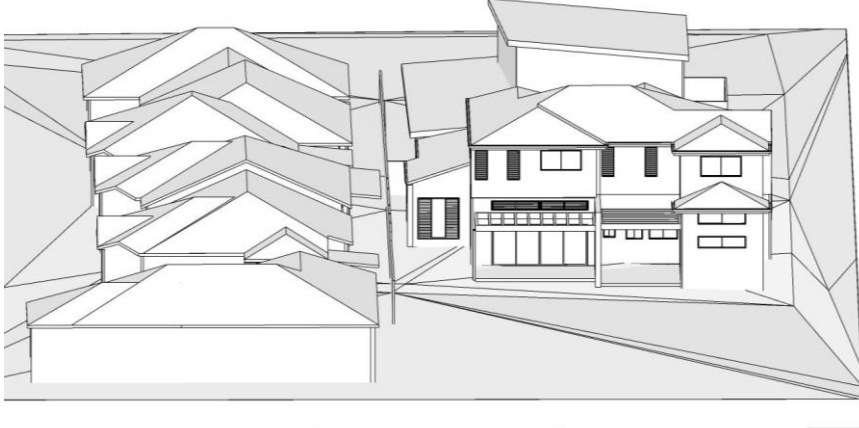
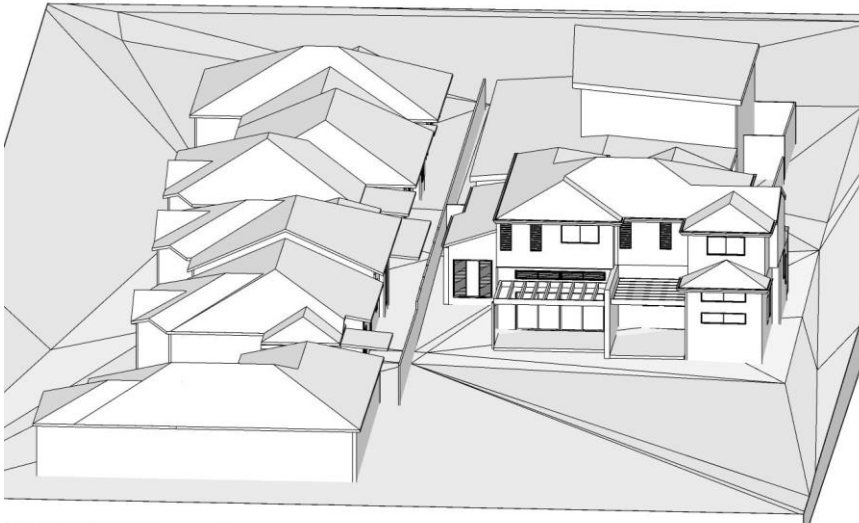
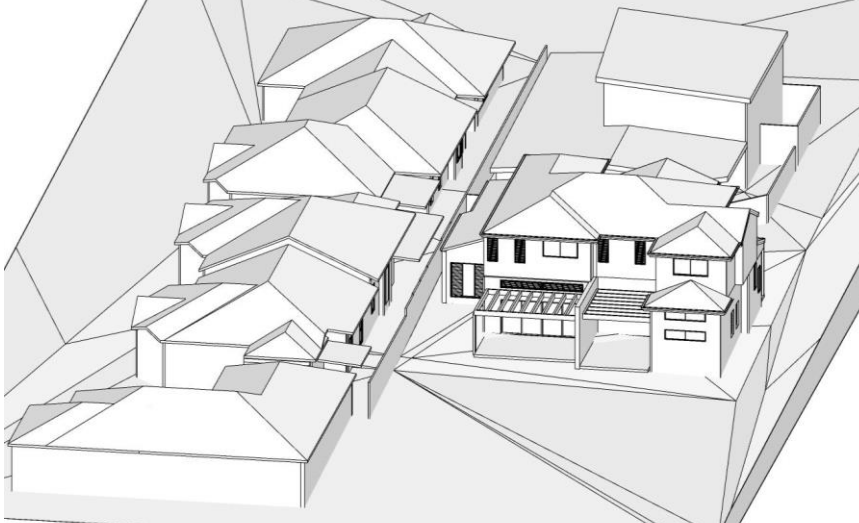
#### **4.0 SUMMARY**

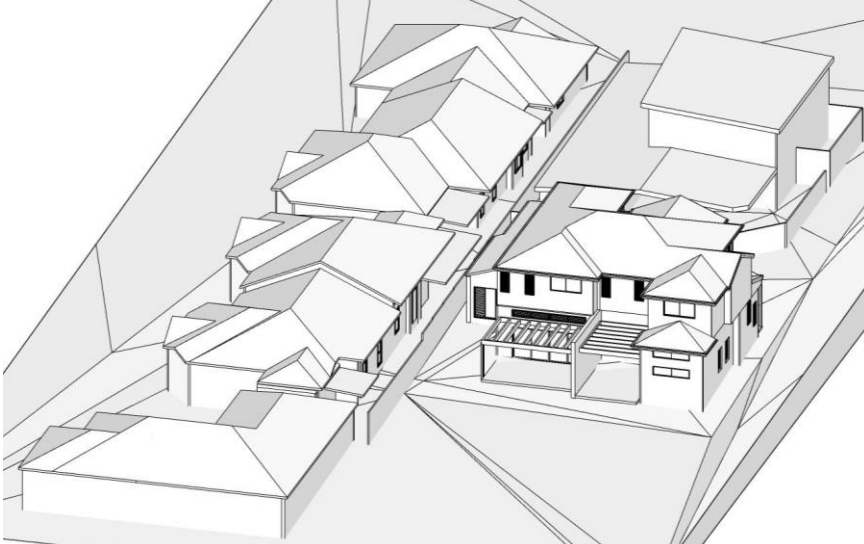
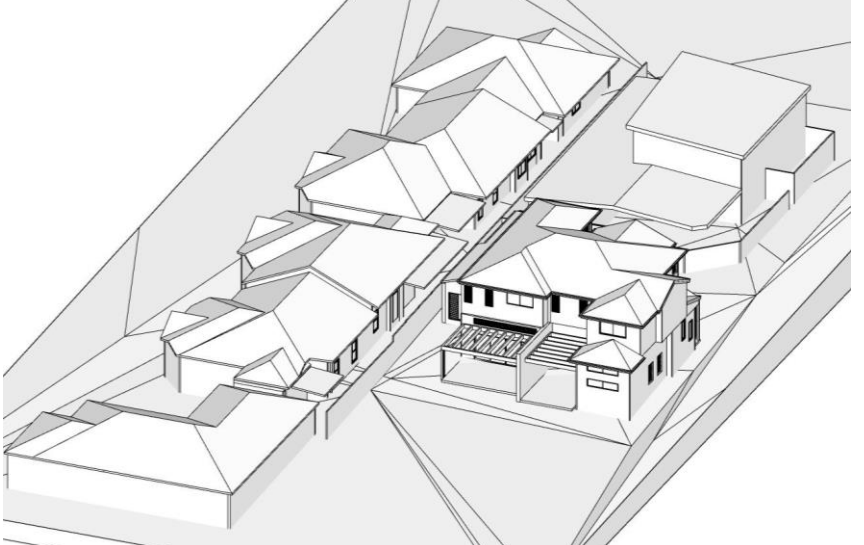
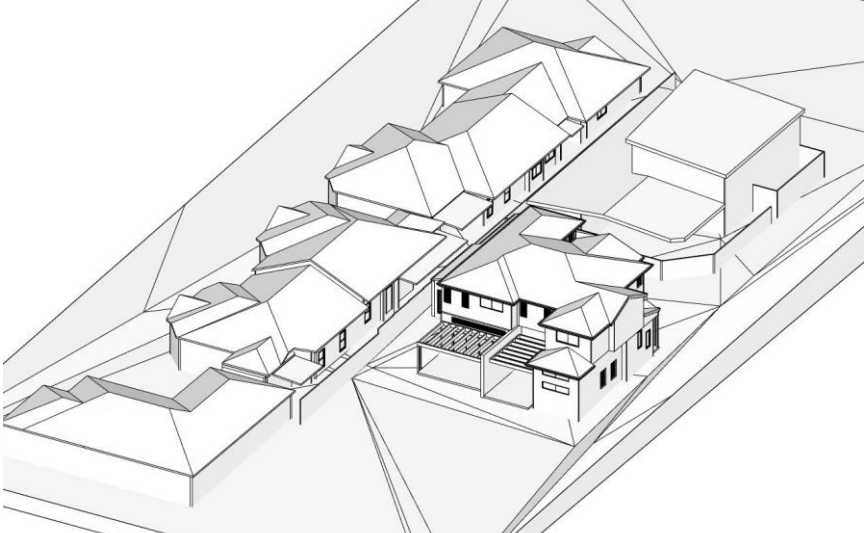
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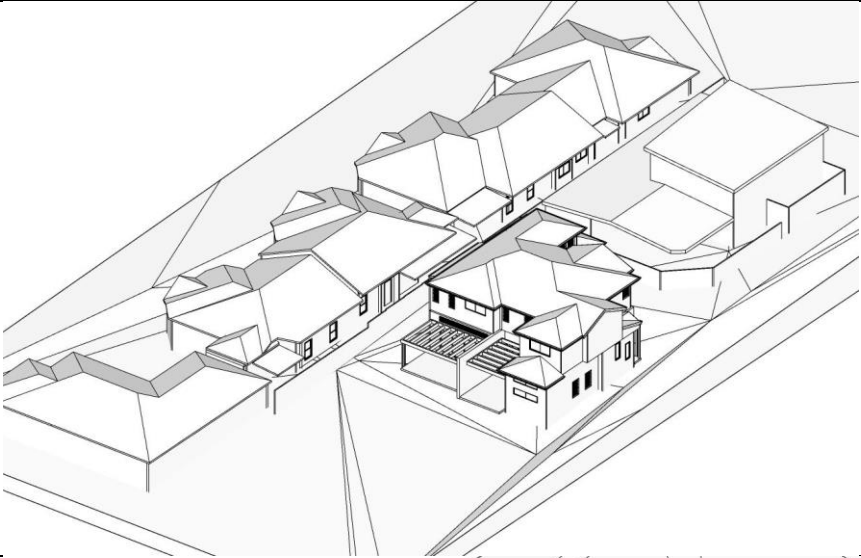
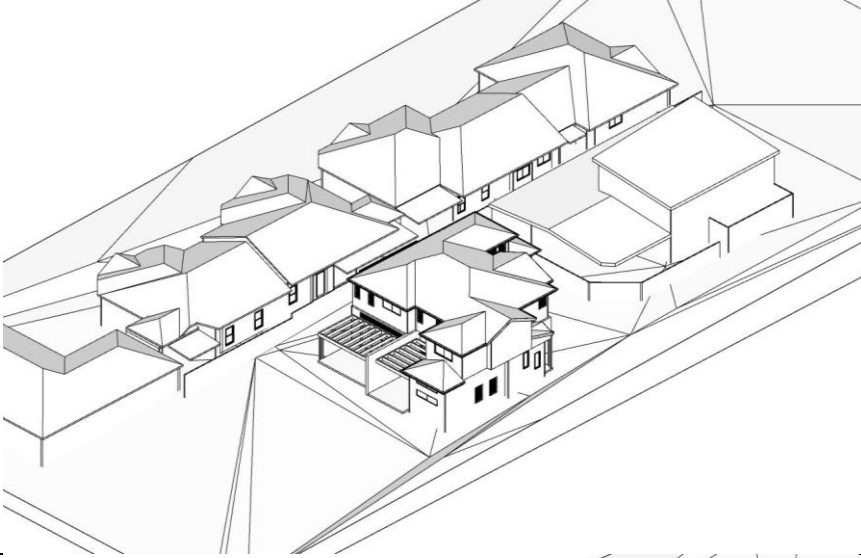
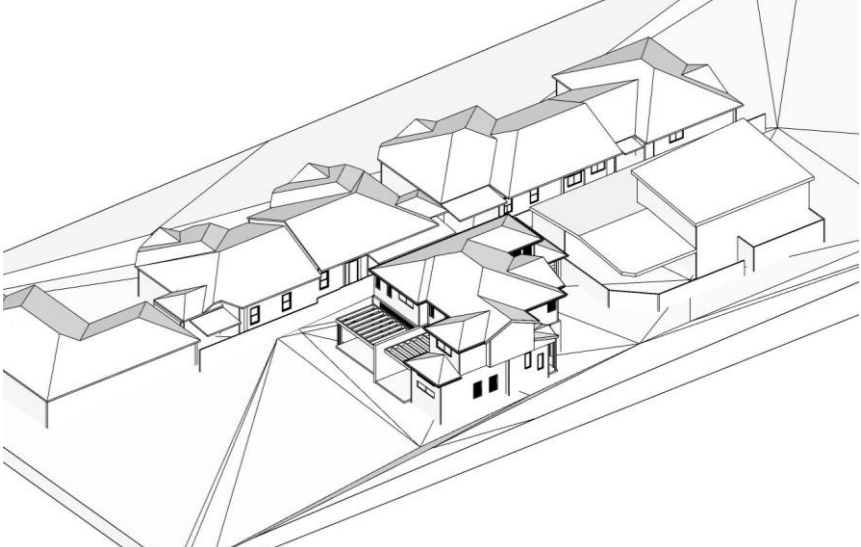
***Analysis of the potential overshadowing impact on the neighbours appears to clarify that the proposed design retains a minimum of 3 hours of direct sun to all potentially affected glazing – and therefore the proposal meets the relevant DCP control for overshadowing.***

## A.0 APPENDIX: VIEWS FROM THE SUN

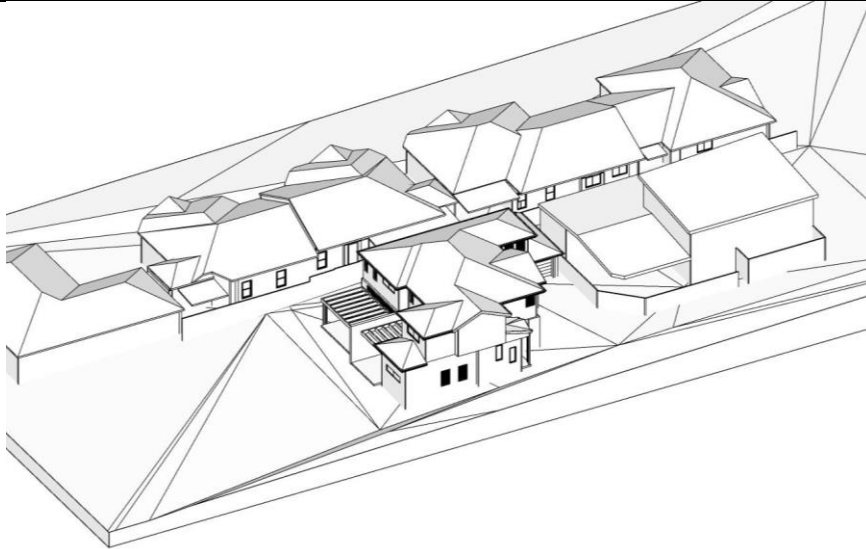
The attached table reproduces in reduced form for reference the half-hourly views of solar access projections for June 21. The projections were prepared by the architects, and independently verified by me by comparison to the digital model.

8.00		South facade of No. 5 not affected by proposed design.
8.30		South facade of No. 5 not affected by proposed design. Windows are self shaded by their own eaves.
9.00		South facade of No. 5 still not affected by proposed design. Windows beginning to receive sun at almost usable angle.

9.30		<p>South facade of No. 5 still not affected by proposed design. Windows now can be counted as receiving complying sun.</p>
10.00		<p>South facade of No. 5 still not affected by proposed design.</p>
10.30		<p>At this time, shadow from the eaves of the proposed design just about to align with top of existing fence.</p>

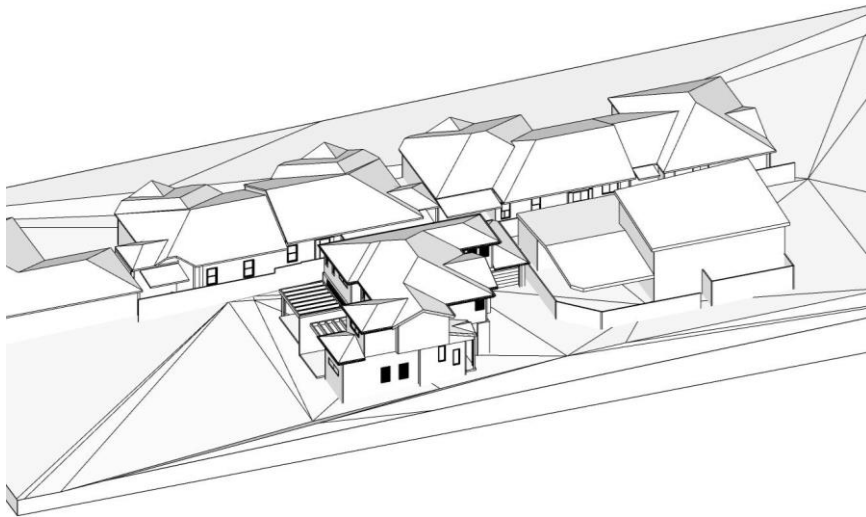
11.00		
11.30		Effectively the earliest time at which there is any additional shadow on the wall of No.5 due to the subject proposal.
12.00		

12.30

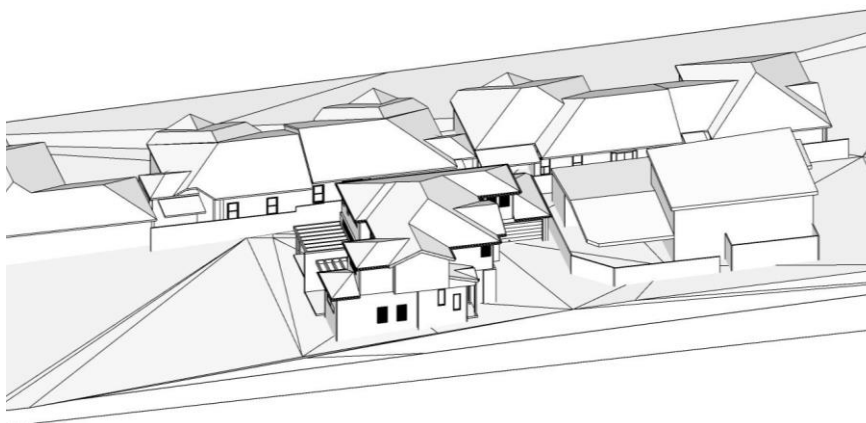


At 12:30 PM, some windows have reduced area of the glazing in the sun. But all of them retain sufficient sunlit area to be counted as complying.

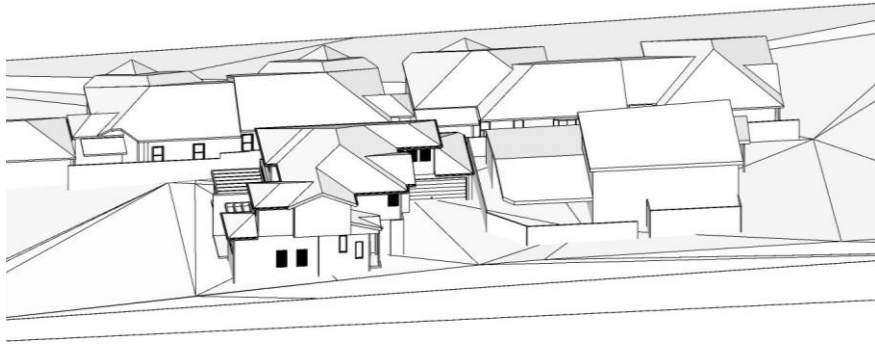
1.00



1.30



2.00



2.30



3.00



3.30



4.00



Your

## Attachment 4b: Excerpt from SEE submitted on solar access

### 5.3.1 Solar Access

Shadows cast by the proposed development will impact upon the neighbouring dwelling house to the south-west and the neighbouring residential unit development to the south-east at various times throughout the day.

A detailed shadowing analysis of the proposal has been undertaken by Steve King, an expert in the field of solar access and design. A copy of the assessment report is attached at Appendix E. The detailed analysis has been informed by detailed survey information of No.5 Cochrane Road including the location and heights of windows and the height of the existing boundary dividing fence. The analysis has been undertaken using computer software which simulates a 'view from the sun' aspect, whereby any part of the adjacent development which is not obscured by foreground development is in sunlight.

The analysis has concluded that the windows of the neighbouring dwellings (particularly Units 2 and 3) at No.5 Cochrane Road will receive adequate solar access between at least 9.30am and 12.30pm on 21<sup>st</sup> June. Furthermore, the analysis notes that the existing boundary fence shades the private open space areas of the dwellings at No.5 Cochrane Road, with the exception that Unit 2 has a roof which provides a degree of self-shading. Shadows from the proposed development will not begin to impact upon the roofed covering of Unit 2's courtyard until after 1.30pm on June 21<sup>st</sup>.

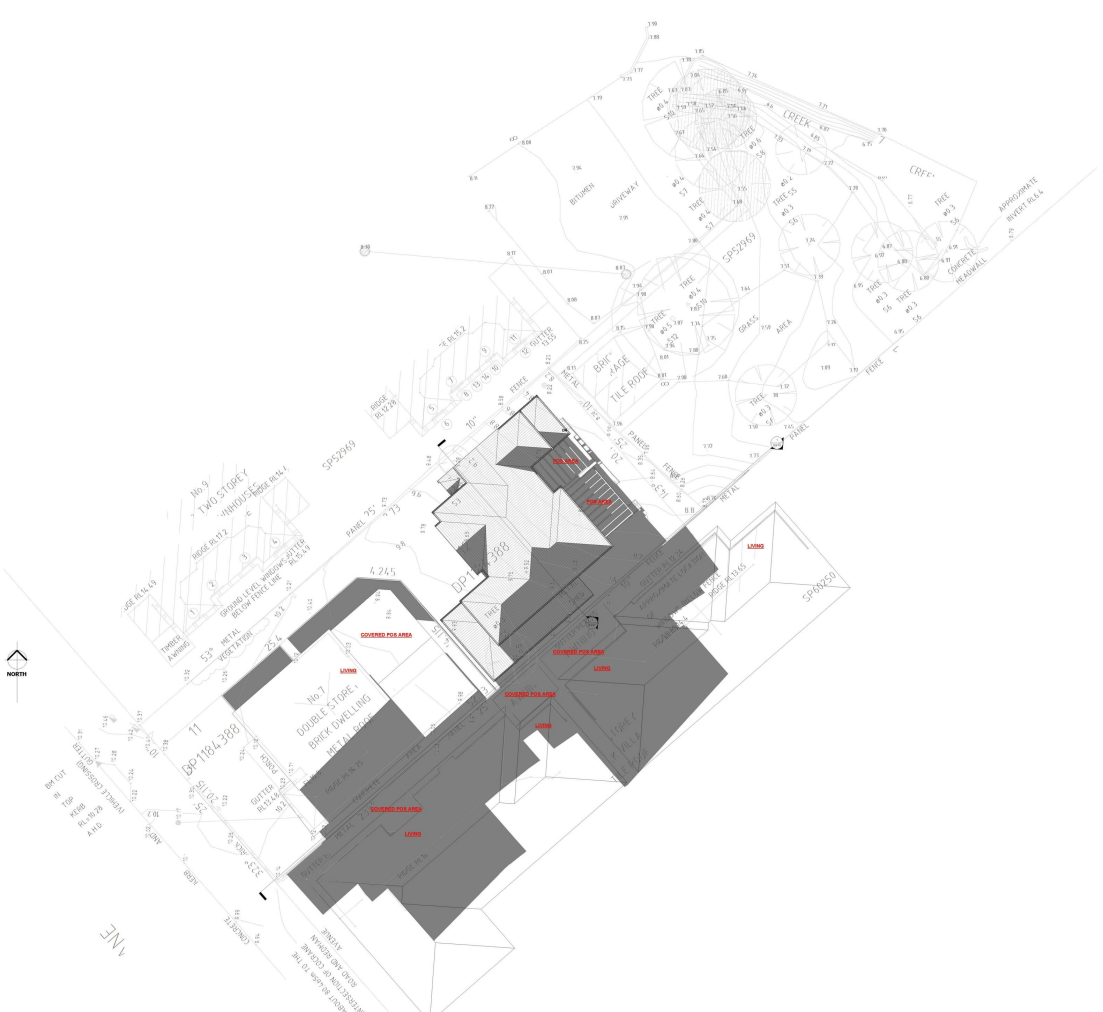
The overshadowing analysis concludes that the *"analysis of the potential overshadowing impact on the neighbours appears to clarify that the proposed design retains a minimum of 3 hours of direct sun to all potentially affected glazing – and therefore the proposal meets the relevant DCP control for overshadowing"*.



Attachment 5 - Shadow diagrams from DA-2017/980



9am SHADOW



3pm SHADOW



12 noon SHADOW

AMENDMENTS:			
No:	DATE:	COMMENTS:	DWN:

GENERAL NOTES:

- Dimensions in preference to scale
- All ground lines are approximate
- Window & Door sizes as shown - Nominal
- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities
- Wind Rating refer to framing manufacturer's specification

DRAWING: **Shadows - Winter Solstice**

PROJECT: **PROPOSED DUAL OCCUPANCY & STRATA SUBDIVISION**

SUBJECT: **DEVELOPMENT APPLICATION**

CLIENT: **L. Stipcevic**

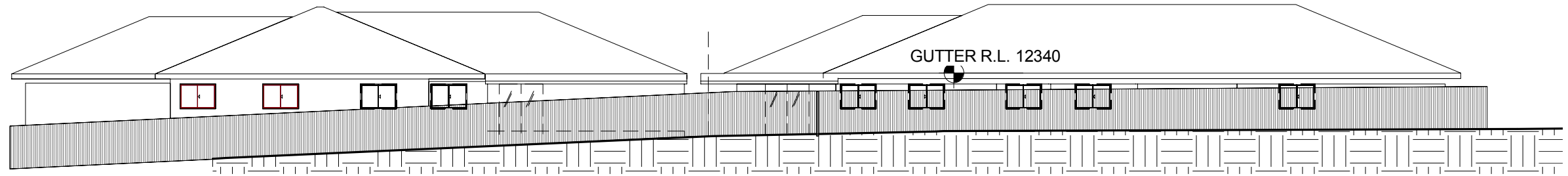
SITE: **7A Cochrane Rd Thirroul**

JOB No.: **00172017**

DATE: **12.07.17**

DRAWN: **J.HARB**

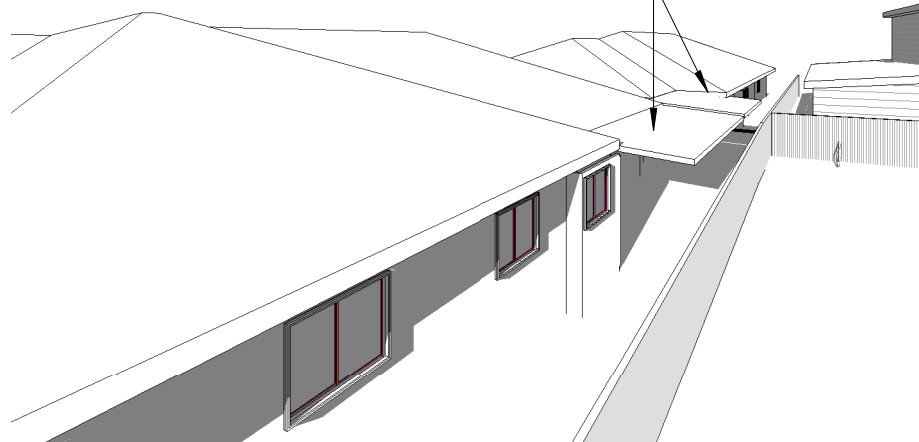
SCALE:



Adjacent dwelling(s)

1 Elevation  
1 : 200

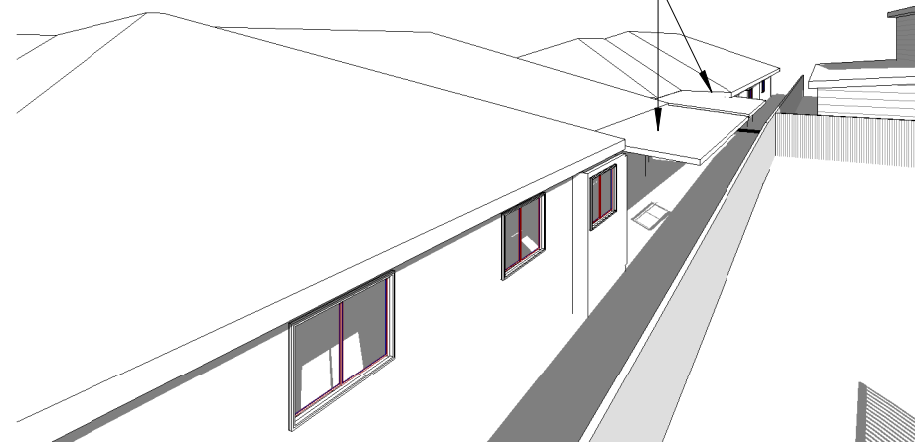
ADJACENT COVERED  
POS AREAS



Existing Shadow 9am

2

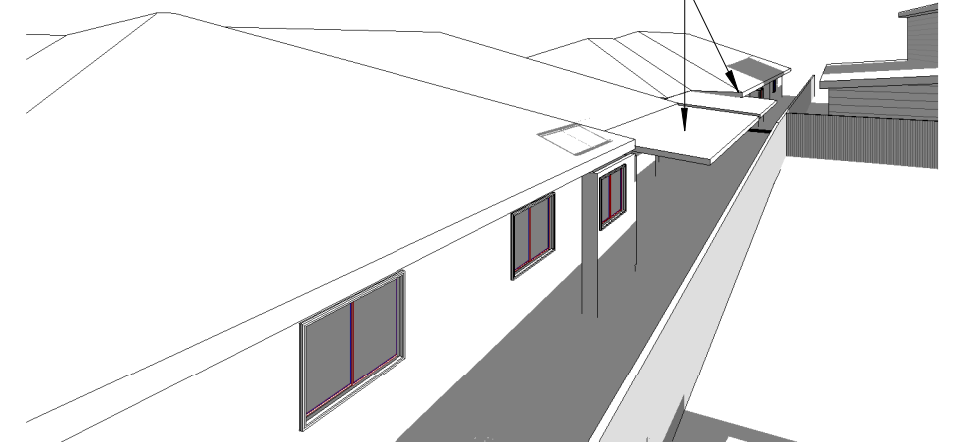
ADJACENT COVERED  
POS AREAS



Existing Shadow 12noon

3

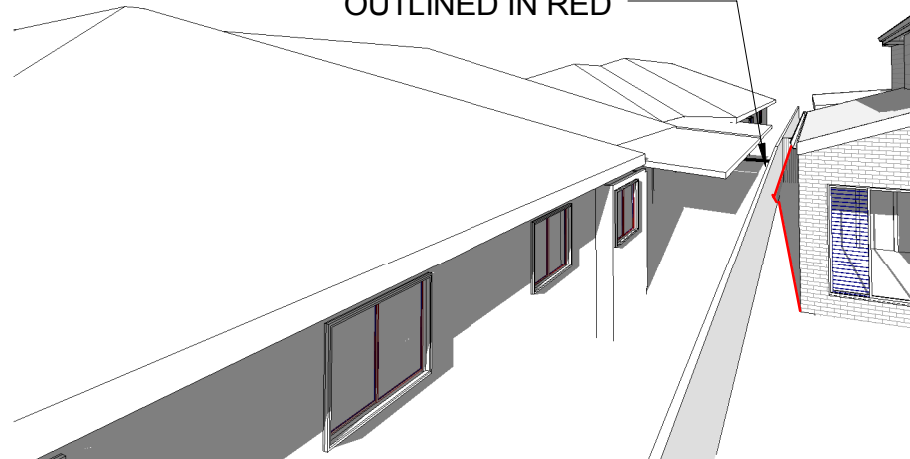
ADJACENT COVERED  
POS AREAS



Existing Shadow 3pm

4

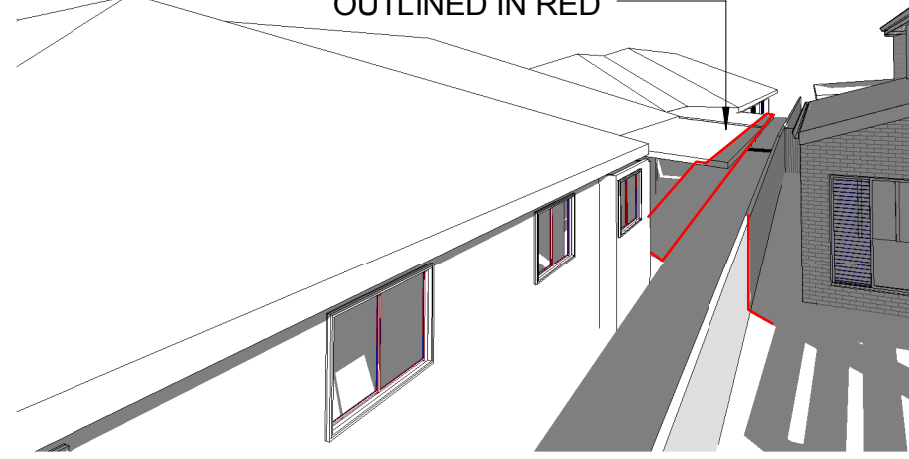
ADDITIONAL SHADOW  
OUTLINED IN RED



Proposed shadow 9am

5

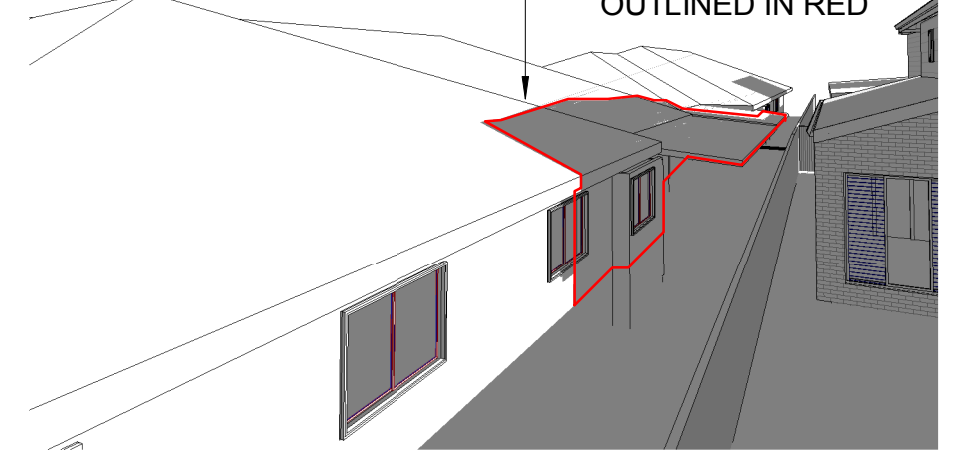
ADDITIONAL SHADOW  
OUTLINED IN RED



Proposed shadow 12noon

6

ADDITIONAL SHADOW  
OUTLINED IN RED



Proposed shadow 3pm

7

AMENDMENTS:				DWN:
No:	DATE:	COMMENTS:		

GENERAL NOTES:

- Dimensions in preference to scale
- All ground lines are approximate
- Window & Door sizes as shown - Nominal
- All work to be carried out in accordance with Local Council Codes, the B.C.A., Australian Standards and any relevant authorities
- Wind Rating refer to framing manufacturer's specification

DRAWING: **Elevational Shadows**

PROJECT: **PROPOSED DUAL OCCUPANCY & STRATA SUBDIVISION**

SUBJECT: **DEVELOPMENT APPLICATION**

CLIENT: **L. Stipcevic**

SITE: **7A Cochrane Rd Thirroul**

JOB No.: **00172017**

DATE: **12.07.17**

DRAWN: **J.HARB**

SCALE: **1 : 200**

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PAGE No.: **SH-10**

## **Attachment 6: Reasons for refusal**

1. Pursuant to the provisions of Section 4.15 (1)(a)(iii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposal fails to demonstrate consistency with the provisions of the Wollongong Development Control Plan 2009:
  - Chapter B1: Residential Development;
  - Chapter D1: Character Statements.
4. Pursuant to the provisions of Section 4.15 (1)(b) of the Environmental Planning and Assessment Act, 1979, it is considered that the proposal fails to demonstrate that the likely impacts of the development will not be adverse.
5. Pursuant to the provisions of Section 4.15 (1)(c) of the Environmental Planning and Assessment Act, 1979, it is considered that the proposal fails to demonstrate that the site is suitable for the development
6. Pursuant to the provisions of Section 4.15 (1)(d)&(e) of the Environmental Planning and Assessment Act, 1979, it is considered that having regard for the relevance of submissions received and in the circumstances of the case, approval of the development would set an undesirable precedent for similar inappropriate development and is therefore, not in the public interest.