Development Consent

Section 89E of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning, I approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

dokutto

David Kitto

Executive Director

Resource Assessments and Business Systems

Sydney

10 APRIL

2015

SCHEDULE 1

Application Number:

SSD_4978

Applicant:

Aus-10 Rhyolite Pty Ltd

Consent Authority:

Minister for Planning

Land:

Lots 1, 2 and 3 of DP 628806

Development:

Tinda Creek Sand Project

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DEFINITIONS

Annual Review The review required by condition 4 of schedule 5

Applicant Aus-10 Rhyolite Pty Ltd, or any other person or persons who rely on

this consent to carry out the development that is subject to this consent

ARI Average Recurrence Interval
BCA Building Code of Australia

Biodiversity Offset Strategy The biodiversity offset strategy described in the EIS, and shown

conceptually in Appendix 5

CCC Community Consultative Committee

Conditions of consent Conditions contained in schedules 1 to 5 inclusive

Construction The demolition of buildings or works, carrying out of works and

erection of buildings covered by this consent

Council Hawkesbury City Council

Day The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm

on Sundays and Public Holidays

Department Development Department of Planning and Environment Development Deve

DRE Division of Resources and Energy within NSW Trade and Investment EIS Environmental Impact Statement titled *Proposed Expansion of the Tinda Creek Sand Quarry* (3 volumes), dated July 2014, as modified

by the Response to Submissions titled, Response to Submissions for Proposed Expansion of Tinda Creek Sand Quarry dated 7 November 2014 and the letter titled Response to OEH, Department of

Environment and Greater Blue Mountains World Heritage Advisory Committee on the Tinda Creek Sand Extraction Stated Significant

Development Proposal, dated 11 December 2014

ENM Excavated Natural Material, as defined by *Protection of the*

Environment Operations (Waste) Regulation 2014 Environmental Planning and Assessment Act 1979

EP&A Regulation Environmental Planning and Assessment Regulation 2000

EPA NSW Environment Protection Authority

EPL Environment Protection Licence under the POEO Act

Evening The period from 6pm to 10pm

Extension area The area outside of the existing quarry footprint (i.e. Domains,

1,2,3,4,6 and 7, as shown conceptually in Appendices 1 and 2) Includes the removal of overburden and extraction, dredging,

processing, handling, storage and transportation of extractive materials

on site

Feasible Feasible relates to engineering considerations and what is practical to

build

GPS Global Positioning System

Ha Hectare

EP&A Act

Extraction operations

Incident A set of circumstances that:

• causes or threatens to cause material harm to the environment;

and/or

• breaches or exceeds the limits or performance measures/criteria in

this consent

Land As defined in the EP&A Act, except for where the term is used in the

noise and air quality conditions in schedules 3 and 4 of this consent where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land

Titles Office at the date of this consent

Material harm to the environment Actual or potential harm to the health or safety of human beings or to

ecosystems that is not trivial

m Metres

Minister for Planning, or delegate

Mitigation Activities associated with reducing the impacts of the development Negligible Small and unimportant, such as to be not worth considering Night The period from 10pm to 7am on Monday to Saturday, and 10pm to

8am on Sundays and Public Holidays

NSW Office of Water NOW

NSW Department of Trade and Investment, Regional Infrastructure NSW Trade and Investment

and Services

NSW Office of Environment and Heritage **OEH**

POEO Act Protection of the Environment Operations Act 1997

Land that is not owned by a public agency or the Applicant (or its Privately-owned land

subsidiary)

Reasonable Reasonable relates to the application of judgement in arriving at a

decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent

of potential improvements

The restoration of land disturbed by the development to a good Rehabilitation

condition, ensuring that it is safe, stable and non-polluting and

appropriately revegetated

RMS Roads and Maritime Services

Secretary Secretary of the Department, or nominee

All land to which the development application applies, as listed under Site

"Land" in schedule 1 and shown in Appendices 1 and 2 The period between 6am to 7am on Monday to Friday and 7am to 8am Shoulder

on Saturday

The Applicant's commitments in Appendix 3 Statement of commitments

Virgin Excavated Natural Material, as defined by the POEO Act **VENM**

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

 In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

- 2. The Applicant shall carry out the development generally in accordance with the:
 - (a) EIS:
 - (b) Statement of Commitments; and
 - (c) conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

- 3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
- 4. The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Extraction Operations

5. The Applicant may undertake extraction operations on the site until 31 December 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct extraction operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limits

- 6. The Applicant shall not:
 - (a) extract or process more than 300,000 tonnes of sand in any calendar year; or
 - (b) undertake extraction operations beyond 15 m below the natural ground surface.

Transportation Limits

- 7. The Applicant shall not:
 - (a) transport more than 300,000 tonnes of sand from the site in a calendar year; and
 - (b) dispatch more than 34 trucks per day or receive more than 34 trucks per day, averaged over a calendar month.

SURRENDER OF EXISTING DEVELOPMENT CONSENT

8. Within 6 months of the date of this consent, unless the Secretary agrees otherwise, the Applicant shall surrender the development consent (DA 0134/95) for the existing operations on the site in accordance with Section 104A of the EP&A Act.

Prior to the surrender of development consent DA 0134/95, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of that consent.

Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrendering of consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.

STRUCTURAL ADEQUACY

The Applicant shall ensure that any new buildings and structures, and any alterations, or additions to
existing buildings and structures, are constructed in accordance with the relevant requirements of the
BCA.

Notes

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

10. The Applicant shall ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

- 11. The Applicant shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

- 12. The Applicant shall ensure that all plant and equipment used on site is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS

13. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that
 the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program
 must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this
 stage to any future stages, and the trigger for updating the strategy, plan or program.
- 14. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant shall implement the existing strategies, plans or programs for the site that have been approved under DA 0134/95.

PRODUCTION DATA

- 15. The Applicant shall:
 - provide annual quarry production data to DRE using the standard form for that purpose; and include a copy of this data in the Annual Review (see condition 4 of schedule 5).
 - (b)

DEVELOPER CONTRIBUTIONS

16. The Applicant shall pay Council road maintenance contributions consistent with Council's Section 94 Contributions Plan, or its latest version.

Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

- 1. Prior to undertaking extraction operations under this consent, the Applicant shall:
 - (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the site; and
 - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
- 2. While extraction operations are being carried out, the Applicant shall ensure that these boundaries are clearly marked at all times.

HOURS OF OPERATION

3. The Applicant shall comply with the operating hours set out in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
Extraction operations	7 am to 6 pm, Monday to Friday
and deliveries	7 am to 3 pm, Saturday
	No activities on Sundays or Public Holidays
Dispatch	5 am to 10 pm, Monday to Friday
	6 am to 3 pm, Saturday
Construction activities	7 am to 6 pm, Monday to Friday
	8 am to 1 pm, Saturday
	No construction to be undertaken on Sundays or Public Holidays
Maintenance activities	24 hours a day, 7 days per week, providing maintenance activities are
	inaudible at any privately-owned residence

NOISE

Noise Criteria

4. The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria dB(A)

Receiver	Day / Evening	Night	
Receiver	L _{Aeq(15 min)}	L _{Aeq(15 min)}	L _{A1(max)}
All receivers	35	35	45

Note: After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the extraction operations on site under the

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 6 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Operating Conditions

- 5. The Applicant shall:
 - (a) implement all reasonable and feasible mitigation measures to minimise the construction, operational and road noise of the development;
 - regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;

- (c) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 6); and
- (d) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent,

to the satisfaction of the Secretary.

Noise Management Plan

- 6. The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA, and be submitted to the Secretary within 6 months of the date of this consent, unless the Secretary agrees otherwise;
 - (b) describe the reasonable and feasible mitigation measures that would be implemented to ensure:
 - · construction noise is minimised;
 - compliance with the relevant noise criteria and operating conditions in this consent;
 - · best management practice is being employed; and
 - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
 - (c) describe the proposed noise management system on site; and
 - (d) include a monitoring program that:
 - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

AIR QUALITY

Air Quality Criteria

7. The Applicant shall implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 5 at any residence on privately-owned land.

Table 3: Long-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 μg/m ³
Particulate matter < 10 μm (PM ₁₀)	Annual	^а 30 µg/m ³

Table 4: Short-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 μm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5: Long-Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 3-6:

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

^D Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

Operating Conditions

- 8. The Applicant shall:
 - implement all reasonable and feasible measures to minimise the dust emissions of the development:
 - (b) minimise surface disturbance of the site; and
 - (c) monitor and report on compliance with the relevant air quality criteria in this consent; to the satisfaction of the Secretary.

Air Quality Management Plan

- 9. The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;
 - (b) describe the measures that would be implemented to ensure:
 - compliance with the air quality criteria and operating conditions under this consent; and
 - best practice management is being employed
 - (c) include an air quality monitoring program that:
 - evaluates and reports on:
 - o the effectiveness of the air quality management measures; and
 - o compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

METEOROLOGICAL MONITORING

10. For the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South* Wales guideline.

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.

Water Supply

11. The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.

Operating Conditions

- 12. The Applicant shall:
 - (a) comply with Section 120 of the POEO Act, unless an EPL authorises otherwise;
 - (b) ensure that the catchment of the water management system is not larger than 40 ha, unless the Secretary agrees otherwise;
 - (c) maintain the dredge and silt ponds to capture a 1 in 100 ARI storm event plus adequate freeboard to ensure no offsite discharge; and
 - (d) ensure that the loss of groundwater and surface water to Tinda Creek is no greater than predicted in the EIS.

Water Management Plan

- 13. The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared by suitably qualified person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and NOW, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;

- (c) include a Site Water Balance that:
 - · includes details of the:
 - o quantity of water required to support operations;
 - sources and security of water supply, clearly differentiating between surface water and groundwater, and taking into account rainfall variability;
 - o water use and management on site;
 - o reporting procedures; and
 - measures to minimise clean water use on site;
- (d) include a Surface Water Management Plan, that includes:
 - detailed baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - a detailed description of the surface water management system on site, including:
 - clean water diversions;
 - erosion and sediment controls;
 - o the dirty water management system; and
 - water storages;
 - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts;
 - the measures that would be implemented to ensure compliance with the surface water performance criteria and relevant operating conditions of this consent;
 - a program to monitor and report on:
 - any surface water discharges;
 - the effectiveness of the water management system; and
 - surface water flows and quality in local watercourses;
 - a comparison of monitoring results with modelled predictions;
- (e) include a Groundwater Monitoring Program, that includes:
 - detailed baseline data on groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores;
 - performance criteria for surrounding aquifers, privately-owned groundwater bores, including trigger levels for investigating any potentially adverse groundwater impacts;
 - the measures that would be implemented to ensure compliance with the groundwater performance criteria and relevant operating conditions of this consent;
 - a program to monitor and report on:
 - groundwater inflows to the quarry pit (quarterly monitoring is required, unless otherwise agreed with the Secretary);
 - the impacts of the development on surrounding aquifers, privately-owned groundwater bores and Tinda Creek; and
 - a program to validate the groundwater model for the development, and compare monitoring results with modelled predictions; and
- (f) include a Surface and Groundwater Contingency Strategy, that includes:
 - a protocol for the investigation, notification and mitigation of identified exceedances of the surface water and groundwater impact assessment criteria;
 - measures to mitigate and/or compensate potentially affected landowners of privatelyowned land, including provision of alternative long-term supply of water to the affected landowner that is equivalent to the loss attributed to the development; and
 - the procedures that would be followed if any unforeseen impacts are detected during the development.

HERITAGE

Heritage Management Plan

- 14. The Applicant shall prepare and implement a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with OEH, and Aboriginal stakeholders for matters relating to Aboriginal heritage values;
 - (b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;

- (c) describe the measures that would be implemented for:
 - managing identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site; and
 - ensuring ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site.

LANDSCAPE AND REHABILITATION

Biodiversity Offset Strategy

15. The Applicant shall implement the biodiversity offset strategy described in the EIS, as summarised and revised in Table 6, and shown conceptually in Appendix 5, to the satisfaction of the Secretary.

Tabla 6.	Diadinaraitu	Offset Strategy	/hal
I ADIP D	BIODIVEISIN	UIISHI SITATHOV	mai

Area	Offset Type	Minimum Size (ha)
On-site Offset Area	Existing vegetation to be enhanced	106.6

Security of Offsets

16. Within 2 years of this consent, unless otherwise agreed with the Secretary, the Applicant shall make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long-term security to the land within the biodiversity offset strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Rehabilitation Objectives

- 17. The Applicant shall rehabilitate the site to the satisfaction of the Secretary. The final landform must:
 - (a) be generally consistent with the proposed rehabilitation strategy in the EIS, and the final landform shown conceptually in Appendices 4 and 5. and
 - (b) comply with the objectives in Table 7.

Table 7: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	Safe, stable and non-polluting
	Restore ecosystem function, including maintaining or establishing self- sustaining ecosystems comprised of local native species and habitat, including at least 0.35 ha of Mellong Sandmass Sedgeland
Surface Infrastructure	To be decommissioned and removed (unless the Secretary agrees otherwise)
Final Voids	Minimise the size, depth, batter slope and the drainage catchment of the final void
	 Ensure that the volume of VENM and ENM detailed in the EIS is imported for rehabilitation of the site
	Ensure that the surface area of the final voids is no greater than 16 ha in total
	Separated from the surface water drainage system, unless the Secretary agrees otherwise
Watercourses	Restore alignment and hydraulic function, as far as practical
Community	Ensure public safety

Progressive Rehabilitation

18. The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. Interim stabilisation measures must be implemented where reasonable and feasible to control erosion (both wind and water) in disturbed areas that are not active and which are not ready for final rehabilitation.

Landscape Management Plan

- 19. The Applicant shall prepare and implement a Landscape Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - be prepared in consultation with OEH, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;
 - (b) provide details of the conceptual final landform and associated land uses for the site;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site:
 - (d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy and rehabilitation of the site, including triggers for any necessary remedial action;
 - (e) describe the short, medium and long term measures that would be implemented to:
 - manage remnant vegetation and habitat on site and in the offset area; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - (f) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following initial preparation of the plan) including the procedures to be implemented for:
 - maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;
 - restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;
 - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
 - minimising the impacts on native fauna, including undertaking pre-clearance surveys;
 - ensure only appropriate activities occur within a 40 m buffer of the recorded small-flower grevillea (Grevillea parviflora subsp. parviflora), (refer Figure 2 in Appendix 5);
 - establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;
 - ensuring minimal environmental consequences for threatened species, populations and habitats:
 - · collecting and propagating seed;
 - · controlling weeds and feral pests;
 - controlling erosion;
 - controlling access; and
 - managing bushfire risk;
 - (g) include a Koala Management Plan prepared generally in accordance with SEPP 44, the accompanying guidelines provided in Circular B35 - State Environmental Planning Policy 44 -Koala Habitat Protection, the NPWS Policy and Procedure Statement No. 9 - Policy for the Translocation of Threatened Fauna in NSW and the draft koala plan of management in the EIS;
 - (h) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
 - (i) identify the potential risks to the successful implementation of the biodiversity offset, and include a description of the contingency measures that would be implemented to mitigate these risks; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

Conservation and Rehabilitation Bond

- 20. Within 6 months of the approval of the Landscape Management Plan, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the biodiversity offset strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of this consent. The sum of the bond shall be determined by:
 - (a) calculating the cost of implementing the biodiversity offset strategy over the next 3 years;
 - (b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of extraction operations; and
 - (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

Notes:

- Alternative funding arrangements for long term management of the biodiversity offset strategy, such as
 provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or
 transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity
 bond.
- If capital and other expenditure required by the Landscape Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.
- If the biodiversity offset strategy and rehabilitation of the site area are completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the biodiversity offset strategy and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.
- 21. Within 3 months of each Independent Environmental Audit (see condition 9 of schedule 5), the Applicant shall review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:
 - (a) effects of inflation;
 - (b) likely cost of implementing the biodiversity offset strategy and rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and
 - (c) performance of the implementation of the biodiversity offset strategy and rehabilitation of the site to date.

TRANSPORT

Monitoring of Product Transport

22. The Applicant shall keep accurate records of all laden truck movements to and from the site (hourly, daily, weekly, monthly and annually) and publish these records on its website every 6 months.

Operating Conditions

- 23. The Applicant shall ensure that:
 - (a) all laden vehicles have appropriate signage, including a contact phone number, so they be easily identified by road users;
 - (b) all laden vehicles entering or exiting the site have their loads covered;
 - (c) all laden vehicles exiting the site are cleaned of sand and other material that may fall on the road, before leaving the site; and
 - (d) no trucks queue at the entrance to the site before 6am.

Access Road and Intersection Construction

24. Within 12 months from the date of this consent, unless the Secretary agrees otherwise, the Applicant shall upgrade the site access road and its intersection with Putty Road in accordance with applicable AUSTROADS standards, and to the satisfaction of RMS.

Transport Management Plan

- 25. The Applicant shall prepare and implement a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - be prepared in consultation with RMS and Council, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;
 - (b) include a drivers Code of Conduct for heavy vehicle drivers; and
 - (c) describe the measures that would be put in place to ensure compliance with the drivers' code of conduct and include a program to monitor the effectiveness of the implementation of these measures.

VISUAL

- 26. The Applicant shall:
 - implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development on local residences and road users; and
 - (b) ensure that all external lighting associated with the development complies with the relevant Australian Standards, including Australian Standard AS4282 (INT) 1997 Control of Obtrusive Effects of Outdoor Lighting or its latest version,

to the satisfaction of the Secretary.

BUSHFIRE MANAGEMENT

27. The Applicant shall ensure that the development is suitably equipped to respond to any fires on site; and assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.

WASTE

- 28. The Applicant shall ensure that only certified VENM and ENM is imported to the site to aid in the minimisation of final voids.
- 29. The Applicant shall manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council.
- 30. The Applicant shall:
 - (a) minimise the waste generated by the development;
 - (b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - (c) report on waste management and minimisation in the Annual Review,

to the satisfaction of the Secretary.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - · consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant criteria in schedule 3; and
 - if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

- 1. The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the date of this consent;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

Adaptive Management

2. The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant shall, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary;

to the satisfaction of the Secretary.

Management Plan Requirements

- 3. The Applicant shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;

- a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents:
 - complaints:
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

- 4. By the end of December each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:
 - describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the EIS;
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

- 5. Within 3 months of a modification to this consent or following the submission of an:
 - (a) annual review under condition 4 above:
 - (b) incident report under condition 7 below; or
 - (c) audit report under condition 9 below,

the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.

Community Consultative Committee

6. The Applicant shall establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments (Department of Planning, 2007, or its latest version), and be operating within 6 months of the date of this consent.

Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.
- In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.

REPORTING

Incident Reporting

7. The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the Development, the Applicant shall notify the Secretary. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

- 9. Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies, Council and the CCC;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under these approvals; and
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

ACCESS TO INFORMATION

- 11. Within 6 months of the date of this consent, the Applicant shall:
 - (a) make copies of the following publicly available on its website:
 - the EIS;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and
 - (b) keep this information up-to-date,

to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT AREA

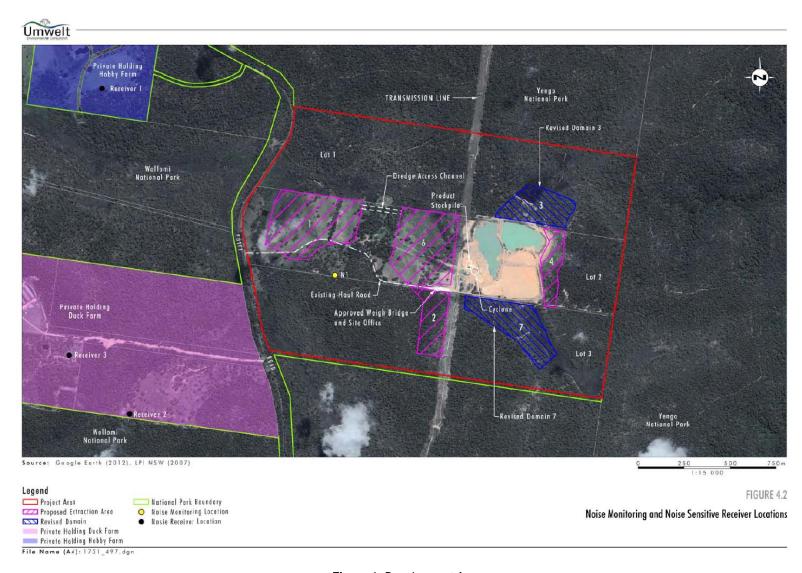


Figure 1: Development Area

APPENDIX 2 DEVELOPMENT LAYOUT

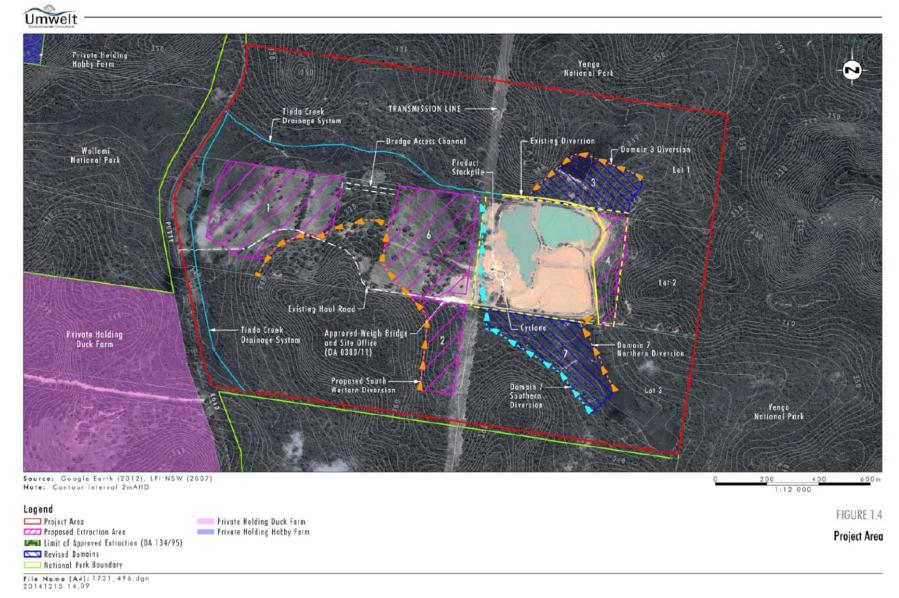


Figure 1: Development Layout

APPENDIX 3 STATEMENT OF COMMITMENTS

Environmental Impact Statement Proposed Expansion of Tinda Creek Sand Quarry **Draft Statement of Commitments**

5.0 Draft Statement of Commitments

The DGRs for the proposal (Appendix 1) require that the EIS include a Draft Statement of Commitments which details the measures proposed by Hy-Tec for environmental mitigation, management and monitoring.

If approval is granted under the EP&A Act for the proposal, Hy-Tec will commit to the controls detailed below.

5.1 Compliance with the EIS

5.1.1 To carry out the development for the Project generally in accordance with the Development Application and this EIS.

5.2 Life of Operation, Production and Hours of Operations

Project Life

5.2.1 The Project approval life will be for an additional 30 years from the date of commencement of operations under the Project Approval. Closure and rehabilitation activities will be undertaken in accordance with a detailed Quarry Closure Plan, at the time of closure. These works may extend beyond the 30 year operational approval period.

Production Limits

5.2.2 A maximum of 300,000 tonnes per year of sand products will be transported from the quarry.

Hours of Operation

- 5.2.3 Quarry operations will be undertaken between the hours of 5.00 am and 10.00 pm Monday to Friday and 5.00 am and 3.00 pm on Saturdays.
- 5.2.4 The following activities may occur on Sundays and public holidays:
 - · maintenance of fixed plant and mobile plant;
 - product stockpile management;
 - · water cart operations for stockpile area and plant area; and
 - · pumping for dewatering activities.

5.3 Environmental Management, Monitoring and Reporting

Environmental Management Plan

5.3.1 Within six months of development consent, Hy-Tec will revise its existing Environmental Management Plan (EMP) as part of the implementation of the Project. The EMP will include details of all of the management and monitoring

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commitments outlined in the EIS (specifically those outlined in this Statement of Commitments).

Annual Review

5.3.2 Hy-Tec will prepare an Annual Review of the environmental performance of the Project and will make this available to the public, Hawkesbury City Council and relevant government agencies as required.

5.4 Ecology

A range of mitigation measures are proposed to ameliorate potential adverse ecological impacts associated with the Project. These include:

- 5.4.1 Implement a robust weed management program to be documented in the revised EMP.
- 5.4.2 Conduct rehabilitation progressively over the life of the quarry. All rehabilitation works will be scheduled to commence as soon as practicable after disturbance and reformation of the landscape.
- 5.4.3 A robust tree felling procedure will be implemented at Tinda Creek Quarry to minimise the potential for impacts on native fauna species (including threatened species) as a result of the clearing of hollow-bearing trees.
- 5.4.4 Nest boxes will be established in retained vegetation in proximity to area impacted as a result of the Project to mitigate the loss of hollow-bearing trees. An assessment of the number of tree hollows lost during clearing will be made as part of the tree felling activities and nest boxes will be established to compensate for this loss, where appropriate. Suitably designed nest boxes will be established for the range of hollow-dependent species that are known to occur in the Project area.
- 5.4.5 A pre-clearance survey of the proposed disturbance areas will be undertaken prior to ground disturbance (within seven days of the planned disturbance) to ensure that no Rosenberg's Goanna burrows are present. The assessment should be undertaken by a suitably qualified and licensed ecologist. If burrows are present, the ecologist will provide advice on how to ensure that no goannas remain within the burrows during the clearing process.
- 5.4.6 A pre-clearance survey of all areas to be cleared will be undertaken (within seven days of the planned clearing time) to ensure that no termite mounds used by Rosenberg's Goannas are present. The assessment should be undertaken by a suitably qualified and licensed ecologist. If termite mounds are present, the ecologist will provide advice on how to ensure that no goanna eggs or juveniles remain within the mounds during the clearing process.
- 5.4.7 A comprehensive biodiversity offset strategy is to be implemented for the Project as described in Appendix 7 to ensure the development maintains or improves the terrestrial and aquatic biodiversity values of the region in the medium to long-term.

5.5 Aboriginal Heritage

It is noted that archaeological subsurface investigation is not necessary within the proposed extraction domains, prior to the quarry expansion proceeding. However, a range of mitigation measures are proposed to ameliorate potential adverse archaeological impacts associate with the Project. These include:

- 5.5.1 In consultation with the registered Aboriginal parties, prepare an Aboriginal Cultural Heritage Management Plan (ACHMP) for the proposed Project. The ACHMP will allow for management (collection) of the artefacts located in the Tinda Creek Artefact Scatter 1 site in Domain 3 (if Domain 3 is to be quarried) and to provide for future management of Aboriginal cultural heritage issues should they arise across the broader Project area. The ACHMP will form part of the revised EMP for the project.
- 5.5.2 If Domain 3 is to be quarried, the artefacts located within the Tinda Creek Artefact Scatter 1 site are collected using the methodology set out in the protocols and procedures of the approved ACHMP.
- 5.5.3 The EMP is to be updated to contain provisions to address management of the following issues, as detailed in the Aboriginal Cultural Heritage and Archaeological Assessment (Appendix 9):
 - exposure of previously unrecorded artefactual material during ground disturbance works within the Project area;
 - exposure of human/possible human skeletal material during ground disturbance works within the Project area;
 - exposure of sandstone with evidence of Aboriginal engravings or grinding grooves; and
 - development of an Aboriginal Cultural Heritage Training Package for all Hy-Tec employees/contractors working on the Project to be provided as part of the quarry induction process.

5.6 Historic Heritage

5.6.1 In the unlikely event that unexpected archaeological remains or potential heritage items not identified as part of this assessment are discovered during the Project and are likely to be disturbed by the Project, all works in the immediate area should cease, the remains and potential impacts should be assessed by a qualified archaeologist or heritage consultant and, if necessary, the Heritage Branch, Department of Planning notified.

5.7 Traffic and Access

5.7.1 The site access will be upgraded to comply with the minor road standard access as detailed in AS2890.2.

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5.8 Noise

- 5.8.1 Hy-Tec will undertake an attended noise monitoring program (as detailed in Section 4.7.6.1) in order to assess ongoing compliance with relevant noise impact assessment criteria over the life of the Project. Details of the Noise Management Plan will be provided in the revised EMP.
- 5.8.2 The monitoring results will be reviewed by the Hy-Tec environmental representative to assess compliance with the Noise Impact Assessment (NIA) predictions and with the relevant NIA criteria. The results will be reported in accordance with the requirements of the Project approval and EPL.

5.9 Air Quality

- 5.9.1 The existing dust control measures will continue to be implemented on site, including:
 - · minimisation of the total disturbed/working areas at any one time; and
 - · watering of unsealed roads, working areas and stockpiles as required.

5.10 Surface Water and Groundwater

- 5.10.1 Hy-Tec will continue to undertake monitoring of groundwater bores in accordance with existing licence conditions.
- 5.10.2 All diversion drains will continue to be maintained in good condition.
- 5.10.3 The water management system will remain as a closed system.

5.11 Greenhouse Gas and Energy

- 5.11.1 Hy-Tec will continue to participate in the Energy Efficiency Opportunities (EEO) Program and undertake the following activities to improve energy use efficiency:
 - · develop an EEO project and communication plan;
 - · evaluate energy use for the Project;
 - identify and investigate potential EEO; and
 - · implement, track, communicate and report on EEO.
- 5.11.2 Hy-Tec will continue to improve on-site diesel use efficiency based on the range of measures outlined in Section 4.11.8.1
- 5.11.3 Hy-Tec will explore the use of lower GHG emission energy sources as soon as practical based on the range of measures outlined in **Section 4.11.8.2.**

5.12 Hazards

- 5.12.1 Hy-Tec will store all dangerous goods in accordance with dangerous goods storage requirements and relevant Australian Standards.
- 5.12.2 Hy-Tec will continue to implement the appropriate measures to reduce the risk of fire ignition and the spread of bushfire across the site in consultation with the Rural Fire Services (RFS).

5.13 Rehabilitation and Closure

- 5.13.1 The revised EMP will detail the approach to rehabilitation of the Project, including the species to be used in revegetation works.
- 5.13.2 Wherever possible, rehabilitation will be completed progressively as part of the ongoing development of the quarry.
- 5.13.3 A detailed Quarry Closure Plan will be developed approximately three years prior to cessation of quarrying activities.

APPENDIX 4 CONCEPTUAL FINAL LANDFORM

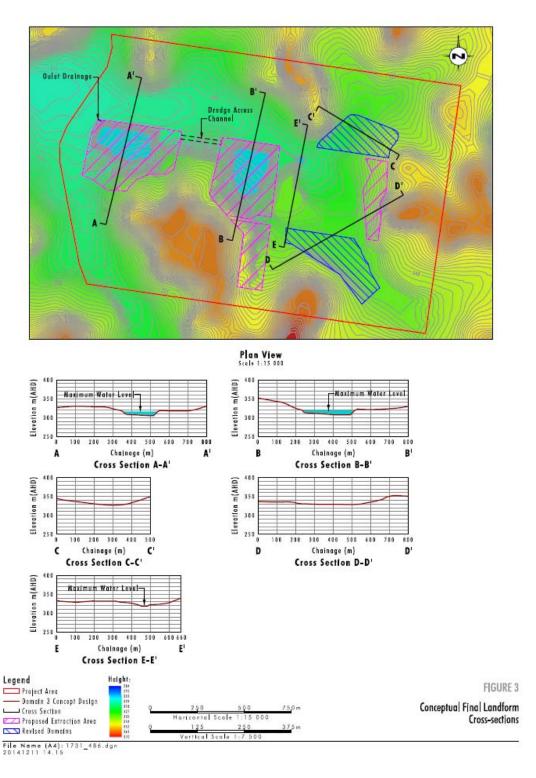


Figure 1: Conceputal Final Landform

APPENDIX 5 BIODIVERSITY OFFSETS AND THREATENED FLORA



Figure 1: Biodiversity Offsets



Figure 2: Location of Grevillea parviflora subsp. Parviflora

APPENDIX 6 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of Schedule 3 are to apply under all meteorological conditions except wind speeds greater than 3 m/s at 10 m above ground level.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station on or in the vicinity of the site.

Compliance Monitoring

Unless directed otherwise by the Secretary, annual attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

- 4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise date, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.