



Building Code & Bushfire Hazard Solutions

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The General Manager
Northern Beaches Council
PO Box 882
MONA VALE NSW 1660

25th October 2019
Our Ref. 190065
Council Ref: DA2019/0762
RFS Ref: D19/2648 DA19080619905 CC

Attn: Julie Edwards

**Re: RFS REQUEST FOR FURTHER INFORMATION
131 THOMPSON STREET, SCOTLAND ISLAND**

Dear Julie,

This Statement is provided in response to the Northern Beaches Council Natural Environment Referral Response – Biodiversity for DA2019/0762.

1. *"The submitted Bushfire Assessment Report (Building Code & Bushfire Hazard Solutions Pty Limited, 13/03/2019) recommends that the whole property be maintained to Inner Protection Area standards, however no clarification was provided to indicate if any vegetation would need to be removed to satisfy this requirement (i.e. there are trees proposed to be retained which will overhang the dwelling). There are no details of tree replacement plantings in accordance with natural environment controls and whether this will be compliant with bushfire recommendations."*

Additionally, we are advised that the NSW Rural Fire Service has requested additional information be provided in relation to their correspondence dated: 27 September 2019 (Ref: D19/2648).

In accordance with due process we submit this information to Council in response to the above and for referral to the NSW Rural Fire Service for their consideration.

I conducted an additional inspection of the site and surrounding area on Wednesday 16th October 2019 in respect to the above.

I have also reviewed the Appendix I – Impact Assessment Plan from the Arboricultural Impact Assessment by Tree Report; Dated: April 2019 and as a result, I provide the following information.

Note: Trees 17 – 28, 31, 34-36 & 38 have not been included in this assessment as they are located outside the property boundary although the impact of these trees on the required APZ has been assessed.

To provide for the prescriptive requirements of an APZ in accordance with 'Planning for Bush Fire Protection' and 'Standards for Asset Protection Zones', the following trees are recommended to be removed to implement the APZ within the subject site.

Tree 9 (Low priority of retention), 16 (Medium priority for retention), and tree 32 (Medium priority for retention).

The removal of these trees will provide for sufficient canopy separation so as to not provide for direct canopy linkage to the proposed dwelling. Furthermore, trees 16 and 32 will have the canopy extending over the proposed dwelling.

Trees 11, 12 and 13 will be required to be monitored to ensure there is sufficient canopy separation from the roof/wall of the proposed dwelling (2-5m) with the possibility of some limb removal required.

Additionally, to comply with the prescriptive requirements of an APZ it is recommended that there is to be no additional planting of trees within the subject site as any increase in the number of trees within the site will potentially compromise the APZ.

There was essentially no shrub layer present within the site at the time of my inspection.

Shrubs can be included within the APZ so long as they are located in islands or clumps covering no more than 20% of the total area of the APZ and landscaping is to comply with Appendix 5 of PBP - 2006.

Additionally, the remaining trees within the site and adjacent to the property boundaries will provide for an 'Ember Trap' in the event of a fire occurring in the surrounding area.

NSW Rural Fire Service correspondence dated: 27 September 2019 (Ref: D19/2648).

An updated bush fire protection report of the proposal will need to be provided, reviewed against the provisions of 'Planning for Bush Fire Protection 2006', which addresses:

- "The location of the proposed dwelling on the subject allotment with the separation distances noted to the areas of the unmanaged bush fire hazard vegetation."*
- The unmanaged bush fire hazard vegetation located on lots 72 and 76 Thompson Street, as identified in the bush fire report, and how this impacts on the identification and determination of the separation distances employed in the Method 2 Modelling of Australian Standard 3959 2009.*
- Supporting photographic information detailing the extent of the asset protection zones on the surrounding allotments, and*
- The impact of the existing connecting tree canopy, located over and extending up from the south across the subject allotment and up to the ridge line, on the radiant heat exposure to the proposed footprint.*

In relation to the above NSW Rural Fire Service request for further information, I offer the following response:

- "The location of the proposed dwelling on the subject allotment with the separation distances noted to the areas of the unmanaged bush fire hazard vegetation."*

The separation distances indicated in the report by this company have been verified onsite and in our opinion are a true reflection of the bushfire threat to the proposed dwelling.

- The unmanaged bush fire hazard vegetation located on lots 72 and 76 Thompson Street, as identified in the bush fire report, and how this impacts on the identification and determination of the separation distances employed in the Method 2 Modelling of Australian Standard 3959 2009.*

The vegetation to the north of the subject site HN76 Thompson Street was found to be 57 metres from the proposed building footprint beyond the existing dwellings on HN76 & 78 with the front (south) portions of the allotments consisting of landscaped areas around built structures. Aerial imagery of the area shows significant shading of landscaped areas giving a perception of a higher canopy cover than is actually present.

- Supporting photographic information detailing the extent of the asset protection zones on the surrounding allotments*

Photo montage and Overlay attached.

- *The impact of the existing connecting tree canopy, located over and extending up from the south across the subject allotment and up to the ridge line, on the radiant heat exposure to the proposed footprint.*

The vegetation within neighbouring allotments to the southeast is broken by built upon areas and landscaping which does not provide for continuous fire runs toward the subject site. Furthermore the subject site is separated from any perceived hazard by the formed Thompson Street to the north & northeast and Hilda Avenue to the east which provide for a further separation of fuels and canopy.

The presence of these steep up slopes would be expected to inhibit the development of a crown fire from this aspect with the ability of this vegetation to sustain a crown fire is considered to be negligible.

The landscaped areas within the neighbouring allotments to the east and southeast consist of weeds and exotics and are not considered to be conducive to the spread of fire and the hazard beyond (east) of HN74 Thompson Street providing the highest hazard to the subject site.

A photo montage is attached to this statement highlighting the areas of managed vegetation and canopy separation.

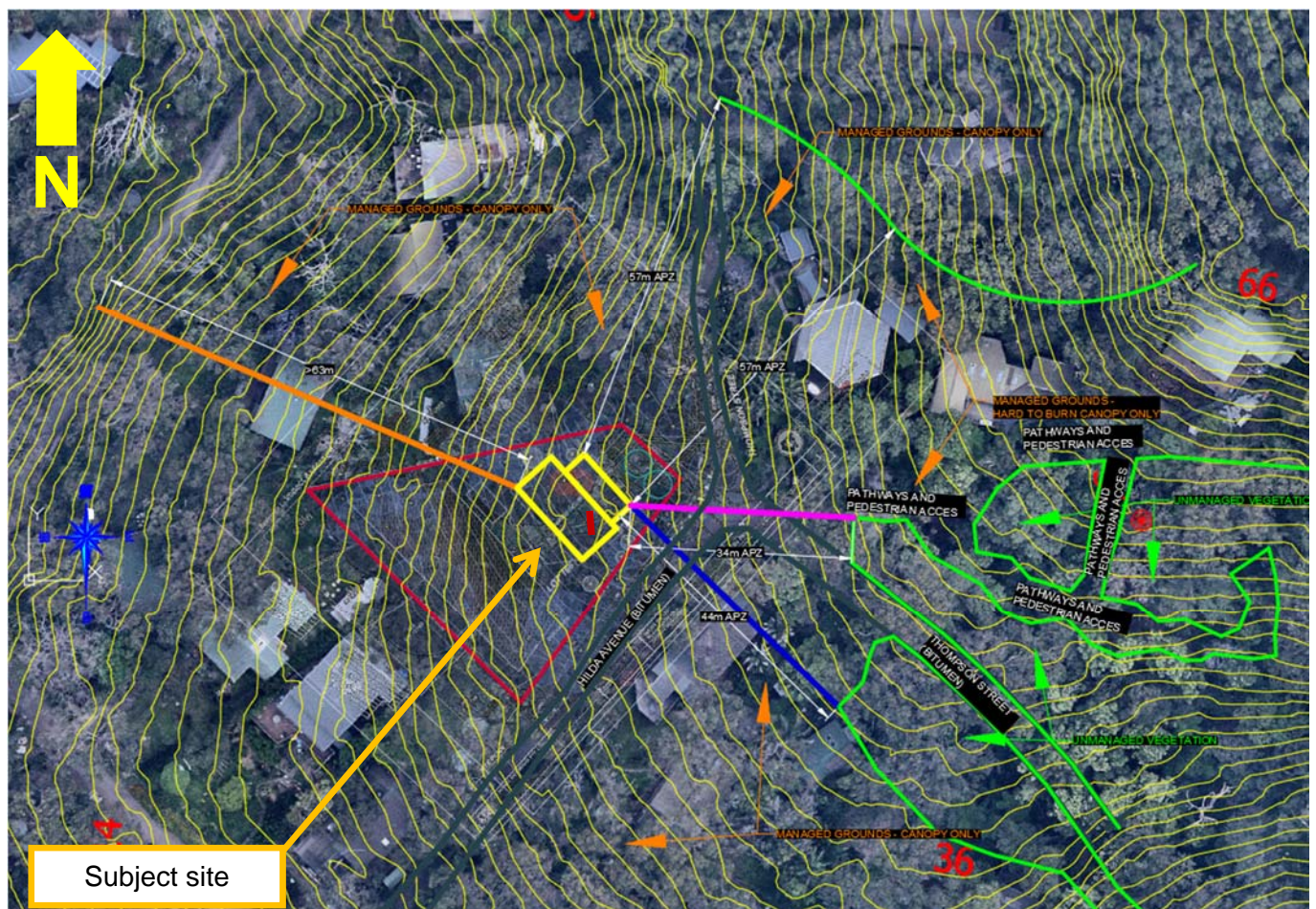


Image 01: Extract from the attached Overlay of the subject area

We trust that the information is sufficient for Council and the NSW Rural Fire Service to finalise their determination. We are available to meet either Council or the NSW Rural Fire Service should the need arise. Should you have any enquiries regarding this project please contact me at our office.

Prepared by
Building Code & Bushfire Hazard Solutions



Ian Tyerman

Bushfire Consultant
Planning for Bushfire Prone Areas – UTS Sydney

Attachment 01: Vegetation Extent Overlay of the subject area
Attachment 02: Photo Montage

COMMENT TEXT

MANAGED GROUNDS - CANOPY ONLY

MANAGED GROUNDS - CANOPY ONLY

57m APZ

57m APZ

>63m

MANAGED GROUNDS -
HARD TO BURN CANOPY ONLY

PATHWAYS AND
PEDESTRIAN ACCES

PATHWAYS AND
PEDESTRIAN ACCES

UNMANAGED VEG

PATHWAYS AND
PEDESTRIAN ACCES

PATHWAYS AND
PEDESTRIAN ACCES

UNMANAGED VEGETATION

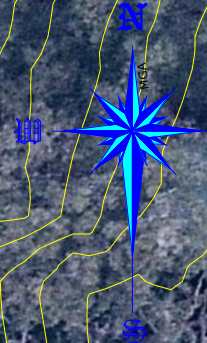
HILDA AVENUE (BITUMEN)

34m APZ

44m APZ

THOMPSON STREET
(BITUMEN)

MANAGED GROUNDS - CANOPY ONLY



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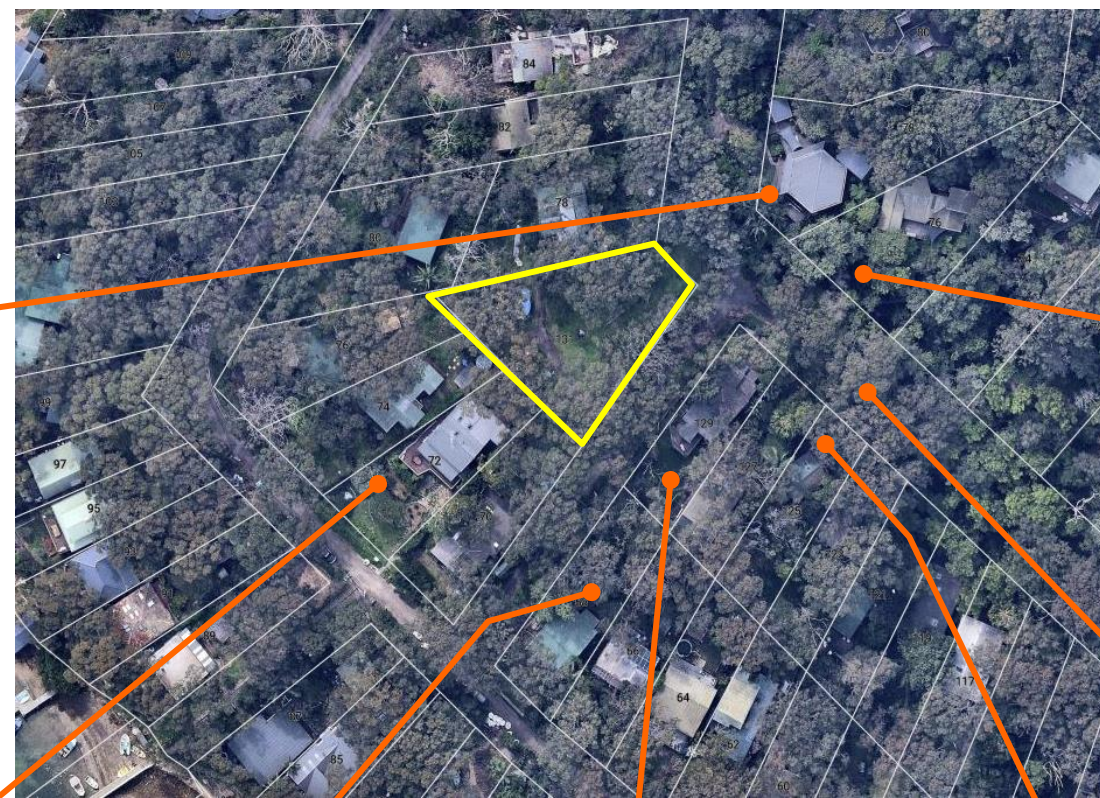


LEGEND

- WESTERN APZ
- SOUTH EASTERN TRANSECT 44m
- EASTERN TRANSECT 34m
- EXTENT OF UNMANAGED VEGETATION

**BUSHFIRE
VEGETATION
EXTENTS**

REFERENCE NO.	190065	LOT 166 DP 12749
ADDRESS	131 THOMPSON STREET, SCOTLAND ISLAND	
DATE.	25/10/2019	DRAWN BY IT SCALE: NTS
REVISION	A	REVISION DATE 24/10/2019
CLIENT	EDMUND BURKE	



Aerial view and photographic montage of
131 Thompson Street, Scotland Island

October 2019 / Our Ref: 190065 RFI