# **Notice of Modification**

# Section 75W of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning, the Independent Planning Commission of NSW modifies the development consent referred to in Schedule 1, as set out in Schedule 2.

Peter Williams

Dr. Peter Williams (Chair) Member of the Commission

ud Marlin

Prof. Richard Mackay, AM Member of the Commission

Sydney

20 August 2018

# SCHEDULE 1

The Development Consent (DA 152-6-2005) for the Tweed Sand Quarry granted by the Minister for Planning on 31 July 2006.

# **SCHEDULE 2**

1. Delete all words after SCHEDULE 1 and replace with:

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# DEFINITIONS

AHD	Australian Height Datum
Annual Review Applicant	The review required by condition 11 of Schedule 5 Hanson Construction Materials Pty Ltd, or any other person carrying out development to
	which this consent applies
Approved Disturbance Area BCA	The area identified as such on the development layout Building Code of Australia
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in Schedules 2 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings
Council	covered by this consent Tweed Shire 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 The development as described in the documents listed in condition 3 of Schedule 2
Development layout Dol Water	The plan at Appendix 1 of this consent Department of Industry - Water
DRG	Division of Resources and Geoscience within the Department
EA (Mod 1)	The Environmental Assessment titled Tweed Sand Quarry – Annual Extraction Rate (DA 152-6-2005) Modification Application to Increase Extraction Rate – Environmental Assessment, prepared by Gilbert and Sutherland and dated June 2017, and associated Response to Submissions titled Tweed Sand Quarry (DA 152-6-2005 Application to Increase Extraction Limit – Environmental Assessment – Response to Submissions, dated 10 October, and any additional information provided by the Applicant in support of the application
EIS	Environmental Impact Statement titled <i>P. Guiane Sand Quarry Expansion</i> prepared by Jim Glazebrook & Associates Pty Ltd and dated 2005, and associated Response to Submission titled <i>Development Application DA 152-6-2005 – Expansion of Sand Quarry –</i> <i>Crescent Street Cudgen (P Guinane Pty Ltd),</i> dated November 2005, any additional information provided by the Applicant in support of the application NSW Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Means what is possible and practicable in the circumstances
Incident	A set of circumstances that:
	<ul> <li>causes or threatens to cause material harm to the environment; or</li> <li>results in non-compliance with this consent</li> </ul>
Laden Trucks	Trucks transporting quarry products or materials to or from the site
Land	Has the same meaning as the definition of the term in section 4 of the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as 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	<ul> <li>Is harm that:</li> <li>involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</li> </ul>
	<ul> <li>results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> <li>This definition excludes "harm" that is authorised under either this consent or any other</li> </ul>
	statutory approval
Minister	NSW Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the development
Modification 1 Negligible	The modification as described in EA (Mod 1) 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
C C	Public Holidays
OEH POEO Act	Office of Environment and Heritage Protection of the Environment Operations Act 1997
Privately-owned land	Land that is not owned by a public agency or a mining, petroleum or extractive industry
Public infrastructure	company (or its subsidiary) Linear and other infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone,
Quarrying operations	telecommunications, etc. The extraction, processing, stockpiling and transportation of extractive materials carried out on the site and the associated removal, storage and/or emplacement of vegetation, tapped and externary data.
Quarry products	topsoil and overburden Includes all saleable quarry products, but excludes tailings, other wastes and rehabilitation material

Reasonable

Rehabilitation

RMS Secretary Site Means applying 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 condition, to ensure it is safe, stable and non-polluting Roads and Maritime Services Planning Secretary under the EP&A Act or nominee The land described in Schedule 1

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

#### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

## **TERMS OF CONSENT**

- 2. The Applicant, in acting on this consent, must carry out the development:
  - (a) in compliance with the conditions of this consent;
  - (b) in accordance with all written directions of the Secretary; and
  - (c) in accordance with the development layout.
- 3. The Applicant, in acting on this consent, must carry out the development:
  - (a) generally in accordance with the EIS; and
  - (b) generally in accordance with EA (Mod 1).
- 4. The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document referenced in condition 3 of this Schedule. In the event of an inconsistency, ambiguity or conflict between any of the documents referenced in condition 3 of this Schedule, the most recent document prevails.
- 5. Consistent with the requirements of this consent, the Secretary may make written directions to the Applicant in relation to:
  - (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and
  - (b) the implementation of any actions or measures contained in any such document referred to in (a) above.
  - Note: For the purposes of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of consent or direction of the Secretary, and a document, if it is not possible to comply with both the condition or direction, and the document.

#### LIMITS ON CONSENT

#### **Quarrying Operations**

- 6. The Applicant may carry out quarrying operations on the site until 1 July 2036.
  - Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional requirements and undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all respects other than the right to conduct quarrying operations until the rehabilitation of the site and those requirements and undertakings have been carried out to the standard required by the applicable conditions.
- 7. The Applicant must not undertake extraction of extractive materials to a depth greater than 20 m below the natural ground surface.
- 8. The Applicant must not transport more than 500,000 tonnes of quarry products from the site in any financial year.

## **Quarry Product Transport**

9. The Applicant must not dispatch more than 10 laden trucks from the site in any hour until the upgrades of Altona Road and the Tweed Coast Road / Crescent Street intersection, as required under conditions 21 and 23 of Schedule 3, have been completed.

Following these road upgrades, the Applicant must not dispatch more than 18 laden trucks from the site in any hour.

#### **Hours of Operation**

10. The Applicant must comply with the operating hours set out in Table 1.

able 1: Operating Hours		
Activity	Permissible Hours	
Quarrying operations (excluding loading and dispatch of trucks)	<ul> <li>7 am to 5 pm Monday to Friday</li> <li>7 am to 4 pm Saturday</li> <li>At no time on Sundays or public holidays</li> </ul>	
Loading and dispatch of trucks	<ul> <li>7 am to 5 pm Monday to Friday</li> <li>7 am to 12 pm Saturday</li> <li>At no time on Sundays or public holidays</li> </ul>	
Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence	

11. The following activities may be carried out outside the hours specified in Table 1 above:

- (a) delivery or dispatch of materials as requested by Police or other public authorities; and
  - (b) emergency work to avoid the loss of lives, property or to prevent environmental harm.

In such circumstances, the Applicant must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

## STRUCTURAL ADEQUACY

12. The Applicant must ensure that all 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; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development or project.

#### DEMOLITION

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

#### PROTECTION OF PUBLIC INFRASTRUCTURE

- 14. Unless the Applicant and the applicable authority agree otherwise the Applicant must:
  - (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 damage to roads caused as a result of general road usage or as otherwise addressed by contributions required by condition 16 of Schedule 2.

#### **OPERATION OF PLANT AND EQUIPMENT**

- 15. The Applicant must ensure that all the plant and equipment used at the site, or to monitor the performance of the development is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

#### CONTRIBUTIONS

- 16. The Applicant must pay to Council a financial contribution toward the upgrade of local roads (other than Altona Road and the Tweed Coast Road / Crescent Street intersection). The contribution must be:
  - (a) determined in accordance with the Tweed Road Contribution Plan September 2016 (as indexed);
  - (b) paid prior to the dispatch of more than 10 laden trucks from the site in any hour; and
  - (c) reported in the Annual Review.
  - Note: The upgrade and maintenance of Altona Road is subject to conditions 21 and 22 of Schedule 3. The upgrade of the Tweed Coast Road / Crescent Street intersection is subject to condition 23 of Schedule 3.

#### COMPLIANCE

17. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

## **PRODUCTION DATA**

- 18. The Applicant must:
  - (a) from the commencement of quarrying operations provide calendar year annual quarry production data to DRG using the standard form for that purpose; and
  - (b) include a copy of this data in the Annual Review.

## LIMITS OF EXTRACTION

19. The Applicant must ensure that the surveyed boundaries of the approved limits of extraction are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

Note: The limit of extraction includes the area described in the documents listed in condition 3 of Schedule 2, and shown conceptually on the development layout plan in Appendix 1.

- 20. The Applicant must maintain a minimum buffer of 10 metres between extraction operations and the boundaries of the site. The buffer may be used for minor activities such as drainage works, access, bunds, and landscaping.
- 21. The Applicant must vary the buffer distance to the site boundary to achieve a stable, natural-looking final lake bank design with curved boundaries, to the satisfaction of the Secretary.

# NOTIFICATION

22. Prior to dispatching more than 10 laden trucks from the site in any hour, the Applicant must provide written notification to the Department and Council that condition 16(b) of Schedule 2 and conditions 3, 21, 22, 23 and 25 of Schedule 3 have been completed to the satisfaction of the relevant authority.

## SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

# NOISE

## **Operational Noise Criteria**

1. The Applicant must 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	<b>Day</b> LAeg (15 minute)
Any residence on privately owned land	40

Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*. Appendix 2 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

## **Operating Conditions**

- 2. The Applicant must:
  - (a) implement best practice management to minimise the construction, operational and road transportation noise of the development;
  - (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 2);
  - (c) carry out attended noise monitoring (at least every 3 months or as otherwise agreed by the Secretary) to determine whether the development is complying with the relevant conditions of this consent (see Appendix 2); and
  - (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent,

to the satisfaction of the Secretary.

Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.

#### **Noise Management Plan**

- 3. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with the EPA;
  - (c) describe the measures to be implemented to ensure:
    - compliance with the noise criteria and operating conditions of this consent;
      - best practice management 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 (see Appendix 2);
  - (d) describe the proposed noise management system; and
  - (e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2, and which evaluates and reports on the effectiveness of the noise management system on site.

The Applicant must not dispatch more than 10 laden trucks from the site in any hour until the Noise Management Plan is approved by the Secretary.

The Applicant must implement the Noise Management Plan as approved from time to time by the Secretary.

#### **AIR QUALITY**

#### Air Quality Impact Assessment Criteria

4. The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.

#### Table 3: Air quality criteria

Pollutant	Averaging Period	Crite	erion
Destinute to section (DM )	Annual	<sup>a,c</sup> 25	µg/m³
Particulate matter < 10 µm (PM <sub>10</sub> )	24-hour	<sup>ь</sup> 50 µg/m <sup>3</sup>	
Derticulate method of (DM )	Annual	<sup>a, c</sup> 8	µg/m <sup>3</sup>
Particulate matter < 2.5 (PM <sub>2.5</sub> )	24-hour	<sup>b</sup> 25 μg/m <sup>3</sup>	
Total suspended particulates (TSP)	Annual	<sup>a,c</sup> 90 μg/m <sup>3</sup>	
<sup>d</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes:

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

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Secretary.

<sup>d</sup> 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.

## **Operating Conditions**

5. The Applicant must:

- (a) implement best management practice to minimise the dust emissions of the development, including routinely watering haul roads being used by heavy vehicles and equipment;
- (b) regularly assess meteorological and air quality monitoring data to guide the day-to-day planning of operations and implementation of air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
- (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to Table 3 above);
- (d) monitor and report on compliance with the relevant air quality conditions in this consent; and
- (e) minimise surface disturbance of the site, other than as permitted under this consent,
- to the satisfaction of the Secretary.

## Air Quality Management Plan

- 6. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with the EPA;
  - (c) be submitted to the Secretary within three months of the determination of Modification 1;
  - (d) describe the measures to be implemented to ensure:
    - compliance with the air quality criteria and operating conditions of this consent;
    - best practice management is being employed; and
    - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
  - (e) describe the air quality management system in detail; and
  - (f) include an air quality monitoring program that:
    - is capable of evaluating the performance of the development against the air quality criteria;
    - adequately supports the air quality management system; and
    - includes a protocol for determining any exceedances of the air quality criteria.

The Applicant must implement the Air Quality Management Plan as approved from time to time by the Secretary.

#### **Meteorological Monitoring**

7. For the life of the development, the Applicant must 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 and Analysis of Air Pollutants in New South Wales* guideline.

#### **Greenhouse Gas Emissions**

8. The Applicant must implement all reasonable measures to minimise the release of greenhouse gas emissions from the site.

## SOIL AND WATER

#### Water Supply

- 9. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under this consent to match its available water supply.
  - Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development.

## Water Discharges

10. Except as expressly provided by an EPA licence, the Applicant must comply with section 120 of the POEO Act during the carrying out of the development.

## **Fines Management**

- 11. The Applicant must ensure that:
  - (a) no potential acid sulfate soil is removed from the site, unless adequately neutralised in accordance with methods approved under the Soil and Water Management Plan (see condition 16 below);
  - (b) all excavated potential acid sulfate soil fines material is discharged into the dredge pond at a depth greater than 3 metres below the water surface as soon as possible to prevent oxidisation; and
  - (c) all fines are deposited to a final depth of at least 8 metres below the water surface, unless an alternative method(s) is approved by the EPA and the Secretary.

Note: Acid sulfate soils are as defined in the NSW Acid Sulfate Soils Manual.

#### **Flood Management**

- 12. The Applicant must cease dredging and processing activities not less than 24 hours prior to the commencement of overflow from any dredge pond. No dredging or processing may occur when the dredge ponds are overflowing.
- 13. The Applicant must ensure that the flood storage capacity of the site is not less than the pre-existing flood storage capacity throughout all stages of the development. Monthly details of the available flood storage capacity must be reported in the Annual Review.

#### Soil and Water Management Plan

- 14. Within three months of the determination of Modification 1, unless otherwise agreed by the Secretary, the Applicant must prepare a Soil and Water Management Plan for the development in consultation with EPA, DPI Water and Council, to the satisfaction of the Secretary. This plan must be prepared by a suitably qualified expert whose appointment has been approved by the Secretary, and include:
  - (a) a Site Water Balance;
  - (b) an Erosion and Sediment Control Plan;
  - (c) a Surface Water Monitoring Program;
  - (d) a Groundwater Monitoring Program; and
  - (e) a Blue-green Algae Management Plan.

The Applicant must implement the approved plan as approved from time to time by the Secretary.

- 15. The Site Water Balance must include details of:
  - (a) sources and security of water supply
  - (b) water use and management on site;
  - (c) any off-site water transfers;
  - (d) reporting procedures; and
  - (e) measures to be implemented to minimise clean water use on site.

#### 16. The Erosion and Sediment Control Plan must:

- (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soil and Construction Manual, the NSW Acid Sulfate Soil Advisory Committee's Acid Sulfate Soil Manual, and relevant Council codes including the Code of Practice for Soil and Water Management on Construction Sites, or most recent versions of these documents;
- (b) describe construction and operational activities that could cause soil erosion, sedimentation or generation of acid sulfate soils;

- (c) describe the location, function, and capacity of soil and water management and control structures during construction, stabilisation and operational stages;
- (d) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
- (e) define procedures for managing the potential acid sulfate soils on the site;
- (f) define procedures for managing water releases from the site; and
- (g) define procedures for the maintenance of soil and water management structures on the site during the life of the development.
- 17. The Surface Water Monitoring Program must include:
  - (a) a detailed description of the surface water management system;
  - (b) surface water impact assessment criteria;
  - (c) a program to monitor bank and bed stability;
  - (d) a program to monitor and manage pH in the dredge pond;
  - (e) a program to monitor and report on adverse impacts of the project on surface water flows and quality, including any surface water discharges; and
  - (f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria.
- 18. The Groundwater Monitoring Program must include:
  - (a) detailed baseline data on groundwater levels and quality, based on statistical analysis;
  - (b) groundwater impact assessment criteria;
  - (c) a program to monitor and report on adverse impacts of the project on groundwater flows and quality;
  - (d) a program to monitor groundwater level effects on vegetation, and on groundwater supply to adjoining properties; and
  - (e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria.
- 19. The Blue-Green Algae Management Plan must:
  - (a) be consistent with extant guidelines for blue-green algae management including the National Health and Medical Research Council's *Guidelines for Managing Risks in Recreational Water*,
  - (b) describe the measures that would be implemented to prevent and control the sources of algal blooms over the short, medium and long term;
  - (c) include a detailed recovery plan that aims to reduce algae levels to meet the water quality performance and completion criteria in the Rehabilitation Management Plan;
  - (d) include reasonable and feasible measures to reduce nutrient levels in the pond/s over the short, medium and long term, and include interim water quality targets for nutrients based on continual improvement and established water quality objectives for the Tweed River catchment; and
  - (e) define procedures for the management and notification of identified algal blooms.

## TRANSPORT

## Site Access

20. The Applicant must ensure that all heavy vehicle access to and from the site is via the Tweed Coast Road/Crescent Road/Altona Road route. Heavy vehicles must not travel via Crescent Street through Cudgen Village, except for local deliveries to Cudgen Village.

#### Upgrade and Maintenance of Altona Road

- 21. The Applicant must upgrade Altona Road between the site entrance and intersection with Crescent Street. This upgrade must:
  - (a) include two additional passing bays along the current alignment of Altona Road, each having sufficient length to readily accommodate a laden truck and dog trailer combination, to the satisfaction of the owners of the road; and
  - (b) be funded by the Applicant, or by a cost sharing agreement between the Applicant and the owner of the Cudgen Lakes Sand Quarry, in consultation with Council.
- 22. Within 12 months of the approval of Modification 1, the Applicant must enter into a cost sharing agreement with the owner of the Cudgen Lakes Sand Quarry, in consultation with Council, for the maintenance of Altona Road between the site entrance and intersection with Crescent Street. This agreement must:
  - (a) provide for ongoing repairs and maintenance of the road;
  - (b) apply to the existing or any future approved alignment of Altona Road; and
  - (c) provide for proportionate and equitable contributions between the Applicant and the owner of the Cudgen Lakes Sand Quarry (based on actual annual product road transport or other measure/s agreed by the parties).

If a cost sharing agreement cannot be reached or if there is any dispute regarding the finalisation of the terms of the cost sharing agreement, or its implementation, then either party may refer the matter to the Secretary for resolution.

#### Upgrade of the Crescent Street and Tweed Coast Road Intersection

- 23. The Applicant must upgrade the intersection of Crescent Street and Tweed Coast Road. This upgrade must: (a) provide for the construction of an acceleration lane of not less than 200 metres in length on Tweed
  - Coast Road, northbound from the intersection, to the satisfaction of Council (as roads authority);
  - (b) provide for channelised right turn treatment (line marking only) on Tweed Coast Road for vehicles turning right into Crescent Street;
  - (c) be designed and constructed in accordance with Austroads Guidelines, Australian Standards and RMS Supplements; and
  - (d) be funded by the Applicant, or by a cost sharing agreement between the Applicant and the owner of the Cudgen Lakes Sand Quarry, in consultation with Council;

If a cost sharing agreement cannot be reached or if there is any dispute regarding the finalisation of the terms of the cost sharing agreement, or its implementation, then either party may refer the matter to the Secretary for resolution.

Note: The proposed road works on Tweed Coast Road (MR450) will be captured by Section 138 of the Roads Act 1993. Concept Design is to be submitted to Tweed Shire Council for referral to Roads and Maritime for concurrence under Section 138 of the Roads Act 1993.

## **Operating Conditions**

- 24. The Applicant must:
  - (a) provide sufficient parking on the site for all project-related traffic and visitors, in accordance with any applicable Council parking code and ensure that no on street parking is undertaken;
  - (b) ensure that on-site parking and pedestrian facilities are adequately signposted;
  - (c) ensure that all laden trucks entering or exiting the site have their loads covered;
  - (d) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site;
  - (e) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport quarry products from the development so they can be easily identified by road users; and
  - (f) keep accurate records of all laden truck movements to and from the site and publish a summary of these records on its website every month.

## Transport Management Plan

- 25. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with RMS and Council, and in accordance with the *RTA Traffic Control at Worksites Manual*;
  - (c) describe the processes in place for the management of truck movements entering and exiting the site;
  - (d) prohibit trucks departing the site from turning right from Crescent Street to Tweed Coast Road;
  - (e) include a Drivers' Code of Conduct that includes:
    - details of the safe and quiet driving practices that must be used by drivers travelling to and from the quarry;
      - a map of the primary haulage route;
      - safety initiatives for haulage through residential areas, school zones and along school bus routes;
      - an induction process for vehicle operators and regular toolbox meetings;
      - complaints resolution and disciplinary procedures; and
      - details of community consultation measures for peak haulage periods.
  - (f) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;
  - (g) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works; and
  - (h) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles leaving the quarry.

The Applicant must not commence operations under Modification 1 until the Traffic Management Plan is approved by the Secretary.

The Applicant must implement the approved Traffic Management Plan as approved from time to time by the Secretary.

## REHABILITATION

## **Rehabilitation Objectives**

26. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the proposed rehabilitation activities described in the documents listed in condition 3 of Schedule 2, and comply with the objectives in Table 4.

Table 4: Rehabilitation	Ob	jectives
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Feature	Objective
All areas of the site affected by the development	<ul> <li>Safe</li> <li>Hydraulically and geotechnically stable, including the dredge pond margins (particularly where subject to regular wind and wave action)</li> <li>Non-polluting</li> <li>Fit for the intended post-mining land use(s)</li> <li>Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
Surface Infrastructure	<ul> <li>Decommissioned and removed, unless otherwise agreed by the Secretary</li> </ul>
Dredge Pond and Final Lake	<ul> <li>Perimeter of dredge pond landscaped and vegetated using native tree and understorey species</li> <li>Natural looking bank design with curved lake boundaries, with a variety of bank treatments (eg beaches, wetlands) providing a variety of habitats</li> <li>Minimise the extent and persistence of algal blooms</li> <li>Water quality fit for the intended post-mining land use(s)</li> </ul>

## **Progressive Rehabilitation**

27. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

#### **Rehabilitation Management Plan**

- 28. The Applicant must prepare a Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with Dol, Council and OEH;
  - (c) be submitted to the Secretary for approval within three months of the determination of Modification 1, unless the Secretary agrees otherwise;
  - (d) include a detailed final landform concept plan, showing the final lake and bank design;
  - (e) describe how the rehabilitation of the site would achieve the objectives identified in Table 4;
  - (f) describe the short, medium, and long-term measures that would be implemented to:
    - rehabilitate and stabilise the site; and
    - manage the restored vegetation and wetland habitat established on the site;
  - (g) include detailed performance and completion criteria for the rehabilitation and stabilisation of the site (including appropriate water quality criteria);
  - (h) include a detailed description of the measures to be implemented on the site to:
    - enhance existing vegetation and increase littoral and terrestrial habitat potential;
      - control terrestrial and aquatic pests and weeds;
      - control erosion;
      - · control access; and
    - reduce the visual impacts of the development;
  - (i) include a vegetation clearance protocol;
  - (j) include a program to monitor, independently audit and report on the effectiveness of the measures in paragraph (f) above, and progress against the detailed performance and completion criteria in paragraph (g) above; and
  - (k) include a Long-Term Management Strategy which:
    - defines the objectives and criteria for quarry closure and post-extraction management;
    - investigates options for the future use of the site;

- describes the measures that would be implemented to minimise or manage the ongoing environmental effects of the project; and
- describes how the performance of these measures would be monitored over time;
- (I) describe the potential risks to successful rehabilitation and/or revegetation, including a description of the contingency measures that would be implemented to mitigate these risks; and
- (m) detail of who is responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved Rehabilitation Management Plan as approved from time to time by the Secretary.

Note: The measures for stabilising the dredge pond and final lake must ensure the long-term stability of the banks from erosion and must be generally consistent with the rock stabilisation methods described in the report titled Cudgen Lake Slope Stability Review, prepared by International Coastal Management, dated December 2005, unless otherwise approved by the Secretary.

#### **Rehabilitation Bond**

- 29. Within 6 months of the approval of the Rehabilitation Management Plan, the Applicant must lodge a Rehabilitation Bond with the Department to ensure that the rehabilitation of the site is undertaken in accordance with the performance and completion criteria set out in the plan and the relevant conditions of consent. The sum of the bond must be an amount agreed to by the Secretary and determined by:
  - (a) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and
  - (b) employing a suitably, independent and experienced person to verify the calculated costs.

The calculation of the Rehabilitation Bond must be submitted to the Department for approval at least 1 month prior to the lodgement of the bond.

- 30. The Rehabilitation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:
  - (a) any update or revision to the Rehabilitation Management Plan;
  - (b) the completion of an Independent Environmental Audit; or
  - (c) in response to a request by the Secretary.

#### Notes:

- If the rehabilitation of the site area is completed (or partially completed) to the satisfaction of the Secretary, then
  the Secretary will release the bond (or relevant part of the bond). If the rehabilitation of the site is 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.
- If capital and other expenditure required by the Rehabilitation Management Plan is largely complete, the Secretary
  may waive the requirement for lodgement of a bond in respect of the remaining expenditure.

## VISUAL

31. The Applicant must maintain a tree screen along the southern boundary of the site.

Note: Construction and maintenance of the tree screen must be described in the Rehabilitation Management Plan (see condition 28 above).

32. The Applicant must implement all reasonable measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.

#### WASTE

- 33. The Applicant must:
  - (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;
  - (b) minimise the waste generated by the development;
  - (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
  - (d) report on waste management and minimisation in the Annual Review,

to the satisfaction of the Secretary.

33. Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

#### LIQUID STORAGE

34. The Applicant must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.

# DANGEROUS GOODS

35. The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

## SCHEDULE 4 ADDITIONAL PROCEDURES

#### NOTIFICATION OF EXCEEDANCES

- 1. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any criteria in Schedule 3 the Applicant must:
  - (a) notify the affected land owners and tenants in writing of the exceedance, and provide quarterly monitoring results, to each affected party until the development is again complying with the relevant criteria; and
  - (b) publish on its website the full details of the exceedance.

Any exceedance of any criteria in Schedule 3 is an incident that must be notified to the Department in accordance with conditions 9 to 12 of Schedule 5.

For any exceedance of the air quality criteria or air quality measures in Schedule 3, the Applicant must also provide to any affected land owners and tenants a copy of the fact sheet entitled "*Mine Dust and You*" (NSW Minerals Council, 2011).

## 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, within 3 months of the Secretary's decision, or as otherwise agreed by the Secretary with the landowner, the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine their 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 that criteria, identify measures that could be implemented to ensure compliance with the relevant criteria;
- (b) give the Secretary and landowner a copy of the independent review; and
- (c) comply with any written requests made by the Secretary to implement any findings of the review.

## SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

## **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

- 1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. The strategy must:
  - (a) be submitted to the Secretary for approval within three months of the determination of Modification 1;
  - (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 to be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, record, handle and respond to complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance; and
    - 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 to be carried out under the conditions of this consent.

The Applicant must implement the Environmental Management Strategy as approved from time to time by the Secretary.

## Management Plan Requirements

- 2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) a summary of relevant background or 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;
  - (c) a description of the measures to 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 and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - (f) 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; and
    - non-compliances with statutory requirements;
  - (h) a protocol for periodic review of the plan; and
  - (i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.
  - Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

#### **Application of Existing Management Plans**

3. The Applicant must continue to apply existing approved management plans, strategies or monitoring programs that have most recently been approved under this consent, until the approval of a similar plan, strategy or program following a modification to this consent.

#### **Revision of Strategies, Plans & Programs**

- 4. Within 3 months of:
  - (a) the submission of an incident report under condition 10 of this Schedule;
  - (b) the submission of an Annual Review under condition 13 of this Schedule;
  - (c) the submission of an Audit report under condition 14 of this Schedule; or
  - (d) the approval of any modification to the conditions of this consent.

the Applicant must review the suitability of all strategies, plans and programs required under this consent. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

Notes:

- This is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve the environmental performance of the development.
- In the event of an inconsistency between condition 4(d) above and any condition in Schedule 3 of this consent, then the latter prevails.

## Staging, Combining and Updating Strategies, Plans or Programs

- 5. With the approval of the Secretary, the Applicant may:
  - (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
  - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and
  - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

## **Evidence of Consultation**

- 6. Where the conditions of this consent require consultation with an identified party, the Applicant must:
  - (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
    - (b) provide details of the consultation undertaken, including:
      - the outcome of that consultation, matters resolved and unresolved; and
      - details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed any unresolved matters.
- 7. However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this consent.

## COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. The CCC must be operated in general accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects (2016)*, for the duration of quarrying operations and for at least 6 months following the completion of quarrying operations.

Notes:

- The CCC is an advisory committee.
- In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.

#### REPORTING

## Incident Notification, Reporting and Response

- 9. The Department must be notified in writing to <u>compliance@planning.nsw.gov.au</u> immediately after the Applicant becomes aware of an incident.
- 10. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. This report must include the time and date of the incident, details of the incident, measures implemented to prevent re-occurrence and must identify any non-compliance with this consent.
- 11. Any written requirements of the Secretary or relevant public authority (as determined by the Secretary) which may be given at any point in time, to address the cause or impact of an incident must be complied with and within any timeframe specified by the Secretary or relevant public authority.

12. If statutory notification is provided to EPA as required under the POEO Act in relation to the project, such notification must also be provided to the Secretary within 24 hours after the notification was provided to EPA.

## Annual Review

- 13. By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must submit a report to the Department reviewing the environmental performance of the development, to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - requirements of any plan or program required under this consent;
    - monitoring results of years prior; and
    - relevant predictions in the documents listed in condition 3 of Schedule 2;
  - (c) detail any non-compliance over the past financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
  - (d) evaluate and report on:
    - the effectiveness of the noise and air quality management systems; and
    - compliance with the performance measures, criteria and operating conditions in this consent;
  - (e) identify any trends in the monitoring data over the life of the development;
  - (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
  - (g) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee and any interested person upon request.

## INDEPENDENT ENVIRONMENTAL AUDIT

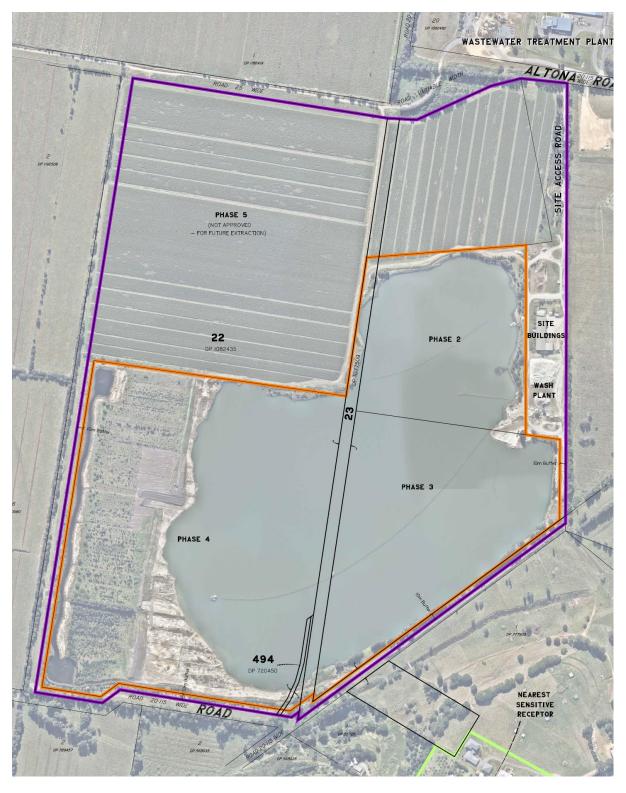
- 14. Within a year of the commencement of quarrying operations and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The primary purposes of the audit are to ascertain information in relation to the environmental performance of the development and the adequacy of strategies, plans and programs. Audits must:
  - (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies 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 or water licences for the development (including any assessment, strategy, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;
  - (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
  - (f) be conducted and reported to the satisfaction of the Secretary.
  - Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.
- 15. Within 12 weeks of commencing each audit, unless otherwise agreed by the Secretary, the Applicant must submit a copy of the Audit report to the Secretary and any other agency that requests it, together with its response to any recommendations contained in the Audit report, and a timetable for the implementation of the recommendations. The Applicant must implement these recommendations, to the satisfaction of the Secretary.

#### ACCESS TO INFORMATION

- 16. Within 1 month of the determination of Modification 1, and for the life of the development, the Applicant must:
  - (a) make the following information and documents (as they are obtained or approved) publicly available on its website:
    - the documents listed in conditions 2 and 3 of Schedule 2;
    - current statutory approvals for the development;
    - all approved strategies, plans and programs required under the conditions of this consent;

- regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved 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 summary of the current stage and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- the Annual Review's of the development;
- any Independent Environmental Audit as described in condition 12 above, and the Applicant's response to the recommendations in any audit; and
- any other matter required by the Secretary; and
- (b) keep this information up-to-date, to the satisfaction of the Secretary.

## APPENDIX 1 DEVELOPMENT LAYOUT PLAN



APPROVED EXTRACTION AREA SITE BOUNDARY

#### APPENDIX 2 NOISE COMPLIANCE ASSESSMENT

## Applicable Meteorological Conditions

- 1. The noise criteria in Table 2 are to apply under all meteorological conditions except the following:
  - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
    - (b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speed greater than 2 m/s at 10 m above ground level; or
    - (c) temperature inversion conditions greater than 3°C/100 m.

## **Compliance Monitoring**

- 2. A noise compliance assessment must be undertaken prior to the dispatch of more than 10 laden trucks from the site in any hour. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with noise criteria presented above. A report must be provided to the Department and EPA prior to the dispatch of more than 10 laden trucks from the site in any hour.
- 3. Unless the Secretary agrees otherwise, 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) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment;
  - (c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and
  - (d) the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the NSW Noise Policy for Industry (2017, or its latest version) Fact Sheet C) and before comparison with the specified noise levels in the consent.