

Development Consent

Section 80 of the *Environmental Planning & Assessment Act 1979*

ANNEXURE A

Figtree Hill Pty Limited v Cleary Bros (Bombo) Pty Limited & Minister for Planning

Land and Environment Court Proceedings No. 10639 of 2005

CONDITIONS OF CONSENT

Red type represents 2009 modification
Green type represents 2015 modification
Blue type represents 2017 modification

SCHEDULE 1

Development Application:	No. 10639 of 2005
Applicant:	Cleary Bros (Bombo) Pty Ltd.
Consent Authority:	Minister for Infrastructure and Planning
Land:	Lot 1 DP 858245 and Lot 23 DP 1039967, Dunsters Lane, Croom.
Proposed Development:	Extension of hard rock quarry
State Significant Development	The proposal is classified as State significant development under section 76A(7) of the <i>Environmental Planning and Assessment Act 1979</i> , as it meets the criteria specified in a declaration made by the Minister for Planning on 3 September 1999.
Integrated Development	The proposal is classified as integrated development under section 91 of the <i>Environmental Planning and Assessment Act 1979</i> , because it requires additional approvals under the: <ul style="list-style-type: none">▪ <i>Protection of the Environment Operations Act, 1997</i>; and▪ <i>Rivers and Foreshores Improvement Act, 1948</i>.
Designated Development	The proposal is classified as designated development under section 77A of the <i>Environmental Planning and Assessment Act 1979</i> because it meets the extractive industry criteria in schedule 3 of the <i>Environmental Planning and Assessment Regulation 2000</i> .
Commencement of Consent	Pursuant to section 83(2) of the <i>Environmental Planning and Assessment Act 1979</i> , this consent operates from the date of determination.
Lapse of Consent	Pursuant to section 95 of the <i>Environmental Planning and Assessment Act 1979</i> , this development consent is liable to lapse five years after the date from which it operates unless the use of any land, building or work the subject of the consent is actually commenced before the date on which the consent would otherwise lapse.

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	4
Obligation to Minimise Harm to the Environment	4
Terms of Approval	4
Staged Development	4
Period of Approval	4
Limits on Production	4
Protection of Public Infrastructure	5
Operation of Plant and Equipment	5
Demolition	5
Compliance	5
SPECIFIC ENVIRONMENTAL CONDITIONS	6
Identification of Boundaries	6
Buffer	6
Noise	6
Blasting and Vibration	7
Air Quality	8
Meteorological Monitoring	9
Surface and Ground Water	10
Flora and Fauna	11
Rehabilitation	12
Traffic and Transport	13
Heritage	14
Visual Impact	15
Waste Management	15
Emergency and Hazards Management	16
Bushfire Management	16
ADDITIONAL PROCEDURES	17
Notification of Landowners	17
Independent Review	17
ENVIRONMENTAL MANAGEMENT, AUDITING & REPORTING	18
Environmental Management Strategy	18
Annual Review	18
Revision of Strategies, Plans & Programs	18
Updating & Staging Strategies, Plans or Programs	19
Community Consultative Committee	19
Reporting	19
Independent Environmental Audit	19
Access to Information	20
APPENDIX 1: SITE LAYOUT PLAN	21
APPENDIX 2: REVEGETATION/REHABILITATION AREA	22
APPENDIX 3: LANDSCAPE BUND, HAUL ROAD AND BATTERS	23

SCHEDULE 2 DEFINITIONS

Annual review	Annual Review, as required under condition 5 of schedule 6
Applicant	Cleary Bros (Bombo) Pty Ltd
Aquifer	As defined in the <i>Water Management Act 2000</i>
BCA	Building Code of Australia
CCC	Community Consultative Committee
Council	Shellharbour City Council
DA	Development Application
Department	Department of Planning and Environment
Design event	90 percentile, 5 day rain event
DPI Water	Department of Primary Industries - Water
DRG	Division of Resources and Geoscience of the Department
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i>
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
Fig Tree Hill Land	Lots 4 and 5 in deposited plan 3709 in their present or succeeding titles
Heavy vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Incident	A set of circumstances that: <ul style="list-style-type: none"> 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	Land means the whole of a lot in a current plan registered at the Land Titles Office at the date of this development 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
Minister	Minister for Planning, or delegate
OEH	NSW Office of Environment and Heritage
Privately-owned land	Land not owned by the Applicant or its related companies or where a private agreement does not exist between the Applicant and the land owner
Quarry products	Extractive materials (hard rock products) which are produced at the site
Quarrying operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of extractive materials
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
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
SEE	<i>Statement of Environmental Effects</i>
Site	Land to which the DA applies
Stage	The quarry development stages as described in the EIS

SCHEDULE 3 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Applicant **must** implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

Scope of Development

2. The Applicant **must** carry out the development generally in accordance with:
 - (a) DA No. 466–11-2003;
 - (b) The EIS titled *Proposed Quarry Extension Albion Park*, dated October 2003, and prepared by Perram & Partners;
 - (c) Modification Application 10639 of 2005 MOD 1 and the accompanying SEE titled “*Albion Park Quarry: Application to Modify Development Consent Increase Production Limit*”, dated November 2008, as amended by the correspondence to the Department dated 24 June 2009;
 - (d) Modification Application 10639 of 2005 MOD 2 and the accompanying Environmental Assessment titled *Modification of Development Consent 10639 of 2005 (LEC) Albion Park Quarry – Increased Production Limit* prepared by Martin Morris & Jones Pty Ltd and dated November 2013;
 - (e) Modification Application 10639 of 2005 MOD 3 and the accompanying Environmental Assessment titled *Modification of Development Consent 10639 of 2005 (LEC) Activation of Approved Stages 5 & 6 – Albion Park Quarry* prepared by Martin Morris & Jones Pty Ltd and dated August 2016, including the associated Response To Submissions dated 23 December 2016 and supplementary letter titled *Further Response to Matters Raised in Updated Submissions* dated 28 February 2017, and the *Aboriginal Cultural Heritage Desktop Assessment: Albion Park Quarry* prepared by Biosis Pty Ltd dated 21 February 2017; and
 - (f) The Site Layout Plan.

Note: The Site Layout Plan is reproduced in Appendix 1.

- 2A. The Applicant **must** carry out the development in accordance with the conditions of this consent.
3. If there is any inconsistency between the documents listed in condition 2 of Schedule 3, the conditions of this consent shall prevail to the extent of the inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising from:
 - (a) any reports, plans, strategies, programs, reviews, audits 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; and
 - (c) the implementation of any actions or measures contained in these documents.
5. Deleted.
6. Deleted.

Period of Approval

7. The Applicant may carry out quarrying operations on the site until 21 February 2036.

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 quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Limits on Production

8. The production of quarry products from the quarry **must** not exceed 900,000 tonnes in any financial year.
9. The Applicant **must**:
 - (a) provide annual production data to the DRG using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review.

Protection of Public Infrastructure

10. 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.

Operation of Plant and Equipment

- 11. The Applicant **must** ensure that all plant and equipment at the site, or used in connection with the development, are:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Demolition

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

Compliance

- 13. Prior to commencement of operations, the Applicant **must** commission an independent person(s) or organisation(s), approved by the **Secretary**, to certify in writing to the satisfaction of the **Secretary**, that the Applicant has complied with all conditions of this consent applicable prior to that event.
- 14. At least two weeks prior to the commencement of **works in each Stage of the Quarry**, the Applicant **must** notify the owners of the Fig Tree Hill Land, in writing, of the date of commencement of **the works**.

SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS

IDENTIFICATION OF BOUNDARIES

1. Prior to the commencement of works, and prior to the commencement of works in each of Stages 5 and 6 of the Quarry, the Applicant **must**:
 - (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction;
 - (b) submit a survey plan of these boundaries to the **Secretary**; and
 - (c) ensure that these boundaries 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 EIS, as amended by the 'Quarry Area' shown on the plan in Appendix 2 (southern boundary), and as amended by the conditions below.

BUFFER

2. A minimum buffer of 10 metres must be maintained between the common northern boundary of Lot 1, DP 858245 and the southern boundary of Lot 4, DP 3709. No extraction is permitted within this 10 metre buffer area. The buffer may be used for landscaping, minor drainage works, noise/visual bunds, alignment of the haul road (including batters), as depicted on the plan in Appendix 3.

NOISE

Construction of Noise/Visual Bunds

3. The Applicant **must** complete construction of the noise/visual bunds prior to commencing extraction of production material, and **must** make all reasonable efforts to complete construction of the bunds within 26 weeks of commencement.

Noise Limits

4. The Applicant **must** ensure that noise generated by the development does not exceed the criteria specified in Table 1.

Receiver Locations	Noise Limits dB(A) L_{Aeq} (15minute)		
	Stages 1-2	Stages 3-4	Stages 5-6
'The Hill' residence (Dunster premises)	35	38	35
'The Cottage' residence (Dunster premises)	35	38	35
Approved rural workers dwelling (Dunster premises)	35	38	35
Greenmeadows Residential Estate	41	41	41

Table 1: Noise Criteria for the Development

Notes:

1. Staging as depicted in Figure 3.5 of the EIS prepared by Perram and Partners, dated October 2003.
2. Receiver locations nominated in Table 5.12 of the report prepared by Richard Heggie and Associates Report No. 30-1079R1 titled 'Noise and Blasting Impact Assessment – Cleary Bros Albion Park Quarry' (13 December 2002). At the time of the DA the above were the nearest affected residences.
3. The receiver locations and noise limits in the above table may be varied in the instance that negotiated agreements are entered into by the licensee and affected residents/occupiers or if existing agreements become void, or the nearest receiver location changes due to urban encroachment. These limits may be subject to change with an EPL variation.
4. Noise from the premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Table 1. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy **must** also be applied to the measured noise level where applicable.
5. The noise emission limits in Table 1 apply under meteorological conditions of:
 - Wind speed up to 0.5m/s in any direction at 10 metres above ground level; or
 - Temperature gradient (environmental lapse rate) conditions of less than or equal to 0°C/100m (lapse).

Operating Hours

5. The Applicant **must** comply with the operating hours in Table 2.

Activity	Days of the Week	Time
Drilling, rock breaking, loading and haulage of material from quarry to processing plant, processing and stockpiling, overburden stripping and other stage preparatory works, all site construction activities, rehabilitation works, general plant and maintenance. Processing, crushing and screening and product transfer to stockpiles	Monday – Friday Saturday	7.00 am – 5.30 pm 7.00 am – 1.00 pm

Table 2: Operating Hours for the Development

6. The following activities may be carried out at the premises outside the hours specified in Table 2:
- (a) the delivery of materials as requested by Police or other authorities for safety reasons;
 - (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm;
 - (c) workshop activities and other maintenance work inaudible at the nearest affected receiver.

Operating Conditions

7. The Applicant **must**:
- (a) implement all reasonable and feasible mitigation measures to minimise the operational and road noise of the development;
 - (b) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply; and
 - (c) 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

8. The Applicant **must** prepare 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 submitted to the Secretary for approval by 30 September 2015;
 - (b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions in this consent;
 - (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.

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

9. Deleted

BLASTING AND VIBRATION

Airblast Overpressure Criteria

10. The Applicant **must** ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 3 at any point that is located at least 3.5m from any residence or other sensitive receiver on privately-owned land.

Airblast overpressure level [dB(Lin Peak)]	Allowable exceedance
115	5% of the total number of blasts over any 12 month reporting period
120	0%

Table 3: Airblast Overpressure Limits

Ground Vibration Criteria

11. The Applicant **must** ensure that the peak particle velocity from blasting at the development does not exceed the criteria in Table 4 at any residence or sensitive receiver on privately-owned land.

Peak particle velocity (mm/s)	Allowable exceedance
5	5% of the total number of blasts over any 12 month reporting period
10	0%

Table 4: Ground Vibration Limits

Blasting Restrictions

12. Blasting operations on the premises may only take place:
- (a) between 9am and 5pm Monday to Friday inclusive;
 - (b) are limited to 1 blast each day; and
 - (c) at such other times as may be approved by the EPA.

Operating Conditions

13. During quarrying operations on site, the Applicant shall:
- (a) implement best management practice to:
 - protect the safety of people and livestock in the surrounding area;
 - protect public or private infrastructure/property in the surrounding area from any damage; and
 - minimise the dust and fume emissions of any blasting;
 - (b) avoid any flyrock impacts on The Fig Tree Hill Land, or the continued rural use of that land; and
 - (c) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary

Blast Management Plan

14. Prior to the commencement of operations in each stage of the development after Stage 1, the Applicant shall prepare, and subsequently implement, a Blast Management Plan for the development in consultation with the landowner(s) of The Fig Tree Hill Land, the EPA and to the satisfaction of the Secretary. This plan must:
- (a) include a summary of monitoring results for the previous quarry stage;
 - (b) describe the objectives for noise and blasting at that stage;
 - (c) describe the proposed blasting design for that stage, and demonstrate that the design will meet the blast criteria listed in Tables 3 and 4;
 - (d) include a monitoring program for evaluating and reporting on the performance of the development, including:
 - compliance with the blasting criteria in this consent; and
 - minimising the fume emissions from the site;
 - (e) describe the measures that would be implemented to:
 - ensure compliance with the blasting criteria and operating conditions of this consent;
 - avoid any flyrock impacts on The Fig Tree Hill Land;
 - minimise dust and fume emissions; and
 - minimise, mitigate, remediate or compensate for any other blasting impacts of the development, including any such impacts on people, livestock and property, to the satisfaction of the Secretary.

AIR QUALITY

Impact Assessment Criteria

15. The Applicant **must** ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the criteria in Table 5 at any sensitive receiver or residence on privately-owned land.

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM ₁₀)	Annual	^{a,c} 30 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³
Total suspended particulates (TSP)	Annual	^{a,c} 90 µg/m ³

Table 5: Air quality criteria

Notes to Table 5:

- a* Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);
- b* Incremental impact (i.e. incremental increase in concentrations due to the development on its own);
- c* Deleted
- 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.
- e* "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 16 and 17 to develop and implement air quality management system that ensures operational responses to the risks of exceedance of the criteria.

Operating Conditions

16. The Applicant **must**:
- (a) implement best management practice to minimise the dust emissions of the development;
 - (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 d to Table 5 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

17. The Applicant **must** prepare 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 submitted to the Secretary for approval by 30 September 2015;
 - (aa) be revised in consultation with the EPA and submitted to the Secretary for approval prior to the commencement of quarrying activities in either Stages 5 or 6;
 - (b) describe the measures that would be implemented to **demonstrate** compliance with the relevant air quality impact assessment criteria and conditions of this consent;
 - (c) include a site-specific best management practice determination;
 - (d) describe the proposed air quality management system; and
 - (e) include an air quality monitoring program that:
 - is capable of evaluating the performance of the development;
 - includes risk-based monitoring to demonstrate compliance with the criteria in Table 5;
 - includes ongoing real-time particulate monitoring;
 - includes a Trigger Action Response Plan (TARP) which describes the actions to be taken when specific trigger levels are exceeded;
 - adequately supports the air quality management system; and
 - evaluates and reports on the adequacy of the air quality management system.

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

METEOROLOGICAL MONITORING

18. 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 of Air Pollutants in New South Wales* guideline.

SURFACE & GROUNDWATER

Water Supply

19. The Applicant **must** ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations on site to match its available supply, to the satisfaction of the Secretary.

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 Pollution

20. Unless an EPL or the EPA authorises otherwise, the Applicant **must** comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.
21. The Applicant **must** ensure that the discharges from any licensed discharge point/s comply with the limits in Table 6, unless otherwise agreed by the EPA.

Pollutant	Units of Measure	Maximum Limit
TSS	mg/L	50
pH	pH	6.5 – 8.5

Table 6: Water Discharge Pollution Limits

Groundwater

22. In the event that groundwater in any aquifer is intersected during extraction activities, the Applicant **must** undertake a hydrogeological investigation in consultation with DPI Water and to the satisfaction of the Secretary. The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures.

The Applicant **must** implement reasonable and feasible groundwater impact management measures to the satisfaction of the Secretary.

23. Deleted

Storm Water Management System

24. The Applicant **must** ensure that the stormwater management system for the development is designed, constructed and operated to capture and treat polluted waters from storm event(s) of less than, and including a 1:10 year, 24 hour duration, average recurrence interval (that is 225 mm of total rainfall within the 24 hour period).
25. Within 5 days of a rainfall event, the Applicant **must** ensure that the basins in the stormwater management system are treated and emptied to maintain the required storage volume.

Flocculant Management

26. The Applicant **must** not use a flocculant, other than gypsum, without the written approval of the EPA.

Monitoring and Management

27. Within 12 months of the date of this consent, the Applicant **must** prepare a Water Management Plan for the development, in consultation with DPI Water and to the satisfaction of the Secretary. This plan must be prepared by a qualified hydrogeologist and include:
- a Water Balance;
 - an Erosion and Sediment Control Plan;
 - a Surface Water Monitoring Program;
 - a Ground Water Monitoring Program; and
 - an Integrated Water Management Strategy, if the water balance shows a potential demand for water above that which can be collected from rainfall.

Prior to the commencement of quarrying activities in Stages 5 and 6, the Water Management Plan must be revised, in consultation with DPI Water and to the satisfaction of the Secretary. The revised Water Management Plan must include a detailed description of the surface water management system on site, including the area, depth and capacity of any in-pit sumps.

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

28. The Water Balance **must** include:
- (a) consideration of the existing quarry and processing site, existing water storage dam and the proposed quarry and haul road;
 - (b) the source of all water collected or stored on the site, including rainfall, stormwater and groundwater;
 - (c) the estimated water use demand in wet, average and drought years.
29. The Erosion and Sediment Control Plan **must**:
- (a) be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
 - (b) identify activities that could cause soil erosion and generate sediment;
 - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters
 - (d) describe the location, function, and capacity of erosion and sediment control structures; and
 - (e) describe what measures would be implemented to maintain the structures over time.
30. The Surface Water Monitoring Program **must** include:
- (a) detailed baseline data on surface water flows and quality;
 - (b) surface water impact assessment criteria;
 - (c) a program to monitor surface water flows and quality;
 - (d) a program to manage water releases from the site, including consideration of water treatment measures, such as vegetated swales;
 - (e) a program to monitor bank and bed stability;
 - (f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria; and
 - (g) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.
31. The Ground Water 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 regional groundwater levels and quality;
 - (d) a program to monitor groundwater level effects on vegetation, and on groundwater supply to adjoining properties;
 - (dd) a program for monitoring groundwater inflows into the quarry from the quarry face or floor, or into any in-pit sumps;
 - (e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria; and
 - (f) a protocol to consult with DPI Water prior to any re-injection of groundwater.
32. The Integrated Water Management Strategy **must** include:
- (a) exploration of a range of options for a sustainable resource alternative for water supply to the site;
 - (b) identification of all possible and available sources of water;
 - (c) consistency with Government Water Reform initiatives and policies;
 - (d) quality of water to meet usage requirements including any possible effects on product;
 - (e) costs of supply;
 - (f) health and environmental impacts;
 - (g) legislative requirements;
 - (h) assessment of the feasibility, benefits and costs of options;
 - (i) a process to identify and evaluate preferred options for implementation; and
 - (j) the identification of a timetable for implementation of the selected options.

Reporting

33. Each year, the Applicant **must**:
- (a) review the Water Management Plan;
 - (b) update each sub-plan; and
 - (c) report the results of this review in the **Annual Review**, including:
 - the results of monitoring;
 - details of the review for each sub-plan;
 - amendments to the sub-plans; and
 - details of the measures undertaken/proposed to address any identified issues.

FLORA & FAUNA

Vegetation Clearing Protocol

34. Prior to the commencement of works, the Applicant **must** prepare a Vegetation Clearing Protocol for the development in consultation with Council and the OEH, and to the satisfaction of the **Secretary**. This plan **must**:
- (a) delineate the areas of remnant vegetation to be cleared; and

- (b) describe the procedures that would be implemented for:
- pre-clearance surveys;
 - progressive clearing;
 - fauna management;
 - conserving and reusing topsoil;
 - collecting seed from the site;
 - salvaging and reusing material from the site; and
 - controlling weeds.

Southern Remnant Vegetation and Revegetation Area

35. The Applicant **must** conserve and maintain the southern areas of remnant vegetation marked on the map in Appendix 2.
36. The Applicant **must** revegetate/rehabilitate and maintain the areas marked 'Area to be Planted' and 'Weed Control to Promote Natural Vegetation' on the map in Appendix 2. Revegetation **must** be in accordance with the Vegetation Management Plan described in Condition 37.

*Note: Other revegetation areas **must** be covered in the Vegetation Management Plan referred to in Condition 37 below.*

Vegetation Management Plan

37. Within 6 months of this consent, the Applicant **must** prepare a Vegetation Management Plan for the development in consultation with Council and the OEH, and to the satisfaction of the Secretary. The plan **must** be prepared by a suitably qualified ecologist / bush regenerator, and **must** address:
- establishment of baseline data for existing vegetation and habitat in the area;
 - vegetation management on all areas of the site outside the working area of the quarry;
 - conservation, maintenance and enhancement of threatened communities, including 'Illawarra Subtropical Rainforest' and 'Illawarra Lowlands Grassy Woodlands';
 - conservation, maintenance and enhancement of threatened plant species, including *Cynanchum elegans* (White Cynachum), *Daphnandra sp.aff micrantha* (Illawarra Socketwood), and *Zieria granulata* (Illawarra Zieria);
 - establishment and maintenance of vegetation/habitat for threatened fauna species, including the Grey-headed flying fox;
 - ongoing management of weeds and pests, including the provision of stock-proof fencing and replacement of damaged plantings;
 - a program for how the performance of the measures described in (b) to (f) above would be monitored over time;
 - a program for monitoring the effect of quarrying, including water management, on vegetation communities.

Prior to the commencement of quarrying activities in Stages 5 and 6, the Vegetation Management Plan must be revised, in consultation with OEH and to the satisfaction of the Secretary.

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

Reporting

38. The Applicant **must** include a progress report on the implementation of the Vegetation Management Plan in the Annual Review.

REHABILITATION

Rehabilitation Objectives

- 38A. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual rehabilitation plan in Appendix 2 and must comply with the objectives in Table 7.

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> • Safe • Hydraulically and geotechnically stable • Non-polluting • Fit for the intended post-mining land use(s) • Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land
Surface Infrastructure	<ul style="list-style-type: none"> • Decommissioned and removed, unless otherwise agreed by the Secretary

Quarry benches and pit floor	<ul style="list-style-type: none"> Landscaped and vegetated using native tree and understorey species
Final Void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void

Table 7: Rehabilitation Objectives

Progressive Rehabilitation

39. 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.

Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance.

Rehabilitation Management Plan

40. Within 6 months of the date of this consent, the Applicant must prepare a Rehabilitation Management Plan to the satisfaction of the Secretary. This plan must:
- identify the disturbed area at the site;
 - provide details of the conceptual final landform and associated land uses for the site;
 - describe in general the short, medium, and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - describe in detail the measures that would be implemented over the next 5 years to rehabilitate the site;
 - include detailed performance and completion criteria for evaluating the rehabilitation of the site (including progressive rehabilitation) including triggers for any necessary remedial action;
 - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and
 - include details of who is responsible for monitoring, reviewing, and implementing this plan.

Prior to the commencement of quarrying activities in Stages 5 and 6, the Rehabilitation Management Plan must be revised to the satisfaction of the Secretary.

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

41. Within 5 years of providing the Rehabilitation Management Plan to the Secretary, and every 5 years thereafter, the Applicant must review and update the plan to the satisfaction of the Secretary.

Rehabilitation Bond

42. Within 6 months of the date of this consent, the Applicant must lodge a suitable rehabilitation and conservation bond for the development with the Secretary. The sum of the bond must be calculated at:
- \$2.50/m² for the total area of disturbance at the development; and
 - \$3.00/m² for the total area of the revegetation area,
- to the satisfaction of the Secretary.

Notes:

- If the rehabilitation and revegetation area is completed to the satisfaction of the Secretary, the Secretary will release the rehabilitation and conservation bond.
- If the rehabilitation and revegetation area is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the rehabilitation and conservation bond, and arrange for the satisfactory completion of these works.

43. Within 3 years of lodging the rehabilitation and conservation bond with the Secretary, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must review, and if necessary revise, the sum of the rehabilitation bond to the satisfaction of the Secretary. This review must consider:
- the effects of inflation;
 - any changes to the total area of disturbance; and
 - the performance of the revegetation area.

Reporting

44. The Applicant must include a progress report on the Rehabilitation Management Plan in the Annual Review.

TRAFFIC AND TRANSPORT

Right of Way

45. Prior to the commencement of works, the Applicant **must** formalise the Right of Way for the haulage road, to the satisfaction of the **Secretary**.

Site Access

46. All access to the site is to be via the roundabout at East-West Link Road, except in an emergency, as agreed by the **Secretary** in consultation with Council.

Transport Management Plan

47. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the **Secretary**. This plan must:
- (a) be prepared by a suitably qualified traffic consultant, in consultation with RMS and Council and submitted to the Secretary for approval by 31 August 2015;
 - (b) include a drivers' code of conduct for the development;
 - (c) describe the measures that would be implemented to ensure:
 - noise generated by heavy vehicles entering and leaving the site is minimised between 10 pm and 6 am;
 - all drivers of vehicles related to the development comply with the drivers' code of conduct; and
 - compliance with the relevant conditions of this consent; and
 - (d) include a program to monitor the effectiveness of the implementation of these measures.

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

Cumulative Traffic Impact Study

- 47A. The Applicant **must**, in conjunction with the operators of the Bass Point Quarry and the Dunmore Quarry, cause to be prepared an independent Cumulative Traffic Impact Study. The study must:
- (a) be undertaken by a suitably qualified traffic consultant, whose appointment has been approved by the Secretary;
 - (b) be commissioned by 31 August 2015, and completed by 30 November 2015, or as otherwise agreed in writing by the Secretary;
 - (c) be co-funded by the operators of the Albion Park, Dunmore and Bass Point quarries, proportionate to the quarries' respective quarry product road transport limits, as approved at 31 August 2015;
 - (d) include a comprehensive assessment of current and future projected cumulative traffic impacts of the three quarries on the classified road network, undertaken in consultation with the RMS; and
 - (e) identify any reasonable and feasible measures that can be implemented to minimise the traffic and road safety impacts of quarry trucks on Mount Ousley Road, and the likely cost of implementing these measures.
- 47B. The Applicant **must**, in conjunction with the operators of the Bass Point Quarry and the Dunmore Quarry, prepare a program to implement any reasonable and feasible measures identified in the Cumulative Traffic Impact Study not already undertaken by the Applicant, in an equitable manner with the two other quarry operators, to the satisfaction of the Secretary. The program must be submitted to the Secretary for approval by 31 December 2015, or as otherwise agreed in writing by the Secretary.

Parking

48. The Applicant **must** provide sufficient parking on-site for all quarry-related traffic to the satisfaction of the **Secretary**.

Road Haulage

49. The Applicant **must** ensure that all loaded vehicles entering or leaving the site are covered.
50. The Applicant **must** ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.

HERITAGE

51. Within 3 months of the date of this consent, and prior to the disturbance of any relic, the Applicant **must** prepare a Heritage Management Plan for the development, in consultation with the OEH and Council, and to the satisfaction of the **Secretary**. The plan **must** be prepared by a suitably qualified heritage consultant and must include:
- (a) a program for baseline dilapidation surveys of residences and other existing buildings on The Fig Tree Hill Land and the 'Belmont' property (subject to reasonable access being granted by the respective landowners). Surveys **must** be undertaken at least prior to the commencement of each quarrying stage;

- (b) archival recording of 'Kyawana' and 'Belmont' properties, the dry stone walls and other heritage elements affected by the development;
- (c) a plan for the salvage and on-site reconstruction of the dry stone walls affected by the proposal, in accordance with a conservation and interpretation strategy;
- (d) a plan for the conservation and maintenance of the dry stone wall on the eastern boundary of the allotment;
- (e) a plan for providing Council the opportunity to salvage any relic proposed to be destroyed by the development, including 'Kyawana';
- (f) measures to manage previously unidentified heritage objects or the discovery of any human remains on site;
- (g) a procedure for obtaining permits under the *Heritage Act 1977* prior to disturbance of any relic, and permits under the *National Parks and Wildlife Act 1974* prior to disturbance of any Aboriginal objects or archaeological remains; and
- (h) procedures to ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values identified on site.

Prior to the commencement of quarrying activities in either Stages 5 or 6, the Heritage Management Plan must be revised, in consultation with OEH and to the satisfaction of the Secretary.

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

- 52. The dilapidation surveys required under Condition 51 must be conducted by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary. The owners of the Fig Tree Hill Land are to supply the applicant with three suggested nominees within 3 months from the grant of this consent. The applicant will submit one engineer from the list to be put forward by the applicant for approval by the Secretary.

Reporting

- 53. The Applicant must include a progress report on the Heritage Management Plan in the Annual Review.

VISUAL IMPACT

Visual Amenity

- 54. The Applicant must minimise the visual impacts of the development to the satisfaction of the Secretary.
- 55. The visual/noise bunds and screen plantings must be designed and established in accordance with a Landscape Plan prepared in consultation with Council, and to the satisfaction of the Secretary. The Landscape Plan must be prepared by a suitably qualified landscape architect with heritage experience, and must have regard to the cultural landscape of Wentworth Hills. The plantings must be commenced prior to the commencement of extraction and completed within six months of this consent.
- 56. The Applicant must ensure that the trees in the bund are maintained, and that in the event that trees die that they are replaced within 28 days to the satisfaction of the Secretary.
- 57. Following construction of the visual/noise bunds, the Applicant must undertake an independent review of their effectiveness, and undertake any improvements to the satisfaction of the Secretary.

WASTE MANGEMENT

Waste Minimisation

- 58. The Applicant must minimise the amount of waste generated by the development to the satisfaction of the Secretary.

Waste Classification

- 59. All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999)*, or any other EPA document superseding this guideline.

Reporting

- 60. The Applicant must describe what measures have been implemented to minimise the amount of waste generated by the development in the Annual Review.

EMERGENCY AND HAZARDS MANAGEMENT

Dangerous Goods

61. 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.

Safety

62. The Applicant **must** secure the development to ensure public safety to the satisfaction of the **Secretary**.

Emergency Management

63. Within 6 months of the date of this consent, the Applicant **must** document, and subsequently implement, measures to minimise the environmental impacts of any emergency situations that could arise as a result of the operation of the quarry to the satisfaction of the **EPA** and the **Secretary**. This documentation must:
- (a) identify any significant threats to the environment and/or public health that could arise from activities associated with the operation of the quarry or construction works associated with the production increase. These threats may include excessive rainfall, pump failures, excess flocculation, power or other utility failure, natural disaster, landslip, accidental spills and discharges, spillage from trucks, fire etc;
 - (b) identify any subsequent direct or indirect environmental effects as a result of the threats;
 - (c) identify the pollution that would result due to these threats and impacts on operations and what impact the pollution would have on the health of the community and the environment;
 - (d) develop actions to effectively respond to the disruption of operations so the risk of pollution is minimised;
 - (e) develop a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution;
 - (f) ensure that all relevant employees are familiar with the documentation; and
 - (g) when developing this documentation, identify any opportunities to integrate with Cleary Bros Emergency plans.

BUSHFIRE MANAGEMENT

64. The Applicant **must**:
- (a) ensure that the development is suitably equipped to respond to any fires on-site;
 - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site.
65. Within 6 months of the date of this consent, the Applicant **must** prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire Service. The plan must have regard to the management of fire regimes and hazard reduction activities so as to avoid negative impacts to threatened species and habitat, endangered communities and populations as well as any cultural assets that may be present.

SCHEDULE 5 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in schedule 4 identify that emissions generated by the development are greater than the criteria in schedule 4, then the Applicant **must** notify the **Secretary** and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in schedule 4.

INDEPENDENT REVIEW

2. If a landowner (excluding quarry owned properties) considers that the operations of the quarry are exceeding the criteria in schedule 4, 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, the Applicant **must** within 3 months of the **Secretary** advising that an independent review is warranted:

- (a) consult with the landowner to determine his/her concerns;
- (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the **Secretary**, to conduct monitoring on the land, to determine whether the development is complying with the relevant criteria in schedule 4, and identify the source(s) and scale of any impact on the land, and the development's contribution to this impact: and
- (c) give the **Secretary** and landowner a copy of the independent review.

SCHEDULE 6 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Within 6 months of the date of this consent, the Applicant **must** prepare an Environmental Management Strategy for the development to the satisfaction of the **Secretary**. This strategy must:
 - (a) provide the strategic context for environmental management of the development;
 - (b) identify the statutory requirements that apply to the development;
 - (c) describe in general how the environmental performance of the development would be monitored and managed during the development;
 - (d) 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;
 - manage cumulative impacts; and
 - respond to emergencies;
 - (e) describe the role, responsibility, authority, and accountability of all key personnel involved in environmental management of the development; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all monitoring required to be carried out under the conditions of this consent.

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

ANNUAL REVIEW

2. 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 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;
 - the monitoring results of previous years; and
 - the relevant predictions in the **documents referred to in condition 2 of Schedule 3**;
 - (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

3. Within 3 months of a modification to this consent or following the submission of an:
 - (a) annual review under condition 2 above;
 - (b) incident report under condition 5 below; or
 - (c) audit report under condition 8 below,the Applicant **must review and if necessary revise, the strategies, plans and programs required under this consent, to the satisfaction of the Secretary.**

Within 4 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and provide any documents that have been revised to the Secretary for review and approval.

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

UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS

- 3A. The Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.

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 under this consent.

Notes:

- While any strategy, plan or program may be submitted on a staged 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.

COMMUNITY CONSULTATIVE COMMITTEE

4. The Applicant must 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 *Community Consultative Committee (CCC) Guidelines for State Significant Projects* (Department of Planning, 2016, or its latest version).

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 of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.
- The Applicant may, with the approval of the Secretary, combine the function of this CCC with the function of other CCCs in the area.

REPORTING

Incident Reporting

5. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. 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.

Regular Reporting

6. The Applicant **must** 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, and to the satisfaction of the Secretary.

INDEPENDENT ENVIRONMENTAL AUDIT

7. Within 2 years of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission, **commence** and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- (a) be 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;
 - (c) assess the environmental performance of the development, and whether it is complying with the relevant requirements in this consent and any relevant EPL (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;
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.
 - (f) **be conducted and reported to the satisfaction of the Secretary.**

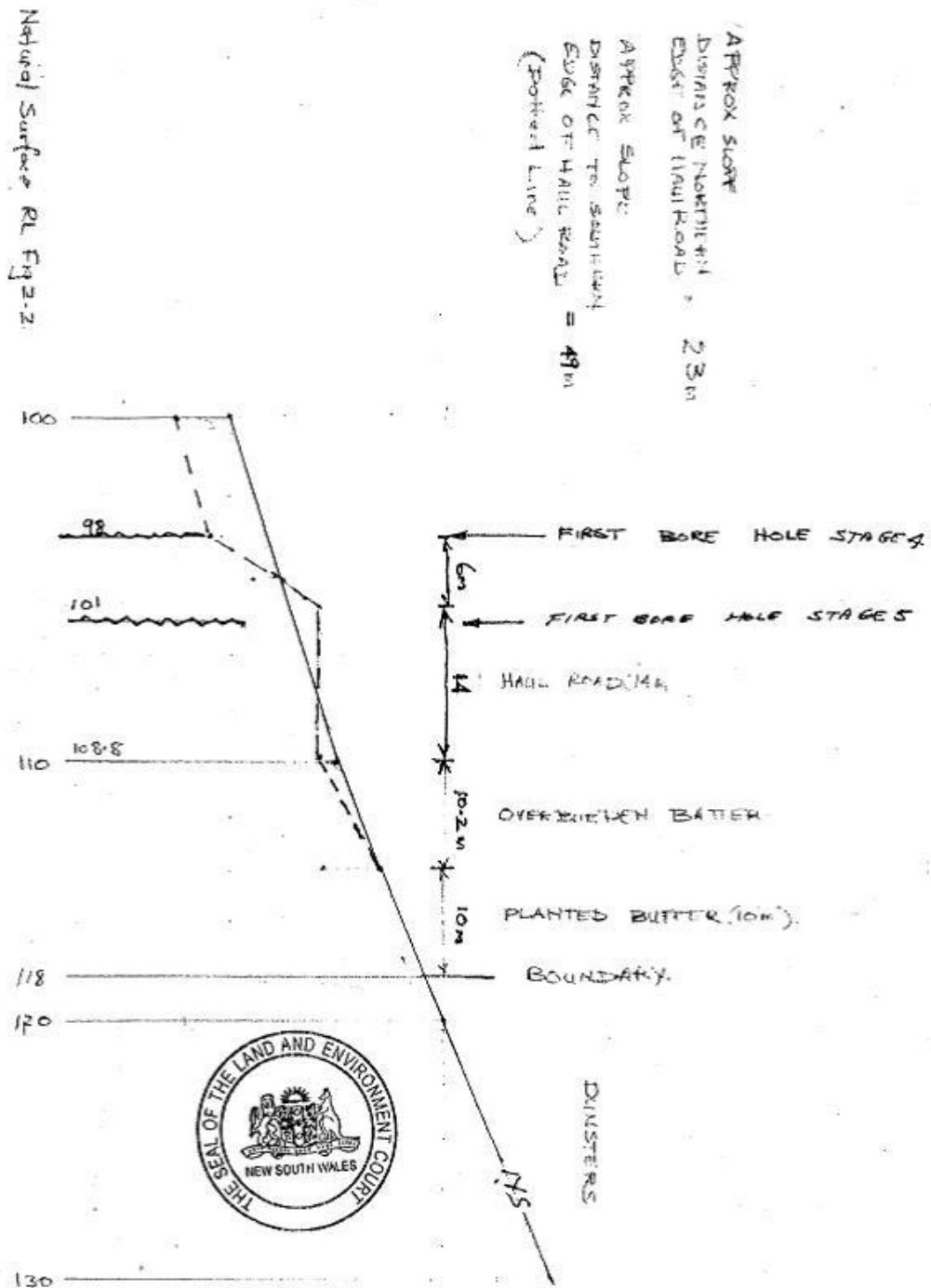
Note: This audit team must be led by a suitably qualified auditor and may include additional experts in any field specified by the Secretary.

8. Within **12 weeks of commencing each** audit, unless the Secretary agrees otherwise, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures to address the recommendations.

ACCESS TO INFORMATION

9. For the duration of the development, the Applicant **must**:
- (a) make copies of the following publicly available on its website:
- the documents referred to in condition 2 of Schedule 3;
 - 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 3
LANDSCAPE BUND, HAUL ROAD AND BATTERS



CS1