
PLANNING PROPOSAL TO MODIFY ZONING, HEIGHT AND FSR TO LAND AT 95-97 STANHOPE ROAD KILLARA - LOURDES RETIREMENT VILLAGE

EXECUTIVE SUMMARY

PURPOSE OF REPORT: For Council to consider a Planning Proposal at 95-97 Stanhope Road, Killara on land currently operating as Lourdes Retirement Village.

BACKGROUND: The Planning Proposal seeks amendment to the *Ku-ring-gai Local Environmental Plan 2015* to:

1. rezone the land from R2 (Low Density Residential) to R3 (Medium Density Residential);
2. increase the maximum floor space ratio (FSR) from 0.3:1 to 0.8:1;
3. increase the maximum height on part of the site from 9.5m to:
 - 11.5m adjacent to Stanhope Road;
 - 22m adjacent to 91 Stanhope Road and to the north of the site; and to
 - 24m to the central part of the site.

The key objective of the Planning Proposal is to facilitate the redevelopment of the site to increase the number of dwellings for Seniors Housing and make improvement on the current facilities.

COMMENTS: This report presents the assessment of the Planning Proposal and addresses key issues regarding the application.

Whilst increased housing provision for the growing aged population is supported, the site is challenged by its proximity to bushland and the associated bushfire hazard and evacuation risks. In addition, the site is located within a highly visible and intact heritage context and an established low density residential area, distant from the local centre where the proposed densities are more typical, and whose impacts are in keeping with that urban context.

RECOMMENDATION: That Council not support the request for the Planning Proposal at 95-97 Stanhope Road, Killara (Lourdes Retirement Village) and that it not be submitted for a Gateway Determination.

PURPOSE OF REPORT

For Council to consider a Planning Proposal at 95-97 Stanhope Road, Killara on land currently operating as Lourdes Retirement Village.

BACKGROUND

The Planning Proposal seeks amendment to the *Ku-ring-gai Local Environmental Plan 2015* (KLEP 2015) zoning, height and FSR standards to enable an increase in the provision of Seniors Housing and associated services and facilities within the Lourdes Retirement Village.

Discussions with the applicant regarding their proposal have been ongoing. Council officers first met with the applicant and landowner, at their request, in October 2015 to discuss their intentions for the site.

A formal Pre-Planning Proposal meeting was held with the applicant and Council staff on 7 December 2016 to discuss a proposal to facilitate the redevelopment of land at 95-97 Stanhope Road, Killara. The minutes of this meeting are attached to this Report at **Attachment A1**.

The Planning Proposal was submitted to Council on 8 September 2017. Following the submission two letters were sent to the applicant (September and December 2017), and one meeting was held (December 2017), requesting additional information to complete their Planning Proposal documentation. The updated Planning Proposal was received by Council on 2 February 2018.

Assessment of the Planning Proposal commenced on 21 March 2018 following the receipt of completed documentation (in line with Council's requirements and the Department of Planning and Environment's *A guide to preparing planning proposals*.)

A copy of the Planning Proposal is included at **Attachment A2**.

Site description and local context

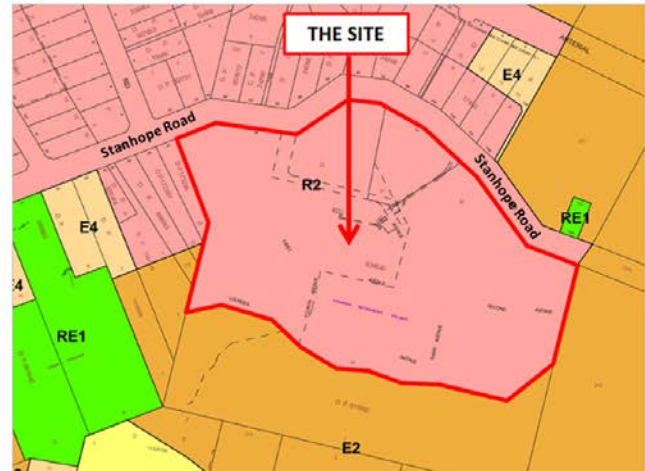
The site consists of two lots at 95 and 97 Stanhope Road, Killara identified as Lot 21 and Lot 22 in Deposited Plan 634645. It is an irregularly shaped allotment with a total area of approximately 5.25 hectares, owned by Stockland Aevum Limited and currently operating as the Lourdes Retirement Village.

The site is located within a low density residential area and is zoned R2 (Low Density Residential). The area to its north and west is typical of low density residential areas in Ku-ring-gai, with high quality single dwellings within established garden settings.

The land to the south and east of the site is zoned E2 (Environmental Conservation) and contains high quality bushland with biodiversity value. In addition, the adjacent bushland area is identified as a Heritage Item known as Seven Little Australians Park, and which partially sits within the C22 Crown Blocks Heritage Conservation Area located adjacent to the south and west of the site.



Site Location Map



Existing Zoning KLEP2015

The site contains a historical building *Headfort House* which is utilised as the site Chapel and other administrative functions.

The site has a single frontage with access off Stanhope Road to its north and has its own internal road system servicing the development. It is located on the ridgeline at Stanhope Road with a relatively flat area close to the road and significant falls across the site to the south and east.

The topography of the site affords panoramic views to the south and east across the heritage bushland and residential areas characteristic of the high quality Ku-ring-gai landscape with built form placed under the tree canopy. The views extend to the skylines of the Chatswood and Lindfield town centres where built form penetrates the tree canopy and serve as a marker of key urban centres in the landscape.



Built form penetrating the tree canopy at the Chatswood Urban Centre

Residential areas sitting beneath the tree canopy

Ku-ring-gai's prevailing tree canopy character with dominant built form only to urban and local centres.(Photo taken from Lourdes site)

Reason for the Planning Proposal

The Planning Proposal outlines the following reasons for proposed amendments to the KLEP 2015:

- The existing building stock on the site is experiencing a decline in viability and cannot meet the expectations of the emerging baby boomer market, which differs significantly from the more modest demands of previous generations.
- The existing development, constructed in 1983, does not provide services and facilities that are competitive with market demand.

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- The dwellings do not have lift access, and the vehicular and pedestrian access is not legible, with some internal streets being too steep to walk.

The proposed amendments would facilitate redevelopment of the site to achieve the following outcomes as indicated in the Planning Proposal:

- provision of increased Seniors Housing to meet growing demands;
- replacement of aged building stock with Seniors Housing apartments;
- delivery of quality communal facilities including communal open space;
- improvement of the internal street and pedestrian network; and
- restoration and preservation of Headfort House.

The following is also listed, however the proposal does not demonstrate this outcome:

- address site features, including the bushland fringe and topography and retention of significant trees.

The Planning Proposal includes the below as an objective, with an explanatory illustration in its Urban Design Study (**Attachment A3**):



- enable future renewal of the southern part of the site if approved under a separate Planning Proposal.

This objective, with the associated illustration of apartment block type buildings to the south of the site, is not supported and contradicts the content of the Planning Proposal which states that due to challenges around bushfire management, the southern part of the site, adjacent to the bushland, would remain as is with the existing housing.

Whilst the Planning Proposal does not seek amendment of the maximum height to this southern part of the site, it seeks to rezone the site in its entirety to R3 (Medium Density Housing), and apply the increased floor space ratio (FSR) to the whole site. This will enable the intensification of development through increased heights to the north of the site close to Stanhope Road (shaded in blue in the diagram below). The below diagram illustrates the development outcomes being sought for this site (from Urban Design Study attached to Planning Proposal).



Existing Site Plan

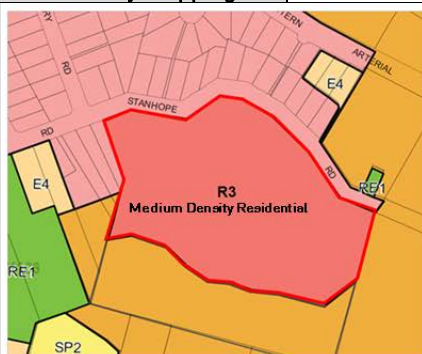


Proposed Site Plan

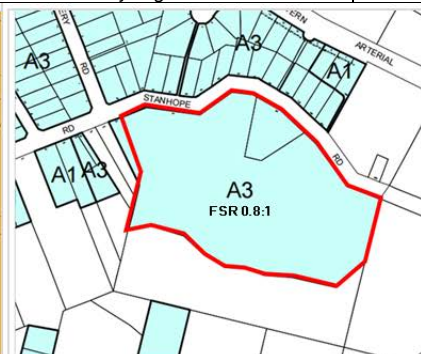
The Planning Proposal

The Planning Proposal seeks amendments to the *KLEP 2015* to apply R3 (Medium Density Residential) zoning and the associated FSR of 0.8:1 to the entire site. It also asks for a range of increased heights, greater than the standard 11.5m maximum height permitted within R3 zones, to the upper portion of the site whilst retaining the 9.5m height to the south and east of the site. The details of the application are tabulated and illustrated as follows:

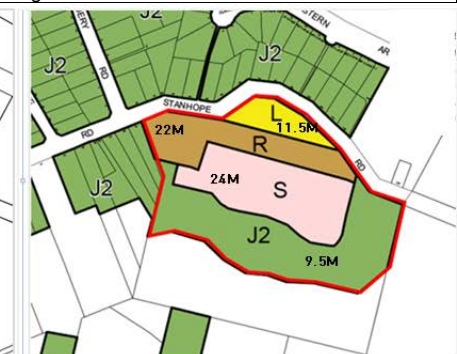
KLEP 2015 Standards – 95-97 Stanhope Road, Killara		
	KLEP 2015 - Existing	KLEP 2015 - Proposed
Zoning	R2 (Low Density Residential)	R3 (Medium Density Residential)
Floor Space Ratio	0.3:1	0.8:1
Height of Building	9.5m	<ul style="list-style-type: none"> - 11.5m adjacent to Stanhope Road (3 storey) - 22m adjacent to 91 Stanhope Road and across the northern part of the site (6 storey) - 24m to the central part of the site (7 storey) - 9.5m to the south of the site (2 storey)
Minimum Lot Size	840sqm	No change
Heritage mapping	Part Heritage Conservation Area C22	No change
Biodiversity mapping	Part area of biodiversity significance	No change



Proposed Zoning



Proposed FSR



Proposed Height

The proposed amendments will facilitate the expansion of the current Lourdes Retirement Village accommodation, enabling buildings of 3-7 stories (11.5–24m) to the upper portion of the site. The dwelling provision on the site will be doubled, as indicated in the table below, and replace the existing Residential Aged Care Facility, community spaces and independent living units.

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The Planning Proposal and supporting studies refer to the increased heights enabling 6 story buildings on the site; however, the sections in the Planning Proposal's Urban Design Study show that a number of buildings are 7 storey due to the sloping topography and that the line of maximum building height is able to accommodate an additional level on some of the buildings.

Comparison of Existing and Proposed Dwelling Numbers – 95-97 Stanhope Rd, Killara		
	Existing Dwelling numbers (Planning Proposal pg 6)	Proposed Dwellings numbers (Urban Design Study pg 69)
Independent living units (ILU)	108	281
Serviced apartments (SA)	49	59
Residential aged care facility (RACF)	83 bed	130 rooms
TOTAL	240 dwellings	470 dwellings
<p>Note: Since ILU and SA may house single people, each RACF bed is treated as one dwelling. Note: Whilst the Urban Design Study illustrates 6 storey built forms, the heights being sought (24m) would enable 7 storey development to parts of the site – this would increase the dwelling numbers and GFA stated in the Study.</p>		

Several supporting studies form attachments to the Planning Proposal and provide justifications for the Planning Proposal. These are listed below and may be viewed at **Attachment A3 – A18** to this Council report.

- Planning Proposal - Attachment A – *Urban Design Study*, prepared by Architectus
- Planning Proposal - Attachment B – *Site Survey*, Prepared by Norton Survey Partners
- Planning Proposal - Attachment C – *Traffic Impact Assessment*, Prepared by ARUP
- Planning Proposal - Attachment D – *Bushfire Protection Assessment*, Prepared by EcoLogical Australia
- Planning Proposal - Attachment E – *Heritage Letter – Response to Draft Urban Design Study*, Prepared by GML Heritage
- Planning Proposal - Attachment F – *Heritage Significance Assessment – Headfort House*, Prepared by GML Heritage
- Planning Proposal - Attachment G – *Social Effects Report*, Prepared by Elton Consulting
- Planning Proposal - Attachment H – *Lourdes Demand Study*, Prepared by Elton Consulting
- Planning Proposal - Attachment I – *Arboricultural Impact Appraisal and Method Statement*, prepared by Naturally Trees
- Planning Proposal - Attachment J – *Ecological Assessment*, prepared by ACS Environmental
- Planning Proposal - Attachment K, L, M, N, O, P – *Resident Meetings/Presentations/Minutes*, Prepared by Stockland

The studies have been considered by Council officers with comment detailed in the *Table of Assessment* at **Attachment A19**.

A Planning Proposal is not a Development Application and does not consider the specific detailed matters for consideration under Section 4.15 of *Environmental Planning and Assessment Act 1979* (previously Section 79C). A Planning Proposal relates only to an LEP amendment and the proposed amendments need to be acceptable as a means for facilitating certain outcomes on the site, regardless of the subsequent approval or refusal of any future Development Application.

The Urban Design Study included with the Planning Proposal provides an indication of the possible type and scale of built outcomes enabled by the Planning Proposal. However, in considering the Planning Proposal, the building envelope across the entire site has to be considered as any future application on the site could potentially deliver alternative footprints and development of differing bulk and scale than indicated in the Urban Design Study.

COMMENTS

Introduction

Seniors Housing in Ku-ring-gai may be developed in two ways:

1. Under the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (SEPP).

The SEPP enables the development of Seniors Housing in any zone where 'dwelling houses' are permitted. Under the KLEP 2015 'dwelling houses' are permitted in all the residential zones enabling the operation of the SEPP.

Seniors Housing developed under the SEPP is limited to a maximum height of 8m to ensure the integration of the development into the local context. The exception is within zones where 'residential flat buildings' are permitted under the local planning instrument. In these locations the SEPP allows 'vertical villages' and the heights under the local instrument prevail as the SEPP is silent on those standards.

2. Under the *Ku-ring-gai Local Environmental Plan 2015* (KLEP 2015).

The KLEP 2015 stipulates Seniors Housing as a permitted development in the following zones:

- R1 (General Residential);
- R3 (Medium Density Residential);
- B2 (Local Centre);
- B4 (Mixed Use.)

This enables Seniors Housing to be developed within those zones and be assessed under the standards of the KLEP 2015, including the maximum height provisions.

The KLEP 2015 does not permit Seniors Housing in the R2 (Low Density Residential) nor within the R4 (High Density Residential) zones; therefore, all Seniors Housing in these zones can only be developed and assessed under the SEPP.

Currently, given the site at 95-97 Stanhope Road is zoned R2 (Low Density Residential), the Lourdes Retirement Village may only proceed with Seniors Housing development under the standards of the SEPP. This Planning Proposal seeks to amend the zoning from R2 (Low Density Residential) to R3 (Medium Density Residential) to facilitate development under the KLEP 2015 with the associated increased development standards to enable an increased intensity of development on the site.

Planning Proposal Assessment

The Planning Proposal documents have been evaluated by Council's Planning, Architectural, Urban Design, Heritage, Transport, Bushfire and Ecological officers.

In addition, due to the serious nature of bushfire risk and the current position by RFS which has influenced the mapping of many areas across Ku-ring-gai, bushfire consultants *Australian*

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Bushfire Protection Planners Pty Ltd were engaged to review the applicant's Bushfire Protection Assessment. The bushfire consultant's *Independent Review of Bushfire Impact* report may be seen at **Attachment A20**.

Associated with the bushfire risk review, Council's methodology to determine evacuation risk, as applied to areas of bushfire risk across the local government area, has been employed to understand the risks associated with evacuating increased numbers from this area, particularly where that population is elderly and vulnerable. This *Bushfire Evacuation Risk Assessment* is at **Attachment A21** to this Report.

Analysis of the Planning Proposal and its attachments has been conducted and summarised in the *Table of Assessment* attached to this Report. Assessment of the documentation has found a number of inconsistencies across the Planning Proposal and its supporting studies which are noted in the *Table of Assessment*.

The key issues raised in the officers' assessments have led to the conclusion that the rezoning, resulting in intensification of residential dwelling development on this site, cannot be supported. This is primarily due to:

- bushfire and evacuation risks related to aged and vulnerable people;
- limited access to public transport and local services for a population whose reliance on private vehicle use will diminish as they age; and
- the impacts on the locality's heritage significance, Items and Conservation Area.

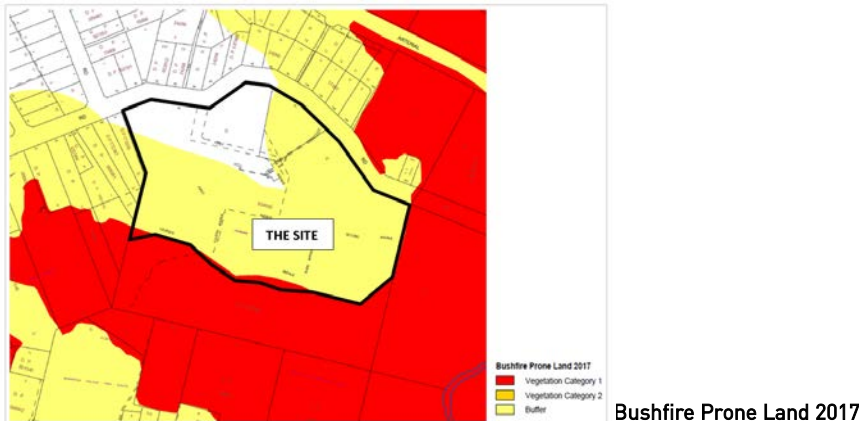
Further, the increase in heights across this site cannot be supported due to:

- the lack of strategic merit and inconsistencies with local, district and regional strategies.

Bushfire and evacuation risks

A highly significant consideration for this site is the bushfire risk and the associated bushfire evacuation risk. This is especially critical given the proposal seeks to increase the number of aged and vulnerable residents on the site.

The majority of the site is identified as bushfire prone land on the Bushfire Prone Land Map 2017, being located within the Buffer Area as illustrated below. Bushfire prone land is land that is likely to be subject to bushfire attack, and the Buffer is the area in which developments and people are most likely to be affected by a bushfire burning in the adjacent land. Therefore, the majority of the subject site poses a high risk to the onsite population.



Bushfire Prone Land 2017

The Planning Proposal's *Bushfire Protection Assessment* report, at **Attachment A6**, presents an assessment of the risks and concludes the following:

"...that the subject land is capable of accommodating future development and associated land use with appropriate bushfire protection measures and bushfire planning requirements as prescribed by s. 117 (2) Direction 4.4 – 'Planning for Bush Fire Protection' and PBP.

A number of strategies have been provided in this report to mitigate bushfire risk including:

- *Ensuring adequate setback from bushfire prone vegetation (APZs);*
- *Ensuring adequate access and egress from the subject land through a well-designed road system;*
- *Considering the adequacy of water supply and the delivery of other services (gas and electricity);*
- *Providing for effective and ongoing management of APZs; and*
- *Considering construction standards (AS3959) implications for future developments depending on development type."*

Investigation of the Planning Proposal's *Bushfire Protection Assessment* by Council's bushfire and ecology officers and the consultant *Australian Bushfire Protection Planners* in their *Independent Review of Bushfire Impact* report, at **Attachment A20**, dispute this conclusion.

Planning for Bushfire Protection 2006 (NSW Rural Fire Service) identifies the existing and proposed Seniors Housing land use on the site as a 'Special Fire Protection Purpose Development' and provides details on the requirements for such infill developments. It provides Performance Criteria that must be satisfied in the assessment of such development. This Performance Criteria can be satisfied in two different ways:

- use of acceptable solutions listed within the *Planning for Bushfire Protection 2006*; or
- by demonstrating another solution satisfying the specific objectives and Performance Criteria listed within the *Planning for Bushfire Protection 2006*. This solution is referred to as a Performance Solution.

The Planning Proposal's *Bushfire Protection Assessment* has applied a Performance Solution approach under *Planning for Bushfire Protection 2006*.

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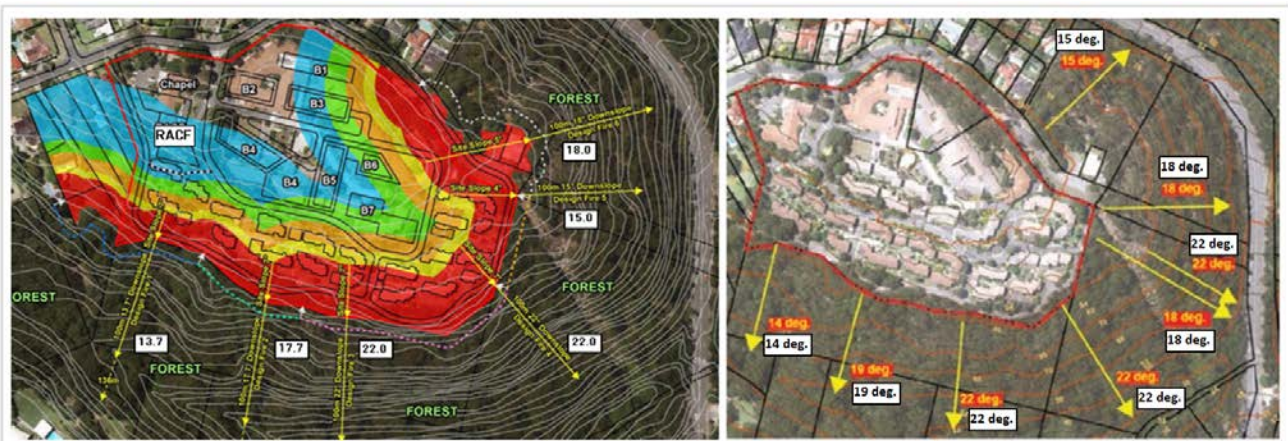
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Following are the key issues:

1. *Bushfire Threat and Bushfire Attack Assessments*

The applicant’s bushfire assessment adopts a Performance Solution approach to the assessment of bushfire threat and bushfire attack. Its modelling includes the bushfire design fires as illustrated by yellow arrows in the below diagram (A). It has used specific slopes agreed with RFS, and selectively utilises two other performance solutions, Short Fire Run and weather data analysis (which has informed the assessment of the Fire Danger Index (FDI)), to identify the site specific Asset Protection Zone (APZ) and Bushfire Attack Level (BAL).

Minor discrepancies in the assessment of specific slopes were identified within some locations as illustrated in the maps below.



(A) Planning Proposal’s Bushfire Protection Assessment – land slope

(B) Independent Review of Bushfire Impact - land slope

The assessment of BAL rating to the future buildings determined in the Planning Proposal’s Bushfire Protection Assessment report is therefore not accurate. Use of the correct FDI of 100 will result in an increase in the level of radiant heat on the buildings. Based on their current proposed location, the result will be an increase in the BAL rating above the accepted BAL 12.5. This increase in radiant heat and construction standards to the proposed buildings do not comply with the performance requirements for *Special Fire Protection Purpose Development* as per *Planning for Bushfire Protection 2006*.

2. *Access and egress*

Due to the inaccuracies in the determination of the APZs, the assessment of the safety of the occupants is also incorrect and evacuation in the event of bushfire will therefore be required on this site.

All the properties (including 95-97 Stanhope Road) within the catchment area, mapped in the below diagram, exit on Stanhope Road, which is the only exit road from this catchment area.

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Catchment area for the assessment of bushfire evacuation risk.

A *Bushfire Evacuation Risk Assessment* has been undertaken to understand current and potential impacts to this area. The methodology used is the same as applied to Council's Deferred Areas Planning Proposal, which was supported by the Rural Fire Service and recently endorsed by the NSW Department of Planning. The results of this analysis show:

- The catchment area has a total of 256 dwellings currently existing, Based on the *Cova (2005)* criteria used in the Deferred Areas Planning Proposal, this number of dwellings exceeds the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 206 dwellings.
- The amendments sought by the Planning Proposal would result in a total of 486 dwellings within the total catchment area, exceeding the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 436 dwellings.
- The egress from this catchment area is inadequate in the event of evacuation from bushfire event:
 - Currently, Stanhope Road has just enough capacity to evacuate the existing catchment within 30mins.
 - With the increase in population that would result from the densities facilitated by the Planning Proposal, the time taken to evacuate the catchment will increase to over 60mins. This exceeds the exit road capacity criteria set by *Cova (2005)* (as per the *Bushfire Evacuation Risk Assessment*) by 32mins.

The amendments sought by the Planning Proposal would result in almost doubling the number of dwellings within the Lourdes Retirement Village which will house vulnerable groups. This will result in the need for a higher level of response by the Emergency Services to assist in the relocation of the residents to a safer neighbourhood place including the frail and disabled in appropriate transport. This assistance may not be available.

The Planning Proposal establishes a loop perimeter internal road identified as 'First Avenue'. A review of the likely impact on this road has identified that with the use of the increased Fire Danger Rating (FDI) for the site the north-eastern, eastern and south-eastern sections of the loop will be exposed to radiant heat levels greater than 10kW/m^2 , including all areas between the bushland and the APZ. This section of the loop road will therefore not provide safe access/egress for residents and an operational platform for firefighters assisting during bushfire.

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The Planning Proposal's Bushfire Protection Assessment does not respond to the risk to the existing Independent Living Units retained to the south and east of the site in the Asset Protection Zone setback to the new buildings.

Whilst a new assessment may be conducted by the applicant with the correct FDI, previous advice from the NSW Rural Fire Service on similar projects has confirmed that the Service is unlikely to accept an increase in the occupancy of such facilities due to the need to evacuate an increased number of vulnerable people from the site, placing additional demand on road infrastructure and the emergency services.

3. *Consideration of multi-level buildings*

The Planning Proposal will enable the construction of multi-level buildings up to 7 stories exceeding the existing two to three storey height. Such buildings have higher densities and increased external façade surface areas potentially exposed to bushfire attack.

The increased height can result in exposure to convective heat and is exacerbated on this site by the steep slopes across which bushfire will travel.

Additionally, the provision of multi-storey buildings housing higher populations will make egress from the building more challenging and place an increased demand on road infrastructure during evacuation.

The NSW Rural Fire Service recommends that multi-storey buildings should not be located along ridges (such as this site) or slopes with significant fire runs.

- *This Planning Proposal is not supported as the RFS have confirmed that it will not accept the lowered Fire Danger Index for this site location that have been used in the Planning Proposal's assessment. The RFS approved Fire Danger Index will result in increasing the bushfire risks above those addressed within the Planning Proposal's Bushfire Assessment.*
- *Significant evacuation issues have been identified for the area and which will be exacerbated by the increase in vulnerable population on this site resulting from the development potential of this Planning Proposal.*
- *The proposal will result in exposure to radiant heat and provide construction standards that do not comply with the Special Fire Protection Purpose developments under Section 117 Direction 4.4 Planning for Bush Fire Protection and Planning for Bush Fire Protection 2006.*

Access to transport and services

95-97 Stanhope Road is located in a low density residential area predominantly serviced by private vehicles. Public transport to the site is limited to one bus service, Route 556, which links the site to East Killara and Lindfield Station. The bus service operates from 6am to 8.30pm, and runs at low frequencies: 30 minute intervals during am and pm peak times, and 1 hour intervals outside peak times. The frequencies and hours of operation are even lower on weekends.

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Killara railway station and post office are the closest services to the site. They are located at 1.3km from the site, beyond easy walking distance for the residents and with no public transport links to them.

Other basic services and facilities such as supermarkets, pharmacies, medical centres, cinema, library and local parks are located well outside the convenient 10 minute walking catchment as suggested in 'Planning guidelines for walking and cycling' (PCAL, 2004), and therefore not within an attractive and manageable walking distance for residents of this site. Access to these services and facilities by residents is reliant on either private vehicle use or the limited service of the 556 bus.

Given its limited frequency, particularly during off-peak times when, as stated in the Planning Proposal (pg 16), residents are most likely to travel, the 556 bus service is unlikely to be attractive as a mode of travel for residents, employees or visitors.

Despite the location of this site on a bus route, there will continue to be a heavy reliance by residents on private vehicle use to access basic services and local facilities. This poses an issue for the ageing population. Unless residents have access to a private vehicle and remain able to drive as they age, the site location presents as a barrier isolating the ageing residents from the services, facilities and community groups that this ageing population might access.

➤ *The significant increase in aged population in this location, facilitated by the Planning Proposal, is not supported. Whilst the site increases the housing stock for the aged population, the site is not well located resulting in a heavy reliance on private vehicle use or limited public transport connections to essential services. Its limited access precludes good ongoing connection with the local community outside the site.*

Heritage significance, Items and Conservation Area

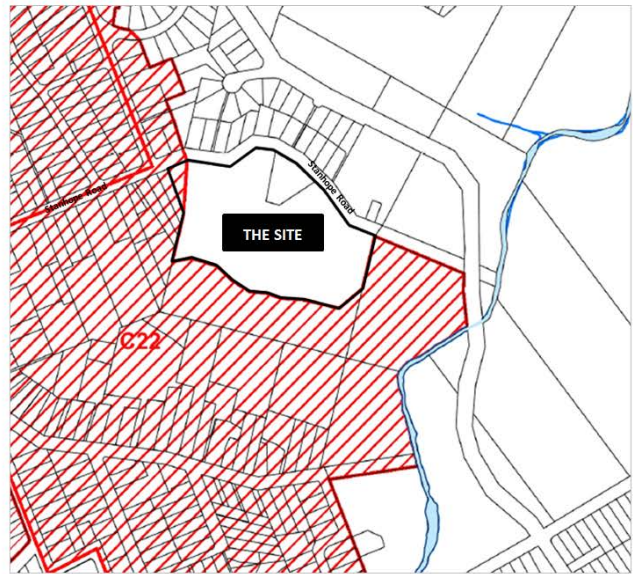
The site is partially included in and surrounded on three sides (west, south and east) by the C22 Crown Blocks Heritage Conservation Area (HCA). It is adjacent to the Seven Little Australians Park Heritage Item (No.11100) to its south and east, and is in the vicinity of the heritage listed Swain Gardens (No.11103) to its west and the Lindfield Soldiers Memorial Park (No.11099) to the east.

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Heritage Items adjacent to and in the vicinity of the site



Heritage Conservation Area Map

Due to the partial inclusion within, and proximity of the HCA and the Heritage Items, heritage consideration is a key component in the assessment of the Planning Proposal and its resultant built form.

The Planning Proposal does not consistently acknowledge its partial inclusion within the HCA nor does it adequately respond to the site’s heritage context. It does not demonstrate integration into the suburban character or scale of the adjacent HCA, neither does it give consideration to the setting of the bushland heritage landscape of the listed Seven Little Australian Park adjacent to its boundary, nor to the vistas from the Lindfield Soldiers Memorial Park. The Planning Proposal states:

Although it is acknowledged that this is an increase in density beyond that of the sites wider surrounds, this is required to afford a high quality outcome for future residents, and the Urban Design Report shows that this density can be achieved without imposing on streetscape character or the significance of Headfort House.

Whilst the garden setting retained at the Stanhope Road frontage of Headfort House will contribute to the street appearance of the HCA, the Planning Proposal would enable 3 storey (11.5m) and 6 storey (22m) buildings to Stanhope Road which do not create interface and transitional areas of bulk and scale within the streetscape and the context of the HCA. In addition, the proposal will enable buildings up to 7 stories (24m) on the highest point of the site. This will have consequences for district views to the site and for the setting of the bushland Heritage Items.

The logic applied to heights following contours is acknowledged, however it is not appropriate in this low density residential context adjacent to the bushland, Heritage Items and the HCA. The heights being sought will locate the tallest (6-7 storey) buildings on the highest points of the site, will be visible above the tree canopy, and through the tree canopy (due to the densities and associated bulk and mass of built form), from several heritage locations including Seven Little Australians Park and Lindfield Soldiers Memorial Park.

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Seven Little Australians Park is a nature reserve that includes bush walks including historical paths of the early residents of Killara. These bushwalks were intended as a bush retreat, a place to get away from the built up suburbs and have historic and aesthetic significance. This sense of escape will be lost with the visibility of the 6-7 storey buildings from the bush tracks within the reserve.

The image below shows a view from the bush track below Ethel Turner lookout in Seven Little Australians Park. Circled is the Optus Base Station which is located opposite Lourdes Retirement Village (north east side). The Optus Base Station has at its highest point an RL of 117.65. The RL of the proposed maximum building heights as indicated in the Urban Design Study is 127.3 (with lift overrun).



Optus Base Station at RL 117.65 visible above tree canopy. Photos taken from Seven Little Australians Park. The proposal seeks an increased height to RL 127.3 making it highly visible above the canopy.



Optus Base Station at RL 117.65 visible above tree canopy. Photo taken from Lindfield Soldiers Memorial Park and oval.
The proposal seeks an increased height to RL 127.3 making it highly visible above the canopy.

The impact on the bushwalks and their intended historical ambience as a 'bush retreat' has not been adequately addressed. A maximum building height that renders any new structure not visible above the canopy would show regard for the locally heritage listed bushland park. This would also integrate with the wider principles of the Ku-ring-gai character of buildings placed within a landscaped setting and below the tree canopy.

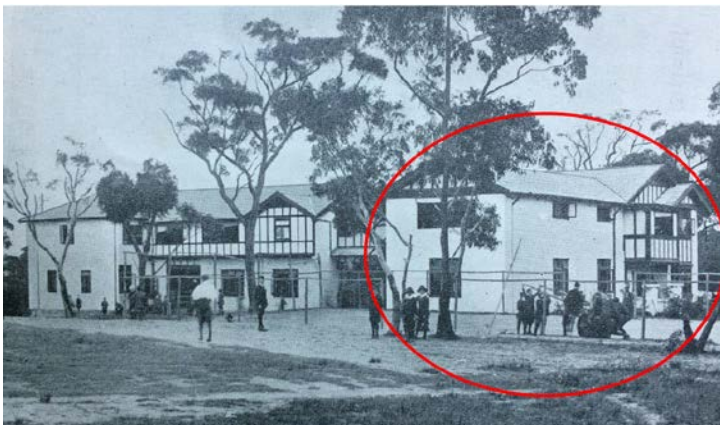
These are views from existing heritage conservation areas across the Seven Little Australians Park especially Crowns Block Conservation Area. At present these sites take in bush vistas but the inclusion of these buildings would result in visible built structures above the canopy. It is important that building heights on the site are below the canopy so regional vistas from conservation areas of the bush are not interrupted by new built elements; and, that the provision of deep soil areas to facilitate improved tall canopy trees be a consideration for any urban study for the site.

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Headfort House:

Headfort House is located on the north-west corner of the Lourdes site. While it is not currently locally heritage listed the building was assessed by the consultants GML Heritage to have heritage significance to Ku-ring-gai based on three heritage criteria: historical significance, historical association and social significance. The former house, now Chapel, is a two storey Federation Arts and Craft style building that has undergone known modifications for its adaptive reuse. The house importantly has historical significance as it was purpose built c1918 as a boys' school known at this time as Headfort School.



Photograph of Headfort House c. 1921. The extant building is circled in red. Photo Source: *GML Heritage: Headfort House – 95 Stanhope Road, Killara – Heritage Significance Assessment May 2017.*



Photograph of Headfort House taken March 2018. Architectural details of the Arts and Craft building still present on the entrance façade.



Photograph of Headfort House taken March 2018. Infilled windows apparent on the first floor.

Headfort House was assessed in the *Heritage Significance Assessment* by GML Heritage at **Attachment A8** and found to have cultural significance for the following heritage criteria:

Historical significance	<ul style="list-style-type: none"> as evidence of the growth of Killara and its development from rural area to residential suburb; as evidence of the effect of WWII on the local area (use by AWAS in the 1940s); and as a tuberculosis hospital.
Historical association	<ul style="list-style-type: none"> building is associated with the prominent educator Thomas Wade who was the founding headmaster of Headfort House.
Social significance	<ul style="list-style-type: none"> to the AWAS, patients and staff of Lourdes hospital, and importance to Ku-ring-gai's sense of place

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The statement of significance for Headfort House (Attachment F – Heritage Significance Assessment) states:

Headfort House has significance at a local level. Headfort House has historical significance as it is evidence of the early Twentieth-Century growth and development of the suburb of Killara and the resultant need for schools in the area. It has further historical significance for its use by the Australian Women’s Army Service (AWAS) for training during WWII, and for its later use as a tuberculosis hospital. Headfort House is associated with the reverend Robert Thomas Wade, a prominent educator, ichthyologist and palaeontologist who was the founding headmaster of the Headfort School. The building also has potential social significance for its association with the AWAS, patients and staff of Lourdes Hospital, and for its importance to the Ku-ring-gai community’s sense of place.

Given that Headfort House has local heritage significance based on the 3 heritage criteria above, it does meet the test for local listing. Therefore, it is recommended to amend the Planning Proposal to locally heritage list Headfort House and its immediate curtilage. It is not recommended that this listing include the entire Lourdes site, instead it should be contained to what has been found to have local significance as per the GML heritage assessment (Planning Proposal Attachment F – Heritage Significance Assessment).

In contradiction to the content of its supporting *Heritage Significance Assessment* by GML, the Planning Proposal states the below.

The assessment found that although Headfort House has significance at a local level, it does not reach the threshold for heritage listing at a local level.

This is an incorrect statement with inadequate consideration of the significance of Headfort House being given in the Planning Proposal and in the design considerations of the Urban Design Study. In addition, the Planning Proposal’s *Attachment E - Heritage Letter response – Draft Urban Design Study* by GML Heritage states:

Whilst the site is not presently heritage listed, GML’s Heritage Significance Assessment (prepared for Stockland in 2017) found that the former Headfort School building (Headfort House) in its garden setting is of heritage significance to Ku-ring-gai. The site is immediately adjacent to two heritage items listed on the LEP 2015.”–

- *Given its significance, Headfort House and its immediate curtilage should be listed as local heritage item on Ku-ring-gai’s Local Environmental Plan (2015) and that any future planning proposal for 95 Stanhope Road Killara include this local heritage listing.*
- *Any proposal for this site would be required to restrict the building heights on the site to below the canopy so regional vistas of the bush items and conservation areas are not interrupted by new built elements, and to enable new landscaping to provide and improve the tree canopy on the site itself.*
- *As a potential Heritage Item the proposed building height of 22m (6 storey) immediately adjacent to Headfort House is considered excessive. It is recommended the building height in the vicinity of the potential Heritage Item be limited to the existing ridge-height of the historic*

portion of Headfort House.

- *The new/relocated grotto should not present as a wall to the street, nor with a carport-like structure in the front garden as currently implied by the Urban Design Study. The visual curtilage to Headfort House from the street should be retained and enhanced to respect its significance and also to ensure consistency with the predominant residential character of Stanhope Road and the adjacent HCA, of houses fronting the street within quality landscaped garden settings.*

Local, District and Regional strategic merit

The Planning Proposal does not demonstrate consistency with strategic local, district and regional principles. Whilst it aligns with the provision of additional housing numbers and choice, it conflicts with other key planning factors. Its departure from the current planning principles and standards applying to this location are not justified and would create a precedent for the numerous retirement village type facilities within Ku-ring-gai.

The justifications to question 3, 4, 5, 6 in the proposal focus on the merits of the site development and provision of additional housing, but does not give due (and in some instances inaccurate) consideration to issues relating to its context. Key points are outlined below with details included in the *Table of Assessment* attached to this Report.

1. Ku-ring-gai Local Environmental Plan 2015 (KLEP 2015)

The KLEP 2015 mapping delineates E2 (Environmental Conservation) areas directly adjacent to this site with objectives “*to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values*”. In addition, part of these E2 lands are Heritage Items and HCA with objectives “*to conserve the environmental heritage of Ku-ring-gai*” and “*to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views*”. The site is also located within a quality low density residential area zoned R2 (low Density Residential) with an objective “*to provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai*”.

The proposal shows limited understanding of the adjacent quality and intact bushland and heritage elements, associated existing high character value of the residential location, and of Ku-ring-gai Council’s key and prevailing landscape character of buildings under the tree canopy within these types of low density areas.

The proposed heights permitting 3–7 storey buildings (11.5–24m), with the tallest being on the high point of the site, will clearly detract from the quality and identity of the area. It will penetrate above the tree canopy and will not provide the interface transitions to the adjacent low density dwellings, heritage neighbourhood and Items, including to Headfort House at the front of the site and adjacent to the neighbouring HCA.

The site is located in an established low density residential area distant from the local and neighbourhood centres. The area is not undergoing a transition warranting a departure from the local character and the principles mapped in KLEP 2015 with development densities being focussed around centres with high availability of transport and services. Therefore any proposal must demonstrate how it will support the desired future character which, at this location, will be a

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continuation of the existing character. The Planning Proposal does not demonstrate alignment or integration of these objectives.

2. *Ku-ring-gai Community Strategic Plan 2030 (CSP)*

Whilst the Planning Proposal demonstrates some consistency with the objectives of the CSP, some of the justifications are not validated by the proposal.

- *Theme 1 – Community, People and Culture*
 - Ku-ring-gai has an ageing population and a key focus is providing appropriate housing, accessible services, facilities and infrastructure to meet the demands of this ageing population.
 - It is acknowledged that the Planning Proposal will provide additional housing for seniors within Ku-ring-gai to support the demand for the aging population, however, the housing for seniors needs to be appropriately located.
 - The Planning Proposal will provide for increase in seniors housing in an out of centres location, not supported by infrastructure, transport or services, and the site has overriding constraints of bushfire hazard, evacuation risks, and heritage and biodiversity.
 - The Planning Proposal has not addressed C7.1 *An aware community able to prepare and respond to the risk to life and property from emergency events*. The site is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire.
- *Theme 2 – Natural Environment*
 - The natural environment is highly valued in Ku-ring-gai, especially the extent of bushland and biodiversity, and the established tree canopy. The *Community Strategic Plan* outlines that *“development should not occur at the expense of the local natural character and no impact detrimentally on the local environment”*.
 - The Planning Proposal provides an inconsistent and incomplete assessment regarding significant vegetation on site (including threatened ecological communities listed under the *NSW Biodiversity Conservation Act 2016*) and fails to effectively demonstrate that the development resulting from the proposed amendments can be designed, sited and managed to avoid potentially adverse environmental impact or if that a potentially adverse environmental impact cannot be avoided that appropriate offsetting can be met.
- *Theme 3 – Places, Spaces and Infrastructure*
 - The proposal shows limited understanding of the adjacent quality and intact bushland and heritage elements, associated existing high character value of the location, and of Council’s key and prevailing landscape character of buildings under the tree canopy within these types of low density areas.
 - The proposed heights permitting 3–7 storey buildings (11.5-24m), with the tallest being on the high point of the site, will clearly detract from the quality and identity of the area.
 - The site is located in an established low density residential area distant from the local and neighbourhood centres. The area is not undergoing a transition warranting a departure from the local character.

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- Headfort House has been identified as having local heritage significance, and it is considered that the proposed building height of 22m adjacent to this potential heritage item is excessive.
- *Theme 4 – Access, Traffic and Transport*
 - The site is not well located in terms of proximity to shops and services (such as supermarkets, pharmacies, medical centres), and frequent public transport in order to support the significant increase in residential density. The site is serviced by one infrequent bus service
 - The future residents of this site and employees will likely be using cars to access jobs, basic services and facilities. Unless residents have access to a private vehicle and remain able to drive as they age, the site location presents as a barrier isolating the ageing residents from the services, facilities and community groups that this ageing population might access.
 - The site is not well located, resulting in heavy reliance on private vehicles and limited public transport

3. *North District Plan*

The Planning Proposal argues its consistency with the objectives and actions of the *North District Plan* primarily around the provision of housing supply and choice. However, it does not demonstrate consistency with the Priorities of the *North District Plan* as indicated below:

- *Planning Priority N3 – Providing services and social infrastructure to meet people’s changing needs.*
 - Whilst the provision of housing for seniors and aged care will contribute to meeting the needs of the ageing population, the site location does not have ready access to the necessary shops, services, facilities and transport to support the growth of this population group at this location. In addition other site constraints such as heritage, biodiversity and bushfire hazard risk present high conflict with the desires of the proposal.
- *Planning Priority N5 – Providing housing supply, choice and affordability with access to jobs, services and public transport.*
 - The proposal states that it is consistent as it provides housing supply, choice and affordability, however it does not address the issue of access to services and to a lesser extent, jobs which form part of this Priority.
 - Access to shops and services by walking is important as it would contribute to reducing the number of trips generated and the distances travelled, especially by car, and increase the potential to derive health benefits of walking as a mode of travel to shops and services.
 - The Planning Proposal is inconsistent with this Planning Priority as the provision of the housing is in an out of centres location, not supported by infrastructure, transport or services and has overriding constraints on the site of bushfire hazard risk and the important heritage and biodiversity setting.

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- *Planning Priority N6 – Creating and renewing great places and local centres and respecting the Districts heritage*
 - The Heritage Assessment by GML submitted with the Planning Proposal found 'Headfort House' located on the subject site to have local heritage significance. However, the Planning Proposal and Urban Design study have given inadequate consideration to the heritage significance of Headfort House.
 - The proposal seeks heights that will deliver development that will sit above the prevailing tree canopy characteristic of the immediate and wider Ku-ring-gai area. This will adversely impact the heritage setting and views and vistas related to adjacent heritage Items as discussed in the body of this Report.
- *Planning Priority N12 – Delivering integrated land use and transport planning and a 30min city.*
 - The Planning Proposal is inconsistent with this Priority as the site is not well located in terms of accessibility to public transport and services due to its out of centre location. Future residents of the site and employees will continue to rely on private cars to access jobs, basic services and facilities.
 - The North District Plan uses 30 minutes of travel time to a metropolitan/strategic centre by public transport as an indicator of developing a well-connected city. While not being in a metropolitan/strategic centre, 30 minutes travel time is largely recognised in transport planning as a fairly stable travel time budget. The very limited 30 minute public transport catchment suggests that employees are likely to be outside this catchment and therefore are likely to use other means of transport (i.e. private vehicle) in their journey to work. In reality, the 30 minute frequency of the route 556 bus service during am and pm peak times (and 1 hour frequency outside peak times) is unlikely to be attractive as a mode of travel for residents, employees or visitors.
 - It is likely, therefore, that future residents of this site and employees will likely be using cars to access jobs, basic services and facilities
- *Planning Priority N16- Protecting and enhancing bushland and biodiversity*
- *Planning Priority N19- Increasing urban tree canopy cover and delivering greengrid connections*
 - The Planning Proposal's Ecological Assessment does not address onsite vegetation that is not proposed to be removed, including indigenous trees considered local to the surrounding vegetation communities and significant vegetation along Stanhope Avenue.

This address is considered important as it includes:

- i. Sydney Turpentine Ironbark Forest (listed as an Endangered Ecological Community under the *Biodiversity Conservation Act 2016*); and
 - ii. Coastal Shale-Sandstone Forest, a community listed as 92% cleared the NSW BioNet Vegetation Classification Database lists this community (that is, it has less than 8% of its estimated distribution prior to pre- European extent estimates).
- The Planning Proposal's Ecological Assessment indicates that the site does not contain threatened ecological communities. This is incorrect as analysis of aerial photographs within the site, from 1943 to 2016, shows persistent vegetation within areas mapped by the NSW Office of Environment and Heritage as Sydney Turpentine Ironbark Forest

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(within the site). The vegetation assemblage, landscape and soils within these areas are consistent with the scientific determination of Sydney Turpentine Ironbark Forest under the *NSW Biodiversity Conservation Act 2016*. It is also consistent in that the determination recognises this community even within areas where the original forest or woodland structure no longer exist (i.e. individual remnant trees).

- The Planning Proposal provides an inconsistent and incomplete assessment regarding significant vegetation on site (including threatened ecological communities listed under the *NSW Biodiversity Conservation Act 2016* and does not effectively demonstrate that the proposed development can be designed, sited and managed, to avoid potentially adverse environmental impact or, if that if a potentially adverse environmental impact cannot be avoided, that appropriate offsetting can be met.
 - The Planning Proposal will result in the removal of, or put at risk, a significant number of high category trees. The broad landscape planning provided within the Urban Design Report, does not provide sufficient detail to determine future canopy outcomes (including on site planting).
- *Planning Priority N22- Adapting to the impacts of urban and natural hazards and climate change.*
 - The site is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire.
 - The North District Plan notes that '*placing development in hazardous areas or increasing density of development in areas with limited evacuation options increases risk to people and property*'. The Planning Proposal is inconsistent with this Planning Priority as it will result in an increase of a vulnerable population on this site, exposing them to bushfire risk and evacuation risks in the event of bushfire.
 - *Planning Priority N17 – Protecting and enhancing scenic and cultural landscapes*
 - The Planning Proposal is inconsistent with the Planning Priority as the proposed building heights, particularly located on the highest parts of the site, will rise above the prevailing tree canopy, and be inconsistent with the low density area context with built form placed under the canopy. The amendments sought by the Planning Proposal will result in buildings extending above the tree canopy, impacting on the scenic landscape and cultural heritage landscape setting of Items including the adjacent Seven Little Australians Park. The protrusion of the built form above the canopy is not warranted as this site is distant from any local centre where such interruptions to the tree canopy are warranted as skylines marking key urban centres.

4. *Greater Sydney Region Plan - A Metropolis of Three Cities (March 2018)*

The Planning Proposal argues its consistency with the objectives of the *Greater Sydney Region Plan* primarily around the provision of housing supply and choice but it does not demonstrate that consistency as indicated below:

- *Objective 10 - Greater Housing Supply*
 - The Greater Sydney Region Plan recognises that not all areas are appropriate for significant additional development, due to lack of access to shops, services and public transport and local amenity constraints.

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- While the Planning Proposal will contribute to delivering the required additional housing for Greater Sydney, the location of this additional housing resulting from the amendment sought by the Planning Proposal is not appropriate due to its out of centre location (away from shops, services and transport) its low density residential and heritage setting, and constraints on the site, namely bushfire hazard and evacuation risk.
- *Objective 11 – Housing is more diverse and affordable.*
 - The Planning Proposal is consistent with this objective relating to housing diversity, as it provides housing for seniors and aged care housing, which will be important for the ageing population.
- *Objective 13 – Environmental heritage is identified, conserved and enhanced.*
 - Heritage identification, management and interpretation are required so that heritage places and stories can be experienced by current and future generations.
 - The Heritage Assessment by GML submitted with the Planning Proposal found 'Headfort House' to have local heritage significance. However, the Planning Proposal and Urban Design study have given inadequate consideration to the heritage significance of Headfort House.
 - The proposal does not give due consideration to the impacts on the adjacent Heritage Items and HCA.
- *Objective 14 – Integrated land use and transport creates walkable and 30minute cities. Strategy 14.1 Integrate land use and transport plans to deliver the 30min city.*
 - The land use is not integrated with transport provision in this area.
 - The site is not well located in terms of accessibility to transport and services due to its out of centre location. Future residents of the site and employees will continue to rely on private cars to access jobs, basic services and facilities.
- *Objective 27 – Biodiversity is protected, urban bushland and remnant vegetation is enhanced. Strategy 27.1 Protect and enhance biodiversity by:*
 - *Supporting landscape-scale biodiversity conservation and the restoration of bushland corridors*
 - *Managing urban bushland and remnant vegetation as green infrastructure*
 - *Managing urban development and urban bushland to reduce edge-effect impacts*
- *Objective 30 – Urban tree canopy cover is increased*
 - The Planning Proposal will result in the removal of, or put at risk, a significant number of high category trees. The broad landscape planning provided within the Urban Design Report, does not provide sufficient detail to determine future canopy outcomes (including on site planting).
- *Objective 28 – Scenic and cultural landscapes are protected*
 - The Planning Proposal is inconsistent with this Objective, as the heights sought by the planning proposal, particularly on the highest part of the site, will result in a built form that will extend above the tree canopy, impacting on views in the surrounding areas and impacting on the scenic landscape value of the surrounding area, particularly as the site forms the backdrop to the adjacent Heritage Item (Seven Little Australians Park).

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- *Objective 37 – Exposure to natural and urban hazards is reduced.*
Strategy 37.1 – Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards.
 - The site is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire. The Planning Proposal is inconsistent with this objective and strategy, as it will result in an increase in population to an existing vulnerable community, exposing them to bushfire risk and evacuation risks in the event of bushfire.

The Planning Proposal is inconsistent with key strategic documents at the local, district and regional levels. It aligns with the objectives of housing provision for the growing aged person demography, however this is at the cost of other key strategies within those plans.

Given the issues of bushland setting, heritage conservation, interface issues with adjacent low density dwellings, the amendment seeking increased heights (11.5-24m) is not supported. Any additional height would have to ensure that the building envelope remains beneath the canopy as per the prevailing character of the Ku-ring-gai area, particularly outside the local centres, and especially adjacent to areas of high heritage bushland significance. This would ensure that any views to the site from surrounding areas continue to read in alignment with the Ku-ring-gai landscape of built form under the canopy. In particular the setting of the listed Seven Little Australians Park is not detracted from by any built form dominating and penetrating the canopy uphill from it, and the views and vistas from the listed Lindfield Soldiers Memorial Park are preserved

A more acceptable maximum height would be 11.5m (3 storey) with the associated FSR. This will ensure the integration of a new Seniors Housing development into the local heritage, bushland and low density context, supporting the local character. It would also enable appropriate interface areas to the adjacent residential detached dwelling at 91 Stanhope Road, Headfort House and existing dwellings on the site, and to Stanhope Road, preserving the dominant Ku-ring-gai character of buildings placed underneath the tree canopy. Having said this, any intensification of Seniors Housing on the site is not supported due to the overriding issues around increased vulnerable populations being accommodated on a high bushfire and evacuation risk site.

➤ *The ability of the Planning Proposal to deliver additional Seniors Housing demographic trends is agreed, however the proposal does not demonstrate any overarching strategic merit due to its contradiction and erosion of local character and inconsistency with the approaches of the local, district and regional strategic plans.*

Other matters

A petition with 113 signatures was tabled at the 27 March 2018 Council meeting, opposing the Planning Proposal. The Petition, titled *Safety of Residents of Lourdes Retirement Village during Bushfire Evacuation* was prepared by residents of the Lourdes Retirement Village. It raises concerns regarding the increased population that would be the result of the Planning Proposal and the bushfire and evacuation risks associated with such population on this site. The issues raised in the petition have been covered in the body of this Report.

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Whilst the motivations for this Planning Proposal are understood and the need to upgrade the current housing stock and facilities on the site is acknowledged, there has been a significant progression in understanding the risks associated with bushfire hazard. This is especially so given the expected continuation of climate change and global warming with the associated increase in bushfire occurrence, intensity and duration.

Due to this understanding and in the face of growing State and Federal policy around these issues, Ku-ring-gai Council, in close consultation with RFS, has applied special zoning to high risk areas similar to this site that prevent housing and uses for vulnerable groups. Where these uses are already in existence, this Council seeks to manage the numbers of populations on them and prevent any further increase of elderly at risk in the event of a bushfire.

The proposal has not adequately factored in a number of key issues including bushfire risk and evacuation risk, adequacy of transport services, links with facilities, the unique heritage setting, prevalent low density residential area character under the tree canopy, and the high quality built and landscape character of this locality.

As discussed in this Report and the attached *Table of Assessment*, the proposed density and heights, illustrated in the Planning Proposal Urban Design Study, will result in built form that:

- does not complement and integrate with the adjacent HCA nor with the adjacent Heritage Items;
- does not enhance the setting of Headfort House on the site which has the merit for local listing;
- does not maintain an appropriate character within the low density residential area, particularly with regards to heights that are extreme for this location and sit above the tree canopy;
- does not consider the interface transition and overbearing bulk and scale to the existing 2 storey dwellings proposed to be retained to the south of the site, to Headfort House, nor to the neighbouring dwelling at 91 Stanhope Road;
- does not adequately consider the value of the Stanhope Street frontage and compatibility of scale and address to the street, rather focusing on the creation of the internal streets, including the relationship of Headfort House with Stanhope Street and the placement of built structure in front of the building line;
- does not respond to the natural environment particularly its proximity to open bushland with high environmental value but also with the associated bushfire hazards and bushfire evacuation risks;
- does not acknowledge the highly unlikely increase in local services or facilities within easy walking distance including public transport service to that area, and unable to meet the demands of the increased aged population that would result from the proposal; and
- does not demonstrate consistency with local, district and regional strategic plans, and will be unable to deliver outcomes that will support the strategic principles of the Plans due to the location of the site and the key aspects that conflict with increased development on the land.

Therefore, this Planning Proposal cannot be supported and it is recommended to be refused.

INTEGRATED PLANNING AND REPORTING

Places, Spaces and Infrastructure

Community Strategic Plan Long Term Objective	Delivery Program Term Achievement	Operational Plan Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai	Strategies, plans and processes are in place to effectively manage the impact of new development	Continue to review existing strategies and plans

GOVERNANCE MATTERS

The process for the preparation and implementation of Planning Proposals is governed by the provisions contained in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

Under Clause 10A of the *EP&A Regulation 2000*, if Council does not support a request made for the preparation of a Planning Proposal under Part 3 of the Act, the Council is required to notify the proponent as soon as practicable in writing that the proposal is not supported

RISK MANAGEMENT

This is a privately initiated Planning Proposal. Council needs to determine its position on this Planning Proposal. Council risks damage to its reputation if it does not undertake strategic land use planning in an effective and timely manner.

FINANCIAL CONSIDERATIONS

This is a private Planning Proposal and Council's Fees and Charges have been applied to cover the Departmental costs of processing the Planning Proposal. Should the proposal proceed to exhibition, advertising fees will be sought from the applicant as per Council's Fees and Charges. Costs to develop the recommended site specific DCP controls upon Gateway determination will be sought from the applicant in accordance with Council's Fees and Charges.

SOCIAL CONSIDERATIONS

The applicant has submitted a Planning Proposal to increase the provision of Seniors Housing on their site which currently operates as the Lourdes Retirement Village. Whilst this housing provision is supported, it is not supported on this particular site due to the high bushfire hazard and evacuation risks to the vulnerable on site population, and due to the isolation factors caused by distance from local services and a limited single bus service operating at low frequency.

ENVIRONMENTAL CONSIDERATIONS

All aspects of the proposal with potential environmental impacts have been considered in the preparation of this Council Report. Assessment has included comment on the ecological and arboricultural reports included in the Planning Proposal. Any specific development that occurs on the site as a result of the proposal will be considered in detail at the development application stage.

COMMUNITY CONSULTATION

Consultation has been undertaken by the applicant to inform its community of this proposal. The Planning Proposal attaches these presentations and minutes of meetings which delineate plans, outcomes and timelines associated with the proposal. As a result of these presentations, Council received and considered a Petition with 113 signatures from the Lourdes Retirement Village residents opposing the Planning Proposal.

INTERNAL CONSULTATION

Internal consultation has taken place for the preparation of this report. Council's planning, architectural, urban design, heritage, transport, bushfire and ecological staff have assessed and provided comment which has informed the recommendations of this Report.

SUMMARY

The Planning Proposal seeks amendment to the *Ku-ring-gai Local Environmental Plan 2015* (KLEP 2015) to enable an increase in the provision of Seniors Housing and associated services and facilities within the Lourdes Retirement Village. It seeks to apply R3 (Medium Density Residential) zoning and the associated FSR of 0.8:1 to the entire site, and a range of increased heights (11.5-24m), greater than the standard 11.5m maximum height permitted within R3 zones, to the upper portion of the site whilst retaining the 9.5m height to the south and east of the site.

The site is located within a low density residential area with high quality single dwellings within established garden settings directly next to the C22 Crown Blocks Heritage Conservation Area. The adjacent areas house high quality bushland with biodiversity value which is identified as the Seven Little Australians Park Heritage Item. The site contains a historical building, Headfort House, utilised as the site Chapel and other administrative functions.

Whilst the provision of additional housing for the aged is recognised, the location of this site precludes its consideration for development intensification that would result from this Planning Proposal.

The rezoning and development standards will result in higher numbers of Seniors Housing development on this site that cannot be supported due to:

- bushfire and evacuation risks related to aged and vulnerable people;
- limited access to public transport and local services for a population whose reliance on private vehicle use will diminish as they age; and
- the impacts on the locality's heritage significance, Items and Conservation Area.

Further, the increase in heights across this site cannot be supported due to:

- the lack of strategic merit and inconsistencies with local, district and regional strategies.

This Report as presented has drawn the following conclusions why this Planning Proposal cannot be supported:

- *This Planning Proposal is not supported as the RFS have confirmed that it will not accept the lowered Fire Danger Index for this site location that have been used in the Planning Proposal's assessment. The RFS approved Fire Danger Index will result in increasing the bushfire risks above those addressed within the Planning Proposal's Bushfire Assessment.*

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- *Significant evacuation issues have been identified for the area and which will be exacerbated by the increase in vulnerable population on this site resulting from the development potential of this Planning Proposal.*
- *The proposal will result in exposure to radiant heat and provide construction standards that do not comply with the Special Fire Protection Purpose developments under Section 117 Direction 4.4 Planning for Bush Fire Protection and Planning for Bush Fire Protection 2006.*
- *The significant increase in aged population in this location, facilitated by the Planning Proposal, is not supported. Whilst the site increases the housing stock for the aged population, the site is not well located resulting in a heavy reliance on private vehicle use or limited public transport connections to essential services. Its limited access precludes good ongoing connection with the local community outside the site.*
- *Given its significance, Headfort House and its immediate curtilage should be listed as local heritage item on Ku-ring-gai's Local Environmental Plan (2015) and that any future planning proposal for 95 Stanhope Road Killara include this local heritage listing.*
- *Any proposal for this site would be required to restrict the building heights on the site to below the canopy so regional vistas of the bush items and conservation areas are not interrupted by new built elements, and to enable new landscaping to provide and improve the tree canopy on the site itself.*
- *As a potential Heritage Item the proposed building height of 22m (6 storey) immediately adjacent to Headfort House is considered excessive. It is recommended the building height in the vicinity of the potential Heritage Item be limited to the existing ridge-height of the historic portion of Headfort House.*
- *The new/relocated grotto should not present as a wall to the street, nor with a carport-like structure in the front garden as currently implied by the Urban Design Study. The visual curtilage to Headfort House from the street should be retained and enhanced to respect its significance and also to ensure consistency with the predominant residential character of Stanhope Road and the adjacent HCA, of houses fronting the street within quality landscaped garden settings.*
- *The ability of the Planning Proposal to deliver additional Seniors Housing demographic trends is agreed, however the proposal does not demonstrate any overarching strategic merit due to its contradiction and erosion of local character and inconsistency with the approaches of the local, district and regional strategic plans.*

RECOMMENDATION:

It is recommended:

- A. That Council does not support the request for the Planning Proposal at 95-97 Stanhope Road, Killara (Lourdes Retirement Village) and that it not be submitted for a gateway determination for the following reasons:
 - i. High bushfire risks due to the proximity of the site to open bushland;

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- ii. High bushfire evacuation risks related to aged and vulnerable residents within Seniors Housing;
- iii. Limited access to public transport and services;
- iv. Impacts on the locality's heritage significance, Items and Conservation Area;
- v. Interface impacts on adjacent low density dwellings, Stanhope Road and bushland;
- vi. Lack of strategic merit and inconsistencies with the *KLEP 2015* and *Ku-ring-gai Community Strategic Plan*;
- vii. Lack of strategic merit and inconsistencies with the *North District Plan* and *Greater Sydney Regional Plan*.

B. That, in accordance with cl10A of the *EP&A Regulation 2000*, the proponent be notified of Council's decision not to support the Planning Proposal.

Rathna Rana
Senior Urban Planner

Antony Fabbro
Manager Urban & Heritage Planning

Craige Wyse
Team Leader Urban Planning

Andrew Watson
Director Strategy & Environment

Attachments:	A1	Pre Planning Proposal Meeting Minutes - Lourdes Retirement Village - 7 December 2016		2018/133623
	A2	Planning Proposal - 95-97 Stanhope Road, Killara - Lourdes Retirement Village		2018/133282
	A3	Planning Proposal - A - Urban Design Study, prepared by Architectus	Excluded	2018/129308
	A4	Planning Proposal - B - Site Survey	Excluded	2018/129312
	A5	Planning Proposal - C - Traffic Impact Assessment	Excluded	2018/129319
	A6	Planning Proposal - D - Bushfire Protection Assessment	Excluded	2018/129325
	A7	Planning Proposal - E - Heritage Letter Response to Draft Urban Design Study	Excluded	2018/129331
	A8	Planning Proposal - F - Heritage Significance Assessment - Headfort House	Excluded	2018/129334
	A9	Planning Proposal - G - Social Effects Report	Excluded	2018/129335
	A10	Planning Proposal - H - Lourdes Demand Study	Excluded	2018/129337
	A11	Planning Proposal - I - Arboricultural Impact Appraisal	Excluded	2018/129343
	A12	Planning Proposal - J - Ecological Assessment	Excluded	2018/129345
	A13	Planning Proposal - K - Resident Meeting 1 - Minutes	Excluded	2018/129347
	A14	Planning Proposal - L - Resident Meeting 2 - Presentation	Excluded	2018/129348
	A15	Planning Proposal - M - Resident Meeting 3 - Presentation	Excluded	2018/129354
	A16	Planning Proposal - N - Resident Meeting 4 - Presentation	Excluded	2018/129357
	A17	Planning Proposal - O - Resident Meeting 5 - Presentation	Excluded	2018/129361
	A18	Planning Proposal - P - Resident Information - Session Minutes	Excluded	2018/129366

Item GB.8

S11689
16 April 2018

A19	Table of Assessment - Planning Proposal - Lourdes Retirement Village	2018/134806
A20	Independent Review of Bushfire Impact prepared by Australian Bushfire Protection Planners Pty Ltd	2018/105115
A21	Bushfire Evacuation Risk Assessment - 91-97 Stanhope Road, Killara	2018/133285

REFERENCE No:	S09993 / 2016/357116	
SITE ADDRESS:	Site at <ul style="list-style-type: none"> 95- 97 Stanhope Road, Killara 	
PROPOSAL:	Amendment to Ku-ring-gai LEP 2015 to <ul style="list-style-type: none"> Rezone site from R2 (Low Density Residential) to R4 (High Density Residential) and amend the associated standards (FSR, Height, Lot Size etc.) 	
DATE OF MEETING:	7 th December 2016	
PRESENT AT MEETING:	Council - Urban Planning and Heritage Department	
	Name	Title
	Antony Fabbro	Manager
	Craige Wyse	Team Leader
	Rathna Rana	Senior Urban Planner
	Andreana Kennedy	Heritage Planner
	Joseph Piccoli	Strategic Transport Engineer
	Penny Collier	Team Leader Natural Areas
	Lucy Goldstein	Student Urban Planner
	Louisa McMullen	Assistant Heritage Planner
	Applicant / Representative	
	Name	Capacity
	Lucas Flecha	Stockland
	Alison McDonagh	Stockland
	Jane Freeman	Senior Associate Urban Design & Planning, Architectus
	Ivan Ip	Senior Urban Planner, Architectus
	Jane Anderson	Urban Planner, Architectus
	Sam Fallon	Urban Designer, Architectus
Rod Rose	Director, Eco Logical	
Sheridan Burke	Partner, GML Heritage	
DOCUMENTS/ REPORTS:	Document(s)	Dated
	Application Form	22/12/15
	DPI Information Checklist	Included
	Supporting Documents and Reports	Lourdes Retirement Village Killara – Masterplan – 21 December 2015 (Architectus) NB. A revised Draft Urban Design Study was presented at Pre PP meeting
Affected Planning Instrument	Amendment to Ku-ring-gai LEP 2015	
Existing Zoning:	<ul style="list-style-type: none"> 95 Stanhope Road, Killara – R2 (Low Density Residential) 	
KEY ISSUE:	See Below:	

DESCRIPTION

The following general points were made by the applicant:

Bushfire

- Applicant has commenced talks with RFS, further discussions with RFS are to occur
- Key changes to the Planning Proposal, from when the Masterplan documents were presented to Council earlier in the year, include the relocation of the RACF. The relocation of the RACF was in response to assessment of the bush-fire attack levels – RACF cannot be located in flame zone.
- Site contains 2 ingress routes – 1 fire trail – 2 entrance streets.
- On the issue of evacuation, that despite the site being located at a dead-end road, people will be evacuating into highly developed area, rather than areas surrounded by bush.

Heritage

The main heritage issues identified include:

- Retaining existing chapel (original house) and curtilage and maintaining streetscape/setbacks/garden.
- Grotto on side of the development to be retained on the site, although the final location is yet to be resolved
- Roof design options to ensure the development sets in with the streetscape
- A Conservation Management Plan will be prepared for the chapel (original house).

Urban Design:

The following site constraints were identified:

- Existing proximity to neighbouring properties – residential interface on Western side of site
- Ensuring an active frontage
- Legible access street layout
- Bushfire
- Heritage
- View assessment has been undertaken from surrounding areas including Swain Gardens, Stanhope Road and Lindfield Cricket club (Soldiers Memorial Park)

The following issues were raised by Council:

General:

- The Planning Proposal needs to give consideration to how the proposal aligns with *A Plan for Growing Sydney* and the Greater Sydney Commission's *Draft North District Plan*.
- If the intent of the Planning proposal is for the development and ongoing provision of aged housing on the site, consideration needs to be given to how Council can receive certainty of the outcomes of future development on the site for such uses. This should include a justification of why the planning proposal is needed as opposed to developing the site under *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*.

- If the intent of the proposed R4 zoning is also to development residential flat buildings, without the occupancy and design restrictions required of seniors housing, then this needs to be clearly articulated in the Planning Proposal and justified.
- The Planning proposal should justify not only the zoning, but also the proposed heights and density against the current use and intent of the R4 zone under the KLEP 2015. The proposal should demonstrate how it will not set a precedent within Ku-ring-gai for out of local centres higher density development.

Heritage:

- The property is within the vicinity of:
 - Seven Little Australians Park (heritage item)
 - Swain Gardens (heritage item)
 - Springdale Conservation Area.(HCA C21)
 - Crown Blocks Conservation Area.(HCA C22)
- The applicants have identified the chapel (original house) and the grotto located on the site as having heritage significance, however, neither is statutorily recognised. As such their heritage values are not protected under Council's Local Environmental Plan. The applicants are proposing to prepare a conservation management plan to protect the identified heritage values of the chapel and the grotto (relocated) however without a statutory listing the recommendations of this document cannot be enforced. To ensure greater certainty, consideration should be given to the local heritage listing of the chapel and its curtilage as part of the planning proposal.
- The draft masterplan for the site indicated new buildings up to 8 storeys. A detailed view analysis to and from the site from those heritage places in the vicinity of the subject site would facilitate a better understanding of the heritage impact of the planning proposal (see also comments re. view analysis under urban design section below).

Bushfire:

- Include evidence of discussions and advise from Rural Fire Service (RFS)
- Ensure that BAL mapping reflects location of bushfire prone vegetation to the west of the site.
- The bushfire report must address all requirements of S117(2) Direction 4.4 Planning for Bushfire Protection.
- Management of bushfire risk needs to be contained within the boundaries of the property (i.e. creation of APZ within council lands will not be accepted)
- The proposal must include details of expected dwelling numbers and include an assessment of bushfire evacuation risk in line with the methodology used by Council within [Managing Bushfire Risk, Now and Into the Future, March 2012, Ku-ring-gai Council \(pdf. 3MB\)](#)
For further information see:
http://www.kmc.nsw.gov.au/I_want_to/Ask_discuss_or_comment/Have_my_say_public_exhibitions/Public_exhibition_-_Deferred_Areas_Planning_Proposal

Biodiversity:

- An Environmental assessment of on-site flora and fauna including know threatened species and their habitat as well as areas mapped as biodiversity significance under KLEP2015.

Urban Design:

- Interface at all levels will need to be considered, particularly if the buildings are located upslope, as they will appear higher. Buildings appear to be on the highest point of the site.
- Provide a justification of proposed building heights, as in Ku-ring-gai 7-8 storey heights are typically not permitted in the R4 zone. This justification is required to address the issue of precedence, particularly as the proposed R4 zoning of the site will be set within a broader R2 zone context and is not within the main transport corridor or adjoining a centre.
- Wider view analysis needs to be done over and above the chosen points shown at the meeting. For example from the residential properties opposite the site on Stanhope Road and from the property immediately adjacent to the site on Stanhope Road, and along the Eastern Arterial Road driving towards the site with Little Australians in the foreground.
- The view analysis should consider at all vertical angles including mid and upper canopy levels when being analysed from adjoining bushland.

Transport / Car parking:

- Consider providing a transport study or statement, including a study of travel modes for the land uses on the site
- Consider on-site car share provision
- Existing bus services to/from the site operate at very low frequencies, and the site is isolated and car-dependent with low walkability/access to basic shops and services – justify how this can be alleviated
- Consider car parking provisions. For example, utilising in-ground car parking using the slope of the land
- Consider how car parking on site will impact on deep soil landscaping

Consultation Process:

- Consideration should be given to a community engagement process with neighbouring residents, prior to lodgement of the Planning Proposal.

THE PLANNING PROPOSAL

General

A full list of the documents required for submission is included in the *Planning Proposal Application Form* available from Council's website. In brief, your submission is to include the following documents as stated in the *Application Form*:

- a *Planning Proposal* in the format specified below, with any supporting studies being attached to that report as Appendices;
- the *Checklist* from *A Guide to Preparing Planning Proposals - Department of Planning and Environment (August 2016)*;
- the *Application Form* and all other documentation stated on page 3 of that Form.

Checklist

The *Checklist* (from *A Guide to Preparing Planning Proposals - Department of Planning and Environment*) submitted for the Pre-Planning Proposal Meeting was updated at the meeting. A revised checklist is attached to this report.

All categories identified as applicable within the Checklist must be addressed within the Planning Proposal.

Planning Proposal Format:

The Planning Proposal is to be set out and include all information as stated in *A Guide to Preparing Planning Proposals - Department of Planning and Environment (August 2016)*.

The *Guide* requires your Planning Proposal to be set out in 6 parts as below. It is highly recommended you follow the layout and content of the Planning Proposal as below, and use the same headings, subheadings, questions and numbering (these are replicated from the updated Department's *Guide*). Should a Part not be relevant to your Planning Proposal, it must still be included within your Planning Proposal with a brief statement why it is not relevant. All the 6 Parts are necessary for your Planning Proposal to be considered as a valid document.

Your Planning Proposal is required to be a full and complete document, with each Part and each question being answered fully with detailed explanation and full justification within that section. It will not be accepted if Council or Department has to search for the answers to the questions in your attachments, introductions or other sections. Further, in the interest of transparency, your document is required to be understood by the people that will read it during the exhibition should it

receive a Gateway. Once you have stated your argument in detail within the body of your Proposal, you can then refer to attachments, but you should not rely on those attachments to argue your case.

The Planning Proposal must be able to operate as a stand-alone document with the studies being secondary and supportive in their role.

INTRODUCTION

Include a brief overview of the Planning Proposal and include any relevant history, photos etc of the site/s in this section of the Planning Proposal.

PART 1 – OBJECTIVE AND INTENDED OUTCOMES

Provide a paragraph explaining the current status of each site and what you are trying to achieve on each site (not how it would be done). This *Part 1* should give the average ordinary person reading your Planning Proposal at exhibition a clear indication of what you are trying to do on each site. Relevant location and descriptive maps, that indicate adjoining land use and zones; heritage items and conservation areas; environmental constraints, including riparian and biodiversity, can be included in this *Part 1*.

PART 2 – EXPLANATION OF PROVISIONS

State the changes being proposed to the sites, reasons for the changes, and how the changes can be made. More specifically you will need to state how the Ku-ring-gai LEP 2015 will be amended to allow your objectives. This will include any changes to the Written Instrument as well as to the Maps.

PART 3 - JUSTIFICATION

Provide detailed justification for the objectives and outcomes sought, and the process for their implementation. It is recommended that detailed attention be given to your *Part 3 – Justification A, B, C, D*. *Part 3* is key in presenting an argument for your case. If you consider aspects of your supporting studies as important, then you need to present/state/quote that specific content under the relevant question in *Part 3*, and show how it applies to your argument. Once your argument has been made, reference to the studies may be made. The supporting studies provide the backup and evidence for your argument, but your argument has to be presented and substantiated within the body of the Planning Proposal.

Include the following sections, numbering and questions (replicated from the *Guide*) under your *Part 3*:

A. Need for the planning proposal

Q1. Is the planning proposal a result of any strategic study or report?

Note all planning studies or reports that have been prepared for the site/s. Current and relevant supporting studies can be included as Appendices to the Planning Proposal and referenced in the justification sections provided their arguments are paraphrased in the body of your Planning Proposal.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

You are presenting an argument for your case and therefore you are required to explain the different methodologies available for allowing the outcomes you seek on the sites. Your methods have to be factual and rely on the means of achieving your outcomes through the legislative framework.

This question requires you to present the different ways of achieving your development objectives on the sites. State all the options you have and justify why your chosen method of amendments to the Ku-ring-gai LEP 2015 is the best means; and therefore, why this Planning Proposal should be considered above any other method. The Department will consider for themselves whether there are alternative ways you could achieve your outcome outside this Planning Proposal, so it is in your interest to state all possible methods and argue your preferred method through your Planning Proposal.

This section should justify why the R4 High Density Residential zoning is being proposed as opposed to developing the site under *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*.

B. Relationship to strategic planning framework

Q3. Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

Note how your proposed outcomes are consistent or inconsistent with the *A Plan for Growing Sydney* and the *Draft North District Plan* and justify any inconsistencies. You are required to state the relevant sections/clauses from the *t* and explain how your Planning Proposal meets those requirements, justifying any that it does not meet.

If you are referring to any document you attach in Appendices you need to pull out the information and requote/reiterate the key elements of those studies within the body of your justification. Your justification has to be robust and contain all information. It is your responsibility to include all arguments within the body of the report as this is what will enable your proposal to progress to Gateway.

Q4. *Is the planning proposal consistent with a Council’s local strategy or other local strategic plan?*

State how your proposed outcomes are consistent or inconsistent with the objectives in the *Ku-ring-gai Council Community Strategic Plan*, and provide justification for any inconsistencies. State the objectives from the *Community Strategic Plan* and explain how your Planning Proposal meets those requirements, justifying any that it does not meet. The *Community Strategic Plan* may be viewed on Council’s website at:

http://www.kmc.nsw.gov.au/Your_Council/Organisation/Integrated_Planning_and_Reporting_framework/Community_Strategic_Plan_2030

Q5. *Is the planning proposal consistent with applicable State Environmental Planning Policies?*

There are several applicable SEPPs for your proposal. You are required to go through all the SEPPs, determine which are relevant, list it with a brief overview and state how your proposal is consistent or inconsistent with it. If inconsistent then give a full justification to support your argument. It is recommended this information be presented in a table as illustrated below.

SEPP	Comment on Consistency
<p>SEPP 55 Remediation of Land</p> <p>SEPP 55 requires a planning authority to give consideration to contamination issues when rezoning land which allows a change of use that may increase the risk to health or the environment from contamination and requires consideration of a report on a preliminary investigation where a rezoning allows a change of use that may increase the risk to health or the environment from contamination.</p>	<p>Insert your argument</p>

Q6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

You are required to go through all the s117 Directions and determine which apply to your site. For each applicable s117 Direction, include a statement on how the Proposal is consistent. If the Proposal is inconsistent with a s117 Direction, then provide a justification for that inconsistency. It is recommended this information be presented in a table as illustrated below.

Directions under S117	Objectives	Consistency
1.1 Business and Industrial Zones	The objectives of this direction are to: (a) Encourage employment growth in suitable locations, (b) Protect employment land in business and industrial zones, and support the viability of identified strategic centres.	Insert your argument

C. Environmental, social and economic impact

Q7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

Note the status of each site with regards to these aspects, stating if they contain or are in close proximity to such lands. If the site has critical habitat or threatened species, you need to provide a full justification for your proposal in light of that.

Note: An Environmental assessment of on-site flora and fauna including known threatened species and their habitat will be required with this planning proposal.

Q8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

Provide an explanation of the scale of the development and any related environmental effects of the Proposal.

It is noted that the site contains areas of Biodiversity Lands as indicated in the Ku-ring-gai LEP 2015. Fully justify the extent of impact, if any, that the proposal will have on them.

Q9. Has the planning proposal adequately addressed any social and economic effects?

Provide a response in terms of the broader community and economy, not personal circumstances of the proponent. Give clear justification on the social and economic

impacts or advantages the Planning Proposal will have. You can paraphrase any studies you have conducted to support your argument and then give reference to their location in the Appendices.

D. State and Commonwealth interests

Q10. Is there adequate public infrastructure for the planning proposal?

Note each individual site's proximity to specific public transport and links to major arterial roads. Also, state the occurrence and location of other relevant infrastructure such as retail, health and educational facilities that would support the proposed uses.

Consultation should also be undertaken with Sydney Water to demonstrate that there will be provisions for adequate water supply for firefighting purposes.

Q11. What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

Identify any consultation already conducted with state or commonwealth agencies, if any, otherwise state that it will be undertaken post-Gateway and in accordance with the Department's requirements. The exception will be the consultation with Office of Environment and Heritage which will be consulted prior to the Gateway application regarding changes heritage listings or to a Heritage Conservation Area.

Details of consultation undertaken to date with Rural Fire Service should be included within this section.

PART 4 - MAPPING

The amendments sought in your Planning Proposal will require changes to the KLEP 2015 mapping sheets. This section should include excerpts of the site with its current mapping alongside its proposed mapping. Every map that will be altered as a result of the Proposal is to be shown in this section (zoning map, heritage map, FSR map, height map, etc).

PART 5 – COMMUNITY CONSULTATION

Indicate the community consultation to be undertaken on the Planning Proposal and state that it will be in accordance with the Gateway. It is expected that the consultation for this Planning Proposal will be 28 days.

PART 6 – PROJECT TIMELINE

Include a table of steps as stated in the ‘A Guide to Preparing Planning Proposals’ leaving the date column empty for Council to complete. An example is provided below:

Stage	Timing
Anticipated commencement date (date of Gateway determination)	Date
Anticipated timeframe for the completion of required technical information	Date
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	Date
Commencement and completion dates for public exhibition period	Date
Dates for public hearing (if required)	Date
Timeframe for consideration of submissions	Date
Timeframe for the consideration of a proposal post exhibition	Date
Date of submission to the department to finalise the LEP	Date
Anticipated date RPA will make the plan (if delegated)	Date
Anticipated date RPA will forward to the department for notification.	Date

APPENDIX

Include any relevant supporting information and studies to which reference has been made in the Planning Proposal. The required studies have been identified within the Checklist and elsewhere within this report.

Planning Proposal Application Form

The Form must be completed in detail and ensure

- Each question is fully answered.
- The *Documents Required* checklist is filled.
- The *Planning Proposal Report Requirements* checklist is filled.
- The Department’s *Checklist* is included with the required documentation.

Commencement of the review of your Planning Proposal can only begin if your Application is complete. This means submitted the Planning Proposal is in accordance with the requirements of the Department’s *Guide*, and in a form that would be adopted by Council to be forwarded to the Department for a Gateway. You are therefore advised to follow the instruction in this Minute and ensure you have completed all requirements stipulated on the Planning Proposal Application Form available on Council’s website.

The Planning Proposal Application will only be accepted and commence when all forms and documents submitted are considered by Council to be complete. A letter of acknowledgement will be sent to confirm Council's acceptance of the Application and a request that the required application fee to be paid.

Note: The Application requires 2 hard copies of **all** documents including the Application Form, and one CD/USB with a pdf copy of all the documents and an additional unlocked WORD copy of the Planning Proposal itself.

Fees and Charges

The fee for this Planning Proposal under Council's 2016/17 Fees and Charges is \$55,000.00. The fee is payable upon council confirming in writing that the application is complete (see above). Should the Proposal proceed to exhibition, there will be an additional fee of \$3,587.50 for advertising costs, payable upon the issuing of a Gateway determination.

For further guidance on key steps and information on the Planning Proposal process and the roles of Council and the Department of Planning and Environment, including the review of decisions, please refer to Council's website at

http://www.kmc.nsw.gov.au/Plans_and_regulations/Building_and_development/Planning_Proposals

Note: To avoid duplication or loss of information, it is advisable that you nominate a single person with whom all discussion/correspondence with Council will occur. Clearly state this in your Application Form.

ATTACHMENT 1 – INFORMATION CHECKLIST

▶ STEP 1: REQUIRED FOR ALL PROPOSALS

(under s55(a) – (e) of the EP&A Act)

- Objectives and intended outcome
- Mapping (including current and proposed zones)
- Community consultation (agencies to be consulted)
- Explanation of provisions
- Justification and process for implementation (including compliance assessment against relevant section 117 direction/s)

▶ STEP 2: MATTERS – CONSIDERED ON A CASE BY CASE BASIS

(Depending on complexity of planning proposal and nature of issues)

PLANNING MATTERS OR ISSUES	To be considered	N/A	PLANNING MATTERS OR ISSUES	To be considered	N/A
Strategic Planning Context			<ul style="list-style-type: none"> • Resources (including drinking water, minerals, oysters, agricultural lands, fisheries, mining) • Sea level rise 	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Demonstrated consistency with relevant Regional Strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Demonstrated consistency with relevant Sub-Regional strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Demonstrated consistency with or support for the outcomes and actions of relevant DG endorsed local strategy	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Demonstrated consistency with Threshold Sustainability Criteria	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Site Description/Context			Urban Design Considerations		
• Aerial photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Existing site plan (buildings, vegetation, roads, etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Site photos/photomontage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Building mass/block diagram study (changes in building height and FSR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			• Lighting impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			• Development yield analysis (potential yield of lots, houses, employment generation)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Traffic and Transport Considerations			Economic Considerations		
• Local traffic and transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Economic impact assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• TMAP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	• Retail centres hierarchy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Public transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Employment land	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Cycle and pedestrian movement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Social and Cultural Considerations		
Environmental Considerations			• Heritage impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Bushfire hazard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Aboriginal archaeology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Acid Sulphate Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Open space management	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Noise impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	• European archaeology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Flora and/or fauna	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Social & cultural impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Soil stability, erosion, sediment, landslip assessment, and subsidence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	• Stakeholder engagement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Infrastructure Considerations		
• Stormwater management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	• Infrastructure servicing and potential funding arrangements	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Flooding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Miscellaneous/Additional Considerations		
• Land/site contamination (SEPP55)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>List any additional studies</i>		



Additional Consideration: As identified in the advice from pre-planning proposal meeting with Ku-ring-gai Council dated 7 December 2016.

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

PLANNING PROPOSAL		
PAGE	DOCUMENT/SECTION	COMMENT
General		
5	Attachments Attachment D – Bushfire Protection Assessment, Prepared by EcoLogical Australia, dated May 2017	Attachment D is incorrectly listed with the wrong report date. An updated assessment report was completed 19 June 2017 that was submitted 02/02/2018. A report dated from May was not submitted and is incorrect.
57	Cover sheet for Attachment D	Same as above
Part 2 Explanation of provisions		
10	<i>It should be noted that the greatest heights are provided in response to existing site topography and to facilitate accessible lift access through buildings from lower parts of the site to the central area.</i>	This response is limited to the site and does not consider the implications for the context within which this site is located – as explained in this Table of assessment commenting on Attachment A - Urban Design Study and Heritage Assessment.
13	<i>It is noted that the southern area of the site consists of existing independent living units which are proposed to be retained at this stage. The maximum building height for the southern part of the site of 9.5 metres is not proposed to change</i>	This statement contradicts statements in the Urban Design Study which seek a future planning proposal on this part of the land and indicate intensification of that land in the diagrams.
14	<i>The amended maximum FSR control of 0.8:1 takes into account the retention of existing dwellings in the southern portion of the site and provision of new dwellings. They have also been proposed in accordance with the built form set out as the illustrative master plan for the site detailed in the Urban Design Study</i>	The calculations in the Urban Design Study are inconsistent with some of the building levels indicated in the drawings of that study. This impacts the presented GFAs and FSRs. Refer to comments made on the Urban Design Study.
14	<i>Although it is acknowledged that this is an increase in density beyond that of the sites wider surrounds, this is required to afford a high quality outcome for future residents, and the Urban Design Report shows that this density can be achieved without imposing on streetscape character or the significance of Headfort House.</i>	The proposal does not adequately consider its context. Refer to comments on the Urban Design Study and on the Heritage Assessment. The proposal has not considered the marked interface impacts on neighbouring dwellings, landscape and bushland setting, nor does it enhance the connectivity with Stanhope Road and the residential context.
Part 3 Justification		
Section A – Need for the planning proposal		
16	<i>Heights of buildings will range from 3 to 6 storeys, with the tallest building located in the centre of the site, and not visible from surrounding areas.</i>	Incorrect statement. The development will be highly visible as the buildings will penetrate the prevailing tree canopy. See comment on Urban design Study.
16	<i>The Assessment finds that the subject land is capable of accommodating future development and associated land use with appropriate bushfire protection measures and bushfire planning requirements. The strategies provided by the Assessment to mitigate bushfire risk include:</i>	An independent review of the Planning proposal’s Bushfire Assessment disputes this finding. See comment on the Bushfire Assessment.
17	<i>The site is one of the few lots in the area that is not a heritage item , with only a small portion of the site located within a Heritage Conservation Area.</i>	This is a correct statement but is not addressed in the Planning Proposal.
19	<i>Areas of deep soil are proposed throughout the development to ensure the village relates closely to the bushland setting.</i>	This statement is not supported by the indications of the Urban Design Study and its landscape content. See comment on the Urban Design Study.

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

Section B – Relationship to strategic planning framework		
Draft Greater Sydney Region Plan 2056: A Metropolis of Three Cities		
21	Draft Greater Sydney Region Plan 2056: A Metropolis of Three Cities	The Planning Proposal has been included an assessment against the (then) Draft Greater Sydney Region Plan: A Metropolis of Three Cities (October 2017). This is now outdated, with the Greater Sydney Region Plan ‘A Metropolis of Three Cities’ being finalised by the Greater Sydney Commission in March 2018.
21	Draft Greater Sydney Region Plan 2056: A Metropolis of Three Cities	<p>The Planning Proposal has failed to address the following applicable objectives and strategies:</p> <ul style="list-style-type: none"> • <i>Objective 13 Environmental Heritage is identified, conserved and enhance</i> Heritage identification, management and interpretation are required so that heritage places and stories can be experienced by current and future generations. The site contains ‘Headfort House’, located in the north-west corner of the site. The Heritage Assessment by GML submitted with the Planning Proposal found ‘Headfort House’ to have local heritage significance. However, the Planning Proposal and Urban Design study have given inadequate consideration to the heritage significance of ‘Headfort House’, and in this regard the Planning Proposal is inconsistent with this objective relating to the identification, conservation and enhancement of environmental heritage. • <i>Objective 14 – Integrated land use and transport creates walkable and 30min cities</i> • <i>Strategy 14.1 Integrate land use and transport plans to deliver the 30min city.</i> The objective of a 30min city is so people are able to access jobs and services in their nearest metropolitan and strategic centre within 30min by public transport. The Planning Proposal is inconsistent with this objective, as the site is not well located in terms of accessibility to transport and services due to its out of centre location. Future residents of the site and employees will continue to rely on private cars to access jobs, basic services and facilities. • <i>Objective 27 – Biodiversity is protected, urban bushland and remnant vegetation is enhanced.</i> • <i>Strategy 27.1 Protect and enhance biodiversity by:</i> <ul style="list-style-type: none"> - <i>Supporting landscape-scale biodiversity conservation and the restoration of bushland corridors</i> - <i>Managing urban bushland and remnant vegetation as green infrastructure</i> - <i>Managing urban development and urban bushland to reduce edge-effect impacts</i> • <i>Objective 30 – Urban tree canopy cover is increased</i> Impacts on the adjoining bushland will in part be informed future development of the remaining site (as referred to within pg 11 of the Urban Design Study, to be subject to a future planning proposal). For further related concerns, refer to comments made to pg 37 of the Planning Proposal regarding 7.1 Implementation of A Plan For Growing Sydney for objectives. • <i>Objective 28 – Scenic and cultural landscapes are protected</i> Scenic and cultural landscapes connect the urban environment with natural and historic urban landscapes, and include the views and vistas of ridgelines, waterways, urban bushland and the urban skyline. The Planning Proposal is inconsistent with this Objective, as the heights sought by the planning proposal,

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		<p>particularly on the highest part of the site, will result in a built form that will extend above the tree canopy, impacting on views in the surrounding areas and impacting on the scenic landscape value of the surrounding area, particularly as the site forms the backdrop to the adjacent Heritage Item (Seven Little Australians Park).</p> <ul style="list-style-type: none"> • <i>Objective 37 – Exposure to natural and urban hazards is reduced.</i> • <i>Strategy 37.1 – Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards.</i> <p>The site the subject of the Planning Proposal is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire. Occupants of retirement villages and housing for seniors are highly vulnerable to the effects of bushfire and are difficult to evacuate in the event of bushfire. The Planning Proposal is inconsistent with this objective and strategy, as it will result in an increase in population to an existing vulnerable community, exposing them to bushfire risk and evacuation risks in the event of bushfire.</p>
21-22	Objective 10 – Greater Housing Supply	<p>It is acknowledged that the Planning Proposal will deliver additional housing, contributing to the new dwellings required for all of Greater Sydney, and the North District. The Planning Proposal notes that objective encourages in-fill development in the form of medium density housing within established precincts to maintain local appeal and amenity – however the Greater Sydney Region Plan also outlines that land should be around local centres with links for walking, cycling and good proximity to transport. The subject site is in an out of centres location, away from shops, services and transport. It is acknowledged that providing ongoing housing supply and a range of housing types will create more liveable neighbourhoods and support Greater Sydney’s growing population. However, as noted on Page 58, emphasis is added to providing this housing within the ‘right locations’. The Greater Sydney Region Plan recognises that not all areas are appropriate for significant additional development, due to lack of access to shops, services and public transport and local amenity constraints. The additional housing resulting from the amendments sought by the Planning Proposal is not appropriate due to its out of centre location (away from shops, services and transport) and constraints on the site, such as biodiversity, heritage and bushfire hazard risk.</p>
22	Objective 11 – Housing is more diverse and affordable	<p>It is acknowledged that the Planning Proposal is consistent with this objective, as it will provide housing for seniors and aged care housing catering for the aging population. Ku-ring-gai supports aging in place, and notes that research has shown that people generally prefer to remain within their local area. However, the housing needs to be in the right location. The subject site is not appropriate for the proposed increase in density and population due to it’s out of centre location (away from shops, services and transport) and constraints on the site such as biodiversity, heritage and bushfire risk.</p>
Draft North District Plan		
23	Draft North District Plan	<p>The Planning Proposal has been included an assessment against the (then) Draft North District Plan (October 2017). This is now outdated, with the North District Plan being finalised by the Greater Sydney Commission in March 2018.</p>
23	Draft North District Plan	<p>The Planning Proposal has failed to address the following applicable Planning Priorities:</p>

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- *Planning Priority N6 – Creating and renewing great places and local centres and respecting the Districts heritage*

The North District Plan acknowledges that heritage and history are important components of local identity and contribute to great places, and the local heritage items and streetscapes form part of the character of centres within the North District. As discussed above under Objective 13 of the Greater Sydney Region Plan, The Heritage Assessment by GML submitted with the Planning Proposal found ‘Headfort House’ located on the subject site to have local heritage significance. However, the Planning Proposal and Urban Design study have given inadequate consideration to the heritage significance of ‘Headfort House’, particularly with the proposed building height of 22m adjacent to this potential Heritage Item and in this regard the Planning Proposal is inconsistent with this Planning Priority relating to the identification, conservation and enhancement of environmental heritage.

- *Planning Priority N12 – Delivering integrated land use and transport planning and a 30min city.*

As discussed under Objective 14 and Strategy 14.1 of the Greater Sydney Region Plan, the objective of a 30min city is so people are able to access jobs and services in their nearest metropolitan and strategic centre within 30min by public transport. The Planning Proposal is inconsistent with this Planning Priority, as the site is not well located in terms of accessibility to transport and services due to its out of centre location. Future residents of the site and employees will continue to rely on private cars to access jobs, basic services and facilities.

- *Planning Priority N19- Increasing urban tree canopy cover and delivering greengrid connections*

The planning proposal will result in the removal or put at risk a significant number of high category trees. The broad landscape planning provided within the Urban Design Report, do not provide sufficient detail to determine future canopy outcomes (including on site planting).

For further issues refer to comments made to pg 37 of the Planning proposal regarding 7.1 Implementation of A Plan For Growing Sydney for objectives.

- *Planning Priority N22- Adapting to the impacts of urban and natural hazards and climate change.*

As discussed under Objective 37 and Strategy 37.1 of the Greater Sydney Region Plan, the site the subject of the Planning Proposal is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire. Occupants of retirement villages and housing for seniors are highly vulnerable to the effects of bushfire and are difficult to evacuate in the event of bushfire. The North District Plan notes that ‘*placing development in hazardous areas or increasing density of development in areas with limited evacuation options increases risk to people and property*’ and notes that when planning for future growth, growth and development should be avoided in areas exposed to natural hazards. The Planning Proposal is inconsistent with this Planning Priority, as it will result in an increase in population to an existing vulnerable community, exposing them to bushfire risk and evacuation risks in the event of bushfire.

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23	Planning Priority N3 – Providing services and social infrastructure to meet people’s changing needs.	The provision of housing for seniors and aged care will contribute to meeting the needs of the ageing population. However, the location of this additional housing is not appropriate due to its out of centre location (away from shops, services and transport) and constraints on the site, such as biodiversity, heritage and bushfire hazard risk.
23	Planning Priority N5 – Providing housing supply, choice and affordability with access to jobs, services and public transport.	<p>The Planning Proposal contributes to the 92,000 dwellings required to be delivered in the North District from 2016-2036, however as noted on Page 40 of the North District Plan, new housing must be provided for in the right location and housing supply must be co-ordinated with local infrastructure to create liveable, walkable neighbourhoods with direct safe and universally designed pedestrian and cycling connections to shops, services and public transport. The North District Plan acknowledges that some areas are not appropriate for additional housing due to natural or amenity constraints, or lack of access to services and public transport. It is acknowledged that there is a need for more aged care facilities and housing to support the ageing population, however, this needs to be appropriately located.</p> <p>The Planning Proposal fails to address the issues of access to services, and to a lesser extent, jobs. Access to shops and services by walking is an important as it would contribute to reducing the number of trips generated and distances travelled, especially by car, and increase the potential to derive health benefits of walking as a mode of travel to shops and services.</p> <p>In this regard, the Planning Proposal is inconsistent with this Planning Priority, as the provision of the housing is in an out of centres location, which is not supported by infrastructure, transport or services and constraints on the site, such as biodiversity, heritage and bushfire hazard risk.</p> <p>States that it is consistent with North District’s Planning Priority N5 (Providing housing supply, choice and affordability, with access to jobs and services) in that it would deliver more diverse housing types in a medium density setting within Ku-ring-gai, as well as create opportunities for older people to continue living within their community. It does not address the issue of access to services and to a lesser extent, jobs.</p> <p>Access to shops and services by walking is important as it would contribute to reducing the number of trips generated and the distances travelled especially by car and increase the potential to derive health benefits of walking as a mode of travel to shops and services.</p> <p>The majority of basic services and facilities such as supermarkets, pharmacies, medical centres are located well outside the convenient 10 minute walking catchment and therefore not within an attractive and manageable walking distance for residents of this area of Killara. Also, the very limited 30 minute public transport catchment suggests that employees are likely to be outside this catchment and therefore are likely to use other means of transport (i.e. private vehicle) in their journey to work.</p> <p>It is likely, therefore, that future residents of this site and employees will likely be using cars to access jobs, basic services and facilities.</p>

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23-24	Planning Priority N15 – Protecting and improving the health and enjoyment of Sydney Harbour and the Districts waterways	Not relevant. The site is not mapped as containing riparian land nor is located in close proximity to Sydney Harbour.
24	<p>Planning Priority N16- Protecting and enhancing bushland and biodiversity</p> <p><i>“The subject site is located adjacent to a biodiversity area as defined by the KLEP 2015 Terrestrial Biodiversity Map in Part 4, however the northern portion of the site, to which this Planning Proposal relates, is not identified as a biodiversity area.”</i></p>	<p>The KLEP 2015 Terrestrial Biodiversity Map occurs both adjacent to and within the site. It is however acknowledged that the planning proposal will not directly impact lands mapped as KLEP 2015 Terrestrial Biodiversity Map. It should be noted however that Greenweb mapping (referred to within Part 18 of the Ku-ring-gai Development Control Plan), does occur within areas to which this Planning Proposal relates. Additionally see comments made to pg 37 of the Planning proposal regarding 7.1 Implementation of A Plan For Growing Sydney for objectives.</p>
24	Planning Priority N17 – Protecting and enhancing scenic and cultural landscapes	<p>The scenic and cultural landscapes encourage an appreciation of the natural environment, protect heritage and culture, and create economic opportunities for recreation and tourism. Scenic landscapes include waterways and urban bushland. The Planning Proposal is inconsistent with the Planning Priority as the proposed scale of development and building heights, particularly located on the highest parts of the site, will rise above the prevailing tree canopy, impacting on views in the surrounding areas. The built form resulting from the proposed amendments is inconsistent with the low density area context with built form placed under the canopy. The resulting built form, rising above the tree canopy, will impact on the scenic landscape and cultural heritage landscape setting of Items including the adjacent Seven Little Australians Park. The protrusion of the built form above the canopy is not warranted as the site is distant from any local centre, where such interruptions to the tree canopy are warranted as skylines marking key urban centres.</p> <p>The Planning Proposal will result in a lack of interface transition between the lower density housing on the lower parts of the site, and neighbouring properties.</p>
Community Strategic Plan 2030: Our Community. Our Future		
28	<p>Theme 1 – Community, People and Culture</p> <p>C4.1 A community that embraces healthier lifestyle choices and practices</p> <p>C5.1 A community where residents feel safe and enjoy good health</p> <p>C6.1 Housing diversity, adaptability is increased to support the needs of a changing community</p>	<p>The comments note that the masterplan will improve access to cultural, recreational and leisure facilities with the development of a new community hub within the site. However the site is isolated, (being located in an out of centres location) in terms of access to shops, local services and public transport.</p> <p>Ku-ring-gai has an ageing population and a key focus is providing appropriate housing, accessible services, facilities and infrastructure to meet the demands of this ageing population. It is acknowledged that the Planning Proposal will provide additional housing for seniors within Ku-ring-gai to support the demand for the aging population, however, the housing for seniors needs to be appropriately located. The planning proposal will provide for increase in seniors housing in an out of centres location, not supported by infrastructure, transport or services, and the site has overriding constraints of bushfire hazard, evacuation risks, and heritage and biodiversity.</p> <p>The Planning Proposal has also failed to address C7.1 <i>An aware community able to prepare and respond to the risk to life and property from emergency events</i> – The site the subject of the Planning Proposal is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that caters to people who are particularly vulnerable in the event of a bushfire. Occupants of</p>

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		retirement villages and housing for seniors are highly vulnerable to the effects of bushfire and are difficult to evacuate in the event of bushfire. The Planning Proposal will result in an increase in population to an existing vulnerable community, exposing them to bushfire risk and evacuation risks in the event of bushfire.
29	<p>Theme 2 – Natural Environment</p> <p>N2. Our Bushland is rich with native flora and fauna</p>	<p>The comments indicate that the proposed master plan preserves critical elements of the native flora and fauna, and that through the DA design it would be sought to maximise tree retention on site. The natural environment is highly valued in Ku-ring-gai, especially the extent of bushland and biodiversity, and the established tree canopy. The Community Strategic Plan outlines that <i>“development should not occur at the expense of the local natural character and no impact detrimentally on the local environment”</i>.</p> <p>The Planning Proposal provides an inconsistent and incomplete assessment regarding significant vegetation on site (including threatened ecological communities listed under the <i>NSW Biodiversity Conservation Act 2016</i>) and fails to effectively demonstrate that the development resulting from the proposed amendments can be designed, sited and managed to avoid potentially adverse environmental impact or if that a potentially adverse environmental impact cannot be avoided that appropriate offsetting can be met.</p>
29	<p>Theme 3 – Places, Spaces and Infrastructure</p> <p>P1.2 Ku-ring-gai's unique visual character and identity is maintained</p> <p>P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai</p> <p>P3.1 The built environment delivers attractive, interactive and sustainable living and working environments</p> <p>P5.1 Ku-ring-gai's heritage is protected, promoted and responsibly managed</p>	<p>The comments indicate the master plan strategically places buildings, with consideration of their height to respond to the site context. However, the proposal shows limited understanding of the adjacent quality and intact bushland and heritage elements, associated existing high character value of the location, and of Council's key and prevailing landscape character of buildings under the tree canopy within these types of low density areas.</p> <p>The proposed heights permitting 3–7 storey buildings (11.5-24m), with the tallest being on the high point of the site, will clearly detract from the quality and identity of the area. It will penetrate well above the tree canopy and will not provide the interface transitions to the adjacent low density dwellings, heritage neighbourhood and Items, including to Headfort House (with its local heritage value and worthy of heritage listing) located on the site and adjacent to the neighbouring HCA.</p> <p>The site is located in an established low density residential area distant from the local and neighbourhood centres. The area is not undergoing a transition warranting a departure from the local character and the principles mapped in KLEP 2015 with development densities being focussed around centres and the associated availability of transport and services. Therefore any proposal must demonstrate how it will support the desired future character which, at this location, will be a continuation of the existing character. The Planning Proposal does not demonstrate alignment or integration of these objectives. Headfort House has been identified as having local heritage significance, and it is considered that the proposed building height of 22m adjacent to this potential heritage item is excessive.</p>
30	<p>Theme 4 – Access, Traffic and Transport</p> <p>T2.1 The local road network is managed to achieve a safe and effective local road network.</p>	<p>The comments note that the masterplan proposed amendments to internal roads, traffic access and pedestrian access within the site. The comments also note that the Traffic Impact Assessment prepared by Arup which outlines that proposal will not have an unreasonable impact upon the surrounding road network.</p> <p>However, the site is not well located in terms of proximity to shops and services, and frequent public</p>

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		<p>transport in order to support the significant increase in residential density. The site is serviced by one bus infrequent bus service.</p> <p>The majority of basic services and facilities such as supermarkets, pharmacies, medical centres are located well outside the convenient 10 minute walking catchment and therefore not within an attractive and manageable walking distance for residents of this area of Killara. Also, the very limited 30 minute public transport catchment suggests that employees are likely to be outside this catchment and therefore are likely to use other means of transport (i.e. private vehicle) in their journey to work.</p> <p>It is likely, therefore, that future residents of this site and employees will likely be using cars to access jobs, basic services and facilities. Unless residents have access to a private vehicle and remain able to drive as they age, the site location presents as a barrier isolating the ageing residents from the services, facilities and community groups that this ageing population might access.</p> <p>The significant increase in aged population in this location is therefore not supported. The site is not well located, resulting in heavy reliance on private vehicles and limited public transport.</p>
s.117 Ministerial Directions		
33	s.117 Ministerial Directions	<p>The Planning Proposal has failed to address: <i>2.1 Environmental Protection Zones</i> – this direction applies to land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards. The subject site is mapped as Biodiversity Significance under the KLEP 2015.</p>
33	2.3 Heritage Conservation	<p>As set out above Headfort House has local heritage significance based on 3 criteria and therefore meets the test for local listing. The s.117 Direction 2.3 is therefore not being met.</p>
33	3.1 Residential Zones	<p>It is acknowledged that the planning proposal will provide for additional seniors housing, supporting the ageing population however the site the subject of the planning proposal does not make efficient use of existing infrastructure and services, as the site is within an out of centres location, away from shops, services and transport. The additional housing on the site will not have appropriate access to essential infrastructure and services to support the increase in population and density.</p> <p>Part (4)(d) outlines that the provision of housing should '<i>be of good design</i>'. The site is located within a low density residential setting, surrounded by bushland. The proposed heights permitted 3-7 storey buildings (11.5m-24m), with the tallest building being located on the high point of the site will clearly detract from the quality and identity of the surrounding area.</p> <p>The Planning Proposal states that it is consistent with the objective of appropriate access to infrastructure and services, by way of proximity to Killara railway station and connecting Route 556 bus service.</p> <p>In reality, the 30 minute frequency of the route 556 bus service during am and pm peak times (and 1 hour</p>

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		frequency outside peak times) is unlikely to be attractive as a mode of travel for residents, employees or visitors
34	3.4 Integrating Land Use and Transport	<p>Under the response to 3.4 (Integrating Land Use and Transport) of the Section 117 Directions, the Planning Proposal states that it is consistent with the objectives of</p> <ul style="list-style-type: none"> • Improving access to housing, jobs and services by walking, cycling and public transport; • Increasing the choice of available transport and reducing dependence on cars; • Reducing travel demand including the number of trips generated by development and the distances travelled, especially by car. <p>The comment in the planning proposal states that the site is located close to existing transport infrastructure including Killara Train Station and a bus route which passes through the site and services key destinations in the area.</p> <p>As noted above, the majority of basic services and facilities such as supermarkets, pharmacies, medical centres are located well outside the convenient 10 minute walking catchment and therefore not within an attractive and manageable walking distance for residents of this area of Killara.</p> <p>Also, the very limited 30 minute public transport catchment suggests that employees are likely to be outside this catchment and therefore are likely to use other means of transport (i.e. private vehicle) in their journey to work. In reality, the 30 minute frequency of the route 556 bus service during am and pm peak times (and 1 hour frequency outside peak times) is unlikely to be attractive as a mode of travel for residents, employees or visitors.</p> <p>It is likely, therefore, that future residents of this site and employees will likely be using cars to access jobs, basic services and facilities</p>
36	6.3 Site Specific Provisions	<p>The Planning Proposal is inconsistent with this direction, as it seeks to include site specific planning controls on the subject site to enable a specific development outcome.</p> <p>The Planning Proposal seeks to rezone the site to R3 Medium Density Residential, which would allow development for the purposes of Seniors Housing. The Planning Proposal then also seeks to amend development standards, particularly Height of Buildings, on the site, to a height that is greater than the standard 11.5m maximum height applied to all other R3 zones in Ku-ring-gai, in order to allow a particular development on the site.</p>
37	7.1 Implementation of A Plan For Growing Sydney	<p>A Plan for Growing Sydney has been replaced by the Greater Sydney Region Plan – A Metropolis of Three Cities (March 2018). The Planning Proposal is inconsistent with the following objectives and strategies:</p> <ul style="list-style-type: none"> • Objective 10 – Greater Housing Supply – while the planning proposal will contribute to delivery of additional housing, the location of this housing is not appropriate due to its out of centre location (away from shops, services and transport), its low density residential and heritage setting and constraints on

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		<p>site, such as bushfire hazard and evacuation risk.</p> <ul style="list-style-type: none"> • Objective 13 – Environmental heritage is identified, conserved and enhanced – the Heritage Assessment by GML found Headfort House to have local heritage significance, however the planning proposal does not give due consideration to the impacts on the on the heritage significance of Headfort House. • Objective 14 Integrated land use and transport creates walkable and 30min cities and Strategy 14.1 Integrate land use and transport plans to deliver the 30min city. – the site is not well located in terms of accessibility to transport and services due to it out of centre location. Future residents and employees will have to continue to rely on private cars. • Objective 27 – Biodiversity is protected, urban bushland and remnant vegetation is enhance. Strategy 27.1 Protect and enhance biodiversity and Objective 30 – urban tree canopy cover is increased – <p>The Planning Proposal’s Ecological Assessment:</p> <ul style="list-style-type: none"> • does not adequately address onsite vegetation that is not proposed to be removed, including indigenous trees considered local to the surrounding vegetation communities and significant vegetation along Stanhope Avenue. • provides an inconsistent and incomplete assessment regarding significant vegetation on site (including the presence of threatened ecological communities listed under the <i>NSW Biodiversity Conservation Act 2016</i>). <p>For further details on these and other related matters see comments on the Attachment J – Ecological Assessment.</p> <p>The broad landscape planning provided within the Urban Design Report, do not provide sufficient detail to determine future canopy outcomes (including on site planting). The planning proposal will result in:</p> <ul style="list-style-type: none"> • The removal of 43 high category trees, which are considered moderate to high significance and display good health and condition, and 81 trees of low and very low retention value will be removed as a result of the proposed development. • Risk to 120 trees high category trees and 150 trees of low and very low retention value, which may be affected through disturbance to TPZ. Retention of these trees will be determined by both the projects detailed design as well as construction processes. <p>Canopy removal within the site is also likely to result from future development within the remainder of the sites, as inferred within page 11 of the Urban Design Study.</p> <p>The Planning Proposal will result in the removal of, or put at risk, a significant number of high category trees. The broad landscape planning provided within the Urban Design Report, does not provide sufficient detail to determine future canopy outcomes (including on site planting).</p> <ul style="list-style-type: none"> • Objective 28 – Scenic and cultural landscapes are protected – The heights sought by the planning proposal will result in a built form that will extend above the tree canopy, impacting on views in the surrounding areas and impacting on the scenic landscape value of the surrounding area, particularly as the site forms the backdrop to the adjacent Heritage Item (Seven Little Australians Park)
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		<ul style="list-style-type: none"> Objective 37 – Exposure to natural and urban hazards is reduced and Strategy 37.1 – avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards – The site is identified as Bushfire Prone Land, has constrained capacity to enable safe evacuation, and provides for a land use that cater to people who are particularly vulnerable in the event of bushfire. The planning proposal will result in an increase in population to an existing vulnerable community, exposing them to bushfire risk and evacuation risks in the event of bushfire.
Section C – Environmental, social and economic impact		
38	<p><i>“An Ecological Assessment has been prepared by ACS Environmental (February 2017) to undertake an ecological assessment and biodiversity survey at Lourdes Retirement Village and is provided at Attachment J. The Assessment found that the subject site has been extensively modified in relation to natural vegetation structure and floristics over time. The site is currently comprised of managed curtilage, formal garden beds and landscaped areas of planted and established trees.</i></p> <p><i>The Assessment found that there are no threatened species or populations occurring at the subject site. As such, it is not considered necessary to undertake any further assessment of significance or refer the proposal to the Director General of OEHL or to the Commonwealth Department of the Environment and Energy.”</i></p>	<p>Council disagrees with the Planning Proposals Ecological Assessment that the site does not contain threatened ecological communities.</p> <p>See comments on Attachment J – Ecological Assessment within this Assessment Table.</p>
HERITAGE COMMENT		
8	<p>Objectives</p> <p><i>To allow for the restoration and preservation of Headfort House</i></p>	<p>Headfort House is not statutorily recognised as heritage item, so while this planning proposal intends to “allow for the restoration and preservation” there is no guarantee or statutory mechanism to ensure the proper management and care of the building.</p> <p>The Planning Proposal should include the locally heritage listing of Headfort House for its historical significance.</p>
9-12	<p>Part 2 Explanation of provisions</p> <p><i>The objectives are to be achieved through the amendment of the following planning provisions:</i></p> <p><i>.... Amend the KLEP 2015 Height of Building Map Sheet HOB_014 to permit the maximum permissible height of a range between 9.5 meters and 24 meters</i></p> <p><i>Fig 6: Proposed maximum building height</i></p>	<p>If Headfort House is to be retained in its current height and form with a garden setting (including the grotto) a maximum building height of 22m seems excessive and incompatible with the retention of significance.</p> <p>The maximum building height of Headfort House and its immediate surrounds (potential curtilage) would need to be reduced to the current maximum ridge height of Headfort House to ensure the integration of new development.</p>

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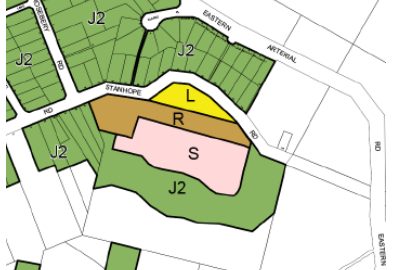

		
<p>14</p>	<p><i>Although it is acknowledged that this is an increase in density beyond that of the sites wider surrounds, this is required to afford a high quality outcome for future residents, and the Urban Design Report shows that this density can be achieved without imposing on streetscape character or the significance of Headfort House.</i></p>	<p>The garden setting retained at the front of the site will contribute to the street appearance of the HCA. It remains a concern that the new buildings will be visible above and through the canopy from several heritage locations including Seven Little Australians Park. This is a nature reserve that includes bush walks including historical paths of the early residents of Killara. These bushwalks were intended as a bush retreat, a place to get away from the built up suburbs. This sense of escape will be lost if from the bush tracks in the reserve if the height is increased to the 5 and 6 storeys proposed particularly the RL of 127.3. The below image shows a view from the bush track below Ethel Turner lookout in Seven Little Australians Park. What can be seen is the Optus Base Station which is located opposite Lourdes Retirement Village (north east side circled red). The Optus Base Station has at its highest point an RL of 117.65. The RL of the proposed maximum building heights is 127.3 (with lift overrun). (Also see photos included in the comment to the Urban Design Study)</p>  <p>A new/relocated grotto should not present as a wall to the street. The visual curtilage to Headfort House from the street should be retained and enhanced. The impact on the bushwalks and their intended historical ambience as a “bush retreat” has not been adequately addressed. A maximum building height that renders any new structure not visible above the canopy is preferred.</p>
<p>15</p>	<p><i>To achieve this the Master seeks to:</i></p> <ul style="list-style-type: none"> – <i>Retention of existing entrance with an improved landscape setting, with the chapel to also be retained with new community facilities.</i> – <i>Retention of Headfort House.</i> – <i>Retention of existing trees along Stanhope Road.</i> 	<p>Agree with the retention of these key elements.</p>

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17	<p>Heritage <i>The subject site is not a heritage item itself, however there are a number of 'Local' heritage items and Conservation Areas bordering the site. Refer to the KLEP 2015 at Error! Reference source not found. below.</i> <i>The site is one of the few lots in the area that is not a heritage item , with only a small portion of the site located within a Heritage Conservation Area. As detailed in Error! Reference source not found. below.</i></p>	Note the “Error! Reference”, needs correction.
18	<p>Headfort House has been assessed by GML Heritage against the NSW Heritage Manual guidelines. GML Heritage’s assessment found that although Headfort House has significance at a local level, it does not reach the threshold for heritage listing at a local level</p>	To reach the threshold for listing a heritage place only requires to meet the criteria for one of the heritage assessment criterion. As per Attachment F – <i>Heritage significance Assessment</i> , Headfort House meets three: Historical Significance, Historical Association and Social Significance. The report by GML Heritage reaches the conclusion that Headfort House does have local significance – see conclusion on p.56. It is recommended that Headfort House and its immediate curtilage (garden) be locally heritage listed.
27	<p><i>The Urban Design Report prepared by Architectus (June 2017) is attached to this Planning Proposal at Appendix A. The Report provides a good understanding of the sites attributes, context and potential impacts and recommends the master plan that is being sought by this Planning Proposal.</i> <i>The heritage context of the site has been taken into consideration and has helped to shape the master plan for the site. The site is not a heritage item itself, however there are a number of 'Local' heritage items and Conservation Areas bordering the site. Particular consideration has been given to the importance of Headfort House, a one to two storey schoolhouse and chapel constructed on the site between 1918 and 1921, which has been found to be important to the Ku-ring-gai community’s sense of place (GML Heritage, May 2017).</i></p>	See comments above.
29	<p><i>P1.1 Ku-ring-gai’s unique visual character and identity is maintained.</i> <i>The topography and native bushland that surrounds the site are defining characteristics of the surrounding context. The master plan maintains this unique visual character and identity by strategically placing buildings of varying heights throughout the site to responds to the bushland context. The development’s 6 storey buildings are located centrally within the site, while the surrounding buildings reduce in height, integrating with the existing lower scale built form to the</i></p>	At points on the walking track in Seven Little Australians Park (not those sites assessed in the Draft Urban Design Study) the towers will be visible above the treeline. See comments in <i>Explanation of provisions</i> above.

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	<i>north and south of the site.</i>	
33	<p><i>P5.1 Ku-ring-gai's heritage is protected, promoted and responsibly managed.</i></p> <p><i>Although the site does not contain any heritage items, a Heritage Significance Assessment of Headfort House, the oldest building to pre-date the retirement village, has been prepared by GML Heritage (Attachment F). The assessment found that although Headfort House has significance at a local level, it does not reach the threshold for heritage listing at a local level. However, the master plan identifies how Headfort House can better integrate into the development through restoration of the building and upgrades to the adjacent gardens, while retaining its use as a chapel for the community</i></p>	<p>The findings of the assessment (see p. 56 of Attachment F) do find that Headfort House does have local heritage significance. The conclusion of the consultant in this report does not mention not reaching the threshold for listing. Amend the planning proposal to include the listing of Headfort House.</p>
33	<p><i>2.3 Conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance</i></p> <p><i>The Planning Proposal does not propose to amend the heritage status of any of the heritage items or conservation zones surrounding the site.</i></p> <p>Yes</p> <p><i>Any amendments to heritage item listings will be considered at the Development Application phase. Critically, although the site is partially located within a Heritage Conservation Area, it is noted that the submitted master plan details how this is effectively addressed through retention of existing buildings and low scale buildings ensuring appropriate interface with adjoining buildings.</i></p>	<p>As set out above Headfort House has local heritage significance based on 3 criteria and therefore meets the test for local listing.</p> <p>The s.117 Direction 2.3 is therefore is not being met.</p> <p>Amend the planning proposal to locally heritage list Headfort House and its immediate curtilage. It is not recommended that this listing include the entire Lourdes site, instead it should be contained to what has been found to have local significance.</p>
41-43	<p><i>Headfort House has been considered by GML Heritage against the NSW Heritage Manual guidelines. GML Heritage's assessment found that although Headfort House has significance at a local level, it does not reach the threshold for heritage listing at a local level under the following criterion: Nevertheless, the Master Plan prepared by Architectus at Attachment A integrates Headfort House, with the vision to retain and restore the existing building. The Urban Design Report identifies the opportunity for built form to respond to the historical context of Headfort House, including upgrading the building's existing entry to interface with proposed buildings, and upgrading the its front and side gardens.</i></p>	<p>See comments on heritage listing above.</p>

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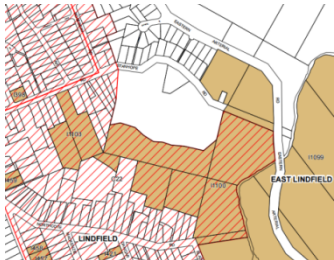
48	<p>Part 4 Mapping</p> <p><i>The site is one of the few lots in the area that is not a heritage item or located within a Heritage Conservation Area. Therefore development of the site is not restricted by heritage controls. As such, the site provides a rare opportunity to increase density in the Killara area</i></p>	<p>This text so it is inaccurate. The planning proposal proposed site is partially included in the Crown Blocks Conservation Area C22.</p> 
BIODIVERSITY COMMENT		
17	<p><i>An Ecological Assessment has been prepared by ACS Environmental (February 2017) to undertake an ecological assessment and biodiversity survey at Lourdes Retirement Village and is provided at Attachment H. The Assessment found that the subject site has been extensively modified in relation to natural vegetation structure and floristics over time. The site is currently comprised of managed curtilage, formal garden beds and landscaped areas of planted and established trees.</i></p> <p><i>The Assessment found that there are no threatened species or populations occurring at the subject site. As such, it is not considered necessary to undertake any further assessment of significance or refer the proposal to the Director General of OEH or to the Commonwealth Department of the Environment and Energy.</i></p>	<p>Council disagrees with the Planning Proposals Ecological Assessment that the site does not contain threatened ecological communities.</p> <p>See comments with Attachment J – Ecological Assessment with Attachment I – Arboricultural Impact Appraisal within this Assessment Table.</p>
31-32	<p><i>“This policy applies to all land within NSW identified in Schedule 1, which includes land within the Ku-ring-gai local government area. The aims of SEPP 19, as specified in Clause 2, are to protect and preserve bushland because of its value to the community as part of natural heritage, its aesthetic value, and its value as a recreational, educational and scientific resource.</i></p> <p><i>Clause 9 of SEPP 19 requires the consideration of specific principles for proposed development on land adjoining land zoned or reserved for public open space. The subject site is partially surrounded by native bushland zoned as E2 Environmental Conservation, with the adjacent Swain Gardens, Seven Little Australians Park and Soldiers Memorial</i></p>	<p>The planning proposal inadequately identifies the presence of KLEP 2015 Terrestrial Biodiversity Mapping both adjacent to and within the site.</p> <p>See Attachment J – Ecological Assessment within this Assessment Table, for further information regarding the planning proposals insufficient assessment of significant vegetation on site.</p> <p>Additionally, the SEPP 19 response, omits discussion of the proposals <i>impact on the surrounding bushland’s natural heritage, or its aesthetic value</i>. Further discussion on this are provided within comments on Attachment E – Heritage Letter Response.</p> <p>The proposal includes a significant amount of cut and fill within the site, on the top of the ridge and near the transition between Lucas Heights and Gynea soil landscapes. Council agrees with the statement that <i>“The effect of potential soil erosion, siltation of streams and waterways, and the spread of exotic plants in</i></p>

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

<p><i>Park located in close proximity to Lourdes Retirement Village. The planning proposal has taken into account the following:</i></p> <ul style="list-style-type: none"> • <i>the need to retain bushland on the land;</i> • <i>the effect of the proposed development on bushland zoned or reserved for public open space purposes and, in particular, on the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland; and</i> • <i>any other matters which, in the opinion of the approving or consent authority, are relevant to the protection and preservation of bushland zoned or reserved for public open space purposes.</i> <p><i>In consideration of potential impacts on bushland, an Ecological Assessment and biodiversity survey was undertaken by ACS Environmental and is appended at Attachment J. The Assessment found that the subject site has been extensively modified in relation to natural vegetation structure and floristics over time. The site is currently comprised of managed curtilage, formal garden beds and landscaped areas of planted and established trees.</i></p> <p><i>The extent of tree removal is detailed in an Arboricultural Impact Appraisal and Method Statement prepared by Naturally Trees, appended at Attachment I. The Statement finds that the proposed development will necessitate the removal of 43 high category trees, which are considered moderate to high significance and display good health and condition, while 81 trees of low and very low retention value will be removed.</i></p> <p><i>As the Ecological Assessment identified, there are no threatened species or populations occurring at the subject site. As such, the removal of trees identified in the Arboricultural Impact Appraisal and Method Statement are not considered to have an adverse impact on the surrounding bushland’s natural heritage, or its aesthetic, recreational, educational or scientific value.</i></p> <p><i>In addition, KLEP’s Terrestrial Biodiversity Map located in Part 4 Mapping illustrates the extent of terrestrial biodiversity in the area, which is limited to surrounding bushland and not the subject site itself.</i></p>	<p><i>neighbouring bushland will need further assessment when detailed built form is finalised in a future development application for the site. Future development will need to comply with relevant storm water management controls implemented by Ku-ring-gai Council, including water sensitive urban design principles and on-site detention, to minimise the potential impact on local waterways.”</i></p> <p>The proposed development needs to further consider:</p> <ul style="list-style-type: none"> • The management of any groundwater seepage, particularly as a result of the excavation. Any seepage collected should not be discharged at a point but encourages infiltrating back into sub-surface flow – which would be similar for the rest of the stormwater collected from the site. • The design should re-use as much stormwater from the site as possible and should consider Water quality and management objectives of Council’s Development Control Plan.
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	<i>The effect of potential soil erosion, siltation of streams and waterways, and the spread of exotic plants in neighboring bushland will need further assessment when detailed built form is finalised in a future development application for the site. Future development will need to comply with relevant storm water management controls implemented by Ku-ring-gai Council, including water sensitive urban design principles and on-site detention, to minimise the potential impact on local waterways.”</i>	
BUSHFIRE COMMENT		
16	<i>Q1. Is the planning proposal a result of any strategic study or report?</i>	Comments on Attachment D – Bushfire Protection Assessment within this Assessment Table, provided further details regarding concerns raised with the Planning proposals bushfire assessment, including among other things the provision of adequate APZs and provision of acceptable evacuation constraints.
35 - 36	<i>Q6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)? Table 1 Response to Section 117 Directions 4.4 Planning for bushfire protection</i>	The planning proposal will result in exposure to radiant heat and provide construction standards that do not comply with the Special Fire Protection Purpose developments under Section 117 Direction 4.4 Planning for Bush Fire Protection and Planning for Bush Fire Protection 2006. For further information see comments on Attachment D – Bushfire Protection Assessment within this Assessment Table.
38 - 40	<i>Q8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed? Bushfire management NSW Planning for Bush Fire Protection 2006 “These can be ensured through future development applications and detailed design resolutions. The review of the proposed master plan by EcoLogical Australia identified that as the proposal is an infill Special Fire Protection Purpose development of a site with currently inadequate bushfire protection measures, the degree to which the proposal increases the safety of occupants is vital. In this regard the proposal shifts a large proportion of existing residents from buildings vulnerable to bushfire attack into buildings compliant with contemporary bushfire protection standards. Notably the most vulnerable occupants, in the existing RACF, are moved to a position further from the higher bushfire attack potential into a RACF resilient to the predicted burning attack. Improvements in evacuation management options are</i>	<p>The proposal states that the “<i>level of bushfire safety of existing and additional residents is considered will above that of the current facility</i>”. The benefit however is countered by the use of multi storey buildings which will increase the potential for entrapment and the almost doubling of dwelling numbers within the Lourdes Retirement Village, placing additional demand on road infrastructure and the emergency services.</p> <p>The assessment is essentially ‘silent’ on the issue of the safety of the residents occupying the existing Independent Living Units to be retained on the periphery of the existing village, however pg 11 of the Urban Design Study clearly articulates a desired future to use (subject to a future planning proposal), which should be considered with regards to the opportunities to provide a site layout that removes residents from high threat areas and considers the potential for cumulative dwelling increases above those already proposed.</p> <p>Additionally a review of Attachment D – Bushfire Protection Assessment has been undertaken by Council staff and an independent bushfire consultant (Australian Bushfire Protection Planners Pty Limited), has identified that the proposed bushfire risk mitigation measures are not adequate as the proposal does not address the core requirement of reducing the radiant heat on the exterior of the buildings to not more than 10kW/m² and the provision of safe access for residents and emergency service personnel has not been addressed. Further details of this assessment are provided within comments on Attachment D – Bushfire Protection Assessment within this Assessment Table.</p> <p>The Hornsby/Ku-ring-gai Bush Fire Risk Management Plan 2016-2021 is now a finalized document (now</p>

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	<p><i>another notable improvement in bushfire risk associated with the proposal.</i></p> <p><i>Currently occupants need to shelter in buildings that have limited bushfire resilience if a fire attack occurred before off-site evacuation could be completed (NB: this is the most likely of fire attack scenarios under adverse fire weather).</i></p> <p><i>Under this rapid bushfire-attack scenario, the proposal provides a level of on-site refuge equivalent to national best practice and much more resilient than the existing situation. Whilst an increase in occupant numbers is proposed, the level of bushfire safety of existing and additional residents is considered will above that of the current facility.”</i></p> <p><i>Ku-ring-gai Bushfire Management Policy 2008</i> <i>“The Hornsby/Ku-ring-gai Bush Fire Risk Management Plan 2016-2021 is the draft plan and was exhibited in 2016, however it is understood that the draft policy is not substantially different from the current policy”.</i></p>	<p>available on council’s website). That draft Bush Fire Risk Management Plan however is not substantially different from the draft version.</p>
	<p><i>Q11. What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?</i></p>	<p>Comments on bushfire constraints are provided within Attachment D – Bushfire Protection Assessment within this Assessment Table, highlight the need for further consultation with the NSW RFS.</p>

PLANNING PROPOSAL - ATTACHMENT A - URBAN DESIGN REPORT


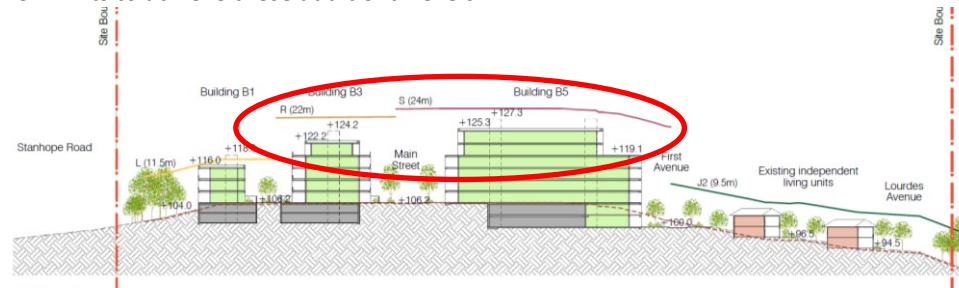
PAGE	DOCUMENT/SECTION	COMMENT
10-11	<p>Sec 1.1.3</p> 	<p>The illustration of apartment block type buildings to the south of the site, contradicts the content of the Planning Proposal which states that due to challenges around bushfire management, the southern part of the site, adjacent to the bushland, would remain as is with the existing housing and no application of increased heights.</p> <p>Council’s independent bushfire assessment suggests that future development should look to removing all built form to this southern part of the site due to risks associated with the vulnerable aged population that is located there.</p>
14-16	<p>Sec 2.1</p> <p>2.1.1 A Plan for Growing Sydney</p> <p>2.1.2 Draft Greater Sydney Regional Plan 2056</p> <p>2.1.3 Draft North District Plan, 2017</p>	<p>The section does not include consideration of some key objectives in these documents. Refer to the comments on the Planning Proposal.</p>
41	<p>Sec 3.1.10 Constraints</p>	<p>Section in adequately address the presence of significant vegetation on site. See comments on the Attachment J - Ecological Assessment.</p>
48-71	<p>4.2 Illustrative master plan</p>	<p>If this Planning Proposal is seeking amendment to the KLEP 2015 so that development on the site can occur</p>

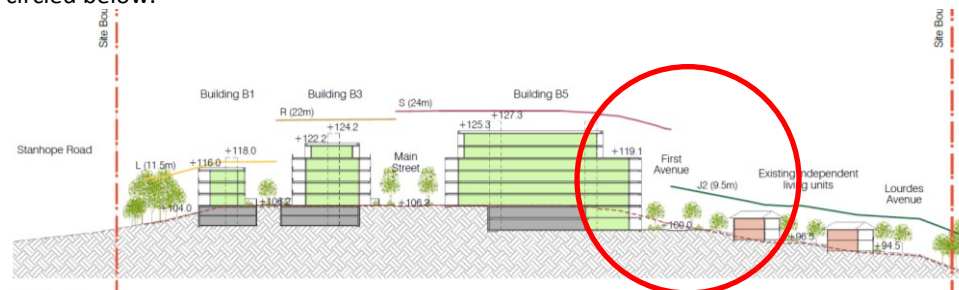
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FSR limits to achieve these additional levels.

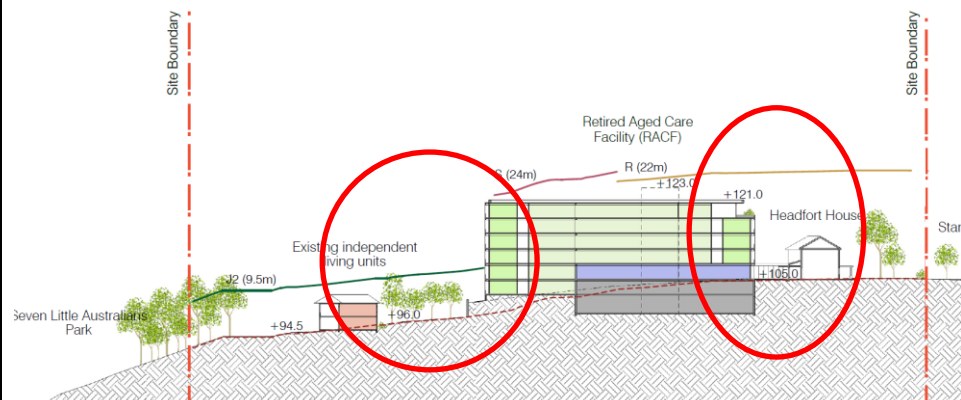


Section E

A key issue regarding the outcomes depicted in this urban Design Study is the lack of interface consideration with low density residential development on the site itself, on the neighbouring site at 91 Stanhope, and to Headfort House which has been found worthy of local listing. Some of the bulk, massing, scale issues are circled below.



Section E



Section D

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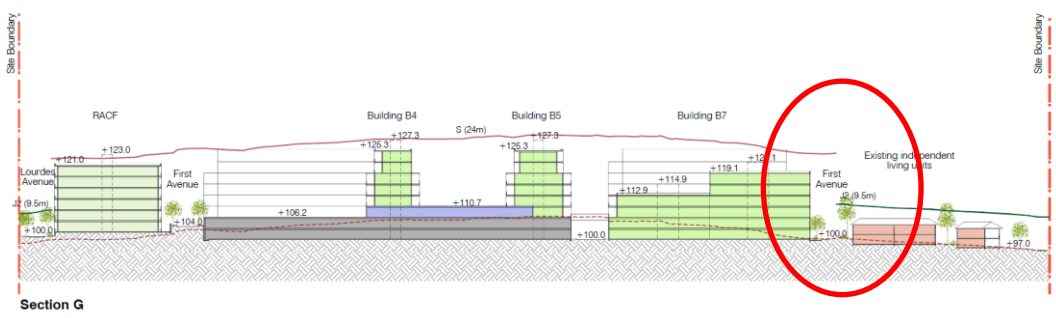
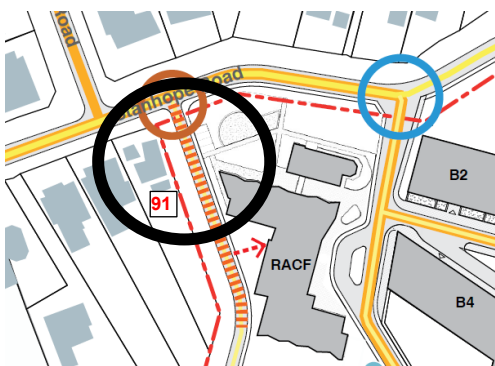

		 <p>Section G</p>
61	4.2.5 Vehicular Circulation	<p>The placement of the new internal road adjacent to the neighbouring single dwelling at 91 Stanhope Rd is of concern as it will be a high use access way to the dwellings to the south and as such generate noise impact to the rear garden and the dwelling. This interface does not appear to have been given consideration.</p> 
62	4.2.6 Basement Parking	<p>Consideration of the DCP requirements for residential flat buildings/mixed use standards that the proposed buildings comprise, has not been given. The large footprint subsurface basement parking is not supported due to the inability to provide deep soil landscaping, including tall trees in between built form – contributing to the prevailing residential character of Ku-ring-gai (buildings located within garden settings with tall canopy trees above).</p>
63	4.2.7 Bushfire	<p>Refer to the comments to Attachment D - Bushfire Protection Assessment within this Table of Assessment.</p>
72	<p>Section 4.3 Landscape strategy <i>“Retention of existing vegetation wherever possible. Particularly existing mature tree planting that contributes to the leafy character of the village and its connection to nature.”</i></p>	<p>This summary fails to recognise presence and protection of remnants within the site, as referred to within the Attachment J - Ecological Assessment and Council’s comments on the Ecological Assessment</p>
73	4.3.2 Landscape Design	<p>Given that the outcomes for this site will resemble residential flat buildings, there will be an expectation that the built form comply with the Ku-ring-gai DCP requirements for that building type. This includes the</p>

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		requirements around landscaping and the provision of deep soil landscaping to ensure all buildings sit well within a garden setting and that the overall setting contribute to the greater context around the site, in particular the addition to the tree canopy.
76	4.4.1 Headfort House Front Garden	See comment made to the Planning Proposal and in comment to Heritage Assessment.
90-109	5.1 Visual Impact Assessment	<p>The view analysis presented underestimates the impacts of the bulk and scale of the proposed built form in its wider setting. Key views from the bush heritage items, Seven Little Australians Park and Lindfield Soldiers Memorial Park have been omitted, these views are highly important as this site forms the backdrop to the setting of Seven Little Australians Park, and is within the views and vista corridor from the Lindfield Soldiers Memorial Park.</p> <p>Following are photos from these two locations showing the height of the Optus Base Station at RL 117.65 visible above the tree canopy. This tower is located on Stanhope Road to the north east of the site.</p> <p>The proposal seeks an increased height to RL 127.3 (10m above the level of this tower). Given the length and solidity of built form that will result, it will be highly visible above the canopy. Also of consideration is the light spill that would result from the buildings further marking the development to no strategic advantage. It will interfere with the setting of the Items and will be an anomaly within the low density context in which it is located.</p> <p>The view analysis at location 13 does not illustrate the wider view impacts as seen in the following photos also taken from Seven Little Australians Park:</p>  <p>The view analysis at location 18 does not illustrate the wider view impacts as seen in the following photos also taken from Lindfield Soldiers Memorial Park and oval.</p>

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118	Section 6.1 Proposed Planning Controls	<p>The comments made regarding this proposal’s impacts on the heritage, low density residential, prevailing Kuring-gai character refute the below statement on pg 118. The consideration given to the value of the context and to the interface with immediate neighbouring buildings and features has been minimal.</p> <p><i>“The maximum height amendments reflect buildings sited in such a way to create transitions between the surrounding area and taller development on the subject site. It should be noted that the proposed heights, although achieving a maximum of 24m responds to the existing topography and do not have any significant visual impact on surrounding areas.”</i></p>

PLANNING PROPOSAL - ATTACHMENT C - TRAFFIC IMPACT ASSESSMENT

PAGE	DOCUMENT/SECTION	COMMENT
6	2.4 Public transport	<p>The assessment of the local bus route (Transdev route 556) gives the impression that the bus stops within the site are serviced in accordance with the frequencies in Table 1.</p> <p>In reality, the Transdev route 556 service stops in the Lourdes development only twice a day on weekdays, at 9.30am and 12.30pm, with no service on weekends.</p> <p>Section 2.4 needs to be updated to better reflect the actual servicing of the site by Transdev route 556 service</p>

PLANNING PROPOSAL - ATTACHMENT D - BUSHFIRE PROTECTION ASSESSMENT

PAGE	DOCUMENT/SECTION	COMMENT
1-2	Sections 1.1 & 1.2 of the report details the description of the proposal, location and description of the development site and includes a comment that the <i>“locality has not had a widespread wildfire and is never likely to experience this as the vegetation is confined to relatively narrow pathways in</i>	<p>Figure 1 below (taken from the Independent Review of Bushfire Impact, Australian Bushfire Protection Planners Pty), provides a graphical representation of the fire paths which are likely to present a hazard to the site and identifies that there is a 1.2 kilometre fire path from the northeast with a potential head width of more than 300 metres.</p>

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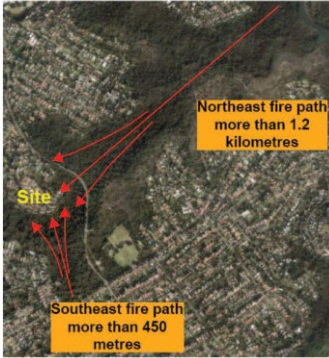
	<p><i>directions that are not exposed to widespread and major bushfires”.</i></p>	<p>The fire path from the southeast has a length of more than 450 metres with a potential head width of more than 250 metres.</p> <p style="text-align: center;"><small>Figure 1 – Plan of Potential Fire Paths</small></p>  <p>The likelihood of bushfire as described within the Bushfire Protection Assessment, should either clarify their proposed fire paths or address those raised within the comments section which clearly show significant fire paths (particularly to the northeast).</p>
<p>5-6</p>	<p>Section 2 of the report undertakes a Bushfire Threat Assessment which includes the determination of the ‘predominant vegetation class’ for a distance of at least 140 metres out from the site and the slope class ‘most significantly affecting fire behaviour’ for a distance of at least 100 metres in all directions.</p>	<p>The report correctly classifies the ‘predominant vegetation’ to the north-east through to the south to southwest of the development as ‘forest’.</p>
<p>5-6</p>	<p>Section 2 of the report undertakes a Bushfire Threat Assessment.</p> <p>The effective slopes shown in Figure 2 have been agreed to by NSW RFS Development Assessment and Planning Officer Josh Calandra after a site inspection on the 6.10.16.</p>	<p>Figure 2 below (taken from the Independent Review of Bushfire Impact, Australian Bushfire Protection Planners Pty), identifies some minor discrepancy in the effective slope identified on Figure 2 [Slope Assessment] in the Bushfire Protection Assessment.</p> <p>The effective slope is that slope within the hazard (i.e. under vegetation) which most significantly affects fire behaviour.</p> <p>Whilst it is understood that the RFS has agreed to the effective slopes used within the Planning proposals Bushfire Threat Assessment, an additional assessment was undertaken by Council’s bushfire consultant (Independent Review of Bushfire Impact, Australian Bushfire Protection Planners Pty). This assessment was undertaken using 2m LIDAR derived contour data and shows either equivalent or greater effective slopes than that assessed within the Bushfire Protection Assessment (see figure 2 below). Resulting in a potential increased rate of spread inherent to fire travelling upslope.</p> <p>It is suggested that the effective slope applied within the current or future Bushfire assessments be reviewed to assess discrepancies raised.</p>

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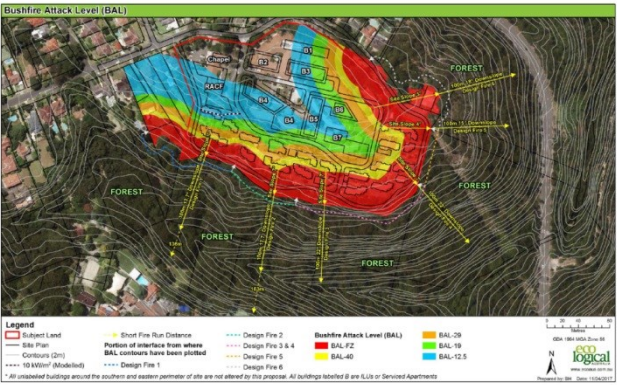

 <p>Figure 2: Proposed Village Layout with assessment of slope, vegetation and BAL (using 1200° flame temp)</p> <p>The report further states: <i>'The effective slope is characterised by a steep riparian corridor to the south and sandstone escarpments of varying heights that 'interrupt' the continuous slope grade and depending on the fire intensity its potential uphill spread'.</i></p>	<p>Figure 2 – Effective Slope Diagram.</p>  <p>Written descriptions of the effective slope within the Bushfire Threat Assessment do not take into account the likely crown fire spread upslope from the northeast, negating any benefit provided by the sandstone Escarpments.</p>
<p>1-21 This appendix includes Bushfire Attack Assessments for each bushfire run (as shown within Figure 2 of the report, also within the section above).</p>	<p>The Bushfire Attack Assessments apply a Short Fire Run Model for Design Fire 1 and Design Fire (pg 1 -4 and pg 5 – 8 of Appendix B).</p> <p>The use of 'Short Fire Run' for Fire run 1 is acceptable as the total length of fire path is less than 150 metres, which is the maximum Short Fire Run length, permitted when using the SFR Calculator.</p> <p>The use of 'Short Fire Run' for Fire run 2 not considered acceptable as the total length of fire path is greater than 150 metres, which is the maximum Short Fire Run length permitted when using the SFR Calculator.</p> <p>Additionally consideration of discrepancies in effective slopes as addressed may also affect the modelled outcome, increasing bushfire attack.</p> <p>All of the Bushfire Attack Assessments are based on the assumption that the Fire Danger Index [FDI] for the location can be lowered to 55, from the accepted 100 as prescribed in <i>Planning for Bushfire Protection 2006</i>, for the Greater Sydney Region – refer to Table A2.3, Page 57 of <i>Planning for Bushfire Protection 2006</i>. Correspondence from the NSW Rural Fire Service [see Attachment A within the Independent Review of Bushfire Impact, Australian Bushfire Protection Planners Pty has confirmed that the Service will not accept lowering the Fire Danger Index for the site from 100 to 55, as proposed in the Bushfire Protection Assessment.</p> <p>The Bushfire Protection Assessment must either:</p> <ul style="list-style-type: none"> ● Demonstrate acceptance from the RFS (in writing); or ● Revise the bush fire assessment through consultation with the RFS; or ● Apply a Fire Danger Index [FDI] of 100 as required by PBP 2006.

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8-12 Section 3 examines the Asset Protection Zones for the site and provides tables which identify the calculations of Asset Protection Zone width and level of building construction [Bushfire Attack Level - BAL] for each of the six defined effective slopes.

This assessment has used the specific slopes agreed to with RFS and selectively used two other performance solutions (short fire run and weather data analysis) to identify the site specific APZ and BAL.

These calculations rely on the ‘design fire modelling’ provided in Appendix B Bushfire Attack Assessments. Results are show within Table 1 and 2 below.

Table 1: Proposed new RACF: APZ and BAL assessment

Direction from envelope	Effective Slope ¹	Predominant Vegetation ²	PBP Accept. Soln. APZ ³	Performance solution APZ ⁴	Method 2 AS 3959-209 Construction Standard ⁵	Comment
South (Line 1)	Downslope 13.7 ^o	Forest	100 m	55 m	BAL-12.5	Reduced FFDI & SFRM ⁶ used, RACF beyond 10 kW/m ²
South (Line 2)	Downslope 17.7 ^o	Forest	100 m	58 m	BAL-12.5	Reduced FFDI & SFRM used, RACF beyond 10 kW/m ²
All other directions	Managed lands					

¹ Slope most significantly influencing the fire behaviour of the site having regard to vegetation found on each ‘fire run line’.

² Predominant vegetation is identified, according to PBP and “Where a mix of vegetation types exist the type providing the greater hazard is said to be predominate”

³ APZ identified using Table 2.6 of PBP to achieve acceptable solution

⁴ APZ identified using a performance solution to achieve BAL-12.5 with flame temp of 1200°C

⁵ BAL construction determined using a AS 3959-2009 Method 2 performance solution with flame temp of 1200°C. NB other BALs shown in Figures 2-4 derived from data in Table 3

⁶ SFRM means Short Fire Run Model

These calculations rely on the ‘design fire modelling’, as discussed above.

As a result of the NSW Rural Fire Service not accepting the use of an FDI of 55 (as discussed above), the assumptions, calculations and modelling in the Bushfire Protection Assessment report are incorrect and will not be accepted by the NSW Rural Fire Service as the use of the correct level of Fire Danger Index will increase the level of radiant heat on the exterior of the buildings to more than the mandatory 10kW/m² (which is the maximum acceptable radiant heat rating for SFPP, as outlined above and within Section 4.2.7 of PBP). In order to reduce the radiant heat rating on the exterior of the buildings increased APZ would be required.

Section 4.2.7 of *Planning for Bushfire Protection 2006* details the standards for bushfire protection measures for SFPP developments and states:

Asset Protection Zones:

“Intent of measures: to provide sufficient space for fire-fighters and other emergency services personnel, ensuring radiant heat levels permit operations under critical conditions of radiant heat, smoke and embers, while supporting or evacuating occupants.

Radiant heat levels of >10kW/m² must not be experienced by emergency services workers aiding residents within a special fire protection purpose development”.

The table below provides the performance criteria and acceptable solutions for SFPP’s located in a bushfire prone area.

Performance Criteria	Acceptable solutions
<p>The intent may be achieved where:</p> <ul style="list-style-type: none"> radiant heat levels of greater than 10kW/m² will not be experienced by occupants or emergency services workers entering or exiting a building. 	<ul style="list-style-type: none"> an APZ is provided in accordance with the relevant tables and figures in Appendix 2 of this document. exits are located away from the hazard side of the building. the APZ is wholly within the boundaries of the development site. Exceptional circumstances may apply (see section 3.3)

Without a viable alternative Bushfire Attack Assessment (‘design fire modelling’) the default mechanism for determining complying Asset Protection Zones is Table A2.6 of *Planning for Bushfire Protection 2006*. Table A2.6 requires that for:

- Effective slopes of more than 18 degrees having forest as the predominant vegetation type, the Asset Protection Zone is 100 metres.
- The 14 degree effective slope to the southwest the width of the Asset Protection Zone is also 100 metres – to achieve a radiant heat rating on the exterior of the buildings of no greater than 10kW/m².

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

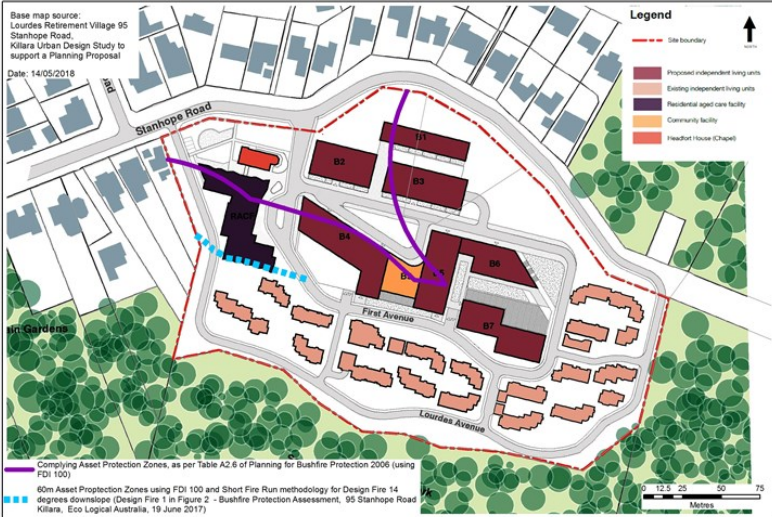
Table 2: Proposed new ILUs/ Serviced Apartments: APZ and BAL assessment						
Direction from envelope	Effective Slope ¹	Predominant Vegetation ²	PBP Accept. Soln. APZ ³	Performance solution APZ ⁴	Method 2 AS3959 Construction Standard ⁵	Comment
South (Line 3)	Downslope 22°	Forest	100 m	87 m	Up to BAL-29	Reduced FFDI use in model
South-East (Line 4)	Downslope 22°	Forest	100 m	87 m	Up to BAL-29	As above
East (Line 5)	Downslope 15°	Forest	100 m	67 m	Up to BAL-29	As above
North-east (Line 6)	Downslope 18°	Forest	100 m	75 m	Up to BAL-29	As above
All other directions	Managed lands					
<p>¹ Slope most significantly influencing the fire behaviour of the site having regard to vegetation found.</p> <p>² Predominant vegetation is identified, according to PBP and "Where a mix of vegetation types exist the type providing the gn hazard is said to be predominate"</p> <p>³ APZ identified using Table 2.6 of PBP to achieve acceptable solution</p> <p>⁴ APZ identified using a performance solution to achieve BAL-12.5 with flame temp of 1200°C</p> <p>⁵ BAL construction determined using a AS 3959-2009 Method 2 performance solution with flame temp of 1200°C NB other t shown in Figures 2-3 derived from data in Table 3.</p>						
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Except for the Design Fire 1 (14 degree downslope fire path to the southwest), which has a fire run distance of 147 – 150 metres, APZs were calculated using an FDI of 100 and the Short Fire Run methodology.</p> <p>The Planning Proposal provides a setback of around 58m (but a required APZ of 55 metres) to the southwest of the new RACF building. Using the Short Fire Run methodology and FDI 100, a distance of 60m is required to provide radiant heat of less than 10kW/m² to this aspect of the building, as mapped within</p> <p>The APZ (using FDI 100) are mapped within Figure 3 below (taken from the Independent Review of Bushfire Impact, Australian Bushfire Protection Planners Pty).</p> </div> <div style="width: 50%; text-align: right;">  </div> </div>						
13-14	Sections 4 & 5 examine the Bushfire Attack Level to the existing and proposed buildings.		<p>In determining construction standard requirements to the buildings, the Planning Proposal’s Bushfire Protection Assessment report has applied Method 2 from the Australian Standard A.S. 3959 – 2009 (Construction of buildings in bushfire prone areas). The Results of this Assessment are show within Figure B. Again this assessment has included use of a Fire Danger Rating (FDI), which has been lowered from 100 to 55, which is unacceptable to the NSW RFS.</p> <p>The assessment of BAL rating to the buildings determined in the Planning Proposal’s Bushfire Protection Assessment report is therefore not accurate. Use of the correct FDI of 100 will result in an increase in the level of radiant heat on the buildings based on their current proposed location (as shown within Figure B) and therefore an increase in the BAL rating above the accepted BAL 12.5.</p> <p>This increase in radiant heat and construction standards to the proposed buildings do not comply with the Special Fire Protection Purpose Development performance requirements of Planning for Bushfire Protection 2006.</p>			
15-16	Section 8 examines the existing and proposed access arrangements under the Planning Proposal with the proposal		<p>The Planning Proposal provide a secondary access to Stanhope Road. This improves emergency egress from the site except that the existing perimeter access road linking to the secondary exit is not safe and will be subject</p>			

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

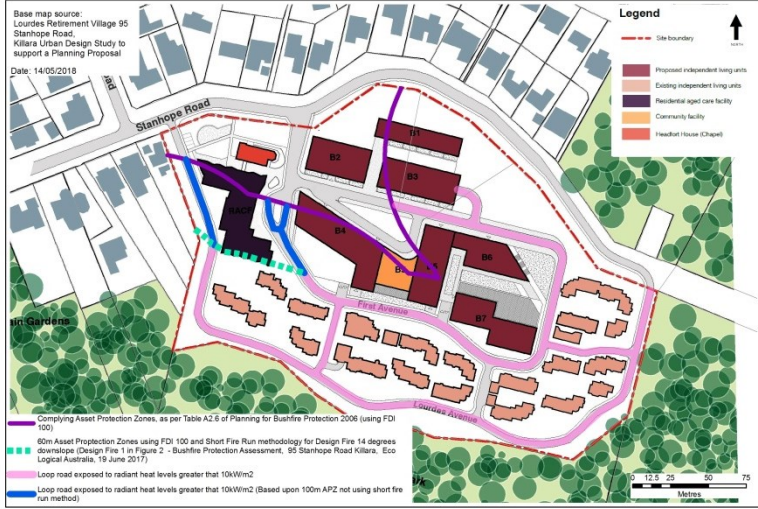
	<p>to provide a secondary access to Stanhope Road.</p>	<p>to bushfire over-run.</p>  <p>The Planning Proposal establishes a loop perimeter internal road identified as ‘First Avenue’. A review of the likely impact on this road has identified that with the use of the increased Fire Danger Rating for the site the north-eastern, eastern and south-eastern sections of the loop will be exposed to radiant heat levels greater than 10kW/m². This section of the loop road will therefore not provide safe access/egress for residents and an operational platform for fire-fighters assisting during bushfire. Refer to Figure 4</p>
<p>17</p>	<p>Section 9 examines emergency response and evacuation.</p>	<p>The following concerns with emergency response and evacuation are raised:</p> <ul style="list-style-type: none"> • Due to the inaccuracies in the determination of the APZs, the assessment of the safety of the occupants is also incorrect and evacuation in the event of bushfire will therefore be required. • All the properties (including 95-97 Stanhope Road) within the catchment area, mapped in Figure D, exit on Stanhope Road, which is the only exit road from this catchment area. A Bushfire Evacuation Risk Assessment has been undertaken to understand current and potential impacts to this area. The methodology used is the same as applied to Council’s Deferred Areas Planning Proposal, which was supported by the NSW Police and Rural Fire Service and recently endorsed by the NSW Department of Planning. The results of this analysis show: <ul style="list-style-type: none"> ○ The catchment area has a total of 256 dwellings currently existing, exceeding the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 206 dwellings. ○ The amendments sought by the Planning Proposal would result in a total of 486 dwellings within the total catchment area, exceeding the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 436 dwellings. • The egress from this catchment area is inadequate in the event of evacuation from bushfire event:

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

- Currently, Stanhope Road has just enough capacity to evacuate the existing catchment within 30mins,
 - With the increase in population permitted under the Planning Proposal; the time taken to evacuate the catchment will increase to over 60mins. This exceeds the exit road capacity criteria set by Cova (2005) by 32mins.
- The amendments sought by the Planning Proposal would result in almost doubling the number of dwellings within the Lourdes Retirement Village. This will result in the need for a higher level of response by the Emergency Services to assist in the relocation of the residents to a safer neighbourhood place. This assistance may not be available.
 - The Planning Proposal establishes a loop perimeter internal road identified as ‘First Avenue’. A review of the likely impact on this road has identified that with the use of the increased Fire Danger Rating (FDI) for the site the north-eastern, eastern and south-eastern sections of the loop will be exposed to radiant heat levels greater than 10kW/m^2 , including all areas between the bushland and the APZ line (blue) map in Figure A. This section of the loop road will therefore not provide safe access/egress for residents and an operational platform for firefighters assisting during bushfire.
 - The Planning Proposal’s Bushfire Protection Assessment does not respond to the risk to the existing Independent Living Units retained to the south and east of the site in the Asset Protection Zone setback to the new buildings.



Figure D: Catchment area for the assessment of bushfire evacuation risk

Council’s Independent Review of Bushfire Impact (by Australian Bushfire Protection Planners Pty), states “Previous advice from the NSW Rural Fire Service [on similar projects] has confirmed that the Service is unlikely to accept an increase in the occupancy of the facility due to the need to evacuate an increased number of

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

		<i>vulnerable people from the site, placing additional demand on road infrastructure and the emergency services”.</i>
17-18	Section 10 provides a Conclusion.	<p>The Conclusion provided within Section 10, relies on the bushfire protection measures determined by modelling using the incorrect Fire Danger Index, which the NSW Rural Fire will not accept (as addressed in comments above). Use of an FDI of 100 will increase the bushfire risks above those addressed within the Planning Proposals Bushfire Assessment. Significant evacuation issues have also been raised, which will be exacerbated by the increase in vulnerable population on this site resulting from the development potential of this Planning Proposal.</p> <p>The planning proposal will result in exposure to radiant heat and provide construction standards that do not comply with the Special Fire Protection Purpose developments under Section 117 Direction 4.4 Planning for Bush Fire Protection and Planning for Bush Fire Protection 2006.</p>
	Additional matters inadequately addressed within the report	The report is essentially ‘silent’ on the issue of the safety of the residents occupying the existing Independent Living Units to be retained on the periphery of the existing village.
	Addition matters inadequately addressed within the report	<p>The Bushfire Protection Assessment does not address the multi-storey nature of the proposed development.</p> <p>The Planning Proposal will enable the construction of multi-level buildings up to 7 stories exceeding the existing two to three storey height. Such buildings have higher densities and increased external façade surface areas potentially exposed to bushfire attack.</p> <p>The increased height can result in exposure to convective heat and is exacerbated on this site by the steep slopes across which bushfire will travel.</p> <p>Additionally, this multi-storey building with provide for higher populations that make egress from the building more challenging and place an increased demand on road infrastructure during evacuation.</p> <p>The NSW Rural Fire Service recommends that multi-storey buildings should not be located along ridges [such as this site] or slopes with significant fire runs.</p>

PLANNING PROPOSAL - ATTACHMENT F - HERITAGE SIGNIFICANCE ASSESSMENT HEADFORT HOUSE

PAGE	DOCUMENT/SECTION	COMMENT
1	Attachment E – Heritage Letter Response Draft Urban Design Study <i>Heritage Listing Context</i> <i>“GML’s Heritage Significance Assessment (prepared for Stockland in 2017) found that the former Headfort School building (Headfort House) in its garden setting is of heritage significance to Ku-ring-gai.”p.1</i>	The heritage response to the draft urban design study has a strong focus on the conserving the significance of Headfort House. This property is not as yet statutorily listed and as such there is no statutory obligation to conserve or even retain the building. Locally heritage list Headfort House.
2	<i>The project will include the restoration of Headfort House as the gateway to the site.....existing vegetation along Stanhope</i>	The trellis structure and the wall around the grotto are not consistent with the open soft landscaped garden that currently exists at the front of Headfort House.

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	<i>Road is to be retained and the remaining garden elements of Headfort House will be conserved. It is proposed Headfort House be conserved within its garden curtilage, which will form an important element of the new gateway to the village.</i>	Ensure any works to the front of Headfort House provide an appropriate garden setting which retains a visual connection with the street.
5	<i>Bushland reserves Plan of Management 2013 – minimise urban encroachment on the park, careful consideration of drainage, shadowing and visual analysis. Consideration of the potential impacts on matters outlined in the Bushland reserves POM...will be needed as the development of the Master Plan proceeds.</i>	Agreed.
7	<p>Commentary</p> <p><i>The impacts of permitting increase density and height require careful consideration of the massing of building envelopes, specific modulation, materials, colours and visual impacts. Scaling down the height of the buildings at the perimeter of the site, particularly along the bushland fringe is a positive design principle, the impact of apparent height from within the park will need to be assessed.</i></p>	<p>It is agreed that reducing the height at the interface of the site is a good design response. Placing the tallest buildings on the highest point of the site will have consequences for district views to the site. These are views from existing heritage conservation areas across the Seven Little Australians Park. At present these sites take in bush vistas but the inclusion of these buildings would result in visible built structures above the canopy. Restrict building heights on the site to below the canopy so regional vistas from conservation areas of the bush are not interrupted by new built elements.</p>
8	<i>It is considered that the detailed design of the proposed five-storey RACF as shown on the masterplan can potentially be further developed to be sympathetic to Headfort House, and not adversely impact on its setting. The new building envelope of the RACF behind Headfort House is of five storeys, and is set back from the chapel. A reasonable setback (as shown on the Master Plan), together with localised stepping of the height of the building on its western side and careful articulation of the facades and materiality of the new RACF will be ultimately required to ensure that the new building will not overwhelm or visually dominate the chapel. These aspects of design development can be considered further at DA stage. The proposed development of landscaped gardens in the area currently occupied by a carpark has the potential to enhance the setting of Headfort House, and represents a suitable location for the relocated grotto.</i>	It is agreed that at the DA stage the RACQ should have a contextual design response to Headfort House.
8	<p><i>Further Investigations to be undertaken as part of the next stages of design:</i></p> <p><i>To fully assess the proposal from a heritage perspective GML</i></p>	If Headfort House does not have a local significance there is no requirement for a CMP. However, it is not agreed that the Headfort House is not significant. Please see comments below on GML heritage assessment.

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

<p><i>recommends the preparation for the site of:</i> <i>A CMP for the site, including Headfort House, prior to the DA stage. This would require:</i> <i>historical investigation to better understand the history of the site as a whole;</i> <i>analysis of the significance of the site and its components</i> <i>indication of priority conservation works;</i> <i>identification of unsympathetic alterations and additions to be reversed; delineation of appropriate curtilage and garden setting surrounding the building; management policies including:</i> <i>o identification of locations for any extension in association with Headfort House;</i> <i>o guidelines for development in its vicinity; and</i> <i>o specific advice about the value and conservation of the grotto</i></p>	<p>Aboriginal cultural heritage values have not be assessed or considered. Given the proximity to creeks and bushland, and the presence of large sandstone outcrops and shelves it is recommended that an Aboriginal Cultural Heritage Assessment be undertaken for the entire site.</p> <p>It is recommended that Headfort House and its immediate curtilage (garden) be locally heritage listed and a CMP prepared to understand this significance and the opportunity and constraints for development of the Lourdes site.</p> <p>Undertake an Aboriginal Cultural Heritage Assessment for the site.</p>
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PLANNING PROPOSAL - ATTACHMENT F - HERITAGE SIGNIFICANCE ASSESSMENT HEADFORT HOUSE

PAGE	DOCUMENT/SECTION	COMMENT
51-56	Heritage significance assessment	<p>The GML Heritage assessment of Headfort House finds it has cultural significance based on the following criteria:</p> <p>Historical significance – as evidence of the growth of Killara and its development from rural area to residential suburb; as evidence of the effect of WWII on the local area (use by AWAS in the 1940s); and as a tuberculosis hospital.</p> <p>Historical association – building is associated with the prominent educator Thomas Wade who was the founding headmaster of Headfort House.</p> <p>Social significance – to the AWAS, patients and staff of Lourdes hospital, and importance to Ku-ring-gai’s sense of place.</p> <p>To reach the threshold for listing a heritage place only requires to meet the criteria for one of the heritage assessment criterion, Headfort House meets three. It is recommended that Headfort House and its immediate curtilage (garden) be locally heritage listed.</p>

PLANNING PROPOSAL - ATTACHMENT I - ARBORICULTURAL IMPACT APPRAISAL

PAGE	DOCUMENT/SECTION	COMMENT
	Appendix 8 - Tree management plan & Appendix 2 Tree schedule	The Tree management plan, Appendix 8, does not display Tree Protection Zones (TPZs) and Structural Root Zones (SRZs) (although they are included within the Legend). Mapping of this information is required to enable assessment of the proposal and it associated impacts. Council questions the requirement for removal of trees

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		<p>within the north western corner of the site near the junction of Stanhope and Lourdes Avenue, including 29 and 30 (both of which have been mapped as category A trees suitable for retention).</p> <p>Note: Tree 30 (a Norfolk pine) is shown to be removed within Appendix 8, but retained within Appendix 2. Retention of this tree is proposed within page 76 of the Urban Design Study</p> <p>The arborist report proposes removal of the following trees whilst, the Ecological Assessment recommends their protection:</p> <ul style="list-style-type: none"> • Tree Number 349, a mature individual of Red Bloodwood that occurs along Stanhope Street; and • Two mature turpentine’s (<i>Syncarpia glomulifera</i> - Trees 44 and 45) (which Council believe align with Sydney Turpentine Ironbark Forest, listed under the <i>NSW Biodiversity Conservation Act 2016</i>). <p>Remove inconsistencies within the Arboricultural Impact Appraisal and between the Arboricultural Impact Appraisal, the Urban Design Study and the Ecological Assessment.</p>
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PLANNING PROPOSAL - ATTACHMENT J - ECOLOGICAL ASSESSMENT

PAGE	DOCUMENT/SECTION	COMMENT
2	<p>Section 1.2</p> <p><i>“a comprehensive survey was undertaken on foot to identify the location of a total of 22 indigenous trees that may be required to be removed and that may or may not be considered remnant and to undertake an ecological assessment of the landscaped and vegetated areas of the site”.</i></p>	<p>As articulated within Section 1.2 (pg 2) of the Ecological Assessment, <i>“a comprehensive survey was undertaken on foot to identify the location of a total of 22 indigenous trees that may be required to be removed and that may or may not be considered remnant and to undertake an ecological assessment of the landscaped and vegetated areas of the site”.</i></p> <p>In undertaking this assessment the report inadequately addresses onsite vegetation that is not proposed to be removed, including indigenous trees considered local to the surrounding vegetation communities and significant vegetation along Stanhope Avenue. This includes</p> <ul style="list-style-type: none"> • Sydney Turpentine Ironbark Forest (listed as an Endangered Ecological Community under <i>the Biodiversity Conservation Act 2016</i>), and • Coastal Shale-Sandstone Forest, a community listed as 92% cleared the NSW BioNet Vegetation Classification Database lists this community (that is, it has less than 8% of its estimated distribution prior to pre- European extent estimates). <p>Whilst OEH vegetation mapping (2013), is referred to within Section 3.1, pg. 7 of the report, the remainder of the report inadequately addresses its presence.</p> <p>Analysis of Aerial photograph within the site from 1943 to 2016 (see appendix 1 below), shows persistent vegetation along Stanhope Road and within areas mapped by The Office of Environment and Heritage as Coastal Shale-Sandstone Forest and Sydney Turpentine Ironbark Forest.</p>

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

		<p>Whilst it is acknowledged that the current proposal does not propose the removal of this vegetation, it is still important that its presence and value within the site be recognised to enable assessment of the sites capacity to meet the proposed development demands, considering both their direct and indirect impacts and where appropriate to provide realistic constraints for proposal modifications.</p> <p>The assessment of impact and habitat for local and migratory fauna (including threatened species), omits consideration of the resources that non indigenous trees on site (i.e. species not occurring within the local vegetation communities found on or adjacent to the site) provide. This idea is supported by the <i>NSW Biodiversity Conservation Act 2016</i>, which requires consideration of all proposed native vegetation clearing associated with a proposal. Native vegetation definition under this Act relates to “plants native to New South Wales”. It is there for advisable that in addition to the consideration of impacts upon threatened ecological communities, populations and species, the planning proposal should consider the proposals potential to impact / remove “plants native to New South Wales”.</p>
13	<p>Section 4.1 <i>“There are no extensive naturally occurring or reconstructed ecological communities occurring on site (Figure 3). A small patch of woodland including two individuals of Turpentine and one of Sweet Pittosporum occurring at the western section of the subject land (Figure 4) may be derived from genotypic material from a former distribution of Sydney Turpentine Ironbark Forest that would have been aligned with the edges of the Wianamatta Shale/Hawkesbury Sandstone stratification boundaries (Figure 3.)”</i></p>	<p>Council supports the position that the site supports Sydney Turpentine Ironbark Forest under the <i>NSW Biodiversity Conservation Act 2016</i>.</p> <p>Analysis of Aerial photograph within the site from 1943 to 2016 (see appendix 1 below), shows persistent vegetation within areas mapped by the NSW Office of Environment and Heritage as Sydney Turpentine Ironbark Forest (as shown within Figure 3 of the Ecological Assessment).</p> <p>The vegetation assemblage, landscape and soils within these areas are consistent with the scientific listing of Sydney Turpentine Ironbark Forest under the <i>NSW Biodiversity Conservation Act 2016</i>. It is also consistent in that the determination recognises this community even within areas where the original forest or woodland structure no longer exist (i.e. individual remnant trees).</p> <p>This is clearly supported within point 2,3, 8 and 9 of the <i>Sydney Turpentine-Ironbark Forest - Determination to make a minor amendment to Part 3 of Schedule 1 of the Threatened Species Conservation Act</i>, which states:</p> <p><i>“2. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed in 1 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site and by its recent disturbance history. The number of species and the above-ground composition of species will change with time since fire, and may also change in response to changes in fire frequency.</i></p> <p><i>3. The structure of the community was originally forest, but may now exist as woodland or as remnant trees.”</i></p> <p><i>8. STIF typically occurs on areas with clay soils derived from Wianamatta Shale, or shale layers within Hawkesbury Sandstone.</i></p>

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

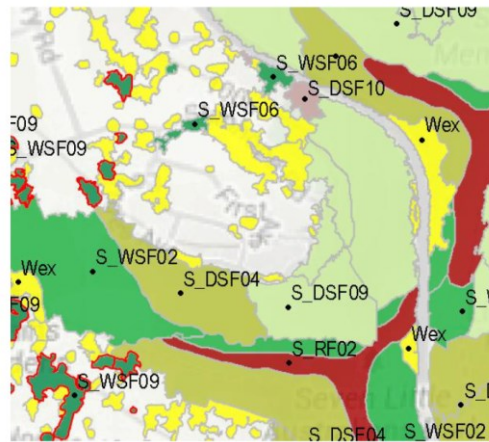


Figure 3 - Mapping by OEH (2013) of vegetation communities within and surrounding the area of the Lourdes Retirement Village and Nursing Home precinct. Relevant assemblages include those shaded in dark green with red borders: S_WSF09 (Sydney Turpentine Ironbark Forest) (STIF); olive green: S_DSF04 (Coastal Enriched Sandstone Dry Forest); light green: S_DSF09 (Coastal Sandstone Gully Forest); light violet: S_DSF10 (Hornsby Enriched Sandstone Exposed Woodland); and yellow: Natives and Exotics (either remnant trees or landscaped individuals)

9. Occurrences of STIF may occur on plateaus and hillsides and on the margins of shale cappings over sandstone."

Source: Sydney Turpentine-Ironbark Forest - Determination to make a minor amendment to Part 3 of Schedule 1 of the *Threatened Species Conservation Act* (Available at <http://www.environment.nsw.gov.au/determinations/sydneyturpentine36a.htm>, 12/05/2018).

Appendix 1 - Aerial photograph of 95 Stanhope Road, Killara from 1943 to 2016

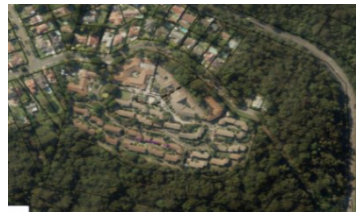


Figure 1. 2016 aerial photograph



Figure 2. 2011 aerial photograph



Figure 3. 2005 aerial photograph



Figure 4. 1988 aerial photograph

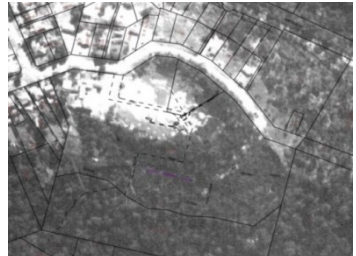
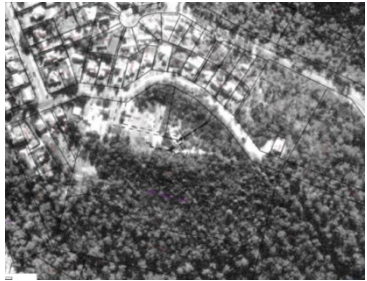



Figure 5. 1972 aerial photograph



Figure 6. 1962 aerial photograph

Table of Assessment – Planning Proposal – 95-97 Stanhope Road, Killara

				
22-23	Section 5 Conclusions	<p data-bbox="907 464 1272 491">Figure 7. 1951 aerial photograph</p> <p data-bbox="1301 464 1668 491">Figure 8. 1943 aerial</p> <p data-bbox="907 496 2130 555">Council supports the position that the site supports Sydney Turpentine Ironbark Forest under the <i>NSW Biodiversity Conservation Act 2016</i> (as outlined above).</p> <p data-bbox="907 592 2130 751">The KLEP and DCP stipulate standards that look to the protection of the significant vegetation communities on site, including Sydney Turpentine Ironbark Forest and the Coastal Shale Sandstone Forest. The KLEP provides a ‘no’ net loss consideration. The <i>NSW Biodiversity Conservation Act 2016</i> and the <i>Biodiversity Conservation Regulation 2017</i> sets out the threshold levels for when the Biodiversity Offsets Scheme will be triggered, including consideration of impacts to “plants native to New South Wales”.</p> <p data-bbox="907 788 2130 884">The Ecological Assessment proposes replanting on site with local native species. From an initial review of the broad landscape planning provided within the Urban Design Report, it is suggested that onsite planting may be insufficient to address the proposed impacts to vegetation.</p> <p data-bbox="907 920 2130 1080">The planning proposal provides an inconsistent and incomplete assessment regarding significant vegetation on site (including threatened ecological communities listed under the <i>NSW Biodiversity Conservation Act 2016</i>) and fails to effectively demonstrate that the proposed development can be designed, sited and managed, to avoid potentially adverse environmental impact or if that if a potentially adverse environmental impact cannot be avoided that appropriate offsetting can be met.</p> <p data-bbox="907 1117 2130 1176">Further clarity and consistency is required between the Arborist and the Ecological Assessment, particularly with regard to the presence, significance and management of significant vegetation.</p>		

**INDEPENDENT REVIEW OF BUSHFIRE IMPACT
PLANNING PROPOSAL
TO
REZONE LAND AT 95 – 97 STANHOPE ROAD,
KILLARA**

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**INDEPENDENT REVIEW
OF
BUSHFIRE IMPACT
PLANNING PROPOSAL TO REZONE LAND
AT
95 – 97 STANHOPE ROAD,
KILLARA**

Report Number	Document	Preparation Date	Issue Date	Directors Approval
B183160-2	Final	06.04.2018	14.05.2018	<i>G.L.Swain</i>

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1.0 Background.

Ku-ring-gai Council has received a Planning Proposal from Architectus Group Pty Ltd on behalf of Stockland Aevum Ltd, to rezone land at 95 Stanhope Rd, Killara.

The site currently operates as a retirement village (Lourdes Retirement Village) comprising 2-3 storey buildings. The uses include independent dwelling units, community uses, and a Residential Aged Care Facility (RACF).

The land was developed for senior's housing in the early 1980s and has had subsequent additions. The most recent development adding to the number of dwellings on the site was in 2011, completed under the SEPP (Housing for Seniors or people with a Disability) 2004.

The site currently houses:

- Independent living units;
- Serviced apartments;
- Hostel apartments;
- Residential Aged Care Facility (RACF);
- Admin centre, café, community centre, pool facilities;
- Croquet lawn, BBQ facilities; and
- Prayer chapel.

The Planning Proposal seeks to retain and intensify these uses on the site.

The site is currently zoned R2 Low Density Residential under the Ku-ring-gai Local Environmental Plan 2015 (KLEP 2015).

The Planning Proposal seeks to:

- Rezone the land from R2 (Low Density Residential) to R3 (Medium Density Residential);
- Amend the Floor Space Ratio from 0.3:1 to 0.8:1;
- Amend the Maximum Height from 9.5m (2 storey) to 9.5m-24m (2 storey - 7/8 storey).

The proposed Master Plan includes:

- ❖ The existing entrance is to be retained with an improved landscape setting, with the Chapel to also be retained with new community facilities;
- ❖ A new village 'main street';
- ❖ A new 'Village Green';
- ❖ A new Residential Aged Care Facility [RACF];
- ❖ 282 new Independent Living Units [ILUs] and Serviced Apartments; and
- ❖ An upgrade to the existing road network including the two-way entry, a secondary entry off Stanhope Road (east), one-way loop roads and a dedicated service road for the RACF.

The proposed development includes the following:

- ❖ Increase from 83 to 133 beds within the new RACF;
- ❖ Increase from 49 to 59 Serviced Apartments;
- ❖ Increase from 106 to 223 Independent Living Units.

The proposed amendments to the KLEP 2015 are to enable Stockland to lodge a future Development Application for demolition and rebuild to a greater density at the north and west of the site (towards Stanhope Road).

Whilst the existing accommodation to the south and east of the site (adjacent to the bushland) are retained as is, the total site area has been incorporated to enable greater density on the central area proposed for redevelopment.

The site is located within an established low density residential area (single dwellings on large lots) to the north and west of the site, and established bushland to the south and east (Seven Little Australians Park forming part of Garigal National Park).

The site is identified as a "buffer" on the Ku-ring-gai Council Bush Fire Prone Land Map (2017).

The Planning Proposal includes a bushfire assessment (by EcoLogical Australia) which finds that the subject site is appropriate for the suggested land uses and increase in the number of dwellings provided for senior's housing, subject to the implementation of various strategies.

2.0 The Brief.

Australian Bushfire Protection Planners Pty Limited has been commissioned by *Ku-ring-gai Council* to undertake an independent review of the bushfire impact of the Planning Proposal to rezone land at No. 95 – 97 Stanhope Road, Killara.

The scope of works includes:

- Undertake a review of the Bushfire Protection Assessment prepared by EcoLogical Australia to determine whether the report adequately addresses Section 117(2) Direction 4.4 – Planning for Bush Fire Protection and *Planning for Bush Fire Protection 2006*;
- Identify any further areas of assessment or investigation that should be included in the study;
- Identify the adequacy and accuracy of the methodology and analysis used in the assessment;
- Advise on the accuracy of the findings and conclusions of the assessment, particularly:
 - On whether the site is capable of accommodating the proposed future development and associated land uses;
 - The adequacy of the proposed bush fire risk mitigation measures.

3.0 Site Inspection.

An inspection of the site was undertaken by Graham Swain, Managing Director, *Australian Bushfire Protection Planners Pty Limited* on the 26th March 2018.

4.0 Documents Reviewed.

The following documents were examined in the preparation of this review:

- *Planning for Bushfire Protection 2006 – NSW Rural Fire Service*;
- Part 9.1 of the EP&A Act;

- Urban Design Study – Lourdes Retirement Village 95 Stanhope Road, Killara prepared by Architectus;
- Bushfire Protection Assessment Report prepared by Ecological Australia – dated 19th June 2017;
- Ecological Assessment prepared by ACS Environmental Pty Ltd – dated February 2017;
- Practice Note 2/12 Planning Instruments and Policies – NSW Rural Fire Service;
- Ku-ring-gai Council Bushfire Prone Land Map;
- Contour Plan(s) supplied by Ku-ring-gai Council;
- Slope Assessment Plan supplied by Ku-ring-gai Council;
- Aerial Photograph (SixMaps).

5.0 Planning for Bushfire Protection 2006.

Planning for Bushfire Protection 2006 – NSW Rural Fire Service identifies the existing and proposed landuse on the site as a ‘*Special Fire Protection Purpose Development*’ with planning controls for this type of development contained in Section 4.2.

Section 4.2.3 details the following specific objectives for Special Fire Protection Purpose Developments:

1. Provide for the special characteristics and needs of occupants as they are more likely to be adversely affected by smoke or heat while being evacuated;
2. Provide for safe emergency evacuation procedures;
3. In all cases the intent and performance criteria of each Bushfire Protection Measure [BPM] must be satisfied as per the Performance Tables within Section 4.2.7. Exceptional circumstances must be demonstrated for reductions in Asset Protection Zone (widths) required by Appendix 2.

Section 4.2.5 details the requirements for infill *SFPP* developments and states:

“In circumstances where alterations or additions to existing SFPP’s facilities are proposed, the RFS requires an appropriate combination of bushfire protection measures and compliance with the intent and performance criteria of each measure within Section 4.3.5.

However, it is also acknowledged that existing circumstances may make the preferred standards difficult to achieve. In such cases, the specific objectives of Section 4.2.3 are to be followed.

Alterations and additions to existing SFPP’s which may involve an increase in size and footprint of the building or redevelopment of an existing building are considered to be infill development.

This type of development should also seek to achieve a better bushfire risk outcome (such as improved construction standards) than if the development did not proceed. The new building work should comply with A.S. 3959 – 2009 or be no closer to the hazard than the existing building”.

Section 4.2.7 of *Planning for Bushfire Protection 2006* details the standards for bushfire protection measures for SFPP developments and states:

Asset Protection Zones:

“Intent of measures: to provide sufficient space for fire-fighters and other emergency services personnel, ensuring radiant heat levels permit operations under critical conditions of radiant heat, smoke and embers, while supporting or evacuating occupants.

Radiant heat levels of $>10\text{kW/m}^2$ must not be experienced by emergency services workers aiding residents within a special fire protection purpose development”.

The table below provides the performance criteria and acceptable solutions for SFPP’s located in a bushfire prone area.

Performance Criteria	Acceptable solutions
The intent may be achieved where:	
<ul style="list-style-type: none"> radiant heat levels of greater than 10kW/m² will not be experienced by occupants or emergency services workers entering or exiting a building. 	<ul style="list-style-type: none"> an APZ is provided in accordance with the relevant tables and figures in Appendix 2 of this document. exits are located away from the hazard side of the building. the APZ is wholly within the boundaries of the development site. Exceptional circumstances may apply (see section 3.3)
<ul style="list-style-type: none"> applicants demonstrate that issues relating to slope are addressed: maintenance is practical, soil stability is not compromised and the potential for crown fires is negated. 	<ul style="list-style-type: none"> mechanisms are in place to provide for the maintenance of the APZ over the life of the development. the APZ is not located on lands with a slope exceeding 18 degrees.
<ul style="list-style-type: none"> APZs are managed and maintained to prevent the spread of a fire towards the building. 	<ul style="list-style-type: none"> in accordance with the requirements of 'Standards for Asset Protection Zones (RFS 2005). <p><i>Note - a Monitoring and Fuel Management Program should be required as a condition of development consent.</i></p>
<ul style="list-style-type: none"> vegetation is managed to prevent flame contact and reduce radiant heat to buildings, minimise the potential for wind driven embers to cause ignition and reduce the effect of smoke on residents and fire-fighters. 	<ul style="list-style-type: none"> compliance with Appendix 5.

6.0 Review of Bushfire Protection Assessment Report prepared by Ecological Australia.

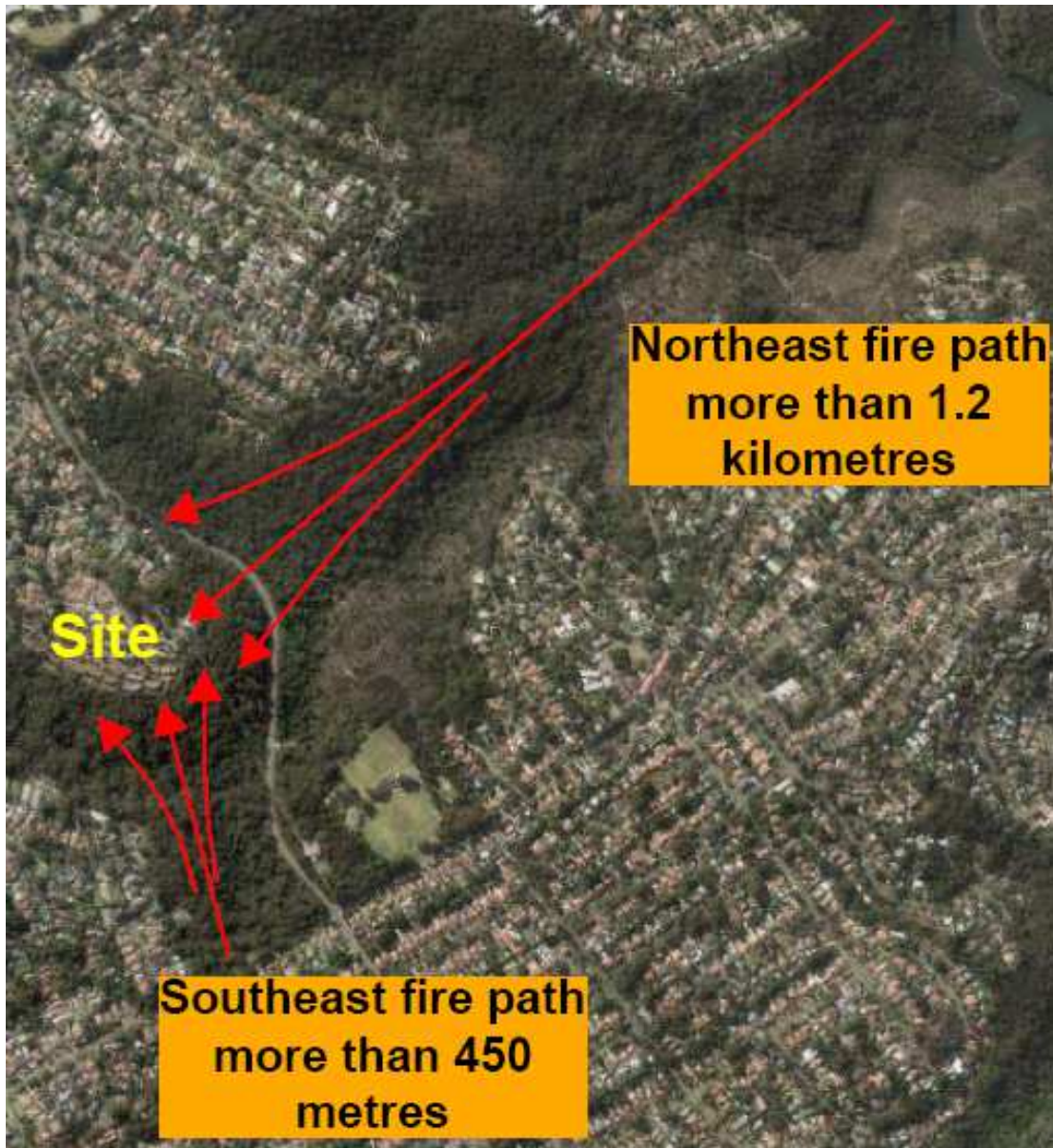
Sections 1.1 & 1.2 of the report details the description of the proposal, location and description of the development site and includes a comment that the *“locality has not had a widespread wildfire and is never likely to experience this as the vegetation is confined to relatively narrow pathways in directions that are not exposed to widespread and major bushfires”*.

Comment:

Figure 1 on Page 10 of this report provides a graphical representation of the fire paths which are likely to present a hazard to the site and identifies that there is a 1.2 klms fire path from the northeast with a potential head width of more than 300 metres.

The fire path from the southeast has a length of more than 450 metres with a potential head width of more than 250 metres.

Figure 1 – Plan of Potential Fire Paths



Section 1.4 of the report identifies that the report relies on 'performance solutions' under *Planning for Bushfire Protection 2006* and the need for a 'Bushfire Engineering Brief (BEB)' to adequately engage stakeholders and to test and validate the performance solutions to an appropriate level'.

Section 2 of the report undertakes a Bushfire Threat Assessment which includes the determination of the 'predominant vegetation class' for a distance of at least 140 metres out from the site and the slope class 'most significantly affecting fire behaviour' for a distance of at least 100 metres in all directions.

The report correctly classifies the 'predominant vegetation' to the north-east through to the south to southwest of the development as 'forest'. The report further states:

'The effective slope is characterised by a steep riparian corridor to the south and sandstone escarpments of varying heights that 'interrupt' the continuous slope grade and depending on the fire intensity its potential uphill spread'.

This comment does not take into account the likely crown fire spread upslope from the northeast, negating any benefit provided by the sandstone escarpments

Figure 2 – Effective Slope Diagram.



Figure 2 on Page 11 of this report identifies some minor discrepancy in the effective slope identified on Figure 2 [Slope Assessment] in the ELA report.

Section 3 of the ELA report examines the Asset Protection Zones for the site and provides tables which identify the calculations of Asset Protection Zone width and level of building construction [Bushfire Attack Level - BAL] for each of the six defined effective slopes.

These calculations rely on the 'design fire modelling' provided in Appendix B: of the ELA report and are based on the assumption that the Fire Danger Index [FDI] for the location can be lowered to 55, from the accepted 100 as prescribed in *Planning for Bushfire Protection 2006*, for the Greater Sydney Region – refer to Table A2.3, Page 57 of *Planning for Bushfire Protection 2006*.

Correspondence from the NSW Rural Fire Service [see Attachment A] has confirmed that the Rural Fire Service will not accept lowering the Fire Danger Index for the site from 100 to 55, as proposed in the ELA report.

Therefore the assumptions, calculations and modelling in the ELA report are incorrect and will not be accepted by the NSW Rural Fire Service as the use of the correct level of Fire Danger Index [FDI 100] will increase the level of radiant heat on the exterior of the buildings, in the locations as shown in the Planning Proposal, to more than the mandatory 10kW/m².

As a result of the NSW Rural Fire Service not accepting the use of an FDI of 55, the default mechanism for determining complying Asset Protection Zones is Table A2.6 of *Planning for Bushfire Protection 2006*.

Table A2.6 *Planning for Bushfire Protection 2006* requires that for effective slopes of more than 10 degrees, having forest as the predominant vegetation type, the Asset Protection Zone is 100 metres in order to achieve a radiant heat rating on the exterior of the buildings of no greater than 10kW/m².

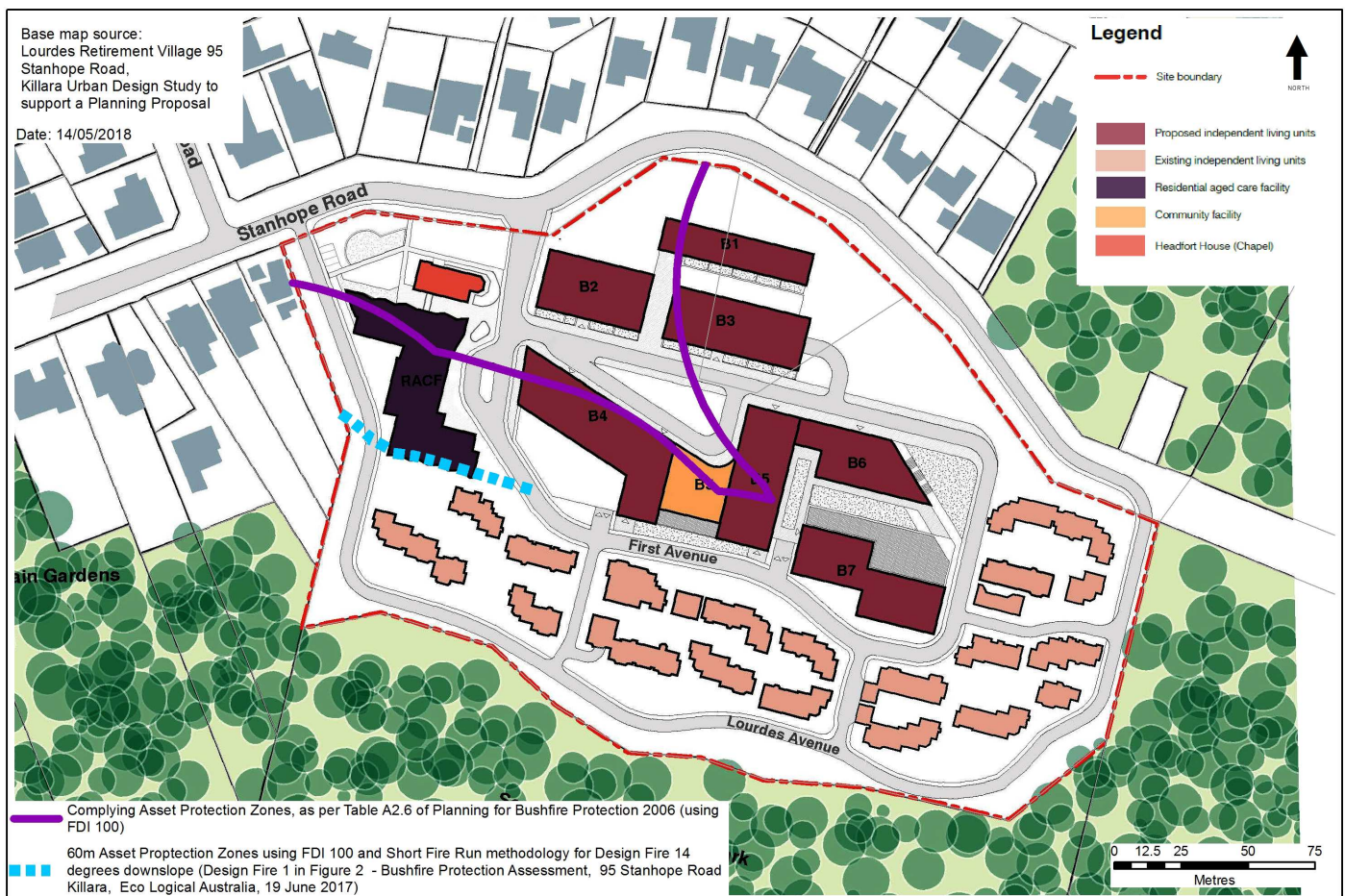
The Planning Proposal locates the new buildings closer to the hazard than the required 100 metre wide setback [Asset Protection Zone] and therefore does not address the mandatory NSW Rural Fire Service performance standard for *Special Fire Protection Purpose Development* as required by Section 4.2.7 of *Planning for Bushfire Protection 2006*.

Figure 3 on Page 13 of this report showing the 100 metre wide Asset Protection Zone setback line.

The ELA report utilises a Short Fire Run calculation to justify the Asset Protection Zone setback to the southwest. The maximum length of fire path [run] accepted by the Rural Fire Service in Short Fire Run calculations is 150 metres.

Except for the Design Fire 14 degree downslope fire path to the southwest, which has a fire run distance of 147 – 150 metres, all other fire paths exceed the 150 metre length and therefore preclude the use of the Short Fire Run Calculator. The Planning Proposal provides a setback of around 58m (but a required APZ of 55 metres) to the southwest of the new RACF building. Using the Short Fire Run methodology and FDI 100, a distance of 60m is required to provide radiant heat of less than 10kW/m² to this aspect of the building, as mapped within Figure 3

Figure 3 – Plan showing 100 metre and 60 metre wide Asset Protection Zone setback line.



Sections 4 & 5 of the ELA report examine the Bushfire Attack Level to the existing and proposed buildings.

The findings in this section of the report are based on calculations which use the reduced Fire Danger Index of 55 – not the Fire Danger Index of 100 confirmed by the NSW Rural Fire Service.

The assessment of BAL rating to the buildings determined in the ELA report is therefore not accurate and the use of the correct Fire Danger Index [FDI 100] will increase the radiant heat on the exterior of the proposed buildings [as shown in the Planning Proposal] to greater than 10kW/m².

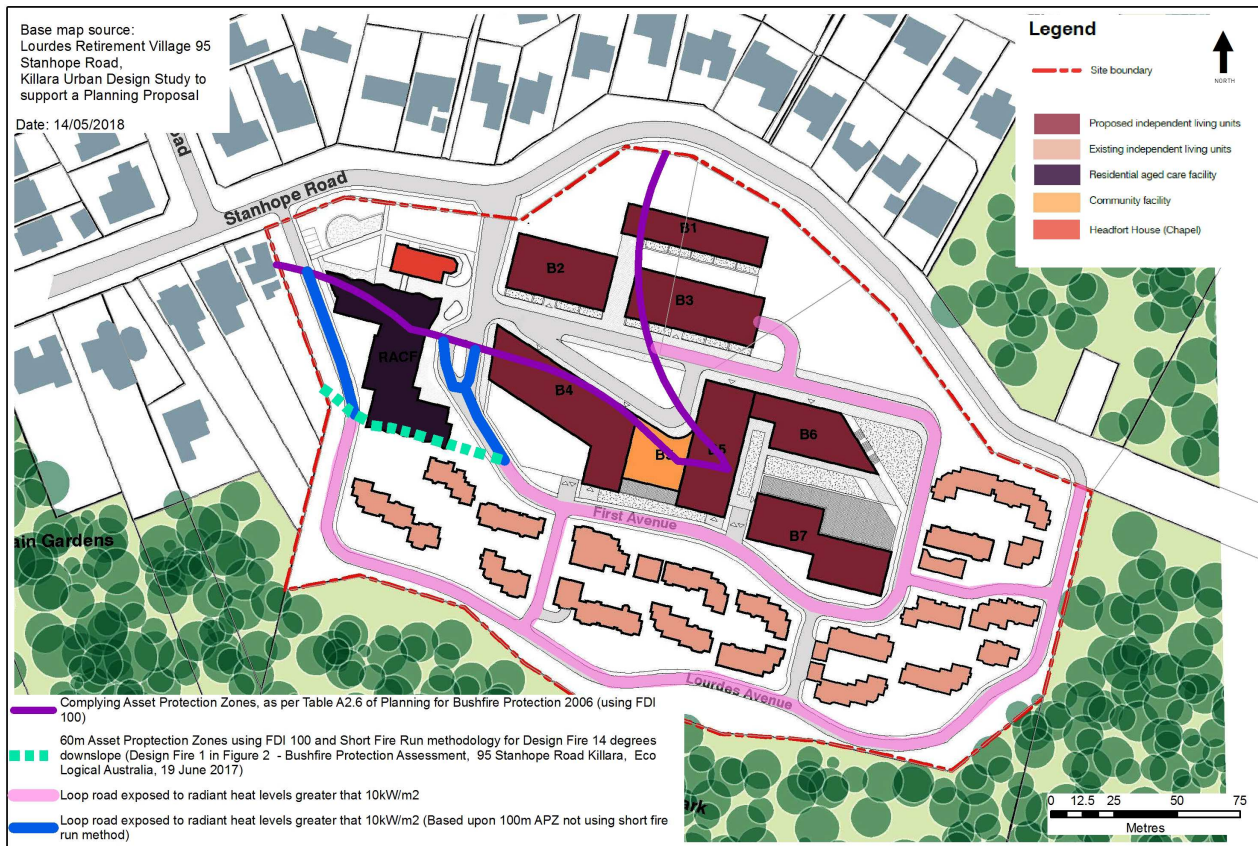
This increase in radiant heat and construction standards to the proposed buildings do not comply with the *Special Fire Protection Purpose Development* performance requirements of *Planning for Bushfire Protection 2006*.

Sections 6 & 7 of the ELA report detail the general requirements for Water Supply, Gas and Electrical supplies in accordance with *Planning for Bushfire Protection 2006*.

Section 8 of the ELA report examines the existing and proposed access arrangements under the Planning Proposal with the proposal to provide a secondary access to Stanhope Road. This improves emergency egress from the site except that the existing perimeter access road linking to the secondary exit is not safe and will be subject to bushfire over-run.

The Planning Proposal establishes a loop perimeter internal road identified as 'First Avenue'. A review of the likely impact on this road has identified that with the use of the increased Fire Danger Rating for the site the north-eastern, eastern and south-eastern sections of the loop will be exposed to radiant heat levels greater than 10kW/m². This section of the loop road will therefore not provide safe access/egress for residents and an operational platform for fire-fighters assisting during bushfire. Refer to Figure 4 on Page 15 of this report.

Figure 4 – Plan showing location of high risk access road.



Section 9 of the ELA report examines emergency response and evacuation.

Due to the inaccuracies in the determination of the Asset Protection Zones, the assessment of the safety of the occupants is also incorrect and evacuation will therefore be required. The author does not respond to the risk to the existing ILUs retained in the Asset Protection Zone setback to the new buildings.

An additional issue is the proposal to increase the occupation density within the facility.

This will result in the need for a higher level of response by the Emergency Services to assist in the relocation of the residents to a safer neighbourhood place. This assistance may not be available.

Section 10 – Conclusion, relies on the bushfire protection measures determined by modelling using the incorrect Fire Danger Index, which the NSW Rural Fire Service will not be accepted – refer to Attachment A.

In addition, the report is essentially 'silent' on the issue of the safety of the residents occupying the existing Independent Living Units to be retained on the periphery of the existing village.

7.0 Identify any further areas of assessment or investigation that should be included in the study.

This review has identified inaccuracies in the preparation of the ELA Bushfire Protection Assessment Report.

A new assessment of the Planning Proposal is required to be undertaken, in consultation with the NSW Rural Fire Service and Council, to examine whether there is any potential to redevelop the site.

The NSW Rural Fire Service may, under the provisions of 'infill development' permit a reduction in the width of the Asset Protection Zones to permit the new buildings to be located behind the 29 kW/m² setback distance.

Previous advice from the NSW Rural Fire Service [on similar projects] has confirmed that the Service is unlikely to accept an increase in the occupancy of the facility due to the need to evacuate an increased number of vulnerable people from the site, placing additional demand on road infrastructure and the emergency services.

The Planning Proposal includes the construction of multi-level buildings exceeding three storeys in height. Such buildings have higher densities and increased external façade surface areas potentially exposed to bushfire attack.

The increased height can result in exposure to convective heat and is exacerbated on this site by the steep slopes across which bushfire will travel.

The NSW Rural Fire Service recommends that multi-storey buildings should not be located along ridges [such as this site] or slopes with significant fire runs.

8.0 Identify the adequacy and accuracy of the methodology and analysis used in the assessment.

Refer to findings within Section 6.

9.0 Advice on the accuracy of the findings and conclusions of the assessment, particularly:

- On whether the site is capable of accommodating the proposed future development and associated landuses.

Comment:

The site is not capable of accommodating the development as detailed in the proposed Master Plan as the setbacks proposed do not comply with the requirement that the exterior of the buildings have a radiant heat exposure of not more than 10 kW/m².

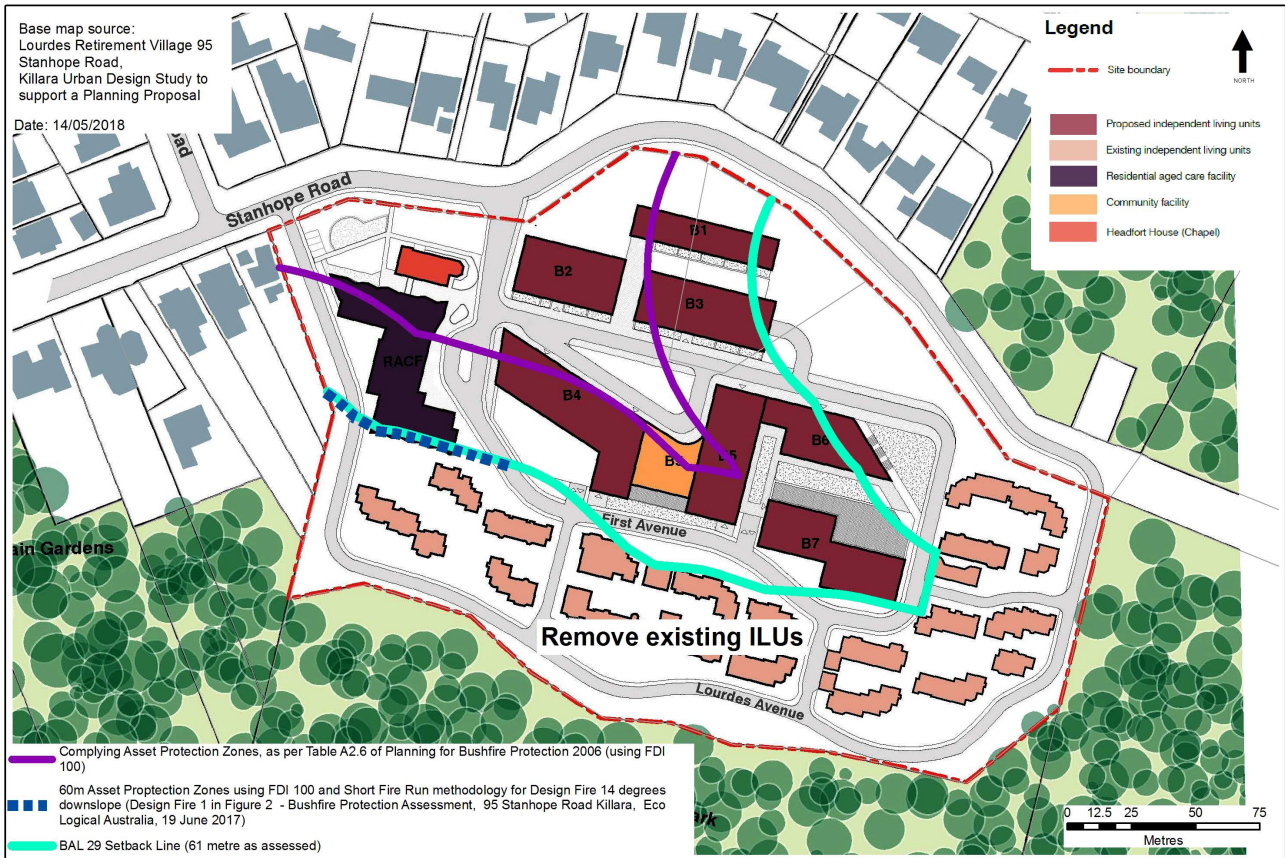
In order to justify redevelopment on the site discussions should be held with the NSW Rural Fire Service to confirm whether the Service is prepared to consider reducing the width of Asset Protection Zones and is also prepared to accept an increase in the level of radiant heat exposure on the exterior of the new buildings to BAL 29.

If the Service confirms support for a reduction in the width of the Asset Protection Zones and an increase in the level of radiant heat above 10kW/m² the Master Plan should be redesigned achieve the required standards.

The occupancy numbers shall also be reduced to lower the number of persons requiring evacuation from the buildings located in the 29 kW/m² setback distance. This will depend on the NSW Rural Fire Service's acceptance of an increase in the radiant heat level from 10kW/m² to 29kW/m².

The existing ILUs proposed to be retained on the periphery of the site shall be removed and the area managed as an Asset Protection Zone. The existing perimeter road shall be retained for fire-fighting and maintenance access and the internal road redesigned to provide access to the buildings and a second connection to Stanhope Road, located inside the 10kW/m² setback – refer to Figure 5 on Page 18 of this report.

Figure 5 – Plan showing 100 metre wide Asset Protection Zone setback and 29kW/m² (61m) setback line.

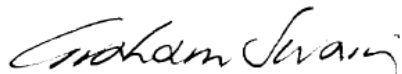


- The adequacy of the proposed bushfire risk mitigation measures.

Comment:

The proposed bushfire risk mitigation measures are not adequate as the proposal does not address the core requirement of reducing the radiant heat on the exterior of the buildings to not more than 10kW/m² and the provision of safe access for residents and emergency service personnel has not been addressed.

In addition, the proposed increase in the numbers of residents makes egress from the buildings challenging and will place an increased demand on road infrastructure and safety of adjoining residents and emergency services during evacuation. The proposal to include multi storey buildings will also increase the potential for entrapment.



Graham Swain,
Managing Director,

Australian Bushfire Protection Planners Pty Limited

14.05.2018

Attachment A – Correspondence from NSW Rural Fire Service

From: Craig Casey [Craig.Casey@rfs.nsw.gov.au]
Sent: Wednesday, 28 March 2018 3:15 PM
To: abpp@bigpond.net.au
Cc: Nika Fomin; Kalpana Varghese
Subject: Proposed redevelopment of Lourdes Retirement Village, 95 Stanhope Road Killara, Modification of FDI levels.

Dear Graham

I've spoken to both Nika Fomin (Manager Planning and Environment Services) and Kalpana Varghese (Acting Team Leader Development Assessment and Planning) regarding your enquiry, concerning the possible modifications to the Fire Danger Indices (FDI) used here in determining the proposed radiant heat levels as experienced by a SFPP development as part of either a direct performance or alternate solution and its compliance with PBP-2006.

Due to the many factors that contribute to the determination of a (FDI) and many variables involved such as wind speed, temperature, humidity and fuel conditions and topographic features, and combined with the level of vulnerability of the proposed developments, inhabitants and the difficulties with any scientific verification, we would not support the use of a modified FDI due to the inherent high level of risk to the residents and fire fighters.

Kind regards

Craig

BUSHFIRE EVACUATION RISK ASSESSMENT

95 – 97 Stanhope Road Killara

Lourdes Retirement Village

Introduction

This report provides an assessment of the planning proposal for 95-97 Stanhope Road, Killara Lourdes Retirement Village in terms of bushfire evacuation risk, using the Bushfire Evacuation Risk Assessment methodology applied within the Deferred Areas Planning Proposal.

This methodology provides a valid assessment tool that has recently been used by Council for a Planning Proposal endorsed by the NSW Department of Planning involving consultation with NSW Police and Rural Fire Service.

The two key assessment factors of this methodology include:

- **Identification of land mapped as a Bushfire Evacuation Risk Area (SEPP 5 Seniors Exclusion Zone); and**
- **Assessment of the exit road criteria proposed by Cova (2005)**

Background information and methodology details for the Bushfire Evacuation Risk Assessment – Deferred Areas Methodology are provided within Appendix A.

SEPP 5 Seniors Exclusion Zone

The site at 95-97 Stanhope Road, Killara was not included within the Deferred Areas as it does not meet the criteria of being mapped on the Bushfire Evacuation Risk Map (SEPP 5 Seniors Exclusion Zone).



Excerpt from Bushfire Evacuation Risk Map (SEPP 5 Seniors Exclusion Zone)

While the site and surrounding area is not mapped on the Bushfire Evacuation Risk Map, the site and surrounding area is similar to the areas included the Deferred Areas Planning Proposal in terms of:

- the area being surrounded by bushfire prone land
- only a single exit road

The planning proposal is for an intensification of land uses that are deemed to be special fire protection purposes under the *Rural Fires Act 1997*, i.e accommodating vulnerable people that would pose an evacuation risk in a major bushfire event. As such, it is considered constructive to undertake an assessment of the catchment area against the Cova (2005) minimum exit road criteria.



Excerpt from Bushfire Prone Lands Map 2017

Catchment Area

The catchment area for the assessment of bushfire evacuation risk is shown outlined in red in the image below:



Aerial Photo – Outline showing Catchment Area for Assessment of Bushfire Evacuation Risk

The catchment area encompasses the area at the eastern end of Stanhope Road, from the intersection with Rosebery Road to the cul-de-sac end of Stanhope Road. The area includes the Lourdes Retirement Village and residential dwelling houses.

The catchment area was chosen using the same methodology as those areas included in the Deferred Areas Planning Proposal. In this case, all the properties in the catchment area exit on Stanhope Road, which is the only exit road from this catchment area. The catchment area ends at the intersection with Rosebery Road, as from this point there are multiple exit roads and routes for residents in the event of an evacuation.

Exit Road Criteria - Cova (2005)

The exit road/maximum dwelling criteria as proposed by Cova (2005) is:

Number of households	Minimum number of exit roads	Maximum number of households per exit
1-50	1	50
51-300	2	150
300-600	3	200
601+	4	

Table 2- Cova (2005) Proposed Minimum Exits Table

Below is an assessment of the existing catchment area against the Cova (2005) exit road criteria, and an assessment of the catchment area with the proposed increases in dwellings to the Lourdes Retirement Village which would be permissible under the amendments sought in the Planning Proposal.

It is noted that Master Plan submitted with the Planning Proposal seeks to increase the number of exit roads from the Lourdes Retirement Village, as shown in the image below:



Excerpt from Master Plan (Architectus, January 2018)

However, the proposed additional exit roads from Lourdes Retirement Village exit out onto Stanhope Road – still resulting in only one exit road from the catchment area.

Existing Catchment			
Number Exits	Number Dwellings	Recommended Maximum Dwellings	Number Over Recommended
1 Stanhope Road	Lourdes**: <ul style="list-style-type: none"> • 108 - Independent Living Units • 49 - Serviced Apartments • 83 Bed Residential Aged Care Facility* Other Stanhope Road Properties: <ul style="list-style-type: none"> • 16 Total = 256	50	206
Proposed Catchment – permissible under Planning Proposal			
Number Exits	Number Dwellings	Recommended Maximum Dwellings	Number Over Recommended
1 Stanhope Road	Lourdes**: <ul style="list-style-type: none"> • 281 - Independent Living Units (207 new + 74 existing) • 59 - Serviced Apartments • 130 - Residential Aged Care Facility* Other Stanhope Road Properties: <ul style="list-style-type: none"> • 16 Total = 486	50	436
*For the purposes of this assessment each bed in the Residential Aged Care Facility is counted as a dwelling. **The existing and proposed numbers for Lourdes Retirement Village are referenced from the Urban Design Study prepared by Architectus January 2018.			

Table 3 – Existing and Proposed Catchment Assessment – Cova (2005)

Exit Capacity Criteria - Cova (2005)

The Cova research paper also proposes assessment criteria based the exit capacity of the key access roads for an area of interest.

For this analysis, an evacuation time of 0.5 hours (30 minutes) is the target, based on the categorisation of the area as a “high+ wildfire hazard” as per the Cova (2005) categories of low, medium or high+ wildfire hazard. The categorisation of the area as high+ wildfire hazard for the purposes of the Cova (2005) exit road capacity assessment is consistent with the categorisation of much of the site as BAL29 – High Risk (Bushfire Attack Level (BAL)) or higher within the *Independent Review of Bushfire Impact* undertaken by Australian Bushfire Protection Planners.

The results of the analysis is tabulated below:

Scenario	Key Roads	No. Exits	No. Dwellings with 2 vehicles	No. Dwellings with 1 vehicles (RACF)	hh:mm estimated evacuation time for ILU, serviced apts and surrounding residential (excluding staff) *	hh:mm estimated evacuation time for RACF (excluding staff) **	hh:mm Estimated total evacuation time (Target - 30 mins)
Existing	Stanhope Road	1	173	83	0:25	0:06	0:31
Proposed	Stanhope Road	1	356	130	0:53	0:09	1:02

* based on average vehicle ownership of 2 vehicles per household leaving the area, and interrupted roadway capacity of 800vph per lane

** based on 1 vehicle per bed leaving the area, and interrupted roadway capacity of 800vph per lane)

Table 4 – Exit road capacity assessment

From this assessment, Stanhope Road currently has just enough capacity to evacuate the area in 0.5hr, but under the proposal it would take over 1 hour to evacuate the area. The proposal would therefore not meet the exit capacity criteria in the Cova (2005) research paper.

CONCLUSION

The existing catchment area has a total of 256 dwellings, exceeding the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 206 dwellings (as shown in Table 3). The amendments sought by the Planning Proposal would result in a total of 486 dwellings within the catchment area, exceeding the recommended maximum 50 dwellings for the one exit road (Stanhope Road) by 436 dwellings.

Within the catchment area, the current number of dwellings and the increased number of dwellings which would be permissible under the Planning Proposal both exceed the recommended number of dwellings for the one (1) exit road as set out by the Cova (2005) criteria. This suggests that the egress from this catchment area is inadequate in the event of evacuation from bushfire event. Currently, Stanhope Road has just enough capacity to evacuate the existing catchment within 30mins, however with the increase in population permitted under the Planning Proposal; the time taken to evacuate the catchment will increase to over 60mins (as shown in Table 4). The increase in population under the Planning Proposal exceeds the exit road capacity criteria set by Cova (2005) by 32mins.

The amendments sought by the Planning Proposal would result in almost doubling the number dwellings within the Lourdes Retirement Village. The substantial intensification of a use being a special fire protection purpose under the *Rural Fires Act* within an area that already exceeds the recommended number dwellings for the one exit road is of concern, as increasing the number of residents will only make evacuation more difficult in the event of a bushfire.

It is also of concern that the additional increase in dwellings will be occupied by residents who are highly vulnerable to the effects of bushfire, are difficult to evacuate and are more susceptible to smoke impacts, resulting in additional demands on emergency services, particularly if evacuation is required.

References

Cova, T, 2005, *Public Safety in the Urban-Wildland Interface: Should Fire-Prone Communities Have a Maximum Occupancy?*, Natural Hazards Review, vol.6, No.3, pp.99-108

Ku-ring-gai Council, 2012, *Managing Bushfire Risk, Now and Into the Future, Ku-ring-gai Principal LEP Background Study*

Appendix A – Bushfire Evacuation Risk Assessment – Deferred Areas Methodology

BACKGROUND

Background Study - Managing Bushfire Risk, Now and Into the Future

As part of the preparation of the *Ku-ring-gai Local Environmental Plan 2015*, Council prepared a background study – *Managing Bushfire Risk, Now and Into the Future* (March 2012). One of the aims of this background study was to better understand the future risk of bushfire in the Ku-ring-gai local government area.

In order to reduce the risks to people and property from bushfire, the study made a number of recommendations which focused on land use planning and development controls, such as zoning, lot sizes and lot depths.

In order to assess evacuation risk, the study considered research paper undertaken by Thomas Cova (2005) *Public Safety in the Urban-Wildland Interface: Should Fire-Prone Communities Have a Maximum Occupancy?* The focus of the paper is evacuation egress or accessibility out of an area in an evacuation. The research paper identified a range of factors that affect the capacity to evacuate during bushfire, including the capacity of the road, the type of land use and the number and location of exit roads.

The Cova research paper proposes a minimum number of exit road based on the number of households in a sensitive area:

Number of households	Minimum number of exit roads	Maximum number of households per exit
1-50	1	50
51-300	2	150
300-600	3	200
601+	4	

Table 1 - Cova (2005) Proposed Minimum Exits Table

The Cova research paper states that *'Economic pressure is strongly toward developing fire-prone communities to a density beyond which the egress system can safely handle in an urgent wildfire evacuation'*.

Within Ku-ring-gai, development has occurred in a number of locations where the local community is surrounded by extensive areas of bushfire prone vegetation, often with inadequate road networks to enable safe evacuation. Pressure to increase development in these areas has led to increasing evacuation risk to residents, including a high number of elderly and very young residents.

Land Use and Evacuation Risk

Land uses such as child care centres, schools, retirement villages, housing for seniors or people with a disability, group homes, hotels, motels or other tourist accommodation and hospitals provide for people who are particularly vulnerable during a bushfire, and increase evacuation risks in the event of a bushfire. These uses are identified as a 'special fire protection purpose' under Section 100B of the *Rural Fires Act 1997* and *Planning for Bushfire Protection 2006*. The Rural Fire Service (RFS) has noted that occupants of these types of developments are highly vulnerable to the effects of bushfire, are difficult to evacuate and are more susceptible to smoke impacts, resulting in additional demands on emergency services, particularly if evacuation is required. Section 4.2.3 of *Planning for Bushfire Protection 2006* details the following specific objectives for Special Fire Protection Purpose Developments:

1. Provide for the special characteristics and needs of occupants as they are more likely to be adversely affected by smoke or heat while being evacuated.
2. Provide for safe emergency evacuation procedures

Methodology

The background study *Managing Bushfire Risk Now and Into the Future* identified zoning as a means of managing the risks associated with bushfire and evacuation. The study recommended that environmental zones – E3 Environmental Management and E4 Environmental Living - could be applied to prevent further development of incompatible land uses (such as child care centres) in areas identified as being of high evacuation risk during a bushfire event.

The background study made the recommendation to apply the environmental zoning to sites that were:

- Identified as 'extreme' bushfire risk using the Bushfire Risk Management Plan 2010 (Hornsby and Ku-ring-gai Councils); AND
- Identified within the bushfire evacuation risk area (SEPP 5 Exclusion Zone) on the Bushfire Prone Land Map and Bushfire Evacuation Risk Map; AND
- The area does not meet the exit criteria proposed by Cova (2005).

This methodology was used to identify the areas and properties that were considered to be of high evacuation risk during the event of a bushfire and as such the environmental zoning was applied to these areas that met the methodology criteria within the *Draft Ku-ring-gai Local Environmental Plan 2013*.

Following the exhibition of the *Draft Ku-ring-gai Local Environment Plan 2013* consultation was undertaken with the RFS and Police who advised that in the event of a bushfire, emergency services would be looking at evacuating more than those properties identified as 'extreme' bushfire risk under the Bushfire Risk Management Plan 2010 (Hornsby and Ku-ring-gai).

As a result of this advice, the methodology was revised so that the areas and properties that were identified to be of high evacuation risk and should have the environmental zoning applied were:

- **Land identified as bushfire evacuation risk area (SEPP 5 Seniors Exclusion Zone) on the Bushfire Prone Land and Bushfire Evacuation Risk Map**

- **The area does not meet the exit road criteria proposed by Cova (2005)**

Deferred Areas Planning Proposal

Due to the change to the methodology, the areas that met the revised methodology criteria were deferred from inclusion within the *Ku-ring-gai Local Environmental Plan 2015* in order to allow Council to re-exhibit the proposed changes prior to making a final decision within these areas.

A Planning Proposal to include these 13 deferred areas into the *Ku-ring-gai Local Environmental Plan 2015* was prepared. The 13 areas the subject of the Planning Proposal are all surrounded by large areas bush fire prone land, and with only a single or limited exit roads from the catchment area. Some areas, like North Turramurra also have a high number of retirement village, schools and hospital which are particularly vulnerable and pose additional difficulties in the event of evacuation from bushfire events.

The Planning Proposal utilised the revised methodology in order to identify areas and properties that were of high evacuation risk during the event of bushfire, and as a result applied the E4 zone as a planning control in order to limit further development to incompatible land uses and limit further increases in residential density by limiting further subdivision.

The Planning Proposal involved extensive consultation with the NSW RFS and Police. The Planning Proposal was gazetted by the Department of Planning in January 2018.