

**Our Ref:** 24530-2:MD

29 January 2010

## APPENDIX

### MINMI LINK ROAD & STOCKRINGTON LOWER HUNTER LANDS PROJECT PRELIMINARY ENVIRONMENTAL ASSESSMENT ECOLOGY

It is proposed that the entire Coal & Allied Industries Limited (Coal & Allied) owned Minmi/Link Road and Stockrington sites be rezoned/listed as a 'State Significant Site' (SSS) in Schedule 3 of State Environmental Planning Policy (Major Development). A draft Schedule 3 listing will be prepared with the Concept Plan Application.

The Concept Plan for a residential subdivision of the Minmi/Link Road site will apply to the entire 537ha Minmi/Link Road and 2,247ha Stockrington site. The key parameters for the proposed development of the site are as follows:

- Dedication of 2,264ha of conservation land (less 300 ha biodiversity offset land to be transferred to RTA and then to DECCW) to the New South Wales Government (NSWG) that is identified in the Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan, comprising 100% of the Stockrington site and approximately 17ha of the Minmi/Link Road site.
- Maximum dwelling yield of 3,300 dwellings over 520ha.
- Indicative development staging. The number of lots and extent of staging for release areas will be largely dictated by the service infrastructure requirements as well as responding to market forces.
- The provision of associated infrastructure.
- Torrens title subdivision of the Minmi/Link Road site. The Torrens title subdivision of Coal & Allied land will enable the following:
  - To dissect land on either side of the F3 Freeway and to separate the development lot from the conservation land.
  - To enable the transfer of approximately 17ha of land at Minmi/Link Road to the North of the Minmi Rural Fire shed to NSWG for conservation purposes.

Approval will not be sought under the Concept Plan for a specific lot layout. An indicative lot layout will indicate how the maximum dwelling yield of 3,300 dwellings could be achieved on the site.

Similarly, approval will not be sought under the Concept Plan for subdivision or construction of individual houses. However, the desired future character of the proposed concept plan will be included in Urban Design Guidelines. Urban Design Guidelines will be prepared to inform the Concept Plan in respect of urban form, built

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form, open space and landscape, access and movement and visual impact for the site.

It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the Environmental Planning & Assessment Act, 1979 (EP&A Act).

The proposed Concept Plan and a Plan showing the proposed development areas and conservation areas is included in the Preliminary Environmental Assessment (PEA) prepared by Urbis.

### ***Brief Overview of Regional & Site Context***

The ecological features of the Stockrington and Minmi Link Road locality include:

- The fact that the vast majority of the holdings are forested.
- The Stockrington site is contiguous with a larger corridor of bushland that comprises a significant forested remnant in the Lower Hunter region that provides connectivity from the Watagan Range to the Hexham Swamps.
- The locality is known to contain vegetation types, such as coastal forest, rainforest and tall wet forest to coastal floodplain wetland systems, representing areas that contain significant biodiversity.
- The regions forested areas contain potential habitat for an array of native fauna species, including numerous threatened or regionally significant species as mentioned above. Importantly, such habitat extends to threatened fauna (and to a lesser extent, flora) species that are typically associated with Lower Hunter woodland and wetland systems.

### ***Ecological Considerations***

A preliminary assessment has been undertaken over the site to inform the PEA. The preliminary assessment drew on a number of information sources including previous preliminary reporting and information held on government databases and archives. Data gathered during preliminary assessments was used to assist in identifying distributions, suitable habitats and known records of threatened species. Preliminary assessment utilised a number of information sources, including:

- Aerial Photograph Interpretation (API) and literature reviews to determine the broad categorisation of vegetation within the site;
- Review of fauna and flora records contained in the DECCW Wildlife Atlas (Accessed Jan 2010);

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- Literature reviews;
- Regional vegetation mapping projects:
  - LHCCREMS – Vegetation Survey, Classification and Mapping. (NPWS 2000, House 2003);
- Hunter Bird Observers Club (HBOC) records;
- Birddata (web version of Birds Australia's New Atlas of Australian Birds);
- A review of GIS data including aerial photography, topographic maps, SEPP 14 Wetland Mapping, Soil Landscapes, Acid Sulphate Soil Potential; and
- Collective knowledge gained from extensive work in the area.

The preliminary assessment has revealed nine vegetation communities are present on the Minmi-Link Road site, based on regional vegetation community mapping prepared for the Lower Hunter and Central Coast Regional Environmental Management Strategy - LHCCREMS (House 2003; NPWS 2000) as follows:

- MU 30 - Coastal Plains Smooth-barked Apple Woodland;
- MU 15 - Coastal Foothills Spotted Gum Ironbark Forest;
- MU 17 - Lower Hunter Spotted Gum Ironbark Forest;
- MU 5 - Alluvial Tall Moist Forest;
- MU 12 - Hunter Valley Moist Forest
- MU 19 - Hunter Lowland Redgum Forest;
- MU 46 - Freshwater Wetland Complex;
- Weeds and Cleared Areas; and
- Dams.

Based on the aforementioned vegetation communities, the following are considered to be commensurate with Endangered Ecological Communities as gazetted under Schedule 1 of the Threatened Species Conservation Act 1995.

- The vegetation community delineated as LHSGIF is commensurate with 'Lower Hunter Spotted Gum – Ironbark Forest endangered ecological community in the Sydney Basin Bioregions';
- The vegetation community delineated as HLRF is commensurate with 'Hunter Lowland Redgum Forest endangered ecological community in the Sydney Basin and NSW North Coast Bioregions'; and

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- Freshwater Wetland Complex is commensurate with 'Freshwater Wetlands on Coastal Floodplains endangered ecological community in the NSW North Coast, Sydney Basin and South East corner Bioregions'.

The desktop search results indicated numerous threatened flora and fauna species have been previously recorded within the locality and/ or have potential habitat within the site. The following have been recorded within 5km of the site and/or if not recorded on the DECCW Wildlife Atlas are considered to have potential habitat and therefore should be considered.

#### Flora

- *Acacia bynoeana*
- *Angophora inopina* (Chamhaven Apple)
- *Arthropteris palisotii*
- *Caladenia tessellata* (Thick Lip Spider Orchid);
- *Callistemon linearifolius* (Netted Bottle Brush)
- *Cryptostylis hunteriana* (Leafless Tongue Orchid)
- *Dendrobium melaleucaphilum* (Spider Orchid)
- *Diuris praecox* (Rough Double Tail)
- *Eucalyptus glaucina* (Slaty Red Gum)
- *Eucalyptus parramattensis* ssp. *decadens*
- *Grevillea parviflora* ssp *parviflora* (Little-flower Grevillea)
- *Melaleuca biconvexa* (Biconvex Paperbark)
- *Microtis angusii*
- *Rutidosia heterogama* (Heath Wrinklewort)
- *Syzygium paniculatum* (Magenta Lilly Pilly)
- *Tetradlea juncea* (Black-eyed Susan)
- *Zannichellia palustris*

#### Fauna

- *Litoria aurea* (Green and Golden Bell Frog)
- *Litoria brevipalmata* (Green-thighed Frog)
- *Varanus rosenbergi* (Heath Monitor)

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- *Botaurus poiciloptilus* (Australasian Bittern)
- *Lophoictinia isura* (Square-tailed Kite)
- *Callocephalon fimbriatum* (Gang-Gang Cockatoo)
- *Calyptorhynchus lathamii* (Glossy Black-Cockatoo)
- *Melanodryas cucullata* (Hooded Robin)
- *Stagonopleura guttata* (Diamond Firetail)
- *Pomatostomus temporalis* (Grey-crowned Babbler)
- *Chthonicola sagittatus* (Speckled Warbler)
- *Climacteris picumnus* (Brown Treecreeper)
- *Melithreptus gularis* (Black-chinned Honeyeater)
- *Anthochaera phrygia* (Regent Honeyeater)
- *Lathamus discolor* (Swift Parrot)
- *Neophema pulchella* (Turquoise Parrot)
- *Ninox connivens* (Barking Owl)
- *Ninox strenua* (Powerful Owl)
- *Tyto novaehollandiae* (Masked Owl)
- *Tyto tenebricosa* (Sooty Owl)
- *Ptilinopus magnificus* (Wompoo Fruit-Dove)
- *Ptilinopus regina* (Rose-crowned Fruit-Dove)
- *Ptilinopus superbus* (Superb Fruit-Dove)
- *Dasyurus maculatus* (Spotted-tailed Quoll)
- *Phascogale tapoatafa* (Brush-tailed Phascogale)
- *Petaurus australis* (Yellow-bellied Glider)
- *Petaurus norfolcensis* (Squirrel Glider)
- *Phascolarctos cinereus* (Koala\*)
- *Pteropus poliocephalus* (Grey-headed Flying-fox\*)
- *Miniopterus schreibersii oceanensis* (Eastern Bentwing-bat)
- *Miniopterus australis* (Little Bentwing-bat\*)
- *Mormopterus norfolkensis* (Eastern Freetail-bat\*)
- *Saccolaimus flaviventris* (Yellow-bellied Sheath-tail-bat)
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle)

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- *Chalinolobus dwyeri* (Large-eared Pied Bat)
- *Myotis adversus* (Large-footed Myotis)
- *Scoteanax rueppellii* (Greater Broad-nosed Bat)
- *Vespadelus troughtoni* (Eastern Cave Bat)

### **Potential Impacts**

Generally impacts associated with land development can be summarised into the following categories:

- Habitat loss;
- Landscape fragmentation and severing of connectivity;
- Riparian zone degradation;
- Edge effects; and
- Degradation to genetic flow, integrity and population dynamics.

The proposed development will require the removal of intact vegetation and/or be concentrated in already disturbed environs. In either case it is considered that impacts to the existing ecological environment will result, however and of key note is the proposal to offset these impacts through the proposed dedication of land for conservation purposes, pursuant to S 93F of the EP&A Act.

Although, the proposed development will require the removal of intact vegetation at Minmi, the proposed Concept Plan scheme incorporates a matrix of vegetation corridor links in the proposed development estate. Furthermore, a key environmental component to the project is the proposed dedication of 2,247ha of Stockrington (less 300 ha biodiversity offset land to be transferred to RTA and then to DECCW) and 17ha of Minmi/Link Road to NSWG for conservation purposes. This land will consolidate the long sought after regional corridor for the Lower Hunter running from the Watagan Range to Stockton Bight. This corridor is identified as a highly significant regional link between southern sandstone ranges and the coastal heaths and wetlands of Port Stephens in the LHRS and Lower Hunter Regional Conservation Plan.

The nature of the landform settings to be conserved, varying from coastal ranges forests and woodlands to wetlands, provides a diverse array of habitats and resources for native fauna. The conservation lands are known to contain important populations of numerous threatened fauna species, including birds, mammals and herpetofauna. The proposed dedication and conservation of Stockrington site will provide secure regional biodiversity gene pools, and also through linkages facilitate valuable genetic material exchange and other key processes associated with sustainable ecological population dynamics.

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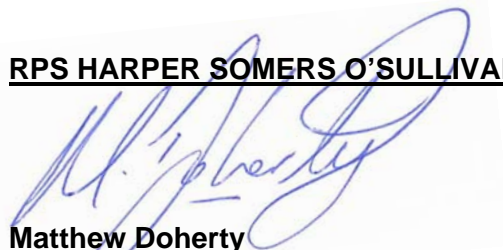
Considering the large area of conservation land that is proposed to be set aside as part of the proposed development, overall it consider that the proposal will provide positive ecological outcomes.

The PEA will be expanded upon to include rigorous field survey and associated reporting that complies with relevant guiding policy and legislation in a suitable scientific format to inform the final EA.

***EPBC Act Considerations***

The project has been referred to the Commonwealth, Department of Environment & Water Resources (DEWHA) pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provisions. The DEWHA concluded the proposed action is not a “controlled action” on 23 December 2008 and, as such, does not require assessment and approval by the Minister before it can proceed.

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