# **Greg Connors**

From:

**Greg Connors** 

Sent:

Friday, May 14, 2010 11:54 AM

To:

'SFRCStudy@maunsell.com'

Subject:

Submission on SRFC Study Alignment

On behalf of Cunningham Industry Precinct Pty Ltd (which is Doyle Group Company), we are supportive of the amended alignment though the Mount Forbes area.

The previous alignment ran through our property (lot 226 on RP220388) and as a consequence would have impacted on the development of this land parcel and others immediately to the north for industrial purposes, and would have impacted on our proposed access location. This area is planned to be developed as a regionally significant industrial area.

In addition it makes sense to locate this route along the proposed new alignment so as to ensure minimal impact on environmentally significant areas.

## Regards

## **Greg Connors**

**Manager - Projects, Planning & Development** 



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26 February 2010

Doyle Group Level 14 Waterfront Place 1 Eagle Street Brisbane, Qld, 4001 By email: gc@doylegroup.com.au

Attention: Mr Greg Connors

Dear Greg

# KOALA HABITAT REHABILITATION VALUES ASSESSMENT OVER LOT 226 CUNNINGHAM HIGHWAY, MUTDAPILLY, QLD (LOT 226 ON RP220388)

#### 1. Introduction

Orogen Pty Ltd (Orogen) was commissioned by the Doyle Group (the client) to undertake a Koala Habitat Rehabilitation Values Assessment over Lot 226 Cunningham Highway, Mutdapilly, Queensland (Qld) (Lot 226 on RP220388) (the site). Refer to **Figure 1.1** for the Locality Plan.

This assessment is in response to the recent release of the draft South East Queensland Koala Conservation State Planning Regulatory Provisions (draft Koala Conservation SPRP) and the draft South East Queensland Koala Conservation State Planning Policy (draft Koala Conservation SPP), which were released for comment in December 2009. Although both documents are in draft form and are not currently in effect, they are expected to be enacted in early 2010. These recent developments in Qld State Koala conservation planning instruments have resulted in additional potential constraints to the future development of the site.

It is understood that the client wishes to make a submission on the draft Koala Conservation SPRP in relation to the relevance of this instrument to the subject site. This assessment provides an ecological basis for the client's submission to the Department of Environment and Resource Management (DERM) relative to the draft Koala Conservation SPRP. The assessment incorporated a desktop review of relevant Local Government planning documentation and also State Government Koala conservation planning instruments.

Aerial imagery indicates that the site has been extensively cleared and appears to be currently used for agricultural purposes (potentially grazing). Future land use of the site is proposed to be industrial development.

# 2. Methodology

A desktop review was undertaken of relevant ecological information pertaining to the site, including:

- Ipswich Planning Scheme (ICC, 2006);
- Ipswich City Council's Draft Key Koala Habitat Areas Map (ICC, 2009);
- Draft SEQ Koala State Planning Regulatory Provisions (draft Koala SPRP) (DIP, 2009a).
- Draft SEO Koala Conservation SPRP and associated habitat mapping (DIP & DERM, 2009);
- SEQ Koala Habitat Values Mapping (DERM, 2009); and
- South East Queensland Regional Plan 2009-2031 (DIP, 2009b).

## 3. Results

#### **Ipswich City Council**

The site is located within Ipswich City Council and is therefore subject to the provisions of the *Ipswich Planning Scheme 2006* (Ipswich Planning Scheme) (ICC, 2006).

Under the Ipswich Planning Scheme, the site is located within the Regionally Significant Business Enterprise and Industry Area. Within this locality, the site is zoned as a Regional Business and Industry Investigation Area. The exception to this is a narrow strip parallel to the Cunningham Highway that is zoned as a Regional Business and Industry Buffer. The site is bordered by Regional Business and Industry Investigation Areas to the north and west, with Rural land uses including Rural A (Agricultural), Rural B (Pastoral) and Rural C (Special Land Management), occurring to the south and east (Figure 3.1). It is noted that the Ebenezer-Willowbank Precincts plan of the Ipswich Planning Scheme (ICC, 2006) identifies the site as 'Future Industry' area. The overall vision for the Regionally Significant Business Enterprise and Industry Area is that regionally significant business enterprise and industry nodes are created and maintained, which enjoy sustained economic growth, good design and ecological sustainability (ICC, 2006).

Under the Ipswich Planning Scheme, a high voltage electricity transmission line is also mapped as traversing the north of the site in an east-west direction (**Figure 3.2**).

Ipswich City Council has prepared a *Draft Key Koala Habitat Areas Map* (ICC, 2009). This map shows no existing core Koala habitat on site that is protected by the Ipswich Planning Scheme, and presents only a narrow strip of existing green space zones/open space corridors that can be supplementary planted with Koala food trees to contribute to Koala habitat and movement (**Figure 3.3**). This strip corresponds to the Regional Business and Industry Buffer zone within the site (**Figure 3.1**).

#### **Draft SEQ Koala SPRP**

The government has introduced interim development controls for the protection of Koala habitat, through the implementation of the South East Queensland Koala State Planning Regulatory Provisions (SEQ Koala SPRP), finalised on 1 July 2009.

The SEQ Koala SPRP have recently been amended to include additional bushland protection controls, with the amended document, draft SEQ Koala SPRP, released on 2 November 2009 (DIP, 2009a). The existing draft SEQ Koala SPRP will be replaced by the Koala Conservation SPRP following finalisation of the document.

Under the regulatory provisions, the Department of Infrastructure and Planning (DIP) can require developers to offset the unavoidable clearing of mature Koala habitat trees felled in the Interim Koala Habitat Protection Area, where the development adversely affects movement of Koalas through a Koala movement corridor. The provisions also require development layouts to allow Koalas to move safely within and through the development sites. DIP can also prevent developers from clearing vegetation within Protected Koala Bushland Habitat Areas.

Under the draft SEQ Koala SPRP, the site is not designated as either a Protected Koala Bushland Habitat Area or an Interim Koala Habitat Protection Area. As such, there are no immediate constraints at a State Government level, to the future development potential of the site with regard to Koala conservation.

#### **Draft Koala Conservation SPRP**

The draft Koala Conservation SPRP has been released as a draft only and it is therefore likely that the document will be altered prior to release of the final in 2010. Under the draft Koala Conservation SPRP the majority of the site is mapped as Koala Planning Area 2 (KPA 2), with a small strip of Koala Planning Area 1 (KPA 1) running parallel to the Cunningham Highway (**Figure 3.4**). The site is not located within a Priority Koala Management Area.

Currently, under Table 1 of the draft SEQ Koala Conservation SPRP, development that requires assessment under the draft Koala Conservation SPRP must:

- a) not occur in a KPA 1 for the purposes of an urban activity, excluding rural residential activities, community infrastructure activities, urban activities not requiring referral agency assessment within Tables 2C or 2E of the South East Queensland Regional Plan 2009-2031 Regulatory Provisions, and works in a biodiversity development offset area receive site; and
- b) comply with Schedule 3 of the draft Koala Conservation SPRP.

A development ultimately complies with Schedule 3 if it includes the mandatory information listed in Annexe 1, and meets the requirements of the relevant code in Annexe 2 of the draft Koala Conservation SPRP. Schedule 3 also outlines acceptable circumstances for not fully complying with Schedule 3, where the proposed development provides for an overriding need in the public interest in accordance with factors listed in Schedule 3.

Annexe 1 requires mandatory information to be provided within a development application, relating to the site design, the development plan and compliance of the application with each relevant code requirement. Annexe 2 includes different assessment tables, dependent on the development type and the mapping designation of the area. It is likely that the majority of the site would be subject to assessment under Part 6: Development (other than extractive industry), to the extent that it involves land within) in a KPA 2 outside a Priority Koala Management Area. Development is unlikely to be permitted within the narrow strip of KPA 1 on site, in accordance with the draft Koala Conservation SPRP

It is understood that the draft Koala Conservation SPRP maps were prepared based on the Koala Habitat Values Mapping (DERM, 2009).

#### Koala Habitat Values Mapping

The South East Queensland Koala Habitat Assessment and Mapping Project, completed in May 2009, was undertaken by GHD on behalf of the Qld Government. The key product of this project was the Koala Habitat Values Mapping (DERM, 2009). The DERM commissioned this project to consolidate scientific knowledge on Koala habitat to inform actions of the Qld Government's Koala Response Strategy. A key component of this strategy is the development of the State Planning Policy and State Planning Regulatory Provision.

In its current state, the Koala Habitat Values Mapping is for information purposes only, and does not include statutory maps for planning purposes. However, as the Koala Habitat Values Mapping has informed the development of the statutory maps associated with the draft Koala Conservation SPRP, it is therefore of considerable interest.

The methodology used to create the Koala habitat assessment mapping is detailed within the South East Queensland Koala Habitat Assessment and Mapping Project report prepared by GHD (GHD, 2009). During the study, Koala habitat was identified and ranked across SEQ using a Koala habitat model based on Koala sighting data, landcover classification and token site field verification. Four key phases of the study approach included:

- 1. Landcover mapping An analysis of satellite imagery (Landsat 2008) to identify landcover strata across the SEQ region.
- 2. Preliminary Habitat Value Ranking A habitat model based on existing sighting data and landscape feature relationships, to rank habitat across SEQ.
- 3. Field Verification Field verification of preliminary habitat value mapping at approximately 500 sites.
- 4. Final Habitat Value Assessment Habitat value was refined based on patch size, connectivity to 'bushland', as well as results from field verification of preliminary values, to produce the final habitat map (GHD, 2009).

KOALA HABITAT REHABILITATION VALUES ASSESSMENT BRIEFING REPORT Lot 226 Cunningham Highway, Mutdapilly Qld (Lot 226 on RP220388)

According to the Koala Habitat Values Mapping, the site is designated as Suitable for Rehabilitation – medium value (Figure 3.5) (DERM, 2009). The majority of land mapped as Suitable for Rehabilitation – medium value is associated with the KPA 2 mapping under the draft Koala Conservation SPRP. A narrow strip of Suitable for Rehabilitation – medium value is associated with KPA 1 mapping under the draft Koala Conservation SPRP. This strip runs parallel to the Cunningham Highway and also corresponds to the Regional Business and Industry Buffer zone mapped under the Ipswich Planning Scheme (Figure 3.1) and the narrow strip of existing green space zones/open space corridors mapped under the *Draft Key Koala Habitat Areas Map* (Figure 3.3).

#### South East Queensland Regional Plan 2009-2031

Under the South East Queensland Regional Plan 2009-2031, the site is included within the Urban Footprint. The site is also included within a Development Area (Figure 3.6) (DIP, 2009b).

The Urban Footprint includes established urban areas, broadhectare and remnant broadhectare areas that could be suitable for future urban development. It incorporates the full range of urban uses, including housing, industry, business, infrastructure, community facilities and Urban open space (DIP, 2009b). Development Areas, in addition to regional activity centres and other suitable established urban areas, are the focus for accommodating regional dwelling and employment targets (DIP, 2009b).

#### 4. Discussion

There are a number of constraining issues that are likely to adversely impact on the practical functioning of rehabilitated Koala habitat/corridor on the site. These issues significantly restrict the potential value of the site from a Koala habitat rehabilitation perspective. These issues are presented and discussed in **Table 4.1** below.

Table 4.1 - Constraints to Koala Corridor Value of Site

Description	Impact
Aerial imagery indicates that historical land use has resulted in widespread clearing across the majority of the site area.	The extensively cleared and degraded nature of the site indicates that rehabilitation would require an extremely intensive rehabilitation program to produce suitable Koala habitat. The rehabilitation program would likely require significant land improvement and revegetation works, combined with continued control of exotic flora species.
The Cunningham Highway is located immediately east of the site.	Koalas would be required to traverse the Cunningham Highway in order to travel east of the site. Although further investigations would be required to identify any potential crossing points, it is considered likely that Koalas may attempt to cross directly over the road, thereby being exposed to road mortality hazard. This suggests that the site does not have the potential to provide a valuable eastwest corridor for Koala movement.
High voltage electricity transmission lines are mapped under the Ipswich Planning Scheme as running in an east-west direction through the north of the site.	High voltage electricity transmission line easements are not suitable for Koala habitat rehabilitation, as maintenance practices prevent regeneration of Koala bushland habitat.
The preferred alignment of the Southern Freight Rail Corridor occurs to the north of the site	In the event that the Southern Freight Rail Corridor is constructed along its preferred alignment, Koalas would be required to cross the rail line in order to travel in a north-south direction.  Although opportunities may arise to construct suitable Koala crossing points, any Koalas that attempt to cross the rail line would be exposed to rail mortality hazard. This hazard may be reduced by the inclusion of Koala proof fence along the rail line, however the
	Aerial imagery indicates that historical land use has resulted in widespread clearing across the majority of the site area.  The Cunningham Highway is located immediately east of the site.  High voltage electricity transmission lines are mapped under the Ipswich Planning Scheme as running in an east-west direction through the north of the site.  The preferred alignment of the Southern Freight Rail Corridor occurs to

		barrier to Koala movement in a north-south direction.
Regionally Significant Business Enterprise and Industry Area Locality	Under the Ipswich Planning Scheme, the site is mapped as occurring within the Regionally Significant Business Enterprise and Industry Area. Within this locality, the site is zoned as a Regional Business and Industry Investigation Area. Land to the immediate north and west of the site is also mapped as this designation.	The zoning for the site is not considered conducive to rehabilitation of Koala habitat/movement corridors. Business and industrial land uses are not likely to provide habitat suitable for Koala. The movement of Koalas through an industrial/business precinct would expose Koalas to multiple hazards associated with this land use such vehicles, dogs and light and noise pollution.  This also applies to land to the immediate north and east of the site. Industrial development within these areas would likely restrict Koala movement in these directions.
Proposed Industrial Land Use	The proposed land use for the site is currently an industrial development.	Industrial development generally does not provide for optimal Koala habitat. The movement of Koalas through the industrial estate proposed for the site would expose Koalas to multiple hazards associated with this land use such vehicles, dogs and light and noise pollution.
Development Area planning intent	The site is designated as occurring within the Urban Footprint and within a Development Area under the South East Queensland Regional Plan 2009-2031.	The land use intent for the site under the South East Queensland Regional Plan 2009-2031 indicates that it is likely that future development of the area will introduce multiple hazards to Koala including road mortality, dogs and further clearing of vegetation. This indicates that the future site and surroundings are unlikely to provide a suitable environment for Koala habitat.

Based on the above constraints, it is unlikely that rehabilitation of the site would successfully create sustainable Koala habitat/corridor function, primarily due to the unsuitable zoning, proposed land use and land use intent of the site, and the existing and potential barrier land uses e.g. Cunningham Highway, high voltage electricity transmission lines and the potential Southern Freight Rail Corridor.

In addition to the above mentioned significant constraints, it is considered unnecessary to rehabilitate the site as Koala habitat/movement corridor, given its proximity to the Rural landscape. Land to the immediate south and east of the site is situated within the Rural locality under the Ipswich Planning Scheme (Figure 3.1) and is designated as KPA 1 under the draft Koala Conservation SPRP (Figure 3.4). This land is also included within the Regional Landscape and Rural Production Area under the South East Queensland Regional Plan 2009-2031 (Figure 3.6). Development is significantly constrained within KPA 1 areas under the draft Koala Conservation SPRP (Section 3). In addition, land uses within the Rural locality are typically more compatible to the rehabilitation of Koala habitat/movement corridors due to the lower density development and fewer hazards. As such, the large area of Rural land to the south and east of the site is therefore considered a more suitable location to rehabilitate Koala habitat and corridors.

#### Conclusions

The Koala habitat rehabilitation value of the site is significantly limited due to the following constraints:

- The current extensively cleared nature of the site;
- The existing and potential barrier land uses within and adjacent to the site e.g. high voltage electricity transmission line, proposed Southern Freight Rail Corridor and Cunningham Highway;
- The incompatible site zoning (Regionally Significant Business Enterprise and Industry Area) and the proposed industrial development land use for the site;
- The incompatible land uses in the surrounding locality e.g. Regionally Significant Business Enterprise and Industry Area to the north and west; and
- The incompatible land use intent for the site and surrounding locality under the South East Queensland Regional Plan 2009-2031.

These incompatible land uses/land use intents are considered to present numerous hazards to Koala, primarily through the threat of vehicle/rail related and dog related mortalities. Additional hazards include exposure to light and/or noise pollution and further clearing of Koala habitat.

The above mentioned constraints indicate that the site is unnecessarily constrained by mapping under the draft Koala Conservation SPRP as KPA 2 and KPA 1. Although targeted and strategic rehabilitation within the site has the potential to improve the quality of onsite Koala habitat, the proposed land use/land use intent of the site and surrounding locality combined with the existing and potential barrier land uses within and adjacent to the site, restricts the potential value of the site from a Koala habitat/corridor rehabilitation perspective. In addition, the site is located immediately adjacent to land within the Rural locality that is considered more suited to provide valuable Koala habitat/movement corridors.

With regards to the strip of KPA 1 mapping on site, it is not considered necessary to apply a higher designation to this strip under the draft Koala Conservation SPRP in comparison to the remainder of the site. A suitable buffer to future development on site is required through Local Government provisions, and due to the numerous constraints associated with the rehabilitation of Koala habitat/movement corridor on site, this requirement is not considered necessary at State Government level.

It is therefore recommended that rehabilitation of the site for Koala habitat/corridor function is not pursued and the mapping for the draft Koala Conservation SPRP is amended to downgrade the site designations from KPA 2 and KPA 1.

It is noted that the actual constraints to development of the site is, as yet, unknown. The full extent of the consequences of the forthcoming final SEQ Koala Conservation SPRP (expected early 2010) will be better understood once this document is released. However, in review of draft instrument there is considerable risk to future development of the site which is driven by large scale and desktop-level derived constraints that need to be refined to reflect the condition of the given subject site and its context relative to Koala conservation.

Please do not hesitate to contact the undersigned should you wish to discuss any matter outlined in this letter.

Yours faithfully Orogen Pty Ltd

A signed copy can be provided upon request

# NELSON WILLS Project Director

#### **Attachments**

Figure 1.1 - Locality Plan

Figure 3.1 - Relevant Extract from Ipswich Planning Scheme Zoning Map

Figure 3.2 - Relevant Extract from OV13 - High Voltage Electricity Transmission Lines

Figure 3.3 - Relevant Extract from Draft Key Koala Habitat Areas Map

Figure 3.4 - Relevant Extract from draft SEQ Koala Conservation SPRP mapping - SEQ Koala Protection Area Map SEQK10

Figure 3.5 - Relevant Extract from Koala Habitat Values Map - Map SEQKHV10

Figure 3.6 - Relevant Extract from SEQ Regional Plan 2009-2031 Interactive Mapping

KOALA HABITAT REHABILITATION VALUES ASSESSMENT BRIEFING REPORT Lot 226 Cunningham Highway, Mutdapilly Qld (Lot 226 on RP220388)

#### References

- DERM (2009). SEQ Koala Habitat Value. The Department of the Environment and Resource Management, Brisbane, Queensland.
- DIP (2009a). *Draft South East Queensland Koala State Planning Regulatory Provisions*. November 2009. Department of Infrastructure and Planning, Brisbane, Queensland.
- DIP (2009b). South East Queensland Regional Plan 2009-2031. Department of Infrastructure and Planning, Brisbane, Queensland.
- DIP & DERM (2009). Draft South East Queensland Koala Conservation State Planning Regulatory Provisions. December 2009. Department of Infrastructure and Planning and Department of Environment and Resource Management, Brisbane, Queensland.
- GHD (2009). South East Queensland Koala Habitat Assessment and Mapping Project. May 2009. GHD and Department of Environment and Resource Management, Brisbane, Queensland.
- ICC (2006). Ipswich Planning Scheme 2006, Ipswich City Council, Ipswich, Queensland.
- ICC (2009). Draft Key Koala Habitat Areas Map. Dated 9 October 2009. Ipswich City Council, Ipswich, Oueensland.





Figure 1.1 - Locality Plan

Source: Google Earth (2010). Lot 266 Cunningham Highway, Mutdapilly Qld. MapData Sciences Pty Ltd, PSMA/GeoEye. Image dated 11 August 2009.

Subject Site

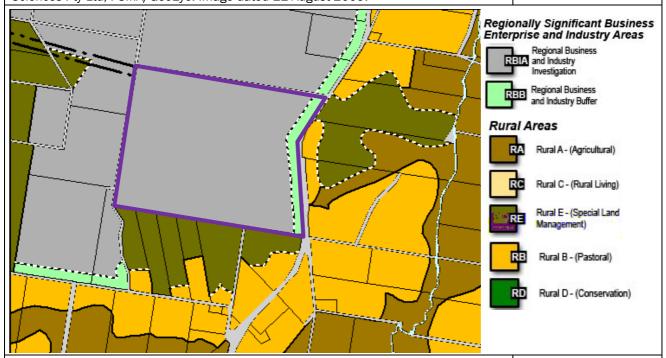


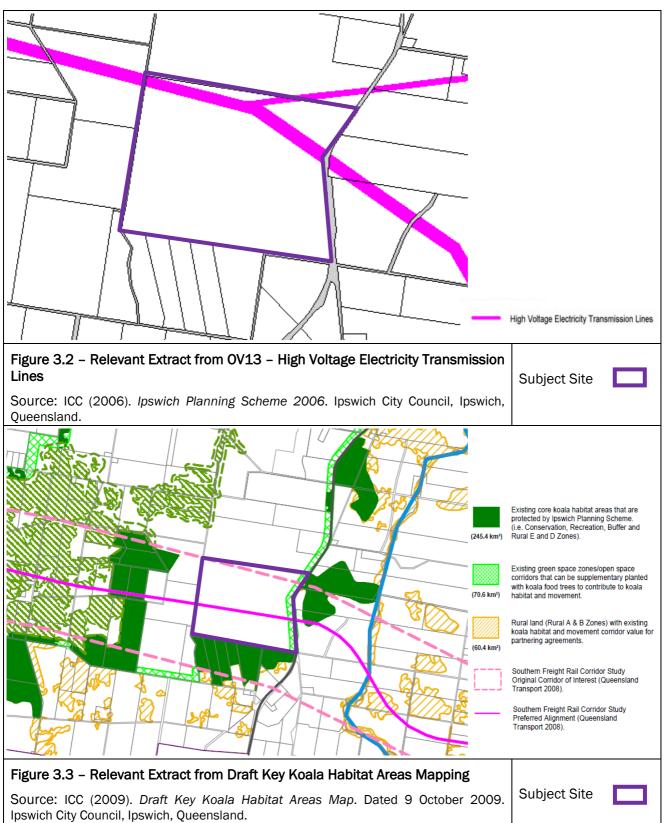
Figure 3.1 – Relevant Extract from Ipswich Planning Scheme Zoning Map

Source: ICC (2006). *Ipswich Planning Scheme 2006*. Ipswich City Council, Ipswich, Queensland.

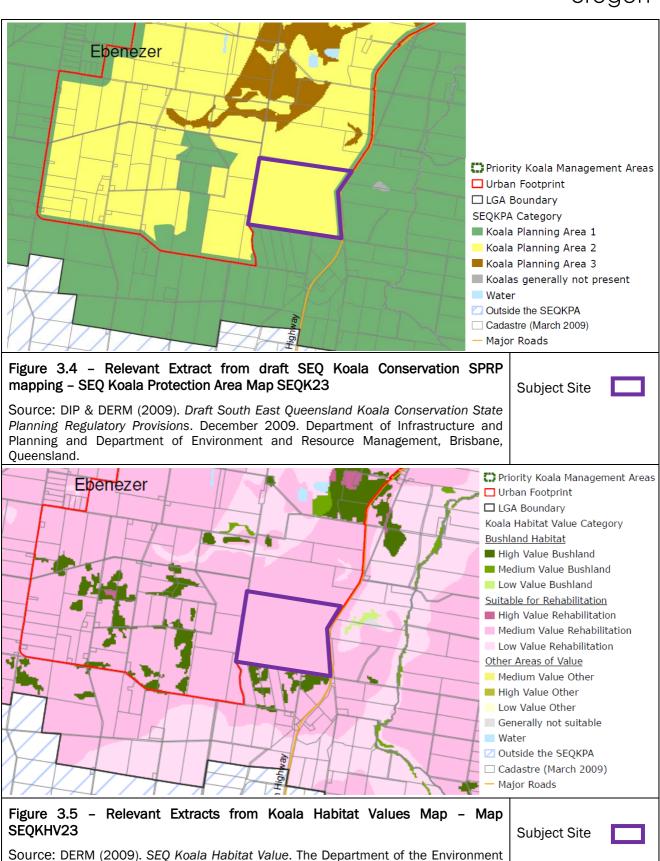
Subject Site











and Resource Management, Brisbane, Queensland.



