

Application for a



Section 91 Licence

to harm or pick a threatened species, population or ecological community*, or damage habitat under the *Threatened Species Conservation Act 1995*.

National Parks and Wildlife Service ABN 30 841 387 271

1. Applicant's Name: <i>(if additional persons require authorisation by this licence, please attach details of names and addresses)</i>	Nicole Van den Berg	
2. Organisation name and position of Applicant: <i>(if applicable)</i>	Clarence Colliery Pty Ltd	
3. Postal address:	Centennial Coal – Clarence Colliery Po Box 92 Lithgow NSW 2790	4. Telephone: B.H. 02 6353 8000 A.H.
5. Location of the action <i>(including grid reference and local government area and delineated on a map).</i>	HV 1 – E – 241550, N – 6296 993 HV 2 – E – 241839, N – 6297 077 HVU 1 – E – 242590, N – 6295 572 HVU 2 – E – 242424, N – 6295 520 LGA – Lithgow City Council See Figure 1 for location of sites.	
6. Full description of the action and its purpose <i>(eg. scientific research, environmental assessment, regeneration activities, development etc.).</i>	<p>The action involves the installation of two piezometer wells in a Newnes Plateau Hanging Swamp and two piezometer wells in a Newnes Plateau Shrub Swamp to monitor groundwater levels and detect any changes which may or may not result from mine subsidence. The action involves the sinking of small wells using a hand auger, installing a piezometer with a diameter of approximately 10cm and checking the site on foot every two months. No vehicles will be required to access the well site during or post construction.</p> <p>The attached letter provides detailed information on the sites.</p>	

* A threatened species, population or ecological community means a species, population or ecological community identified in either Schedule 1 or Schedule 2 of the *Threatened Species Conservation Act 1995*.

7. Details of the area to be affected by the action (<i>in hectares</i>).	The area to be affected will be very small consisting of approximately 4m ² for each piezo. The area of EEC to be disturbed by this action is less than 0.0004 ha.			
8. Duration and timing of the action (<i>including staging, if any</i>).	The piezometer wells will be constructed in mid July 2009 and checked every two months thereafter. It would take approximately one day to access and install all four piezometers.			
9. Is the action to occur on land declared as critical habitat*? (<i>please tick appropriate box</i>)	<u>No</u>			
10. Threatened species, populations or ecological communities to be harmed or picked.	<u>Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion.</u>	<u>Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion.</u>	<u>Endangered Ecological Community</u>	<u>The proposal involves the installation of four piezometers using a hand auger in the EEC to monitor groundwater levels in the community. The area of impact will be minimal as no vehicles will enter the site. The piezometers will be checked every two months after installation and will encompass an area of less than 4 metres squared.</u>

* Critical habitat means habitat declared as critical habitat under Part 3 of the *Threatened Species Conservation Act 1995*.

<p>11. Species impact: (please tick appropriate box)</p> <p>a) For action proposed on land declared as critical habitat; or</p> <p>b) For action proposed on land <u>not</u> declared as critical habitat.</p>	<p>Items 12 to 25 have been addressed</p>
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N.B: Provision of a species impact statement is a statutory requirement of a licence application, if the action is proposed on critical habitat.

The provision of information addressing items 12 to 17 is a statutory requirement of a licence application if the action proposed is not on land that is critical habitat. Information addressing any of the questions below must be attached to the application.

<p>12. Describe the type and condition of habitats in and adjacent to the land to be affected by the action.</p>	<p>The letter attached to this application details the type of habitats present which are considered to be in good condition. Weed invasion was very low and disturbance to the sites was minimal.</p>
<p>13. Provide details of any known records of a threatened species in the same or similar known habitats in the locality (include reference sources).</p>	<p><i>Eulamprus leuraensis</i> (Blue Mountains Water Skinks) have been recorded within the EEC that are subject to piezometer installation (NPWS Wildlife Atlas accessed April, 2009) with a range of other threatened fauna observed in adjacent country including the Brown Treecreeper, Masked Owl and Powerful Owl.</p> <p><i>Boronia deanei</i> (Deane's Boronia) has been recorded within the EEC to be disturbed with other threatened flora observed in the vicinity including <i>Derwentia blakelyi</i> and <i>Persoonia hindii</i> (NPWS Wildlife Atlas accessed April 2009).</p>
<p>14. Provide details of any known or potential habitat for a threatened species on the land to be affected by the action (include reference sources).</p>	<p>The EEC forms habitat for <i>Eulamprus leuraensis</i> (Blue Mountains Water Skink) and <i>Boronia deanei</i> (Deane's Boronia). As the proposal involves the installation of four piezometers which will impact upon a minimal area of the habitat, the impact is not considered significant.</p>

<p>15. Provide details of the amount of such habitat to be affected by the action proposed in relation to the known distribution of the species and its habitat in the locality and the region.</p>	<p>The area of EEC and threatened species habitat to be disturbed is minimal and will be approximately 4m². No vehicle access into the EEC will be permitted and monitoring will be undertaken every two months. Therefore, the area to be disturbed is minimal and the associated impacts are not considered to be significant.</p>
<p>16. Provide an assessment of the likely nature and intensity of the effect of the action on the lifecycle and habitat of the species.</p>	<p>The action involves the installation of four piezometers using a hand auger with no vehicle access to the site. The piezometers will be monitored every two months and cover an area of approximately 4m² (for all four piezometers). Therefore, the impact of the action is considered to be of low intensity and is considered unlikely to impact on the lifecycle or habitat of any threatened species, populations or ecological communities.</p>
<p>17. Provide details of possible measures to avoid or ameliorate the effect of the action.</p>	<p>The sites will be accessed on foot only, no vehicular access will be permitted to minimise the impact on the EECs present. The piezometers are being installed on the recommendation of the DECC to monitor groundwater levels within the Shrub Swamps. This will enable long the long term monitoring of the health of these ecosystems.</p>

N.B: The Director-General must determine whether the action proposed is likely to significantly affect threatened species, populations or ecological communities, or their habitats. To enable this assessment the Applicant is required to address items 18 to 25. Information addressing any of the questions below must be attached to the application.

<p>18. In the case of a threatened species, whether the life cycle of the species is likely to be disrupted such that a viable local population of the species is likely to be placed at risk of extinction.</p>	<p>There are no threatened species recorded at the exact piezometer sites which are marked out with stakes. The proposed piezometer installation is considered to have a minimal impact on the area. As such it is considered highly unlikely to disrupt the life cycle of any threatened species, population or ecological community such that it would place those species at risk of extinction.</p>
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19. In the case of an endangered population, whether the lifecycle of the species that constitutes the endangered population is likely to be disrupted such that the viability of the population is likely to be significantly compromised.	No Endangered Populations are likely to occur within the subject site.
20. In relation to the regional distribution of the habitat of a threatened species, population or ecological community, whether a significant area of known habitat is to be modified or removed.	Due to the minimal area of Newnes Plateau Shrub Swamp EEC, any areas of this type are considered significant. As the proposal is of low intensity and does not involve the clearing of substantial tracts of EEC, it is not considered likely to destroy a significant area of this rare EEC. In fact, monitoring of the groundwater via the piezometers will assist in better understanding the swamps enabling management of the area to protect this EEC.
21. Whether an area of known habitat is likely to become isolated from currently interconnecting or proximate areas of habitat for a threatened species, population or ecological community.	The proposal will not result in the disconnection of any corridors or area of interconnected habitat. Disturbance will be minimal.
22. Whether critical habitat will be affected.	No areas declared as Critical Habitat lie within the subject site.
23. Whether a threatened species, population or ecological community, or their habitats, are adequately represented in conservation reserves (or other similar protected areas) in the region.	160ha of the approximately 650ha of mapped Newnes Plateau Shrub Swamp (DECC, 2006) occurs within Blue Mountains and Wollemi National Parks. The proposal involves the monitoring of this community to maintain its health into the future thereby conserving the EEC into the future. The area of EEC to be disturbed by this action is less than 0.0004 ha.

24. Whether the development or activity proposed is of a class of development or activity that is recognised as a threatening process.	The installation of the piezometers will involve minimal clearing and minimal disturbance to the ecosystem. It is not considered likely to contribute to any activity that is recognised as a threatening process.
25. Whether any threatened species, population or ecological community is at the limit of its known distribution.	The Newnes Plateau Shrub Swamp EEC occurs within the local government areas of the Blue Mountains and Lithgow. As the site lies within the Lithgow LGA, it is not considered to be at the limit of its known distribution.

Important information for the Applicant

Processing times and fees

The *Threatened Species Conservation Act 1995* provides that the Director-General must make a decision on the licence application within 120 days where a species impact statement (SIS) has been received. No timeframes have been set for those applications which do not require a SIS. The Director-General will assess your application as soon as possible. You can assist this process by providing clear and concise information in your application.

Applicants may be charged a processing fee. The Director-General is required to advise prospective applicants of the maximum fee payable before the licence application is lodged. Therefore, prospective applicants should contact the NPWS prior to submitting a licence application.

A \$30 licence application fee must accompany a licence application.

Protected fauna and protected native plants*

Licensing provisions for protected fauna and protected native plants are contained within the *National Parks and Wildlife Act 1974*.

Request for additional information

The Director-General may, after receiving the application, request additional information necessary for the determination of the licence application.

Species impact statement

Where the application is not accompanied by a SIS, the Director-General may decide, following an initial assessment of your application, that the action proposed is likely to have a significant effect on threatened species, populations or ecological communities, or their habitats. In such cases, the

* Protected fauna means fauna of a species not named in Schedule 11 of the *National Parks and Wildlife Act 1974*.

Protected native plant means a native plant of a species named in Schedule 13 of the *National Parks and Wildlife Service 1974*.

on threatened species, populations or ecological communities, or their habitats. In such cases, the *Threatened Species Conservation Act 1995* requires that the applicant submit a SIS. Following initial review of the application, the Director-General will advise the applicant of the need to prepare a SIS.

Director-General's requirements for a SIS

Prior to the preparation of a SIS, a request for Director-General's requirements must be forwarded to the relevant NPWS Zone Office. The SIS must be prepared in accordance with section 109 and 110 of the TSC Act and must comply with any requirements notified by the Director-General of National Parks and Wildlife.

Certificates


If the Director-General decides, following an assessment of your application, that the proposed action is not likely to significantly affect threatened species, populations or ecological communities, or their habitats, a Section 91 Licence is not required and the Director-General must, as soon as practicable after making the determination, issue the applicant with a certificate to that effect.

N.B: An action that is not required to be licensed under the Threatened Species Conservation Act 1995, may require licensing under the National Parks and Wildlife Act 1974, if it is likely to affect protected fauna or protected native plants.

I confirm that the information contained in this application is correct. I hereby apply for a licence under the provisions of Section 91 of the *Threatened Species Conservation Act 1995*.

Nicole Van den Berg
Environmental Coordinator
Clarence - Centennial

Applicant's name,
organisation and position
(Please print)


Applicant's signature

Date

26-6-09

Our Ref: 25954:MB:TL

19 June 2009

CENTENNIAL COAL – CLARENCE COLLIERY
PO BOX 92
LITHGOW NSW 2790

ATTENTION: NICOLE VANDENBERG

Dear Nicole,

**RE: SECTION 91 LICENCE APPLICATION
PIEZOMETER INSTALLATION, CLARENCE COLLIERY**

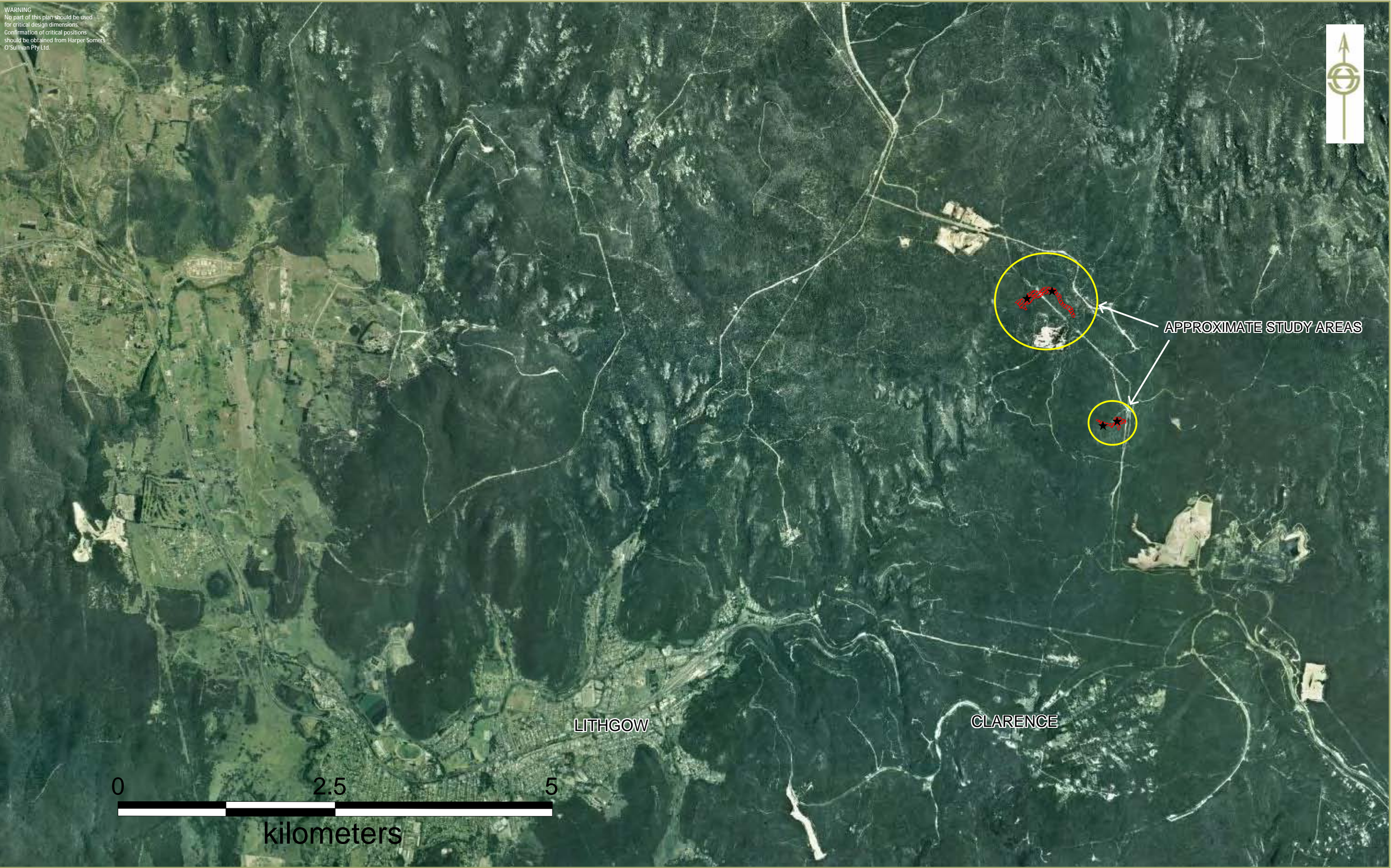
RPS Harper Somers O'Sullivan (RPS HSO) has been engaged by Centennial Coal to undertake ecological inspections of proposed piezometer sites located within the Newnes State Forest above Clarence Colliery, near Lithgow. The piezometers are being installed at the recommendation of the Department of Environment and Climate Change (DECC) to monitor groundwater levels in lands that are potentially subject to subsidence as a result of mining activities. This letter forms part of a Section 91 Application under the *Threatened Species Conservation Act 1995*.

Ecological inspections by an ecologist took place on 9th June 2009 and included 4 proposed piezometer locations (see Figures 1-1 and 1-2). Inspections identified the ecological characteristics and related possible ecological constraints in relation to the proposed piezometer installation. Whilst only a small area will be affected by the installation of the piezometers, a total area of 3 square meters was assessed.

A description of each proposed piezometer site is provided below. These sites lie within land mapped as Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion Endangered Ecological Community in the Vegetation of the Western Blue Mountains (DECC, 2006). They are proposed to be located within this Endangered Ecological Community (EEC) to monitor groundwater levels, as this EEC is partly groundwater-dependant.

The piezometers to be installed will stand at approximately 1 metre tall and consist of pipes that have a diameter of approximately 10cm. A data logger will be attached to each piezometer to record groundwater data which will be incorporated into the four monthly Newnes Plateau Shrub Swamp Management Plan reports by Clarence Colliery. Access to the piezometer locations will be by vehicle on the nearest track then on foot to the piezometer location to prevent unnecessary damage to the Newnes Plateau Shrub Swamp EEC. The likely impacts are minimal considering the small size of the piezometers which will be installed using hand augers. This will not require the clearing of substantial amounts of vegetation but may involve the removal

WARNING
No part of this plan should be used
for critical design dimensions.
Confirmation of critical positions
should be obtained from Harper Somers
O'Sullivan Pty Ltd.



TITLE: FIGURE 1-1 SITE LOCATION

LOCATION: CLARENCE

DATUM: DATUM
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 22/6/2009
PURPOSE: LOCALITY MAP

LAYOUT REF: J:\JOBS\25K\25954 - Clarence\10-Drafting & Mapping
VERSION (PLAN BY): MAYA BERETTA

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CLIENT: CLARENCE COLLIERY
JOB REF: 25954

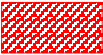
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T: 02 4961 6500 F: 02 4961 6794 www.rpshso.com.au


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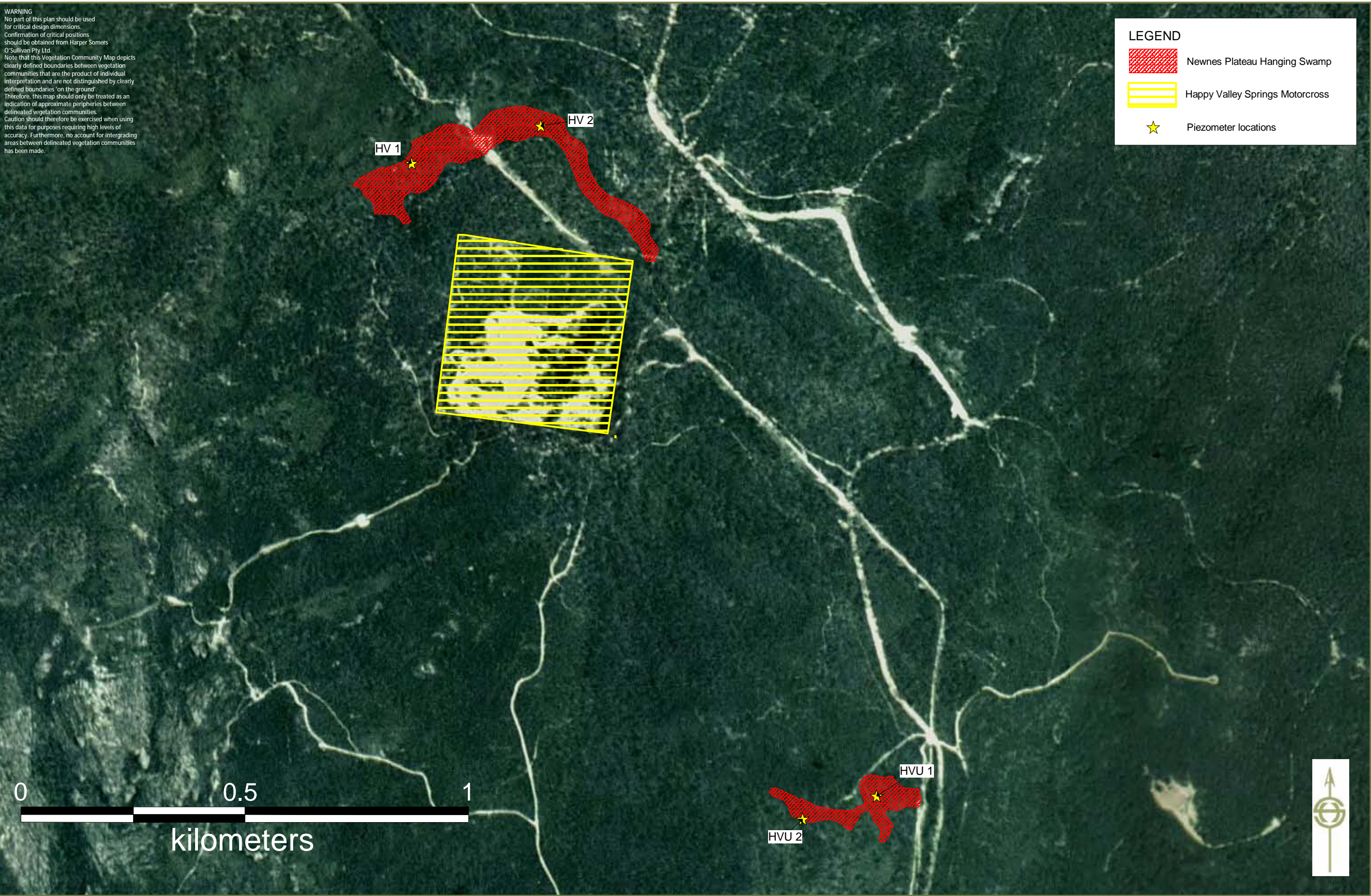
WARNING
No part of this plan should be used
for critical design dimensions.
Confirmation of critical positions
should be obtained from Harper Somers
O'Sullivan Pty Ltd.
Note that this Vegetation Community Map depicts
clearly defined boundaries between vegetation
communities that are the product of individual
interpretation and are not distinguished by clearly
defined boundaries 'on the ground'.
Therefore, this map should only be treated as an
indication of approximate peripheries between
delineated vegetation communities.
Caution should therefore be exercised when using
this data for purposes requiring high levels of
accuracy. Furthermore, no account for intergrading
areas between delineated vegetation communities
has been made.

LEGEND

 Newnes Plateau Hanging Swamp

 Happy Valley Springs Motorcross

 Piezometer locations



TITLE: FIGURE 1-2 STUDY AREAS

LOCATION: CLARENCE

DATUM: DATUM
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 15/6/2009
PURPOSE: SECTION 91

LAYOUT REF: J:\JOBS\25K\25954 - Clarence\10-Drafting & Mapping
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19 June 2009

of a small area of vegetation, by hand, to allow the installation of the piezometer. See Photograph 1 for an example of the type of piezometer to be installed. Potential impacts include:

- the loss of less than 5 shrubs and small areas of groundcover;
- small areas of soil disturbance which are unlikely to lead to erosion due to the minimal slope and high level of groundcover; and
- the creation, over time of walking tracks to the piezometers which may develop as a result of the data loggers being checked every two months.

A number of general recommendations that should be adopted for all piezometer sites are:

- Disturbance to, and removal of, native vegetation should be minimised during all phases of work;
- The sites must be accessed on foot from the nearest existing track;
- The piezometer holes are to be dug with a hand auger to minimise potential impacts on the Endangered Ecological Community within which the piezometers are to be placed;
- If there is fallen timber (logs and fallen branches) within the vicinity of the piezometer sites it is recommended that an Environmental Officer inspect the fallen timber for fauna such as small reptiles and mammals before being moved. Any timber that is moved should be done carefully and with minimal disturbance and replaced on the ground away from the access track or piezometer sites; and
- Vehicle access is to remain within existing tracks to minimise potential impacts on surrounding vegetation and reduce erosion.



Photograph 1 – Piezometer type to be installed.

HV1 (6296993N, 241550E)



Description

Piezometer site HV1 lies within an area mapped as Newnes Plateau Hanging Swamp (DECC, 2006). The site occurs within an area of dense groundcover (90%) that is dominated by *Gleichenia dicarpa* (Pouched Coral Fern) and a variety of sedges and rushes. While no canopy exists above the piezometer site, a shrub layer was present at 50% projected foliage cover (PFC) dominated by *Grevillea acanthifolia* subsp. *acanthifolia* interspersed with *Leptospermum grandifolium* (Woolly Tea Tree), *Banksia marginata* (Silver Banksia) and *Sprengelia incarnata*. See attachment 1 for the flora list of this site.

HV2 (6297077N, 241839E)



Description

Piezometer site HV2 lies within an area mapped as Newnes Plateau Shrub Swamp (DECC, 2006). The site occurs within an area of dense groundcover (95%) that is dominated by *Gahnia sieberiana* (Red-fruit Saw-sedge), *Baloskion australe* and *Gleichenia dicarpa* (Pouched Coral Fern). While no canopy exists above the piezometer site, a shrub layer was present at 40% projected foliage cover (PFC) dominated by *Grevillea acanthifolia* subsp. *acanthifolia*. See attachment 1 for the flora list of this site.

HVU1 (6295590N, 242590E)



Description

Piezometer site HVU1 lies within an area mapped as Newnes Plateau Hanging Swamp (DECC, 2006). The site occurs within an area of dense groundcover (95%) that consists of *Lepidosperma gunnii*, *Gahnia sieberiana* (Red-fruit Saw-sedge), *Baloskion australe* and *Gleichenia dicarpa* (Pouched Coral Fern). While no canopy exists above the piezometer site, a shrub layer was present at 20% projected foliage cover (PFC) dominated by *Grevillea acanthifolia* subsp. *acanthifolia* and a *Leucopogon* sp.. See attachment 1 for the flora list of this site.

Wombat scats were observed in the vicinity of this site.

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HVU2 (6295520N, 242424E)



Description

Piezometer site HVU2 lies within an area mapped as Newnes Plateau Hanging Swamp (DECC, 2006). The site occurs within an area of dense groundcover (95%) that consisted of *Lepidosperma gunnii*, *Gahnia sieberiana* (Red-fruit Saw-sedge) and *Baloskion australe*. While no canopy exists above the piezometer site, a shrub layer was present at 25% projected foliage cover (PFC) dominated by *Grevillea acanthifolia* subsp. *acanthifolia* and a *Leptospermum grandifolium*. See attachment 1 for the flora list of this site.

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19 June 2009

IMPACT ASSESSMENT

A 7 part test of significance has been undertaken for the Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion EEC and is attached in the Section 91 Application. The 7 part test of significance indicates that the proposed action is unlikely to result in a significant impact on any threatened species, populations or ecological communities.

CONCLUSION

The ecological inspection found that the proposed activities are unlikely to have a significant impact on threatened species, populations or ecological communities in the locality providing that the recommended mitigation measures are adopted.

If you have any further enquiries regarding the above please do not hesitate to contact the writer on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN PTY LTD

**Toby Lambert
Senior Ecologist
BEnvSc**

Attachment One

Flora Species List for Clarence Piezometer Sites

Family	Scientific Name	Common Name	HV1	HV2	HVU1	HVU2
Restionaceae	<i>Baloskion australe</i>	-		X	X	X
Proteaceae	<i>Banksia marginata</i>	Silver Banksia	X			
Cyperaceae	<i>Caustis flexuosa</i>	Curly Sedge	X			
Poaceae	<i>Deyeuxia gunniana</i>	-			X	
Cyperaceae	<i>Gahnia sieberiana</i>	Red-fruited Saw-sedge		X	X	X
Gleicheniaceae	<i>Gleichenia dicarpa</i>	Pouched Coral Fern	X	X	X	
Proteaceae	<i>Grevillea acanthifolia</i> subsp. <i>acanthifolia</i>	-	X	X	X	X
Cyperaceae	<i>Gymnoschoenus sphaerocephalus</i>	Button Grass	X			
Cyperaceae	<i>Lepidosperma gunnii</i>	-			X	X
Myrtaceae	<i>Leptospermum grandifolium</i>	Wooly Tea-tree	X			X
Epacridaceae	<i>Leucopogon</i> sp.	-			X	
Thymelaeaceae	<i>Pimelea</i> sp.	Rice Flower	X			
Epacridaceae	<i>Sprengelia incarnata</i>	Swamp Heath	X			
Stylidiaceae	<i>Stylidium graminifolium</i>	Trigger Plant			X	