

Project: Fairview Ecological Assessment Report – Proposed Hub HCS04 Laydown	Reference: 221708
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To:	Copy:	Circulate:	Name:	Organisation:	Location/Facsimile:
<input type="checkbox"/>			Paul Wybrew	Santos Pty Ltd	32 Turbot St, Brisbane
From:	Aurecon C/o Vanessa Boettcher			Date: 5 October 2011	Total pages: 9

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Subject: Fairview Ecological Assessment Report – Proposed Hub HCS04 Laydown (Lot 8 on AB200)
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Dear Mr Wybrew,

This memo is in relation to the ground-truthing of the proposed Hub HCS04 (herein referred to as the 'proposed development area') that occurs within Lot 8 on AB200. These areas are additional development areas associated with the proposed Hub HCS04 at Fairview. A previous report has been submitted addressing the proposed disturbance areas on Lot 8 AB200 (Santos document id: 0020-GLNG-4-1.3-0033) and this report should be read in conjunction with the existing Lot 8 AB200 report.

## 1.1 Hub HCS04 – Laydown A (FV-GD-021)

### 1.1.1 General

The Hub HCS04 – Laydown A proposed development area is located within an existing clearing, to the north of an unnamed access track (Figure 1).

The proposed development area is mapped entirely as non-remnant vegetation on the Department of Environment and Resource Management (DERM) Regional Ecosystem (RE) Mapping. Ground-truthing of the proposed development area has confirmed that the DERM Mapping is accurate.

No Environmentally Sensitive Areas (ESAs) are mapped within or immediately adjacent to this proposed development area. The closest mapped ESA (Category C) is located approximately 500 m to the north-east, in association with a mapped referable wetland.

No mapped watercourses occur within the proposed development area. The closest watercourse (stream order 1) is mapped approximately 260 m to the north-east.

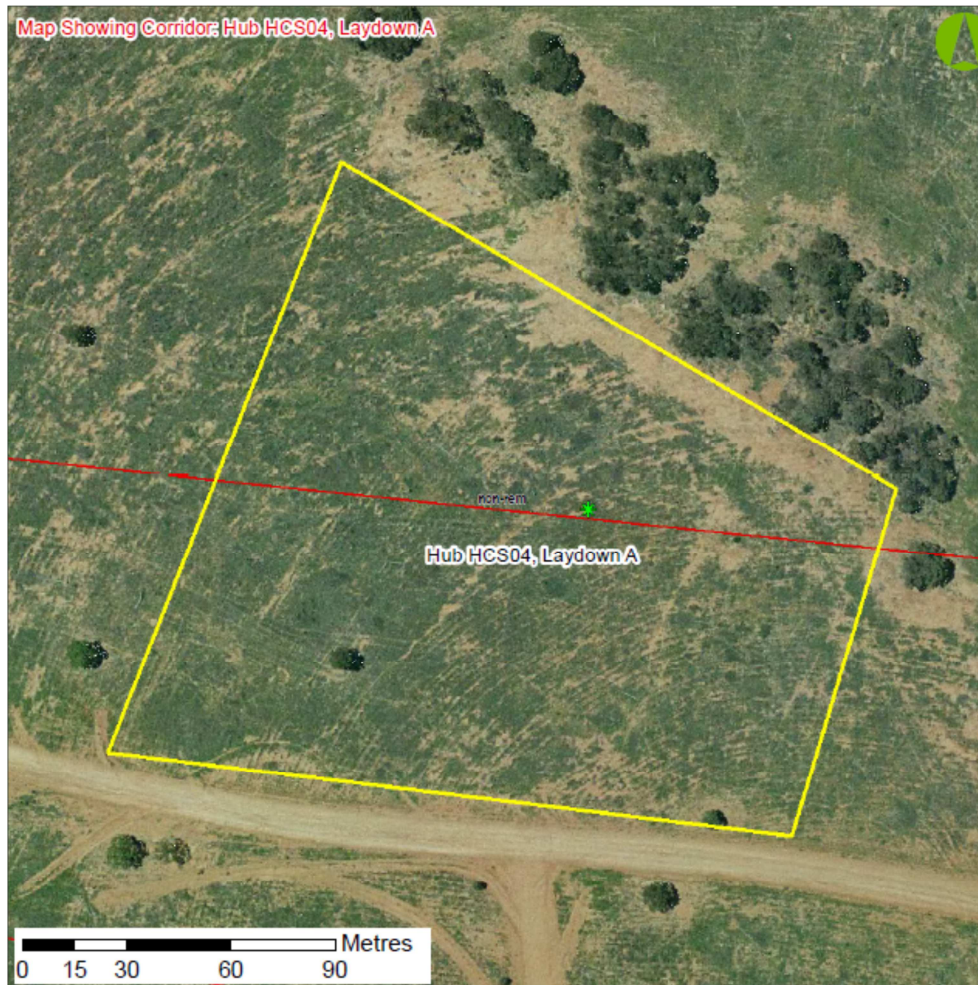


Figure 1 Hub HCS04 – Laydown A Proposed Development Area

## 1.1.2 Floristics

The proposed development area is considered a highly modified environment, as a result of historical vegetation clearing and current grazing practices. The proposed development area occurs entirely within non-remnant vegetation.

The low canopy stratum within the cleared development footprint is considered very sparse (~1%), and is typically represented by *Eucalyptus melanophloia* (Silver-leaved ironbark). The heights of the few canopy trees recorded averaged approximately 8 m.

The shrub stratum recorded with this proposed development area is also considered very sparse (~2%), with an average height of 1.5 m. Species representing this stratum include *Acacia decora* (Pretty wattle), *Hakea lorea* (Bootlace oak), *Eucalyptus melanophloia* (Silver-leaved ironbark) and *Dodonaea viscosa* (Sticky hopbush).

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The dense (~95%) ground cover stratum is dominated by *Pennisetum ciliare* (Buffel grass), with occurrences of *Verbena tenuisecta* (Mayne’s curse), *Eragrostis brownii* (Brown’s lovegrass), *Pterocaulon sphacelatum* (Apple bush) and *Brachyscome dentata* (Lobe-seed daisy).

One Type A restricted plant (under the provisions of the NC Act) was detected within the proposed development area. The details of this record are presented in Table 1. No other species of ‘conservation significance’ under the provisions of the NC Act or EPBC Act were observed within the proposed development area.

A list of flora species observed within the proposed development area is provided in Appendix A.

**Table 1 Location of Type A Restricted Plants (NC Act) within Hub HCS04 – Laydown A Proposed Development Area**

Species	Easting (GDA 94, Zone 55J)	Northing (GDA 94, Zone 55J)
<i>Brachychiton populneus</i> (Juvenile 1.5 m)	703213	7153263

### 1.1.3 Habitat values

Habitat features associated with the proposed development area include:

- Dense groundcover vegetation (ie grassy tussocks)
- Woody debris (ie fallen/felled timber, including hollow-bearing log)

The habitat value of the proposed development area can be considered to be low overall, especially for EVNT species, given its highly modified state. Notwithstanding, the proposed development area provides limited sources of fauna habitat, particularly for more common species normally associated with disturbed sites. The scattered trees provide foraging, refuge and nesting niches for some larger bird species, such as *Corvus orru* (Torresian crows) and *Gymnorhina tibicen* (Magpies).

Three (3) incidental fauna species were recorded within the proposed development area, as indicated in

Table 2 below. All of these species are listed as Least Concern under the provisions of the NC Act, and are not listed under the provisions of the EPBC Act.

**Table 2 Incidental fauna species recorded within Hub HCS04 – Laydown A proposed development area**

Species	Common name
<i>Gymnorhina tibicen</i>	Australian magpie
<i>Malurus lamberti</i>	Variegated fairy wren
<i>Smicronis brevirostris</i>	Weebill

## 1.2 Hub HCS04 – Laydown B (FV-GD-022) and Laydown C (FV-GD-023)

### 1.2.1 General

The Hub HCS04 – Laydown B and Laydown C proposed development area is located within an existing clearing, immediately to the south of Hub HCS04 – Laydown A (FV-GD-021) proposed development area (Figures 2 and 3).

The proposed development area is mapped entirely as non-remnant vegetation on the DERM RE Mapping. Ground-truthing of the proposed development area has confirmed that the DERM Mapping is accurate.

No ESAs are mapped within or immediately adjacent to this proposed development area. The closest mapped ESA (category C) occurs approximately 700 m to the east, in association with a mapped Of Concern RE.

No mapped watercourses occur within the proposed development area. The closest watercourse (stream order 1) is mapped approximately 550 m to the east.

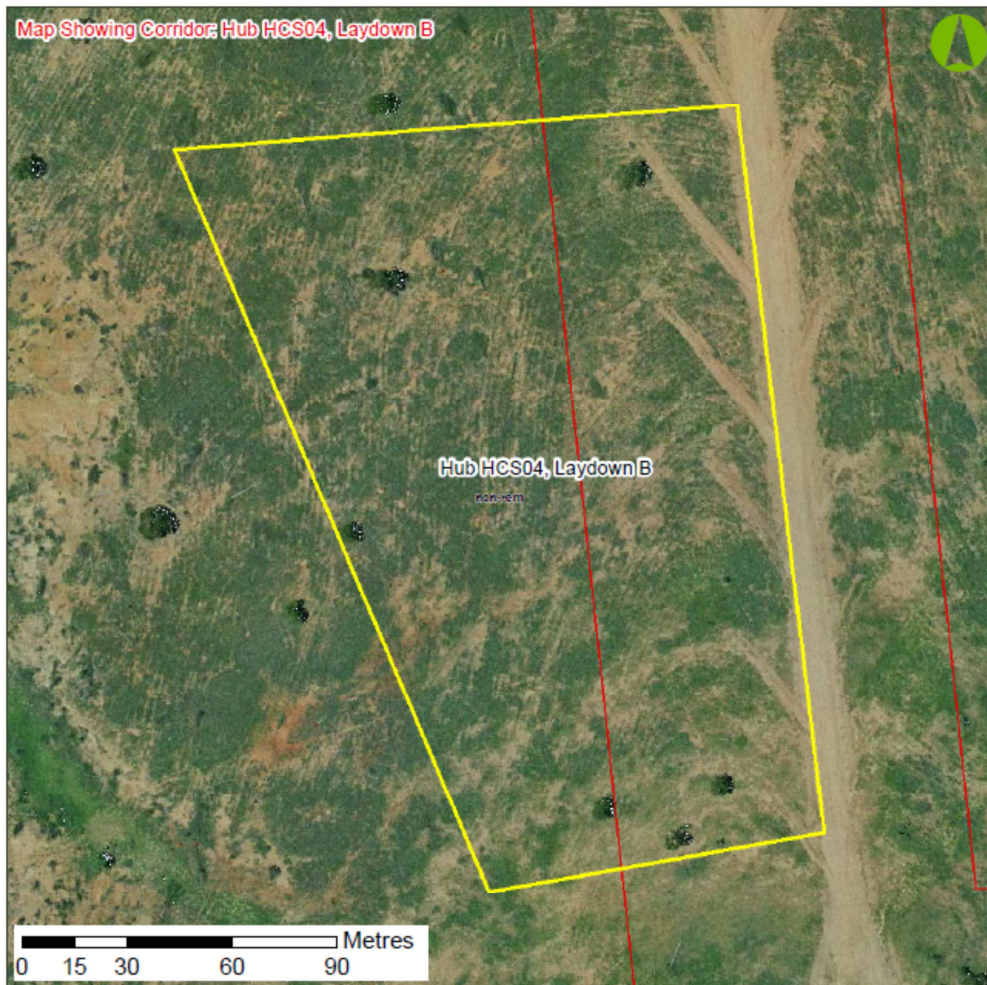


Figure 2 Hub HCS04 – Laydown B Proposed Development Area



Figure 3 Hub HCS04 – Laydown C Proposed Development Area

## 1.2.2 Floristics

The proposed development area is considered a highly modified environment, as a result of historical vegetation clearing and current grazing practices. The proposed development area occurs entirely within non-remnant vegetation.

The low canopy stratum within the cleared development footprint is considered sparse (~5%) and is typically represented by *Eucalyptus melanophloia* (Silver-leaved ironbark), *Eucalyptus populneus* (Poplar box). *Acacia harpophylla* (Brigalow) occurs sporadically throughout the canopy layer. The canopy layer averaged approximately 8 m in height, with an estimated range of 8 to 12 m.

The shrub stratum recorded with this proposed development area is also considered sparse (~5%), with an average height of 2 m. Species representing this stratum include *Eucalyptus melanophloia* (Silver-leaved ironbark) *Acacia decora* (Pretty wattle), *Acacia everistii* and *Geijera parviflora* (Wilga).

The dense (~90%) ground cover stratum is dominated by *Pennisetum ciliare* (Buffel grass), with occurrences of *Verbena tenuisecta* (Mayne's curse), *Eragrostis brownii* (Brown's lovegrass), *Heteropogon contortus* (Black spear grass) and *Sporobolus creber* (Western rat's tail grass).

No species of 'conservation significance' under the provisions of the NC Act or EPBC Act were observed within the proposed development area. Furthermore, no Type A restricted plants (under the provisions of the NC Act) were detected within the proposed development area.

A list of flora species observed within the proposed development area is provided in Appendix A.

### 1.2.3 Habitat values

Habitat features associated with the proposed development area include:

- Dense groundcover vegetation (ie grassy tussocks)
- Woody debris (ie fallen/felled timber, including hollow-bearing logs)

The habitat value of the proposed development area can be considered to be low overall, especially for EVNT species, given its highly modified state. Notwithstanding, the proposed development area provides limited sources of fauna habitat, particularly for more common species normally associated with disturbed sites. The scattered trees provide foraging, refuge and nesting niches for some larger bird species, such as *Corvus orru* (Torresian crows) and *Gymnorhina tibicen* (Magpies).

One (1) incidental fauna species was recorded within the proposed development area, namely *Cisticola exilis* (Golden-headed Cisticola). This species is listed as Least Concern under the provisions of the NC Act and are not listed under the provisions of the EPBC Act.

## Appendix A – Botanical Species List

Family Name	Scientific Name	Common Name	Proposed Development Area	
			Hub HCS04 Laydown A	Hub HCS04 Laydown B & C
Adiantaceae	<i>Cheilanthes aspera</i>	Bristly cloak fern		√
Adiantaceae	<i>Cheilanthes sieberi</i>	Mulga fern		√
Apiaceae	<i>Hydrocotyle laxiflora</i>	Pennywort	√	
Asteraceae	<i>Bidens pilosa</i>	Cobblers pegs	√	
Asteraceae	<i>Bracteantha bracteata</i>	Everlasting daisy		√
Asteraceae	<i>Calocephalus platycephalus</i>	Billy buttons	√	√
Asteraceae	<i>Calotis lappulacea</i>	Yellow burr daisy	√	√
Asteraceae	<i>Cassinia laevis</i>	Cough bush		√
Asteraceae	<i>Pterocaulon sphacelatum</i>	Apple bush	√	√
Asteraceae	<i>Senecio lautus</i>	Fire Weed	√	
Cactaceae	<i>Opuntia tomentosa</i>	Velvety tree pear	√	√
Campanulaceae	<i>Wahlenbergia gracilis</i>	Sprawling bluebells	√	
Celastraceae	<i>Elaeodendron australis</i>	Peach Leaf	√	
Chenopodiaceae	<i>Maireana microphylla</i>	Small-leaf bluebush	√	√
Chenopodiaceae	<i>Sclerolaena birchii</i>	Galvanised burr	√	√
Cupressaceae	<i>Callitris glaucophylla</i>	White cypress pine	√	√
Cyperaceae	<i>Gahnia aspera</i>	Gahnia		√
Faboideae	<i>Glycine clandestina</i>	-		√
Goodeniaceae	<i>Goodenia glabra</i>	Smooth goodenia		√
Goodeniaceae	<i>Scaevola parvibarbata</i>	Purple flower scaevola		√
Hemerocallidaceae	<i>Dianella caerulea</i>	Blue flax-lily	√	√
Lomandraceae	<i>Lomandra</i> sp.	Lomandra	√	
Malvaceae	<i>Sida rhombifolia</i>	Paddy's lucerne	√	√
Malvaceae	<i>Sida subspicata</i>	Queensland hemp	√	√
Meliaceae	<i>Owenia acidula</i>	Emu Apple		√
Mimosoideae	<i>Acacia decora</i>	Pretty wattle	√	√
Mimosoideae	<i>Acacia everistii</i>	Wattle		√
Mimosoideae	<i>Acacia harpophylla</i>	Brigalow		√



Family Name	Scientific Name	Common Name	Proposed Development Area	
			Hub HCS04 Laydown A	Hub HCS04 Laydown B & C
Mimosoideae	<i>Acacia neriifoli</i>	Silver wattle	√	
Myrtaceae	<i>Eucalyptus melanophloia</i>	Silver leaved ironbark	√	√
Myrtaceae	<i>Eucalyptus populnea</i>	Poplar box		√
Poaceae	<i>Aristida caput medusae</i>	Many-headed wire grass	√	
Poaceae	<i>Austrostipa verticillata</i>	Slender bamboo grass		√
Poaceae	<i>Chloris pectinata</i>	Comb chloris		√
Poaceae	<i>Cynodon dactylon</i>	Green Couch		√
Poaceae	<i>Eragrostis brownii</i>	Browns lovegrass	√	
Poaceae	<i>Eragrostis fallax</i>	Tall lovegrass		√
Poaceae	<i>Eragrostis sororia</i>	Woodland love	√	
Poaceae	<i>Heteropogon contortus</i>	Black spear grass		√
Poaceae	<i>Pennisetum ciliare</i>	Buffel brass	√	√
Poaceae	<i>Sporobolus creber</i>	Western rats tail grass	√	
Poaceae	<i>Themeda triandra</i>	Kangaroo grass	√	√
Proteaceae	<i>Hakea lorea</i>	Bootlace oak	√	
Rubiaceae	<i>Psydrax oleifolium</i>	Canthium		√
Rutaceae	<i>Geijera parviflora</i>	Wilga		√
Sapindaceae	<i>Dodonaea viscosa</i>	Sticky hopbush	√	
Sterculiaceae	<i>Brachychiton populneus</i>	Kurrajong	√	
Verbenaceae	<i>Verbena tenuisecta</i>	Mayne's curse	√	√