

File No: 603
13th September 2018

Stuart Dixon-Smith
Broken Head Quarry
Cnr Broken Head Rd & Natural Lane
SUFFOLK PARK NSW 2481

Dear Stuart

RE: INVENTORY OF PLANTINGS, W3 AREA, BROKEN HEAD QUARRY

Background

On the 20th August 2018 an Enforceable Undertaking was finalised that details future rehabilitation works to be completed at the Broken Head Quarry site. Undertaking 4.1 (f) requires that Leadshine undertake an inventory of existing plantings within the area identified as W3 in the undertaking.

This area is shown in **FIGURE 1**.

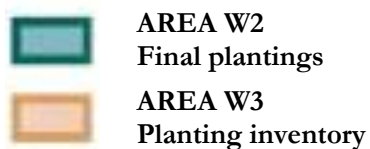


FIGURE 1 PLANTING INVENTORY AREA

Site assessment

A site assessment of this area was completed on the 12th of September 2018. A general flora survey was completed throughout this area to identify native and exotic species growing within the planting inventory area. Vegetation in this area consists of naturally occurring regrowth on the previously cleared hillslope that has largely established from the existing seedbank following initial clearing. This area has not been subject to plantings with the possible exception of a small number of Blackbutt trees.

Tree species common in this area (including those currently present as saplings) include Blackbutt, Brushbox, Blackwood wattle, Cheese tree, Blueberry ash, Pink euodia, Bleeding heart, Geebung, Satinwood and Brown kurrajong (see **FIGURE 2**).

There is a relatively dense growth of native shrubs throughout most of this area including Narrow-leaved acacia, Coast wattle, Rainbow fern and Midjinberry with additional patchy growth of native groundcovers including Gahnia, Spiny-headed mat-rush and Sandfly zieria.

Weed species including Paspalum and other grasses, Tobacco bush, Blue billygoat weed, Lantana and Narrow-leaved cottonbush occur throughout at generally low densities although some larger grass patches are present.



FIGURE 2 VEGETATION ESTABLISHED WITHIN THE W3 INVENTORY AREA

Conclusion and recommendations

The vegetation community establishing in this area is representative of the target vegetation community identified for this area and is compatible with the existing vegetation in neighbouring areas of retained vegetation and the future Blackbutt Forest to be established in this part of the site. It supports a healthy component of canopy species (primarily Blackbutt and Brushbox) amongst a high proportion of shorter-lived locally occurring pioneer species and a developing wetter rainforest midstorey. This is desirable in establishing a healthy climax community as it protects and encourages growth of canopy species and slower growing midstorey shrubs and trees.

The area will require ongoing weed control and assisted natural regeneration as part of the overall rehabilitation works in the Western Quarry Sector. At this stage it is considered that additional supplementary plantings in this area are not required.

Please contact me if you require any further information.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mark Free', with a stylized, cursive script.

Mark Free
MANAGER / PRINCIPAL ECOLOGIST