



## Office of Water

7 April 2011

Mr Michael Woodland  
Department of Planning  
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**Attention: Simon Truong**

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Our ref : ER21478  
Your ref: MP08\_0207 & MP10\_0219

Dear Sir

**MP08\_0207 and MP10\_0219 – Concept Plan and Project Application residential development at Avon, Beechworth and Arilla Roads, Pymble - Environmental Assessment – Ku-ring-gai Local Government Area**

Thank you for your letter of 25 March 2011 seeking comment from the NSW Office of Water (NOW) on the Environmental Assessment (EA) for the above major project proposal.

The NOW's key issues are outlined in Attachment A.

**Contact Details**

Should you have any queries in relation to this matter please contact Janne Grose on telephone (02) 4729 8262.

Yours sincerely

**Mark Mignanelli**  
**Manager Major Projects and Assessment**

## NSW Office of Water Comments

### Residential development - Avon, Beechworth and Arilla Roads, Pymble - Environmental Assessment

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#### Riparian land

The Environmental Assessment (EA) and accompanying reports indicate the drainage line on the site is not identified as a creek on the 1:25 000 Hornsby topographic map. While the drainage line is not shown as a 'blue line' on the topographic map, this does not necessarily mean it is not a 'river' as defined under the Water Management Act. Small headwater streams can be 'rivers' but are usually too small to be seen on air photos or picked up by laser altimeter imagery, mainly due to the problems of scale and obscuring by dense vegetation, shadows etc.

The EA notes the drainage line is mapped under Ku-ring-gai Council's Riparian Policy and the Ku-ring-gai (Town Centres) LEP 2010 as a Category 3 riparian zone with a minimum core riparian zone width of 10 m measured from the top of both banks (see page 74). The NOW supports the proposed provision of a 10 m wide riparian zone (measured from the top of both banks) along either side of the creek.

Section 3.6 of the EA states "*the natural drainage line creates an opportunity for the development of native ecosystems that mirror the natural vegetated values of the area, enhancing the canopy, mid-storey, lower storey and ground cover layer*" (page 29) but this conflicts with Section 4.7 of the EA which notes the 20 m wide riparian zone must also be managed for bush fire mitigation. It is recommended any APZ requirements are located outside the riparian corridor so as not to compromise the future function, management and biological diversity of the rehabilitated riparian land.

The NOW supports the proposed removal of weeds and replanting of the riparian corridor with local native riparian plant species but it is concerned that the Site Concept Plan does not clearly label and identify the creek and proposed riparian corridor. The NOW recommends as a condition of approval that a minimum 10 m wide riparian corridor be established either side of the creek (measured from top of bank).

It is noted in the Sites Report Compliance Table (Table 4, page 54 of the EA) that no drainage detention structures are located in the riparian zone. The NOW supports the locating of drainage structures outside the riparian zone.

The Landscape Masterplan (Appendix 17, drawing No. LA01) appears to show that a pathway is proposed to be located within the riparian corridor. The NOW recommends the path is located outside the riparian zone (with the exception of crossings). The locating of a path in the riparian zone would prevent the rehabilitation of riparian vegetation and would decrease the function of the riparian land and biological diversity. It is recommended the Statement of Commitment 15 (appendix 38, page 3) is amended to state any pathways (with the exception of crossings) shall be located outside the riparian zone. The NOW recommends as a condition of approval that any proposed buildings or structures associated with the proposal are located outside the riparian corridor.

It is noted in Section 3.2 of the EA that approval is sought to demolish all existing structures on the site (page 26) and that the creek has been significantly altered to accommodate the existing dwelling and driveway at 1 Arilla Road (see Section 2.2, page 19). The VMP notes the drainage line will have "*removal of weed infestation and bank stability measures and reinstatement of vegetation association related to the soil types in this area as a high priority*" (Appendix 18, page 15). The redevelopment of the site provides an opportunity to rehabilitate the creek to mimic a stable naturalised system and to provide a rehabilitated riparian zone. The locating of the existing dwelling immediately adjacent to the channel as shown in Photo 6 (Appendix 3) is not appropriate and the redevelopment of the site provides an opportunity to improve the creek and riparian outcome. It is recommended the creek rehabilitation works (bed and bank stabilisation works etc) are maintained and monitored for a minimum period of at least 2 years or until they are identified as stable by an independent suitably qualified certifier. It is recommended the Statement of Commitment (14) includes the drainage line is to be rehabilitated to mimic a stable natural system.

Section 3.6 of the EA indicates that the maintenance period of the revegetation area along the drainage line will be for a 12 month period (page 30). The Planting Matrix plans (Appendix 17, drawing LA03) also indicate a 12 month maintenance period is proposed for the drainage line. The NOW recommends longer maintenance periods are applied rather than shorter periods as the longer the proponent maintains the riparian vegetation the better as the vegetation becomes more established and is able to compete with fringe effects such as weeding, trampling, litter, etc. Longer maintenance periods will also enable Council's Tree Preservation Order to apply so as to protect the riparian trees from being cleared. Under the Tree Preservation Order a tree is defined as a perennial plant with self supporting stems that are more than 3 metres or has a trunk diameter more than 150mm measured 1 metre above ground level. NOW has found that following shorter maintenance periods, riparian trees are being destroyed because they have not grown to reach a size that can be protected by Council's tree preservation orders. The NOW recommends the maintenance requirements should extend for a minimum of two years after the completion of works or until such time as a minimum 80% survival rate for all plantings and a maximum five percent (5%) weed cover for the treated riparian corridor is achieved.

### **Water Licensing**

The NOW notes the proposed development will involve basement excavations and the excavations may intersect some of the groundwater flows. It is also noted the flow quantity would be relatively minor and readily controllable (see Appendix 15, Geotechnical Assessment, section 4.4).

A licence under Part 5 of the *Water Act 1912* may be required from the NOW. The proponent needs to contact Mr Wayne Connors at the NOW for water licensing queries on phone: 9895 7194 or after the 22 April on phone: 8838 7531.

**End Attachment A  
7 April 2011**