

Memorandum

TO: Andy Turner – Manager, City Planning
COPY TO: Nick Rigby – Manager, Environmental Sustainability
FROM: Matthew Chambers – Program Leader, Natural Area Management
DATE: 5 January 2012 **FILE:**
SUBJECT: Environmental Constraints associated with Lawson Business Park, 17 Johns St Lawson.

1.0 Introduction

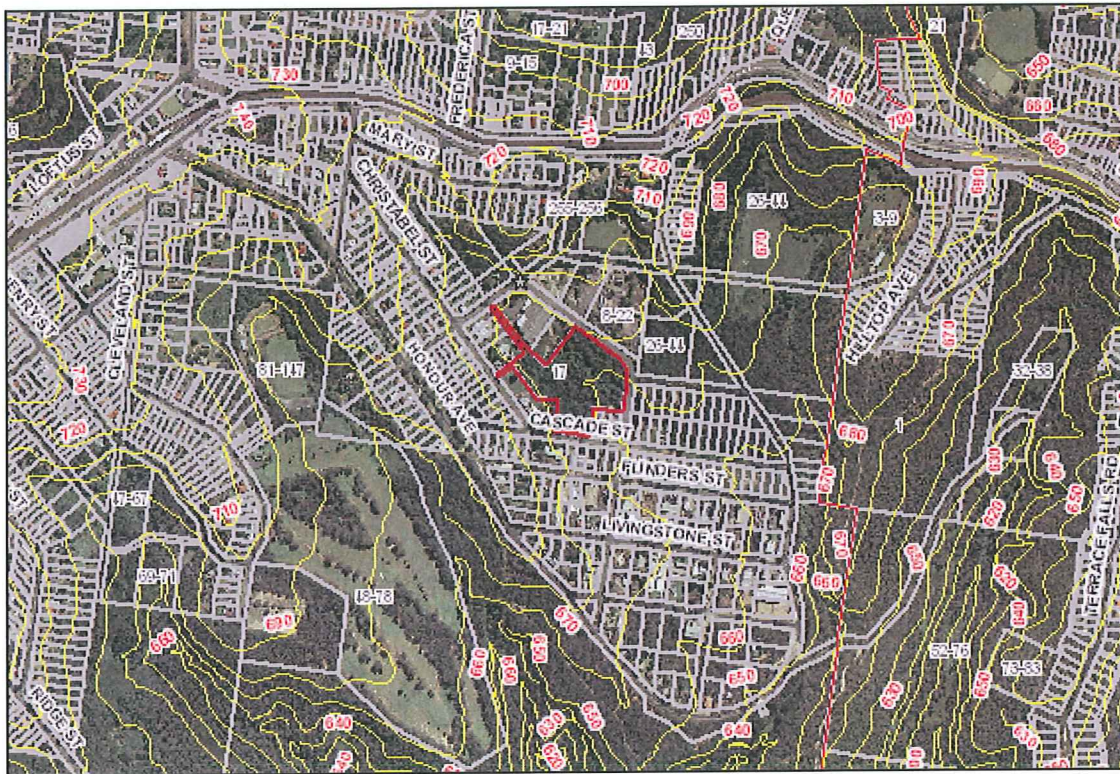
This memo has been prepared following a request from City Planning to receive an indication of the potential environmental constraints associated with the subject site at 17 Johns St, Lawson. The report has considered threatened species and ecological communities and protected area zonings, including slope, ecological buffers and watercourses.

In preparation of this report, a review of Council's GIS database was undertaken. No specific field assessment has been undertaken to assist production of this memo. The content for this memo should not be taken as a complete and detailed assessment of the issues and further investigation of the issues should be undertaken to inform any determination on the matter.

2.0 The Site

- 2.1 The site is situated in Lawson Business Park which is located in South Lawson industrial area. Surrounding land use is predominantly industrial in nature.
 - 2.2 The site is an irregularly shaped parcel within the confines of John, Christabel, Park and Cascade Streets, Lawson. The parcel has a frontage to all four roads.
 - 2.3 The parcel is described as 17 John St, Lawson (Lot 9 DP 255987) and is approximately 2.96 ha in extent.
 - 2.4 The land is owned by Blue Mountains City Council and is classified as Operational Land.
 - 2.5 Figure 1 shows the location of the land in question and its position in the landscape.
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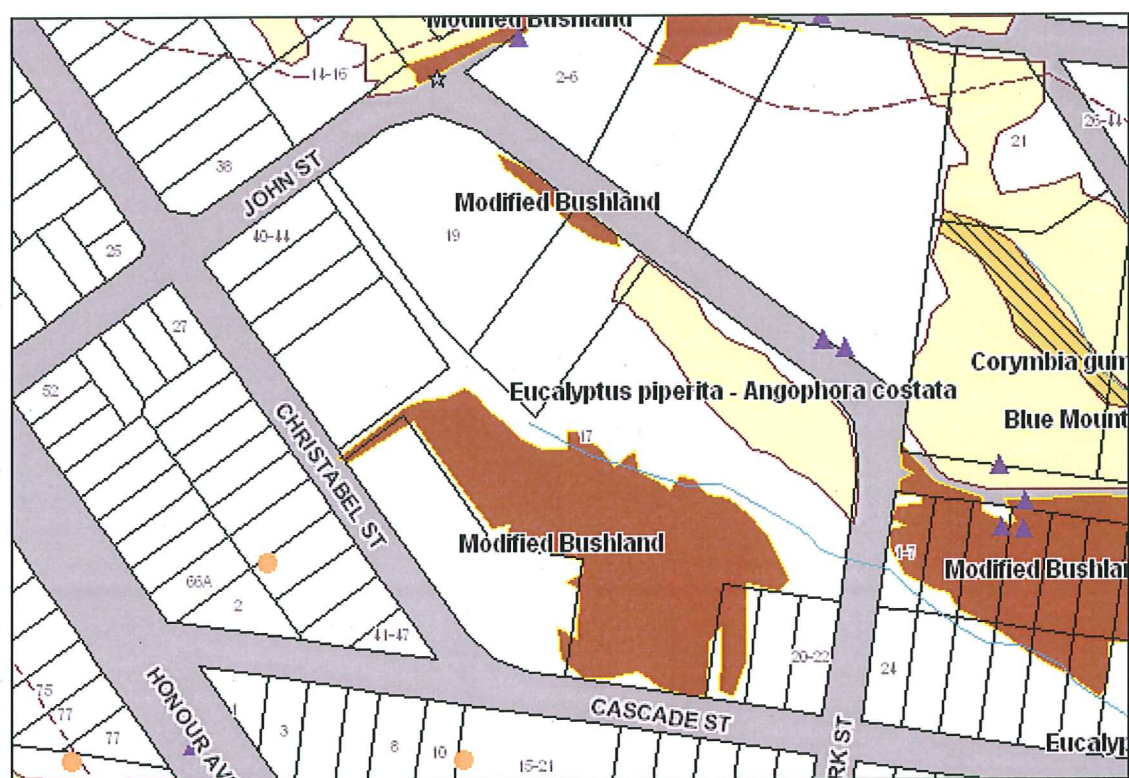
Figure 1: Location of the subject site



3.0 Vegetation

- 3.1 Council's vegetation mapping indicates the presence of modified bushland, *Eucalyptus piperita*-*Angophora costata* woodland and unmapped lands and is shown in Figure 2.
- 3.2 The vegetation fronting Cascade St was verified as modified bushland comprising of disturbed *E. piperita*-*E. seiberi* woodland with a dominant understorey of *Pittosporum undulatum*. The unmapped vegetation along the water course was verified as *E. piperita*-*E. seiberi* woodland.
- 3.3 Councils vegetation mapping does not identified the presence of protected vegetation as listed under Scheduled 5 LEP 2005, and this was verified by inspection.

Figure 2: Council's vegetation mapping for the site

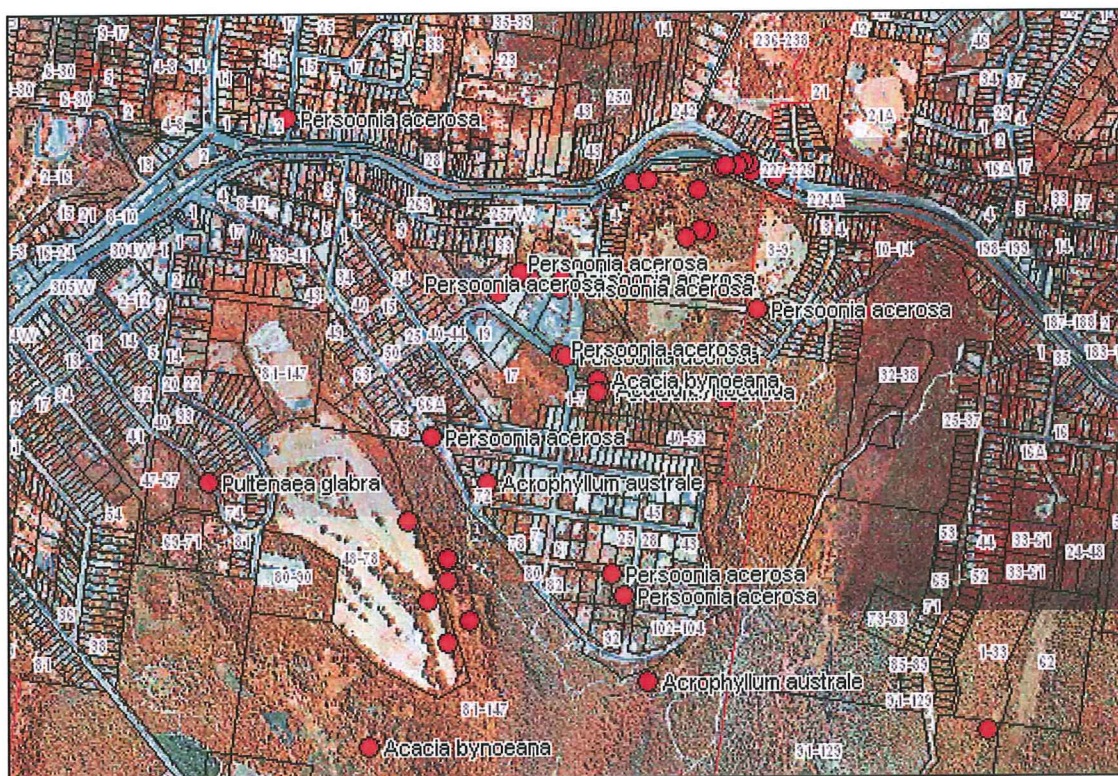


4.0 Threatened Species, Populations and Ecological Communities

- 4.1 A review of Wildlife Atlas data held by Council at the date of the preparation of this report shows no record of threatened species, populations of communities on the subject site.
- 4.2 The Wildlife Atlas shows four species of NSW listed threatened flora, *Persoonia acerosa*, *Acacia bynoeana*, *Pultenaea glabra* and *Acrophyllum australe*, as being recorded within 1 km of the site, as shown in Figure 3.
- 4.3 The subject site provides marginal habitat for *Persoonia acerosa*, *Acacia bynoeana*, and *Pultenaea glabra* as it has been substantially disturbed.
- 4.4 A field inspection was conducted on 6 January 2012 in the vicinity of Cascade St for 1 ½ hr. No threatened flora were observed, however the vegetation in this area is dense and further survey would be required to provide a definitive answer whether threatened flora are present. It was observed that the mid storey of *P.undulatum* is very dense in this area and does not provide suitable conditions for sustaining the three threatened flora in question.
- 4.5 The Wildlife Atlas shows four NSW listed threatened fauna, Eastern Bent-wing Bat, False Pipistrelle, Spotted-tailed Quoll and Gang-gang Cockatoo, as being recorded within 1 km of the site, as shown in Figure 4.
- 4.6 The subject site would provide suitable foraging habitat for the Eastern Bent-wing Bat, False Pipistrelle, Spotted-tailed Quoll and Gang-gang Cockatoo. Suitable refuge or breeding habitat was not observed.

- 4.7 *Persoonia acerosa*, *Acacia bynoeana*, *Pultenaea glabra*, *Acrophyllum australe* and the Spotted-tailed Quoll are all listed as Vulnerable under the Commonwealth EPBC Act.
- 4.8 There is the potential for threatened species to be present and a detailed fauna and flora assessment should be undertaken to determine the development potential of the subject site. The assessment should be compliant with Section 43 of LEP 2005 and should include a test for significance.
- 4.9 A significant impact on a matter of national environmental significance, in this case the aforementioned threatened species listed as Vulnerable under the EPBC Act, must obtain approval from the Commonwealth.
- 4.10 Council vegetation mapping shows the presence of the Commonwealth and NSW listed Blue Mountains Swamp 360 m downstream of the subject site, as shown in Figure 5. The indirect impacts of a development on this community must be considered.

Figure 3: Threatened flora Wildlife Atlas data



5.0 Watercourse

- 5.1 A first order stream is located within the subject site, and is shown in Figure 6.
- 5.2 The position of the stream has been mapped with a GPS and is shown in dark blue in Figure 6, and correlates to Council's GIS creek layer shown in light blue.
- 5.3 The watercourse is in reasonable condition both structurally and in terms of aquatic fauna.

Figure 4: Threatened fauna Wildlife Atlas data

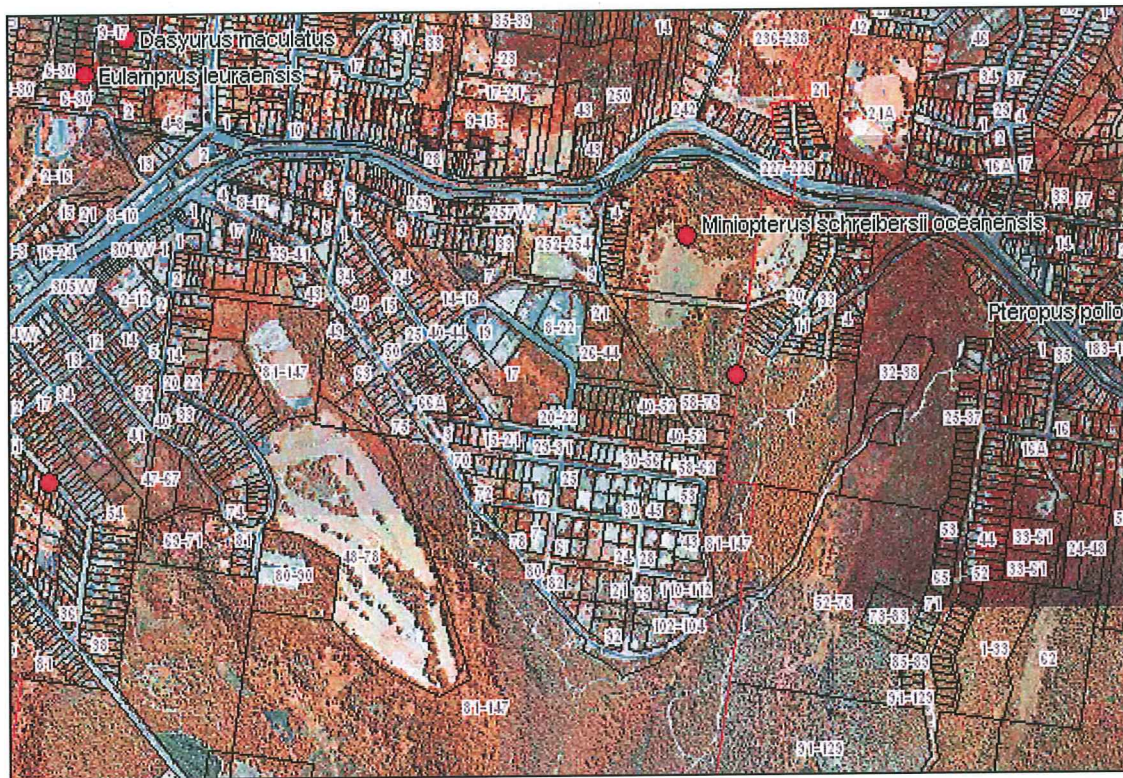


Figure 5: Location of Blue Mountains Swamp in relation to the subject site.

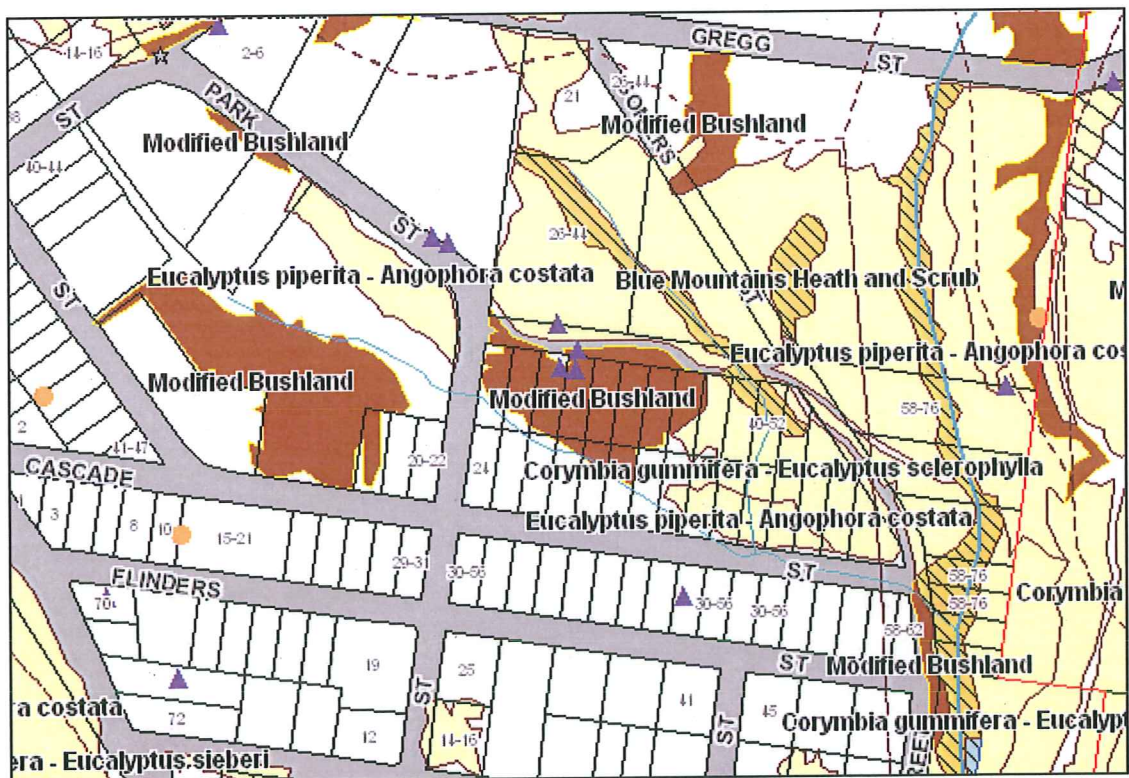


Figure 6: Location of mapped watercourse and LEP Protected Areas



6.0 Protected Area Zonings

6.1 Figure 6 shows the Protected Area zones gazetted under LEP 2005.

6.2 A Protected Area -Ecological Buffer, depicted as the green hashed area in Figure 6, has been declared under LEP 2005. The buffer surrounds land zoned Environmental Protection – Private and provides protection to the riparian area. However, the position of the creek was physically verified and the majority of its alignment falls outside of the Protected Area zoning.

6.3 The verified position of the creek is shown in dark blue in Figure 6. A 10 m buffer has been placed around the creek illustrating the extent of the Ecological Buffer that would be applied.

6.4 A Protected Area – Slope Constraint zone, depicted as the pink area in Figure 6, has been declared under LEP 2005. A detailed survey would be required to clarify the gradient of the land and the development potential of the site. However, physical inspection found the land to be generally level and did not appear to warrant any Protected Area - Slope Constraint zoning.

7.0 Storm Water Management

7.1 The creek maintained an incised channel that was on average over a metre deep and more than 2 m wide suggesting sufficient hydrological relief to accommodate further development in the catchment. However, a proper hydrological analysis would be required to confirm this observation.

7.2 The portion of the creek at the rear of 18-22 Cascade St is more degraded and could accommodate infrastructure to improve stormwater quality or mitigate

flooding. Reducing the impact of urban stormwater on the nationally listed Blue Mountains Swamp that is situated downstream of the subject site would be beneficial.

8.0 Summary

- 8.1 Threatened flora was not observed in the vicinity of Cascade St following a 1 ½ hr inspection. Threatened fauna and flora may still be present on the subject site and a formal assessment would be required in order to reach a determination. The assessment should include a test of significance and the outcome of this would determine whether the matter needs to be referred to the Commonwealth for consideration.
- 8.2 Verification of the creek has shown that the Ecological Buffer for the purpose of assessing a development application would be in a different position to the Protected Area - Ecological Buffer zone declared under LEP 2005. A more accurate position of the buffer is shown in Figure 6 and survey would be required for final verification.
- 8.3 Infrastructure to improve stormwater or mitigate flooding could be accommodated within the creek at the rear of 18-22 Cascade St.
- 8.4 The area near Cascade St is generally level and does not appear to warrant a Slope Constraint zoning. A survey would be required to determine the gradient of the land.

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