# **Project Approval**

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

As delegate for the Minister for Planning and Infrastructure, I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

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

Richard Pearson

**Deputy Director-General** 

**Development Assessment and Systems Performance** 

Sydney

#### **SCHEDULE 1**

**Application Number:** 07\_0069

Proponent: Hanson Construction Materials Pty Limited

Approval Authority: Minister for Planning and Infrastructure

Land: Lot 2 DP 610795 and part Lot B DP 381991 (north of Roach

Road), City of Wagga Wagga, Parish of South Wagga

Wagga, County of Wynyard

Project: Wagga Wagga Quarry Extension Project

October 2018 modification in red type (MOD 1)

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#### **DEFINITIONS**

AEP **Annual Exceedance Probability AHD** Australian Height Datum

The review required by condition 3 of Schedule 5 **Annual Review** 

Building Code of Australia BCA

Community Consultative Committee CCC

Conditions contained in Schedules 2 to 5 inclusive Conditions of this approval

Wagga Wagga City Council Council

NSW Department of Planning and Environment Department

NSW Department of Industry - Crown Lands and Water Dol Division of Resources and Geoscience within the Department **DRG** 

EΑ Wagga Wagga Quarry Extension: Environmental Assessment Report, prepared by

Hanson Construction Materials Pty Ltd and dated April 2010, including the EA Addendum Wagga Wagga Quarry Extension: Environment Assessment Report on Potential Impacts on Riverview Estate Subdivision, prepared by Hanson Construction Materials Pty Ltd and dated July 2010, and Wagga Wagga Quarry Extension: Response to Public Exhibition Submissions, prepared by Hanson

Construction Materials Pty Ltd and dated August 2010

EA (MOD 1) Environmental Assessment titled Environmental Assessment for Wagga Wagga

Quarry Extension Project Modification PA 07\_0069, dated June 2018

NSW Environmental Protection Authority **EPA** 

EP&A Act Environmental Planning and Assessment Act 1979 **EP&A Regulation** Environmental Planning and Assessment Regulation 2000 Environment Protection Licence issued under the POEO Act **EPL Feasible** Means what is possible and practical in the circumstances

An occurrence or set of circumstances that causes or threatens to cause material Incident

harm and which may or may not be or cause a non-compliance

Material harm

involves actual or potential harm to the health or safety of human beings or to

the environment that is not trivial; or

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)

This definition excludes "harm" that is authorised under either this approval or any

other statutory approval

Minister NSW Minister for Planning, or delegate

Mitigation Activities associated with reducing the impacts of the project Modification 1 The modification to the project, as described in EA (MOD 1)

Office of Environment and Heritage **OEH** 

POEO Act Protection of the Environment Operations Act 1997

Land that is not owned by a public agency or a quarry company (or its subsidiary) Privately-owned land **Project** The project as described in the documents listed in condition 2 of Schedule 2

Proponent Hanson Construction Materials Pty Ltd, or its successors in title

Public Infrastructure Linear and related infrastructure that provides services to the general public, such

as roads, railways, water supply, gas supply, drainage, sewerage, telephony,

telecommunications etc

Includes all saleable quarry products, but excludes tailings and other wastes and Quarry product

rehabilitation material

**Quarrying Operations** The extraction, processing, stockpiling and transportation of extractive materials

carried out on the site and the associated removal, storage and/or emplacement of

vegetation, topsoil and overburden

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

Rehabilitation The treatment or management of land disturbed by the project for the purpose of

establishing a safe, stable and non-polluting environment, and includes remediation

**RMS NSW Roads and Maritime Services** 

Secretary Planning Secretary under the EP&A Act, or nominee

The land listed in Schedule 1 Site

The Statement of Commitments reproduced in Appendix 3 Statement

Commitments

# SCHEDULE 2 ADMINISTRATIVE CONDITIONS

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

 The Proponent must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.

#### **TERMS OF APPROVAL**

- 2. The Proponent must carry out the project generally in accordance with the:
  - (a) EA:
  - (b) EA (MOD 1)
  - (c) Statement of Commitments; and

Note: The general layout of the project is shown in Appendix 1 and intended project staging as shown in Appendix 2.

- 2A. The Proponent must carry out the project in accordance with the conditions of this approval.
- 3. Consistent with the requirements in this approval, the Secretary may make written directions to the Proponent 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 approval, 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 condition 3(a).
- 4. The conditions of this approval and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document/s listed in condition 2. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2, the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

#### **LIMITS ON APPROVAL**

5. Quarrying operations may take place at the site until 31 December 2036.

Note: Under this approval, the Proponent is required to rehabilitate the site to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all respects - other than the right to conduct quarrying operations - until the site has been rehabilitated to a satisfactory standard.

- 6. The Proponent must not:
  - (a) transport more than 150,000 tonnes of product from the site per calendar year;
  - (b) permit more than 12 heavy vehicle movements per hour (total of all quarry haulage truck movements into and out of the site) between 3:00 pm and 5:00 pm on any weekday; and
  - (c) permit more than six heavy vehicle movements per hour (total of all quarry haulage truck movements into and out of the site) between 5:00pm and 6:00pm on any weekday,

unless in the case of emergency or under the direction of police or other relevant authority.

- 7. The Proponent must not excavate or extract any materials below a depth of 158 metres AHD without the prior written approval of the Secretary. Approval will be subject to the Secretary's satisfaction concerning the:
  - (a) progress made against the goals and targets presented in the Water Management Improvement Program required under condition 9 of Schedule 3;
  - (b) implementation of the Water Management Plan required under condition 14 of Schedule 3:
  - (c) results of the Water Monitoring Program required under condition 15 of Schedule 3;
  - (d) results shown and predictions made in the Water Management Verification Report required under condition 16 of Schedule 3: and
  - (e) progress under the Rehabilitation Management Plan required under condition 25 of Schedule 3.

#### INFRASTRUCTURE CONTRIBUTIONS

8. The Proponent must make annual contributions to Council for the maintenance of local roads impacted by the quarry's operations (ie Roach Road and McNickle Road), payable by 31 January each year, in respect of the preceding calendar year. The contributions must be at a rate of three cents (2011 dollars, indexed annually to CPI) per tonne of product material hauled per kilometre of Roach Road and McNickle Road travelled by haulage vehicles associated with the project, unless an alternative contribution, works-in-kind or reimbursement arrangement is negotiated between the Proponent and Council, and agreed by the Secretary.

9. Prior to the commencement of works under this approval, the Proponent must contribute 1.0% of the capital investment value of the project (as at the time of proposed commencement of the project) to Council for the purpose of delivering the community infrastructure and services outlined in the City of Wagga Wagga: S94A Development Contributions Plan 2006.

#### STRUCTURAL ADEQUACY

 The Proponent 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 Proponent 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 project.

#### PROTECTION OF PUBLIC INFRASTRUCTURE

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

#### **DEMOLITION**

12. The Proponent 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.

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

- 13. The Proponent must ensure that all the plant and equipment used on site, or to transport materials to and from the site, is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

#### STAGED SUBMISSION OF ANY STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

Note: The conditions of this approval require certain strategies, plans, and programs to be prepared for the project. They also require these documents to be reviewed and audited on a regular basis to ensure they remain effective. However, in some instances, it will not be necessary or practicable to prepare these documents for the whole project at any one time (eg all proposed extraction stages), particularly as these documents are intended to be dynamic and improved over time. Consequently, the documents may be prepared and implemented on a progressive basis, subject to the conditions of this approval. In so doing, the Proponent will need to demonstrate that it has suitable documents in place to manage the existing operations of the project.

# SURRENDER OF DEVELOPMENT CONSENTS

15. The Proponent must surrender all existing development consents applying to the site to the relevant consent authority by 30 June 2012.

# SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

#### **NOISE**

#### **Impact Assessment Criteria**

1. The Proponent must ensure that the noise generated by the project during operation does not exceed the criteria in Table 1.

Table 1: Noise Impact Assessment Criteria (dB(A) L<sub>Aea (15min)</sub>

| Location                       | <sup>a</sup> Day |
|--------------------------------|------------------|
| Kullaroo 2                     | 39               |
| Riverglen                      | 40               |
| All other privately-owned land | 35               |

#### Notes:

- Receiver locations are as identified in the noise assessments presented in the EA.
- Noise limits are to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.
- The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land
  to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this
  agreement.
- a Day is defined as 6:00am to 6:00pm Mondays to Fridays, and 8:00am to 1:00pm on Saturdays, but does not include public holidays.

#### **Operating Hours**

2. The Proponent must comply with the operating hours in Table 2.

Table 2: Operating hours

| Activity                 | Day   | Time               |
|--------------------------|---|--------------------|
| All quarrying operations | Monday – Friday (except Public Holidays)    | 6.00 am to 6.00 pm |
|                          | Saturdays                                   | 8.00 am to 1.00 pm |
|                          | Sundays and Public Holidays                 | No activities      |
| Transportation off-site  | Monday – Friday (except Public<br>Holidays) | 6.00 am to 6.00 pm |
|                          | Saturdays                                   | 8.00 am to 1.00 pm |
|                          | Sundays and Public Holidays                 | No activities      |

However, the Proponent may, at any time, undertake maintenance activities and/or operate dewatering pumps, provided that the noise levels from the pumps remain below background noise levels at the most sensitive receiver.

Note: This condition does not apply to delivery of material if that delivery is required by police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, notification is to be provided to EPA and the affected residents as soon as possible, or within a reasonable period in the case of emergency.

#### **Operating Conditions**

- 3. The Proponent must:
  - (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational noise and traffic noise generated by the project; and
  - (b) regularly assess the noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Secretary.

### **Noise Management Plan**

4. The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:

- (a) be prepared in consultation with EPA, and submitted for approval to the Secretary within 6 months of this approval; and
- (b) include a:
  - description of the measures that would be implemented to minimise noise emissions from the project, including from project-related transport;
  - noise monitoring program that uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project;
  - protocol for determining exceedances of the relevant conditions of this approval and investigating, notifying and mitigating identified exceedances of the relevant noise limits; and
  - continual improvement program for investigating, implementing and reporting on reasonable and feasible measures to reduce noise generated by the project.

The Proponent must implement the plan as approved by the Secretary.

#### **AIR QUALITY**

#### **Impact Assessment Criteria**

5. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause an exceedance of the criteria listed in Tables 3, 4 or 5 at any residence on privately-owned land.

Table 3: Long Term Criteria for Particulate Matter

| Pollutant                                      | Averaging Period | <sup>d</sup> Criterion |
|--|------------------|------------------------|
| Total solid particles (TSP)                    | Annual           | <sup>a</sup> 90 μg/m³  |
| Particulate matter < 10 µm (PM <sub>10</sub> ) | Annual           | <sup>a</sup> 30 μg/m³  |

Table 4: Short Term Criterion for Particulate Matter

| Pollutant                                      | Averaging Period | <sup>d</sup> Criterion              |
|--|------------------|-------------------------------------|
| Particulate matter < 10 µm (PM <sub>10</sub> ) | 24 hour          | <mark>b</mark> 50 μg/m <sup>3</sup> |

Table 5: Long Term Criteria for Deposited Dust

| Pollutant                   | Averaging | g Period Maximum Proje<br>Contribution | ct Maximum Total Deposited Dust Level  |
|-----------------------------|-----------|--|--|
| <sup>c</sup> Deposited dust | Annı      | ual <sup>b</sup> 2 g/m²/month          | <sup>a</sup> 4 g/m <sup>2</sup> /month |

#### Notes to Tables 3-5:

- <sup>a</sup> Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- b Incremental impact (ie incremental increase in concentrations due to the project on its own);
- <sup>c</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;
- d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents, illegal activities
  or any other activity agreed by the Secretary in consultation with EPA.

# **Operating Conditions**

- 6. The Proponent must:
  - (a) minimise the generation of visible air pollution by the project; and
  - (b) ensure that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land,

to the satisfaction of the Secretary.

#### **Air Quality Management**

- 7. The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA, and submitted to the Secretary for approval within 6 months of this approval;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including consideration of a real-time air quality management system that employs both reactive and proactive mitigation measures; and

(c) include an air quality monitoring program that that uses a combination of high volume samplers and dust deposition gauges to evaluate the performance of the project, and includes a protocol for determining exceedances with the relevant conditions of this approval.

The Proponent must implement the plan as approved by the Secretary.

#### **SOIL AND WATER**

Note: The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.

#### Comprehensive Water Audit and Water Management Improvement Program

- 8. Within three months of the date of this approval, the Proponent must commission independent surface and groundwater expert/s, approved by the Secretary, to undertake a comprehensive audit of current and proposed water management practices and infrastructure on the site. The Comprehensive Water Audit must:
  - (a) fully describe and audit all current site water management practices, including with respect to surface water, groundwater, water licensing, flooding, drainage, process water usage and management, wastewater disposal practices and discharges of water from the site (whether to the surface or underground environment);
  - (b) identify all reasonable and feasible measures to improve water management and monitoring on the site, having regard to existing water management practices and the approach proposed within the EA;
  - (c) identify all reasonable and feasible measures to improve the management of process water on the site, with particular reference to opportunities for improved and/or increased recycling/reuse of process water;
  - (d) recommend design parameters for process water systems on the site, including with respect to water recycling/reuse systems and constructed wetland systems; and
  - (e) be undertaken in consultation with EPA, Dol and the Council, and include consideration of any additional water management issues identified through this consultation.
- 9. Unless otherwise agreed with the Secretary, the Proponent must submit a copy of the Comprehensive Water Audit report to the Secretary, EPA, Dol and the Council within six months of it commissioning the audit. The Audit report must be accompanied by a Water Management Improvement Program, based on the Audit report's recommendations, to improve water management practices on the site and to ensure continuous improvement over the life of the project, including a program of proposed timeframes for implementation. Should the Proponent propose to not implement one or more of the Audit recommendations, it must provide detailed justification to this effect.
- 10. The Water Management Improvement Program must be prepared and implemented to the satisfaction of the Secretary. Progress against the Program must be considered as part of the Independent Environmental Audits for the project and reported through Annual Reviews.
- 11. The Proponent must apply a recycling target of no less than 50% of process water generated on site, to be implemented through the Water Management Improvement Program.

# **Compensatory Water Supply**

12. The Proponent must provide a compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the project, in consultation with Dol, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified.

If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent must provide alternative compensation to the satisfaction of the Secretary.

# **Surface Water Discharges**

13. The Proponent must ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.

#### **Water Management Plan**

- 14. The Proponent must prepare a Water Management Plan for the project to the satisfaction of the Secretary. This plan must be prepared in consultation with EPA and Dol and must be submitted to the Secretary for approval in conjunction with the Water Management Improvement Program. The plan must include:
  - (a) a Site Water Balance, which must:
    - include details of:
      - sources, security and licensing of water supply;
      - water use on site;
      - o water management on site; and
      - any off-site water transfers;
  - (b) an Erosion and Sediment Control Plan, which must:
    - be consistent with the requirements of Managing Urban Stormwater: Soils and Construction, Volume 2E Mines and Quarries, (DECC), or most recent version of the relevant guidelines;
    - identify activities that could cause soil erosion or generate sediment;
    - describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters;
    - describe the location, function and capacity of erosion and sediment control structures and flood management structures; and
    - describe what measures would be implemented to maintain the structures over time;
  - (c) a Surface Water Management Plan, which must include:
    - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project;
    - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;
    - measures to manage pit inflows, including the storage and transfer of pit water and processing water;
    - a commitment to reduce surface water abstractions and to only operate strictly within surface water and groundwater licence entitlements;
    - a commitment to maximising the recycling and/ or reuse of site process water; and
    - measures to ensure that all discharges of water from the site to the Murrumbidgee River (excepting floodwater) contain less than 50mg/L TSS;
  - (d) a Flood Management Plan, including:
    - surveyed heights of all existing levees and measures to manage and maintain flood management infrastructure in proper and effective service over the life of the project;
    - details of flood mitigation and flood contingency measures;
    - accurate plans for proposed levees, including location, height and anticipated level of AEP flood event protection;
    - accurate plans for fuse plug design and location;
    - a program for:
      - certification of these plans by an independent hydrological specialist, prior to levee and fuse plug construction; and
      - o five-yearly inspection and certification of all extant flood mitigation infrastructure as fit for purpose by an independent hydrological specialist; and
  - (e) details of contingency measures to be implemented in the event that any significant impact occurs on either surface or groundwater resources.

The Proponent must implement the plan as approved by the Secretary.

# **Water Monitoring Program**

- 15. The Proponent must prepare a Water Monitoring Program for the project to the satisfaction of the Secretary. This program must be prepared in consultation with EPA and Dol and must be submitted to the Secretary for approval in conjunction with the Water Management Improvement Program. The program must include:
  - (a) monitoring and recording of all key elements of the projected Site Water Balance, including:
    - daily pit dewatering volumes for each pit;
    - water used in processing;
    - water used for recycling and/or reuse;
    - water released to the constructed wetland system; and
    - water released to the environment, whether by evaporation, infiltration, discharge or entrained with product;
  - (b) a Groundwater Monitoring Program, which must include:
    - a groundwater monitoring bore network developed following consultation with Dol, aimed at accurately identifying the groundwater impacts of the project;
    - detailed baseline data of groundwater levels, yield and quality in the area, and privatelyowned groundwater bores that could be affected by the project;

- groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
- a program to monitor and assess:
  - groundwater inflows to the quarry operations;
  - impacts on regional aquifers;
  - impacts on groundwater supply of potentially-affected landowners and the Riverina Water County Council's West Wagga Wagga Borefield;
  - o impacts on the aguifers in the Cowra and Lachlan Formations; and
  - impacts on nay groundwater dependent ecosystems and riparian vegetation.

The Proponent must implement the program as approved by the Secretary.

#### **Verification of Water Management Performance**

- 16. After implementing the approved Water Monitoring Program for at least two years, the Proponent must prepare and submit to the Secretary a Water Management Performance Verification Report, to the satisfaction of the Secretary. The Report must be prepared to:
  - (a) demonstrate and verify the predictions made in the EA, particularly with respect to water requirements, pit inflows and recycling/ reuse opportunities;
  - (b) demonstrate progress against the recommendations made in the Comprehensive Water Audit and the Water Management Improvement Program;
  - (c) verify the surface water and groundwater impacts of the project, through an updated water balance and groundwater model, calibrated using groundwater monitoring data; and
  - (d) demonstrate that the project would not have an unacceptable surface water or groundwater impact, through application of the calibrated groundwater model referred to above, if extraction was conducted on site below 158 metres AHD.

#### TRAFFIC AND TRANSPORT

- 17. The Proponent must:
  - (a) keep accurate records of the amount of product materials transported from the site, including the date, time and tare weight of each product haulage vehicle dispatched from the site; and
  - (b) make these records available on its website on a quarterly basis and include them in the Annual Review.
- 18. The Proponent must consult with the RMS, Council and the CCC over appropriate reduction to the existing speed limit along Roach Road, to the satisfaction of the Secretary.

#### **Traffic Management Plan**

- 19. The Proponent must prepare a Traffic Management Plan to the satisfaction of the Secretary. The Plan must be developed in consultation with the RMS and Council, and must be submitted for the approval of the Secretary within 6 months of the date of this approval. The plan must address:
  - (a) adoption, implementation and enforcement of a Truck Driver Code of Practice to ensure that project-related traffic uses Roach Road and McNickle Road in a safe manner;
  - (b) traffic management along these roads to minimise potential conflicts between project-related traffic and other road users and pedestrians, including truck driver awareness of the Wiradjuri Walking Track;
  - (c) management of dust generated by project-related traffic on these roads; and
  - (d) review of the standard of maintenance of these roads and their intersections.
- 20. The Proponent must use its best endeavours to meet with the Riverview Estate community on a bimonthly basis during the development of the Traffic Management Plan to consult with and inform the community over progress in developing the plan and consultation in respect of the Roach Road speed limit.

The Proponent must implement the plan as approved by the Secretary.

# **VISUAL AMENITY**

- 21. The Proponent must:
  - (a) minimise the visual impacts, and particularly the off-site lighting impacts, of the project;
  - (b) take all practicable measures to further mitigate off-site lighting impacts from the project; and
  - (c) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting, or its latest version,

# to the satisfaction of the Secretary.

### WASTE

22. The Proponent must dispose of processing fines in a pit or other location agreed to by the Secretary, and must not dispose of fines on the flood plain surface after 31 December 2012.

- 23. The Proponent must:
  - (a) minimise the waste generated by the project; and
  - (b) ensure that the waste generated by the project is appropriately stored, handled, and disposed of, to the satisfaction of the Secretary.
- 24. The Proponent must prepare a Waste Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA, and submitted the Secretary for approval by the end of June 2012:
  - (b) identify the various waste streams of the project;
  - (c) estimate the volumes of waste material that would be generated by the project;
  - (d) describe and justify the proposed strategy for disposing of this waste material;
  - describe what measures would be implemented to meet the requirements set out in condition 27; and
  - (f) include a program to monitor the effectiveness of these measures.

The Proponent must implement the plan as approved by the Secretary.

#### **REHABILITATION**

#### **Rehabilitation Management Plan**

- 25. The Proponent must prepare a Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must be prepared in consultation with OEH, Dol and DRG and must be submitted to the Secretary for approval in conjunction with the Water Management Improvement Program. The plan must:
  - (a) consider the rehabilitation plans presented in the EA;
  - (b) assess the quantity and availability of materials on site that can be applied to rehabilitation (including overburden, tailings, reject, existing levee banks and pit walls);
  - (c) consider all options regarding the re-establishment of the pit wall and river bank in the vicinity of the breach which took place in December 2010;
  - (d) consider likely flood behaviour and impacts on the landscape as proposed to be rehabilitated (including during each of the various rehabilitation stages);
  - (e) consider available alternative landuses for the site, including for the exhausted quarry pits;
  - review what parts of the site should be refilled to a level above standing groundwater, so as to manage flood behaviour and other longterm risks;
  - (g) address the issue of fines disposal so as to prevent fines being eroded from the landscape during major flood events or being a source of dust emissions during dry periods;
  - (h) develop clear rehabilitation objectives for the whole site, including the following:
    - stabilisation of disturbed areas to prevent the emission of dust following closure;
    - landscaping the site with native species endemic to the locality; and
    - minimising the total surface area of water bodies on the site;
  - (i) consider opportunities to enhance wildlife habitat on the rehabilitated project site, in particular in and around artificial water bodies and wetlands;
  - (j) develop clear, progressive rehabilitation staging for the whole site, including specific milestone dates for rehabilitation works and a program for monitoring progress against these dates;
  - (k) address potential conflicts between the rehabilitation of the existing extraction pit and its proposed use as a settling pond;
  - (I) demonstrate that all reasonable and feasible measures have been applied to minimise the total surface area of water-filled voids on the site:
  - (m) set completion criteria for the rehabilitation of the site;
  - (n) describe in detail the measures that would be implemented over the next 5 years to rehabilitate and manage the landscape on the site;
  - (o) describe how the performance of these measures would be monitored over time; and
  - (p) provide for regular auditing of progress against rehabilitation outcomes and milestones, with reporting of progress to the Secretary and DRG.

The Proponent must implement the plan as approved by the Secretary.

#### **Rehabilitation Bond**

26. Within 3 months of the approval of the Rehabilitation Management Plan, the Proponent must lodge a rehabilitation bond for the project with the Secretary. The sum of the bond must be calculated at \$2.50/m² for the total area both currently disturbed and proposed to be disturbed for the following 3 year period, or as otherwise directed by the Secretary.

#### Notes:

 If the rehabilitation is completed to the satisfaction of the Secretary, the Secretary will release the rehabilitation bond.

- If the rehabilitation is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the rehabilitation bond, and arrange for the satisfactory completion of the relevant works.
- 27. Within 3 months of each Independent Environmental Audit (see condition 8 in Schedule 5) after the initial lodgement of the rehabilitation bond, the Proponent must review, and if necessary revise the sum of the bond to the satisfaction of the Secretary. This review must consider:
  - (a) the effects of inflation;
  - (b) any changes to the total area of disturbance; and
  - (c) the performance of the rehabilitation against the completion criteria of the Rehabilitation Management Plan.

# SCHEDULE 4 ADDITIONAL PROCEDURES

#### NOTIFICATION OF LANDOWNERS

- 1. Within 3 months of this approval, the Proponent must notify, in writing, the landowners of all residences located within one kilometre of any of the project site boundaries of their right to request monitoring in accordance with condition 3 below.
- 2. If the results of the monitoring required in Schedule 3 identify that the impacts generated by the project on site are greater than the relevant impact assessment criteria, and there is no negotiated agreement in place to allow the impact, then within 2 weeks of obtaining the monitoring results the Proponent must:
  - (a) notify the Secretary, the affected landowners and tenants (including tenants of any quarry-owned properties) accordingly, and provide monitoring results to each of these parties until the results show that the project is complying with the relevant criteria in Schedule 3; and
  - (b) in the case of exceedances of the relevant air quality criteria, send the affected landowners and tenants (including tenants of mine-owned properties) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time).

#### INDEPENDENT REVIEW

3. If a landowner of privately-owned land considers the project to be exceeding the relevant air quality or noise impact assessment criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.

If the Secretary is satisfied that an independent review is warranted, the Proponent must within 2 months of the Secretary's decision:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in Schedule 3; and
  - if the project is not complying with these criteria then:
    - determine if more than one source, including the project, is responsible for the exceedance, and if so the relative share of each source towards the impact on the land;
    - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.
- 4. If the independent review determines that the project is complying with the relevant impact assessment criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.

If the independent review determines that the project is not complying with the relevant impact assessment criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent must:

- implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or
- (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria,

to the satisfaction of the Secretary.

- 5. If the independent review determines that any relevant impact assessment criteria in Schedule 3 are being exceeded, but that more than one source, including the project, is responsible for this non-compliance, then the Proponent must, together with the relevant sources:
  - implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or
  - (b) secure a written agreement with the landowner and other relevant sources to allow exceedances of the relevant impact assessment criteria in Schedule 3,

to the satisfaction of the Secretary.

# SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

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

The Proponent must implement the strategy as approved by the Secretary.

#### **Management Plan Requirements**

- 2. The Proponent must ensure that the management plans required under this approval are prepared in accordance with relevant guidelines, and include:
  - (a) a summary of 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 project or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the project; 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;
  - a program to investigate and implement ways to improve the environmental performance of the project over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with the conditions of this approval and statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

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

### **Annual Review**

- 3. By the end of June 2012, and annually thereafter, the Proponent must review the environmental performance of the project to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - monitoring results of previous years; and

- relevant predictions in the documents referred to in condition 2 of Schedule 2:
- (c) identify any non-compliance over the past 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 project;
- (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
- (f) describe what measure will be implemented over the next year to improve the environmental performance of the project.

#### Revision of Strategies, Plans & Programs

- Within three months of:
  - (a) the submission of an annual review under condition 3 above:
  - (b) the submission of an incident report under condition 6 below;
  - (c) the submission of an audit report under condition 8 below, or
  - (d) any modification of the conditions of this approval (unless the conditions require otherwise).

the Proponent must review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.

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

#### **Community Consultative Committee**

5. The Proponent must establish and operate a Community Consultative Committee (CCC) for the project in general accordance with the Community Consultative Committee Guidelines: State Significant Projects (2016), or alternative consultative framework as may be agreed by the Secretary, to the satisfaction of the Secretary. This CCC or alternative framework must be operating within 6 months of this approval and have a principal but not exclusive focus on stakeholders owning or occupying properties in the Riverview Estate, to the satisfaction of the Secretary.

#### Notes:

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

#### **REPORTING**

### **Incident Reporting**

6. The Proponent must notify the Secretary and any other relevant agencies of any incident that has caused, or has the potential to cause, significant risk of material harm to the environment, at the earliest opportunity. For any other incident associated with the project, the Proponent must notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent 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**

 The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans or programs of the conditions of this approval.

#### INDEPENDENT ENVIRONMENTAL AUDIT

- 8. By the end of June 2014, and every three years thereafter, unless the Secretary directs otherwise, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
  - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies and CCC;
  - (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate
  - (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

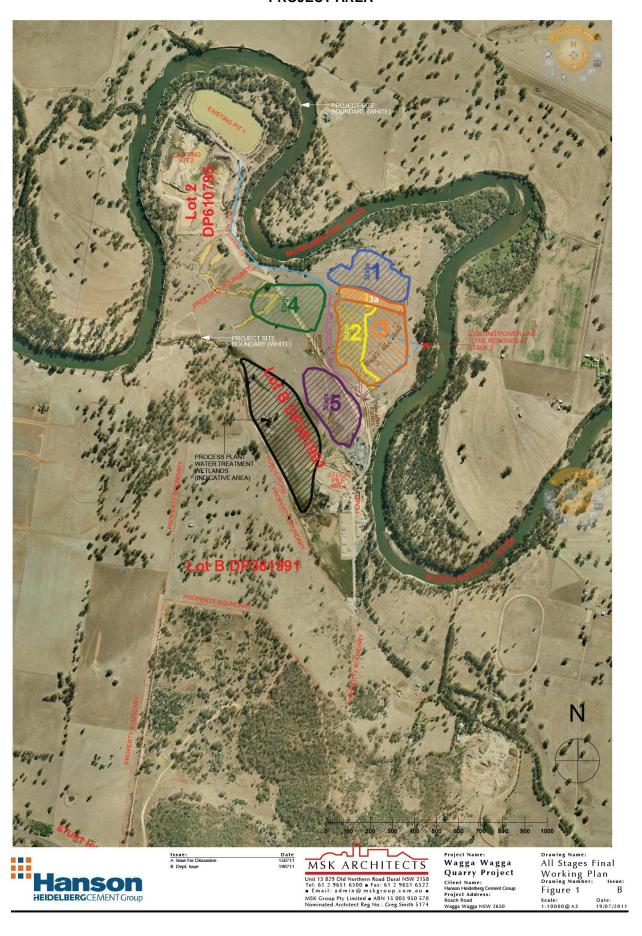
Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

9. Within six weeks of the completing of this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

- 10. From the end of June 2012, the Proponent must:
  - (a) make copies of the following publicly available on its website:
    - the documents referred to in condition 2 of Schedule 2;
    - all current statutory approvals for the project;
    - all approved strategies, plans and programs required under the conditions of this approval;
    - the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans or programs;
    - a complaints register, updated on a monthly basis;
    - the annual reviews of the project;
    - any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit; and
    - any other matter required by the Secretary;
  - (b) keep this information up-to-date, to the satisfaction of the Secretary.

# APPENDIX 1 PROJECT AREA



# APPENDIX 2 PROJECT STAGING



# APPENDIX 3 STATEMENT OF COMMITMENTS

### WAGGA WAGGA QUARRY EXTENSION PROJECT Hanson Construction Materials Pty Ltd

### 1.1. Operational Controls

All activities will be undertaken generally in accordance with the Wagga Wagga Quarry Extension Environmental Assessment Report (dated April 2010) and the Wagga Wagga Quarry Extension Environment Assessment Report on Potential Impacts on Riverview Estate Subdivision (dated July 2010).

- 1.1.1. Sand and gravel extraction and processing activities will be as follows:
  - Quarry pit activities 6am to 6pm Monday to Friday and 7am to 1pm Saturday.
  - Plant processing to occur 6am to 6pm Monday to Friday and 7am to 1pm Saturday.
  - Sales and transportation activities to occur 6am to 6pm Monday to Friday and 7am to 1pm Saturday, however this
    may be extended from time-to-time depending on customer's needs. Notice will be provided should this be the case.
  - Maintenance activities will occur at any time provided that the activities are not audible at any privately owned residence.
- 1.1.2. Annual production will be limited to 150,000 tonnes per annum.
- 1.1.3. The quarry will be rehabilitated and the final land form will be constructed as per Figure 5.10 of the EAR. A comprehensive Rehabilitation and Decommissioning Plan will be prepared to ensure rehabilitation objectives are achieved to a reasonable extent. The Plan will include:
  - the rehabilitation program;
  - native vegetation and fauna habitat management;
  - feral animal control;
  - fire management;
  - weed management;
  - · minimisation of edge effects;
  - stormwater control:
  - · control of public access;
  - monitoring; and funding

#### 1.2. Flora and Fauna

- 1.2.1. In order to minimise the impact of vegetation clearing the proponent will commission and commence a Vegetation Clearance Management Plan, Revegetation Plan, Feral Animal Control Management Plan, and Weed Management Plan prior to commencement of quarrying activities. These plans will be developed by a suitably qualified and experienced person and take into consideration the following:
  - Implications of meta-population dynamics
  - Implications of transitional zone dynamics
  - Episodic high disturbance events
  - Loss of functional role of species
  - Clearing of native vegetation; and removal of dead wood and dead trees
  - Bush rock removal
  - Invasion of exotic perennial grasses
  - Predation by European Red Fox , Feral Cats, and Rabbits

#### 1.3. Heritage

- 1.3.1. The proponent will give the Wagga Wagga LALC seven days notice of their intention to commence stripping of overburden or any disturbance of the existing ground to allow the land council sufficient time to arrange for a Sites Officer to be present.
- 1.3.2. All Hanson employees, contractors and the employees will be bound by the provisions of the National Parks and Wildlife Act 1974 as amended, which was in part designed to mitigate impacts to the indigenous archaeological record.
- 1.3.3. All Hanson employees, contractors and the employees will be instructed that in the event of any bone or stone artefacts, or discrete distributions of shell being unearthed during quarry activities, work should cease immediately in the area of the find, and the Wagga Wagga LALC, and officers of the National Parks and Wildlife Service informed.

#### 1.4. Traffic and Access

- 1.4.1. Quarry truck movements will be limited to six (6) movements per hour between the hours of 3:00pm to 6:00pm.
- 1.4.2. If there is a requirement to increase the number of truck movements between 3:00pm and 6:00pm, then the Proponent will notify the nominated representative of the Riverview Estate Community prior to the increase.
- 1.4.3. The Proponent will work with the Riverview Estate Community, DoP, and Wagga Wagga City Council to reduce the speed zone along Roach Road from 80km/hr to 50km/hr or as otherwise agreed on by the parties.
- 1.4.4. The proponent will in conjunction with the Wagga Wagga City Council and RMS, develop a plan that addresses the review of the standard of maintenance of the roads and intersections that service the development site.
- 1.4.5. The proponent will maintain a log book of sold extracted quantities of sand and gravel and traffic movement in and out of the subject site. This record will be made available to the Wagga Wagga City Council and RMS on request.
- 1.4.6. On-site parking will be provided to accommodate at least 10 car spaces (6 staff, 4 visitors).
- 1.4.7. The proponent will submit a Driver Code of Practice for approval to ensure that truck drivers are made aware of the obligations of safety and environmental compliance when accessing the site, driving on the guarry property, and in

- particular along Roach Road. All Hanson employee truck drivers and sub-contractors will be conditioned to adhere to the approved Driver Code of Practice.
- 1.4.8. The Proponent will make it a condition of the quarry site rules that truck drivers must commit to a Truck Driver Code of Practice in writing prior to receiving any quarry product at the quarry.
- 1.4.9. The Proponent will on receipt of development consent meet with members of the Riverview Estate Community on a monthly basis for the purpose of informing the progress on Environmental Management Plans, updates on truck movements between the hours of 3:00pm and 6:00pm, progress on changing the speed zone for Roach Road, and the roll out of the Driver Code of Practice. These meetings will be held each month for a period of six (6) months unless agreed otherwise by the parties
- 1.4.10. The proponent will enter an agreement with the Lands and Property Management Authority and Wagga Wagga City Council on the installation of suitable road signage to increase awareness of the location of the Wirdajuri Walking Track along Roach Road.

#### 1.5. Noise

- 1.5.1. An Operational Noise Management Plan will be developed for the proposal and be implemented prior to extraction commencing. The plan will incorporate a noise monitoring program to monitor noise emissions and determine compliance with the project specific noise goals. The Plan will include:
  - Noise monitoring on site and within the community
  - Prompt response procedures to any community issues of concern
  - Refinement of on-site noise mitigation measures and quarry operating procedures where practical
  - · Mechanism for discussion and negotiation with relevant property holders to assess concerns
- 1.5.2. Traffic Noise Management Plan will be developed and implemented for truck movements on and accessing/exiting the site.

# 1.6. Air Quality

- 1.6.1. Dust suppression activities, such as spraying a suitable dust suppressant, will be undertaken on all unsealed quarry roads so that dust generation is minimised.
- 1.6.2. A weather station monitor will be installed on-site to continuously monitor weather conditions so that quarry operations can be modified to reduce dust emitting activities and appropriate mitigations taken in response to adverse weather
- 1.6.3. An Air Quality management Plan will be developed for the proposal and be implemented prior to extraction commencing. This Plan will include air quality monitoring during initial operation at the sensitive receptors as nominated in the Heggies Pty Ltd, Air Quality Impact Assessment Report of the EAR.

### 1.7. Groundwater and Surface Water

- 1.7.1. An Integrated Site Water Cycle Management Plan (ISWCMP) will be developed, as per the recommendations of Section 9 of the Martens and Associates, Surface Water and Groundwater Assessment in the EAR, prior to any extraction activities to the satisfaction of the Department in consultation with Dol. The Plan will include a groundwater monitoring program that will include:
  - A commencement date to groundwater monitoring will be once the water table has been intercepted on the first cell.
  - Initially groundwater level gauging will occur fortnightly (for 3 months), then monthly gauging of onsite groundwater wells (WG 0701 to WG 0707, windmill and well) once quarrying has commenced for the first 2 years. Data loggers are recommended to be placed in the immediate surrounding wells.
  - During gauging events, field chemical parameters should be measured to investigate any flux in hydrochemistry.
  - Initial annual review of information collected.
  - The program will be reviewed once the drawdown has stabilised, and the frequency of monitoring events designed accordingly.
  - Should the drawdown levels exceed that from within the report, the regulatory authorities need to be notified and a contingency plan developed in conjunction.
- 1.7.2. To prevent soil erosion problems, only limited areas will be stripped ahead of the quarry pit development and heavy quarry traffic will be confined to constructed roads and quarry areas. Drainage channels will be constructed for all access roads and any crossings will be designed for the expected flows from upslope areas. All channels will be stabilised to prevent scouring. Rehabilitation will be carried out progressively following extractive operations to ensure a stable landform and to control soil erosion.
- 1.7.3. A licensed discharged point will be established in consultation with EPA.
- 1.7.4. Used oils and greases will be collected and removed by a licensed contractor for disposal off site or on an approved disposal area. Diesel will be stored on site in an above ground fuel storage tank located in a bunded area. All fuel storage will be conducted in accordance with Australian Standards for storage of fuels (AS 1940- 2004 5.8.2, AS 3780-1994 5.7.2, AS 4452-1997).

#### 1.8. Visual

- 1.8.1. In order to prevent a change to the existing visual character of the site, Hanson will maintain the specified exclusion zone between the development and the riparian zone and take all necessary measures to ensure the existing vegetation buffer is maintained and protected throughout the life of the quarry.
- 1.8.2. To manage the site lines into the site the following measures will be undertaken:
  - Develop the extraction stages as shown on the works plan (Figures 5.5 to 5.93 of the EAR). The development of cells 1 and 2 has been designed to allow for early rehabilitation of the eastern part of the site.
  - Establish embankments on the north boundary. These are established both to act as acoustic barriers as well as sight barriers. They are 3 to 4 metres in height and moulded to blend in with the natural alluvial planes of the site.

#### 1.9. Greenhouse Gases

1.9.1. The proponent will continue to report annually the quarry operation's Greenhouse Gas emissions.

#### 1.10. Environmental Management, Monitoring and Auditing

- 1.10.1. In conjunction with the high standard of safeguards to be incorporated in the design of the project, the Company will carry out regular monitoring of air quality, water quality, and noise. The results will be made available to Authorities for inspection and auditing.
- 1.10.2. Within 7 days of detecting an exceedance of the limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the proponent must report the exceedance/incident to EPA and any relevant agency. The report will:
  - describe the date, time and nature of the exceedance/incident;
  - identify the cause (or likely cause) of the exceedance/incident;
  - · describe what action has been taken to date; and
  - describe the proposed measures to address the exceedance/incident.
- 1.10.3. Prior to the commencement of any operations, the proponent will implement, publicise and list with a telephone company a contact phone number, which will enable the general public to reach a person who can arrange appropriate response action to the enquiry. The proponent will maintain a register to record details of all enquiries received and actions undertaken in response. This record will be made available to the EPA as required.