

3 November 2016

**NSW Planning Assessment Commission Determination Report
Mount Owen Continued Operations Project (SSD 5850)**

1. INTRODUCTION

On 10 October 2016, the Planning Assessment Commission (Commission) received from the Department of Planning and Environment (Department), a State significant development application (the development application) from Mount Owen Pty Ltd (Applicant) for the Mount Owen Continued Operations Project (MOCO Project).

The Department has referred the development application to the Commission for determination in accordance with the Minister for Planning's delegation dated 14 September 2011 because the Department received more than 25 public submissions in the nature of objections.

The Department's referral follows the Commission's public hearing on 15 December 2015 and review report dated February 2016.

Ms Lynelle Briggs AO, Chair of the Commission, nominated Mr Garry West (chair), Ms Abigail Goldberg and Mr Gordon Kirkby to constitute the Commission to determine the development application.

1.1 Summary of development application

The development application (as amended – see Section 1.3) proposes to expand the existing mining operations at two open cut pits in the Mount Owen Complex to extend the life of the mine and enable the extraction of an additional 86 million tonnes (Mt) of run-of-mine (ROM) coal. In summary, the project would involve:

- expanding the existing open cut mine to extract an additional 86Mt of ROM coal from two open cut pits (one of which is largely located in an area previously disturbed by mining);
- extending the life of the open cut mine by approximately 12 years to 2030;
- duplicating the existing rail spur line and constructing a northern rail entry/exit;
- using an existing overland conveyor to transfer gravel and coal to the Liddell Coal Mine; and
- upgrading Hebden Road and ancillary site infrastructure.

1.2 Public hearing and review report

On 18 November 2015, the Minister for Planning requested that the Commission conduct a public hearing and review the merits of the project. In summary, the Minister's terms of reference guided the Commission to consider the:

- Applicant's Environmental Impact Statement (EIS), public and agency submissions, and the Applicant's response to submissions;
- likely economic, environmental and social impacts of the development;
- merits of the proposed development as a whole, having regard to all relevant policies; and
- additional reasonable and feasible mitigation measures that could be implemented to minimise and/or manage the potential impacts of the development.

The Commission subsequently held a public hearing on 15 December 2015, received written submissions, visited the site and surrounds, and met with the Applicant, the Department, Singleton Council (the Council), the Office of Environment and Heritage (OEH) and the Upper Hunter Mining Dialogue.

The Commission published its review report in February 2016. It made a total of 24 recommendations in the areas of biodiversity, air quality, final landform, rehabilitation, water, Aboriginal cultural heritage, socio-economic impacts and public consultation. The Commission carried forward the view of several submissions that the Department's preliminary environmental assessment report did not present a full assessment of the project or take a final position on the key areas of biodiversity, air quality and the final landform.

1.3 Project amendments in response to the Commission's review report

In May 2016, the Applicant responded to the Commission's review report. The response made a number of changes to the proposed project. Those changes include:

- removal of the previously proposed Ravensworth East Resource Recovery (RERR) Pit mining area, with a resulting reduction in proposed ROM coal extraction from 92Mt to 86Mt;
- provision of an additional 144 hectare (ha) biodiversity offset area comprising extant woodland, forest communities and key foraging resources for threatened fauna;
- revised rehabilitation plans incorporating additional rehabilitated woodland corridors and measures to improve corridor resilience and habitat connectivity in the final landform;
- additional macro-relief and micro-relief across the proposed final landforms;
- further works to improve the final landform around the Bayswater North Pit void; and
- updated tailings emplacement activities that reflect a recent modification to the consent for the Ravensworth East Mine.

The Applicant's response also included a revised mine plan, an updated air quality impact assessment, an updated water resources assessment and an updated cost benefit analysis.

1.4 The Department's final assessment report

The Department completed its final assessment report on 10 October 2016. It considered each of the Commission's recommendations and the Applicant's response before concluding that:

- the Applicant has addressed the Commission's recommendations on biodiversity through the provision of an additional upfront biodiversity offset, additional information on its proposed biodiversity management actions, and further commitments toward the establishment, active regeneration and management of strategic woodland corridor areas;
- the Applicant has undertaken all reasonable and feasible efforts to minimise the number and extent of final mine voids and blend the final mine voids into the surrounding landscape;
- the revised conditions provide a greater focus on regular monitoring and reporting of rehabilitation and regeneration success;
- the project can be operated to meet air quality standards, subject to conditions;
- nearby residences have been afforded appropriate protection from potential noise impacts from mining;
- the project's predicted impacts on water resources can be appropriately managed and licensed; and
- the project would result in a net benefit to NSW under all of the reasonably foreseeable economic scenarios.

2. COMMISSION'S MEETINGS

As part of its consideration of the proposal, the Commission met with the Department and the Applicant on 19 October 2016. Notes from these meetings are provided in **Appendix 1**.

2.1 Briefing from the Department

The Department briefed the Commission on its final assessment report. Specifically, the Department outlined key changes to biodiversity, final landforms, rehabilitation, air quality, water quality and socio-economic matters. The Department also briefed the Commission on the additional community and agency consultation that was undertaken after publication of the Commission's review report.

2.2 Briefing from the Applicant

The Applicant briefed the Commission on its response to the Commission's review report. In particular, the Applicant outlined the key changes to the project, improvements to biodiversity outcomes, consultation that was undertaken after the review report and the results of the updated air quality analysis. The Applicant also outlined its response to the Commission's recommendations in relation to water management, Aboriginal cultural heritage and socio-economic matters.

2.3 Public meeting

The Commission notes that in accordance with its 'Guide to Commission Meetings', where a public hearing has already been held, the Commission will not usually hold a public meeting, regardless of the number of submissions on the application. The Commission also notes that there is no statutory requirement for a public meeting before determining an application.

The Commission held a public hearing for the development application on 15 December 2015 as part of its review process. A total of 19 people spoke at the public hearing and 31 written submissions were received from the community before and after the public hearing.

In addition, following the Commission's review report the Department invited further submissions from previous submitters on the Applicant's response (as per the Commission's Recommendation 24). The Department carried this out on 31 May 2016 (see the Department's letter of invitation in **Appendix 2**) and received four submissions in total, comprising three objections and one submission in support of the proposal.

The Commission has examined these further submissions, and the Department's analysis of them in section 3.2.1 of the final assessment report. The Commission notes that no additional issues were raised and that in one case (Donna Watson, receiver 116), acquisition rights have been granted in the Department's revised recommendation.

Therefore, in compliance with the Guide, the Commission considers that an additional public meeting would not further assist its determination of the development application.

3. COMMISSION'S CONSIDERATION

In this determination, the Commission has carefully considered:

- all information provided by the Applicant, including updated inputs;
- the Department's preliminary and final assessment reports, including final peer reviews;
- advice and recommendations from government agencies, including updated advice;
- all submissions from the public; and,
- Section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Commission considers the key matters for consideration continue to be the main issues that were highlighted in its review report, which include biodiversity, final landform, rehabilitation, air quality, socio-economic, and water resource considerations. These issues are discussed in detail in the report below. The Commission has also considered other relevant issues including Aboriginal cultural heritage, noise, water and the appointment of relevant stakeholders to the community consultative committee.

The Commission acknowledges that the Department has negotiated significant amendments to the project following the review report, not least of which is a new 144 ha biodiversity offset, among other biodiversity gains, and the deletion of mining in the RERR pit and its associated final mine void.

3.1 Biodiversity

The Commission made six recommendations for biodiversity on the basis of its concern for the quantum of biodiversity offset proposed, connectivity and the timing for rehabilitation of biodiversity corridors in the east and north of the mine, the adequacy of audit arrangements for proposed biodiversity management measures, and representation of biodiversity stakeholders' interests on the Community Consultative Committee (CCC).

The Commission acknowledges that the Department has secured substantial improvements to the package of proposed biodiversity measures from the Applicant. In particular, the Applicant has proposed an additional 144 ha offset known as the Mitchell Hills Offset Area. This new offset is adjacent to the Hillcrest Offset Area, a 1,392 ha conservation area known to provide habitat for 12 threatened species, including those impacted by the proposal. The proposal now provides an upfront offset ratio of 1.8:1 ha, increased from 0.7:1 in the original proposal. The long term (post-regeneration and rehabilitation) offset ratio is expected to be 6.2:1 ha, increased from 3.6:1 in the original proposal.

In addition, the Applicant has committed to prioritising regeneration actions in identified sensitive areas, including areas of the endangered Central Hunter Ironbark – Spotted Gum – Grey Box Forest ecological community (Ironbark Forest) and important biodiversity corridors. This includes prioritising progressive rehabilitation to areas on the eastern boundary of the project and improving the condition of woodland remnants north of the project area. This commitment has been incorporated by the Department into the revised conditions of consent. The conceptual progression of the mine development and onsite revegetation and rehabilitation programs at 1, 5, 10 and 20 (final) years after commencement is provided at **Appendix 3**.

The Commission notes that the conditions of consent relating to the biodiversity management plan and the rehabilitation management plan have added emphasis to developing and monitoring environmental outcomes, including performance milestones and performance trials, developing detailed performance measures and completion criteria, and developing contingency actions if rehabilitation and revegetation activities are proving to be ineffective.

The biodiversity management plan now includes the requirement to monitor potential impacts of groundwater dependent ecosystems, specific trigger levels for remedial action and specific management measures to provide suitable habitat resources for threatened fauna species. The Applicant's commitments have been incorporated into the biodiversity management plan, which also addresses the recommendation to incorporate and monitor the function of introduced key habitat features, such as artificial tree hollows, and functional groups of vegetation.

In line with the Commission's recommendation to ensure biodiversity interests are represented on the CCC, the Department has recommended condition 8 in Schedule 5, requiring the Applicant to operate the CCC in keeping with the Department's guidelines for CCCs, as updated. Membership of the CCC shall comprise an independent chair and appropriate representation from the Council, recognised environmental groups and the local community. The Commission supports the inclusion of this condition in the conditions of consent.

Conclusion

The Commission acknowledges the significant improvement in the quantum of offsets proposed with the inclusion of the Mitchell Hills Offset Area, and additional rehabilitation areas for native forest, woodland and shrub land communities. In the long term these offset levels are expected to exceed the minimum 2:1 ratio requirements of the *Interim Policy on Assessing and Offsetting Biodiversity Impacts (2011)*.

The Commission notes that the additional 144 ha of established woodlands adjacent to Hillcrest Offset Area will help maintain large areas of woodland environments. This area of established woodland has been demonstrated to conserve the biodiversity values impacted by the proposal. In particular, this area is known to contain Spotted-tailed Quolls and foraging habitat for Regent Honeyeaters and Swift Parrots. Through the addition of this offset, the Commission considers that the Applicant has increased certainty around the compensation for impacts to biodiversity.

The Commission considers that the revised mine plan presents a sophisticated life of mine approach to managing the likely impacts to biodiversity from clearing native vegetation. The Applicant has provided additional information about specific methods and performance measures for regeneration and about particular vegetation species that should be promoted. The Commission notes that these amendments are reflected in the recommended conditions of consent, which also links the independent environmental audit to ensure regeneration is independently monitored and audited regularly.

The Commission notes that the Commonwealth Department of the Environment and Energy and the Department have confirmed the proposed offsets will compensate for impacts to species and ecological communities protected by NSW and the Commonwealth. Moreover, in finding that the proposed offsets are suitable, particularly in the long term, the OEH states that regeneration of land with intact soil profiles and seed banks, such as areas of derived native grasslands, is feasible and can support the re-establishment of woody plant communities. The Commission is satisfied that the required audit and corrective procedures, as well as the additional areas to be rehabilitated, will promote this.

The Commission considers that the Applicant has demonstrated that it is committed to implementing an effective and achievable management program to address impacts to biodiversity. The Commission also considers that the Department has revised its assessment, including the proposed conditions of consent, in a manner which provides greater certainty to how the biodiversity impacts from the proposal would be managed and offset. After consideration of the amended revegetation planning, landscape management and offsetting proposals the Commission accepts that the proposal would have an acceptable and manageable impact on biodiversity.

As a final remark, separate to the conclusion above, the Commission notes that an area of land adjacent to the Stringybark Creek Habitat Corridor is currently designated as Crown land. The Applicant stated that discussions have been held in relation to securing this land for conservation, but to date, have not been successful. The Commission agrees, in principle, that it is important this land is secured and managed for conservation as a method for ensuring long term biodiversity connectivity values are retained in the region, though not as a requirement for the MOCO project. The Commission encourages the Applicant to pursue this.

3.2 Final landform and rehabilitation

The Commission made six recommendations in relation to planning and outcomes for the final landform and rehabilitation objectives for the proposal. Broadly, the Commission recommended a review of the appropriateness of re-mining the RERR Pit, clarification on the number of final mine voids to remain at mine closure, options for exploring additional final land uses, amendments to management plans for mine closure and rehabilitation as well as areas currently undergoing rehabilitation at the Mount Owen Complex, and finally independent auditing and monitoring. The recommendations made by the Commission reflect community and agency submissions relating to long-term impacts to landforms, land use and effective mine remediation in the Hunter Valley.

In response to the Commission's review report, the Applicant has resolved to no longer mine in the RERR Pit thereby reducing the number of final mine voids. The Applicant confirmed the additional mine void identified in the EIS would actually be a temporary tailing storage facility attached to the Ravensworth East Mine. This tailing facility would be backfilled and capped prior to closure, as per the conditions of consent for the Ravensworth East Mine. The Applicant and the Department have confirmed that the overall Mount Owen Complex, including the MOCO Project, will result in three final mine voids. The Commission notes that the void at the Glendell Coal Mine, is governed under a separate consent and is not part of this project.

The Applicant also provided additional information in relation to its planned mine site remediation program, including the long term management and remediation of landscape impacts from the project. This information includes a commitment to work with the Department and other government agencies to develop detailed performance milestones, targeted remediation trials and to incorporate the results of ongoing environmental research into the remediation program. These commitments have been incorporated into the revised rehabilitation management plan and strategy.

The Commission notes that the updated conditions of consent require the Applicant to undertake independent auditing of the rehabilitation program. Findings from the audit programs would be incorporated into the ongoing rehabilitation of the MOCO Project site, allowing for an adaptive approach to post mining management of the landscape.

The Applicant has also provided additional information in relation to the potential final land use capabilities at the MOCO Project site and the surrounding mine affected areas. The Applicant identified that establishing woodland for biodiversity outcomes was likely to provide more beneficial outcomes than the establishment of low-intensity grazing land. However, the Applicant has provided revised landform and rehabilitation plans to accommodate additional potential future land uses, including agriculture and industrial uses.

Conclusion

The Commission considers that removal of mining in the RERR Pit from the proposal will allow for a reduced timeframe for the establishment of mature revegetated landscapes on the project site in a previously disturbed area. The exclusion of mining in the RERR Pit will also reduce the number of final mine voids that require management during and after mine closure.

While the Commission acknowledges that the proposal will result in final mine voids, it is also considered that the reduction in the number of final mine voids during decommissioning and post mine land use to be a desirable outcome for the long term management of this area. The Commission considers this project amendment signals the Applicant's commitment to rehabilitating and revegetating the project site.

The Commission also considers that the inclusion of additional audit and monitoring functions into the rehabilitation management plan strengthens the conditions of consent. The Commission notes that the Department and the Applicant have addressed its recommendations related to landform and rehabilitation. In particular, the project scope, supporting information and proposed conditions of consent have been reviewed and amended with effective refinements.

The Commission is of the view that the ongoing management of impacts to the landscape and post closure planning is appropriate. The Commission notes in particular the early consideration and development of ongoing management processes for impacts to the landscape, including any final mine voids, will provide as much certainty as possible at this stage that the post closure remediation of this project site will deliver positive outcomes.

The Commission notes that at the time of determination, NSW had not finalised its policy on final mine voids and as such this could not be considered by either the Applicant or the Department as recommended by the Commission.

3.3 Air quality

The Commission recommended that the air quality impacts of the project be fully assessed in the Department's final assessment report. This recommendation arose from a number of data and adequacy issues in the Applicant's original air quality impact assessment, which were identified in the independent peer review undertaken by Todoroski Air Sciences (Todoroski), and in agency submissions. The Commission also recommended that the Department should invite further comments from the Environment Protection Authority (EPA) and NSW Health.

Todoroski identified issues with the weather data obtained from one meteorological station used in the Applicant's air quality model, a potential underestimation of the background levels of annual average PM₁₀, and concerns with the Applicant's apportionment of dust sources around the site and relative to nearby mines. To resolve any uncertainty, Todoroski performed sensitivity testing of the three worst-case scenarios to determine the impacts of the potential underestimations.

Through this sensitivity testing, Todoroski found that two additional privately owned properties (receivers 114 and 116) are likely to exceed the annual average PM₁₀ criteria (30ug/m³) and recommended that these properties be afforded acquisition rights. Todoroski also recommended that the Applicant be required to install and operate a weather station near the closest private receivers to the southeast and be required to operate an accurate predictive dust management system, in order to better manage potential dust impacts in the area. The Commission notes the inclusion of these conditions in the recommended conditions of consent.

In keeping with the Commission's recommendation, the Department sought further comments from the EPA and NSW Health in relation to the final Todoroski review. The EPA advised that the Applicant had resolved all outstanding issues in relation to air quality impacts. In addition to the Todoroski conditions, it recommended two further conditions, which require the Applicant to estimate the PM_{2.5} emissions from diesel combustion and implement measures to minimise PM₁₀ and PM_{2.5} emissions from the project. These have been incorporated into conditions 18 and 19 of Schedule 3 of the recommended conditions of consent.

NSW Health advised that the recently revised criteria for 24-hour PM₁₀ in the *National Environmental Protection (Ambient Air Quality) Measure* (NEPM) (reduced to 30ug/m³ from 50ug/m³) would be exceeded at a number of private residences. The Commission notes the Department's advice that NSW is yet to adopt the revised NEPM. The project has been assessed against the EPA's current guidelines and afforded any voluntary mitigation and acquisition rights in accordance with the criteria set out in the NSW acquisition policy.

Conclusion

The Commission is satisfied that its recommendations have received an appropriate response in the Department's final assessment report. Uncertainties around the data and methods of air quality assessment have been resolved through independent sensitivity testing. The additional affected receivers have been given acquisition rights in the recommended conditions of consent, in line with the government's acquisition policy.

The Commission acknowledges the advice from NSW Health about the most recently adopted 24-hour PM₁₀ criteria in the NEPM. However, the Commission does not consider it appropriate to adopt the criteria for this project ahead of current State government policy. Notwithstanding, the Commission notes that the EPA has for some time implemented a range of air quality initiatives in the Hunter Valley under its licencing powers for coal mines. These initiatives include:

- an inter-agency coal mine compliance audit program;
- a 'Dust-Stop' program, ensuring that each coal mine implements the most reasonable and feasible particulate control options;
- a dust assessment handbook to help identify whether mining activities are being conducted in a proper and efficient manner;
- a reliable ambient air quality monitoring network; and
- compiling data to assist NSW Health review health impacts associated with air pollution in the Hunter and to respond to community concerns.

While acceptable according to current policy, the Commission notes that dust impacts from the mine would be reviewed from time to time under the EPA licencing powers. Any consent issued contemporarily would not preclude improvements to the mine's air quality performance in the future, if deemed necessary by the EPA after any future adoption of the revised NEPM criteria.

3.4 Socio-economic

Following significant concerns with the data and methodology, the Commission recommended that the cost benefit analysis be prepared in accordance with the relevant guidelines, reflect the final advice on air quality, biodiversity, final landforms, and should include additional information on the methodology employed to produce estimates of the value of the project under alternative scenarios.

The Centre of International Economics, the Department's independent peer reviewer, confirmed the revised cost benefit analysis had been undertaken in accordance with the relevant guidelines, including the *NSW Government Guidelines for Economic Appraisal* (NSW Treasury 2007) and the *Guidelines for the Use of Cost Benefit Analysis in Mining and Coal Seam Gas Proposals* (NSW Government 2012). In particular, the Centre of International Economics tested the revised project under an extreme scenario, using a coal price 20% lower than current market conditions and the upper bound estimates of the costs of residual air quality impacts and carbon emissions. Under this scenario, the revised project would be expected to generate a net benefit to NSW of approximately \$70M in present value terms.

The Commission also notes that on 18 April 2016, the Council endorsed the Applicant's draft Voluntary Planning Agreement (VPA) offer. The offer comprises funding contributions of \$1,024,000 and includes initiatives to target economic development, support for Aboriginal cultural events and the provision of community infrastructure and sponsorships. Accordingly, condition 15 in Schedule 1 requires the Applicant to enter into the VPA with the Council within six months of the date of the development consent.

Conclusion

The Commission has considered the Applicant's updated cost benefit analysis and acknowledges that it includes consideration of a range of different scenarios, as recommended in the review report. The Commission notes that the sensitivity of the Applicant's estimates of the project's net benefit to NSW were also peer reviewed. The Commission is satisfied that the economic benefits of the proposal, including employment provided by the mine, contributions to the Council and other indirect socio-economic benefits generated by the proposal, will provide a material benefit to the local area and NSW.

3.5 Water management

During the review process, the EPA identified that the existing environmental protection licences for the project did not allow for the direct discharge of surplus water to the environment. The Department of Primary Industry's (DPI Water) initial correspondence also raised issues with the project's predicted groundwater and surface water impacts and proposed surface water management system and licensing arrangements for the final landform. As such, the Commission recommended that the Department seek further comments from the EPA about the discharge of surplus water and the DPI Water about water licensing and associated issues.

The Department received further comments from the EPA on 22 June 2016, who advised that as the project will share water with other Glencore operations under the Greater Ravensworth Water Sharing Scheme, any surplus water would be managed under this scheme and the MOCO project does not involve direct discharge of surplus water to the environment. The Commission notes that the Applicant has updated its surface water impact assessment to reflect changes made in the revised project and concluded that the predicted impacts would not materially change from those described in the Environmental Impact Statement.

On 16 August 2016, DPI Water advised the Department that it was satisfied the Applicant would be able to obtain sufficient water licensing with the methodology used to calculate catchment loss and to estimate the volume of the water take for the proposed final landform. The Commission notes that conditions 21 and 26 in Schedule 3 reflect the recommendations of DPI Water related to the available water supply and consultation with DPI on the project's water management plan and final design and licensing requirements for the proposed final landform.

The Commission also recommended that the conditions of consent for the groundwater management plan include consideration of operations at Integra Underground Mine, an adjacent mine which Glencore has recently acquired. The Commission acknowledges that condition 26(v) in Schedule 2 has been updated to reflect this recommendation.

Conclusion

The Commission is satisfied that its concerns relating to water management have been adequately addressed that the project's potential impacts on water resources can be appropriately managed and licensed.

3.6 Other issues

All other issues raised previously in submissions have been adequately addressed in the Department's preliminary and final assessment reports, and in the conditions of consent. However, the Commission would like to comment on the Aboriginal cultural heritage assessment, the potential noise impacts from the project and a minor amendment requested by the Department to a blasting condition.

In its review report, the Commission recommended that the Department consider the findings and any potential implications of the court case *Darkinjung Aboriginal Land Council v Minister for Planning Infrastructure and Anor* (i.e. Calga Sand Quarry) in relation to the adequacy of the cultural heritage assessment for this project. Given that the MOCO project has been subject to a detailed Aboriginal cultural heritage assessment and would only impact upon sites of low or low to moderate significance, the Applicant and the Department consider that the court case has no relevant implications for the determination of this project. The Commission is satisfied with the Department's assessment of this matter.

The Commission notes that the Applicant has revised its noise impact assessment to account for the removal of the RERR area as a noise source. The noise impact assessment concludes that there would be a slight improvement in predicted noise levels during Year 10 for the Falbrook and Middle Falbrook areas and a reduction in the number of residences in the noise affectation and management zones. To ensure that nearby residences are appropriately protected from the impacts of mining in accordance with the NSW acquisition policy, the Department has recommended conditions 1 and 2 in Schedule 3, which require receivers 21, 22 and 23 to be afforded voluntary acquisition rights and receivers 13, 19 and 93 to be afforded voluntary mitigation rights. The Commission is satisfied that noise impacts on surrounding development have been addressed and is supportive of the recommended conditions.

On 31 October 2016, the Department wrote to the Commission requesting a minor amendment to a note under recommended condition 10 of Schedule 3. The amendment clarifies that should an additional blast be required after a blast misfire, this additional blast and the blast misfire should be counted as a single blast for the purpose of calculating the maximum number of daily and weekly blasts permitted under the condition. The Commission has included this amendment in the conditions of consent.

4. COMMISSION'S FINDINGS AND DETERMINATION

The Commission has carefully considered the Applicant's proposal, the Department's preliminary and final assessment reports and the relevant matters for consideration under section 79C of the EP&A Act. The Commission notes the advice and recommendations from government agencies including DPI, the Department of Industry, EPA, OEH, NSW Health, the Dams Safety Committee, Roads and Maritime Services, Transport for NSW and the Commonwealth Department of the Environment and Energy. The Commission has also reviewed the submissions received from the community on the project.

The Commission notes that the Department and the Applicant have adequately addressed the recommendations of the review report, especially in relation to strengthening and improving biodiversity, final landform and rehabilitation outcomes. The Commission considers that the Applicant has demonstrated that it is committed to implementing an effective and achievable management program to address impacts to biodiversity. The Commission also considers that the Department has revised its assessment, including the conditions of consent, in a manner which provides greater certainty in how the biodiversity impacts from the proposal would be managed and offset. The Commission considers that the proposal would have an acceptable and manageable impact on biodiversity.

The Commission is satisfied that potential air quality impacts have been adequately addressed in the Applicant's updated air quality impact assessment and will be appropriately managed by the conditions of consent. The Applicant's revised cost benefit analysis, peer reviewed by the Centre of International Economics, addresses the concerns raised in the Commission's review report. The Commission supports the conclusion that the project will provide material benefits to the local area and NSW.

The Commission is satisfied that its concerns relating to water management have been adequately addressed that the project's potential impacts on water resources can be appropriately managed and licensed. The Commission is of the view that matters relating to Aboriginal cultural heritage and noise have been addressed in the Department's final assessment report and through the conditions of consent.

For the reasons set out above, the Commission accepts the Department's recommendation that this proposal be approved. Consequently, the Commission has determined to grant consent to the development application subject to the conditions set out in the instrument of approval.



Mr Garry West (Chair)
Member of the Commission



Ms Abigail Goldberg
Member of the Commission



Mr Gordon Kirkby
Member of the Commission

**APPENDIX 1
RECORDS OF COMMISSION MEETINGS**

Notes of Briefing from the Department

This meeting is part of the determination process.		
Meeting note taken by David Way	Date: 19 October 2016	Time: 10:00 – 11:00 am
Project: Mount Owen Continued Operations (MOCO) Project (SSD 5850)		
Meeting place: Planning Assessment Commission Office		
<p>Attendees:</p> <p>Commission Members: Garry West (Chair), Abigail Goldberg and Gordon Kirkby</p> <p>Commission Secretariat: David Mooney (Team Leader) Jade Hoskins (Senior Planning Officer) David Way (Planning Officer)</p> <p>Department of Planning and Environment (DPE): Howard Reed (A/Executive Director, Resource Assessments) Matthew Sprott (A/Director, Resource Assessments & Compliance)</p>		
The purpose of the meeting: For DPE to brief the Planning Assessment Commission (PAC) on incorporating recommendations from the review.		
<p>A summary of key matters discussed is provided below:</p> <ul style="list-style-type: none"> • The Commission outlined the rationale for not requiring a public meeting prior to a determination for the MOCO Project. <p>The Department raised the following matters:</p> <ul style="list-style-type: none"> • Biodiversity <ul style="list-style-type: none"> - The overall change in the project’s scope and supporting information since the prior review, including the deletion of mining of the RERR pit; - The revised offset package, incorporating the Mitchell Hills Offset Area, including confirmation that it meets NSW and Commonwealth requirements; - Amendments to the extent and conditioning associated with woodland revegetation, including the inclusion of additional monitoring and auditing requirements; and, - Maintenance and establishment of east - west and north - south biodiversity linkages / corridors. • Landforms and Rehabilitation <ul style="list-style-type: none"> - Importance of the early planning and consideration of closure outcomes. - Changes to the mine planning, including additional information in the final landform, including battering and shaping of final mine voids and in micro-relief features. - Reduction in the total number of final mine voids with the deletion of mining of the RERR from the project consent. • Air Quality <ul style="list-style-type: none"> - Results of the air quality peer review and adjustment to proposed acquisitions. • Water Quality <ul style="list-style-type: none"> - The current management options for mine water, including the consolidation of management options across the Mount Owen Complex. • Socio Economic Analysis 		

- Result of the peer review of the CBA confirming a net positive economic gain for NSW and agreement on the procedure used.

Documents [tabled at meeting/to be provided]: The Department to provide a tracked changes version of the conditions of consent.

Outcomes/Agreed Actions: N/A

Meeting closed at 11:00 am

Notes of Briefing from the Applicant

This meeting is part of the determination process.		
Meeting note taken by Jade Hoskins	Date: 19 October 2016	Time: 11:30 am
Project: Mount Owen Continued Operations (MOCO) Project (SSD 5850)		
Meeting place: Planning Assessment Commission Office		
<p>Attendees:</p> <p>Commission Members: Garry West (Chair), Abigail Goldberg and Gordon Kirkby</p> <p>Commission Secretariat: David Mooney (Team Leader) Jade Hoskins (Senior Planning Officer) David Way (Planning Officer)</p> <p>Representing Mount Owen Pty Ltd (the Applicant): Bret Jenkins (GCAA Approval Manager) Ashley McLeod (Mt Owen Complex Operations Manager) Shane Scott (Mt Owen Continued Operations Project Manager) Vicki McBride (Mt Owen Continued Operations Approval Manager) David Holmes (Project Manager – Response to Submissions - Umwelt) Kate Connelly (Senior Ecologist - Umwelt) Barbara Crossley (Project Director - Umwelt)</p>		
The purpose of the meeting: For the Applicant to brief the Planning Assessment Commission (PAC) on its response to the Commission’s Review Report and Department’s Final Assessment Report.		
<p>A summary of key matters discussed is provided below:</p> <ul style="list-style-type: none"> • The Commission outlined its rationale for not requiring a public meeting prior to the determination of the project. <p>The Applicant presented the following to the Commission:</p> <ul style="list-style-type: none"> • Key changes to the project, including: <ul style="list-style-type: none"> - the deletion of mining of the RERR pit - additional areas of micro relief in the final landform - refined shape of proposed final mine voids and the allowance for receipt of tailings from other mines; and, - biodiversity improvements. • The consultation process following the Commission’s Review Report, including consultation with the CCC, Council, DPE, DPI Water and the community. • Key changes to biodiversity, including: <ul style="list-style-type: none"> - the additional offset (Mitchell Hills Offset Site) - revegetation commitments - regeneration activities - ensuring that those with interests on biodiversity are represented in the CCC - corridor linkages; and, - improvements into the biodiversity management plan. • The updated air quality assessment, noting that it accepts the peer review and DPE recommendations. 		

- Approved final mine voids and improvements to the final landform outcomes.
- Water management arrangements, noting that no additional surplus water is proposed.
- Consideration of the court case *Darkinjung Aboriginal Land Council v Minister for Planning Infrastructure and Anor* (re Calga Sand Quarry), noting that there are no identified, actual or potential items or places of high significance within the disturbance area.
- The updated CBA and the Department's peer review, which both confirm that even under an extreme scenario, there would be a net positive economic gain for NSW.

Documents [tabled at meeting/to be provided]: Applicant to provide a copy of their PowerPoint presentation

Outcomes/Agreed Actions: N/A

Meeting closed at 12:30pm

**APPENDIX 2
CORRESPONDENCE FROM THE DEPARTMENT**



**Planning &
Environment**

**Resource Assessments
Planning Services**

Contact: Thomas Watt
Phone: 9228 6375
Email: thomas.watt@planning.nsw.gov.au

«AddressBlock»
«Address1»

«GreetingLine»

Mount Owen Continued Operations Project (SSD 5850)

I refer to your submission made in relation to the Mount Owen Continued Operations Project (the project). As you may be aware, the Planning Assessment Commission published its review report on the project in February 2016.

The Commission's review included 24 recommendations which relate to biodiversity, air quality, final landform and rehabilitation, water, aboriginal cultural heritage, socio-economic and further public input into the assessment process. The Department requested that Glencore provide a response to each recommendation contained in the Commission's review report.

I wish to advise that the Department has now received Glencore's response and this information has been published on the Department's website (www.majorprojects.planning.nsw.gov.au).

I encourage you to review this information. Should you have any supplementary comments to add to your original submission on the project, you are invited to outline these matters in writing to the Department. If you choose to provide further comments, I ask that you consider the Department's Privacy Statement (see overleaf).

The Department is seeking to finalise its assessment of the project in the near future, to provide greater certainty for all members of the local community. Accordingly, should you decide to provide further comments, please ensure that these comments are received by the Department by **5.00 pm, Friday 17 June 2016**.

After receiving and considering any further comments, the Department will complete its final assessment report and refer the project back to the Commission for determination. I note that it is common practice for the Commission to hold a public meeting to hear public views on the Department's assessment report and recommendations, prior to making a determination on a project. As such, you may have a further opportunity for input at this stage.

If you have any enquiries on this matter, please contact Thomas Watt on 9228 6375.

Yours sincerely,

Matthew Sprott
Team Leader, Resource Assessments

Department of Planning and Environment - Privacy Statement

We value your input into the planning process and look forward to reading your submission.

1. Read the Department's Privacy Statement

Your personal information is protected under the *Privacy and Personal Information Protection Act 1998* (PPIP Act). The Department collects personal information in submissions for the purposes set out in the Department's Privacy Statement, which can be accessed from <http://www.planning.nsw.gov.au/privacy>. This statement sets out:

- how personal information is defined under the PPIP Act - it includes but is not limited to your name, address, and email address;
- the purposes for which the department collects personal information; and
- how personal information collected by the department will be used.

We respect your right to privacy.

2. Decide whether to include your personal information in your submission

(a) When you make a submission we will publish:

- **the content of your submission and any attachments** - including any personal information about you which you have chosen to include in those documents
- **a list of submitters**, which will include:
 - your name (unless you request your name be withheld from the list by identifying that you wish to make a 'confidential' submission)
 - your suburb or town
- **any political donations disclosure statement**, in accordance with the *Environmental Planning and Assessment Act 1979 (EP&A Act)*.

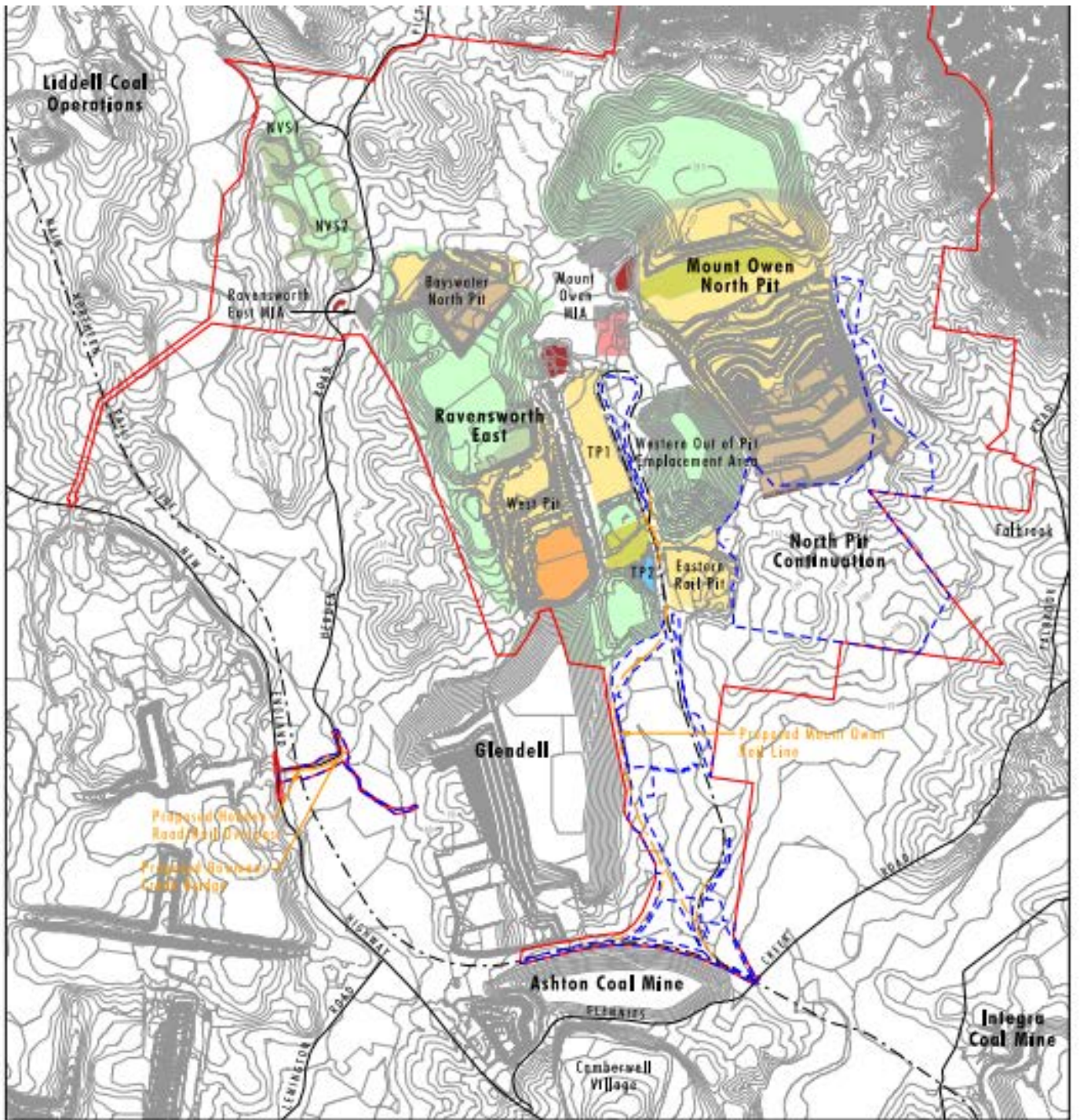
If you disclose a political donation point 2(b) does not apply as we must publish the political donations disclosure statement, which includes your name and address.

(b) If you wish to maintain your privacy in this submission process you must:

- **request your name be withheld from the list of submitters** by identifying in your correspondence that you wish to make a 'confidential' submission, and
- **not include any of your personal information** in your submission or attachments.

We will not publish offensive, threatening, defamatory or other inappropriate material.

**APPENDIX 3
CONCEPTUAL MINE DEVELOPMENT AND REHABILITATION**



Data Source: Mount Owen (2014)
Note: Contour Interval 5m(AHD)

0 1 2 3km
1:60 000

Legend

- | | | |
|------------------------------------|----------------------------|---------------------------|
| Project Area | Coal Stockpile - Product | Topsoil Removal |
| Proposed Disturbance Area | Coal Stockpile - ROM | Water Storage Area |
| Proposed Rail Upgrade Works | Infrastructure | Rehabilitation - Complete |
| Proposed Holden Road Upgrade Works | Rehabilitation - Temporary | Shaped Net Seeded |
| Contour | Tailings Employment | |
| Active Mining Area | | |
| Active Overburden Employment Area | | |

File Name (A4): R20/3109_1095.dgn
20140516 10:22

FIGURE 2.1

**Proposed Mount Owen
Conceptual Mine Plan
Year 1**

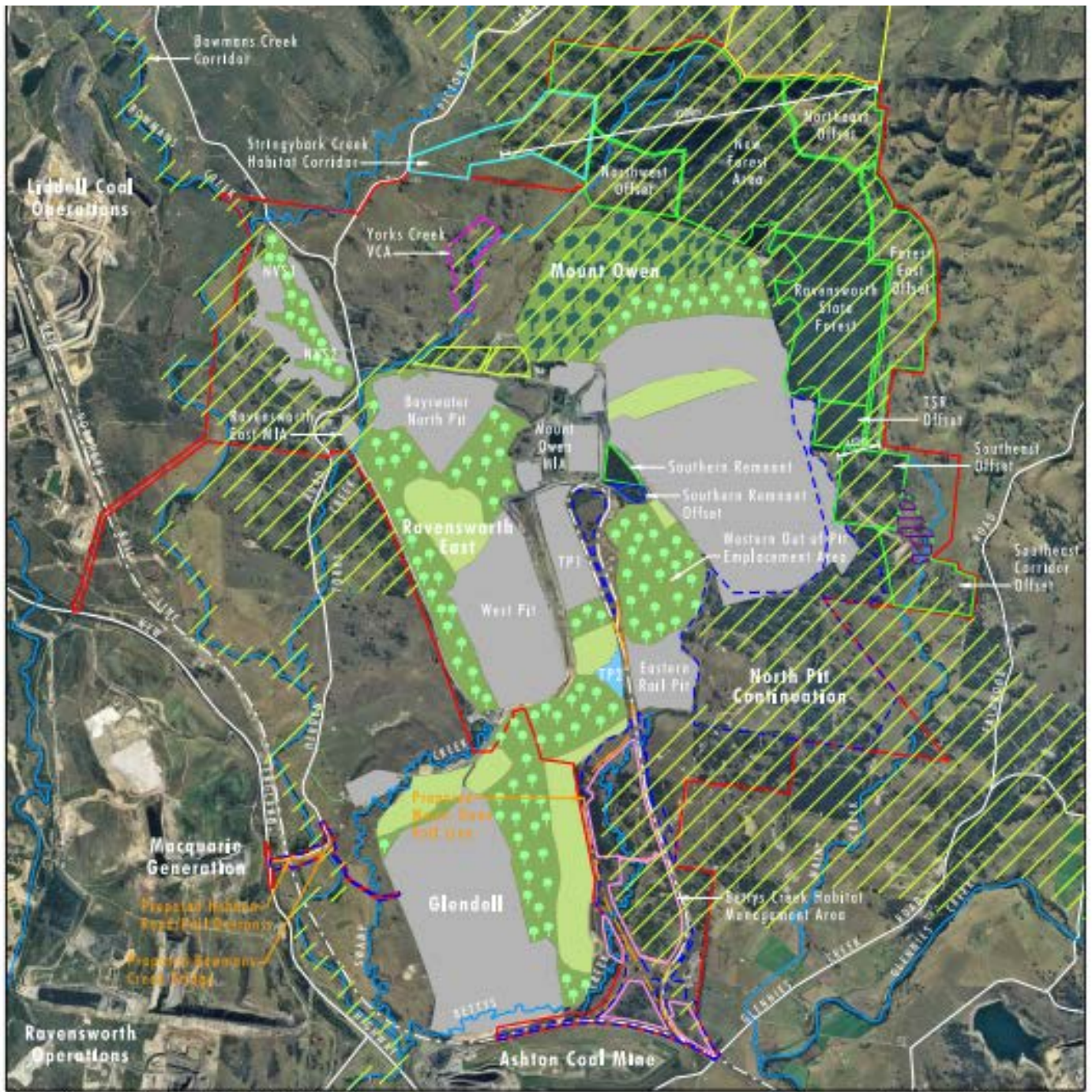


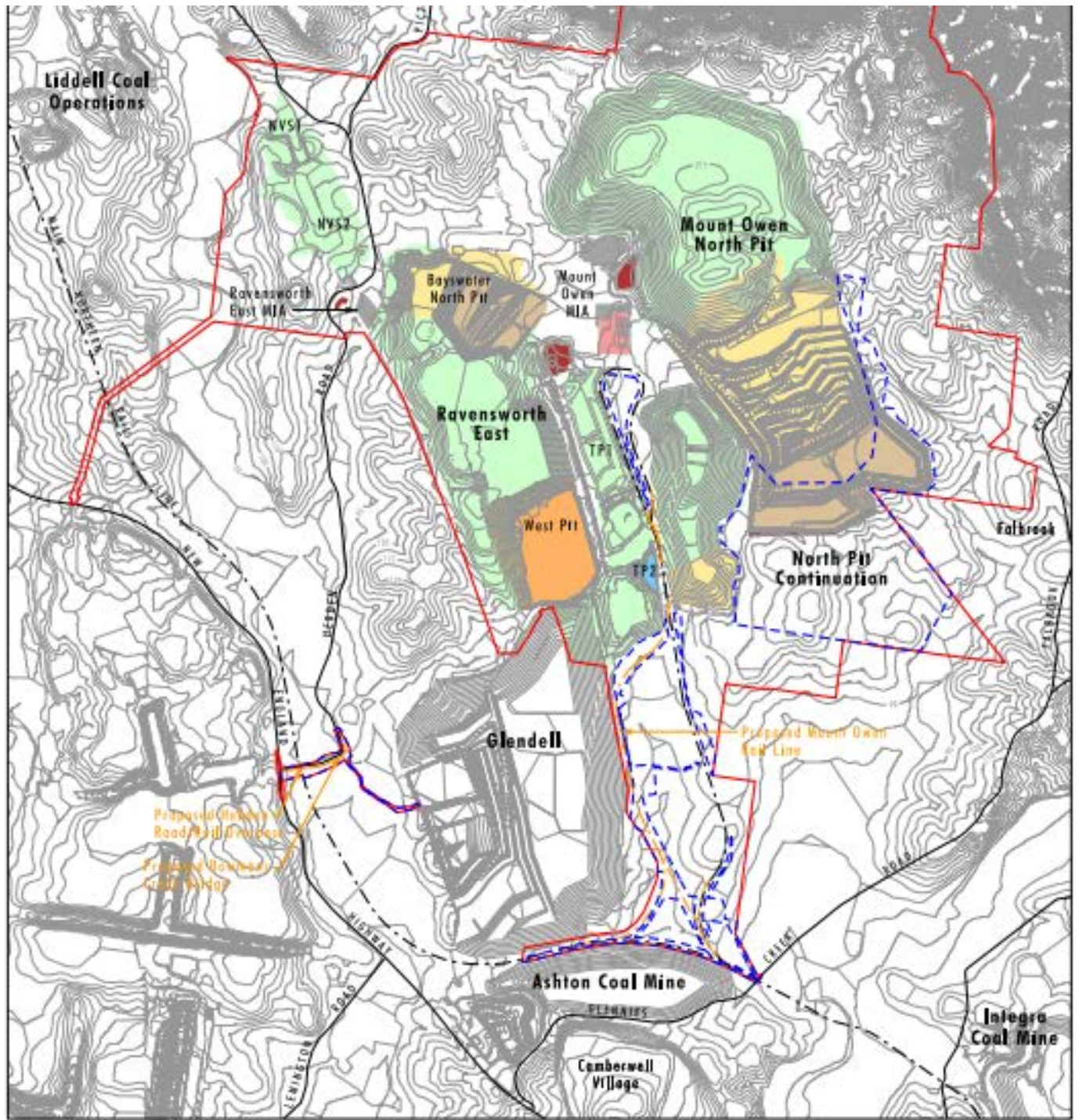
Image Source: Mount Owen (2012-2013)
 Data Source: Mount Owen (2014)

Legend

- | | | |
|---|------------------------------------|-------------------------------------|
| Project Area | Stringybark Creek Habitat Corridor | Habitat Connectivity |
| Proposed Disturbance Area | Disturbed Land | East-West Corridor Management Area |
| Yorks Creek VCA | Rehabilitation Woodland Advanced | Additional Active Revegetation Area |
| Existing Biodiversity Offset Area | Rehabilitation Woodland Early | |
| Proposed Cross Creek Biodiversity Offset Area | Rehabilitation Grassland | |
| Batters Creek Habitat Management Area | Water Storage Area | |
| Southern Remnant Biodiversity Offset Area | Drainage Line | |

File Name [A4]: R20/3109_1106.dgn
 20160510 11.15

FIGURE 4.3
Conceptual Habitat Connectivity Year 1



Data Source: Mount Owen (2014)
 Note: Contour Interval 5m(AHD)

0 1 2 3km
 1:60 000

Legend

- Project Area
- Proposed Disturbance Area
- Proposed Rail Upgrade Works
- Proposed Hobden Road Upgrade Works
- Contour
- Active Mining Area
- Active Overburden Employment Area
- Coal Stockpile - Product
- Coal Stockpile - ROM
- Infrastructure
- Rehabilitation - Complete
- Rehabilitation - Temporary
- Shaped Mat Seeded
- Tailings Employment
- Topsoil Removal
- Water Storage Area

File Name [A4]: R2073109_1096.dgn
 20160516 10:23

FIGURE 2.2

Proposed Mount Owen
 Conceptual Mine Plan
 Year 5

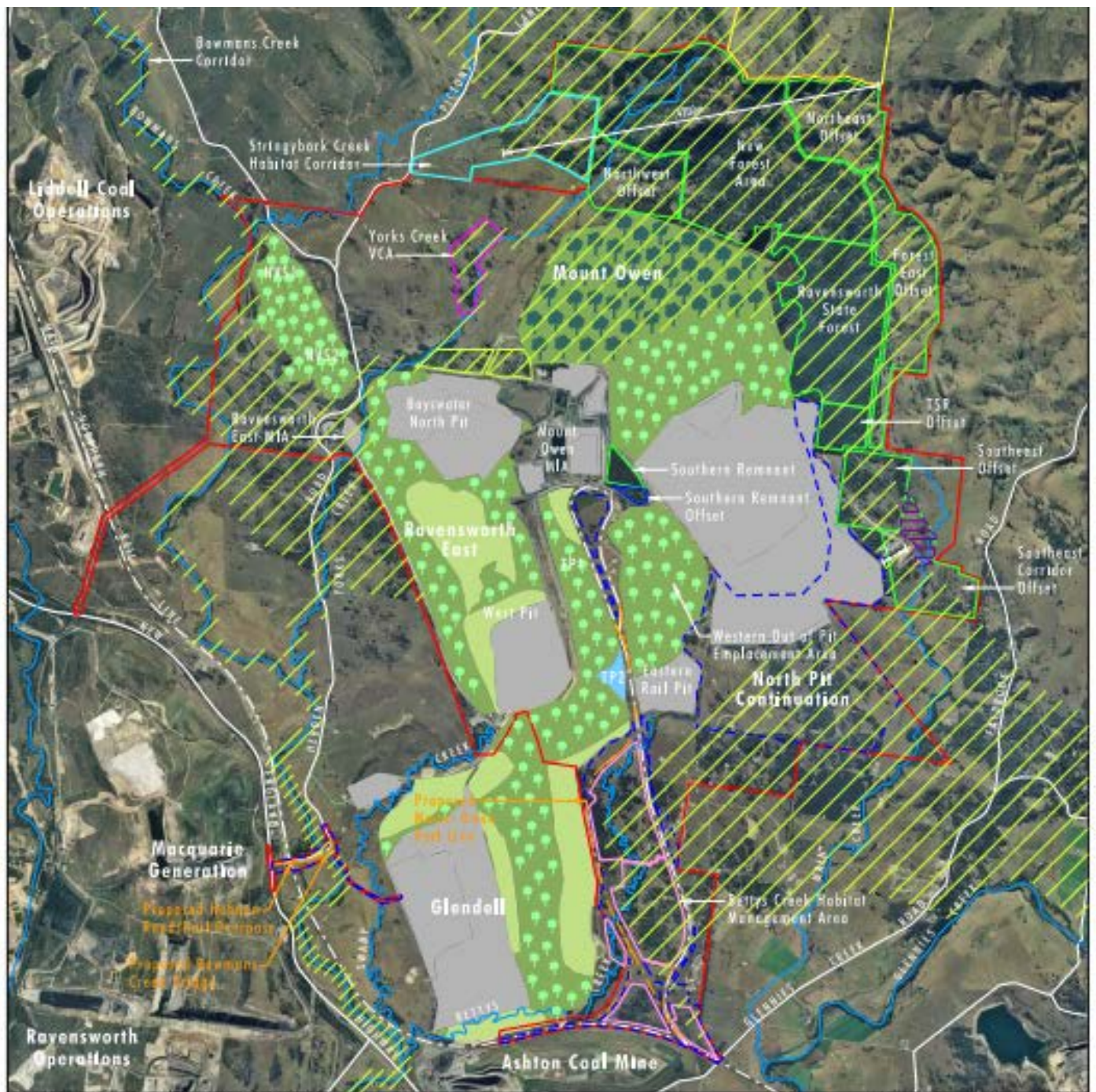
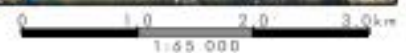


Image Source: Mount Owen (2012-2013)
 Data Source: Mount Owen (2014)

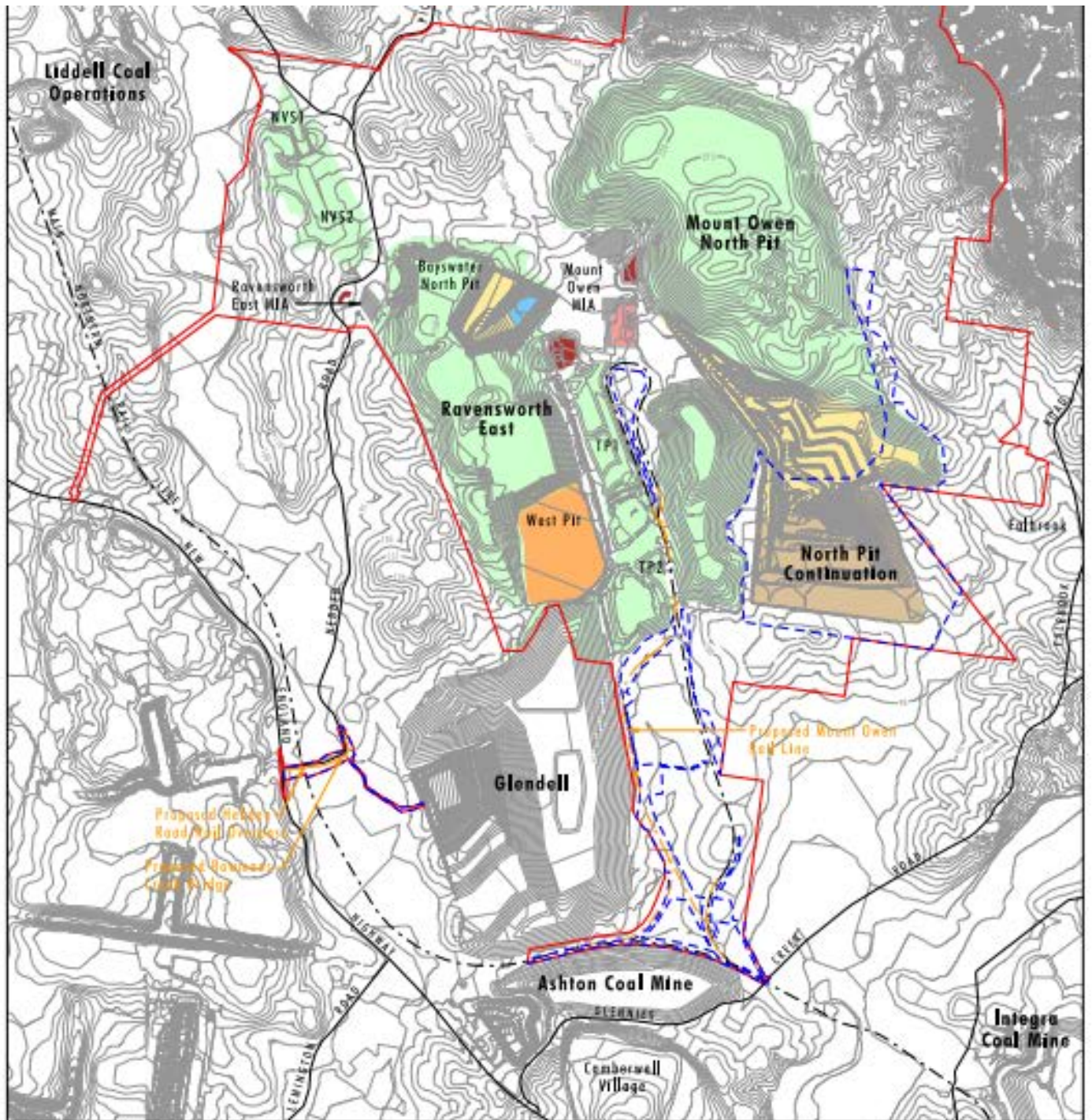


Legend

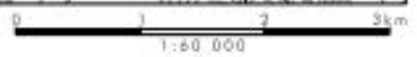
- | | | |
|---|------------------------------------|-------------------------------------|
| Project Area | Stringybark Creek Habitat Corridor | Habitat Connectivity |
| Proposed Disturbance Area | Disturbed Land | East-West Corridor Management Area |
| Yorks Creek YCA | Rehabilitation Woodland Advanced | Additional Active Revegetation Area |
| Existing Biodiversity Offset Area | Rehabilitation Woodland Early | |
| Proposed Cross Creek Biodiversity Offset Area | Rehabilitation Grassland | |
| Battys Creek Habitat Management Area | Water Storage Area | |
| Southern Remnant Biodiversity Offset Area | Drainage Line | |

FIGURE 4.4
Conceptual Habitat
Connectivity
Year 5

File Name (A4): R20/3109_1107.dgn
 20160518 11:11



Data Source: Mount Owen (2014)
 Note: Contour Interval 5m(AHD)



- Legend**
- | | | |
|------------------------------------|----------------------------|--------------------|
| Project Area | Coal Stockpile - Product | Topsoil Removal |
| Proposed Disturbance Area | Coal Stockpile - ROM | Water Storage Area |
| Proposed Road Upgrade Works | Infrastructure | |
| Proposed Hobden Road Upgrade Works | Rehabilitation - Complete | |
| Contour | Rehabilitation - Temporary | |
| Active Mining Area | Shaped Net Seeded | |
| Active Overburden Employment Area | Tailings Employment | |

File Name (A4): R20/3109_1097.dgn
 20180516 10.24

FIGURE 2.3
 Proposed Mount Owen
 Conceptual Mine Plan
 Year 10

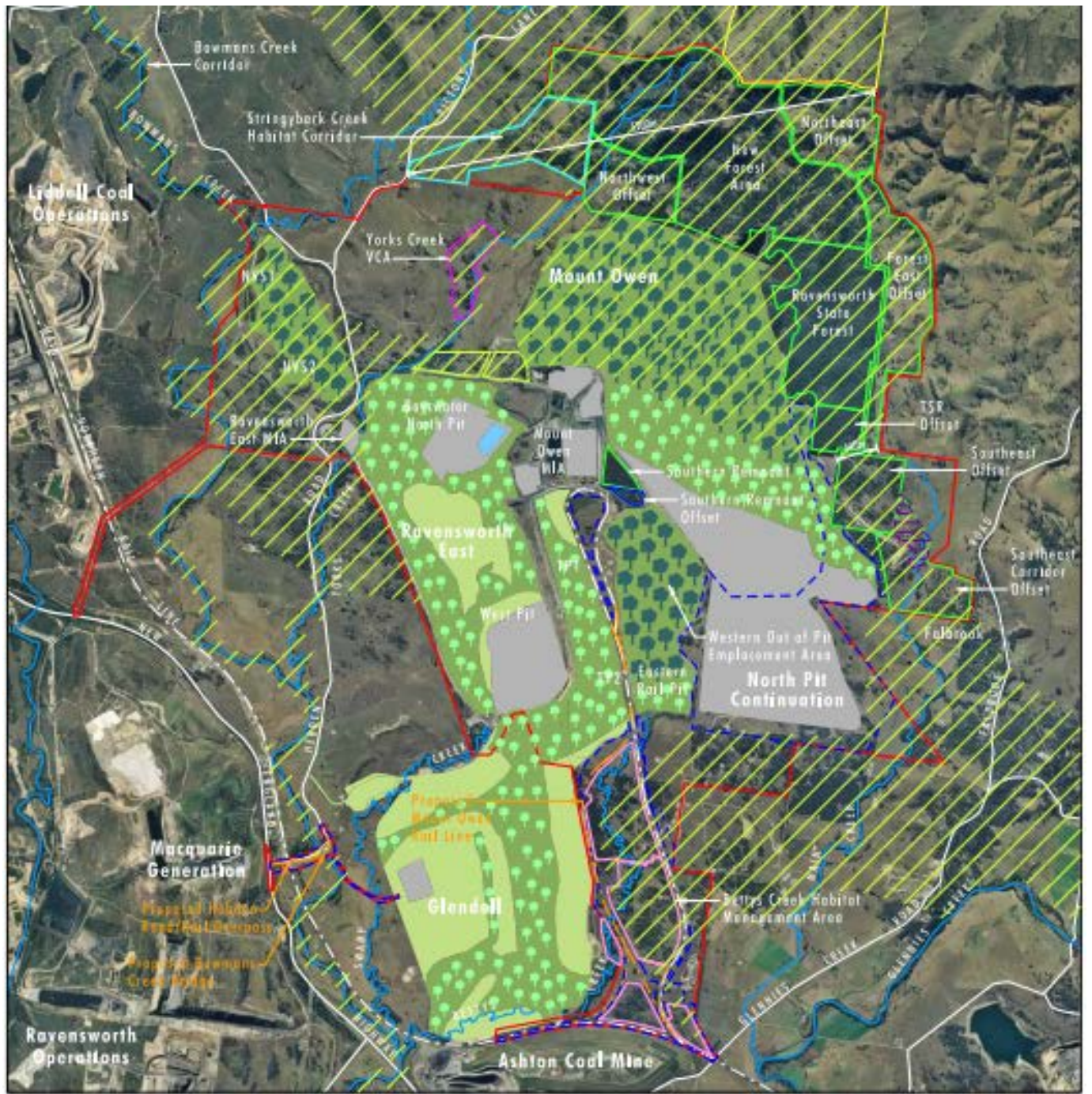


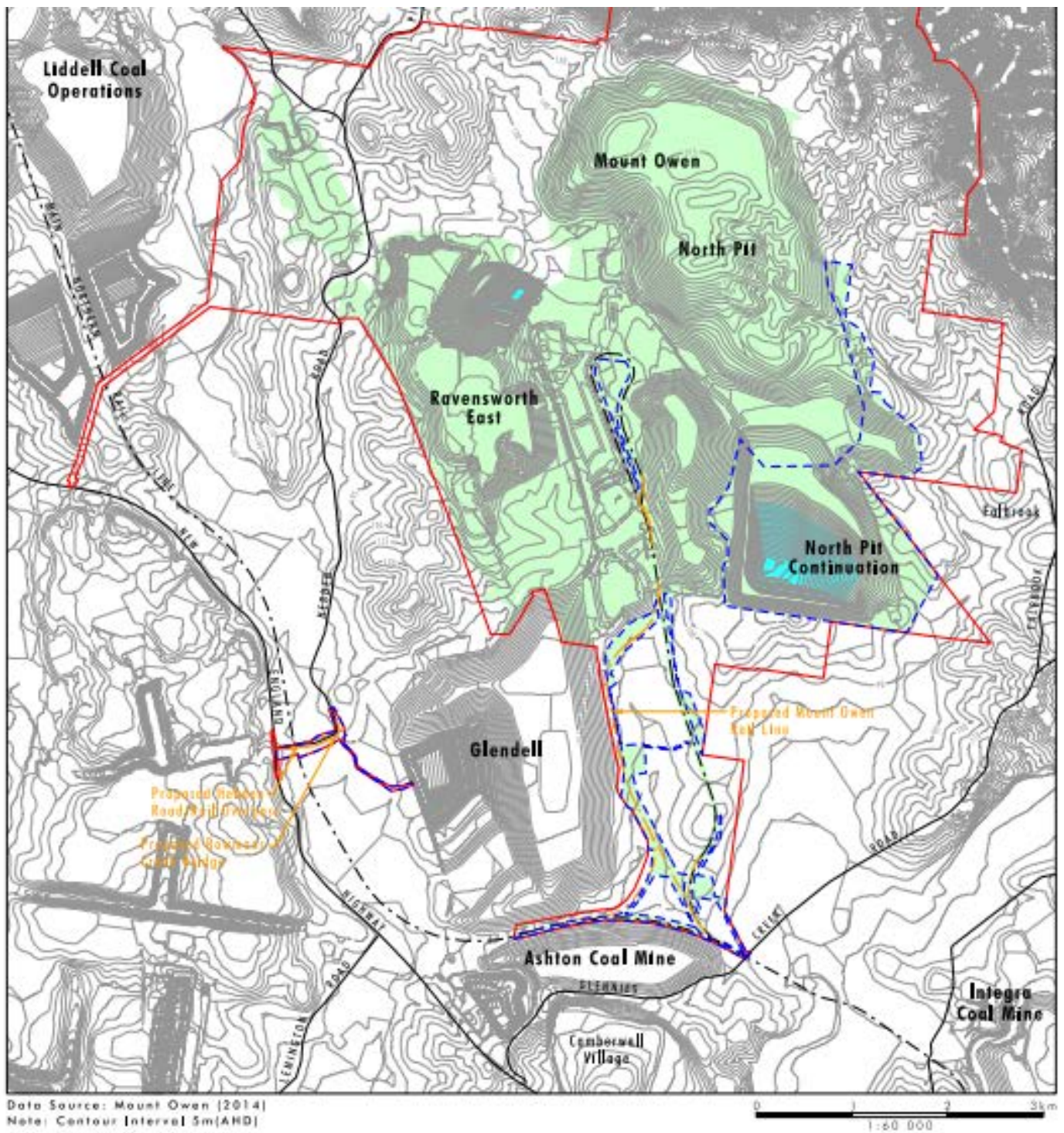
Image Source: Mount Owen (2012-2013)
 Data Source: Mount Owen (2014)

Legend

- | | | |
|---|------------------------------------|-------------------------------------|
| Project Area | Stringybark Creek Habitat Corridor | Habitat Connectivity |
| Proposed Disturbance Area | Disturbed Land | East-West Corridor Management Area |
| Yorks Creek YCA | Rehabilitation Woodland Advanced | Additional Active Revegetation Area |
| Existing Biodiversity Offset Area | Rehabilitation Woodland Early | |
| Proposed Cross Creek Biodiversity Offset Area | Rehabilitation Grassland | |
| Betty's Creek Habitat Management Area | Water Storage Area | |
| Southern Remnant Biodiversity Offset Area | Drainage Line | |

File Name [A4]: R20/3109_1108.dgn
 20160510 11.02

FIGURE 4.5
Conceptual Habitat
Connectivity
Year 10



Legend

- Project Area
- Proposed Disturbance Area
- Proposed Rail Upgrade Works
- Proposed Hobden Road Upgrade Works
- Contour
- Rehabilitation - Complete
- Final Void Water Level

File Name [A4]: R20/3109_1098.dgn
 20160516 10:25

FIGURE 2.4
 Proposed Mount Owen
 Conceptual Mine Plan
 Final Landform

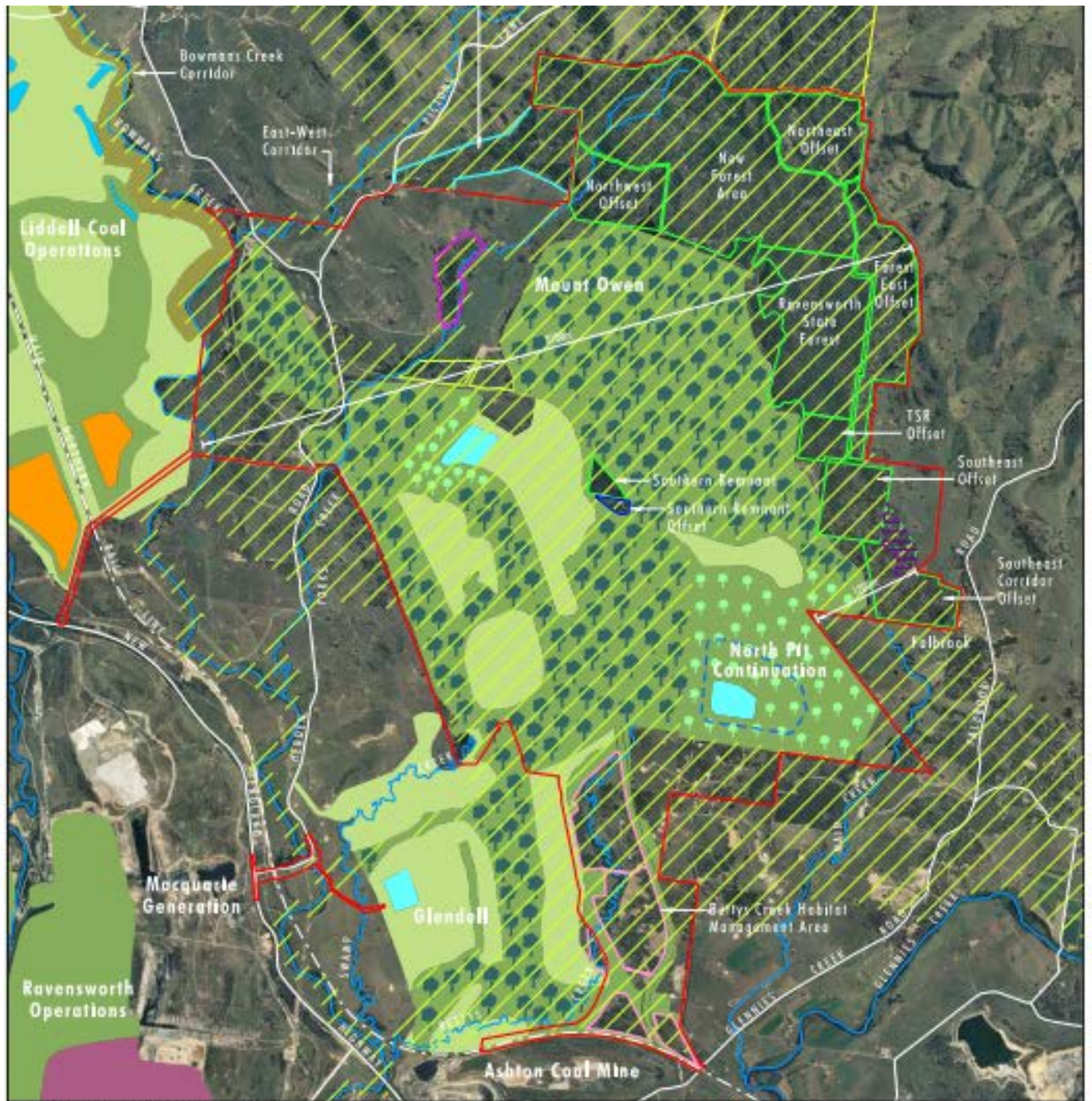


Image Source: Mount Owen (2012)
 Data Source: Mount Owen (2014)

0 1.0 2.0 3.0 km
 1:65 000

Legend

- | | | |
|---------------------------------------|---|-------------------------------------|
| Project Area | Proposed Corridor Habitat Enhancement on Non-Mined land (Liddell Coal Operations) | Grazing |
| Yorks Creek VCA | Existing Biodiversity Offset Area | Drainage Line |
| Pit Lake | Proposed Cross Creek Biodiversity Offset Area | Habitat Connectivity |
| Rehabilitation Woodland Advanced | Betty's Creek Habitat Management Area | Additional Active Revegetation Area |
| Rehabilitation Woodland Early | Southern Remnant Biodiversity Offset Area | |
| Rehabilitation Grassland | Stringybark Creek Habitat Corridor | |
| Grassland for Stabilisation (Liddell) | East-West Corridor Management Area | |
| Maximum Pit Lake Water Level | | |

FIGURE 4.6

Conceptual Habitat Connectivity and Conceptual Final Landform Year 20

File Name [A4]: R20/3109_1109.dgn
 20140520 14:51