



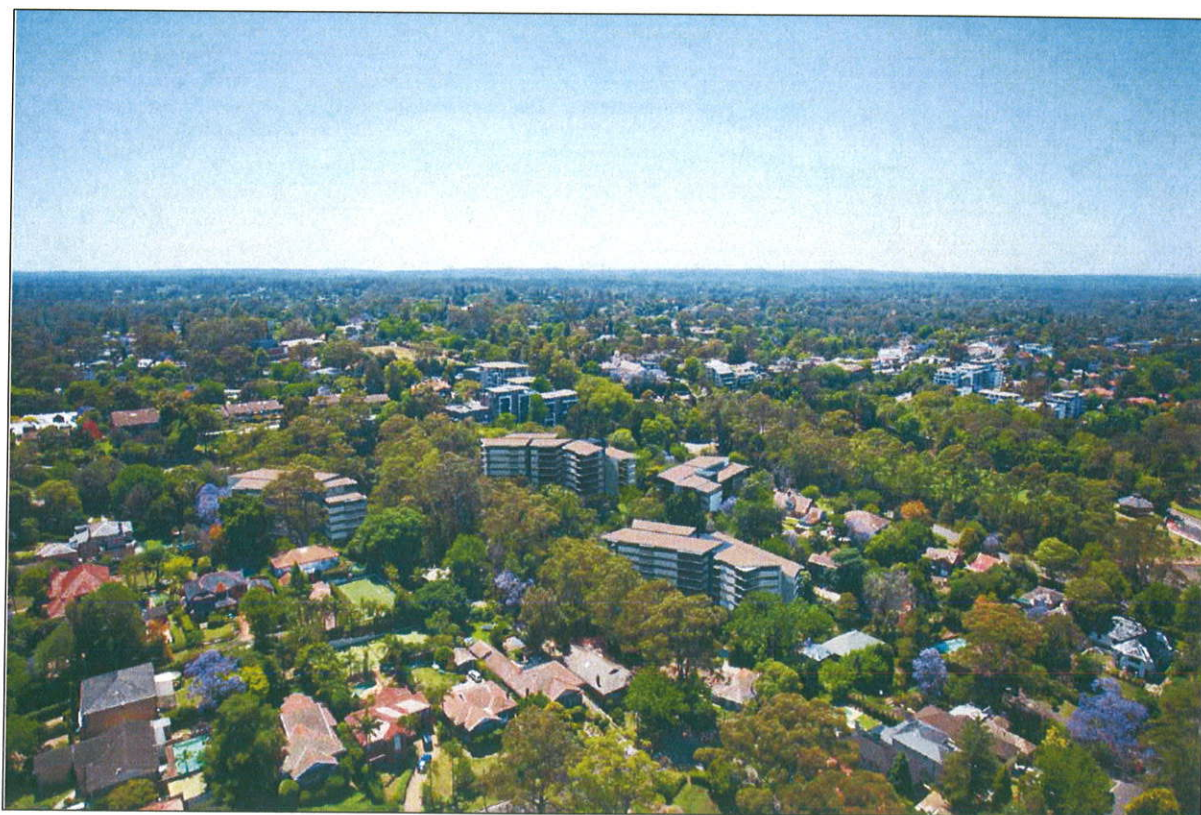
**Planning &  
Infrastructure**

***MAJOR PROJECT ASSESSMENT:***

***Residential Development***

***1, 1A and 5 Avon Road,  
4 and 8 Beechworth Road, Pymble***

***MP 08\_0207 and MP 10\_0219***



Director-General's  
Environmental Assessment Report  
Section 75I of the  
*Environmental Planning and Assessment Act 1979*

June 2013

## Abbreviations

|                  |  |
|------------------|--|
| CIV              | Capital Investment Value   |
| Department       | Department of Planning & Infrastructure  |
| DGRs             | Director-General's Requirements  |
| Director-General | Director-General of the Department of Planning & Infrastructure  |
| EA               | Environmental Assessment   |
| EP&A Act         | <i>Environmental Planning and Assessment Act 1979</i>  |
| EP&A Regulation  | Environmental Planning and Assessment Regulation 2000  |
| EPI              | Environmental Planning Instrument  |
| KPSO             | Ku-ring-gai Planning Scheme Ordinance  |
| MD SEPP          | State Environmental Planning Policy (Major Development) 2005   |
| Minister         | Minister for Planning & Infrastructure   |
| PAC              | Planning Assessment Commission   |
| Part 3A          | Part 3A of the <i>Environmental Planning and Assessment Act 1979</i>                                   |
| PEA              | Preliminary Environmental Assessment   |
| PPR              | Preferred Project Report   |
| Proponent        | Brett Stephen Lord and Marcus William Ayres as Joint and Several<br>Receivers and Managers of the Site |
| RtS              | Response to Submissions  |

Cover Photograph: Photomontage aerial view of the proposal viewed from the south  
(Source: Proponent's PPR)

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## EXECUTIVE SUMMARY

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This is an assessment report prepared in respect of a Concept Plan Application and Stage 1 Project Application seeking approval for a multi-unit residential development at 1, 1A and 5 Avon Road and 4 and 8 Beechworth Road at Pymble. The site is located in the Ku-ring-gai Local Government Area.

The site is zoned part R2 Low Density Residential, part R3 Medium Density Residential and part E4 Environmental Living under Ku-ring-gai Local Environmental Plan (Local Centres) 2012. The proposed multi-unit residential development is not permissible under the current zoning, however the submission of a Concept Plan allows the Minister to approve the development based on a full merit assessment of the application.

The Concept Plan (as exhibited) sought approval for a residential development in 5 stages comprising:

- 5 residential flat building envelopes accommodating 355 apartments with building heights ranging between 2 and 11 storeys;
- an overall FSR of 1.38:1; and
- approximately 500 on-site parking spaces.

The Project Application for Stage 1 sought approval for the construction of a 4 to 6 storey residential flat building over basement parking, comprising 55 apartments.

The Concept Plan and Stage 1 Project Application are transitional Part 3A projects as Director-General's Requirements (DGRs) were issued for the project prior to 1 October 2011. Part 3A of the EP&A Act, as in force immediately before its repeal on 1 October 2011, and as modified by Schedule 6A to the Act, continues to apply to these projects.

The Environmental Assessment (EA) was exhibited for a period of 59 days between 15 December 2010 and 11 February 2011. The Department received 321 public submissions, all of which objected to the development. In addition, the Department received 8 submissions from public authorities.

The Department identified a range of issues with the proposal, including building height and layout, density, environmental constraints, residential amenity, traffic generation and on-site parking. The Proponent was advised that a Preferred Project Report (PPR) was required to address the key issues.

During the assessment period the original Proponent was placed in receivership. In October 2012 the Department was advised that the receivers and managers of the site would assume the role of the Proponent.

The Department met with the new Proponent (Brett Stephen Lord and Marcus William Ayres as Joint and Several Receivers and Managers of the Site) to clearly communicate its concerns and highlight the key issues associated with the proposal.

On 30 November 2012, a Preferred Project Report (PPR) was submitted which incorporated significant changes to the Concept Plan including:

- 36% reduction in GFA involving the deletion of one building (Building 2) and a reduction in the size and bulk of the remaining four buildings;
- 32% reduction in FSR from 1.38:1 to 0.94:1;
- 23% reduction in the dwelling yield (from 355 to 273);
- 30% increase in the amount of landscaped area;
- 18% increase in the amount of deep soil area (from 50% to 68%);
- 130% increase in the area associated with the conservation and enhancement of the Blue Gum High Forest (from 3,600m<sup>2</sup> to 8,430m<sup>2</sup>); and
- 25% reduction in on-site parking.

The Stage 1 proposal was also revised as part of the PPR, with adjustments to the building footprint and increases in side setbacks as well as reductions in height, dwelling yield and associated basement parking provision.

The PPR was exhibited for 37 days from 23 January to 1 March 2013 and the Department received 506 public submissions, all of which objected to the proposal. A similar range of issues was raised in relation to traffic and road capacity, parking, built form (particularly height) and density. A total of 10 submissions were received from public authorities.

Council provided a detailed submission in response to the PPR which commends some aspects of the proposal, in particular the protection and enhancement of the Blue Gum High Forest, rehabilitation of the watercourse, the provision of public access through the site and the use of the natural setting. However, it argues that these benefits are outweighed by adverse impacts on:

- local traffic;
- adjoining sites and streetscapes;
- local heritage values; and
- poor amenity for future residents.

The Department requested the preparation of a revised PPR, including a more detailed analysis of the relationship of the proposal on adjoining properties, specifically relating to impacts on the amenity of those properties.

On 22 May 2013, the Proponent submitted a revised PPR and a response to submissions which provided further adjustments to the siting and design of the building envelopes, including;

- reorientation of Building 3 to avoid overlooking of adjoining properties in Avon Road;
- the deletion of the southern end of Building 5 to increase the physical separation to the adjoining properties at 10A and 10B Beechworth Road; and
- an increase in the setback of Building 1 to Avon Road.

Further amendments to the Stage 1 proposal were also incorporated to address specific concerns raised by Ku-ring-gai Council which included an increased setback to Avon Road and an increase in the number of visitor parking spaces.

The Department has carefully assessed the proposal, including the issues raised in submissions. The Department acknowledges the significant changes made by the Proponent to improve the scheme by reducing the density and site coverage of the proposal, while at the same time increasing the landscape and deep soil area, as well as increasing the area to be set aside for the conservation and enhancement of the currently degraded Blue Gum High Forest.

Also, the Concept Plan provides an opportunity to provide high density residential development in close proximity to public transport and retail facilities. This is in line with the objectives and dwelling targets set out in the Draft Metropolitan Plan and the draft Northern Sub-Regional Strategy which indicate that in order to provide accommodation for the projected 1.3 million increase in population by 2031, Sydney will require an additional 545,000 dwellings.

The Department considers that the impacts of the proposal are generally reasonable, subject to residual impacts being appropriately managed through modifications to the design and the inclusion of future assessment requirements. On this basis, the Department is satisfied that the site is suitable for the proposed development and the Concept Plan would provide environmental, social and economic benefits to the locality.

The Concept Plan and Stage 1 Project Application are accordingly recommended for approval. The application is referred to the Planning Assessment Commission for determination under Ministerial delegation as Council object to the proposal and more than 25 submissions in the nature of an objection were received.

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## 1. BACKGROUND

### 1.1 Site Description

The site is located on the western side of the North Shore rail corridor, between Avon Road and Beechworth Road at Pymble and is known as Nos. 1, 1A and 5 Avon Road and 4 and 8 Beechworth Road.

The site is located approximately 500 metres to the north west of Pymble Town Centre / railway station, within the Ku-ring-gai Local Government Area. Pymble is approximately 14km north west of the Sydney CBD.

The site is an irregular shaped parcel with a total area in the order of 23,667m<sup>2</sup>, with street frontages to Avon Road and Beechworth Road. The site comprises 5 separate allotments, described as follows:

| Address           | Property Description | Site Area (m <sup>2</sup> ) |
|-------------------|----------------------|-----------------------------|
| 1 Avon Road       | Lot 1 DP 583803      | 2,356                       |
| 1A Avon Road      | Lot 2 DP 583803      | 11,934                      |
| 5 Avon Road       | Lot 2 DP 205504      | 2,807                       |
| 4 Beechworth Road | Lot 1 DP 403072      | 2,067                       |
| 8 Beechworth Road | Lot 3 DP 403072      | 4,503                       |
| <b>Total Area</b> |                      | <b>23,667</b>               |

**Figure 1** illustrates the general configuration of the site and its relationship to adjoining development and surrounding context.

The topography of the site has variable slope, with flatter areas located towards the Avon Road and Beechworth Road frontages. The site forms the upper part of a steep gully between two high points which generally follow the alignments of Avon and Beechworth Roads. The elevation of the site varies from approximately 150m AHD adjacent to the railway line to approximately 130m AHD in the centre of the gully in the south western part of the site.

Existing development on the site comprises three dwellings, including:

- 1 Avon Road which is a part 1 and part 2 storey building in poor condition, which dates from the early part of the 20<sup>th</sup> Century and includes an in-ground swimming pool;
- 5 Avon Road which is a derelict brick and weatherboard dwelling with attic rooms; and
- 8 Beechworth Road which is a part 1 and part 2 storey brick and tile dwelling with an in-ground swimming pool, both of which are in very poor condition.

None of the dwellings on the site are currently occupied.

The site is otherwise devoid of any development. It is heavily vegetated and overgrown with a variety of noxious weeds. Remnant endemic vegetation, known as Blue Gum High Forest (BGHF) occupies the central (steepest) parts of the site. Existing site conditions, including buildings are illustrated in **Figures 2 - 6**.



**Figure 1** Local Context and site indicated in red outline (Source: Proponent's PPR)



**Figure 2** Existing development and relationship to adjoining development  
(Source: Proponent's Revised PPR / RtS)



**Figure 3** Typical vegetation on the site



**Figure 4** Typical vegetation on the site – note degree of weed infestation



**Figure 5** Existing dwelling at 1 Avon Road



**Figure 6** Existing derelict dwelling at 5 Avon Road

## 1.2 Surrounding Development

Pymble Town Centre is located approximately 500 metres to the south east of the site and is located adjacent to Pymble railway station. Existing development in the town centre is predominantly low scale retail and commercial buildings extending along Grandview Parade and the Pacific Highway. In recent years there has been several multi-storey apartment buildings constructed in the nearby area, primarily along the Pacific Highway.

**Figure 7** shows a six storey development known as Clyde Gardens, situated on the eastern side of the rail line in Clydesdale Place which is in close proximity to the site.



**Figure 7** “Clyde Gardens” situated on eastern side of the rail corridor

The 6 – 7 storey “Ironbark” development at No. 2 Avon Road (**Figure 8**) is directly opposite the pedestrian underpass to Pymble Station and is approximately 360 metres to the south west of the site. The “Ironbark” development is a further example of high density residential development in this locality on the western side of the railway line.



**Figure 8** “Ironbark” development at No. 2 Avon Road

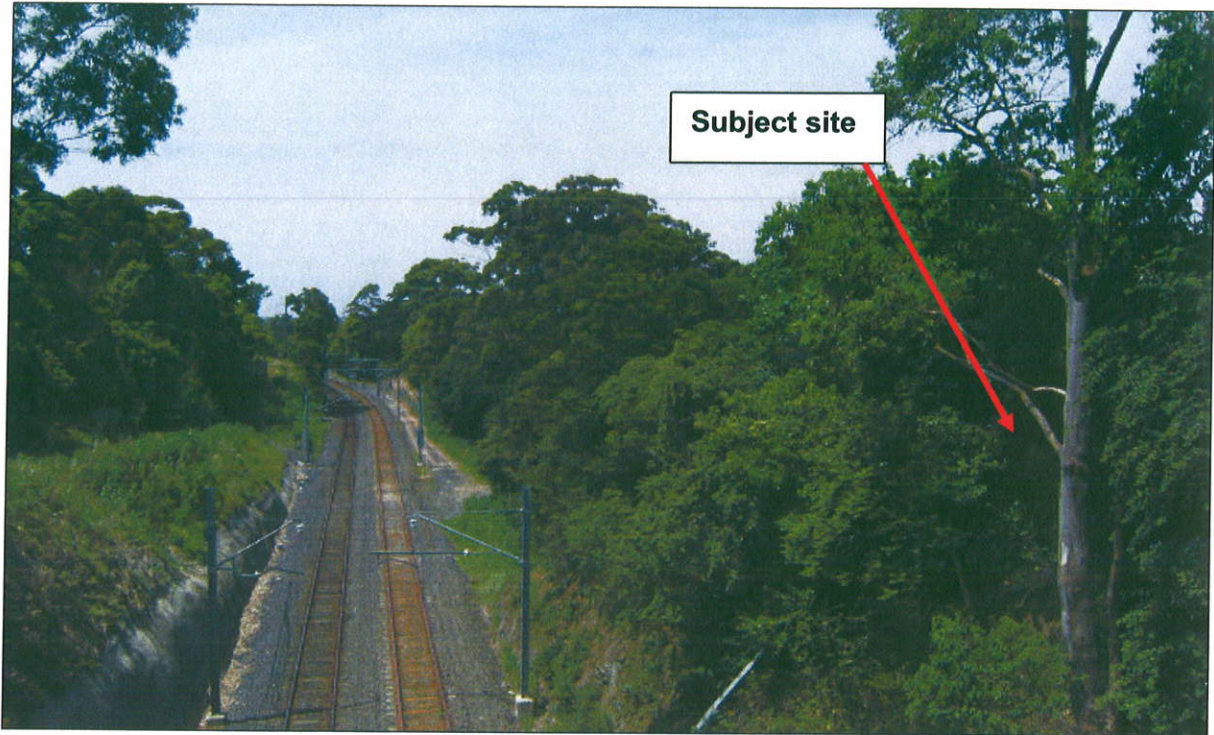
The Pymble Ladies College (PLC) secondary school campus occupies an extensive area on the opposite side of Avon Road.

The primary intersections with the Pacific Highway in the vicinity of the site are at Beechworth Road and Livingstone Avenue. Avon Road follows the northern and western boundaries of the PLC campus and together with smaller local roads, provides a connection between Livingstone Avenue, Beechworth Road and the Pacific Highway.

The locality is heavily vegetated, with dense clusters of larger trees typical on larger residential parcels, as well as on the subject site, within the road reserves and the rail corridor and within the PLC campus.

With the exception of the PLC campus and the “Ironbark” residential flat building, development in the area on the western side of the railway is characterised by large residential blocks occupied by 1 and 2 storey single dwellings.

The site shares a common boundary with the North Shore Rail corridor (**Figure 9**). A number of trees are planted within the rail corridor, between the railway line and the common boundary. This provides a substantial vegetated buffer between the site and the railway.



**Figure 9** View of the site looking south from Beechworth Road railway overpass

## 2. PROPOSED PROJECT

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### 2.1. Project Description

#### 2.1.1. Environmental Assessment (as exhibited)

The proposal as exhibited in the EA sought Concept Plan and Stage 1 Project Approval for a multi-storey residential development. In particular, the Concept Plan sought approval for the following:

- 5 residential building envelopes, ranging in height between 2 and 11 storeys and comprising up to 355 units;
- development of the site in 5 stages (coinciding with the number of building envelopes);
- basement car parking for approximately 500 cars; and
- associated landscaping including weed removal and the establishment of a managed "riparian corridor" adjacent to the drainage corridor that bisects the site comprising native riparian species and other available deep soil planting areas with species consistent with the Blue Gum High Forest ecological community.

The Stage 1 Project Application sought approval for the following:

- demolition of buildings on the Stage 1 site and excavation to allow for proposed basement parking;
- construction of Building 1, being a 4 to 6 storey residential flat building over basement levels containing parking for 86 cars, bicycle parking and storage; and
- a total of 50 units with an apartment mix as follows:
  - 21 x 1 bedroom units;
  - 21 x 2 bedroom units; and
  - 8 x 3 bedroom units.

The Capital Investment Value (CIV) of the Project is estimated at \$121,695,000.

#### 2.1.2. Preferred Project Report

Following the public exhibition of the Environmental Assessment, the Department advised the former Proponent of a number of issues which required further consideration and requested the submission of a Preferred Project Report (PPR). The main issues raised were in relation to:

- building height, scale and character;
- building height and amenity impacts;
- environmental constraints;
- traffic generation, road capacity and car parking;
- contributions, works-in-kind offsets and provision of infrastructure; and
- land amalgamation and site description.

During the assessment period the original Proponent was placed in receivership. In October 2012 the Department was advised that the receivers and managers of the site would assume the role of the Proponent.

On 19 December 2012, the new Proponent submitted a response to submissions and a PPR. The PPR made a number of significant changes to the proposed scheme (detailed in **Section 4.4**), which generally reduced the overall development yield and excised the property at 1 Arilla Road from the Concept Plan site. The PPR incorporated significant changes to the proposal, as detailed in Table 1. This, together with the period of time (23 months) which had elapsed between the exhibition of the EA and receipt of the PPR, resulted in the Department making the decision to exhibit the PPR.

At the conclusion of the exhibition of the PPR, the Department advised the Proponent of a number of issues which required further consideration / clarification. The issues raised by the local community were similar to those raised in relation to the EA and included:

- building height, bulk and scale;
- traffic and road capacity issues;
- relationship to and impacts on adjoining residential properties; and
- environmental impacts.

On 22 May 2013, the Proponent submitted a Revised PPR and response to submissions which included a more detailed analysis relating to the relationship of the proposed development to adjoining residential properties and associated impacts. This has resulted in further adjustments to the siting and design of the building envelopes to address the issues raised in the submissions.

The key changes to the Concept Plan as refined by the Revised PPR are described below.

**Table 1: Key Project Components**

| Project Element   | EA (as exhibited)    | Revised Preferred Project Report |
|-------------------|----------------------|----------------------------------|
| Site Area         | 24,915m <sup>2</sup> | 23,667m <sup>2</sup>             |
| Gross Floor Area  | 34,892m <sup>2</sup> | 22,442m <sup>2</sup>             |
| Floor Space Ratio | 1.38:1               | 0.94:1                           |
| Apartment Mix     | 355                  | 273                              |
| 1 bedroom         | 153                  | 132                              |
| 2 bedroom         | 154                  | 118                              |
| 3 bedroom         | 48                   | 23                               |
| Site Coverage     | 30%                  | 19.6%                            |
| Landscaped Area   | 12,500m <sup>2</sup> | 15,259m <sup>2</sup>             |
| Deep Soil Area    | 50%                  | 68%                              |
| Conservation Area | 3,600m <sup>2</sup>  | 8,430m <sup>2</sup>              |
| Height            |                      |                                  |
| Stage 1           | 5 – 6 storeys        | 4 – 6 storeys                    |
| Stage 2           | 6 storeys            | DELETED                          |
| Stage 3           | 9 – 11 storeys       | 6 – 7 storeys                    |
| Stage 4           | 8 – 11 storeys       | 6 – 9 storeys                    |
| Stage 5           | 8 storeys            | 6 – 8 storeys                    |
| Car Parking       | 500 spaces (approx.) | 324 spaces                       |

The Concept Plan as described in the Revised PPR is illustrated in **Figure 10** and seeks approval for a residential development comprising:

- four building envelopes incorporating basement level parking;
- 22,442m<sup>2</sup> GFA for residential use and up to a total of 273 dwellings;
- on-site parking rates;
- vegetation management plan;
- landscape concept including pedestrian and cyclist through-site links; and
- stormwater concept.

**Figure 11** is the Building Envelope Plan which illustrates the setbacks of the building envelopes from common boundaries with adjoining properties and the proposed conservation area, as well as providing an indication of the extent of the basements associated with each building envelope.

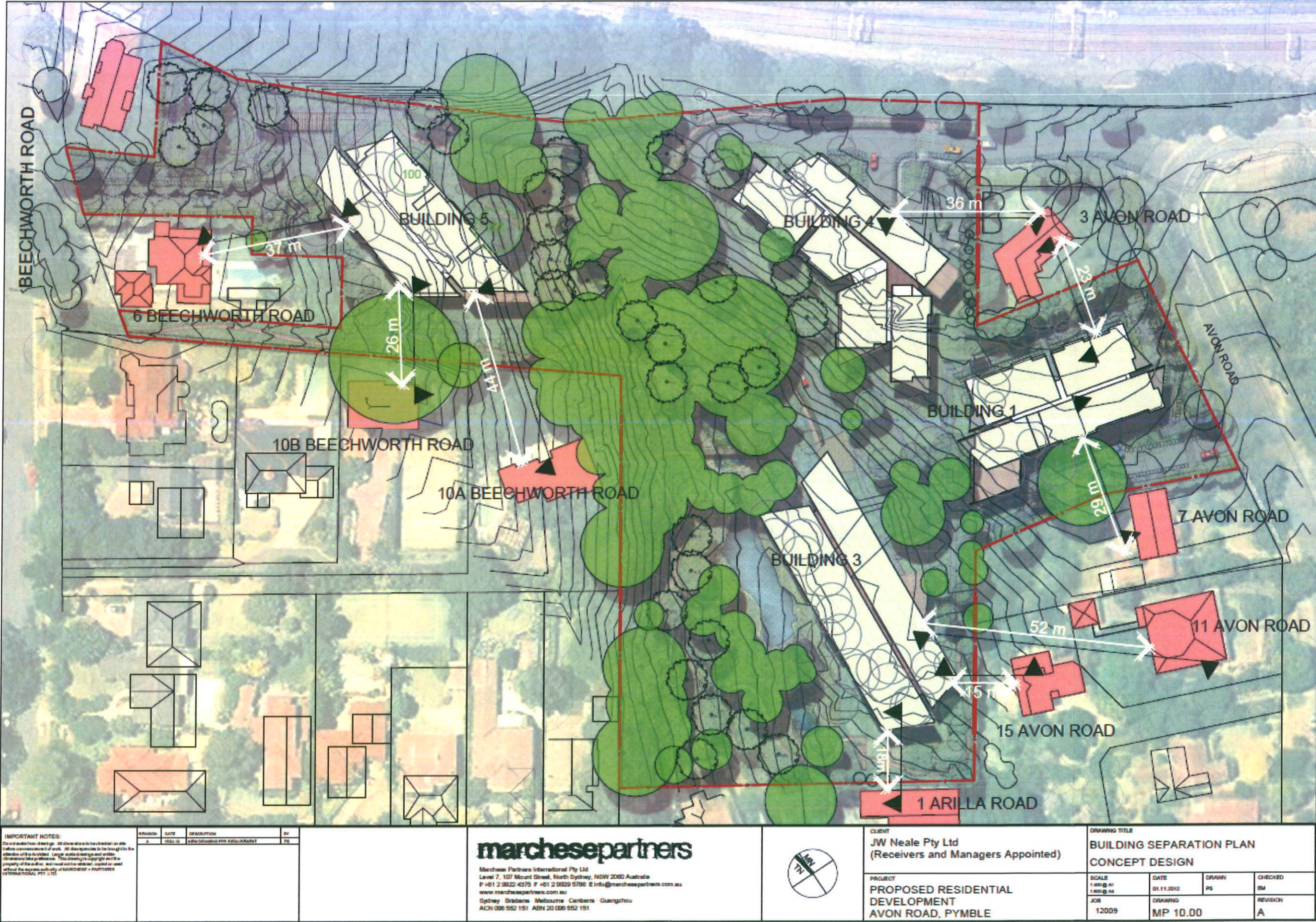


Figure 10 Proposed Concept Plan (Source: Proponent's Revised PPR / RtS)  
NSW Government  
Department of Planning & Infrastructure

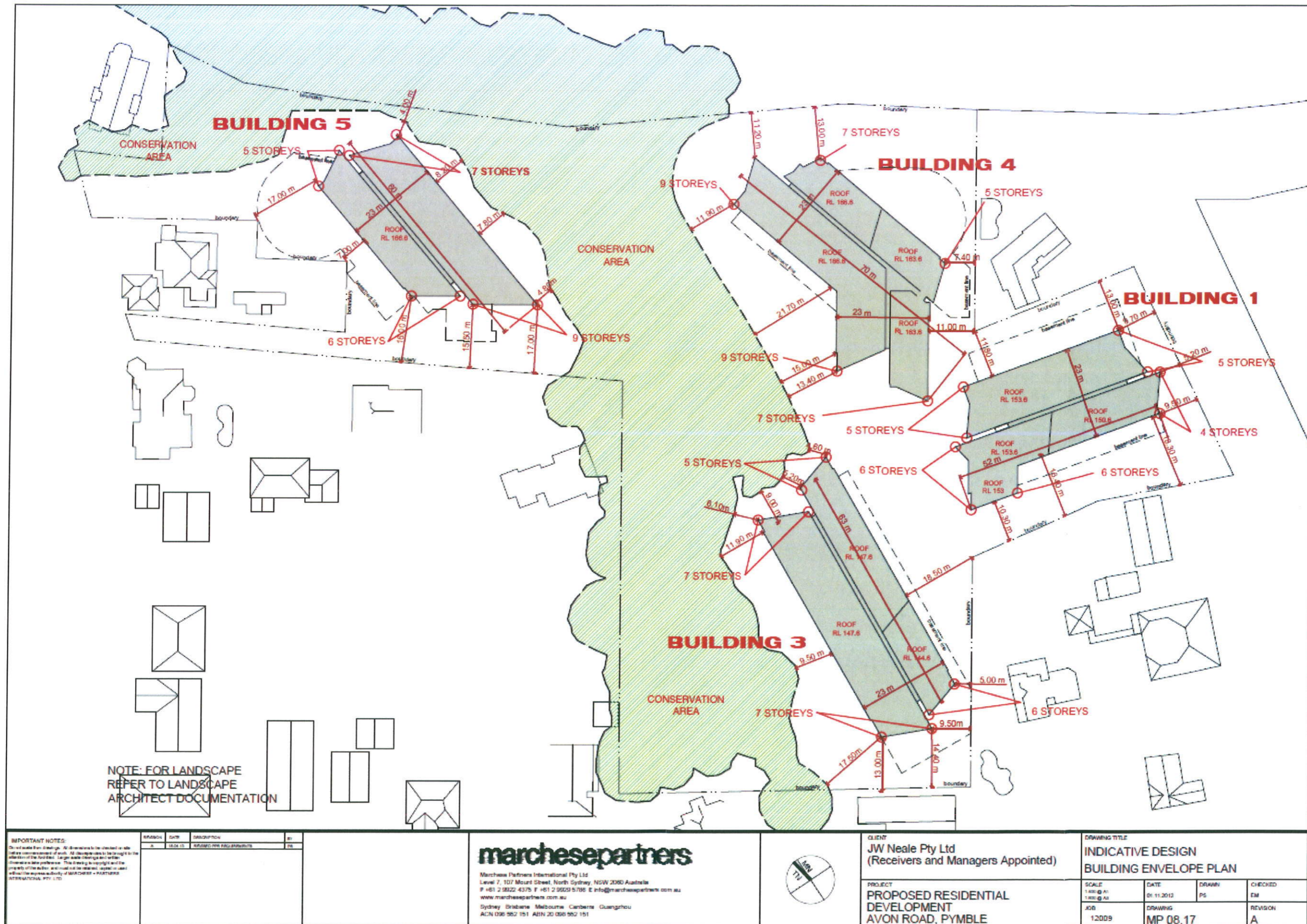


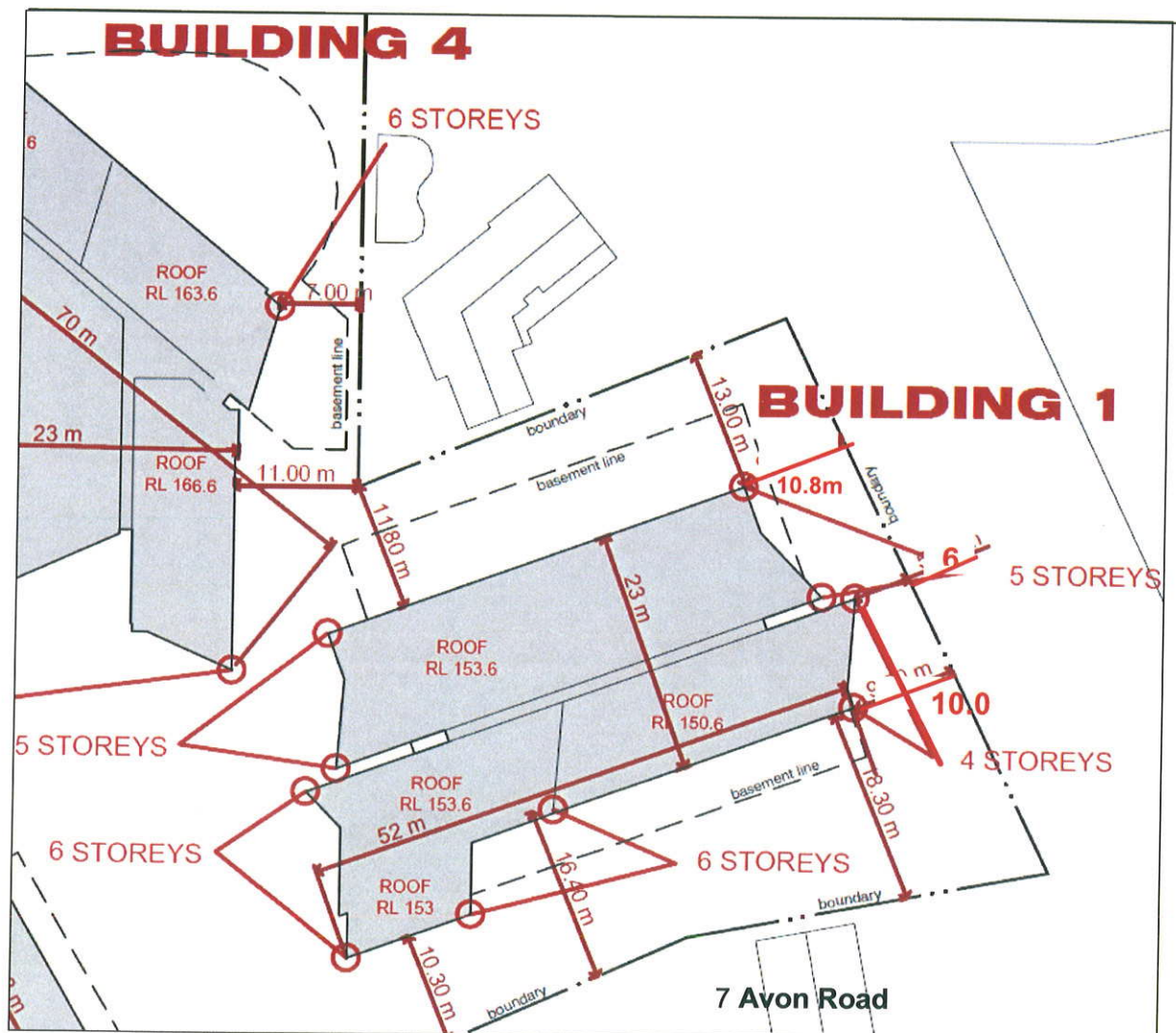
Figure 11 Building Envelope Plan (Source: Proponent's Revised PPR / RtS)

The key changes to the Stage 1 proposal, as detailed in the Revised PPR are summarised in the following table.

**Table 2: Key Changes to the Stage 1 Project Application (Building 1)**

| Project Element         | EA (as exhibited)   | Revised Preferred Project Report |
|-------------------------|---------------------|----------------------------------|
| <b>Gross Floor Area</b> | 4,830m <sup>2</sup> | 3,807m <sup>2</sup>              |
| <b>Apartment Mix</b>    | 50                  | 44                               |
| 1 bedroom               | 21                  | 16                               |
| 2 bedroom               | 21                  | 21                               |
| 3 bedroom               | 8                   | 7                                |
| <b>Height</b>           | 5 – 6 storeys       | 4 – 6 storeys                    |
| <b>Car Parking</b>      | 86 spaces           | 61 spaces                        |

Figure 12 illustrates the siting and building footprint of the Stage 1 proposal.



**Figure 12** Stage 1 Building – building footprint and relationship to adjoining existing and future buildings (Base Image Source: Proponent's Revised PPR / RtS)

## **2.2. Project Need and Justification**

### **NSW 2021**

NSW 2021 is the NSW Government's strategic business plan for setting priorities for action and guiding resource allocation. It is a 10 year plan designed to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability and strengthen the local environment and communities.

The site's proximity to the Pymble Town Centre and to public transport including Pymble Railway Station and bus services would contribute to the Plan's goal of building liveable centres. Further, the introduction of higher density residential flat buildings would increase the supply and variety of housing stock, which in turn would assist in the creation of more affordable housing and housing choice in the North subregion.

### **Draft Metropolitan Strategy**

The Draft Metropolitan Strategy for Sydney was released for public comment on 19 March 2013. It is a strategic document that will guide the development of Sydney to 2031 and beyond. The Draft Strategy aims to achieve the sustainable growth of Sydney, built around five key outcomes:

- balanced growth;
- a liveable city;
- productivity and prosperity;
- healthy and resilient environment; and
- accessibility and connectivity.

The Draft Strategy forecasts a population increase for Sydney of 1.3 million people by 2031, taking the total population to 5.6 million. The Draft Strategy sets a target of 545,000 additional dwellings by 2031, with minimum housing targets set for the subregions for 2021 to support the growing housing needs of Sydney.

The proposal would contribute to the achievement of the housing targets. Specifically, the proposal would provide up to 273 new apartments in this locality, which has excellent access to public transport, employment, retail facilities and services. A mix of apartment sizes and the provision of adaptable dwellings (minimum 10% of total apartments) recognises changing household demographics and the principles of ageing in place.

### **Draft North Subregional Strategy**

The site is located within the North subregion. The Draft North Subregional Strategy (the Draft Strategy) sets the Ku-ring-gai Local Government Area a target of 10,000 additional dwellings by 2031.

The Draft Strategy identifies Pymble as a Small Village. The village includes a series of shops arranged along both sides of the Pacific Highway and Grandview Street, centred on Pymble Railway Station. The nearest part of the site is located approximately 500 metres walking distance from the railway station via Avon Road and a pedestrian underpass under the Pacific Highway near the intersection of Avon Road / Pymble Avenue / Everton Road. Bus services to a range of destinations including Hornsby and Macquarie University supplement the regular train services.

A key action of the Draft Strategy is to provide increased residential densities within walking distance of smaller local centres and public transport. The provision of higher density residential development in an area with good access to public transport, services and employment opportunities makes a significant contribution toward the dwelling target for the Ku-ring-gai Local Government Area as updated in the Draft Strategy.

The Department considers that the proposal is consistent with the key directions and would assist in meeting the targets set out in the Draft Strategy.

### **History of Planning Controls**

In 2002 the site was identified as one of six 'targeted sites' for high density development under *State Environmental Planning Policy No. 53 - Metropolitan Residential Development* (SEPP 53) and under Clause 15 of Schedule 2 of State Environmental Planning Policy (Major Development) 2005. This became the principal planning instrument applicable to the site, superseding the *Ku-ring-gai Planning Scheme Ordinance* (KPSO). SEPP 53 permitted multi-unit residential development, to a height of between 3 and 7 storeys and an FSR of 0.8:1.

The document entitled "Development Controls and Design Guidelines – Six SEPP 53 Sites in Ku-ring-gai" supplemented SEPP 53, providing detailed development principles for each site. These guidelines also nominated heights of between 3 and 7 storeys and an FSR of 0.8:1.

*Ku-ring-gai Local Environmental Plan (Town Centres) 2010* (Town Centres LEP) was gazetted on 25 May 2010 and superseded SEPP 53. It largely replicated the height and FSR controls applicable to the site that were previously applied under SEPP 53 and the Design Guidelines. On 25 June 2010, SEPP 53 was subsequently amended to reflect the provisions of the Town Centres LEP and was ultimately repealed in full on 3 June 2011.

On 28 July 2011, a legal challenge to the validity of the process leading to the gazettal of the Town Centres LEP was successful in the NSW Land and Environment Court and resulted in the instrument being declared invalid.

With SEPP 53 repealed and the Town Centres LEP having been declared invalid, the relevant environmental planning instrument reverted to the KPSO, under which the site was zoned Residential 2(c). Residential flat buildings are prohibited in the 2(c) zone. The KPSO was the applicable planning instrument when the PPR was submitted.

On 25 January 2013, *Ku-ring-gai Local Environmental Plan (Local Centres) 2012* (KLEP 2012) was gazetted and came into effect on 8 February 2013. Under the provisions of KLEP 2012, the site is zoned part R2 Low Density Residential (No. 4 Beechworth Road), part R3 Medium Density Residential (Nos. 1 and 5 Avon Road), with the remainder of the site zoned E4 Environmental Living. It is noted that residential flat buildings are prohibited in each of these land use zones.

Permissibility is not a consideration for Concept Plans under Section 75R of the EP&A Act. The Concept Plan, in accordance with Section 75O of the EP&A Act will however, allow for a thorough merit assessment of the land use, built form and environmental impacts of the proposed development despite the changes to the policy context.

### **2.3. Concept Plan**

The Proponent has applied for approval of a Concept Plan application under Section 75M of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Concept Plan application seeks approval for the building envelopes and land use described above in the section detailing the PPR.

Any further development of the site (with the exception of Stage 1 for which Project Approval has been sought under MP10\_0219) will require separate and detailed Development Applications to be submitted to Ku-ring-gai Council for consideration.

### 3. STATUTORY CONTEXT

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#### 3.1. Major Project

The proposal constitutes a Major Project under Part 3A of the EP&A Act because it was development for the purpose of multi-unit housing on a site within the Ku-ring-gai Local Governmental Area as identified under Schedule 4 of *State Environmental Planning Policy No. 53 – Major Residential Development* (SEPP 53) and Clause 15 of Schedule 2 of *State Environmental Planning Policy (Major Development) 2005* (MD SEPP) at the time.

On 21 January 2010, the then Acting Deputy Director General of Development Assessment and Systems Performance authorised the submission of a Concept Plan. The Department notes that Schedule 4 of SEPP 53 and Clause 15 of the MD SEPP have been repealed since the original declaration of the proposal as a major project on 1 December 2008.

The Department confirms that despite this repeal, the major project declaration remains in force and therefore the major project applications remain open for consideration and determination.

In addition Part 3A of the EP&A Act, as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A to the EP&A Act, continues to apply to transitional Part 3A projects. Director-General's Environmental Assessment Requirements (DGRs) were issued for this project prior to 8 April 2011 and the project is therefore a transitional Part 3A project.

As a result, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove of the carrying out of the project under Section 75O of the EP&A Act. In this regard, the Planning Assessment Commission may determine the application on the Minister's behalf under delegation, as Ku-ring-gai Council has lodged a submission objecting to the proposal.

#### 3.2. Delegations

The Minister has delegated his functions to determine Part 3A applications to the Planning Assessment Commission (PAC) for applications being made by persons other than by or on behalf of a public authority and in cases where:

- the relevant local council objects to the proposal;
- there are more than 25 public submissions in the nature of objections; or
- a political disclosure statement has been made.

Having regard to the above, the application is referred to the PAC for determination under delegation from the Minister as Council objects to the proposal and there are more than 25 submissions in the nature of an objection.

#### 3.3. Permissibility

The application was submitted on 1 December 2010. At this time, the subject site was zoned R4 High Density Residential under the provisions of Ku-ring-gai LEP (Town Centres) 2010 which permitted multi-dwelling housing and residential flat buildings. A number of other documents and planning instruments were adopted in association with the Town Centres LEP including:

- Ku-ring-gai Town Centres Development Control Plan 2010 (Town Centres DCP);
- Ku-ring-gai Town Centres Public Domain Plan 2010; and
- Ku-ring-gai Town Centres Parking Management Plan 2010.

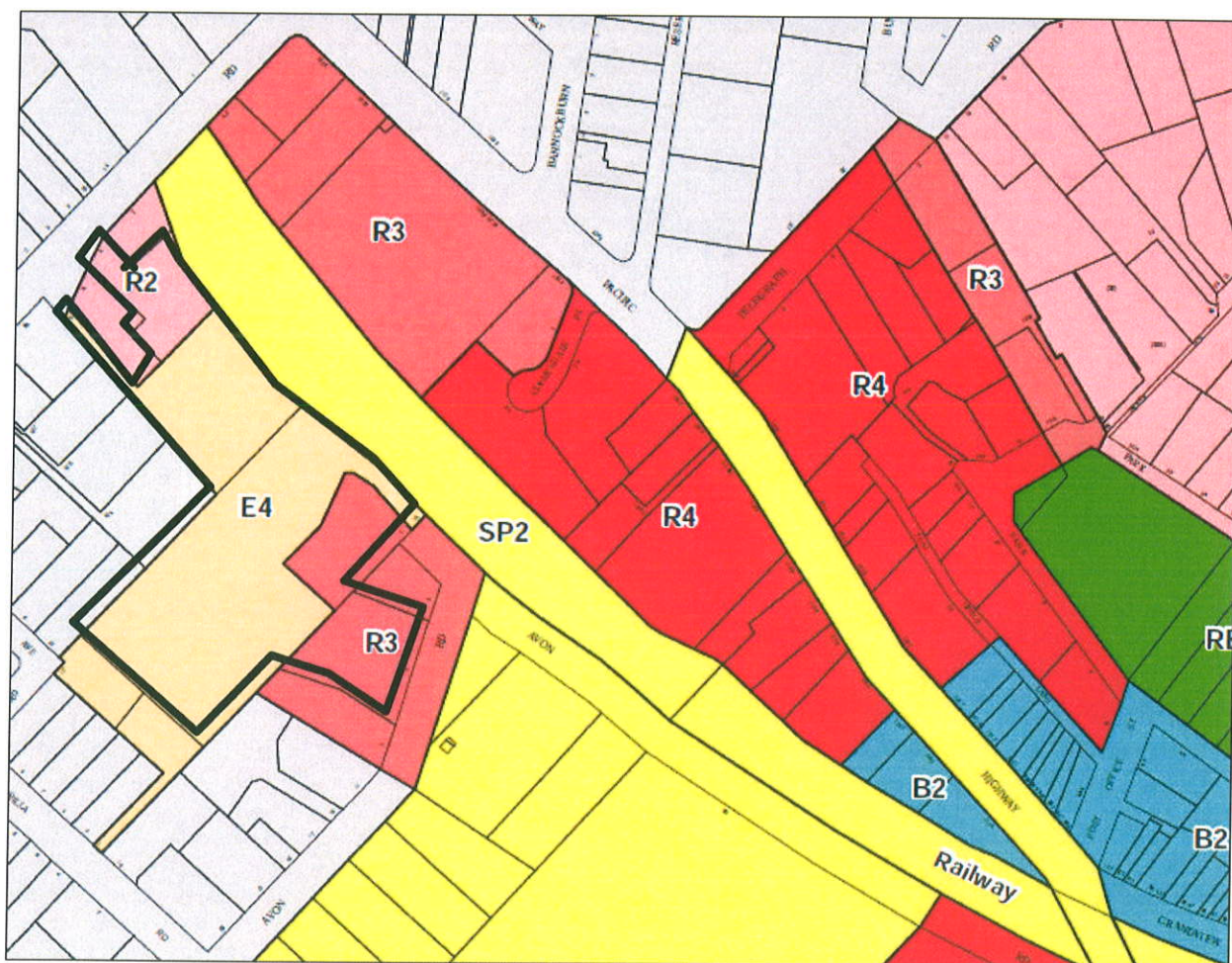
On 28 July 2011, a legal challenge to the validity of the process leading to the gazettal of the Town Centres LEP was successful in the NSW Land and Environment Court and resulted in the that instrument being declared invalid.

The relevant environmental planning instrument reverted to the KPSO, under which the site was zoned Residential 2(c). Residential flat buildings are prohibited in the zone. At the time the PPR was submitted, the Ku-ring-gai Planning Scheme Ordinance (KPSO) was the applicable planning instrument.

On 25 January 2013, Ku-ring-gai Local Environmental Plan (Local Centres) 2012 was gazetted and came into effect on 8 February 2013. Under the provisions of the Local Centres LEP, the site is zoned part R2 Low Density Residential (along Beechworth Road), part R3 Medium Density Residential (along Avon Road), with the remainder of the site zoned E4 Environmental Living (**Figure 13**).

The R3 Zone permits medium density residential development (townhouses), while the R2 and E4 Zones only allow for dwelling houses. Residential flat buildings are prohibited in each of these zones.

Permissibility is not a consideration for Concept Plans under Section 75R of the EP&A Act. In accordance with Section 75O of the EP&A Act, the submission of a Concept Plan allows for a thorough merit assessment of the land use, built form and environmental impacts of the proposed development.



**Figure 13** Zoning Plan (Source: Ku-ring-gai LEP (Local Centres) 2012)

### 3.4. Environmental Planning Instruments

Under Sections 75I(2)(d) and 75I(2)(e) of the EP&A Act, the Director-General's report for a project is required to include a copy of, or reference to, the provisions of any State Environmental Planning Policy that substantially governs the carrying out of the project, and the provisions of any environmental planning instruments that would (except for the application of

Part 3A) substantially govern the carrying out of the project and that have been taken into consideration in the assessment of the project.

The Department's consideration of the relevant State Environmental Planning Policies and environmental planning instruments is provided in **Appendix F**.

### 3.5. Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the Act, as set out in Section 5 of the Act. The relevant objects are:

- (a) *to encourage:*
  - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
  - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
  - (iii) *the protection, provision and co-ordination of communication and utility services,*
  - (iv) *the provision of land for public purposes,*
  - (v) *the provision and co-ordination of community services and facilities, and*
  - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
  - (vii) *ecologically sustainable development, and*
  - (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

The proposal is consistent with the relevant objects of the EP&A Act, in particular:

- the benefits provided by the proposal including the contribution to the housing stock within the Ku-ring-gai Local Government Area, with good access to public transport, services, facilities and employment opportunities;
- the renewal of unutilised residential properties for a higher density residential development achieves orderly and economic use and development of the site;
- retention, enhancement and regeneration of an existing endangered ecological community being the Blue Gum High Forest;
- provision of publicly accessible through-site links between Avon Road and Beechworth Road thereby improving the permeability of the locality; and
- the proposed mix of apartment sizes and types would expand the range of housing options available in the Ku-ring-gai Local Government Area, increasing opportunities for future residents of varying income levels and household size.

### 3.6. Ecologically Sustainable Development

The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) *the precautionary principle,*
- (b) *inter-generational equity,*
- (c) *conservation of biological diversity and ecological integrity,*
- (d) *improved valuation, pricing and incentive mechanisms.*

The proposal facilitates the rehabilitation of the riparian area associated with the watercourse which traverses the site, together with an area of Blue Gum High Forest which is identified as an Endangered Ecological Community under the provisions of the *Threatened Species Conservation Act 1995*.

The EA has also explored key ESD opportunities which may be incorporated into the development as part of future applications.

Overall, the Department considers that the proposal represents a sustainable use of the site, as it proposes a high density residential development within an established urban area with good access to public transport, amenities, services and employment.

Further consideration of relevant ESD principles is included at **Appendix F**.

### **3.7. Statement of Compliance**

In accordance with Section 75I of the EP&A Act, the Department is satisfied that the Director-General's Environmental Assessment Requirements have been complied with.

## 4. CONSULTATION AND SUBMISSIONS

### 4.1. Exhibition

Under Section 75H(3) of the EP&A Act, the Director-General is required to make the EA of an application publicly available for at least 30 days. After accepting the EA, the Department publicly exhibited it from Wednesday 15 December 2010 until Friday 11 February 2011 (59 days) on the Department's website; at the Department of Planning and Infrastructure's Information Centre, Ku-ring-gai Council and Turramurra Library. The Department also advertised the public exhibition in the Sydney Morning Herald, the Daily Telegraph and the North Shore Times on 15 December 2010 and notified landholders, local community groups and relevant State and local government authorities in writing.

The Department received a total of 329 submissions during the exhibition of the EA, comprising 8 submissions from public authorities and 321 submissions, in the nature of objections, from the general public and special interest groups.

The extent of the changes to the scheme as detailed in the PPR necessitated a further public exhibition. Accordingly, the documentation was uploaded to the Department's website, advertised in the Sydney Morning Herald, the Daily Telegraph and the North Shore Times, and referred to the relevant State and local government authorities. Furthermore, all adjoining landholders were notified in writing of the public exhibition, which commenced on 23 January 2013 and concluded on 1 March 2013 (a period of 37 days).

A further 10 agency submissions were received in response to the exhibition of the PPR and 506 submissions from the general public were received (all of which objected to the proposal).

A summary of the issues raised in submissions is provided below.

### 4.2. Public Authority Submissions

Eight submissions were received from public authorities in response to the EA and a further 10 submissions were received in response to the exhibition of the PPR. Key issues include:

| <b>Ku-ring-gai Council</b>              |   |
|---|---|
| <b>Issues raised in relation to EA</b>  | Objected to the proposal and identified a number of inadequacies / inconsistencies in the plans and information which accompanied the application. Raised specific concerns about the creation of isolated sites; bulk and scale of the development; ecological impacts including Blue Gum High Forest, riparian protection and bush fire protection; streetscape; amenity of adjoining properties; traffic, access and parking.  |
| <b>Issues raised in relation to PPR</b> | <p>Council maintained its objection to the proposal and identified key issues including:</p> <ul style="list-style-type: none"> <li>• The density relative to the environmental capacity of the land. Council contends that the zoning under KLEP 2012 reflects ecological values/constraints of the site and recognises the existing conditions on the local road network.</li> <li>• Traffic, access and parking.</li> <li>• Streetscape and visual impact.</li> <li>• Detailed design issues specific to Building 1</li> <li>• More general design issues associated with the Building 3, 4 and 5 envelopes.</li> <li>• Amenity issues – privacy, overshadowing</li> <li>• Issues associated with the riparian corridor, stormwater management and ongoing vegetation management.</li> <li>• Heritage impacts.</li> <li>• Site isolation.</li> <li>• Lack of detail and inconsistencies in the plans and documentation.</li> </ul> <p>A detailed summary of the issues raised by Council is included at <b>Appendix D</b>.</p> |

| <b>Roads and Maritime Services (SRDAC)</b> |   |
|--|---|
| <b>Issues raised in relation to EA</b>     | Requested a SIDRA analysis for the intersections of Pacific Highway / Beechworth Road and Pacific Highway / Livingstone Road; recommended the provision of a new road connecting Avon and Beechworth Roads; and set out a range of recommended conditions for inclusion in any approval.  |
| <b>Issues raised in relation to PPR</b>    | <p>RMS noted that whilst the Proponent did not fully undertake the changes sought to the traffic modelling, it has undertaken its own assessment and has advised that the proposal will have a minimal impact on the flow of traffic on the Pacific Highway.</p> <p>RMS reiterated its support for the construction of a new public street linking Avon Road and Beechworth Avenue as it would improve local circulation of traffic and spread local traffic across both signalised intersections to the Pacific Highway (Livingstone Ave and Beechworth Road).</p> <p>Due to the location of the site in proximity to PLC school and the Pacific Highway, RMS advised that the Proponent should prepare a Construction Traffic Management Plan.</p>  |
| <b>NSW Office of Water (NOW)</b>           |   |
| <b>Issues raised in relation to EA</b>     | <p>Supported removal of weeds / replanting of riparian corridor but concerned about lack of definition of the creek and proposed riparian corridor – recommended min 10 metre wide corridor on either side of the creek. Maintenance period for revegetation area should be increased to a min 2 years.</p> <p>Drainage detention structures should be located outside the extent of the riparian zone. Identified the possibility of the need for Water Licence.</p>   |
| <b>Issues raised in relation to PPR</b>    | <p>The Stormwater Management Plan indicates a proposal for 2 on-line weirs and associated constructed wetlands for water quality control. The Office of Water advises that this is not consistent with Controlled Activity Application Guidelines and has recommended that the water quality treatment be dealt with offline to mitigate potential impacts on downstream water quality.</p> <p>Recommends that the drainage line is rehabilitated to mimic a stable natural creek system from the local area.</p> <p>Details required in relation to the combined capacity of the ponds/weirs and the estimated capacity of each pond needs to be provided to determine whether a licence is required.</p> <p>If the project requires interception of groundwater and/or dewatering the Proponent is advised to seek the relevant approvals under the <i>Water Act 1912</i> and the <i>Water Management Act 2000</i> prior to commencement of activities.</p> |
| <b>RailCorp</b>                            |   |
| <b>Issues raised in relation to EA</b>     | Raised no specific objection. Recommended a series of conditions for inclusion in any approvals. Also advised that the Developer should be required to provide safe access to Pymble Station and that on-site parking should be reduced.  |
| <b>Issues raised in relation to PPR</b>    | <p>Notes that some of the previous RailCorp requirements are no longer applicable to the Concept Plan and are more relevant to future DAs.</p> <p>Advises that geotech and acoustic reports are required to be submitted for each DA and contain specific details relevant for each proposal.</p> <p>Sets out a schedule of conditions to be applied to the Concept Plan Approval and a separate schedule of conditions to be imposed on the Project Approval.</p>  |

| <b>Office of Environment &amp; Heritage</b>        |  |
|--|--|
| <b>Issues raised in relation to EA</b>             | <p>The Vegetation Management Plan and Flora and Fauna Assessment are inadequate. Advised that a detailed contamination assessment of the site should be undertaken after vegetation has been cleared, together with a detailed soil and possibly groundwater investigations assessed based on the results of the contamination assessment.</p> <p>Also recommended that on-site parking should be substantially reduced having regard to the site's accessibility to public transport.</p>   |
| <b>Issues raised in relation to PPR</b>            | <ul style="list-style-type: none"> <li>Notes that most of the issues raised previously by OEH have been addressed however the Flora and Fauna Assessment identifies some indirect impacts that appear not to have been assessed.</li> <li>Revised VMP does not provide any information on the resources required to achieve the overall aim of conserving and enhancing the Blue Gum High Forest vegetation. OEH recommends that the VMP be revised to include a detailed estimate of the resources necessary to undertake the listed actions.</li> <li>If approval for this project is granted, OEH recommends it be conditioned by requiring the applicant to financially guarantee the funds necessary to implement a revised (and costed) VMP.</li> </ul>            |
| <b>Rural Fire Service</b>                          |  |
| <b>Issues raised in relation to EA</b>             | <p>Inner Protection Area to be created around the buildings in accordance with <i>Planning for Bush Fire Protection 2006</i> (PBFP). Electricity, water and gas to comply with PBFP. Access to comply with PBFP.</p>   |
| <b>Issues raised in relation to PPR</b>            | <p>RFS has included a range of requirements for inclusion in the Terms of Approval, should the application(s) be approved, including:</p> <ul style="list-style-type: none"> <li>A 10 metre inner protection area (IPA) to be established and maintained in perpetuity around all buildings.</li> <li>The Conservation Area shall be no closer than 10 metres to any neighbouring dwellings so as to provide those dwellings with a 10 metre IPA.</li> <li>Building 1 to observe a setback from the Avon Road boundary of &gt;10 metres to comply with separation distances set out in PBFP 2006.</li> </ul> <p>A range of other conditions pertaining to the provision of water and utility services, access requirements and fencing materials are also specified.</p> |
| <b>Sydney Water</b>                                |  |
| <b>Issues raised in relation to EA</b>             | <p>Requires extension from existing potable water main to supply the site. Wastewater mains need to be upsized to accommodate additional demand. Further assessment at S73 Certificate stage.</p>  |
| <b>Issues raised in relation to PPR</b>            | <p>Notes that the Proponent has addressed all matters raised by Sydney Water in relation to the EA and has no further comments at this stage. Further detailed requirements will be provided when the Proponent applies for a S73 Certificate.</p>   |
| <b>EPA (previously included in DECCW response)</b> |  |
| <b>Issues raised in relation to PPR</b>            | <p>Advises that the Project is not listed under schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> and that as a consequence, an Environment Protection Licence is not required.</p>   |

#### 4.3. Public Submissions

##### *Submissions to the EA*

A total of 321 submissions objecting to the proposal were received from the public. This included submissions from the following special interest groups:

- Pymble Ladies College; and
- the NRMA.

It is also noted that the Hon Barry O'Farrell MP (prior to his appointment as NSW Premier) made a submission objecting to the development in his capacity as the Local Member.

The key issues raised in public submissions are listed in Table 3.

**Table 3: Summary of Issues Raised in Public Submissions**

| Issue   | Proportion of submissions (%) |
|---|-------------------------------|
| Excessive height / bulk   | 74                            |
| Excessive density   | 61                            |
| Traffic / roads – local roads cannot accommodate additional traffic generated by the proposal | 60                            |
| Non-compliance with controls  | 54                            |
| Environmental impacts – loss of trees, impact on threatened species                           | 19                            |
| Out of character with development in the area   | 16                            |
| Impacts on local infrastructure – schools, roads and local amenities (shops etc)              | 13                            |
| Parking   | 13                            |
| Public transport  | 11                            |
| Heritage  | 8                             |
| Solar access / overshadowing  | 6                             |
| Visual impact / view loss   | 6                             |
| Increased flood risk  | 5                             |

Other issues raised in the public submissions include:

- fire impacts;
- lack of consultation;
- construction impacts;
- lack of open space;
- Traffic safety;
- non-compliance with DGRs;
- proposed setbacks will impact privacy of adjoining properties;
- social impacts; and
- impacts on property values.

The Department considered the issues raised in submissions and requested that the Proponent provide a response to the issues, including a PPR.

#### 4.4. Proponent's Response to Submissions

On 30 November 2012, the Proponent provided a response to the issues raised in submissions (see **Appendix C**). A PPR was also submitted which incorporated a number of key changes to the proposal, as follows:

- Reduction in apartment numbers from 355 to 273;

- Reduction in the number of buildings from 5 to 4 and adjustments to siting and orientation of the remaining 4 buildings;
- Reduction in site coverage from 30% to 17%;
- Reduction in GFA and FSR from 34,644.61m<sup>2</sup> (1.38:1) to 22,442m<sup>2</sup> (0.94:1);
- Reduction in building heights from 2-11 storeys to 4-9 storeys;
- Reduction in on-site parking provision from approx. 500 spaces to 324 spaces;
- Increase in the quantum of deep soil planting from 12,500m<sup>2</sup> to 16,390m<sup>2</sup>; and
- Increase in the conservation area / riparian zone from 3,601m<sup>2</sup> to 8,430m<sup>2</sup>.

#### *Submissions in response to the PPR*

Due to the extent of changes to the proposal and the substantial period which had elapsed since the EA was exhibited, the Department exhibited the PPR from 23 January until 1 March 2013 (37 days). A total of 533 submissions were received from the public which included submissions from the following special interest groups:

- Pymble Ladies College;
- PAGE (Pymble Action Group for the Environment); and
- the Avondale Golf Club.

A large proportion (63%) of the submissions received were in the form of pro forma letters, with 5 primary configurations. In addition, 1 petition with 8 signatories was received.

All submissions received objected to the proposal. The key issues raised in the public submissions in response to the PPR are summarised in Table 4.

**Table 4: Summary of Issues Raised in Public Submissions to the PPR**

| <b>Issue</b>  | <b>Proportion of submissions (%)</b> |
|---|--------------------------------------|
| Traffic / roads – local roads cannot accommodate additional traffic generated by the proposal | 61                                   |
| Out of character with development in the area   | 60                                   |
| Non-compliance with controls (should comply with LEP 2012)                                    | 52                                   |
| Excessive height / bulk   | 50                                   |
| Excessive density   | 20                                   |
| Environmental impacts – loss of trees, impact on threatened species                           | 18                                   |
| Parking (existing problem in the locality)  | 24                                   |
| Previously submitted objections not adequately addressed                                      | 24                                   |
| General loss of amenity   | 20                                   |
| Visual impact / view loss   | 19                                   |
| Impact on property values   | 12                                   |
| Tree removal  | 11                                   |
| Heritage  | 11                                   |
| Traffic safety  | 10                                   |
| Heavily constrained site should not mean increased density on other parts of the site         | 8                                    |
| Impact on privacy to adjoining dwellings  | 5                                    |
| Emergency vehicle access  | 5                                    |

Other issues raised in the public submissions to the PPR include:

- photomontages are misleading;
- solar access / overshadowing;
- fire impacts;
- inadequate separation to adjoining properties;
- impacts on local infrastructure – schools, roads and local amenities (shops etc);

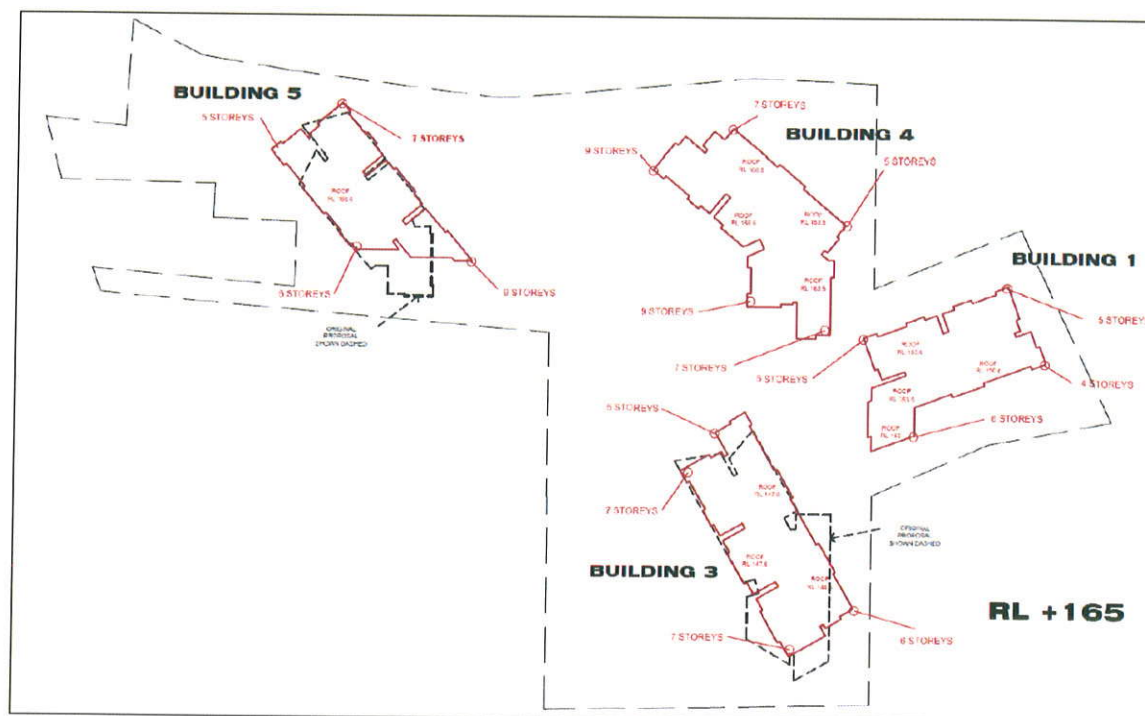
- noise pollution;
- pedestrian safety – lack of footpaths;
- construction impacts;
- demographics – lack of demand for product;
- errors in the PPR;
- stormwater impacts;
- public transport;
- lack of consultation;
- increased flood risk;
- loss of open space;
- PPR is denial of merit assessment; and
- request for 12 Mayfield Ave and 1 Arilla Road to be included in the development site.

#### 4.5. Revised Preferred Project Report

On 22 May 2013, the Proponent submitted a Revised PPR and response to submissions (see **Appendix E**) which included a more detailed analysis regarding the relationship of the proposed development to adjoining residential properties and its associated impacts. This has resulted in further adjustments to the siting and design of the building envelopes to address the issues raised in the submissions.

The nature of the changes to the proposal are as follows:

- the envelopes of Buildings 3 and 5 have been amended to avoid direct overlooking of the rear of adjacent properties and to increase the physical separation between existing dwellings and the proposed development (**Figure 14**).
- amendments to the landscape plans to increase deep soil zones along the section of the Avon Road frontage associated with Building 1;
- increase in the provision of visitor parking associated with Building 1;
- amended Statement of Commitments to install fixed opaque louvres on certain elevations of Buildings 1, 3 and 4 to prevent overlooking of adjoining properties; and
- reduction in the quantum of area available for deep soil from 16,390m<sup>2</sup> to 15,259m<sup>2</sup>.



**Figure 14**      **Reconfigured building footprints (Source: Proponent's Revised PPR)**

## 5. ASSESSMENT

The Department considers the key environmental issues for the project to be:

- density;
- built form;
- residential amenity;
- traffic and access;
- natural environment impacts; and
- heritage.

### 5.1. Density

The proposal seeks to provide up to 273 new dwellings and a total gross floor area of 22,442m<sup>2</sup> across the site. This results in a floor space ratio of approximately 0.94:1.

The density of the development was a key issue raised by the general public in response to both the EA and the PPR. Residents expressed concern about the impacts of density in terms of the scale of the proposed buildings and traffic impacts.

Council also raised density as a key issue, particularly in light of the rezoning of the site under Ku-ring-gai Local Environmental Plan (Local Centres) 2012. Table 5 sets out the current floor space ratio (FSR) controls contained within Ku-ring-gai Local Environmental Plan (Local Centres) 2012.

**Table 5: Floor Space Ratio and achievable density**

| Zone   | FSR           | Site Area (m <sup>2</sup> ) | Allowable GFA (m <sup>2</sup> ) |
|--|---------------|-----------------------------|---------------------------------|
| R2 Low Density Residential<br>(Beechworth Road frontage) | 0.3:1         | 2,067                       | 620.1                           |
| R3 Medium Density Residential<br>(1 and 5 Avon Road)     | 0.8:1         | 5,163                       | 4,130.4                         |
| E4 Environmental Living<br>(central part of the site)    | 0.2:1         | 16,437                      | 3,287.4                         |
| <b>Total</b>   | <b>0.34:1</b> | <b>23,667</b>               | <b>8,037.9</b>                  |

Council has indicated that the zoning and controls that now apply to the site under Ku-ring-gai Local Environmental Plan (Local Centres) 2012 are based on the following:

- the prevailing physical and environmental constraints (critically endangered ecological community, the presence of a watercourse and the steep topography) which has resulted in the zoning of a large proportion of the site as E4;
- re-listing of 1 Avon Road and 6 Beechworth Road as heritage items, combined with the respective R3 and R2 zonings, recognises that the site is not required to meet the dwelling targets for Ku-ring-gai agreed with the Minister for Planning;
- the heritage value of these properties and others in the vicinity of the site further constrain redevelopment, supporting the low density residential /environmental zoning of the site; and
- the areas closest to the railway station and Pymble Town Centre (those parts of the site addressing Avon Road) can support redevelopment at a scale consistent with the protection of the heritage and natural values of the site and the locality, which has resulted in the R3 zoning.

The R3 zone covers 4 properties in this locality being Nos. 1, 3, 5 and 7 Avon Road (Note: Nos. 1 and 5 Avon Road are located within the subject site). Council has expressed the view that the combined area of 5,319m<sup>2</sup> of these properties excluding 1 Avon Road due to its heritage listing could be developed for multi-unit housing (townhouses) at an FSR of 0.8:1. This form of

development together with the adaptive re-use of the existing heritage dwelling at 1 Avon Road would have an acceptable impact on the streetscape and amenity of the area while protecting the heritage and natural values of the site and locality. This scale of development can also be accommodated within the constraints of the existing road network.

The Proponent has sought to justify the proposed density by referencing the historical planning controls (State Environmental Planning Policy No. 53 and Ku-ring-gai Local Environmental Plan (Town Centres) 2010), as well as citing consistency with regional targets for urban consolidation and priorities of increasing density in areas in proximity to public transport and employment areas.

The Department supports the provision of increased residential densities within walking distance of local centres and public transport in line with the key objectives of the Metropolitan Plan and the Draft Metropolitan Strategy. In this regard it is considered that the site is strategically well located to provide for increased density of development given its proximity to public transport and retail services. All parts of the site are within easy walking distance from Pymble Railway Station (between 450 metres to 590 metres) and regular bus routes on the Pacific Highway. Retail services within the Pymble Town Centre are between 550 and 900 metres from the site.

The site is well suited to accommodate increased densities because of its physical characteristics including the large site area, topography and the extent of the existing tree cover. These features enable a greater density of development to be provided at the top of the site, adjacent to the rail corridor and lower down in the central part of the site without significant impacts to adjoining residential areas including shadow impacts from the taller buildings which to a large extent, fall within the site boundaries.

The appropriateness of the proposed density have been tested through an analysis and merit assessment of:

- built form and resulting amenity impacts;
- traffic impacts on the surrounding road network; and
- natural environmental impacts.

These issues are further addressed in this report (see **Sections 5.2, 5.4 and 5.5**). In each case, the Department concludes that the resulting impacts are acceptable subject to modifications and future assessment requirements. It is considered that the site has the environmental capacity to support the proposed density and FSR of 0.94:1.

Council also raised an issue regarding dwelling numbers. In particular, that the proposal is not necessary for Ku-ring-gai Local Government Area to achieve the target for additional dwellings under the Draft North Subregional Strategy. However, the Department notes that this does not take into account the revised dwelling targets for the subregion which were increased from 21,000 to 29,000 (refer to discussion in **Section 2.2**). The Department therefore considers that the proposal would make a significant contribution towards meeting the updated dwelling targets for the subregion.

In any case, the Department does not consider that urban renewal opportunities on large sites should be "capped" to ensure housing targets are not exceeded. Density impacts should be assessed on their merits, as is the case with this proposal.

## 5.2. Built Form

The Concept Plan as amended in the PPR proposes 4 building envelopes with heights ranging from 4 to 9 storeys across the site. Existing development on the site is limited and is generally confined to the perimeter and the heights of the existing dwellings are primarily 2 storeys with ridge heights in the steeper parts of the site at 3 storeys.

Concerns were raised by Council and the public that the proposed built form is not compatible with the predominantly 2 storey character of the surrounding residential properties. In response, the Department requested that the Proponent undertake further detailed analysis in this regard.

The Department considers that the key issues relating to the proposed building form include:

- design of the building(s) and their relationship to surrounding context; and
- impacts on adjoining properties.

These issues are discussed below.

### 5.2.1. Context

The surrounding area is characterised by 1 and 2 storey dwellings and more contemporary higher density multi-storey apartment development. As detailed in **Section 1.2**, the Clyde Gardens development situated in Clydesdale Place on the eastern side of the rail line and approximately 200m from the site achieves heights of 6 storeys. The 6 – 7 storey "Ironbark" development at 2 Avon Road is directly opposite the pedestrian underpass to Pymble Station and is approximately 450 metres to the south west of the site.

The Pymble Ladies College secondary school campus (PLC) occupies an extensive area on the opposite side of Avon Road. Existing buildings within the school campus achieve a range of building heights up to 3 storeys.

Following exhibition of the PPR, concerns were raised by Council and the public that:

- the proposed built form is not compatible with the predominantly two storey character of the surrounding residential properties; and
- the positioning and bulk of the buildings will impact upon the streetscapes of Avon Road and Arilla Road.

In response, the Department requested that the Proponent undertake further analysis of the siting of the proposed buildings and provide perspective studies of the development when viewed from Arilla Road and along the section of Avon Road adjacent to the rail corridor.

In addition, the Proponent has provided a series of perspective studies using computer generated photomontages to address the impact of the development on the existing streetscapes of Arilla Road and Avon Road.

The Department's assessment of the four building envelopes is provided below. The assessment of Building 1 is more detailed, as it has the benefit of detailed architectural drawings submitted as part of the Project Application.

#### Building 1 (Avon Road frontage)

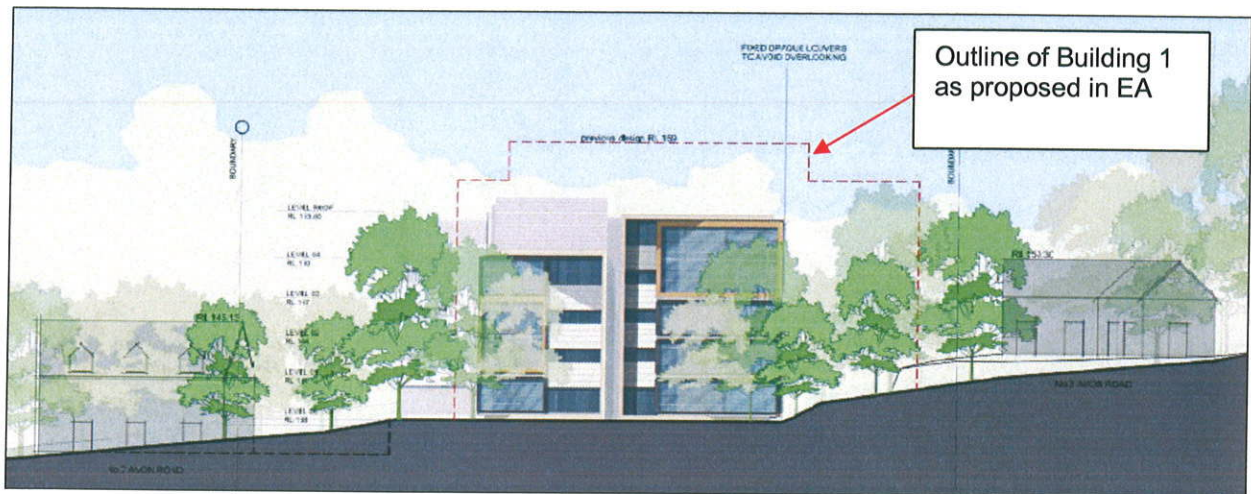
Building 1 occupies the site known as 5 Avon Road which currently accommodates an existing derelict dwelling (**Figure 6**). This part of the site has a street frontage of 56.6 metres.

Existing development on the western side of Avon Road (in the block between Arilla Road and the Avon Road "stub road") comprises a series of single dwelling houses which present predominantly 2 storeys to the street frontage. Setbacks are varied and range between approximately 6 metres (19 Avon Road) and 18 metres (7 Avon Road).

On the opposite side of Avon Road is the PLC campus which presents a stand of densely planted trees to Avon Road, beyond which are playing fields / open space.

Building 1 presents a 4 and 5 storey built form to Avon Road. The lower 4 storey element is provided on the lower side of the site, located closer to the dwelling at 7 Avon Road (**Figure 15**). The rear section of Building 1 increases to 6 storeys in response to the sloping topography.

However this part of the building is setback approximately 45 metres from Avon Road and would not be readily visible to the streetscape.



**Figure 15 Built form Building 1 (Base Image Source: Proponent's Revised PPR / RtS)**

The photomontage at **Figure 16** illustrates Building 1 in the Avon Road streetscape.



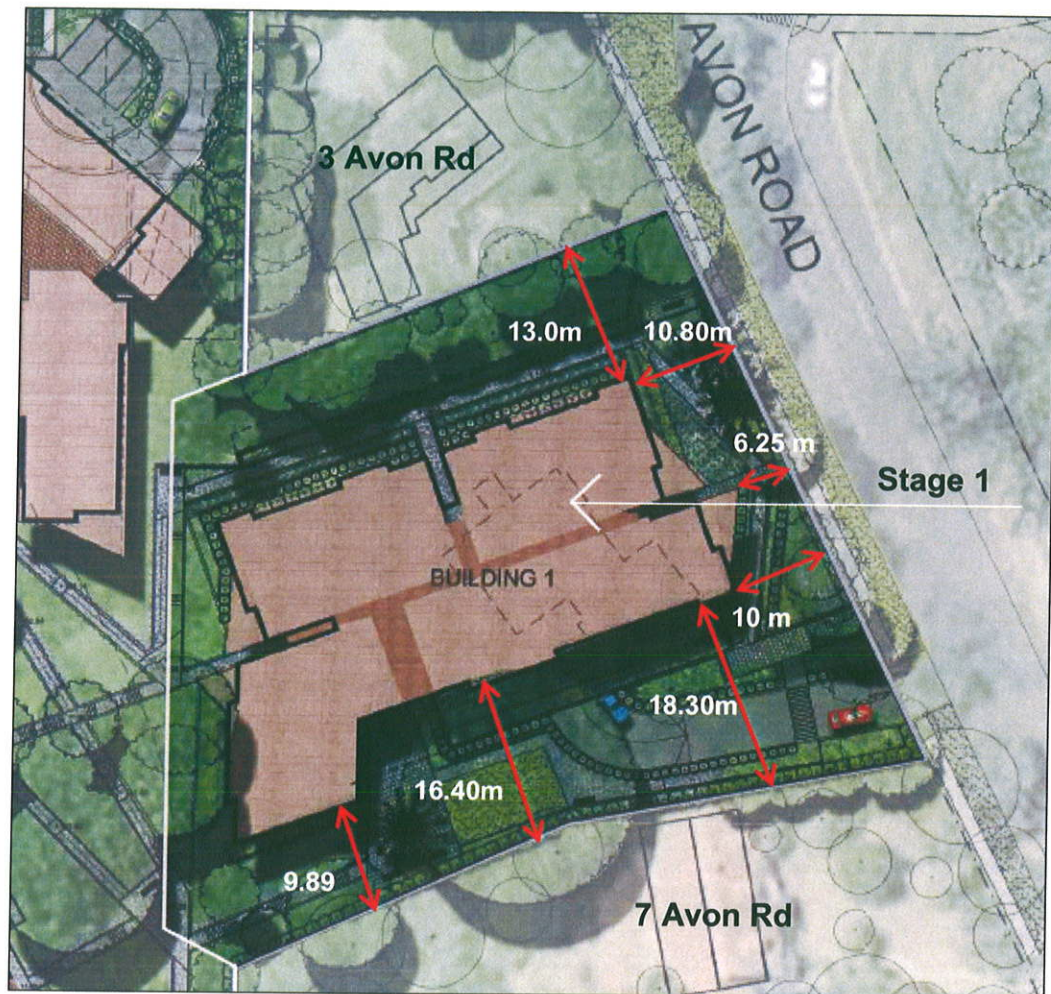
**Figure 16 Stage 1 - view from Avon Road looking west (Source: Revised PPR / RtS)**

Building 1 is set back between 10 and 10.8 metres from Avon Road (**Figure 17**) however the central architectural feature (masonry blade wall) projects into the setback area, and is setback 6.25 metres from the boundary. Council considers Building 1 to be of an appropriate height at the Avon Road frontage, but has indicated that the proposed setback of the building at less than 9 metres is unacceptable, particularly having regard to the setbacks of the adjoining dwellings at Nos. 3 and 7 Avon Road (11 and 18 metres respectively).

Council has suggested that a setback from Avon Road of 11 metres would be more appropriate.

In order to address Council's concerns, the Proponent has increased the setback of Building 1 to Avon Road from 8.95 – 9.7 metres to 10 – 10.8 metres (**Figure 17**).

The Department considers the projection of the central blade wall into the Avon Road setback to be satisfactory as it is a slender element which articulates the façade and serves to further break down the bulk and scale of the buildings as it presents to Avon Road.



**Figure 17 Building 1 setbacks (Base Image Source: Proponent's Revised PPR / RtS)**

The Department notes that the proposed height of Building 1 is higher than the 2 storey dwellings in the immediate vicinity. The proposed building would be partly screened when viewed from vantage points along Avon Road through the retention of trees, relocation of two existing palms to the area of deep soil within the front setback and planting of new trees between the building and property boundaries.

Building 1 includes side setbacks of 13 metres to the north eastern boundary and between 9.89 and 18.3 metres to the south western boundary. This results in significant physical separation between the building and the adjoining dwelling houses at Nos. 3 and 7 Avon Road and creates the opportunity to provide substantial landscaped treatment.

The Department acknowledges that the proposed 4 / 5 storeys that Building 1 presents to Avon Road contrasts with the scale of the adjoining dwellings at Nos. 3 and 7. However, the streetscape impacts of this larger scale building form are considered appropriate noting the following:

- the building would be setback from Avon Road between 10 and 10.8 metres which is considered to be more responsive to the character of the streetscape and this locality;
- the majority of the setback to Avon Road would be available for deep soil planting and is proposed to be landscaped using a number of transplanted mature specimens from elsewhere on the site including a *Gordonia* tree, a *Cocos Palm* and *Phoenix Palm*. The combination of setback and opportunities for deep soil planting are expected to provide a high quality established landscape consistent with the landscaped setting in this area;
- the side setbacks result in substantial physical separation between Building 1 and the adjoining dwellings and allows the proposed building to sit comfortably within the site; and

- the presentation of a stepped building form in response to the topography of the site reduces the visual bulk of this elevation when viewed from Avon Road and Council has advised that Building 1 is an appropriate height at the Avon Road frontage.

### Building 3 (south eastern corner of the site)

The Building 3 envelope is located in the south western corner of the Concept Plan site. This is the lowest part of the site and was previously developed as a tennis court and terraced gardens associated with the dwelling at 1 Avon Road. It has an interface with the boundaries of 7 Avon Road and two battle-axe properties known as 15 Avon Road and 1 Arilla Road.

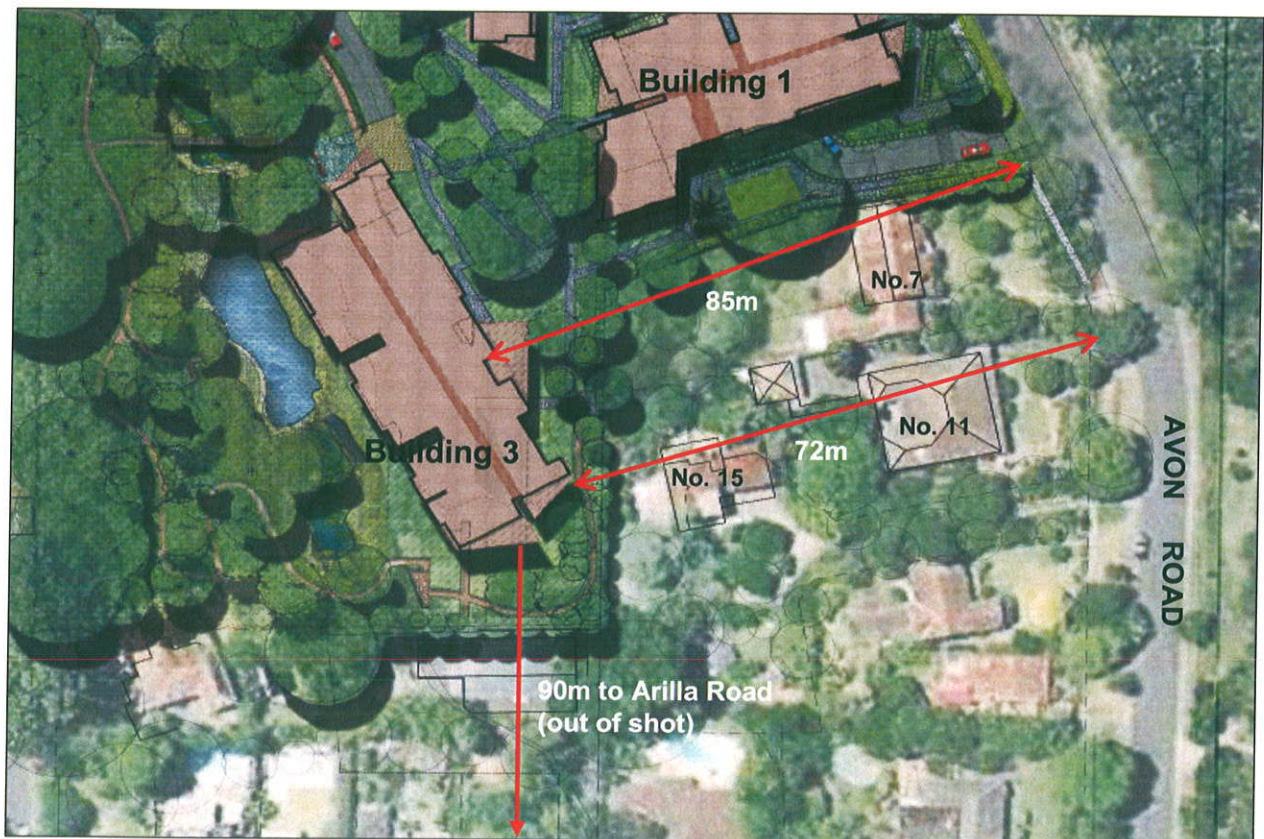
Concerns were raised by Council and in the public submissions that the 6 storey height and scale of Building 3 has the potential to result in an adverse visual impact on the public domain, particularly Arilla Road.

Accordingly, the Department requested that the Proponent undertake perspective studies of the development to demonstrate the visual impact of the proposal on the streetscape in Arilla Road.

The Building 3 envelope is set back 15 metres from the common boundary with 1 Arilla Road, which results in a physical separation in the order of 90 metres to the Arilla Road road reserve.

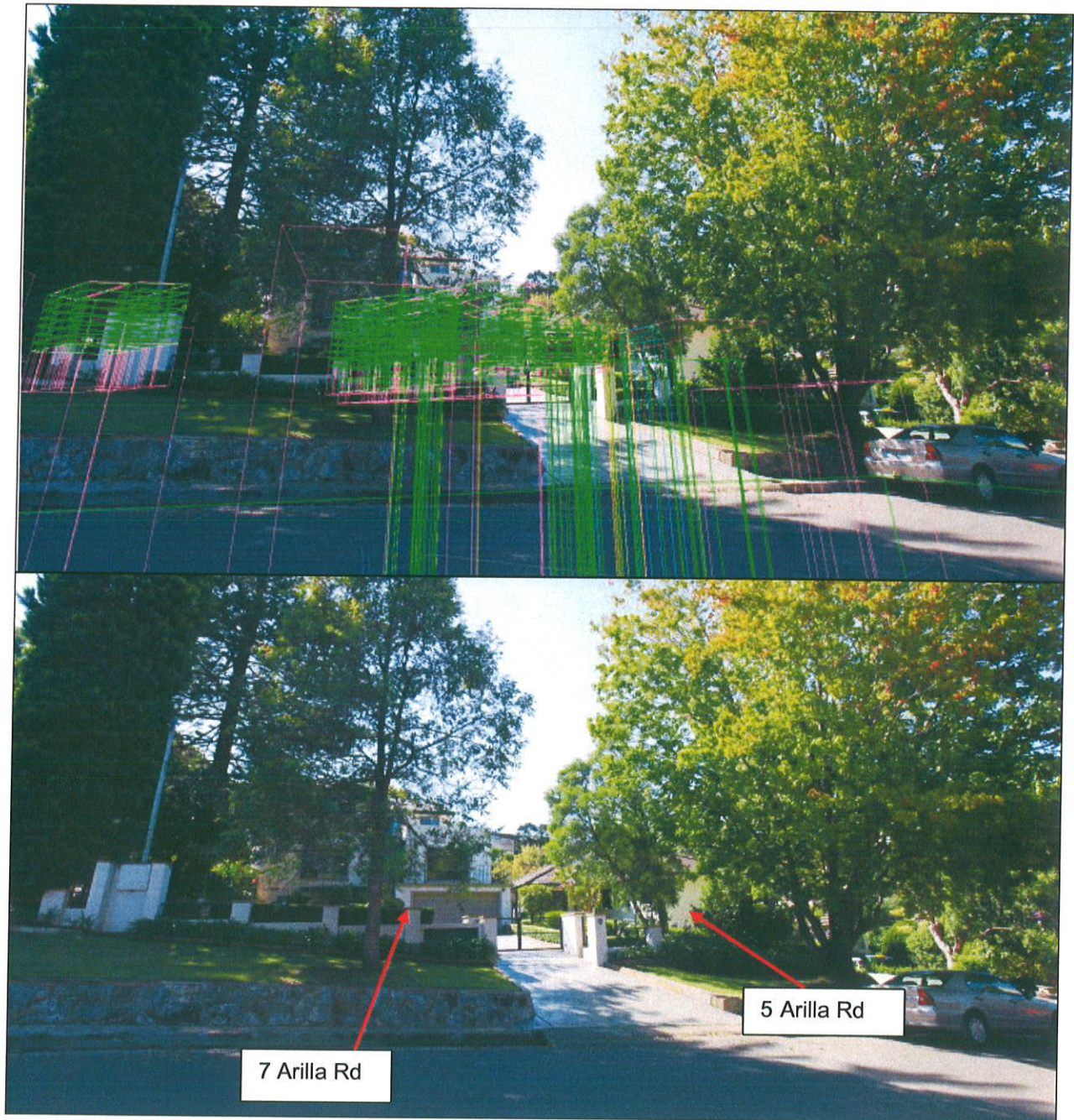
In terms of the potential visual impact of the Building 3 envelope on the Avon Road streetscape, the Department notes that the building has been re-sited / reoriented to minimise the potential impact on the nearest dwelling (15 Avon Road). This is discussed in greater detail in **Section 5.2.2**.

The Building 3 envelope observes setbacks ranging between 5.0 and 18.5 metres from the boundaries with Nos. 15 and 7 Avon Road respectively, which results in a physical separation from the Avon Road road reserve of between approximately 72 and 85 metres (**Figure 18**).



**Figure 18** Physical separation of Building 3 envelope to public domain (Source: Proponent's revised PPR / RtS)

The images presented at **Figure 19** comprise a computer generated wire-framed architectural model of the buildings in the development superimposed over a photograph taken from the roadway opposite Nos. 5 and 7 Arilla Road. The bottom image is a photomontage of the building forms which illustrates that they would not be visible from this vantage point.



**Figure 19** Wireframe model and resultant photomontage of modelled view from between Nos. 5 and 7 Arilla Road (Source: Proponent's Revised PPR / RtS)

Having regard to the above, the Department considers the proposed 6 storey height of the Building 3 envelope to be acceptable in the context of its impact on the public domain because of the combined effects of the:

- topography;
- physical distances involved (approximately 90 metres);
- location of the dwellings which front Arilla Road (ie. between the site and Arilla Road); and
- existing vegetative cover.

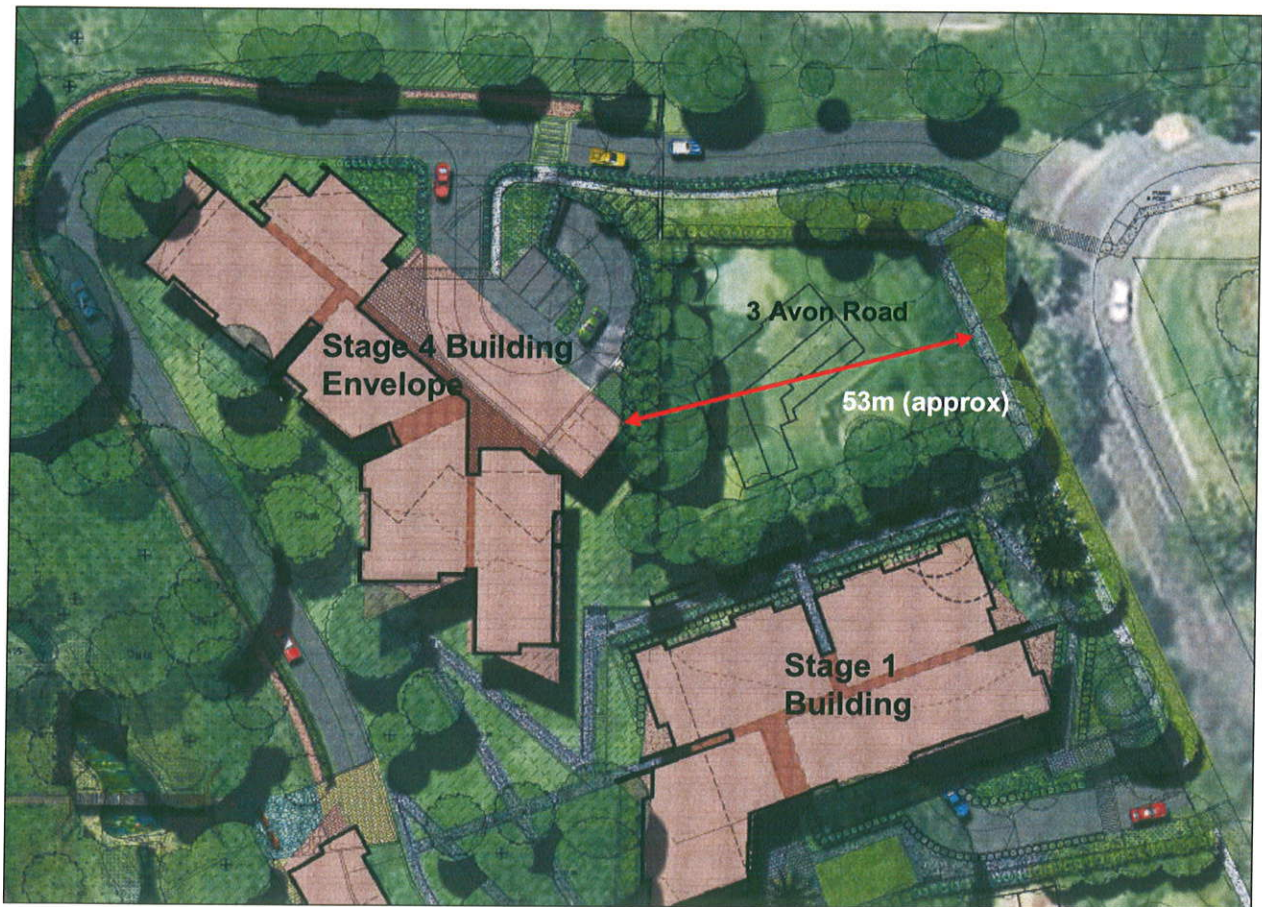
These elements combine to screen the envelope so that it would not be visible to the street.

#### **Building 4 (north eastern corner, end of Avon Road “stub road”)**

The Building 4 envelope is located at the highest part of the site adjacent to the rail corridor, in an area that is currently occupied by the dwelling at 1 Avon Road. It has an interface with the north eastern boundary of 3 Avon Road. The separation between the proposed Building 4 envelope and 3 Avon Road is discussed in further detail in **Section 5.2.2**.

A section of public road (also known as Avon Road) extends for some 40 metres beyond its intersection with the main section of Avon Road and provides access to the site. It also affords a view corridor into the site from the main section of Avon Road.

An internal road would be constructed to meet this “stub road” which would provide access to Buildings 3 and 4. The Building 4 envelope has been sited to the west of the internal access road and would not be directly visible along the Avon Road / “stub road” view corridor. At its closest point (7 metres from the common boundary with 3 Avon Road) the Building 4 envelope would be approximately 53 metres from Avon Road, as illustrated in **Figure 20**.



**Figure 20 Relationship of Building 4 envelope to Avon Road (Source: Proponent's Revised PPR / RtS)**

Concerns were raised by Council and in the public submissions that the height of the Building 4 envelope would project above the roofline of 3 Avon Road and has the potential to result in an adverse visual impact on the public domain, particularly that of Avon Road.

**Figure 21** illustrates the modelling and resultant photomontage for the Building 4 envelope when viewed from Avon Road, looking north east towards the site along the stub road.



**Figure 21** Wireframe model and resultant photomontage of view looking north east along Avon Road towards the site (Source: Proponent's Revised PPR / RtS)

The Department considers the proposed 6 to 9 storey height of the Building 4 envelope to be acceptable in the context of its impact on the public domain as the topography, the physical distances involved and the vegetative cover combine to screen the envelope. On this basis, the visual impact of the proposed development on the Avon Road public domain is considered to be acceptable.

#### **Building 5 (north western part of the site, accessed via Beechworth Road)**

The Building 5 envelope is located in a steeply sloping part of the site in the north western corner, adjacent to the rail corridor. It has an interface with the boundaries of 2 Beechworth

Road, 6A Beechworth Road and two battle-axe properties known as 10A and 10B Beechworth Road. As a consequence of the battle-axe subdivision pattern, the dwellings on these properties (and particularly 10B Beechworth Road) are located in close proximity to the common boundary with the subject site. The separation between the proposed Building 5 envelope and the adjoining properties is discussed in further detail in **Section 5.2.2**.

The scale of development in the immediate vicinity of the Building 5 envelope includes one and two storey dwellings on Beechworth Road.

The Building 5 envelope has no direct street frontage however vehicular access would be achieved via a 6 metre wide driveway from Beechworth Road, situated between the existing dwellings at Nos. 2 and 6A. There is a significant drop in level (approximately 11 metres) between the Beechworth Road footpath and the Building 5 footprint. It is also noted that the Beechworth Road carriageway is set down approximately 800mm below the level of the footpath.

The building envelope provides for 6 storeys at the end of the access driveway, which is the closest point to Beechworth Road being a setback of approximately 75 metres.

No objection to the potential impacts on the Beechworth Road streetscape was raised by Council or the community, and as a consequence the Proponent was not requested to undertake a perspective study for the likely impact of the development (in particular Building 5).

The Department is of the opinion that based on the topography of this part of the site, the physical separation from the public domain combined with the dwellings fronting Beechworth Road, the existing vegetative cover and the proposed landscape treatment, the likely impact of the Building 5 envelope is expected to be within reasonable limits.

### **5.2.2. Relationship with Adjoining Properties**

A number of concerns have been raised about the relationship between the proposed building envelopes and the immediately adjoining properties, particularly in relation to amenity impacts to adjoining residences such as visual bulk, privacy and overshadowing.

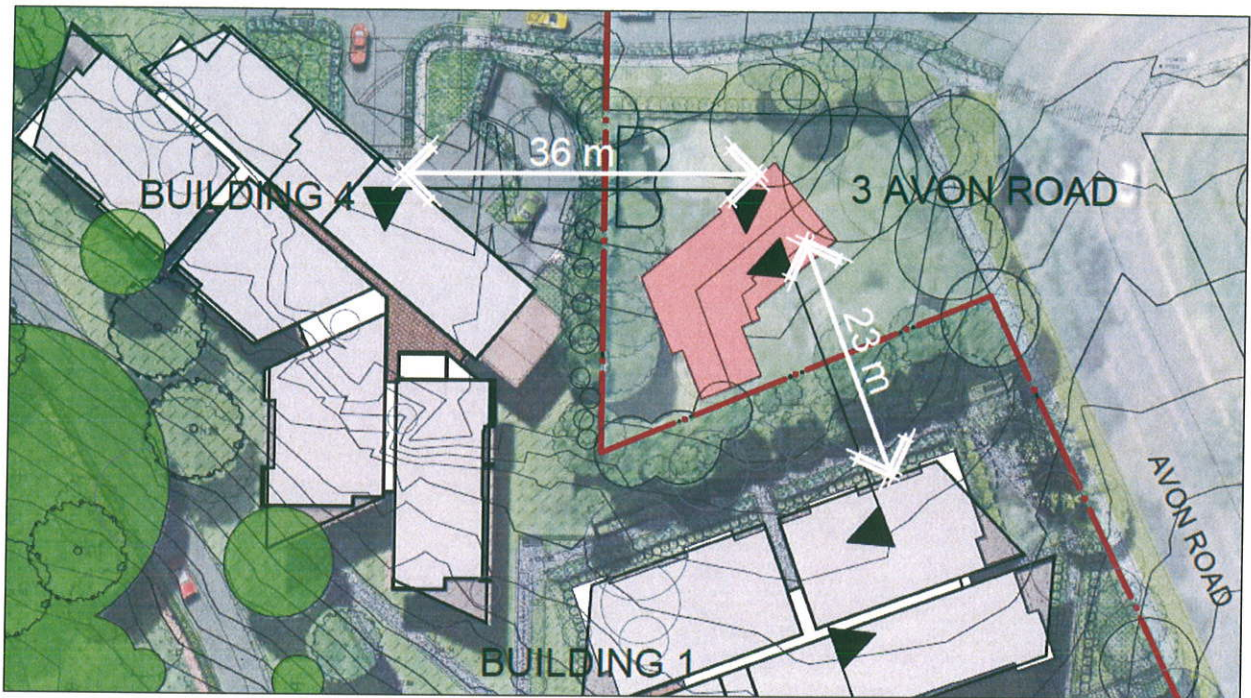
A number of the submissions also questioned the accuracy of the survey data provided for the properties which directly adjoin the site. In order to assess the likely impact of the proposed development to the adjoining dwellings expected to be most affected, the Department required the Proponent to undertake further analysis in this regard.

The Proponent has prepared a series of sections and plans which illustrate the relationship of the proposed building envelopes to adjoining properties. The Department has given consideration to the potential amenity impacts to the adjoining properties in turn below.

### **3 Avon Road**

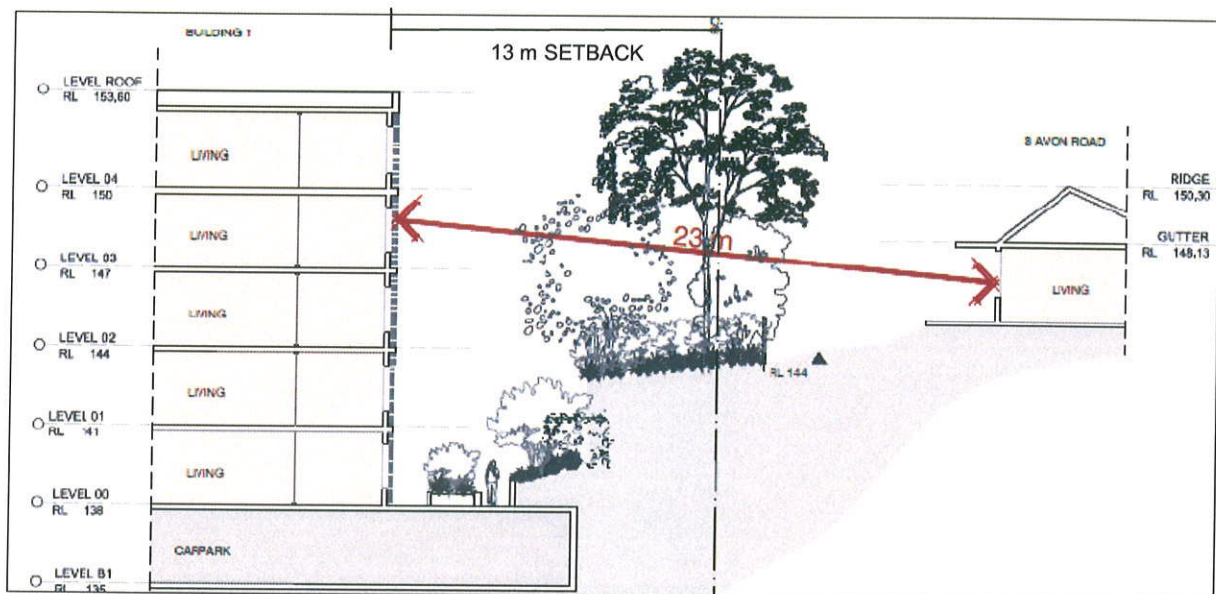
The property known as 3 Avon Road is a single parcel that has frontage to Avon Road and the "stub road" and shares common boundaries with the subject site to the south and west. Existing development on this site comprises a part 1 and part 2 storey dwelling and an in-ground swimming pool.

Building 1 adjoins the southern boundary of the site, while the Building 4 envelope is located to the west (**Figure 22**).



**Figure 22 Relationship of Buildings 1 and 4 to the dwelling at 3 Avon Road (Source: Proponent's Revised PPR / RtS)**

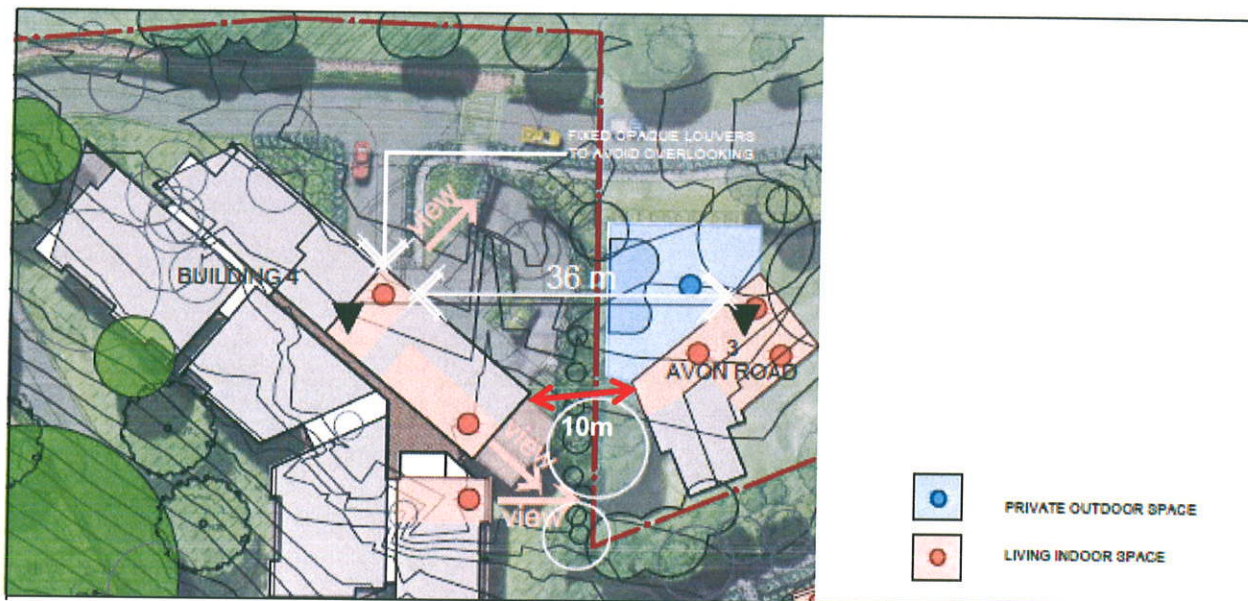
The section at **Figure 23** illustrates that the total separation distance between the living area within the dwelling at 3 Avon Road and the nearest living area within the proposed Building 1 is 23 metres (setback 13 metres from the common boundary). The setback provides opportunities for extensive landscape treatment which would serve to screen Building 1 and maintain privacy between the properties. It is also noted that because of the topography, Building 1 is only 1 storey higher (3.3 metres) than the dwelling at 3 Avon Road.



**Figure 23 Section between Building 1 & 3 Avon Road (Source: Proponent's Revised PPR / RtS)**

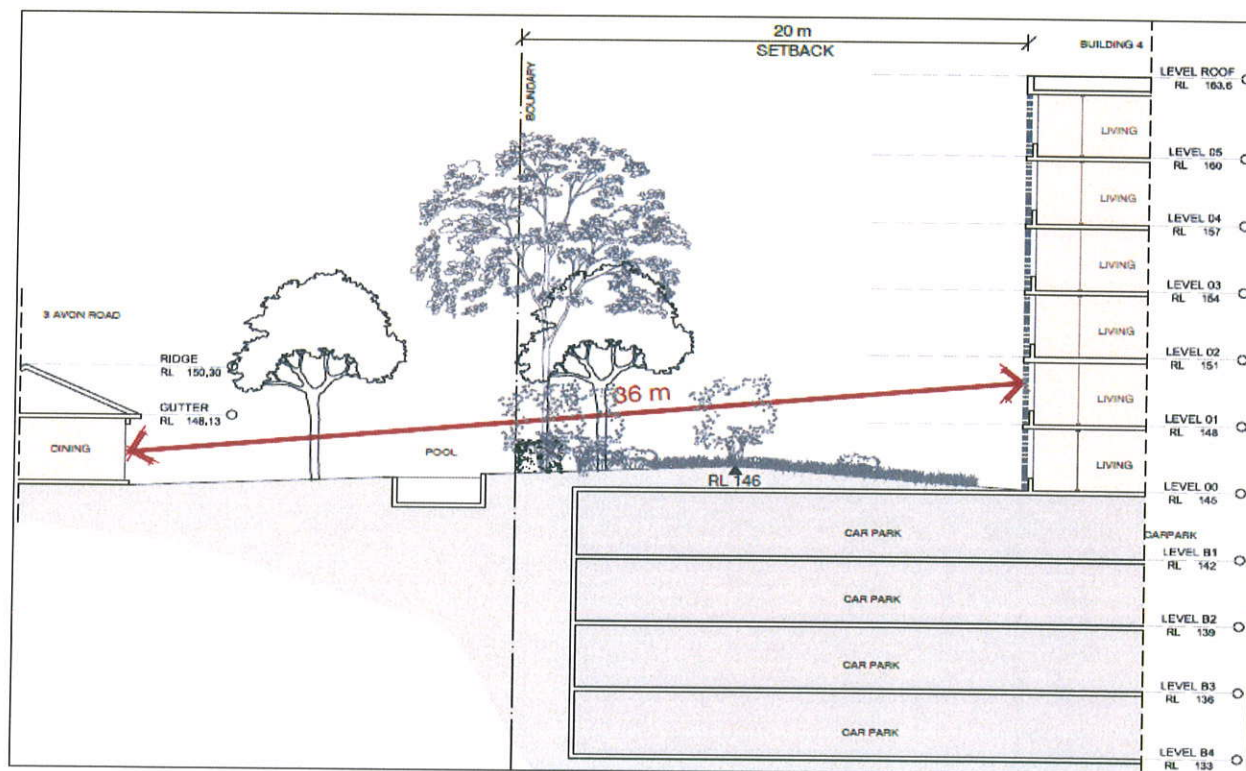
Noting the above, the Department considers that the relationship between these two buildings is acceptable as the Stage 1 proposal would not unreasonably impact on the amenity of the dwelling at 3 Avon Road.

The Proponent has undertaken a similar exercise to illustrate the relationship between the Building 4 envelope and 3 Avon Road, which has a height of 6 storeys and at its closest point, is setback 7 metres from the common boundary and 10 metres from the dwelling at 3 Avon Road (**Figure 24**). Due to the orientation of the Building 4 envelope and the indicative internal layouts the separation distance between the closest living area within the Building 4 envelope and the dwelling at 3 Avon Road is 36 metres (**Figure 25**).



**Figure 24** Relationship between 3 Avon Road and Building 4 showing relative location of internal living spaces (Source: Proponent's Revised PPR / RtS)

The topography is relatively flat in this area and the difference in height between the dwelling at 3 Avon Road and the Building 4 envelope is 13.3 metres (**Figure 25**)



**Figure 25** Section between living areas in Building 4 envelope and the dwelling at 3 Avon Road (Source: Proponent's Revised PPR / RtS)

Notwithstanding the proximity of the dwelling to the Building 4 envelope, the Department notes that visual bulk, privacy and overshadowing impacts are acceptable having regard to:

- the Building 4 envelope being sited at an oblique angle to the property at 3 Avon Road, which minimises the volume of the 6 storey north eastern façade visible from that property and therefore reduces the visual bulk;
- the north eastern orientation of the Building 4 envelope would also prevent direct overlooking into the dwelling at 3 Avon Road;
- solar access to 3 Avon Road would be unimpeded by Building 4 in the period between 9.00am and 1.00pm in mid-winter;
- there are only 2 living rooms per floor in the north eastern elevation of the Building 4 envelope and the Proponent has indicated that vertical louvres would be applied to these windows to preclude any overlooking of the adjoining property (as detailed in the revised Statement of Commitments); and
- there is a line of mature Turpentine trees (**Figure 26**) planted along the rear boundary of 3 Avon Road which, together with an appropriate landscape treatment within the setback on the subject site, would serve to screen the development, thereby maintaining privacy between properties and reducing its visual bulk.



**Figure 26** Existing trees planted within the rear yard of 3 Avon Road adjacent to the common boundary with the Concept Plan site

It is noted that the basement associated with Building 4 extends beyond the building footprint and is setback 2 to 3 metres from the common boundary with 3 Avon Road. In order to ensure the ongoing health of the existing mature trees a future assessment requirement has been included stipulating that any future stage application in respect of Building 4 should be accompanied by an Arborist's report which provides an assessment of the impact of the development on these trees and makes recommendations to ensure their ongoing health.

### **7 Avon Road**

No. 7 Avon Road accommodates a 2 storey dwelling which is located to the south of proposed Building 1. It is setback approximately 1.2 metres from the common boundary. There are three

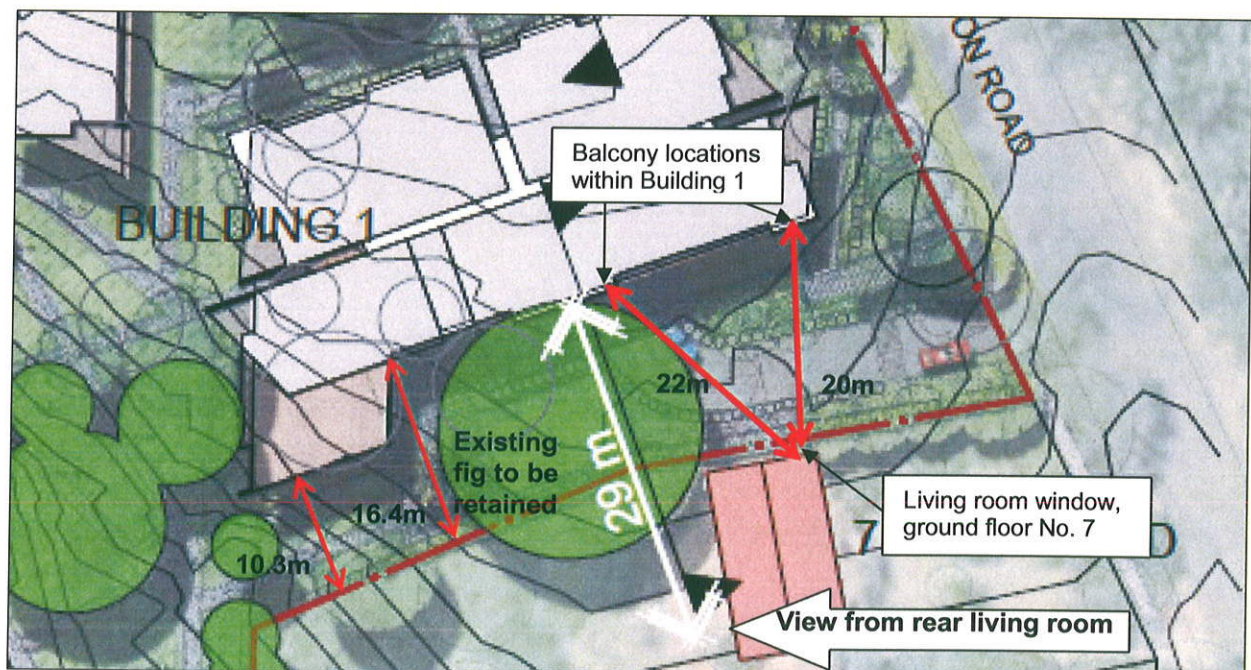
windows in the northern elevation of 7 Avon Road (**Figure 27**), two at ground level and one on the first floor.



**Figure 27 Dwelling at 7 Avon Road showing windows in the northern elevation**

Building 1 would present 4 storeys to 7 Avon Road and is 5.47 metres higher than the ridgeline of the dwelling. For the majority, Building 1 is proposed to be setback 16.4 metres from the boundary, with a small element at the rear being setback 10.3 metres.

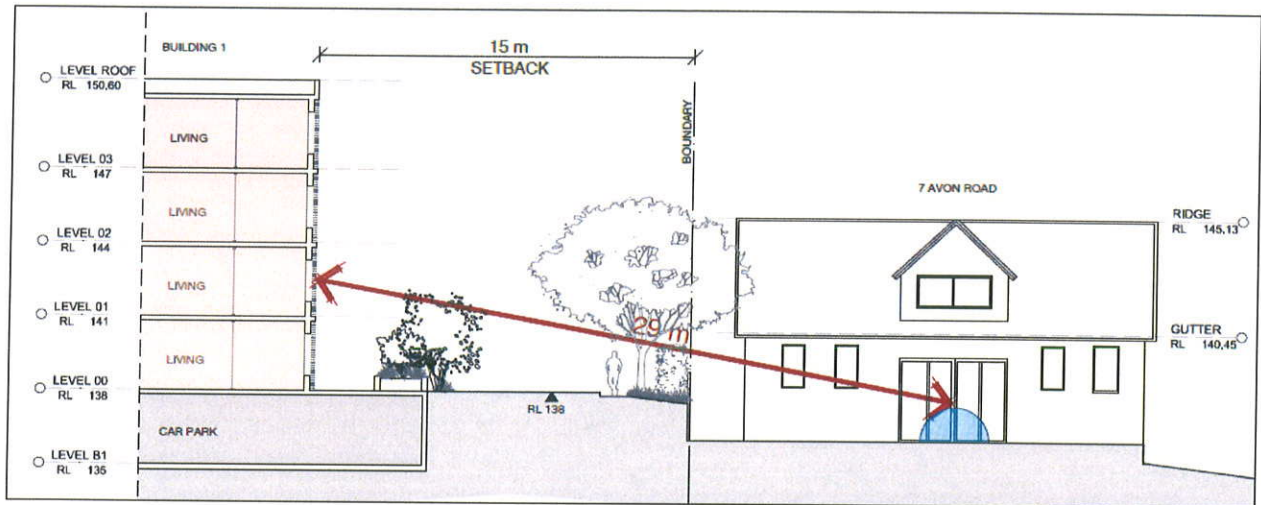
It would achieve a separation distance between living areas / balconies in Building 1 and the ground floor living room window in 7 Avon Road in excess of 20 metres, while the separation distance between the living areas within Building 1 and the private open space and associated living room windows at the rear of the dwelling would be 29 metres (**Figure 28**).



**Figure 28 Relationship between living areas in Building 1 and the dwelling at 7 Avon Road (Source: Proponent's Revised PPR / RtS)**

Council considers that the setback between Building 1 and 7 Avon Road provides inadequate opportunity for landscaping along the common boundary (approximately 1.6 metres wide measured to the internal pathway and driveway rather than the building façade).

The Department notes that in addition to the 1.6 metre wide strip along the common boundary, the side setback area affords considerable opportunities (a planted area immediately adjacent to Building 1 approximately 3 metres wide) for landscape treatment beyond the driveway and pedestrian pathway and on this basis is considered to be acceptable.



**Figure 29 Section showing living areas in Building 1 and dwelling at 7 Avon Road (Source: Proponent's Revised PPR / RtS)**

The Department considers that the proposed setbacks and the separation distance would minimise the 4 storey bulk of the building as seen from this property and would also (in conjunction with the proposed landscape treatment) allow for privacy to be maintained. Shadow diagrams indicated that 7 Avon Road would maintain 3 hours minimum solar access to primary living areas and usable private outdoor areas closest to the house between 10.00am and 12.00noon and 2.00pm and 3.00pm in mid-winter.

Noting the above, the Department considers the relationship between Building 1 and the existing dwelling house at 7 Avon Road to be acceptable as the proposal would not unreasonably impact on the amenity of the existing dwelling.

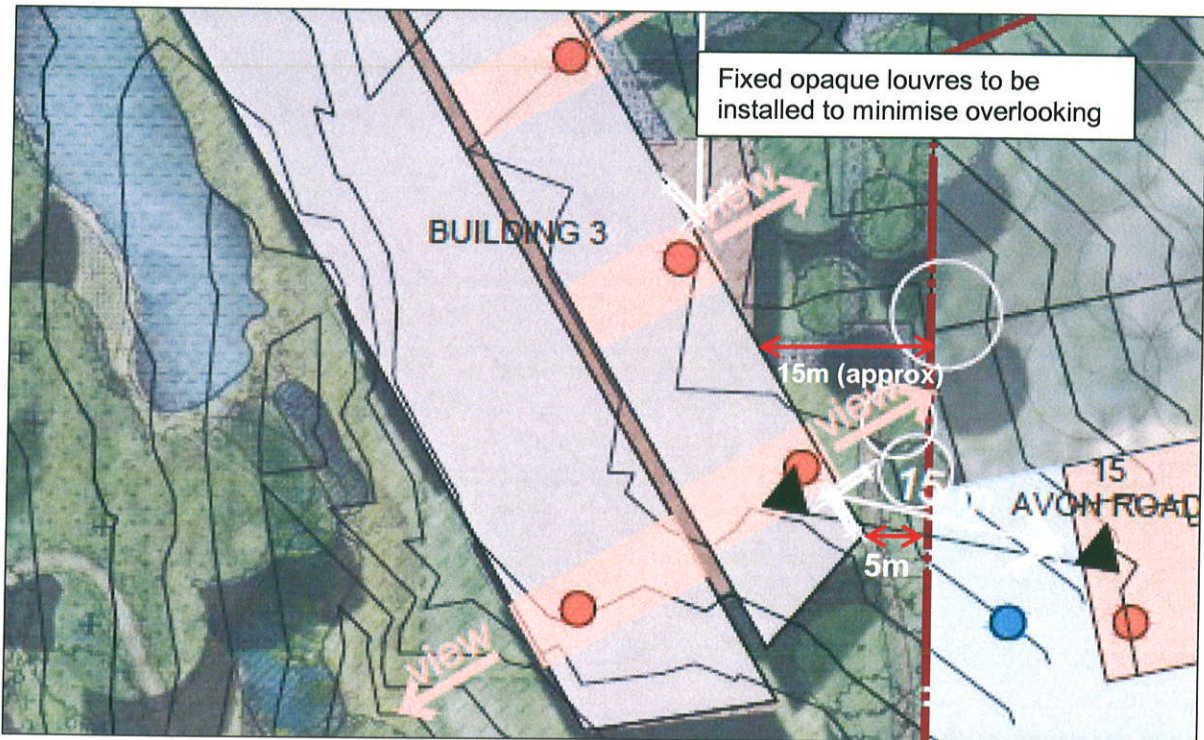
### 15 Avon Road

The property known as 15 Avon Road is a battle-axe block and accommodates a three storey dwelling which (at its closest point) is setback approximately 10 metres from the common boundary with the subject site (**Figures 30 and 31**).

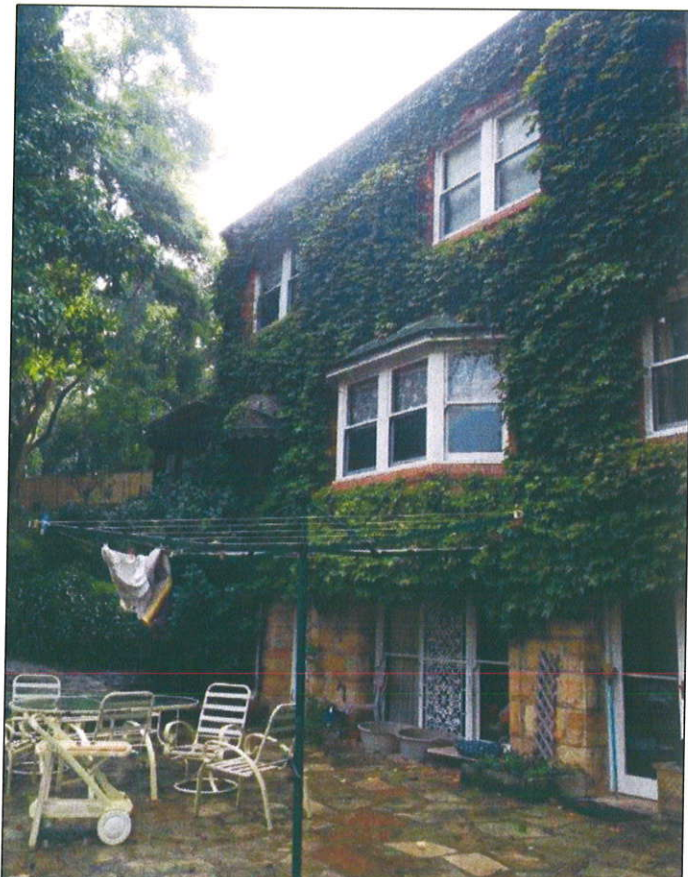
The Building 3 envelope presents 6 storeys to the dwelling at 15 Avon Road and is 5.15 metres higher than the ridgeline of that dwelling. The closest point is the south eastern corner which sits at a splayed angle to 15 Avon Road and is setback between 5 and 15 metres from the common boundary. As illustrated in **Figure 32** the minimum separation between the dwelling and the south eastern corner of the Building 3 envelope is 15 metres. The rear yard of 15 Avon Road is designed as an outdoor living and service area. An in-ground swimming pool is located toward the south western corner of the property, further away from the Building 3 envelope.

The Department notes that while the two buildings are only approximately 15 metres apart at the closest point, the proposed apartments within the Building 3 envelope are oriented to the north east, away from the principal private open space and living areas at 15 Avon Road.

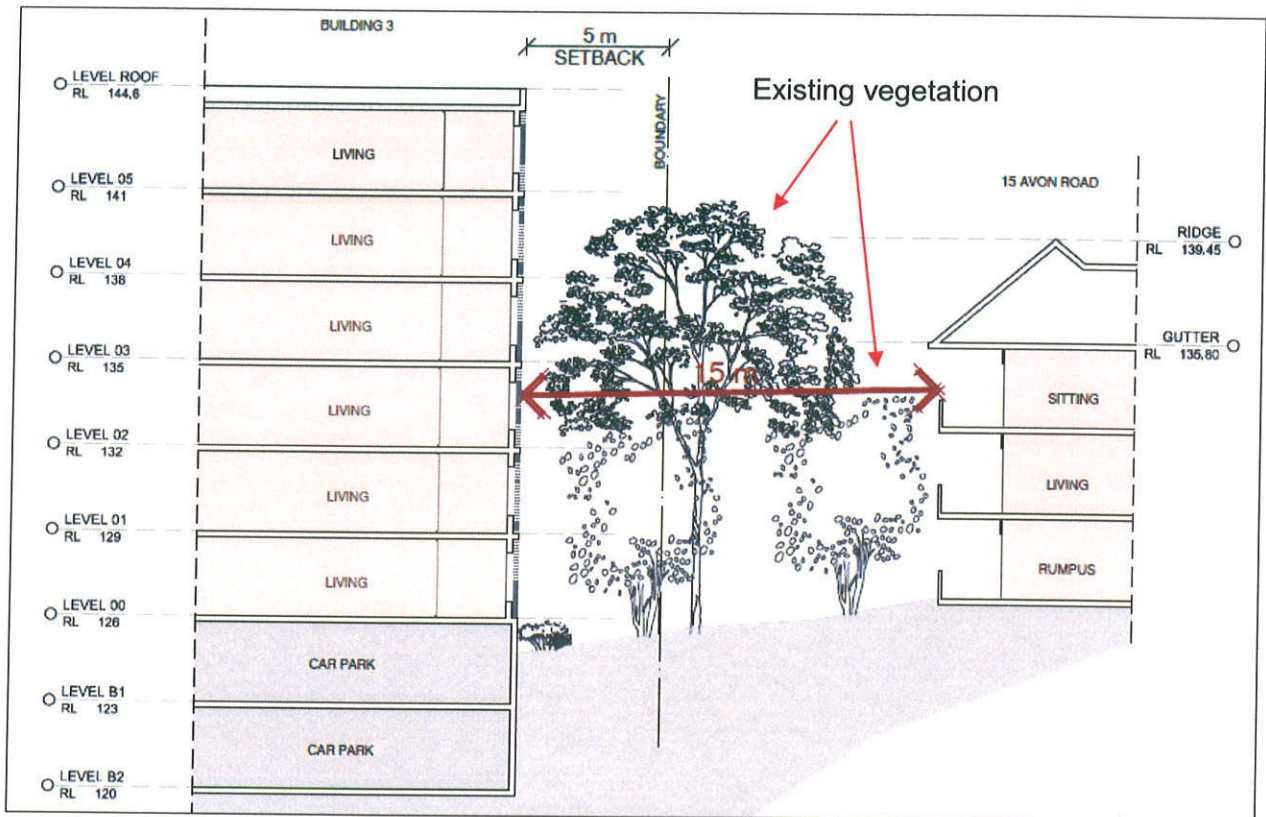
It is also noted that the Proponent has committed to providing vertical louvres to the windows of the principal living areas in this elevation of the Building 3 envelope to minimise any overlooking to the adjoining properties.



**Figure 30** Relationship between living areas in Building 3 and 15 Avon Road  
(Source: Proponent's Revised PPR / RtS)



**Figure 31** Rear elevation of dwelling at 15 Avon Road and associated outdoor area



**Figure 32** Section between living areas in Building 3 envelope and the dwelling at 15 Avon Road (Base Image Source: Proponent's Revised PPR / RtS)

The Building Envelope Plan (**Figure 11**) indicates that the Building 3 basement would project beyond the building footprint and would be constructed to the common boundary with 15 Avon Road. The intrusion of the basement into this setback area would limit the opportunities for deep soil planting in this part of the site where the potential impact of Building 3 on the adjoining property is greatest.

Whilst the Department considers that the detail of effective screening measures, both in terms of architectural devices and landscape treatment, is most appropriately addressed as part of any future DA for Building 3, it is recommended that a future assessment requirement be included which requires the adjustment of the basement footprint to provide an appropriate setback from the common boundary with 15 Avon Road to ensure the provision of effective screen planting in deep soil. The extent of the setback and the planting detail shall be determined in consultation with a landscape architect and shall demonstrate the efficacy of the screening function of the species selected.

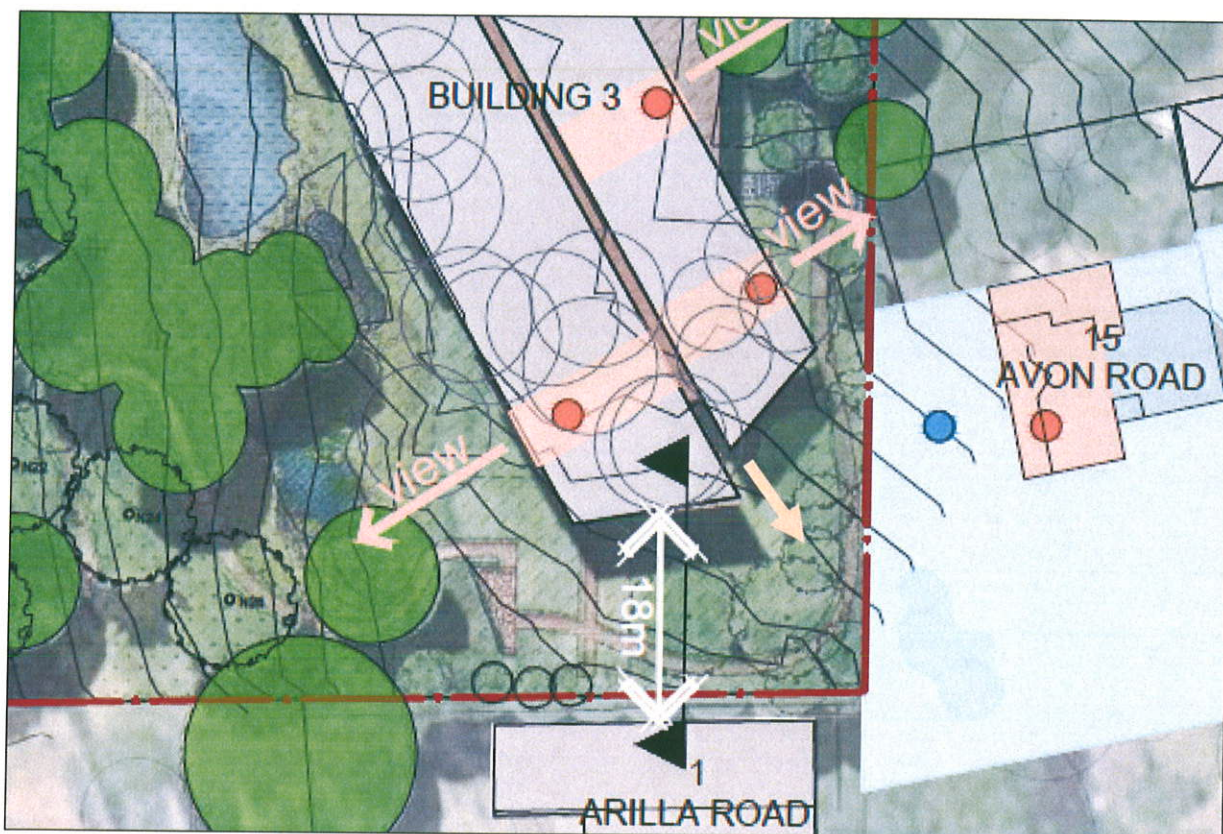
Notwithstanding the relative proximity of the dwelling to the Building 3 envelope, the Department notes that visual bulk and privacy and overshadowing impacts are acceptable having regard to:

- the orientation of the Building 3 envelope which is sited to take advantage of the north easterly aspect and the Proponent's commitment to apply vertical louvres to the windows of the living rooms in this elevation to preclude overlooking of the adjoining properties; and
- shadow diagrams which indicate that 15 Avon Road would maintain 3 hours minimum solar access to primary living areas within the dwelling and usable private outdoor areas closest to the house between 9.00am and 12.00noon in mid-winter.

### 1 Arilla Road

The property known as 1 Arilla Road is a battle-axe block and accommodates a 2 storey dwelling which is set back approximately 3 metres from the common boundary with the subject site.

The Building 3 envelope is proposed to be sited immediately to the north east of the dwelling at 1 Arilla Road (**Figure 33**) and observes an average setback of 15 metres from the common boundary, resulting in a physical separation of 18 metres between the buildings (**Figure 34**).



**Figure 33 Relationship between living areas in Building 3 and 1 Arilla Road (Source: Proponent's Revised PPR / RtS)**

This part of the Building 3 envelope presents 7 storeys to 1 Arilla Road and is 16 metres higher than the ridgeline of that dwelling. **Figure 33** indicates that the living areas within the Building 3 envelope are generally oriented away from the dwelling at 1 Arilla Road. This indicates that privacy may be maintained between properties.

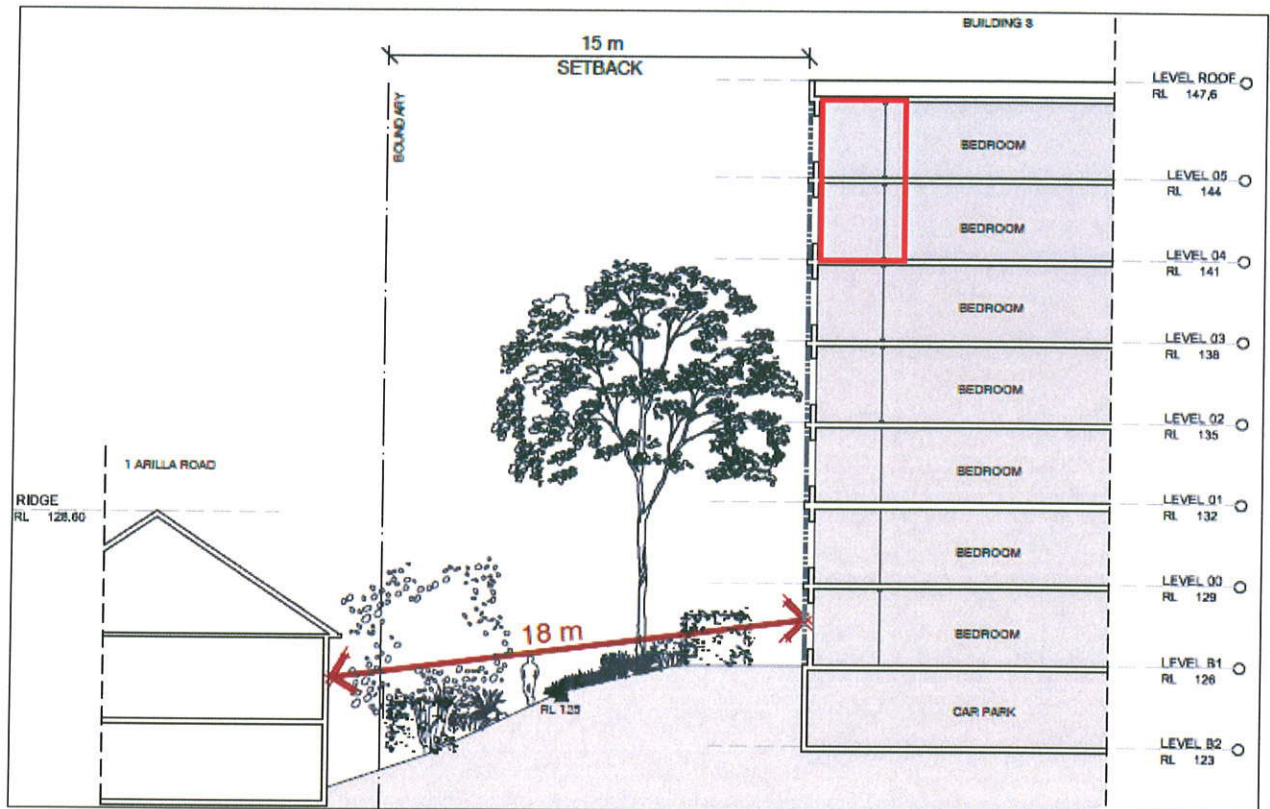
The Proponent has demonstrated that a minimum of 3 hours solar access would be maintained to the primary living area within the dwelling and its usable private open space between 12.00noon and 3.00pm in mid-winter.

The Department notes that Building 3 is setback to the boundary a greater distance than the 12 metres sought by Council. It also maintains a reasonable level of privacy and solar access to the adjoining dwelling. Notwithstanding, the Department considers that the scale of the 7 storey building, being situated on higher ground than the adjoining dwelling, would have an unreasonable visual bulk impact to 1 Arilla Road.

The Department therefore recommends the following changes to the Building 3 envelope to ensure the amenity of 1 Arilla Road is preserved and to provide a more appropriate relationship between the existing and proposed development is achieved:

- set back Levels 6 and 7 on the south western corner of the building by a minimum of 3 metres (as illustrated in the red outline in **Figure 34**); and
- adjust the basement footprint to provide a minimum setback of 6 metres from the common boundary with 1 Arilla Road to ensure the provision of effective screen planting in deep soil. The planting detail shall be determined in consultation with the project landscape architect and shall demonstrate the efficacy of the screening function of the species selected.

It is noted that modification to the proposal would also address a concern raised by Council in relation to the height of the Building 3 envelope and its poor transition and adverse amenity impacts to the property at 1 Arilla Road.



**Figure 34** Section between living areas in Building 3 and the dwelling 1 Arilla Rd (Source: Proponent's Revised PPR / RtS)

### 10A Beechworth Road

The dwelling at 10A Beechworth Road is a part 1 and part 2 storey dwelling which is approximately 28 metres from the common boundary with the Concept Plan site. The Building 5 envelope is located 16 metres to the north of the common boundary which results in a physical separation of 44 metres between the buildings (**Figures 35 and 36**).

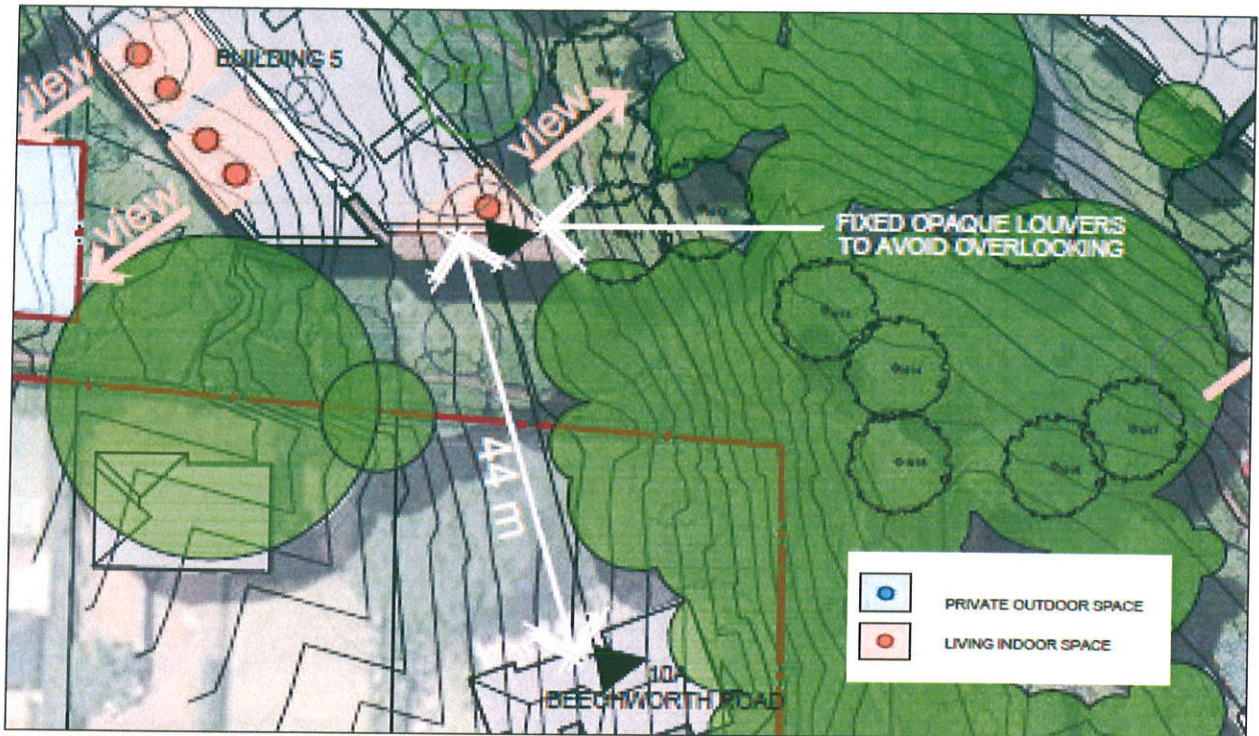
The section of the Building 5 envelope closest to the property at 10A Beechworth Road is part 6 / part 8 storeys in height, which is 20.95 metres higher than that dwelling.

An examination of aerial photographs of the site and environs indicates that there is substantial landscaping within the boundaries of the property at 10A Beechworth Road. Furthermore, the 16 metre setback within the Concept Plan site provides opportunities for extensive landscape treatment which would serve to further screen the Building 5 envelope thereby maintaining privacy and minimising visual bulk.

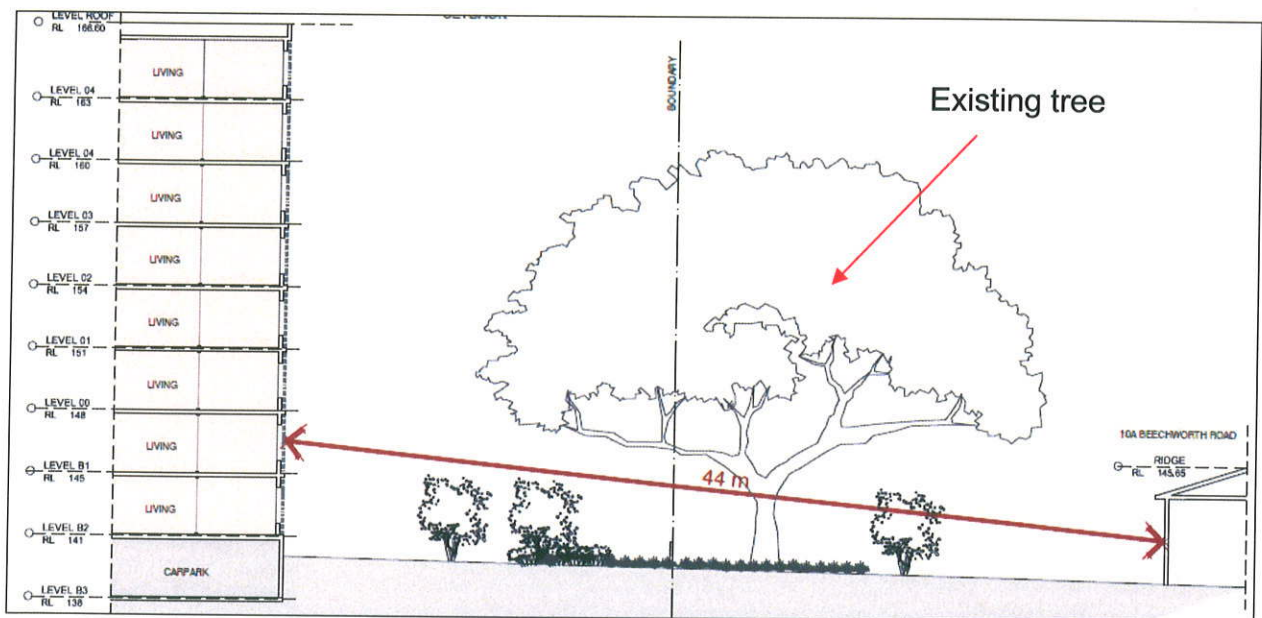
The Proponent has indicated that opaque louvres would be installed to the living room windows in the southern elevation of Building 5 in order to maintain privacy between properties.

The dwelling at 10A Beechworth Road is unaffected by shadow cast by the Building 5 envelope from 11.00am onwards and therefore achieves at least 4 hours of solar access in mid-winter.

Having regard to the above, the Department considers the relationship between the two buildings to be acceptable as the Building 5 envelope would not unreasonably impact on the amenity of the dwelling at 10A Beechworth Road.



**Figure 35** Relationship between living areas in Building 5 and the dwelling at 10A Beechworth Road (Source: Proponent's Revised PPR / RtS)

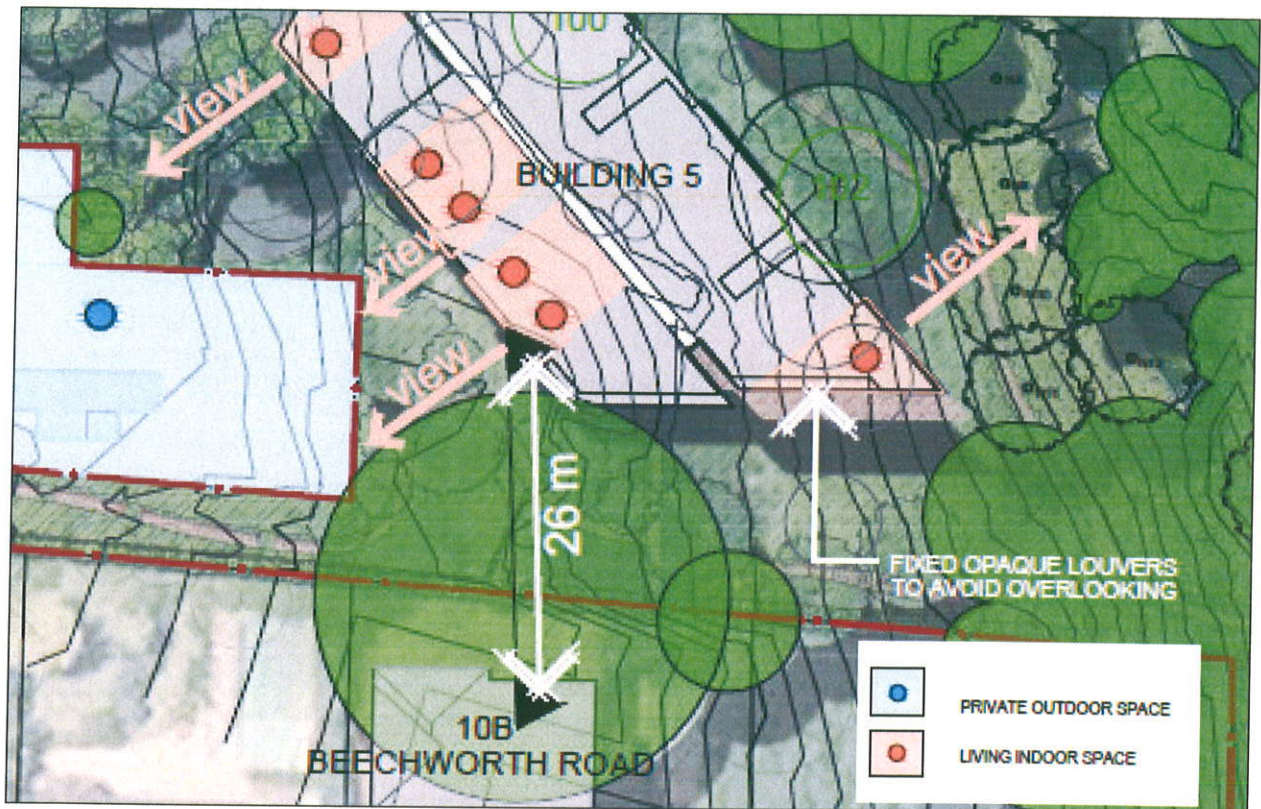


**Figure 36** Section between living areas in Building 5 and the dwelling at 10A Beechworth Road (Base Image Source: Proponent's Revised PPR / RtS)

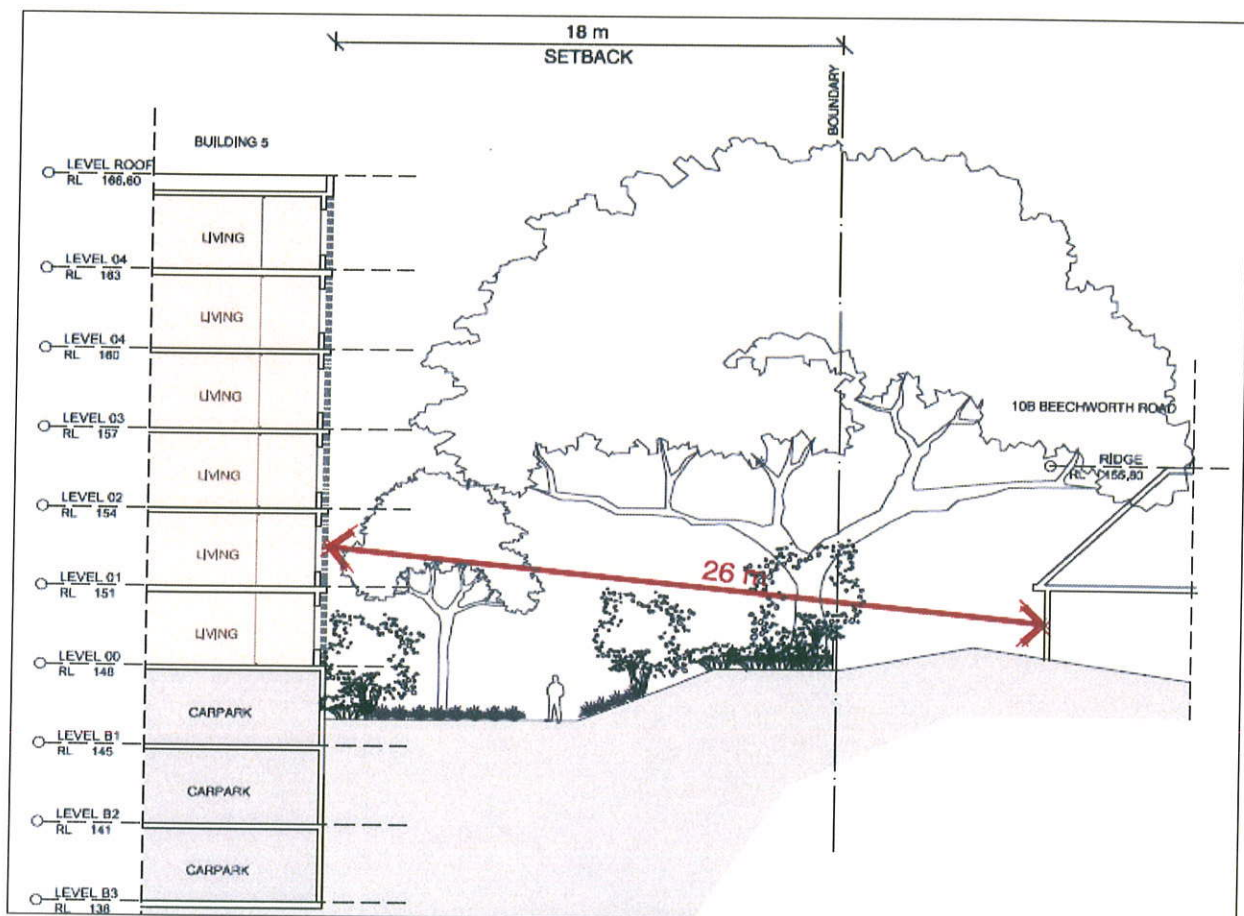
### 10B Beechworth Road

The property at 10B Beechworth Road accommodates a two storey dwelling which includes an outdoor living area located in the setback (approximately 8 metres) to the common boundary with the Concept Plan site.

The Building 5 envelope is located 18 metres to the north of the common boundary between the properties. The siting of the dwelling at 10B Beechworth Road results in a physical separation of 26 metres (**Figures 37 and 38**) between these two buildings.



**Figure 37** Relationship between living areas in Building 5 and the dwelling at 10B Beechworth Road (Source: Proponent's Revised PPR / RtS)



**Figure 38** Section between living areas in Building 5 and 10B Beechworth Road (Source: Proponent's Revised PPR / RtS)

The Building 5 envelope is part 6 / part 8 storeys in the area which faces the property at 10B Beechworth Road and is 10.8 metres higher than the ridgeline of this dwelling.

The Proponent has made an undertaking in the revised Statement of Commitments that opaque louvers would be installed to the living room windows in the southern elevation of Building 5 in order to maintain privacy between the properties.

The dwelling and all outdoor private open space areas at 10B Beechworth Road are unaffected by shadow cast by the Building 5 envelope from 11.00am onwards and therefore achieves at least 4 hours of solar access in mid-winter.

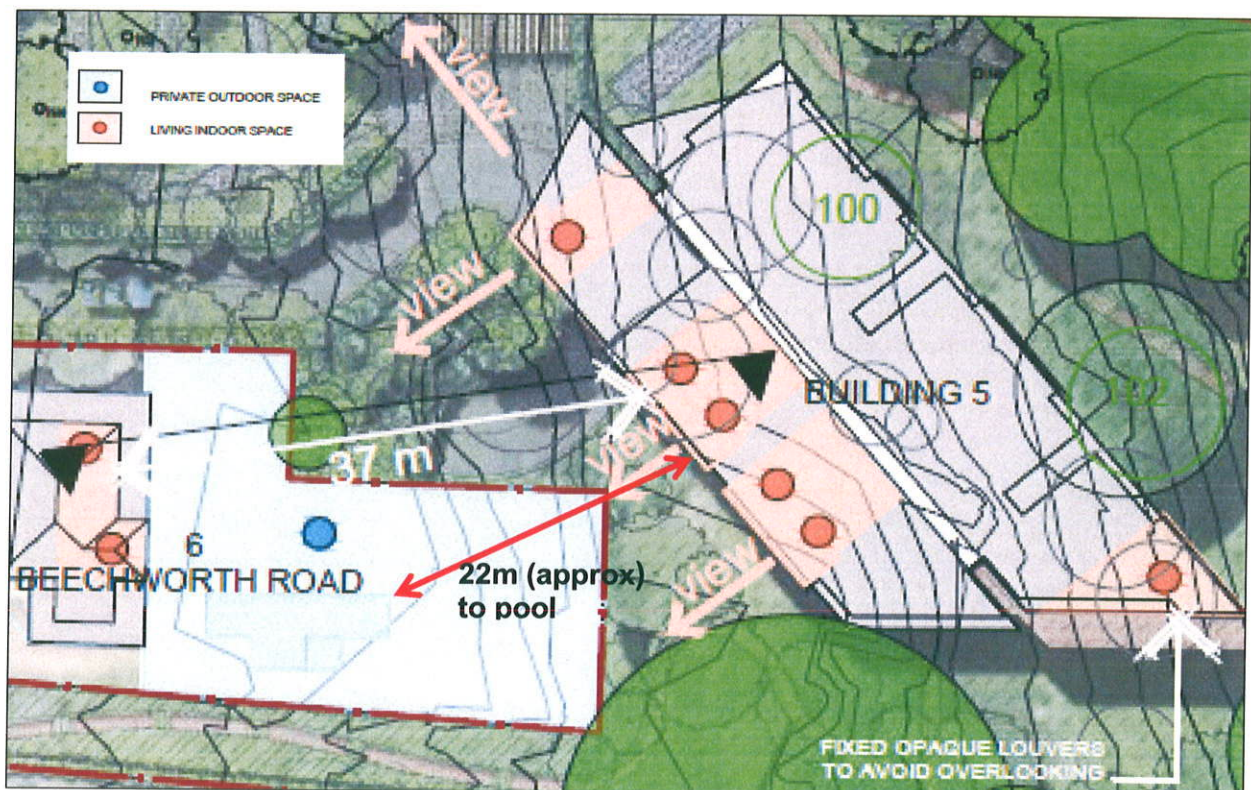
Noting the above, the Department is of the opinion that the relationship between Building 5 and the dwelling at 10B Beechworth Road is acceptable as the Building 5 envelope would not unreasonably impact on the amenity of the adjoining dwelling and its associated private outdoor space in terms of privacy, visual bulk or overshadowing.

### 6 Beechworth Road

The dwelling at 6 Beechworth Road is a large two storey late federation home on an irregular shaped parcel of land (**Figure 39**).

The Building 5 envelope is 6 storeys in its western elevation and is located a minimum distance of 37 metres to the east of the dwelling at 6 Beechworth Road. It is noted that the Building 5 envelope is less than 1 storey higher (2.4 metres) than the top of the ridge of this dwelling.

It is noted that the primary outdoor living area associated with the dwelling at 6 Beechworth Road is generally associated with the swimming pool and is located in the area closest to the dwelling. Based on the indicative floor plans submitted by the Proponent the western elevation of the Building 5 envelope would be (at its closest point) in the order of 22 metres from the pool area.



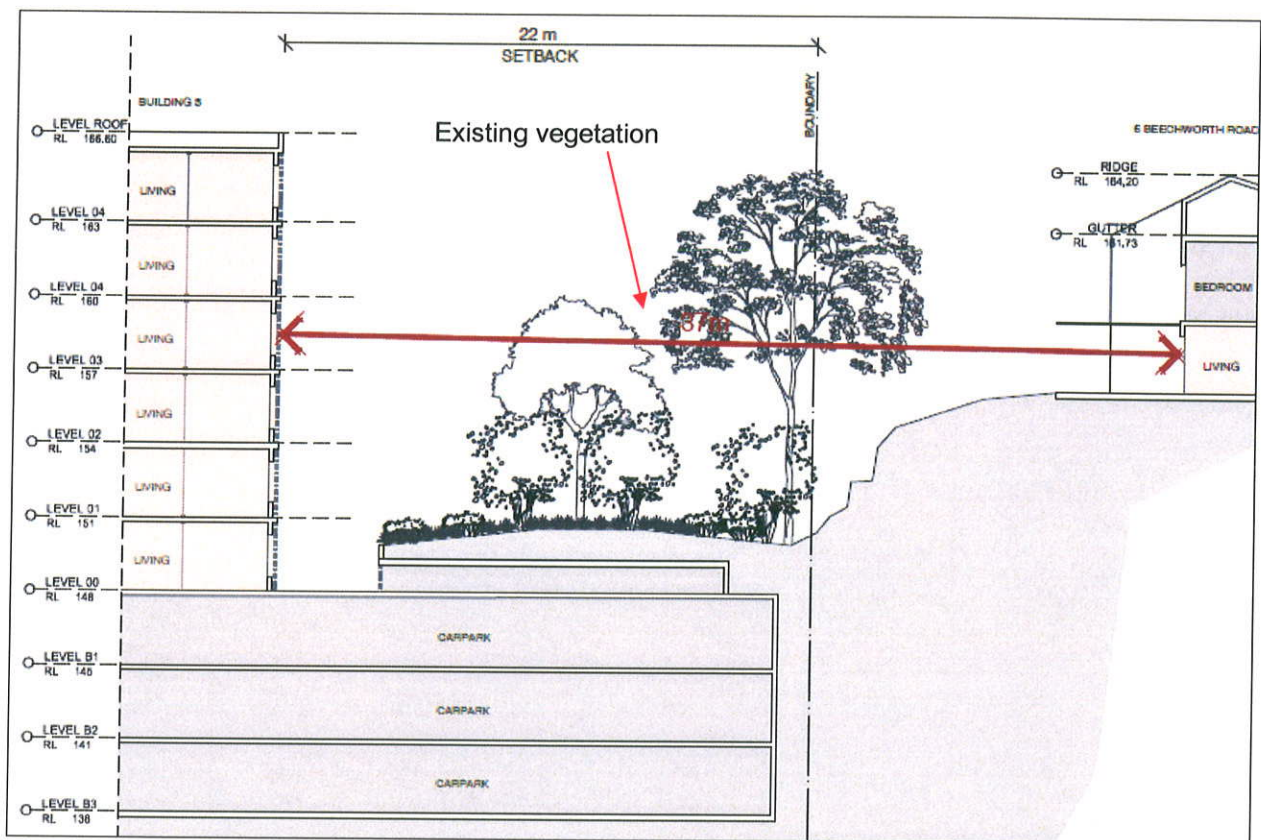
**Figure 39** Relationship between living areas in the Building 5 envelope and the dwelling at 6 Beechworth Road (Source: Proponent's Revised PPR / RtS)

The section at **Figure 40** illustrates the relationship between the living areas within the dwelling at 6 Beechworth Road. An examination of aerial photographs indicates that there is substantial existing vegetation within the property at 6 Beechworth where it interfaces with the subject site.

The setback within the Concept Plan site provides further opportunities for landscape treatment which would screen the Building 5 envelope.

It is noted that the dwelling and outdoor private open space areas at 6 Beechworth Road are unaffected by the shadow cast by the Building 5 envelope between 9.00am and 3.00pm in mid-winter.

Having regard to the above, the Department considers that the relationship between Building 5 and the dwelling at 6 Beechworth Road is acceptable as the Building 5 envelope would not unreasonably impact on the amenity of the adjoining dwelling and its associated private outdoor space in terms of visual bulk, privacy or overshadowing.



**Figure 40** Section between living areas in Building 5 and the dwelling at 6 Beechworth Road (Source: Proponent's Revised PPR / RtS)

### 5.2.3. Built Form Summary

The preceding analysis and discussion has demonstrated that the majority of the building forms would not be readily visible from the adjoining streets.

Building 1 is the only part of the proposal with direct frontage to a public road (Avon Road) and following further amendments in response to concerns raised by Council, the setback from the street has been increased to 10 – 10.8 metres which is considered to be more responsive to the character of the streetscape and this locality. Furthermore, the increased front setback combined with the generous side setbacks provides a transition to the dwellings on either side and ensures that the building is appropriately scaled to sit sympathetically amongst this lower scale development.

Having assessed the relationship of the development with the adjoining dwellings, the Department considers that the proposed building forms would have an acceptable impact on amenity when considering key issues such as visual bulk, overshadowing and privacy impacts.

It is acknowledged that both the Building 3 and 4 envelopes are sited quite close to adjoining boundaries in some areas however modifications and future assessment requirements are recommended to ensure that a reasonable level of amenity is retained by adjoining properties and that appropriate landscape planting is provided to create a vegetated buffer where appropriate.

### 5.3. Residential Amenity

The residential amenity provided by the proposal has been considered against relevant policies including *State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings* (SEPP 65) and the accompanying *Residential Flat Design Code*.

The Concept Plan only provides indicative building and apartment layouts. More comprehensive compliance with the Code criteria can be demonstrated by the Proponent in future development applications. Notwithstanding, the Department has assessed the level of residential amenity in terms of solar access, building separation, natural cross ventilation, building depth and communal open space. A more detailed assessment has been undertaken for Stage 1 (see **Appendix F**).

#### 5.3.1. Solar Access

The Code recommends that living rooms and private open space in at least 70% of apartments achieve 3 hours solar access between 9.00am and 3.00pm in mid winter.

##### *Concept Plan*

The Proponent has submitted an analysis of each level of all four building envelopes, based on the illustrative floor plans accompanying the Concept Plan, which details the likely extent of solar access achieved to the primary living and private open space areas of each apartment at mid winter. The following table sets out the solar access achieved in each envelope.

**Table 6: Concept Plan solar access performance**

| Building Envelope No. | Solar Access Achieved |
|-----------------------|-----------------------|
| 1                     | 73%                   |
| 3                     | 70%                   |
| 4                     | 93%                   |
| 5                     | 89%                   |
| <b>Average</b>        | <b>81%</b>            |

The Department is satisfied that the Concept Plan is capable of achieving the rule of thumb in relation to solar access.

##### *Stage 1*

As described above, the solar access study for Building 1 demonstrates that 73% of the apartments achieve at least 3 hours direct solar access.

#### 5.3.2. Building Separation

##### *Concept Plan and Stage 1 Project Application*

The building separation distance between each of the Building Envelopes generally meets the rule of thumb, with the exception of the distance between Building 1 and Building 4. The separation between the north western corner of Building 1 (5 storeys) and the southernmost

point of the Building 4 envelope (9 storeys) is approximately 9.3 metres, where the Code recommends up to 18 metres.

It is noted that Council has also identified the building separation as an issue and has indicated that a 12 metre separation in this location would be appropriate.

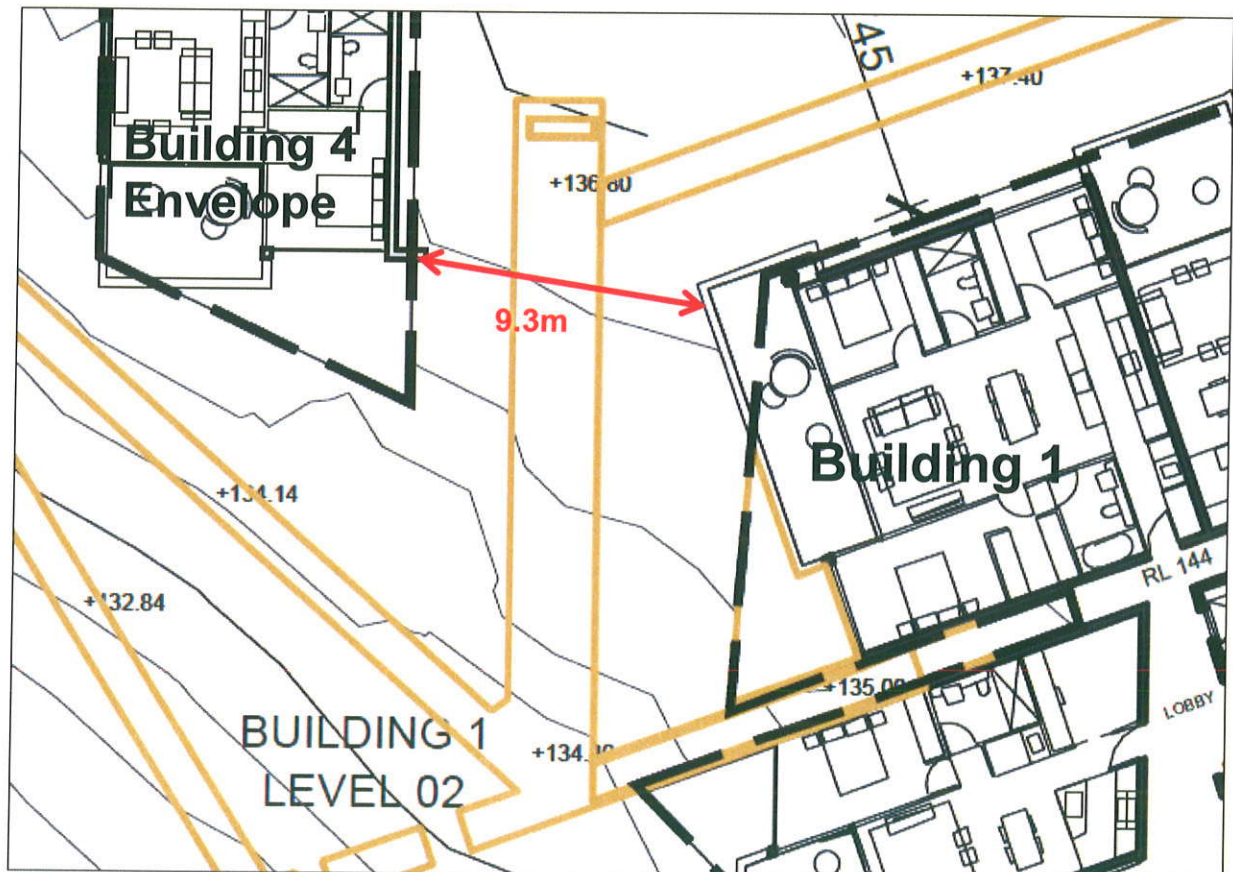
The architectural drawings submitted in respect of Building 1 and the indicative floor plans for the Building 4 envelope show that the living areas in the Building 4 envelope are oriented away from the balcony in Building 1 (**Figure 41**). As a result there would be no direct overlooking between the buildings at this point.

It is noted that Building 4 will be the subject of a future stage application, at which time the detailed design should demonstrate that privacy is maintained between the buildings. In this regard, a range of architectural devices such as highlight windows, louvres, screens or blade walls could be employed to achieve this outcome. A future assessment requirement is recommended in this regard.

In relation to the overshadowing impact associated with the proximity of the buildings, the Department notes that the whilst the Building 4 envelope would overshadow the apartments in the north western corner of Building 1, they are still capable of achieving a minimum of 3 hours solar access in mid-winter between 9.00am and 10.00am and between 1.00pm and 3.00pm.

Having regard to the above, the Department is of the opinion that the reduced building separation distance between Building 1 and Building 4 is acceptable as proposed, as:

- the orientation and siting of the buildings ensure that minimum solar access requirements to the primary living areas and balconies can be achieved; and
- the internal floor plans / apartment layouts, together with the overall building orientation ensures that privacy is maintained.



**Figure 41** Building separation - Building 1 and Building 4 (Source: Proponent's PPR)

### 5.3.3. Natural Cross Ventilation

The Code recommends that 60% of apartments should be naturally cross ventilated.

#### *Concept Plan*

The Proponent has provided an analysis of each level of each Building Envelope, based on the indicative floor plans, which demonstrates the means by which cross ventilation is capable of being achieved. The following table summarises the cross ventilation able to be achieved in each envelope.

**Table 7: Concept Plan indicative cross ventilation performance**

| Building Envelope No. | Cross Ventilation Achieved |
|-----------------------|----------------------------|
| 1                     | 82%                        |
| 3                     | 70%                        |
| 4                     | 60.7%                      |
| 5                     | 80%                        |
| <b>Average</b>        | <b>70%</b>                 |

Having regard to the above, the Department considers that the Concept Plan proposal is capable of achieving the minimum 60% of all apartments guideline for cross ventilation.

#### *Stage 1*

The Proponent has submitted a detailed analysis of each level of the building which demonstrates the means by which cross ventilation is achieved to each apartment.

Of the 44 apartments proposed within Building 1, 82% are capable of being naturally cross-ventilated. It is noted that to achieve this, the building design features deep recesses in the façade and includes distinct corner conditions for living areas and / or bedrooms to enhance local pressure differentials, thereby achieving movement of air. The apartments also have an open plan layout to living, dining and kitchen areas. The Stage 1 proposal therefore exceeds the rule of thumb allowed for a high level of internal amenity.

### 5.3.4. Building Depth / Depth of Apartments / Single Aspect Units

#### *Concept Plan*

The Code recommends an overall building depth of between 10 and 18 metres, a maximum distance from a window to back of kitchen of 8 metres and a maximum depth for single aspect units of 8 metres.

The proposal provides for building depths ranging between 11 and 23 metres. While this exceeds the rules of thumb, the Department considers the proposed building envelopes are acceptable at the Concept Plan stage given that:

- the likely internal layout of future stages would be similar to Stage 1 providing a central corridor with double loaded apartments (approx. 12 metres in depth);
- balconies / wintergardens would be provided within the building envelope thereby reducing building depth in these locations; and
- building articulation and recesses (similar to that documented in Stage 1) would be introduced at the future development application stage.

On this basis, the Department is satisfied that the internal layout of these buildings would not be compromised by the additional depth of the building envelopes. Detailed consideration of apartment depths would be assessed as part of future applications.

### *Stage 1*

The overall building depth for the Stage 1 building ranges between 10 and 22 metres. The proposed apartment depths are generally no greater than 12 metres and the habitable parts of all units are confined to an area within 8 metres of an external glass line, which provides a good level of amenity associated with access to natural light and ventilation.

It is also noted that 20 apartments (45%) occupy corner locations with good natural light and cross ventilation.

The Department is satisfied that the level of articulation provided to facades is acceptable and that apartment depths as proposed would provide access to natural light and ventilation thereby creating an acceptable level of internal amenity.

The Code recommends that single aspect, southern-facing apartments be limited to no more than 10% of the total number of units. The configuration of the land and the roughly east – west orientation of Building 1 results in 18% of the dwellings having a southern, single aspect.

The single aspect apartments have a minimum frontage of 9 metres and are shallower (6-8 metres) than those with dual aspect. In assessing the internal amenity of these dwellings, the Department notes that:

- the Proponent has committed to a minimum 2.7 metre floor to ceiling height in all habitable rooms; and
- glazing associated with the balconies/wintergardens and other habitable rooms is estimated to comprise approximately 65% of the façade, thereby ensuring access to daylight.

On this basis, the Department is satisfied that the single aspect apartments would achieve appropriate levels of internal amenity.

The Code indicates that a minimum of 25% of kitchens should be naturally ventilated. The Proponent has advised that only 1 of the dwellings in Building 1 can comply. The Department notes that the internal apartment layouts are “open plan” and that as a consequence the kitchen areas are generally within 6 to 10 metres of an operable window and / or balcony door. The Department is satisfied that the kitchens would have reasonable access to natural light and ventilation.

### **5.3.5. Communal Open Space**

#### *Concept Plan and Stage 1 Project Application*

The Code indicates that 25-30% of the site area should be available for communal open space. The proposal incorporates 175m<sup>2</sup> of communal open space (approximately 5% of the Building 1 site) located on the southern side of the building in the general vicinity of the main entry to the lift lobby.

Considered in isolation, this appears to be a significant non-compliance with the rule of thumb, however the Department is of the opinion that this is satisfactory in this instance having regard to the wider Concept Plan site which includes extensive landscaped and conservation areas (64% of the Concept Plan site) that are expected to provide a significant resource and level of amenity for future residents.

### **5.3.6. Number of Units Accessed from Circulation Core**

#### *Stage 1*

The Code recommends that the maximum number of units accessible from a single core / corridor should be limited to 8. Exceptions may be considered in instances where developments can demonstrate a high level of amenity for common lobbies, corridors and units.

The configuration of Building 1 is roughly L-shaped and accommodates 9 units per floor, from Ground Floor to Level 3. The lift lobby is located in the south western corner of the building. Two west-facing apartments per floor are located directly opposite the lifts, while the remaining 7 apartments are accessed from a central corridor through the building.

At ground level the central corridor has doors at each end which would provide alternate access for residents. On the upper levels the central corridor includes glazing at each end which would facilitate light penetration and natural ventilation to the space.

The 9 units accessed from the single core / corridor is considered a minor non-compliance. The Department considers this arrangement to be satisfactory having regard to the relatively small scale of the development (44 apartments), the configuration of the building and its design features, including the ease of access and the high level of level of amenity afforded to the common areas, including the lift lobby and the central corridor.

## **5.4. Traffic and Access**

### **5.4.1. Traffic Generation and Local Road Network**

Three points of vehicular ingress / egress to the Concept Plan site are proposed, all of which service discrete elements of the Concept Plan site, as follows:

- Building 1 access is via a new 6 metre wide driveway in approximately the same location as the existing driveway to 5 Avon Road. The projected traffic generation associated with Building 1 is 17.6 vehicles per hour in peak periods;
- Buildings 3 and 4 would be accessed via a new internal road in the same location as the existing driveway which services 1 Avon Road (from the end of the "stub road"). The combined traffic generation from these buildings is 66 vehicles per hour in peak periods; and
- Building 5 would be serviced by a new driveway to be constructed in approximately the same position as the existing driveway which services 4 Beechworth Road. The projected traffic generation from Building 5 is 25 vehicles per hour in peak periods.

Traffic generation and impacts on the local road network were the primary concerns raised by the public during the notification period associated with the EA. The same level of concern was raised during the notification of the PPR, notwithstanding the reduction in the density of the proposal.

Concerns about traffic impacts were also raised by Council, citing high volumes of traffic, particularly in the morning peak, associated with the school (PLC) and commuter traffic on the local road network in the vicinity of the site, in particular on Avon Road.

The PPR was accompanied by a Traffic and Parking Assessment Report prepared by Varga Traffic Planning. This modelled the existing traffic conditions in the vicinity of the site by undertaking a traffic survey. The survey found that the major intersections with the Pacific Highway (Beechworth Road and Livingstone Road) currently operate at Level of Service (LoS) B, which indicates that these intersections are operating satisfactorily. The survey found that the intersection of Avon Road and Arilla Road operates at LoS A which indicates satisfactory operation with spare capacity.

Varga provided a modelled analysis of the additional traffic generated by the Concept Plan which results in 109 vehicles per hour in the peak period. The surveyed intersections were forecast to continue to operate at the same level of service during the peak periods under post development conditions, as follows:

- the Pacific Highway / Livingstone Road intersection would continue to operate at LoS B under the projected additional traffic flows, with increases in total average vehicle delays of less than 2 seconds per vehicle;

- Pacific Highway / Beechworth Road intersection would also continue to operate at LoS B, with increases in total average vehicle delays in the order of 3-4 seconds per vehicle; and
- the Avon Road / Arilla Road intersection would continue to operate at LoS A, with no appreciable change in total average vehicle delays.

The RMS reviewed the information and undertook its own desktop review and has advised that the proposal would have a minimal impact on the flow of traffic along the Pacific Highway.

The Department has given consideration to the potential amenity impacts to the locality as a result of the additional traffic generation. In view of the issues raised in the public submissions about existing congestion on the local road network (particularly in the morning peak) and pedestrian safety in the vicinity of the site, the Department considered it appropriate to commission an independent peer review of the key traffic and transport issues associated with the proposal to inform its assessment.

The Department commissioned ARUP to undertake a peer review of the traffic report prepared by Varga in the context of the issues raised by the public as well as the submissions received from Ku-ring-gai Council and the RMS. A copy of ARUP's report is provided in **Appendix H**.

ARUP reviewed the existing traffic conditions during the morning peak hour and observed that while queuing does occur on Avon Road, it is confined to a relatively short period during school drop-off hours. After approximately 8.15am, ARUP concludes that traffic conditions improve and queues of more than 2 or 3 vehicles were rare.

ARUP has indicated that because the proposal is solely for residential purposes, vehicle trips would be predominantly out of the site in the AM peak hour and into the site in PM peak hour. Therefore during the morning peak, any queuing would occur within the site and not on Council roads as vehicles from the development would be required to give way to through traffic on Avon and Beechworth Roads. The PM peak hour for development traffic, forecast to occur between 5.00pm and 6.00pm would not coincide with the peak activity generated by PLC (which occurs during 3.00pm and 4.00pm).

On this basis, ARUP concluded that the additional traffic generated from the Concept Plan site would result in negligible impacts on the local road network. Avon Road would, particularly between 7.30am and 8.30am, experience a small increase in traffic however queuing would be largely confined within the site boundary. Traffic conditions along Avon Road would continue to be dictated by PLC-related traffic, with congestion along this route dissipating significantly outside of school pick-up and drop-off periods.

The Department has considered the traffic impacts of the proposal on the local road network and notes the comments provided by RMS relating to intersection performance and the minimal impact on traffic flows on the Pacific Highway. As the intersections would continue to operate at good levels of service, the proposal does not give rise to any requirements in relation to State road infrastructure improvements.

Furthermore the independent review of traffic issues carried out by ARUP has confirmed that the proposal would have a negligible impact on the local road network.

Having regard to the above, the Department considers that the local road network is capable of accommodating the increased vehicle movements generated by the proposal.

#### **5.4.2. Parking Rates and Alternate forms of Travel**

Car parking provision and the impacts associated with on-street parking were issues raised in the public submissions. Specific concerns were also raised by Council in relation to the adequacy of on-site parking to service visitors to the site.

The proposal seeks approval for 324 basement level parking spaces based on the following parking rates:

- 1 space per studio, 1 bedroom or 2 bedroom dwelling;
- 2 spaces per 3 bedroom dwelling; and
- 1 space per 10 dwellings for visitor use.

A comparison with Council's current (DCP 55) and draft (Draft Ku-ring-gai Local Centres DCP) parking requirements, together with the RTA Guide to Traffic Generating Development is included.

**Table 8: Parking Rates of Proposal, Council and RMS Controls**

|               | <b>Proposal<br/>Parking Rates</b> | <b>Ku-ring-gai<br/>DCP 55</b> | <b>Draft Ku-ring-gai Local<br/>Centres DCP</b> | <b>RTA Guide<br/>(recommended<br/>minimum)</b> |
|---------------|-----------------------------------|-------------------------------|--|--|
| 1 bed         | 1 space                           | 1 space min.                  | 0.7 space min – 1 space max                    | 0.6 spaces                                     |
| 2 bed         | 1 space                           | 1 space min.                  | 1 space min–1.25 space max                     | 0.9 spaces                                     |
| 3 bed         | 2 spaces                          | 2 space min.                  | 1 space min – 2 spaces max                     | 1.4 spaces                                     |
| Visitors      | 1 space/10<br>units*              | 1 space/4 units               | 1 space/4 units                                | 1 space/5 units                                |
| <b>Totals</b> | <b>324 spaces</b>                 | <b>365 spaces</b>             | <b>303 – 395 spaces</b>                        | <b>272 spaces</b>                              |

*\*It is noted that the visitor parking has been increased for the Stage 1 proposal. This issue is discussed in further detail below.*

Council has advised that the parking for residents for the Concept Plan site aligns with the requirements set out in both DCP 55 and the draft Local Centres DCP and is appropriate. However, a shortfall of 42 visitor spaces has been identified and is of concern to Council, particularly in relation to Stage 1 where there is a lack of on-street parking immediately adjacent in Avon Road due to a "No Stopping" zone.

The Proponent has increased the visitor parking numbers in Stage 1 to a total of 10 spaces (which translates to 1 space / 4.4 dwellings and a total number of parking spaces on the Concept Plan site of 330) in direct response to Council's concern. This was done particularly noting the scarcity of on-street parking on the Avon Road frontage and in the general vicinity.

In relation to Stage 1, the Department is satisfied that the on-site parking provision is acceptable as it complies with Council's parking requirements for residential flat buildings. The proposed on-site parking provision for the entire development is also considered to be reasonable having regard to the proximity of the site to public transport and local services and the fact that it is within the numeric range as set out in the Draft Local Centres DCP (**Table 8**). The independent review carried out by ARUP considered the visitor parking rates and has advised that Ku-ring-gai's rate of 1 space per 4 dwellings for a development in close proximity to public transport is high in comparison to other local government areas.

The Department considers the application of Council's full visitor parking rate of 1 space / 4 dwellings to be unreasonable given the site's proximity to public transport. Notwithstanding, a greater visitor parking provision than is proposed is warranted as the Department considers that the proposed rate creates a demand for on-street parking in the locality which is limited by nearby "No Stopping" and "No Parking" zones. Therefore a modification to the Concept Plan is recommended requiring visitor parking to be provided to Buildings 3, 4 and 5 at the rate of 1 space per 5 - 7 dwellings (noting that the upper end of this range is generally consistent with the Stage 1 provision of visitor parking spaces).

### **Bicycle Parking**

Council identified the need for provision of bicycle parking facilities within both the Stage 1 development and the Concept Plan proposal. Council's current (DCP 55) and draft (Draft Local

Centres DCP 2013) controls require the provision of a total of 14 spaces, calculated at the rate of 1 bicycle space / 5 units for residents (9 spaces) and 1 bicycle space / 10 units for visitors (5 spaces).

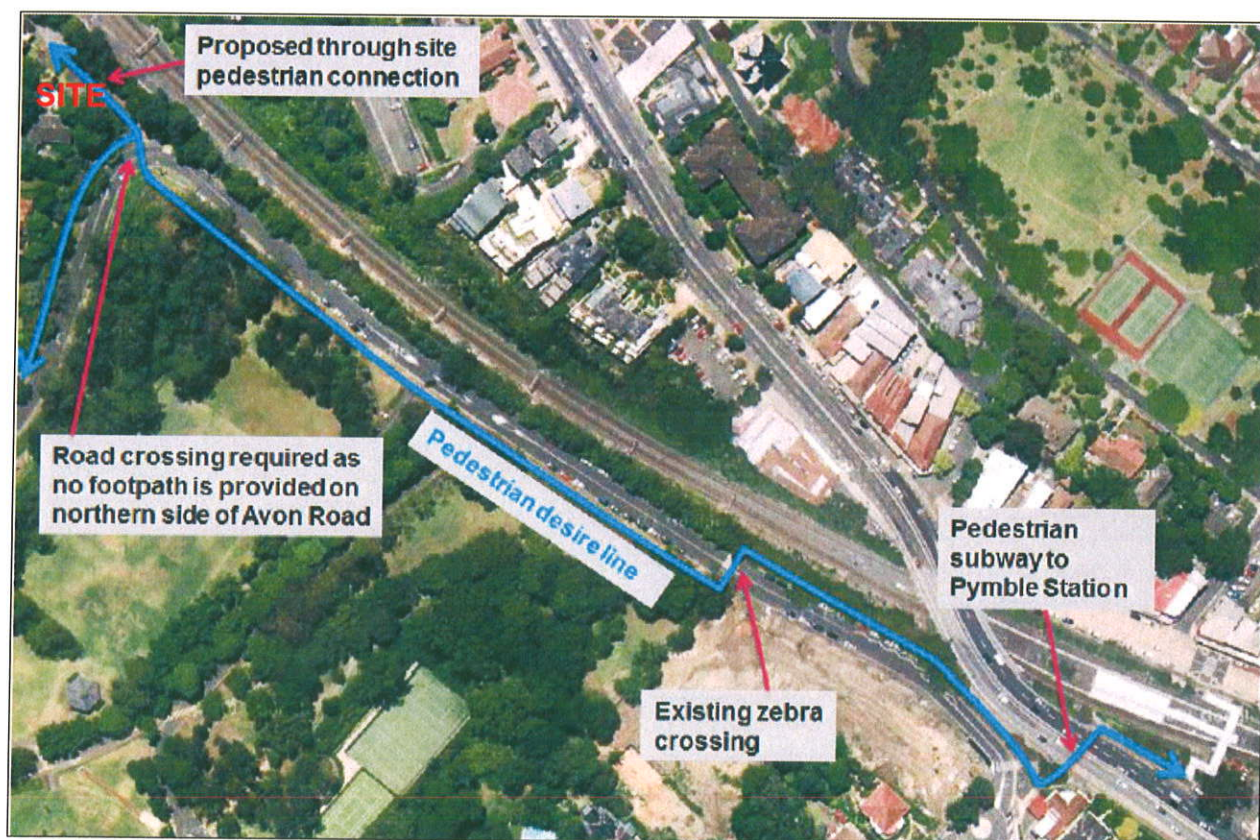
The Proponent has included 8 secure bicycle parking spaces in the basement of the Stage 1 building for residents. These are located at the base of the vehicle access ramp adjacent to the fire stair in the north western corner of the building.

The Department notes that there appears to be unused space in this part of the basement and that additional bicycle parking can be provided. A condition is recommended which stipulates the provision of a total of 14 secure bicycle parking spaces provided in accordance with the Draft Local Centres DCP and designed in accordance with Austroads guidelines and AS 2890.3 (Condition C1).

Based on the proposed dwelling yield, Council's Draft Local Centres DCP would require that the remainder of the Concept Plan site (Buildings 3, 4 and 5) provide a minimum of 68 bicycle spaces. In the interests of encouraging alternative forms of travel, the Department has included a future assessment requirement which requires future stage applications to provide bicycle parking in accordance with Council's requirements.

#### 5.4.3. Pedestrian Access and Connectivity

Pedestrian access along Avon Road near the site is currently limited to the southern footpath. A zebra crossing is provided opposite the pedestrian entry to PLC, with an additional subway connection under the Pacific Highway providing access to Pymble Railway Station (**Figure 42**).



**Figure 42 Existing pedestrian connections (Source: ARUP)**

Following development of the Concept Plan site, it is anticipated that there would be a greater volume of pedestrians walking to and from Pymble Town Centre and the railway station during the morning and afternoon peak periods. The current network would require pedestrians to

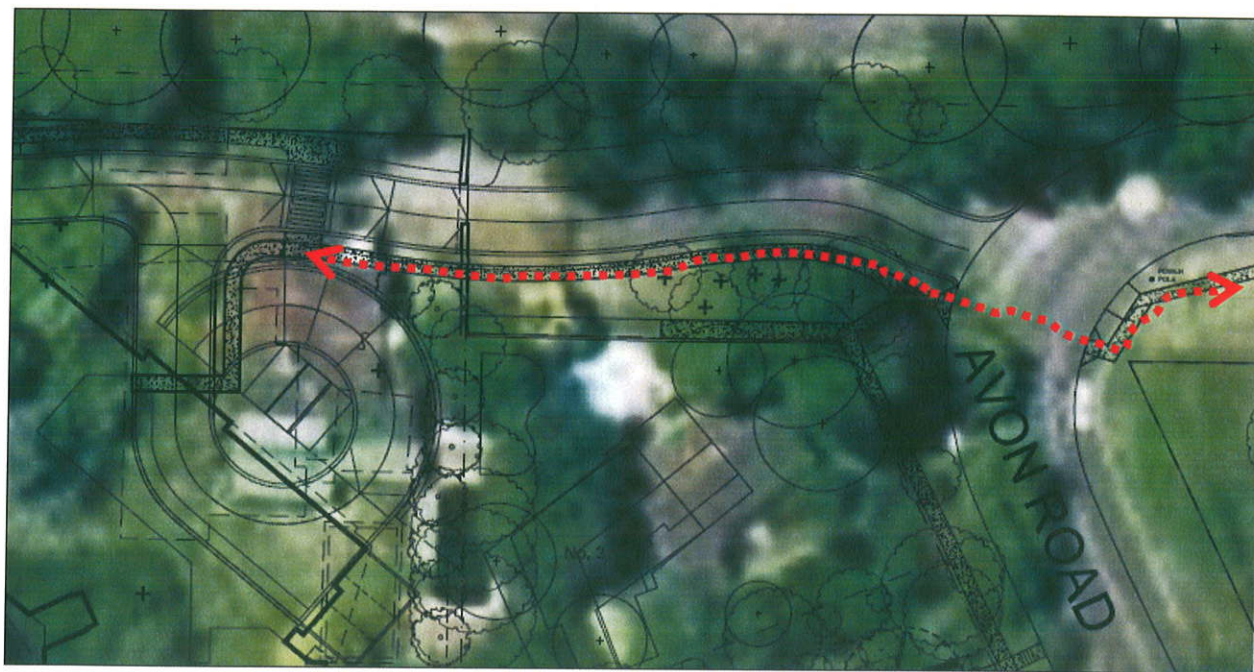
cross Avon Road at the bend, opposite the vehicular access to Buildings 3 and 4 (from the "stub road").

The Proponent originally proposed the installation of a pedestrian crossing at the bend in Avon Road. Council has however, noted that the vehicular and pedestrian volumes at this location are unlikely to meet the RMS criteria for the installation of a zebra crossing.

As an alternative to the zebra crossing, Council requested that a pedestrian refuge be constructed in Avon Road at the same location. The Proponent has advised that the current dimensional requirements for refuge islands would compromise manoeuvring by coaches and other heavy vehicles around the raised median and would also impede right-turn movements in / out of the access driveway servicing Buildings 3 and 4.

The submission made by the PLC included advice from its traffic consultants, Colston Budd Hunt and Kafes, which suggested the construction of a roundabout at the bend in Avon Road to manage traffic and pedestrian movements in this location.

Having regard to the above, the Proponent proposes to realign the footpaths on either side of Avon Road to facilitate a shorter, more direct pedestrian movement across Avon Road, albeit without a marked zebra crossing (**Figure 43**).



**Figure 43** Proposed pedestrian arrangements across Avon Road – pedestrian desire line shown red dashed (Source: Proponent's Revised PPR / RtS)

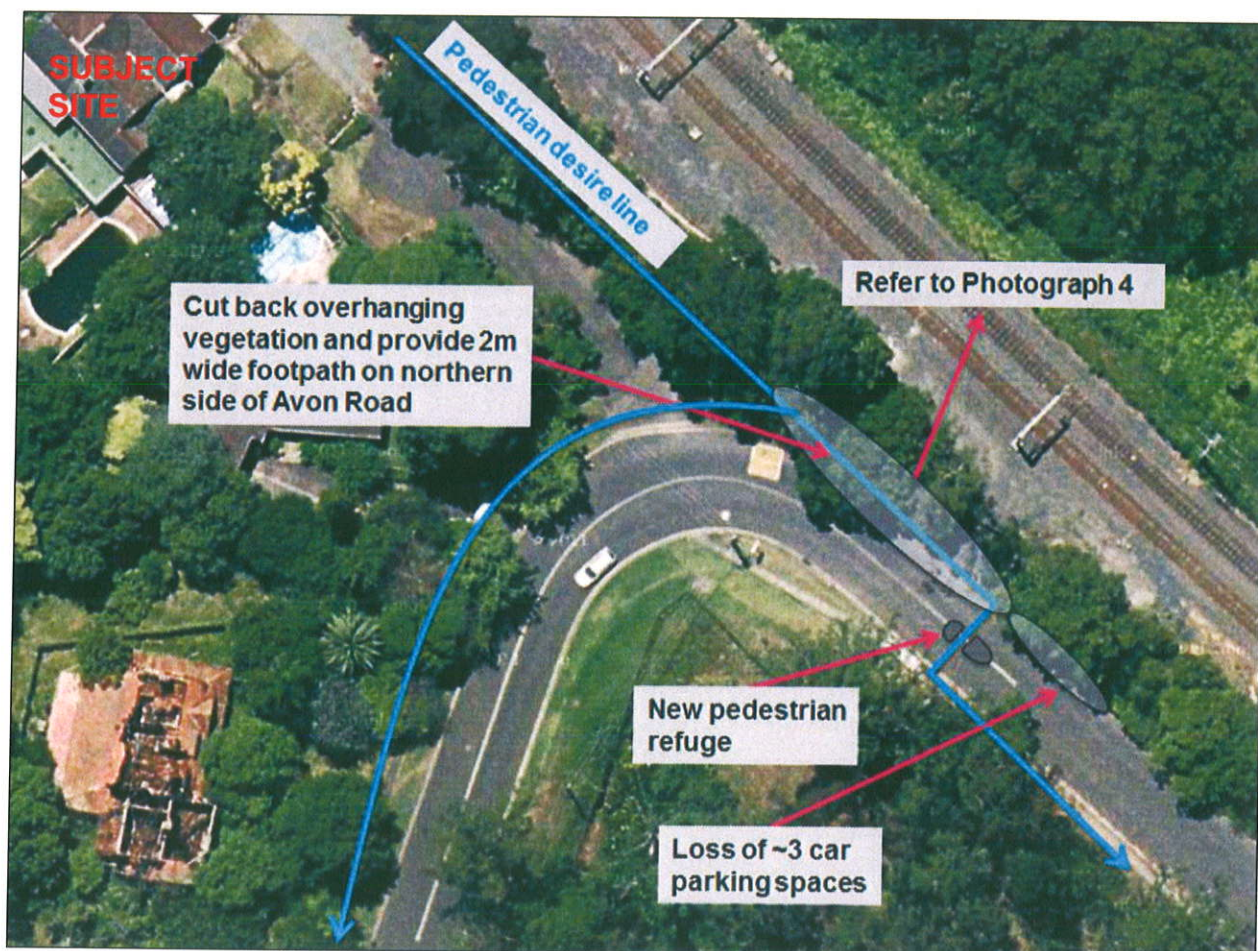
The Department considers that pedestrian safety in this locality is particularly important given the proximity of the school and the proximity of the site to Pymble Station. The Department requested that ARUP independently examine this aspect of the proposal in the context of Council's comments and identify alternative solutions to provide safe paths of travel for pedestrians across Avon Road.

ARUP examined a range of options and has advised that:

- the RMS criteria for a pedestrian crossing were unlikely to be met at this location;
- a roundabout at the bend of Avon Road is not recommended as this type of traffic facility is not conducive to pedestrian movement;
- the crossing arrangement proposed by the Proponent is not an optimal outcome. The realigned footpaths in Avon Road result in only minor reduction in crossing length and has

- a negligible benefit as pedestrians walking to and from the railway station would still conflict with traffic on Avon Road, particularly in the AM peak; and
- whilst Council's preferred option of a pedestrian refuge is more compatible with likely pedestrian desire lines, its viability is limited as it is unlikely that the swept path of coaches (which frequent the PLC premises) could safely manoeuvre around the raised median.

ARUP has devised an alternative which includes the provision of the refuge further south on Avon Road. This would require overhanging vegetation to be cut back along the northern side of Avon Road to enable the construction of a 2 metre wide footpath up to the refuge, as well as the extension of a no-stopping zone, which would result in the loss of 3 existing on-street parking spaces (Figure 44).



**Figure 44** Possible alternate location for pedestrian refuge (Source: ARUP)

The Proponent has confirmed that the pedestrian upgrade to Pymble Station would be constructed prior to the occupation of the Stage 1 building. The Department concurs with the timing for the works and notes that the design would need to be developed in consultation with Council and implemented via the Local Traffic Committee process.

A condition has been included in the Project Approval for Stage 1 (Condition B3) which requires the Proponent to further investigate the vehicle swept paths for the location of the pedestrian refuge at the bend in Avon Road to ascertain whether it would impact on the path of travel for coaches and other heavy vehicles. In the event that this option is demonstrated not to be feasible, an alternative solution generally consistent to that described above is to be designed in consultation with Council and approved by the Local Traffic Committee, prior to occupation of the Stage 1 building.

This requirement is also reflected in the Concept Plan approval.

### ***Through-Site Pedestrian Link and Publicly Accessible Pathways***

The Proponent proposes to construct a through-site pedestrian link between Avon Road and Beechworth Road, parallel to the rail corridor. This piece of infrastructure represents a significant public benefit and would enhance access to Pymble Station and the Town Centre for both residents of the Concept Plan site and local residents further to the north by providing a more direct route, compared with the current route via Mayfield Avenue / Arilla Road / Avon Road.

Council has indicated its support for the through-site link but has noted the lack of design detail and has suggested that it should also accommodate bicycle traffic. Council has further advised that a positive covenant would be required to ensure the provision of and ongoing public accessibility to the through-site link.

The Department notes that the pedestrian through-site link between Avon Road and Beechworth Road cannot be practically or safely delivered until the completion of construction works on the site. The pedestrian pathways passing through the Conservation Area (which are also to be publicly accessible) would be delivered within the same timeframe for the same reason.

In view of the timing for the provision of the through-site link and other pedestrian pathways within the Concept Plan site, the Department has included future assessment requirements for further stage applications which require:

- the submission of design details for the through-site link; and
- a positive covenant under Section 88B of the *Conveyancing Act 1919* to be placed on the title of all future lots to ensure the pedestrian through-site link and other pedestrian pathways on the site remain accessible to the public in perpetuity.

### ***Contributions to RailCorp***

RailCorp also advised of the need for the Proponent to liaise with Transport for NSW prior to the lodgement of future Development Applications to ascertain whether Stage 1 and subsequent stages of the development would trigger the need to upgrade Pymble Station and the need for any developer contributions.

The proposed increase in density on the site is consistent with the key state planning and transport strategies to locate higher density residential development in centres and near public transport. Furthermore the Proponent has made an undertaking to provide upgrades to the pedestrian infrastructure between the site and Pymble Station (including upgrades to the pedestrian subway under the Pacific Highway).

Having regard to the above and also the comparatively modest increase in patronage to Pymble Station as a result of the dwelling numbers proposed by the Concept Plan, the Department does not believe that the development would trigger the need to upgrade Pymble Station.

## **5.5. Impacts on the Natural Environment**

The Department's assessment of the originally submitted scheme found that the site is subject to a range of natural environmental hazards and conservation constraints. In particular these constraints include the need to protect and reasonably conserve vegetation corridors, the potential for riparian corridors to be provided and also bushfire risks affecting the site.

The Proponent has undertaken further technical assessment as part of the PPR, specifically in relation to ecological impacts, stormwater management and also managing bushfire risk. The analysis of these issues has largely informed and guided the proposed location of the building envelopes. In addition to the proposed building envelopes, the Concept Plan proposal seeks

approval for the conservation and rehabilitation of the existing Blue Gum High Forest on the site via a Vegetation Management Plan (VMP), Landscape Concept Plan and Stormwater Concept Plan.

In its most recent submission, Council has commended the PPR noting the use of the natural setting, the protection and rehabilitation of the Blue Gum High Forest, the more sensitive approach to stormwater management and not least, the re-siting of the proposed building envelopes that result in a significantly better environmental outcome compared to the original proposal. Despite this, Council maintains its more broad objection to use of the portion of the site that was recently zoned E4 – Environmental Living. Council notes that the rationale for the zoning of the central part of the site is due to the constraints to development potential presented by the BGHF in addition to the presence of a drainage line through the site and the steep topography.

The Department considers that it is more appropriate to assess the development potential of the site by examining the merits of the proposal having specific regard to each of the impacts on the natural environment noting the identified constraints or hazards. As outlined above this includes vegetation management, stormwater management and bushfire protection.

These issues are discussed separately below along with specific issues raised by relevant environmental agencies.

### 5.5.1. Vegetation Management

As noted in Section 1, the site is heavily vegetated and infested with a number of noxious weed species. Native vegetation on the site consists of 52 large canopy trees which are characteristic of the Blue Gum High Forest, with many exceeding a height of 30 metres.

The Blue Gum High Forest is listed as a critically endangered ecological community under the *NSW Threatened Species Conservation Act 1995*. The vegetation on the site was recorded as a highly modified relic of the community comprising canopy trees without a native understorey.

The proposal would result in the removal of three (3) Sydney Blue Gums (of the 52 canopy trees referred to above). Those three trees sought to be removed are toward the western side of the site within the proposed footprint of Building 5 and driveway from Beechworth Road.

The Flora and Fauna Assessment which accompanies the application indicates that the majority of the understorey typically associated with the Blue Gum High Forest is not present due to the infestation of the aforementioned weed species. The application is accompanied by an Assessment of Significance for the Blue Gum High Forest which concludes that the removal of the 3 trees is not likely to significantly impact the community and therefore, that a Species Impact Statement is not required.

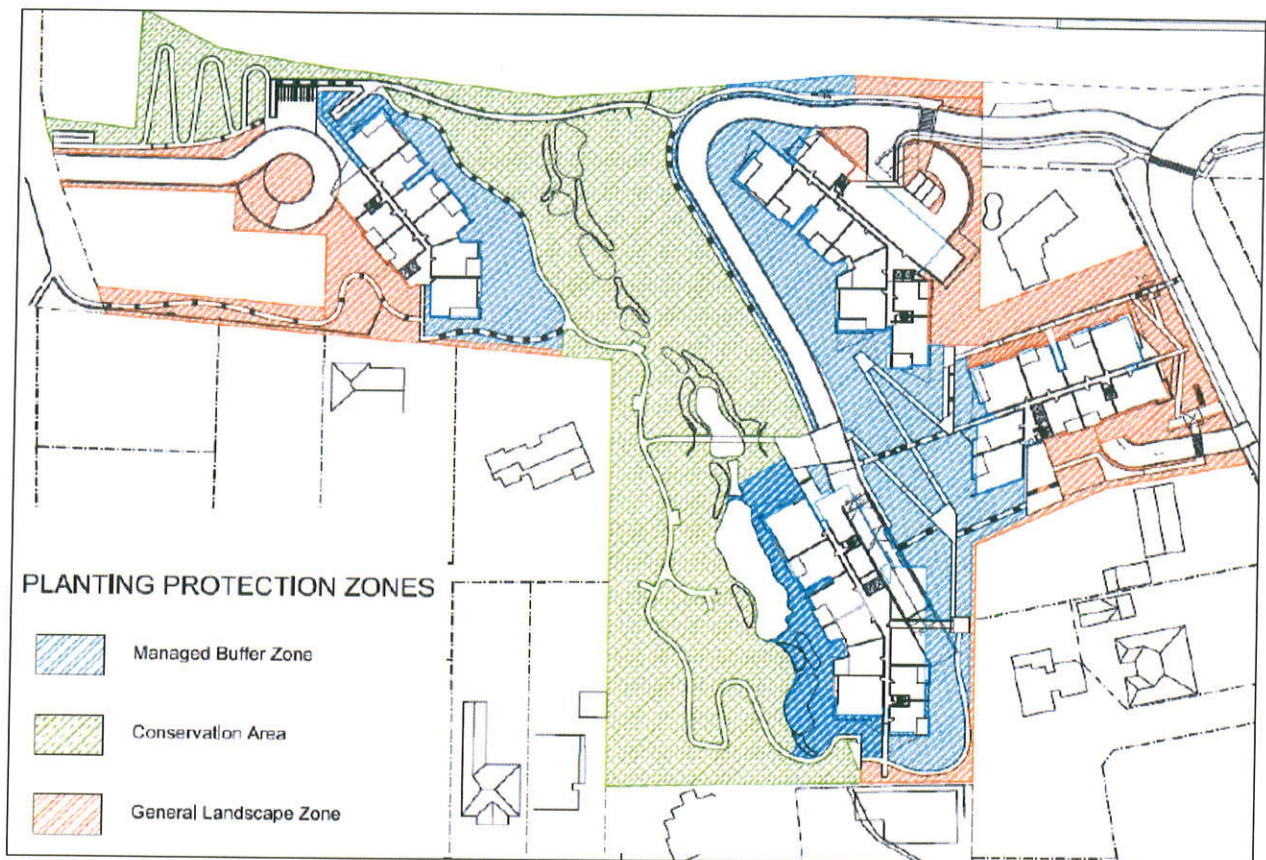
The proposal seeks to establish a conservation area on the site designed to conserve and enhance the critically endangered ecological community. Integral to this is the preparation and implementation of the VMP and a Landscape Concept Plan (**Figure 45**). The Landscape Concept Plan identifies:

- a conservation area which accommodates the existing Blue Gum High Forest and is generally located toward the centre of the site along the drainage line;
- a general landscape zone toward the street frontages and between the proposed built form and boundaries with adjoining properties; and
- a managed buffer area which is located between the other two zones, generally between buildings and reflecting bushfire buffer areas (discussed in **Section 5.5.3**).

The VMP incorporates the following:

- protection of the identified conservation area;

- earthworks to remove introduced materials, reinstate natural soils and create water bodies;
- the enhancement of local native vegetation through revegetation and planting; and
- weed control and monitoring and maintenance for a 5 year period.



**Figure 45: Extract from Landscape Concept Plan showing location of planting protection zones (Source: Proponent's Revised PPR / RtS)**

OEH has reviewed the Proponent's Flora and Fauna Assessment including the VMP and states that most of the original issues raised in response to the original application have been addressed. However it maintains that some potential indirect impacts of the proposal have not been detailed. These include issues such as overshadowing, soil compaction, trampling, altered drainage patterns, increased nutrient levels and potential root damage from provision of basement car parks. Also the VMP does not provide detail on the resources required to achieve the overall aim of conserving and enhancing the Blue Gum High Forest and should the application be approved, the Proponent should be required to provide a financial guarantee to implement the VMP.

Council is supportive of the VMP noting that the proposal seeks to maintain and improve the onsite ecological values which (through the implementation of the VMP) would effectively result in a net improvement of the biodiversity values of the site. Critically, Council recognises also that it is unlikely that this rehabilitation (and the long-term viability) of the Blue Gum High Forest could occur without some medium density development on the site to financially enable the VMP.

The Department notes that the Proponent's Flora and Fauna Assessment has been carried out with the objective of the rehabilitation and conservation of the Blue Gum High Forest. This includes the consideration of both direct and indirect impacts resulting from the proposed development. Despite the concern raised by OEH regarding indirect impacts, the Department

considers that this document has substantially addressed the likely impacts resulting from the development.

The Department considers that the above identified indirect impacts are common to the development and rehabilitation of urban bushland environments and are generally considered to be issues that may be managed and mitigated via sensible and appropriate development and construction strategies. Notwithstanding the above, the Department recommends that the indirect impacts identified by OEH in its letter of 15 February 2011 be further addressed as a requirement of the Concept Plan prior to the commencement of any work on the site. This is considered to be adequate in ensuring any potential impacts to the Blue Gum High Forest are suitably mitigated and managed.

The Department has considered the issue raised by the OEH regarding the need for a financial guarantee to ensure the implementation of the VMP and acknowledges that the secure delivery of the VMP is an important aspect of the proposal. In its consideration of the secure and timely delivery of the VMP, the Department notes that the PPR outlines the likely future development staging and tenure for the site as the following:

- Stage 2 works are likely to incorporate the construction of the remaining 3 building envelopes (Buildings 3, 4 and 5) and the implementation of the VMP; and
- the future subdivision tenure of the site is intended to provide a Community Title with four separate strata titles (one for each building). The identified conservation area would form one common lot remaining in private ownership with the responsibility for management of the area being shared amongst the strata lots.

Whilst the VMP is sought to be implemented with the later stage of development, the Department acknowledges that it would be inherently difficult for this rehabilitation work to be safely and properly delivered until the completion of all site works given the practical constraints associated with carrying out construction on the site.

The Department considers that the delivery of the VMP can be reasonably secured with the following recommended future assessment requirements:

- any application for future stages of development of the site shall ensure appropriate measures are in place for the delivery of the VMP (to practical completion of revegetation / rehabilitation works and ongoing monitoring and maintenance); and
- any future application for subdivision of the site shall ensure that adequate arrangements are in place for the ongoing monitoring and management of the Conservation Area as identified by the Landscape Masterplan.

With the above requirements forming Council's considerations for the assessment of future stage applications, the Department does not consider that it is necessary to seek any financial guarantee as part of the determination of the Concept Plan.

Council remains concerned with the level of detail and information provided in the proposed Landscape Concept Plan and Stage 1 Landscape Concept Plan provided by the Proponent. In particular, Council notes that inadequate information is provided in relation to proposed planting, details of the trees to be retained and other landscaping details that include inconsistencies between the landscape plans and architectural plans (such as basements encroaching in deep soil areas).

The Department considers that information provided in this regard to be adequate for the assessment of a Concept Plan and notes the Proponent has updated the Stage 1 Project Application and Landscape Plan to address these inconsistencies and to provide details of the areas to be planted with native species (BASIX commitment) and exotic planting. It is noted that the area of exotic planting is limited to the Avon Road setback area in order to maintain the streetscape / landscape character of the Pymble area.

The Department recommends future assessment requirements for the further consideration of landscaping details for future stage applications.

### 5.5.2. Stormwater Management

The site is located near the top of the local catchment, which extends to the ridgeline (Pacific Highway) to the north east of the site. The extent of the catchment above the subject site is approximately 5 hectares. Stormwater runoff flows onto the site from the north and is controlled by the embankment associated with the rail corridor. A culvert under the rail corridor emerges at the top end of the site and discharges into a minor drainage line / overland flow path which traverses the site, following the central valley that runs in a general north – south direction. The water that flows along the drainage lines discharges to a culvert that runs underneath Arilla Road before it joins the downstream waterway and finally into the Lane Cove River.

The Stormwater Management Plan submitted with the PPR outlines the stormwater management concept for the site which is designed to work in tandem with the objectives of the Conservation Area (as outlined in **Section 5.5.1**). This proposed stormwater concept design accommodates the drainage line that runs through the site. In particular, the steep upper third of the site would incorporate an intermittent cascading pool system in the drainage line to slow down the runoff and create aquatic habitat features intended to improve water quality. The lower two thirds of the site would incorporate a vegetated and rocky drainage line with a pond to provide diversity of habitat and water quality treatment (as indicated in **Figure 45**). The pond would be designed as a wet and dry feature to accommodate variations in rainfall patterns. It is noted that this system would accommodate stormwater runoff from both the subject site and the upstream catchment.

The Stage 1 Project Application features a 20,000 litre rainwater tank for reuse of roof runoff and a 125m<sup>3</sup> water detention tank to maintain peak flow rates below existing rates (within the basement of Building 1). The Stage 1 Stormwater Management Plan provides for stormwater drainage to the pond system in the drainage line toward the lower part of the site as described above.

Council has provided detailed comments on this aspect of the proposal noting that the design is generally based on the riparian objectives in Council's policy and the requirements for protection of the Blue Gum High Forest on the site. Overall the concept of combining riparian remediation with elements of water sensitive urban design to help improve overall water quality and flow conditions is supported.

Council notes that the setback distance of approximately 2 metres between Building 3 Envelope and the lower pond should be increased to a distance of 5 metres. This additional setback should provide sufficient space for planting, access for site users and for maintenance of both the building and the wetland/watercourse. Further, Council recommends that the basement be fully tanked given it is located close to the wetland and natural drainage line.

The NSW Office of Water (NOW) has provided comments on the proposed drainage concept noting that whilst no Controlled Activity Approval would be required, the key aspects for the assessment of the proposal are determining whether the proposed works within 40 metres of watercourses are consistent with the Guidelines for Controlled Activities on Waterfront Land.

NOW has advised that the Stormwater Management Plan is not consistent with the Controlled Activity Approval Guidelines and has concerns with the ability of the intermittent ponds to perform the desired water quality function. Based on other similar proposals, key management issues of blue green algae and aquatic weed issues need to be comprehensively understood. Further, options should be considered for off-line water treatment as opposed to the proposed on-line scheme.

NOW's current guidelines for controlled activities on Waterfront Land include a range of guideline documents including "Controlled Activities: Guidelines for instream works on waterfront land" (CAA Guidelines). This document provides guidelines for development within watercourses or adjoining waterfront land and whilst not providing prescriptive requirements, highlights the need for development of this nature to protect and enhance water flow, water quality, stream ecology and existing riparian vegetation. It also maintains that impacts on the hydrologic, hydraulic and geomorphic functions of a watercourse should be minimised.

The Department notes that the application of these guidelines does not strictly apply given that there is no watercourse on the site. Rather the Department's on-site observations lead to the view that the existing drainage line is best characterised as an overland flow path that may intermittently carry water to downstream receiving waters. The Department further notes that whilst the stormwater drainage concept would introduce a system of ponds, these would also be intermittent and designed only to fill for periods when collecting stormwater runoff during and after rain events.

Notwithstanding, the Department considers that it is prudent to give consideration to the CAA Guidelines given the potential environmental values of the site and the opportunity presented by the proposal to improve and rehabilitate the ecological quality of the currently degraded site.

In its response to the concerns raised by NOW, the Proponent has stated that the general principles of the guidelines have been adopted. In detailing this, it has restated that the proposed ponds would be designed as ephemeral features which would be dry most of the time and would pond water only after rainfall. Therefore there would be no problem with algae blooms and weeds would be managed as part of the ongoing maintenance plan.

The Proponent confirms that the stormwater concept plan, along with the Blue Gum High Forest rehabilitation as provided in the VMP and Landscape Concept Plan is in accordance with the CAA Guidelines and the proposal would create a rehabilitated corridor with a stable natural drainage line within a restored Blue Gum High Forest with extensive understorey vegetation. This arrangement would provide considerably improved runoff water quality to downstream watercourses as well as contributing to significant improvement in the habitat quality on the site.

The Department notes that the Proponent's Stormwater Management Plan provides a range of (both off-line and on-line) Water Sensitive Urban Design features to achieve reductions in runoff pollutant loads and improve water quality. These include:

- debris baskets in all drainage pits;
- rainwater tanks (for reuse) and detention tanks in each building;
- 200m<sup>2</sup> of surface area of constructed wetland/pond; and
- use of vegetation and ponds along the drainage line through the site to remove pollutants.

This proposed runoff water quality control system has been modelled by the Proponent noting the pollutant reductions achieved as set out in Table 9. The Department notes that this would exceed both Council's Development Control Plan requirements and the industry best practice standards as referenced by the Proponent.

**Table 9: Pollutant reduction requirements and proposed by the Concept Plan**

| Pollutant Type   | Council's Water Management DCP 47 Requirements | Industry Best Practice* | Proposed |
|------------------|--|-------------------------|----------|
| Gross pollutants | 70%  | 90%                     | 99%      |
| Suspended solids | 80%  | 80%                     | 83%      |
| Phosphorus       | 45%  | 60%                     | 61%      |
| Nitrogen         | 45%  | 45%                     | 51%      |

\*As referenced by the Proponent from the Commonwealth Department of Environment, Water, Heritage and Arts - Evaluating Options for WSUD - A National Guide 2009

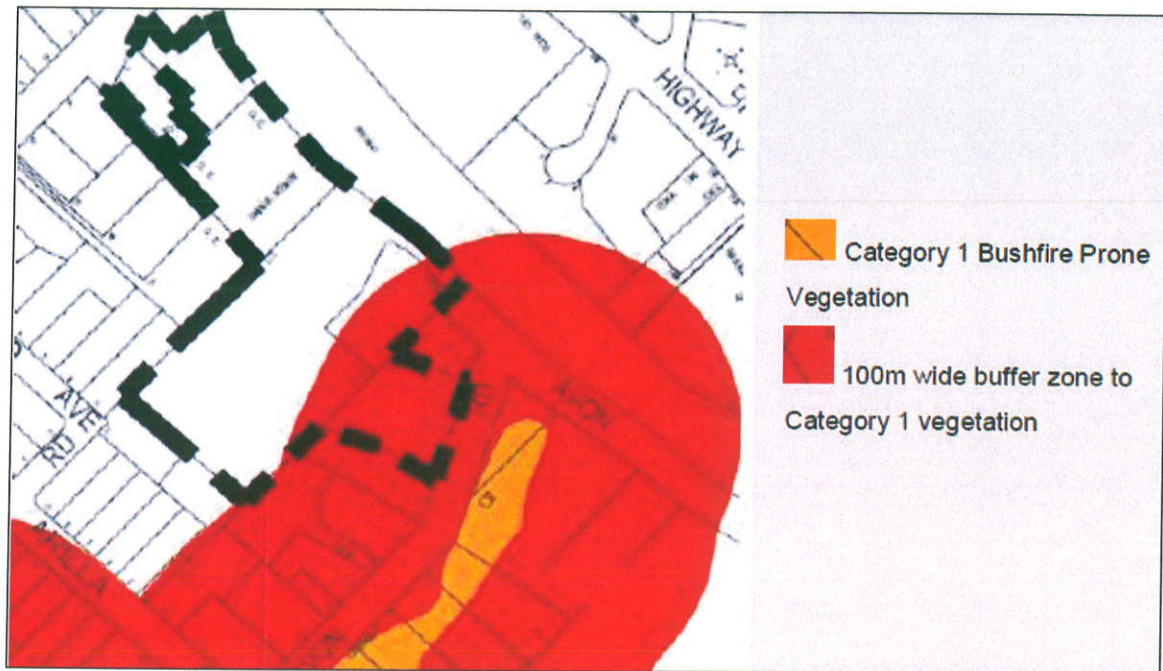
Having carefully considered the Proponent's Stormwater Management Plan, the Department considers that despite NOW's concerns about this aspect of the proposal, it is consistent with the overarching aims and objectives of the CAA Guidelines as it has been demonstrated that the proposed Stormwater Management Plan would protect and enhance water flow, water quality, stream ecology and riparian vegetation (in conjunction with the VMP). The Department supports this aspect of the proposal noting the following:

- Council's Water Management DCP 47 supports the use of retention ponds and natural filtration as proposed;
- the potential for blue green algae management issues would be minimised by virtue of the fact that the scheme would exceed industry best practice for pollutant and nutrient removal and also the ponds would not retain stagnant water;
- the natural water quality treatment and filtration process that reduces nutrient levels in the stormwater runoff on the site would contribute toward the reduced likelihood of blue green algae management in downstream receiving waters;
- aquatic weed monitoring and management can form part of the VMP (a future assessment requirement is recommended to ensure this occurs) to ensure this is appropriately controlled;
- the Proponent seeks to provide both off-line water treatment options (rainwater and detention tanks) as well as on-line treatment options (such as the wetland/pond system); and
- the Concept Plan seeks to reintroduce and use natural features that would be common in steep gullies with drainage lines that are located toward the upper reaches of a catchment which would improve both water quality and naturally manage peak flow rates into downstream receiving waters.

Further to the above the Department notes Council's comments regarding a 5 metre setback between the Building 3 envelope and part of the lower pond and does not consider this to be a significant issue. Noting the issues raised by Council regarding access, maintenance and construction related issues can be addressed by the Proponent through the detailed design process and Council's consideration in the assessment of any future application. The Department considers that it is appropriate to carefully manage any construction process for Building 3 given its proximity to the lower pond which would be constructed as part of Stage 1. A future assessment requirement is recommended accordingly.

### **5.5.3. Bushfire Protection**

The subject site does not contain any land identified as bushfire prone land (**Figure 46**). However Council's Bushfire Prone Land Map indicates that the south eastern section of the site contains a vegetation buffer zone to Category 1 Bushfire Prone Vegetation located on the PLC site on the opposite side of Avon Road.



**Figure 46** Extract from Ku-ring-gai Council Bush Fire Prone Land Map. Subject site is shown in broken outline

The Proponent has provided a Bushfire Assessment Protection report providing the following key points:

- the location of the closest building (Building 1) provides a separation of more than 25 metres to the mapped bushfire prone vegetation located to the southeast of the site, exceeding the minimum width for the Asset Protection Zone (APZ) of 25 metres required by Planning for Bushfire Protection 2006. Notwithstanding it recommends that Building 1 be constructed in accordance with AS 3959 – 2009 *“Construction of Buildings in Bushfire Prone Areas”* to appropriately withstand any radiant heat exposure;
- the vegetation within the development site is not recorded as a bushfire hazard on the Bushfire Prone Land Map. However, the development proposal includes the rehabilitation of the existing Blue Gum High Forest on the site. This retained and rehabilitated pocket of vegetation is not connected to adjoining vegetation which is mapped as bushfire prone vegetation and therefore would remain a low hazard pocket of vegetation; and
- as a precaution, the proposed buildings have been located so as to provide a 10 metre wide landscaped buffer zone between the buildings and the rehabilitated Blue Gum High Forest vegetation. The Buffer Zone will be maintained as an Inner Protection Area.

The RFS has reviewed the proposal and has recommended a number of approval requirements in relation to the following:

- Asset Protection Zones;
- water and utilities; and
- access for fire fighting and property protection.

A key RFS recommendation includes the provision of a 10 metre Inner Protection Area (IPA) around all buildings and that Building 1 be further setback to a minimum of 10 metres from the Avon Road frontage.

In response, the Proponent has increased the Building 1 setback so that its eastern wall is a minimum of 10 metres from the street frontage. There is however a masonry blade wall element that protrudes into this setback area (setback 6.25 metres from the street). The Proponent's Bushfire Assessment Protection report notes that the blade wall be constructed to address the fire safety provisions of the BCA and therefore would be capable of withstanding prolonged levels of exposure to levels of radiant heat far greater than the level nominated by the RFS.

Noting this point and that Building 1 is proposed to be constructed in accordance with AS 3959 - 2009 "Construction of Buildings in Bushfire Prone Areas", the Department considers that the intrusion of the blade wall would not have a detrimental effect on the protection of the building and its occupants from a bushfire event.

In respect to the RFS recommendation for a 10 metre IPA around all buildings, the Department notes that all buildings are provided with this precautionary bush fire protection measure. However the proposed conservation area is located approximately 3 metres from the southern adjoining residence located at 1 Arilla Road. Given that this part of the site is not within an identified bushfire prone area (or a buffer zone) and the Proponent's consultant has identified this as a low hazard pocket of vegetation, the Department does not consider this to be a significant concern. Notwithstanding, to ensure that all bush fire risk issues are appropriately addressed, the Department recommends a future assessment requirement that addresses the bush fire risk associated with the proximity of the conservation area to this dwelling. The Department also recommends that the recommendations of the Proponent's Bushfire Assessment Protection report be considered as future assessment requirements for future stage applications.

#### **5.5.4. Summary – Impacts on the Natural Environment**

The Department has carefully considered the potential for natural environmental impacts having regard to Council's broad objection to the intensity of development with the E4 - Environmental Living zone and other issues raised by OEH regarding the potential indirect impacts of the proposal.

In its assessment, the Department has found that Proponent is proposing a suite of measures that would effectively respond to the constraints presented by the Blue Gum High Forest in addition to the presence of a drainage line through the site and the steep topography. The Department considers that the proposal would act as a catalyst for the rehabilitation and ongoing conservation of the identified Endangered Ecological Community. This is considered to have a positive biodiversity conservation impact and is also a clear public benefit in itself.

Noting this, the Department does not support Council's view that development of the site should be artificially limited (via the E4 zoning) by the presence of the identified environmental sensitivities as the above merit assessment has demonstrated that the development has appropriately responded to sit comfortably within these constraints while at the same time ensuring the ongoing rehabilitation and maintenance of the site's ecological values.

The Department considers that the potential indirect impacts identified by OEH can be readily managed. It is therefore recommended that they be addressed and appropriate management strategies incorporated in the VMP as a requirement of the Concept Plan prior to the commencement of any work on the site.

#### **5.6. Heritage**

The proposal includes the demolition of the dwelling known as 1 Avon Road which is listed as an item of environmental heritage under Ku-ring-gai Local Environmental Plan (Local Centres) 2012. The subject site also has a common boundary with 6 Beechworth Road which is similarly listed.

Council has raised concern in relation to:

- the demolition of the dwelling at 1 Avon Road; and
- the impact of the proposal (specifically Building Envelope 5) on the setting and curtilage of 6 Beechworth Road.

Council has also indicated that the potential impacts on heritage items in the general vicinity of the site including 11 Avon Road, 1190 Pacific Highway and 1202 Pacific Highway, have not been adequately addressed.

These issues are discussed in the following sections of this report.

### 5.6.1. Avon Road

The proposal seeks approval for demolition of the dwelling known as 1 Avon Road which is a part 1 and part 2 storey derelict residential building dating from the early part of the 20<sup>th</sup> Century (**Figure 5**). The front garden of this property is defined by a stone wall to the street frontage. There is an existing in-ground swimming pool at the rear of the dwelling.

Council has objected to the demolition of the building on the basis that it has considerable local heritage significance and should be retained in any future development of the site. As part of its submission, Council requested that additional investigation be undertaken and justification provided for the proposed demolition of the dwelling at 1 Avon Road.

The application is accompanied by a Heritage Impact Statement which indicates that:

- the building has undergone significant internal alterations. Considerable sections of the interior fabric have been removed or replaced since WWII including ceilings, joinery, cornices and fenestration;
- the exterior retains elements dating from the 1920s, with alterations including the front porch dating from 1938. The south western part of the dwelling is dominated by unsympathetic post WWII alterations, while the north and western part of the building show evidence of several era changes; and
- the building is set well back from the main part of Avon Road and is difficult to see. As a consequence it is not a significant contributory element to the residential character of Avon Road.

In response to Council's concerns, the revised PPR includes a supplement to the Heritage Impact Statement which examines two options for the possible adaptive re-use of 1 Avon Road, namely its retention as a single dwelling or the creation of several units within the current building form.

The Department does not consider that the retention and adaptive re-use of 1 Avon Road is the most appropriate outcome for the following reasons:

- the building has been significantly altered and much of the interior and exterior fabric has been modified or replaced;
- the level of renovation and refurbishment required for the adaptive reuse of the building (given its current configuration, the extent of previous alterations and the general state of disrepair) would be so substantial that a significant amount of the original building fabric would no longer be present; and
- the building is not readily visible from the public domain and as such does not contribute to the residential character or streetscape of Avon Road.

The Department also notes that both the aforementioned heritage items were included in "Site 2" under the provisions of SEPP 53. In so doing, it is inferred that SEPP 53 contemplated the demolition of these buildings having regard to their heritage significance and deemed the demolition appropriate.

The Statement of Commitments confirms that the following items would be preserved and integrated into the proposed development:

- the eastern inter-war dry laid sandstone boundary wall together with the small fountain (at the southern end of 1 Avon Road near the entry gates);

- the sandstone fence along the frontage to the stub road (repaired as necessary), vehicle and pedestrian gateposts; and
- salvage all sandstone building blocks and paving for re-use within the development.

In view of the above, the Department is of the opinion that the demolition of the dwelling at 1 Avon is reasonable, subject to full archival recording of the interiors and exteriors of the building prior to Construction Certificate being granted and a copy being provided to Council for its records. An appropriate requirement has been included in the Terms of Approval in this regard.

### 5.6.2. 6 Beechworth Road

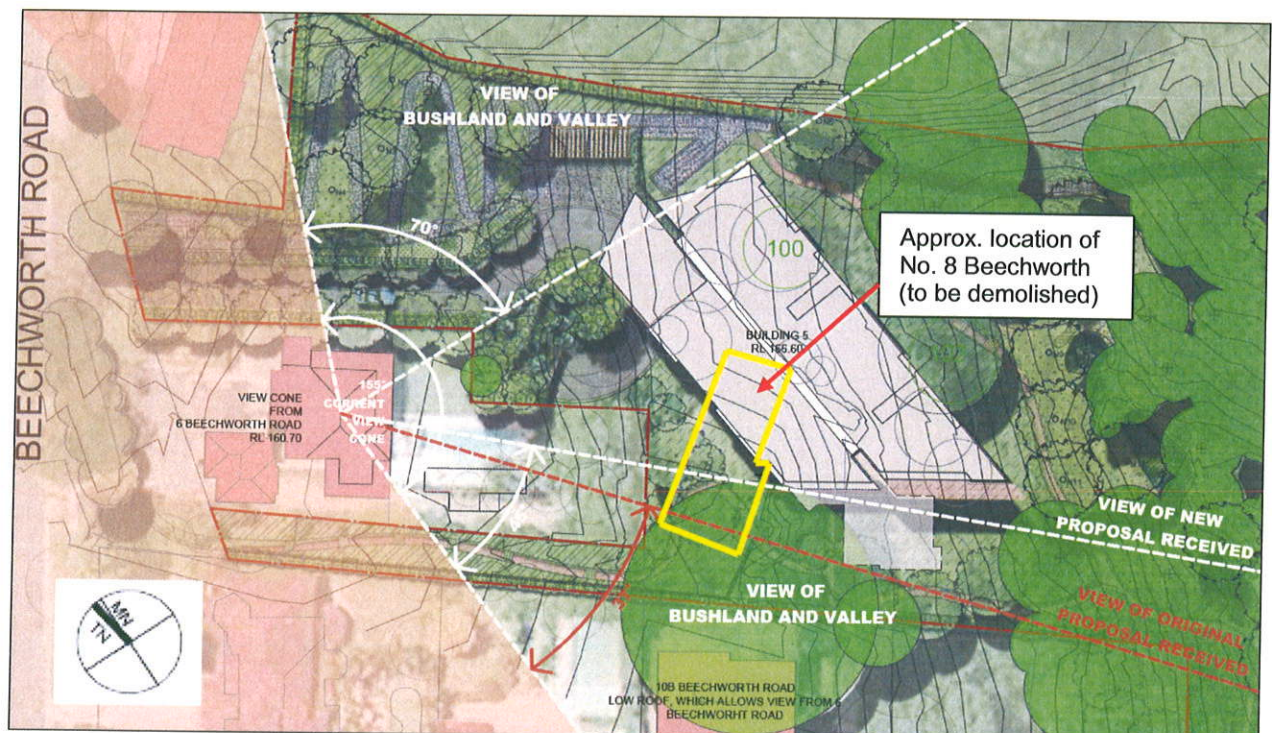
Council has advised that the early Federation dwelling was constructed prior to the land resumption for the North Shore Railway line and was oriented to a roadway that no longer exists, that is the dwelling faces the rear and overlooks the subject site. The elevation presented to Beechworth Road is effectively the rear of the dwelling.

The principal living rooms of the dwelling overlook the subject site. Council has expressed concern that the Building 5 envelope (which achieves a maximum RL of 166) would obstruct the primary views from this heritage listed property and would compromise its heritage value and has requested that Building 5 be redesigned to protect both the primary views from 6 Beechworth Road and its heritage significance.

In response to Council's concerns the Proponent has modified the building footprint of Building 5 to reduce the impact on the view to the south east (**Figure 47**).

The Department considers that the view loss to 6 Beechworth Road is moderate and that the property's views to the north and east would be largely unaffected, whilst a substantial view corridor is maintained to the preserve views to the south.

The Department notes the physical separation distance (37 metres) between the dwelling at 6 Beechworth Road and the Building 5 envelope (**Section 5.2.2**) and Council's point that the building was designed and constructed to address a roadway which no longer exists. It is also noted that the dwelling has been altered to orientate its living spaces towards the rear (**Figure 48**).



**Figure 47 View analysis (Base Image Source: Proponent's Revised PPR / RtS)**



**Figure 48 Typical view from private open space 6 Beechworth Road – note roof of dwelling known as 8 Beechworth (to be demolished) in the middleground**

Noting these points, any significance once afforded to this building as a result of this orientation and view is not considered material. Therefore the Department considers it unlikely that the proposed siting of the Building 5 envelope would have any substantive impact on the heritage fabric or curtilage of the dwelling.

Furthermore, the orientation of the dwelling and the absence of the road means that any public perception of the relationship between the dwelling and the view / site cannot be appreciated.

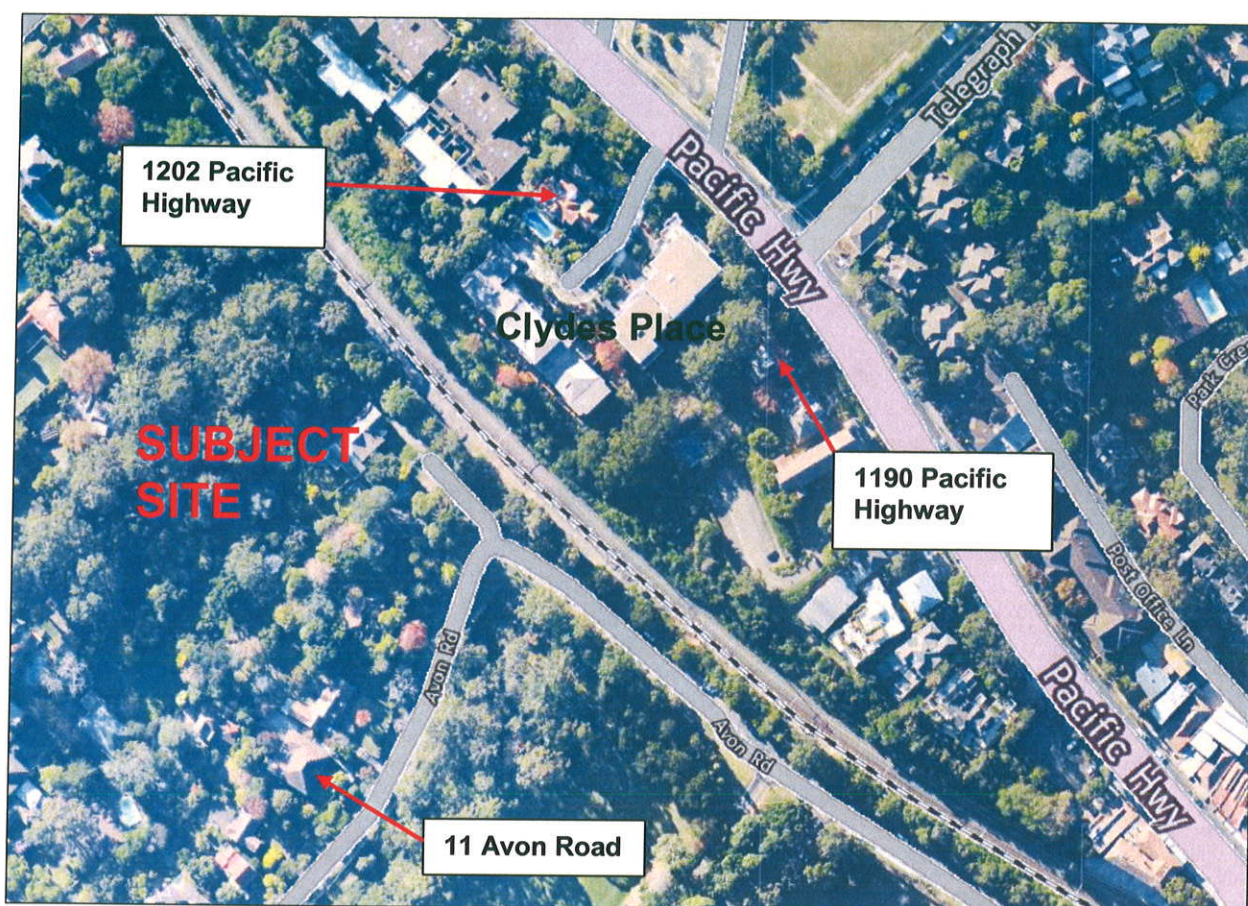
The view share afforded by the Concept Plan proposal to the item of environmental heritage at 6 Beechworth Road is therefore considered to be appropriate in the suburban context.

### 5.6.3. Nearby Heritage Items

Council advised that the proposal did not adequately address the potential impacts on 3 heritage items in the locality, being 11 Avon Road, 1190 Pacific Highway and 1202 Pacific Highway (**Figure 49**). The Revised PPR includes a supplementary Heritage Statement which examines the relationship between the proposed development and these properties.

The Department notes that the physical separation between the Concept Plan site and these properties is substantial (ranging between 52 and 140 metres). Furthermore the topography, existing mature vegetation and existing development combine to minimise any substantive impact on either the visual curtilage or the integrity of these heritage items.

On this basis, the Department is of the opinion that the potential heritage impact of the proposal on the aforementioned nearby heritage items is within reasonable limits in this urban context.



**Figure 49 Relationship of the site to nearby heritage items (Source: Near Maps)**

## 5.7. Other Issues

Other issues considered in the Department's assessment are summarised in the following table.

**Table 10: Other Issues**

| Issue          | Consideration  |
|----------------|--|
| Isolated Sites | <p>Council has raised concern that the proposal has not adequately addressed the potential isolation and subsequent limitation of any future development potential of Nos. 3 and 7 Avon Road, both of which are currently zoned R3 Medium Density Residential under Ku-ring-gai LEP (Local Centres) 2012.</p> <p>The R3 Medium Density Residential zoning permits a range of low and medium density residential development including dwelling houses, attached dwellings and multi-dwelling housing. Clause 6.5(2)(a) of the KLEP sets a minimum street frontage of 24 metres.</p> <p>No. 7 Avon Road has sufficient area (approximately 1,588m<sup>2</sup>) and frontage (approximately 28 metres) to be redeveloped for the purposes of medium density residential development such as attached and multi-unit housing.</p> <p>No. 3 Avon Road has a site area of approximately 930m<sup>2</sup> and has frontages to both Avon Road and the "stub road". Having regard to Council's controls it is acknowledged that this property may be too small to develop for medium density housing as envisaged by the R3 zoning.</p> |

The Department notes that during the assessment and at the time of the submission of the PPR this property was subject to a low density zoning under the provisions of the previous instrument (Ku-ring-gai Planning Scheme Ordinance) and was excluded from the SEPP 53 provisions. On this basis, it is not considered reasonable to pursue site amalgamation in an uncertain policy context.

Furthermore the Department considers that the existing 2 storey dwelling at No. 3 Avon Road sits well within the wider site context and retains good amenity for residents.

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Construction of a  
link road  
between Avon  
and Beechworth  
Roads

SEPP 53 contemplated the provision of a link road to be constructed on the Concept Plan site parallel to the rail corridor between Avon Road and Beechworth Road to improve local connectivity and traffic movement through the locality.

RMS has indicated its support for the link road on the basis it would improve local traffic circulation and spread local traffic access across both intersections to the Pacific Highway.

Council no longer supports the construction of the link road because of the potential impact on the Blue Gum High Forest as it would outweigh the limited utility provided by the link road. It has also confirmed that the proposal to provide a pedestrian connection instead of the road on the Concept Plan site is supported.

The Department is of the opinion that the link road is not required having regard to the following:

- the limited traffic impact generated by the proposal (without the link road); and
- the natural environment and significant public benefit to be derived from the conservation of the area of Blue Gum High Forest on the site and the provision of a pedestrian through-site link.

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Contamination

A Stage 1 Environmental Site Assessment accompanies the application which assesses the suitability of the site for the proposed land use and examines the potential risk of significant widespread contamination of the site.

The report indicates that there is some potential for contamination caused by historic activities in the site including:

- the use of imported fill used to construct the terraced gardens;
- pesticides used in the former orchard in the southern part of the site;
- asbestos or other hazardous building materials may be (or have been in the case of the demolished house at 4 Beechworth Road) present in the houses and structures on the site; and
- the creek / drainage line running through the site could have been a pathway for potential off-site contaminant sources (eg the railway) impacting on the site.

The report concludes that the site is capable of being made suitable for the proposed development, provided that:

- an investigation is undertaken of the site that includes sampling

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and analysis. Ideally this should be undertaken after the vegetation (weeds and noxious plants) has been cleared from the site;

- a waste classification is assigned to any fill material that is excavated to ensure appropriate off-site disposal;
- in the event that any significant contamination is encountered, a Remedial Action Plan (RAP) would be required; and
- a Hazardous Building Materials Survey of the existing buildings and structures on the site is undertaken prior to demolition.

The Department concurs with these requirements and has included future assessment requirements and a condition for the Stage 1 Project Approval (Condition D3) to this effect.

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#### Section 94

Council raised concern about the timing for payments of Section 94 Contributions and in particular, the manner in which and timing for the claiming of credit for the 3 existing dwellings on the site. It is noted that credit is given for each dwelling based on evidence being provided of the number of bedrooms in each dwelling.

The Proponent has indicated that a credit for the existing 3 bedroom dwelling at 5 Avon Road would be sought as part of Stage 1 and that the contributions will be paid in accordance with Council's Section 94 Contributions Plan prior to release of the Construction Certificate. A condition has been included in the Project Approval to this effect (Condition C2).

In relation to the balance of the Concept Plan, the Proponent has advised that Buildings 3, 4 and 5 are intended to be constructed as a single stage of work. Accordingly, contributions for the balance of the development (including any credits attributable to the existing dwellings at 1 Avon Road and 8 Beechworth Road) will be calculated as part of future applications in accordance with Council's Contributions Plan.

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## 6. CONCLUSION

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The Department has assessed the merits of the proposal taking into consideration the issues raised in public and agency submissions. The key issues raised in submissions and addressed by the Department relate to:

- density and built form;
- amenity considerations;
- traffic and parking;
- environmental impacts; and
- heritage.

Council's primary objection to the proposal is that it is inconsistent with the current zoning(s) applicable to the site under Ku-ring-gai LEP (Local Centres) 2012 which it argues reflects the environmental capacity of the land and acknowledge the existing operational constraints of the local road network.

The Department has carefully assessed the proposal on its merits, noting the significant changes made to the scheme by reducing the density and site coverage while at the same time increasing the deep soil planting area, the landscaped area and the area to be set aside for the conservation and enhancement of the Blue Gum High Forest.

Having regard to the above, the Department concludes that the Concept Plan and Stage 1 Project Application are appropriate for the following reasons:

- the physical size and configuration of the site enables greater density to be provided with relatively minor and acceptable impacts on adjoining residential areas or individual properties;
- the proposed renewal and increased density on this significantly underutilised residential site represents an orderly redevelopment of the land in line with local and regional planning objectives;
- the proposal would make a significant contribution to the housing stock in the Ku-ring-gai local government area, with good access to transport, services, facilities and employment opportunities; and
- the proposal would deliver a range public benefits including stormwater infrastructure, improvements to the pedestrian network (including a through-site link), provision of publicly accessible open space and preservation and enhancement of an area of Blue Gum High Forest.

Having regard to the above points, the Department considers that the proposal would provide a sound development outcome for the site. In particular, this is achieved by delivering a significant, yet reasonable, number of dwellings in a strategically well located site whilst enabling and accommodating the enhancement and conservation of the currently degraded Endangered Ecological Community and the broader ecological values of the site.

The Department therefore recommends that the Concept Plan be approved, subject to the modifications to the design and the inclusion of future assessment requirements to inform the detailed design of the subsequent stages. The Department also recommends the Stage 1 Project Application be approved, subject to conditions.


## 7. RECOMMENDATION

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It is recommended that the Planning Assessment Commission, as delegate for the Minister for Planning and Infrastructure:

- (a) consider the recommendations of this report;
- (b) **approve** the Concept Plan application under the repealed Section 75O of Part 3A of the *Environmental Planning and Assessment Act 1979*;
- (c) **approve** the Stage 1 Project Application under the repealed Section 75J of Part 3A of the *Environmental Planning and Assessment Act 1979*; and
- (d) **sign** the attached Instruments of Approval (**Appendix H**).

Endorsed by:



11/6/13.

Ben Lusher  
**A/Director**  
**Metropolitan & Regional Projects South**



12.6.13

Chris Wilson  
**Executive Director**  
**Development Assessment Systems & Approvals**

## **APPENDIX A ENVIRONMENTAL ASSESSMENT**

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See the Department's website at:

MP 08\_0207

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2919](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2919)

MP 10\_0219

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=4403](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4403)

## **APPENDIX B SUBMISSIONS**

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See the Department's website at:

MP 08\_0207

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2919](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2919)

MP 10\_0219

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=4403](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4403)

## **APPENDIX C    PROPONENT'S RESPONSE TO SUBMISSIONS**

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See the Department's website at:

MP 08\_0207

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2919](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2919)

MP 10\_0219

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=4403](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4403)

## **APPENDIX D ISSUES RAISED BY KU-RING-GAI COUNCIL IN RESPONSE TO THE PPR**

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Council, at its meeting of 12 March 2013 resolved to forward a detailed submission to the Department made in response to the exhibition of the Proponent's PPR. The following is a summary of the points raised in that submission.

- Permissibility – the proposal is not permissible under the current zoning (KLEP 2012) and is inconsistent with the aims of the plan and the objectives for the zones under this instrument.
- Lack of detail and inconsistencies in the plans and documentation.
- Site isolation of Nos. 3 & 7 Avon Rd which are zoned R3 Medium Density Residential.
- Location of the riparian corridor should be further investigated.
- Stormwater and riparian management plan and the Vegetation Management Plan should identify the works proposed at each stage.
- Controlled Activity Approval should be obtained for work to the riparian zone.
- Additional traffic impact particularly in the AM peak where school and commuter peaks coincide and intersections already perform very poorly – development should therefore be undertaken in accordance with density / form permissible under the KLEP 2012.
- Access issues including:
  - need to reallocate residential parking spaces to visitor spaces (Building 1);
  - lack of identified bicycle parking for all buildings except Stage 1;
  - increased width of vehicular access to Buildings 3 and 4 is required, although this would result in negative impacts on ecological values – additional information required;
  - bicycle access should be provided through the site from Avon Road to Beechworth Road;
  - clarification as to which pathways will be accessible to the public. A positive covenant is required to ensure the provision of public access; and
  - details of the footpath upgrade between the site and Pymble Station are required and should include a pedestrian refuge to be constructed in Avon Road as well as localised road widening to accommodate it.
- Minimum 10% accessible units required. Internal corridors should be 1500mm.
- BCA Compliance Report required to ensure that the buildings do not require redesign to meet fire egress provisions.
- Density significantly exceeds current FSR controls (KLEP 2012), which ranges between 0.2: in the E4 Zone and 0.8:1 for the R3 Zone, as well as those established under SEPP53 (0.63:1 – 0.8:1). Proposed density represents an overdevelopment of the site resulting in adverse impacts to the streetscape and adjoining low density development.
- Heritage – demolition of 1 Avon Road is not supported as it has local heritage significance – adaptive re-use should be considered. Heritage features within the curtilage of 1 Avon Road that are to be retained should be clearly identified.
- Location and scale of Building 5 will have a detrimental impact on heritage value of 6 Beechworth Road and should be redesigned to protect the primary views and significance of the heritage property.
- Heritage report fails to consider the impact of the proposal on the heritage significance of Nos. 11 Avon Road, 1190 Pacific Highway and 1202 Pacific Highway.
- Bush Fire - the Community Management Plan to include details of the regime and responsibilities for bush fire management.
- Safety – potential for vehicle / pedestrian conflicts identified at a number of points – requires some redesign.
- Access to Buildings 3 and 4 via undercrofts is not consistent with CPTED;

- Design issues (general):
  - buildings should step down the site, following the topography;
  - height, bulk and scale are inconsistent with KLEP and community expectations and do not provide transition to lower scale development;
  - double-loaded corridor types perform poorly in terms of environmental performance and amenity – proposed ventilation “slots” are not an acceptable solution to provide daylight or ventilation – building depths should be reduced to comply with RFDC Rule of Thumb;
  - length of corridors should be reduced and width increased to 1500mm;
  - solar access diagrams are inaccurate – should employ a “sun’s eye view” to demonstrate compliance with RFDC Rule of Thumb;
  - overshadowing of adjoining properties – 7 and 15 Avon Road and 10B Beechworth Road should be further investigated. Min. 3 hours solar access to these properties between 900am and 300pm in mid-winter;
  - majority of kitchens are more than 8m from glassline and insufficient numbers have natural ventilation;
  - apart from Building 5, only 42-45% of the units achieve adequate cross-ventilation (“slots” represent a poor design response);
  - 25m<sup>2</sup> private open space should be provided to ground floor apartments;
  - basements must be of sufficient area to accommodate garbage storage.
- Design Issues (Stage 1):
  - setback to Avon Road is insufficient (11m would be more appropriate);
  - basement encroaches on Avon Road setback – 11m would be appropriate;
  - survey diagrams illustrating windows and private open spaces of adjoining dwellings required. Separation distances and potential impacts on privacy of 3 Avon Road need clarification;
  - 10m separation to 7 Avon Road is inadequate and landscaped setback of 1600mm is inadequate;
  - location of common open space adjacent to 7 Avon Road has potential to impact amenity of that property;
  - separation between Buildings 1 and 4 is inadequate - should be 12m;
  - high number of single aspect apartments in Building 1 is unacceptable;
  - gradient of driveway not shown - minimum 2.6m clear headroom is required for access by Council’s small waste collection vehicle – must be demonstrated on project application plans;
  - architectural plans should show rainwater tank and OSD tanks under / in basement;
  - landscape plans should provide details of BASIX landscape commitments (low water usage or indigenous planting); details of species, numbers and location of plants etc;
  - adjust location of entry driveway under Avon Road elevation or position it closer to the southern wall of the building to allow for 6m deep soil at the boundary and for the entry path to be resolved;
  - a materials palette should be provided.
- Design Issues (Building3):
  - building should observe increased setback from watercourse (+5m);
  - floor plate is too large and has too many units / floor;
  - survey diagrams required to illustrate windows and private open spaces of adjoining dwellings. Separation distances and potential impacts on privacy of 15 Avon Road need clarification;
  - visual impact of development viewed from the public domain in Arilla Road needs to be assessed – requests perspective study;
  - inconsistency of description of height of building;
  - physical separation from dwellings at Nos. 7 and 15 Avon Road and the distance to the boundary is inadequate. At a minimum, 5<sup>th</sup> and 6<sup>th</sup> storeys should be stepped back to observe a 12 m setback from the boundary;

- height of building and separation to dwelling at 1 Arilla Road results in poor transition and adverse amenity impacts on that property. At a minimum, 5<sup>th</sup> and 6<sup>th</sup> storeys should be stepped back to observe a 12 m setback from the boundary;
  - basement should be setback min 6m from the boundaries of 1 Arilla Road and 15 Avon Road.
- Design Issues (Building 4):
    - floor plate is too large and has too many units / floor;
    - visual impact of development viewed from the public domain in Avon Road needs to be assessed – requests perspective study;
    - adverse impacts on amenity of 3 Avon Road (isolated site). All floors should be minimum 9m from the boundary and the 5<sup>th</sup> and 6<sup>th</sup> floors should be minimum 12m from the boundary. Basement should be minimum 6m from boundary and circular vehicle access ramp should also be 6m from boundary.
- Design Issues (Building 5):
    - survey diagrams required to illustrate windows and private open spaces of adjoining dwellings. Separation distances and potential impacts on privacy of 10B Beechworth Road need clarification;
    - height and setbacks to dwellings at Nos. 10A and 10B Beechworth Road provide poor transition. Building should observe minimum 9m setback from boundary and 5<sup>th</sup> and 6<sup>th</sup> storeys should be 12m;
    - basement car park should be set back to align with final above-ground portion of the building adjacent to the boundary of 6 Beechworth Road; and
    - consider redesign of access driveway in relation to 6 Beechworth Road.

## **APPENDIX E    PROPONENT'S    REVISED    PPR    /    RESPONSE    TO SUBMISSIONS**

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See the Department's website at:

MP 08\_0207

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=2919](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=2919)

MP 10\_0219

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=4403](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4403)

## **APPENDIX F      CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENTS**

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## Ecologically Sustainable Development

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The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision making processes and that ESD can be achieved through the implementation of:

- (a) *if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);*
- (b) *the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);*
- (c) *the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and*
- (d) *improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).*

The department has considered the proposed development in relation to the ESD principles and has made the following conclusions:

- **Precautionary Principle** – The application is supported by technical and environmental reports which conclude that the proposal's impacts can be successfully mitigated. No irreversible or serious environmental impacts have been identified. No significant climate change risks are identified as a result of this proposal.
- **Inter-Generational Principle** – The location of new residential development on a site with good access to public transport will enable residents to make sustainable travel choices which will protect the environment for future generations.
- **Biodiversity Principle** – There is no threat of serious or irreversible environmental damage as a result of the proposal. The proposal is generally confined to those parts of the site where there are either existing buildings or which have previously been cleared and, as such, is unlikely to impact upon biological diversity or ecological integrity. The Department has considered flora and fauna in **Section 5.5** of this report
- **Valuation Principle** – The valuation principle is more appropriately applied to broader strategic planning decisions and not at the scale of this application. The principle is not considered to be relevant to this particular Concept Plan application.

The Proponent submitted a BASIX assessment of the thermal performance of the Stage 1 building together with an assessment of its ability to conserve water and minimise energy consumption. The report concludes that Stage 1 is able to achieve the mandatory Energy target of 20% and Water target of 40%.

It is recommended that a future assessment requirement be imposed to require future development applications to incorporate measures to achieve or exceed these BASIX targets. On this basis, the Department is satisfied that the proposal is consistent with the principles of ESD.

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### Section 75I(2) of the Act / Clause 8B of Regulation

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Section 75I(2) of the *Environmental Planning and Assessment Act 1979* and clause 8B of the *Environmental Planning and Assessment Regulation 2000* provides that the Director General's Report is to address a number of requirements. These matters and the department's response are set out below:

| <b>Section 75I(2) criteria</b>   | <b>Response</b>  |
|--|--|
| Copy of the Proponent's EA and any Preferred Project Report  | The Proponent's EA and PPR are located at <b>Appendices A</b> and <b>C</b> respectively.   |
| Any advice provided by public authorities on the project   | All advice provided by public authorities in relation to the project for the Minister's consideration is set out in <b>Section 4</b> of this report.   |
| Copy of any report of a panel constituted under Section 75G in respect of the project  | No statutory panel was required or convened in relation to this project.   |
| Copy or reference to the provisions of any State Environmental Planning Policy that substantially governs the carrying out of the project  | Each relevant SEPP that substantially governs the carrying out of the project is identified below, including an assessment of the proposal against the relevant provisions of the SEPP.  |
| Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division | An assessment of the development against the relevant environmental planning instruments is provided below.  |
| Any environmental assessment undertaken by the Director General or other matter the Director General considers to be appropriate   | The environmental assessment of the project is this report in its entirety.  |
| A <b>Statement of Compliance</b> with the environmental assessment requirements under this Division with respect to the project  | In accordance with section 75I of the EP&A Act, the department is satisfied that the Director General's environmental assessment requirements have been satisfied.   |
| <b>Clause 8B criteria</b>  | <b>Response</b>  |
| An assessment of the environmental impact of the project   | An assessment of the environmental impact of the proposal is provided in <b>Section 5</b> of this report.  |
| Any aspect of the public interest that the Director General considers relevant to the project  | The public interest is discussed in <b>Section 5</b> of this report.   |
| The suitability of the site for the project  | The suitability of the site to accommodate the proposed development is discussed in <b>Section 5</b> . The revised proposal as described in the PPR including density, built form, traffic and other impacts have been considered by the department and the site is considered to be suitable for the scale and form of residential development proposed, subject to certain design modifications. |
| Copies of submissions received by the Director General in connection with public consultation under section 75H or a summary of the issues raised in those submissions   | A summary of the issues raised in the submissions is provided in <b>Section 4</b> of this report. Proponent's response to the submissions to the EA and PPR appear at <b>Appendices C</b> and <b>E</b> respectively. A copy of the submissions is provided at <b>Appendix B</b> .  |

### **State Environmental Planning Policy (Major Development) 2005**

The Project remains a Part 3A project under the former provisions of Schedule 1, Clause 13, Group 5 of the Major Projects SEPP, "residential, commercial or retail projects" as DGRs were issued prior to 8 April 2011. The project has a capital investment value (CIV) of more than \$100 million satisfying the non-discretionary criteria of clause 13.

### **State Environmental Planning Policy 55 – Remediation of Land**

A Stage 1 Environmental Site Assessment accompanies the proposal as discussed in **Section 5.7** of this report.

## **State Environmental Planning Policy (Infrastructure) 2007**

The original EA proposed up to 355 residential apartments which exceeds the apartment number threshold (300 dwellings with access to any road) referred to in clause 104 and Schedule 3 of the Infrastructure SEPP. Accordingly, the proposal was referred to Roads and Maritime Services (RMS) as "Traffic Generating Development". The RMS comments are discussed in **Sections 4.2** and **5.4** of this report.

It is however noted that the proposal, as amended by the Revised PPR, has reduced the dwelling yield to 273 residential apartments.

## **Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

The deemed SEPP aims to establish a balance between maintaining and restoring the natural, heritage and scenic values of the Sydney Harbour catchment, promoting recreational access to the foreshore and waterways and promoting a prosperous working harbour. It establishes planning principles and controls for the catchment as a whole that are to be considered and, where possible, achieved in the preparation of environmental planning instruments.

The proposal is consistent with the SEPP as it aims to protect and enhance identified environmentally sensitive lands and waterways.

## **State Environmental Planning Policy 65 – Design Quality of Residential Flat Buildings (SEPP 65)**

SEPP 65 seeks to improve the design quality of residential flat development through the application of a series of 10 design principles. An assessment against these principles is provided below.

The EA confirms the development has been designed having regard to the design principles embodied in SEPP 65.

### **Key Principles of Department Response SEPP 65**

|                             |  |
|-----------------------------|--|
| <b>Principle 1: Context</b> | <p>The site is located in an established urban area, within walking distance of the Pymble Town Centre and public transport. Development in the locality is predominantly single dwelling houses although more recently there has been a significant amount of multi-storey residential development in the nearby area, primarily along the Pacific Highway / rail corridor.</p> <p>The proposal responds to its context by focussing the greatest height in the central parts of the site and in the area closest to the rail corridor. The building height of Stage 1 which presents to Avon Road (the only direct interface with the public domain) is part 4 and part 5 storeys which is considered to be appropriate, having regard to the landscaped setbacks and physical relationship to adjoining dwellings. Detailed analysis of the physical relationship of the proposal with other adjoining properties has demonstrated that the development is appropriate in its context.</p> <p>Furthermore, the proposed publicly accessible open space associated with the conservation zone and the through-site pedestrian link will benefit the residents of the locality.</p> |
| <b>Principle 2: Scale</b>   | <p>The bulk, height and scale of the buildings (as detailed in the PPR) has been modified to address the issues raised in the submissions and in an effort to significantly improve the relationship of the proposal to its</p>  |

|   |   |
|---|---|
|   | <p>neighbours and in recognition of the ecological constraints of the site.</p> <p>The proposed building footprints and envelopes are arranged around the central gully / conservation area. This arrangement takes advantage of the physical size of the land and the buildings have been sited in direct response to the ecological constraints of the site, the surrounding neighbours and the topography.</p> <p>The perimeter of the site will be landscaped to provide an appropriate transition to the building forms to the surrounding lower density residential development on the south western side of the Pacific Highway / North Shore Railway Line.</p> <p>The Stage 1 Building is located on Avon Road and is the only component of the proposal that has a direct interface with the public domain. Council has acknowledged the presentation of Building 1 to Avon Road and has indicated that this is similar to that required by its DCP 55 and is therefore considered to be of an appropriate height in this location.</p> <p>On this basis the proposed development is considered to be generally in keeping with the scale of the existing streetscape.</p> |
| <b>Principle 3: Built Form</b>                                | <p>It is considered that the proposed building envelopes will provide an appropriate built form outcome as outlined in <b>Section 5.2</b> of this report. Future assessment requirements have been recommended to ensure a high quality architectural design of future buildings.</p>   |
| <b>Principle 4: Density</b>                                   | <p>The subject site is large and the proposed FSR and dwelling yield is considered appropriate in this particular context as:</p> <ul style="list-style-type: none"> <li>the site has previously been identified as being capable of accommodating greater density of development (SEPP 53);</li> <li>the site coverage is less than 20% and the proposal provides a substantial area of open landscaped space within the site to preserve and enhance the area of remnant Blue Gum High Forest which occupies the central part of the site.</li> </ul> <p>The provision of up to 273 apartments on the site is consistent with local and regional planning strategies which seek to locate housing within centres with access to public transport, jobs and services. The Department has undertaken a detailed assessment of density in <b>Section 5.1</b>.</p>  |
| <b>Principle 5: Resource use, Energy and Water Efficiency</b> | <p>As outlined in Section 5.3 of this report, the proposal generally achieves the required solar access and cross ventilation have been achieved which provide a level of amenity which will ensure that the building will not be reliant on air conditioning to maintain thermal comfort. For the Concept Plan more than 3 hours of solar access have been provided to 81% of the residential units (required 70%). Some 70% of the units are capable of achieving cross ventilation (required 60%). The remainder of the units receive passive natural ventilation however the external wall configuration and wind pressure at the higher levels will create a natural cross flow through the single aspect units as well.</p> <p>Stage 1 is similarly compliant, achieving 73% of apartments with 3 hours solar access and 82% of apartments with cross ventilation.</p> <p>The development will also comply with BASIX in relation to resource, energy and water efficiency. A future assessment requirement has been recommended to require ESD measures to be incorporated into the future design, construction and operation of the development.</p>                        |
| <b>Principle 6: Landscape</b>                                 | <p>The Concept Plan provides for the establishment of a conservation area which occupies the central part of the site which is designed to conserve and enhance an area of BGHF. The Conservation Area will be the subject of a Vegetation Management Plan.</p>   |

|   |   |
|---|---|
|   | The Landscape master plan for the site provides for landscaping between the buildings, in setback areas and within areas of open space throughout the site, designed to augment existing vegetation and enhance the appearance and amenity of the development.  |
| <b>Principle 7: Amenity</b>                                     | The Department has assessed the proposal in terms of solar access, cross ventilation and privacy. Adequate separation is provided between the proposed building envelopes. Noting the constraints of the site the Department is satisfied that the building envelopes are capable of achieving a satisfactory level of amenity throughout the development as outlined in <b>Section 5.3</b> . More detailed consideration of amenity will be undertaken in the assessment of future applications. |
| <b>Principle 8: Safety and Security</b>                         | The proposal has taken into account the CPTED principles in the design of communal areas and landscape treatment. The development will provide passive surveillance of common areas on the site from living rooms and balconies and the use of controlled access points to ensure clear definition of public and private spaces.  |
| <b>Principle 9: Social Dimensions and Housing Affordability</b> | The Concept Plan and Stage 1 Project Application provides for a mix of apartment types which will encourage a diverse social mix within the area. Adaptable housing will also be provided in accordance with Council's DCP 55 requirements (10%).   |
| <b>Principle 10: Aesthetics</b>                                 | Future assessment requirements are recommended to ensure that the elevations of the building envelopes provide a high level of articulation as well as varied and high quality textures, materials and colours to make a positive contribution to the streetscape and amenity of the locality.  |

Having regard to the above, it is considered that the proposed development represents an appropriate design response to the opportunities and constraints offered by the site and its setting and is consistent with the design quality principles outlined in Part 2 of SEPP 65.

### Residential Flat Design Code (the Code)

The Residential Flat Design Code is closely linked to the principles of SEPP 65. The Code sets out a number of "rules of thumb" which detail prescriptive standards for residential development that would ensure the development complies with the intent of the Code. An assessment has been undertaken of the Stage 1 Project Application.

| <b>Residential Flat Design Code Compliance</b>             |  |   |   |
|--|--|---|---|
|  | <b>RFDC Requirement</b>  | <b>Proposed</b>   | <b>Complies (Y/N)</b>   |
| <b>Part 1 Local Context</b>                                |  |   |   |
| <b>Building Depth</b>                                      | Max 18m  | 11 - 23 metres  | No - acceptable on merit (see <b>Section 5.3.4</b> )  |
| <b>Building Separation (habitable rooms and balconies)</b> | <ul style="list-style-type: none"> <li>Up to 4 storeys: 12m between habitable rooms / balconies</li> <li>5 – 8 storeys: 18m</li> <li>9 storeys and above: 24m</li> </ul> | Building separation is generally in excess of min. requirements:<br>Bldg 1 to 3 = 24.5m<br>Bldg 3 to 4 = 34m<br>Bldg 4 to 5 = 61m<br>Bldg 1 to 4 = 9.5m | No – acceptable on merit subject to recommended modifications and additional privacy measures (see <b>Section 5.3.2</b> ) |

|   | RFDC Requirement   | Proposed   | Complies (Y/N)  |
|---|--|--|---|
| <b>Street Setbacks</b>                            | Compatible with desired streetscape character  | 10 – 10.8 metre setback to Avon Road   | Yes – refer detailed discussion at <b>Section 5.2.1</b>   |
| <b>Part 2 Site Design</b>                         |  |  |   |
| <b>Deep Soil Landscaping</b>                      | Min 25% of open space should be deep soil  | Approximately 1,155m <sup>2</sup> (31%) of total site area                                 | Yes   |
| <b>Communal Open Space</b>                        | 25-30% or if this is not achieved increased private open space and/or in a contribution to public open space         | The area of communal open space available to the Stage 1 building is 175m <sup>2</sup>     | No – acceptable on merit, considering extent of the wider site reserved for conservation area / riparian zone (see <b>Section 5.3.5</b> ).  |
| <b>Solar Access</b>                               | 70% of living rooms and private open space to achieve 2 hours solar access between 9.00am and 3.00pm on 21 June      | 73%  | Yes   |
| <b>Single Aspect Units</b>                        | Limit those with southerly aspect to no more than 10%  | 8 units (18%) have a southerly aspect  | No – acceptable on merit given the site orientation and the fact that the single aspect units are shallower (6-8m) than those with dual aspect (see <b>Section 5.3.4</b> ).   |
| <b>Single Aspect Units – distance from window</b> | Max 8m   | Single aspect units range in depth between 6 – 8 metres                                    | Yes   |
| <b>Naturally cross ventilated</b>                 | Min 60% of units   | 82%  | Yes   |
| <b>Max number of units of circulation core</b>    | Max 8 units  | 9 apartments (Ground floor – Level 3 inclusive)  | No – acceptable on merit on the basis that the L-shaped corridor has fixed windows at both ends and adjacent to the lifts in the short section of the corridor, providing ample natural light (see <b>Section 5.3.6</b> ) |
| <b>Accessible storage facilities</b>              | 1 bedroom = 6m <sup>3</sup><br>2 bedroom = 8m <sup>3</sup><br>3 bedroom = 10m <sup>3</sup><br>exclusive of wardrobes | 1 bedroom = 6m <sup>3</sup><br>2 bedroom = 8m <sup>3</sup><br>3 bedroom = 10m <sup>3</sup> | Yes   |

|  | RFDC Requirement  | Proposed  | Complies (Y/N)   |
|--|---|---|--|
| <b>Kitchens with natural ventilation</b> | Min 25%   | 1%  | No – acceptable on merit given that the kitchens are part of open plan living / dining area which has access to natural ventilation (see <b>Section 5.3.4</b> ). |
| <b>Apartment Size (min)</b>              | 1 bedroom = 50 – 63.4m <sup>2</sup><br>2 bedroom = 70 – 121m <sup>2</sup><br>3 bedroom = 95 – 124m <sup>2</sup> | 1 bedroom – 50-65m <sup>2</sup><br>2 bedroom – 75-85m <sup>2</sup><br>3 bedroom – 100m <sup>2</sup> | Yes  |
| <b>Balcony Depth</b>                     | Min 2 metres  | Minimum 2 metres  | Yes  |
| <b>Floor to Ceiling Heights</b>          | ≥ 2.7m for habitable rooms<br>2.4m for non-habitable  | 2.7m habitable rooms<br>2.4m non-habitable rooms  | Yes  |

### Ku-ring-gai Local Environmental Plan (Local Centres) 2012

Ku-ring-gai LEP (Local Centres) 2012 was gazetted on 25 January 2013 and came into effect on 8 February 2013. The following table contains a summary of the compliance of the proposal against the controls set out in the draft LEP.

| Cl.         | Control   | Proposed  | Compliance                               |
|-------------|---|---|--|
| <b>2.3</b>  | <b>Land Use</b><br>R3 Medium Density Residential – townhouses<br>R2 Low Density Residential – dwelling houses<br>E4 Environmental Living – dwelling house | Residential flat buildings  | No – see <b>Section 3.3</b>              |
| <b>4.3</b>  | <b>Height of Buildings</b><br>R3 Zone – 11.5m (2 storeys)<br>R2 and E4 Zones – 9.5m   | Building heights range from 4 storeys to 9 storeys  | No – see <b>Sections 5.2.1 and 5.2.2</b> |
| <b>4.4</b>  | <b>Floor Space Ratio</b><br>R3 Zone – 0.8:1<br>R2 Zone – 0.3:1 – 0.4:1<br>E4 Zone – 0.2:1 – 0.4:1   | FSR calculated over the entire site is 0.94:1   | No – see <b>Section 5.1</b>              |
| <b>5.9</b>  | <b>Preservation of Trees or Vegetation</b>  | The proposal involves the removal of a number of trees  | Yes                                      |
| <b>5.10</b> | <b>Heritage Conservation</b><br>1 Avon Road and 6 Beechworth Road are identified as heritage items in Schedule 5 of the LEP and on the Heritage Map       | Consent is sought for demolition of 1 Avon Road. A Statement of Heritage Impact accompanies the application, thereby satisfying the requirements of clause 5.10(5). Revised PPR / Response to Submissions addresses impact of the proposal on 6 Beechworth, which does not form part of the site but is on an adjoining parcel. | Yes                                      |

| Cl.  | Control   | Proposed  | Compliance   |
|------|---|---|--|
| 5.11 | <b>Bush fire hazard reduction</b><br>The south eastern corner of the site is identified on Council's mapping as being Bush Fire Prone Vegetation Buffer                                   | Bush Fire Protection Assessment indicates that the separation distance between the proposed development and the Category 1 Bush Fire Prone Vegetation (within PLC campus) exceeds the minimum recommended in <i>Planning for Bush Fire Protection 2006</i> .<br><br>RFS recommends 10m setback from Building 1 to Avon Road and inclusion of conditions on any approvals issued – Condition C22.  | Yes – Building 1 setback to Avon Road has been increased to 10m. |
| 6.1  | <b>Earthworks</b>   | Erosion and Sediment Control Plan accompanies the application. Preparation of dilapidation reports for adjoining properties will be included as condition of approval for Building 1 (Condition D5) and it is anticipated that Council will require for future DAs.   | Yes  |
| 6.2  | <b>Stormwater and water sensitive urban design</b><br>Requires WSUD principles to be incorporated into the development and for riparian, stormwater and flooding measure to be integrated | Proposal incorporates best practice WSUD for water management – capture of roof runoff for re-use (toilet flushing, laundries, irrigation etc); installation of water efficient fittings and fixtures; detention of runoff from impermeable surfaces; erosion and sediment control measures; treatment of runoff; enhancement of BGHF, stabilisation of surfaces and improvement of runoff water quality; and use of endemic species in landscape treatment to reduce water demand.   | Yes  |
| 6.3  | <b>Biodiversity protection</b><br>The site is identified for its biodiversity values on the LEP Maps  | Council's vegetation mapping shows BGHF in the gully area and the adjoining slope to the north west, which is consistent with DECCW mapping (2009). Urban / exotic species on the upper slopes of the site and a patch of Sydney Turpentine – Ironbark Forest on the boundary with 3 Avon Road (it is noted that the Turpentines are within the boundary of 3 Avon Road – <b>Figure 25</b> ).<br><br>BGHF vegetation to be conserved / enhanced and will be the subject of a VMP.   | Yes  |
| 6.4  | <b>Riparian land and waterways</b>  | The design has been based on satisfying Category 3 riparian objectives from Council's Riparian Policy and the requirements for the protection of the Blue Gum High Forest on the site.<br><br>Council has indicated that the general location of Building 3 within the 10m nominal riparian zone is acceptable given the previous / existing extensive landscaping in that area (tennis court) and the maintenance of an extensive riparian zone across the other side of the channel 20-30m and over the rest of the site. | Yes  |

| Cl. | Control  | Proposed   | Compliance |
|-----|--|--|------------|
| 6.5 | <b>Site requirements for multi-dwelling housing and residential flat buildings</b><br>Minimum lot size of 1,200m <sup>2</sup> and street frontage of 24m (if lot is less than 1800m <sup>2</sup> ) or 30m (if land is more than 1800m <sup>2</sup> ) | The site has an area of 23,677m <sup>2</sup> , with frontage to Avon Road (56.645m), thereby satisfying the numerical requirements. The site also has frontage to the stub end of Avon Road (20m) via which access will be achieved to Buildings 3 and 4; and two short frontages to Beechworth Road (15.87m and 6.77m). The wider of these two frontages will accommodate vehicular access to Building 5. | Yes        |

## **APPENDIX G    OTHER RELEVANT REPORTS OR DOCUMENTS**

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## **APPENDIX H    RECOMMENDED CONDITIONS OF APPROVAL**

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