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Mr Graham McKee
Principal
McKees Legal Solutions
25 Solent Circuit
Baulkham Hills NSW 2153

Our ref: HiSC 14-697

6th March 2015

RE: Glenhaven Gardens at
Lot 102 DP 1205322
140-146 Glenhaven Road, Glenhaven

Dear Graham,

BACKGROUND

This brief ecological report is provided to accompany an application for a Site Compatibility Certificate for a proposed development at Glenhaven Gardens, 140-146 Glenhaven Road, Glenhaven.

THE SITE

The site contains a large existing seniors living development in its north eastern corner, a large stand-alone residence with extensive surrounding cleared land in its north western corner and natural bushland across the southern half of the site.

The latest available vegetation mapping produced by The Hills Shire Council indicates that the natural bushland in its southern part is made up of two vegetation types: Sydney Sandstone Gully Forest and Shale Sandstone Transition Forest, the latter being an endangered ecological community (EEC).

This mapping also shows that the Shale Sandstone Transition Forest extends to the north west and into neighbouring properties, particularly number 148 and number 150 Glenhaven Road. Mapping notations indicate that the natural vegetation closest to the existing dwellings is in relatively poor condition, being thinned.

An extract of this vegetation mapping in relation to the subject site is illustrated in Figure 1.

Although not delineated in this vegetation mapping, a row of mature eucalypts occur along the northern boundary of the site. Council has expressed concern about the affinity of these trees with the Shale Sandstone Transition Forest mapped in the local area and the potential impact to these trees.

In order to provide advice regarding this matter, I undertook a site assessment of the vegetation of the proposed development area and adjacent vegetation on 6th January 2014 and 17th November 2014.

RESULTS

My survey established that, in a broad sense, the vegetation mapping is correct for the subject site:

- The vegetation along the gully is representative of Sydney Sandstone Gully Forest (marked A on Figure 1);
- The vegetation in the site's the south east corner is consistent with Shale Sandstone Transition Forest EEC (marked B on Figure 1);
- The strip of vegetation to the north west is also consistent with Shale Sandstone Transition Forest (marked C on Figure 1).

The vegetation at the rear of number 146 is suffering from severe edge effects, with dead and dying trees, dense infestations of serious weeds (such as *Ligustrum sinense* Small-leaved Privet and *Lantana camara* Lantana) and piles of rock.

However, the vegetation mapping is only partially correct for the properties at numbers 148 and 150:

- The vegetation shown in number 148 as Shale Sandstone Transition Forest is almost entirely made up of exotic trees, lawns, gardens and outbuildings. This is not consistent with natural vegetation and certainly not Shale Sandstone Transition Forest (marked D on Figure 1);
- The vegetation in the northern part of number 150 is almost entirely planted with exotic trees, native Australian trees not native to the local area, lawns, gardens and outbuildings. This cannot be regarded as an example of Shale Sandstone Transition Forest, even with a "thinned" condition qualifier(marked E on Figure 1); and
- The vegetation in the southern part of number 150 is consistent with Shale Sandstone Transition Forest, albeit with a somewhat disturbed understorey (marked F on Figure 1).

The four trees along the northern boundary (marked G on Figure 1) have been planted:

- Their size indicates that they are all of a similar age;
- They occur in a straight line along the boundary; and
- They are *Eucalyptus microcorys* Tallowwood. This species is not locally native, occurring naturally no further than the Central Coast north of the Hawkesbury River.

THE PROPOSAL

An earlier iteration of the design indicated that removal of native vegetation was necessary for the implementation of an Asset Protection Zone. This had the potential to impose an impact on the Shale Sandstone Transition Forest EEC and other ecological features.

As a result of the site inspections and the latest design in response to those inspections (preliminary issue dated 19/11/14 and prepared by NBRS+Partners), the bushfire impact assessment indicates that the proposed buildings will be at least 88 metres from the naturally vegetated hazard to the south west (area F) and 100 metres from the hazard to the south (areas A, B and C) (draft received 8th December 2014, prepared by Building Code and Bushfire Hazard Solutions).

This separation is sufficient for bushfire protection: no clearing of vegetation within areas A, B or F is required or proposed.

POTENTIAL ECOLOGICAL IMPACTS

The latest proposal will have no direct impact on any threatened species, endangered populations, endangered ecological communities or their habitats that have been established to occur to the south and west.

Potential indirect impacts such as stormwater runoff and mobilisation of soil are also unlikely to occur due to the distance from the works. Moreover, these impacts are routinely controlled by the implementation of standard stormwater management and sediment and erosion controls.

It is therefore concluded that no further consideration of potential ecological impacts are required.

The tree protection zones (TPZs) of the trees along the northern boundary have been calculated and are shown approximately in relation to a detailed extract of the proposed layout in Figure 2. This plan will result in incursions to the TPZs of trees 2, 3 and 4 (shown in red). While it is considered that it is likely that the proposal will not require the removal of these trees, it is recommended that an arborist is consulted in regard to their long term protection.

I trust that this information is of assistance. If you require any further explanation or more information, please do not hesitate to contact me.

Yours sincerely,

Elizabeth Ashby

Elizabeth Ashby
Principal Consultant

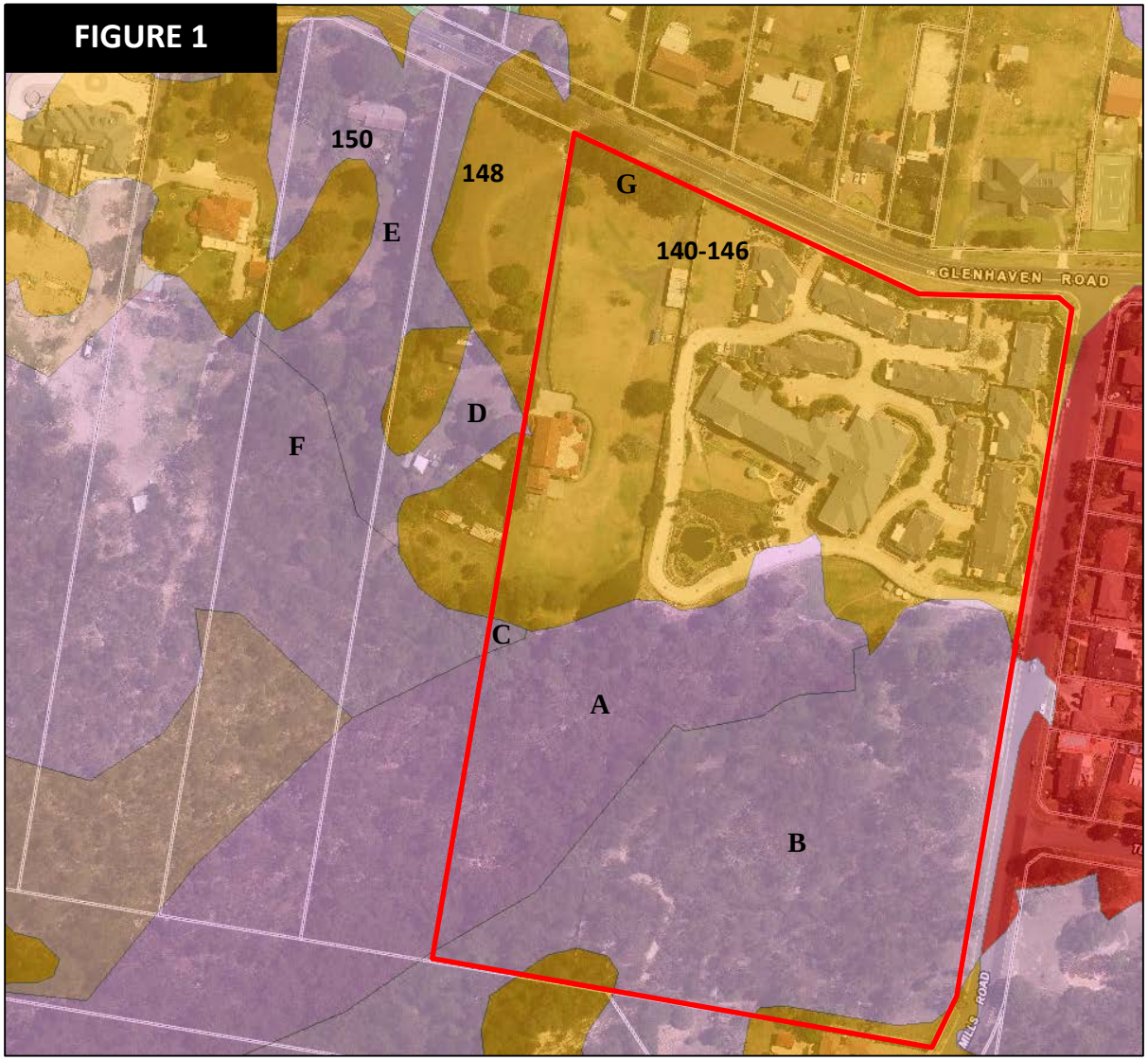
FIGURE 1
150
148
E
G
140-146
GLENHAVEN ROAD
D
F
C
A
B
MILLS ROAD

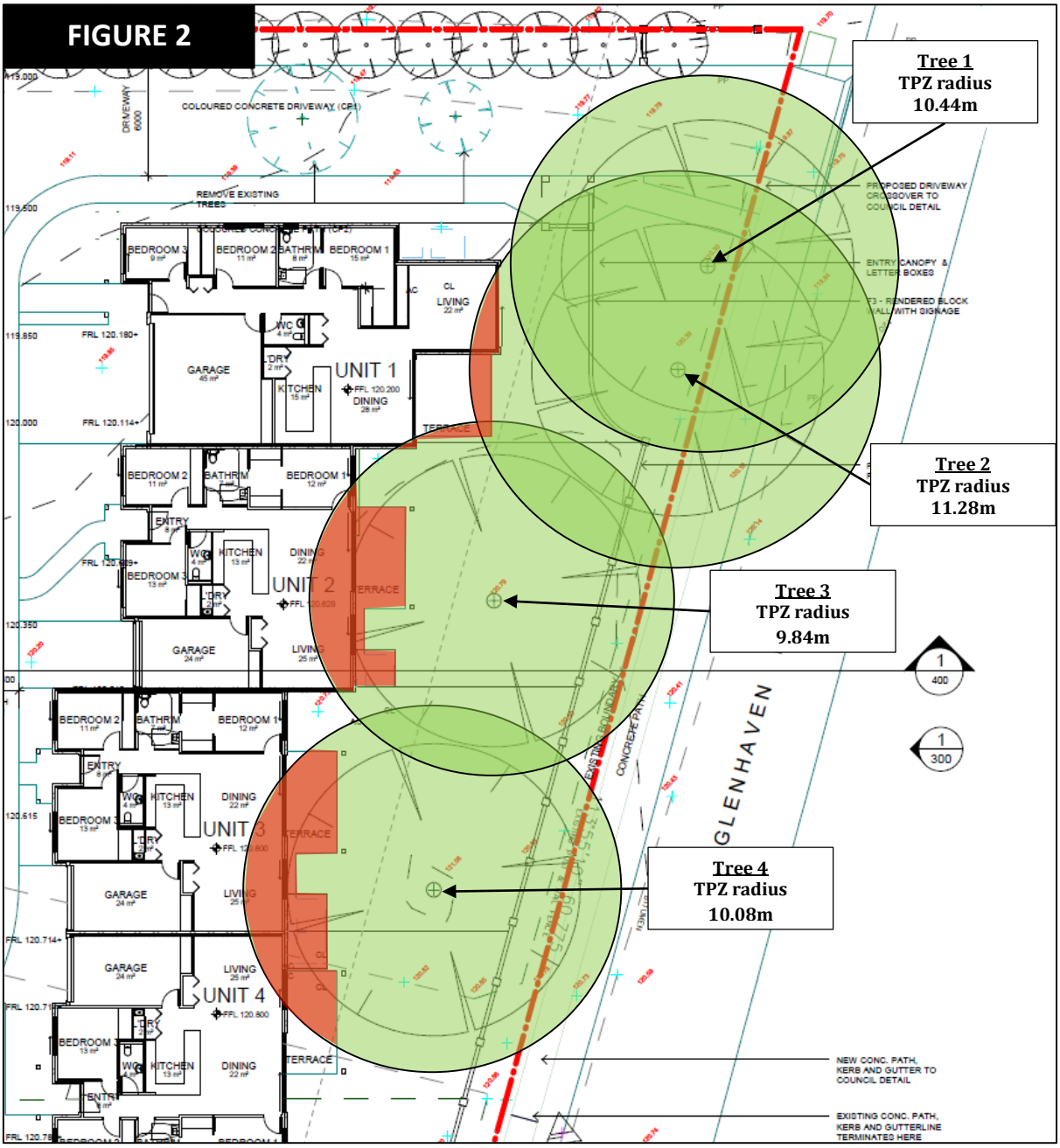
FIGURE 2
Tree 1
TPZ radius
10.44m
Tree 2
TPZ radius
11.28m
Tree 3
TPZ radius
9.84m
Tree 4
TPZ radius
10.08m
COLOURED CONCRETE DRIVEWAY (CP1)
REMOVE EXISTING TREES
PROPOSED DRIVEWAY CROSSOVER TO COUNCIL DETAIL
ENTRY CANOPY & LETTER BOXES
F3 - RENDERED BLOCK WALL WITH SIGNAGE
UNIT 1
UNIT 2
UNIT 3
UNIT 4
GARAGE
BEDROOM 1
BEDROOM 2
BEDROOM 3
BATHRM
KITCHEN
DINING
LIVING
TERRACE
ENTRY
GLENHAVEN
NEW CONC. PATH, KERB AND GUTTER TO COUNCIL DETAIL
EXISTING CONC. PATH, KERB AND GUTTERLINE TERMINATES HERE