



Austen Quarry Extension Project

Modification 2

**Amendments
to the
Overburden
Emplacement Area**

*Section 4.55 (1A)
Modification Assessment
(SSD 6084 MOD 2)*

July 2019

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Glossary

Abbreviation	Definition
AHD	Australian Height Datum
BMCC	Blue Mountains City Council
Consent	Development Consent
Department	Department of Planning, Industry and Environment
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
LCC	Lithgow City Council
Minister	Minister for Planning and Public Spaces
OEH	Office of Environment and Heritage
RMS	Roads and Maritime Services
RTS	Response to Submissions
Secretary	Secretary of the Department of Planning, Industry and Environment
SEE	Statement of Environmental Effects
SEPP	State Environmental Planning Policy
SSD	State Significant Development



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1. Introduction

Aus-10-Rhyolite Pty Ltd, trading as Hy-Tec Industries (NSW) Pty Limited (Hy-Tec), operates the Austen Quarry (the quarry), located approximately 3.5 kilometres southwest of the village of Hartley in the Lithgow local government area (see **Figure 1**). Hy-Tec leases the quarry site from the Hartley Pastoral Corporation Pty Ltd. The quarry is located on the western fringe of the Blue Mountains to the west of the Blue Mountains World Heritage Area and south of Mt York and Hassans Wall. Nearby tourist operations include Jenolan Valley View Resort and the Glenroy Cottages and Campground. Other industries located near the quarry include forestry operations and two quarries at Oberon.

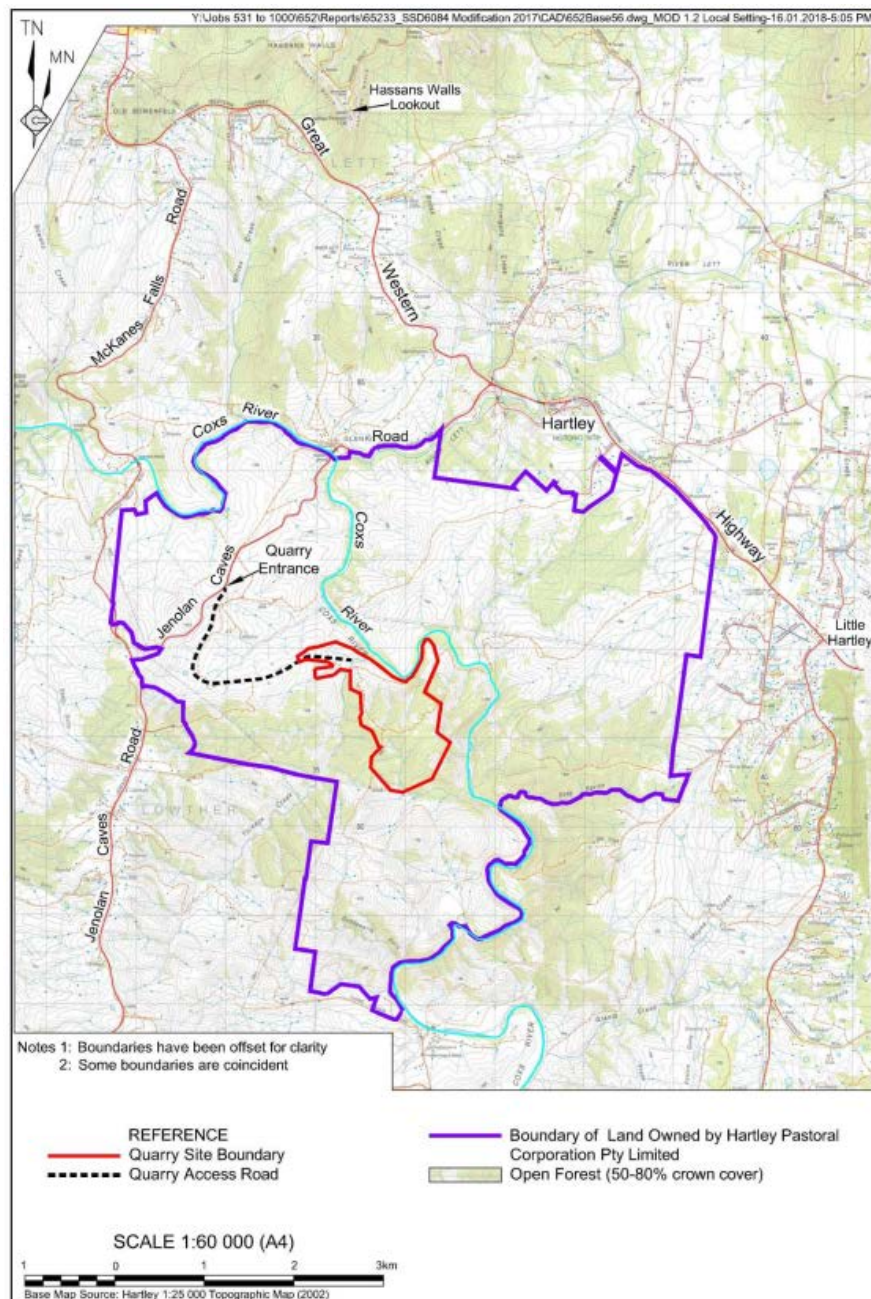


Figure 1: Regional location of Austen Quarry

1.1 Approval History

Hy-Tec currently operates the quarry under development consent SSD 6084, which was granted on 15 July 2015 by the Department's Executive Director of Resource Assessments and Compliance, under delegation from the then Minister of Planning. This consent allows Hy-Tec to extract and process rhyolite, to produce high quality aggregates, manufactured sand and road construction materials.

The consent has been modified on one previous occasion to increase annual quarry product dispatch limits and to reduce the overburden emplacement area (OEA) footprint due to lower than predicted amounts of overburden.

The consent, as modified, allows Hy-Tec to:

- carry out quarrying operations on the site until 30 June 2050;
- extract, process and transport up to 1.6 million tonnes per annum (Mtpa) of quarry products per financial year;
- extract to a maximum depth of 685m AHD;
- load and dispatch trucks between 4am to 10pm Monday to Friday and from 5am to 3pm on Saturday;
- dispatch up to 300 laden trucks from the site on weekdays and 167 laden trucks on Saturdays; and
- dispatch up to 200 laden trucks from the site per weekday, averaged over the total number of dispatch weekdays in any calendar month.

Quarry products are transported via road to Hy-Tec's concrete batching plants in the Sydney metropolitan area and locally at Wallerawang. The site is accessed from Jenolan Caves Road via a privately owned and partially sealed road. All trucks travelling to and from the quarry use Jenolan Caves Road to travel to the Great Western Highway, from where most trucks travel east towards Sydney.



2. Proposed Modification

On 13 June 2019, Hy-Tec submitted an application to modify SSD 6084 under section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The modification proposes to redesign the overburden emplacement area to remove a potential geotechnical risk within the currently approved (but not fully constructed) OEA. No other changes are proposed with respect to approved quarrying areas, methods of extraction, production rates or transport activities.

Hy-Tec advised that a recent geotechnical review of the current overburden emplacement design identified an area where water could accumulate which could cause the OEA to lose contact with the natural surface, possibly resulting in a shear failure of the constructed landform. This presents a significant safety risk to quarry workers and a failure would likely result in detrimental environmental consequences on the surrounding flora and fauna. As the OEA is not yet fully constructed there is an opportunity to remove this risk through redesigning the final OEA landform.

The revised design involves extending the northern boundary of the OEA to the quarry's northern access road, incorporating a 1 hectare (ha) area of native vegetation which would be cleared. To offset this vegetation loss, Hy-Tec proposes to retain 1.5 ha of similar native vegetation currently within the western OEA, by reducing its western extent (see **Figures 2 and 3**).

A table drain would be constructed between the access road and the OEA to allow surface water runoff to be more effectively diverted around the western edge of the OEA.

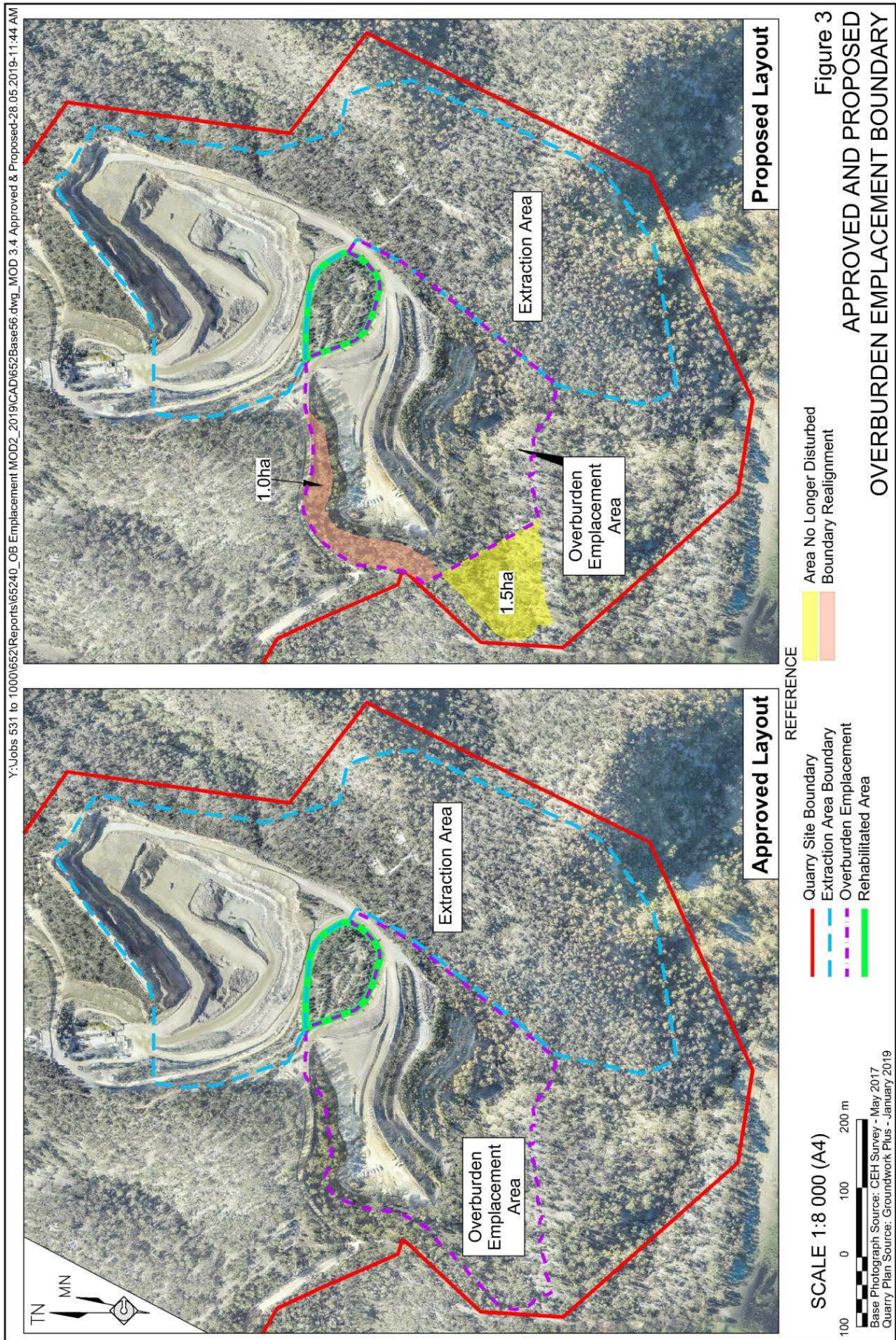


Figure 2: Approved and proposed overburden emplacement boundaries

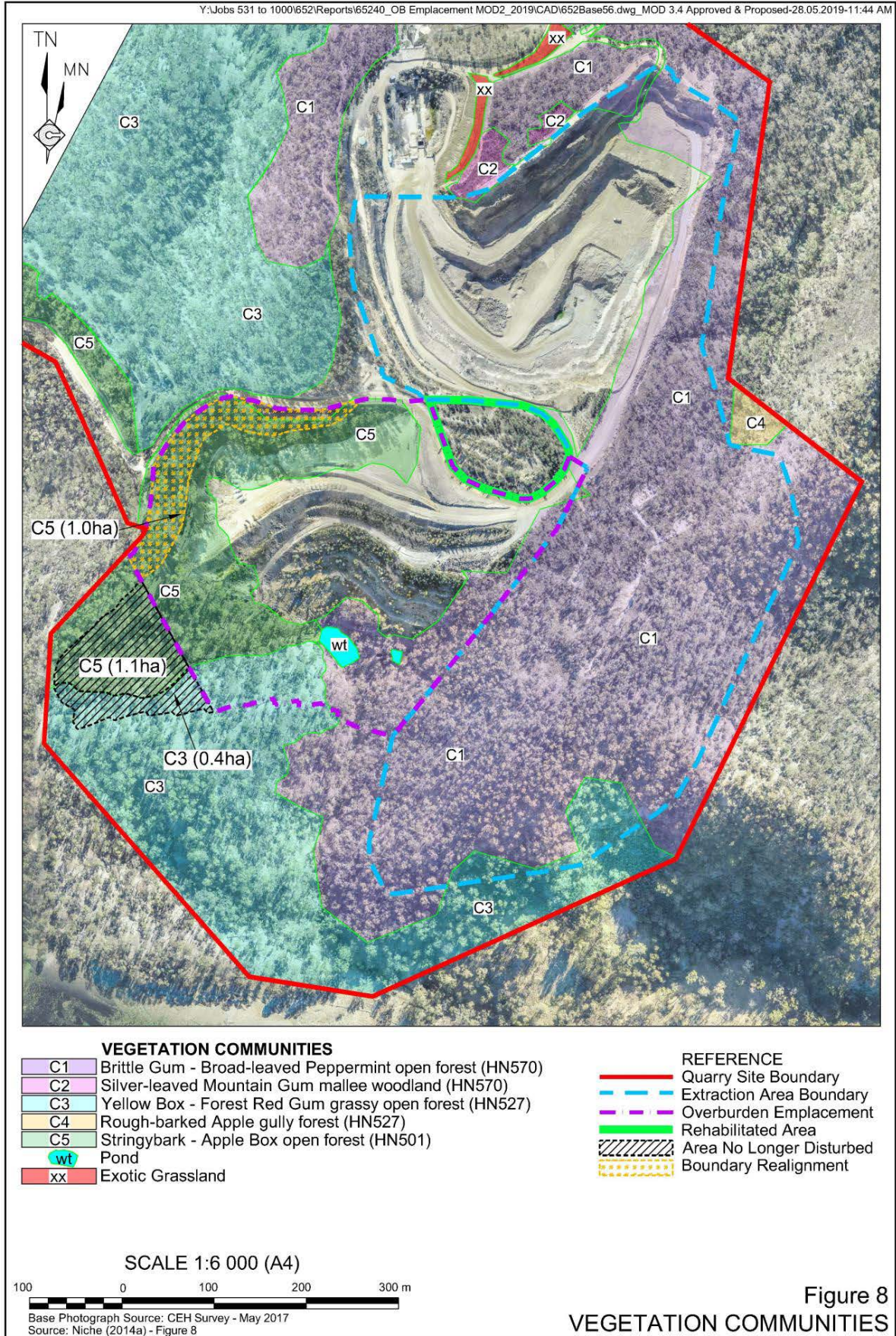


Figure 3: Proposed changes to vegetation clearing

Hy-Tec notes that while these proposed changes would slightly reduce the storage capacity of the OEA, the quarry has been producing lower than expected volumes of overburden and has been able to sell some overburden product to local construction markets. These factors have resulted in reduced on-site overburden storage requirements (see **Table 1**).

Table 1: Approved and proposed overburden storage capacity (tonnes, t)

Aspect	Approved (t)	Proposed (t)	Change (t)
Overburden production	3,235,616	1,617,808	No change
Overburden storage capacity	5,338,584	4,617,200	-721 384

A detailed description of the proposed modification is provided in Hy-Tec's Statement of Environmental Effects (SEE, see **Appendix A**).



3. Statutory Context

3.1 Scope of Modification

SSD 6084 was originally approved on 15 July 2015 by a delegate of the Minister for Planning, under Part 4 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act). This modification application has been lodged under section 4.55(1A) of the EP&A Act, as it is considered to have minimal environmental impact.

The Department has reviewed the scope of the modification application and considers that it would result in minimal environmental impacts and that the development, as proposed to be modified, would remain substantially the same development as originally approved. In this regard:

- there are no proposed changes to the approved extraction areas, methods or production rates; and
- any potential environmental impacts would be minimal in nature and could be appropriately managed through the existing conditions of consent.

Consequently, the Department is satisfied the modification is within the scope of section 4.55(1A) of the EP&A Act and can be assessed and determined under this section.

3.2 Consent Authority

The Minister for Planning and Public Spaces is the consent authority for the application, in accordance with section 4.5(a) of the EP&A Act. However, under the Minister's delegations dated 11 October 2017 and 25 June 2019, the Director, Resource Assessments may determine the application, as no objections from the public were received, the Councils consulted did not object to the modification and Hy-Tec did not report any political donations.

3.3 Mandatory Matters for Consideration

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any environmental planning instruments (EPIs) that apply to the land to which the application relates. The Department has assessed the modification against the relevant provisions of the following EPIs:

- *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*;
- *SEPP (Mining, Petroleum Production and Extractive Industries) 2007*;

- SEPP (Sydney Drinking Water Catchment) 2011;
- Lithgow Local Environmental Plan 2014; and
- Blue Mountains Local Environmental Plan 2015.

The Department considers that the modification can be undertaken in a manner that is generally consistent with the aims, objectives and provisions of these EPLs.

3.4 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles for all decision-making under the Act. They must be considered by the consent authority when making this decision. The Department has assessed the modification against the objects found in section 1.3 of the EP&A Act. **Table 2** summarises how these objects have been considered.

Table 2: Consideration of the proposal against relevant objects of the EP&A Act

Objects of the EP&A Act (section 1.3)	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;	<ul style="list-style-type: none"> The modification would improve the safety of the site and allow for the continuation of socio-economic benefits to the people of NSW and ongoing employment opportunities for members of the local Lithgow and Blue Mountains communities.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;	<ul style="list-style-type: none"> The modification can be carried out in a manner that is consistent with the principles of ESD. The Department's assessment has sought to integrate all significant environmental, social and economic considerations.
(c) to promote the orderly and economic use and development of land;	<ul style="list-style-type: none"> The development involves a permissible land use on the subject site and would facilitate sustainable, efficient and optimised recovery of an approved resource.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;	<ul style="list-style-type: none"> The modification would not directly impact any threatened species, populations or ecological communities beyond what has previously been assessed and mitigated.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);	<ul style="list-style-type: none"> The modification would not directly impact on Aboriginal cultural heritage or historic heritage.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State;	<ul style="list-style-type: none"> The Department notified and consulted with Lithgow City Council, Blue Mountains City Council and other relevant NSW government authorities on the modification and has considered all responses in its assessment.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	<ul style="list-style-type: none"> The Department consulted with local Councils and made the modification application and accompanying documents publicly available on its website (see Section 4). All submissions have been considered by Hy-Tec and the Department during the assessment process.



4. Engagement

4.1 Department's Engagement

In accordance with clause 117(3B) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) the notification requirements of the EP&A Regulation do not apply to section 4.55(1A) State significant development modification applications. Accordingly, the Department did not advertise or publicly exhibit the modification application.

However, after accepting the Statement of Environmental Effects (SEE) for the modification, the Department made the modification application and SEE publicly available on its website on 18 June 2019 (see **Appendix A**).

The Department also referred the modification to key government agencies and the **Lithgow City Council** (LCC) and Blue **Mountains City Council** (BMCC).

In response to the notification process, the Department received advice from five government agencies and both Councils. The Department made all advice provided by government agencies and Councils publicly available on its website on 28 June 2019. A summary of this advice is provided below, copies of all advices are provided in **Appendix B**.

The Department is satisfied that the notification process met the requirements of the EP&A Act and EP&A Regulation.

4.2 Advice from Councils and Government Agencies

BMCC raised concerns over the modification's potential visual impacts from vantage points within the Greater Blue Mountains World Heritage Area. BMCC considered that the proposed changes in vegetation clearing and the effects on visual amenity should be addressed and that that advanced revegetation should be expedited.

Hy-Tec responded by clarifying that the existing conditions of consent require the ridge on the northern side of the quarry to be retained; application of surface treatments to reduce the appearance of exposed benches from distant vantage points; and advanced planting of tube stock in areas visible from nearby vantage points. Hy-Tec confirmed that it would continue to implement these mitigation measures. Hy-Tec also provided an update on revegetation activities completed up to April 2019 (see **Appendix C**). The Department considers that visual impacts would continue to be appropriately managed through existing conditions of consent. Visual impacts are discussed further in **Section 5**.

LCC considered that Hy-Tec had addressed all relevant environmental issues and had no further comment on the modification, provided all conditions previously requested by LCC remained in the consent.

The **Office of Environment and Heritage (OEH)** advised that, as the proposed modification would result in a reduction of native vegetation clearing by 0.5 ha, it considered the impacts would be either the same or less than previously assessed for the affected plant community types. OEH further noted that these proposed changes would have no impact upon the Commonwealth-listed vulnerable plant *Eucalyptus pulverulenta* (Silver-leaved Mountain Gum, Silver-leaved Gum). OEH supported the retention of the consent's existing biodiversity offset obligations. Biodiversity impacts are discussed further in **Section 5**.

The Department's **Division of Resources and Geoscience (DRG)** raised no issues in respect of the proposed modification. However, DRG noted the requirement for all operating quarries to provide annual production data to DRG and requested a condition to this effect. The Department notes that Hy-Tec is already required to provide this data to DRG through existing conditions of consent.

The **Environment Protection Authority, WaterNSW** and the **Department of Industry** advised that they had no comments.

4.3 Response to Submissions

The Department did not request that Hy-Tec provide a formal Response to Submissions report as the consulted agencies did not raise any significant issues. However, the Department requested that Hy-Tec provide additional information regarding the visual amenity impacts raised by BMCC. This information has been included in **Appendix C**.

The Department made the additional information publicly available on its website on 28 June 2019.



5. Assessment

In assessing the merits of the modification, the Department has considered the:

- Environmental Impact Statement for the original development;
- existing conditions of consent;
- modification application, SEE and additional information;
- advice from government agencies and Councils; and
- relevant EPIs, policies and guidelines.

The Department considers that the key issues for assessment relate to the final landform and biodiversity. Consideration of these issues is provided in **Section 5.1** below. Other issues are discussed in **Table 3**.

5.1 Overburden Emplacement Area

Design

Hy-Tec commissioned a *Geotechnical Review of Overburden Emplacement and Structure Redesign* report, prepared by Groundwork Plus. This review recommended that a redesign of the overburden emplacement was required to address the risk of potential failure.

The revised design has seven phases. Phase 1 would extend the OEA's northern boundary as far as the quarry access road by filling it with overburden. A table drain would be constructed between the access road and the OEA to allow surface water runoff to be more effectively diverted around the western side of the OEA (see **Figure 4**).

Phases two to seven would then progressively fill and shape the final landform, with a minor change to the width of the upper bench to accommodate the additional fill area. The modification would also result in minor changes to the currently approved final landform. Hy-Tec does not propose any changes to its currently approved rehabilitation strategy.

There are no changes proposed to the previously approved design criteria and construction processes governing batter heights, extraction sequencing, bench widths, slope angles or material composition of the emplacement.

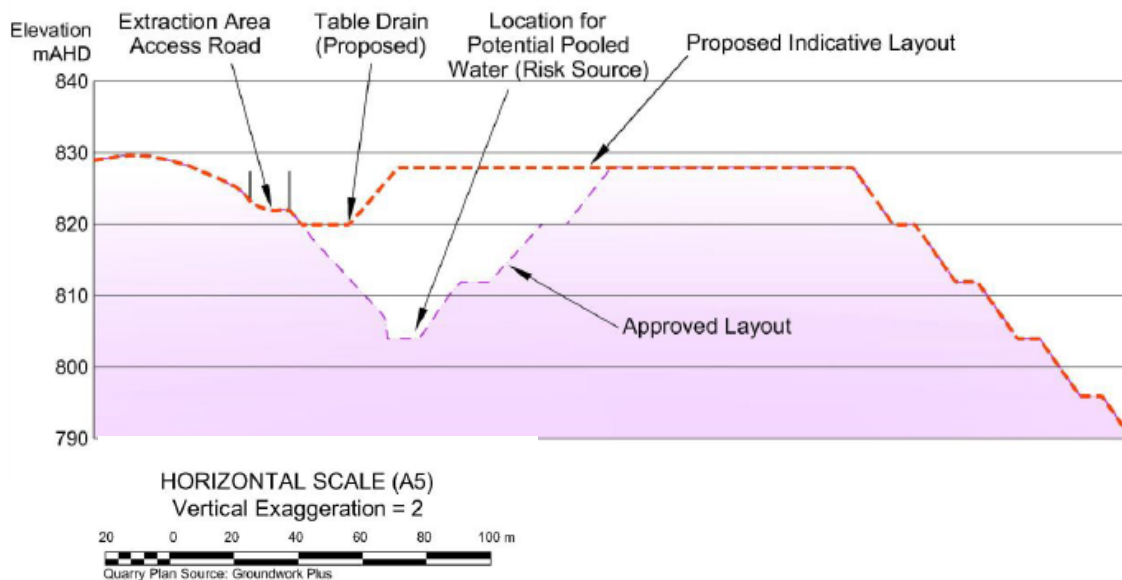


Figure 4: Approved and proposed indicative overburden emplacement cross section

Biodiversity Impacts

The SEE was accompanied by a *Review of Biodiversity Impacts and Offsetting Implications* report prepared by Niche Environment and Heritage and dated 30 May 2019. This report assessed the biodiversity impacts of the modification and determined that no changes to biodiversity offsetting obligations would be required.

To extend the northern boundary of the OEA, Hy-Tec proposes to clear 1 ha of plant community type (PCT) *HN501 Stringybark – Apple Box open forest* (see C5 in **Figure 3**), which occurs between the current northern boundary and the quarry access road.

The vegetated area to be excised from the western boundary comprises 1.1 ha of the same PCT *HN501*, together with 0.4 ha of similar vegetation classified as Biometric Vegetation Type *HN527 Yellow Box – Forest Red Gum grassy open forest*. The Niche report concluded that these are comparable vegetation communities and that reassessment of the project’s biodiversity offsetting obligations is not required.

The modification would reduce total clearing of native vegetation by 0.5 ha. Therefore, the proposed overall impact is either the same or less than that currently approved for each PCT. Hy-Tec advised that it is not proposing to reduce any biodiversity offsetting requirements despite the reduced impact area. Both the Department and OEH support this approach (see **Section 4**).

The Department considers that, as the modification would have no impact on the State and Commonwealth-listed Silver-leaved Mountain Gum, a referral to the Commonwealth is not required and no further assessment in respect of this species is necessary.

Conclusion

The proposed changes would improve the safety and stability of the final overburden emplacement landform and enhance the safety of personnel working in its vicinity. The Department considers that any potential impacts from the modification would continue to be managed under existing rehabilitation and landscape management objectives and performance measures, and that no changes to the existing biodiversity offsetting requirements are required.

The Department recommends that Hy-Tec review and update the quarry's *Landscape and Rehabilitation Management Plan* to reflect the modification, and that updated figures showing the amended OEA are included in the conditions of consent.

5.2 Other Issues

Other issues which are not considered key issues have been addressed in **Table 3**.

Table 3: Summary of other issues

Issue	Findings	Recommended Condition
Water	<ul style="list-style-type: none"> To prevent water pooling around the OEA, Hy-Tec would construct a drain along the southern side of the access road. This would ensure water could be diverted away from the OEA towards sediment basin 3a. Hy-Tec manages surface water at the quarry under existing conditions of consent, which includes the development and implementation of a Water Management Plan. The Department considers that the existing conditions of consent remain appropriate to manage surface water run-off, erosion and sediment control. The Department recommends that the quarry's Water Management Plan is revised to reflect this modification. 	<ul style="list-style-type: none"> No changes to conditions are recommended.
Visual Impacts	<ul style="list-style-type: none"> Hy-Tec considered that the modification would not result in changes to the previously assessed visual impacts. As discussed in Section 4, BMCC raised concerns that the modification may impact on vantage points on the Blue Mountains Escarpment. Hy-Tec provided additional information outlining the measures it currently implements and would continue to implement to reduce the quarry's visual impacts. The Department notes there is no change to the maximum height of the OEA. Hy-Tec has committed to progressive rehabilitation and advanced plantings in highly visible areas. Given Hy-Tec's visual impact mitigation measures, the Department considers the modification would have a negligible visual impact and would be appropriately managed by existing conditions of consent. 	<ul style="list-style-type: none"> No changes to conditions are recommended.
Air Quality	<ul style="list-style-type: none"> The modification would not result in any increase in operational air quality impacts, as quarrying operations would continue as previously approved. The air quality criteria for the quarry were revised under Modification 1 (determined in August 2018) and the Department considers these limits remain appropriate for the development. 	<ul style="list-style-type: none"> No changes to conditions are recommended.
Noise	<ul style="list-style-type: none"> The modification would not result in any increase in operational noise impacts, as quarrying operations would continue to occur at or below existing approved rates, in previously approved disturbance areas. As a result, previous noise assessments for the project remain relevant and there is no need to update the noise impact assessment. Hy-Tec currently operates under an approved Noise Management Plan and must adhere to strict noise operating criteria, specified in existing conditions of consent. These conditions would continue to apply, and the Department considers that they remain appropriate for the development. 	<ul style="list-style-type: none"> No changes to conditions are recommended.



6. Evaluation

The Department has assessed the merits of the modification in accordance with the requirements of the EP&A Act. In doing so, the Department has carefully considered the modification's potential impacts on the natural environment. The modification would significantly reduce the risk of a potential failure of the quarry's OEA, removing risks to the safety of quarry employees and the surrounding environment.

The Department considers that, subject to existing management measures, the modification would result in:

- no material change to Hy-Tec's currently approved operations; and
- no material change to approved environmental impacts.

The Department considers that the project is in the public interest, and recommends that the modification be approved, subject to minor updates to the conditions of consent (see **Appendix D**).



7. Recommendation

It is recommended that the Director Resource Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report;
- **determines** that the modification application falls within the scope of section 4.55(1A) of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **modifies** consent SSD 6084; and
- **signs** the attached approval of the modification in **Appendix E**.

Recommended by:

Melissa Anderson

Environmental Assessment Officer
Resource Assessments

Recommended by:

Melanie Hollis

Senior Environmental Assessment Officer
Resource Assessments



8. *Determination*

The recommendation is **Adopted by:**

Howard Reed

Howard Reed

Director

Resource Assessments

15.7.19



Appendices

Appendix A – Statement of Environmental Effects

<https://www.planningportal.nsw.gov.au/major-projects/project/13836>

Appendix B – Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/13836>

Appendix C – Additional Information

<https://www.planningportal.nsw.gov.au/major-projects/project/13836>

Appendix D – Consolidated Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/13836>

Appendix E - Notice of Modification

<https://www.planningportal.nsw.gov.au/major-projects/project/13836>