Referral of proposed action

What is a referral?

The Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister’s delegate. (Further references to ‘the Minister’ in this form include references to the Minister’s delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister’s decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
  - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
  - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department’s website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.
Can I refer part of a larger action?
In certain circumstances, the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act). If you wish to make a referral for a staged or component referral, read ‘Fact Sheet 6 Staged Developments/Split Referrals’ and contact the Referrals Gateway (1800 803 772).

Do I need a permit?
Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department’s web site.

Is your action in the Great Barrier Reef Marine Park?
If your action is in the Great Barrier Reef Marine Park it may require permission under the Great Barrier Reef Marine Park Act 1975 (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from http://www.gbrmpa.gov.au/ or by contacting GBRMPA’s Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority
2-68 Flinders Street PO Box 1379
Townsville QLD 4810
AUSTRALIA

Phone: + 61 7 4750 0700
Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

What information do I need to provide?
Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/ A.

You can complete your referral by entering your information into this Word file.

Instructions
Instructions are provided in blue text throughout the form.
**Attachments/supporting information**

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department’s website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

**Do I have to pay for my referral or assessment / what are the fees?**

Cost recovery for environmental assessment activities is currently scheduled for commencement on 1 July 2014. The commencement of cost recovery is subject to amendments to the EPBC Act being passed by the Commonwealth Parliament and the making of regulations.

Cost recovery arrangements will only apply to proposed actions referred to the Department on or after 14 May 2014. The Department will inform you of your liability for potential fees prior to the introduction of cost recovery arrangements, currently scheduled for 1 July 2014. Fees will only apply to referrals and assessment work or stages of the assessment process undertaken by the Department after the commencement of cost recovery. Fees may also be applicable for certain activities such as the variation of conditions of approval.

There will be no retrospective charging for the stages of assessment initiated before cost recovery commences or for projects that were referred to the department prior to 14 May 2014. Fees will only apply to those stages of the assessment that occur after cost recovery commences.


**How do I submit a referral?**

Referrals may be submitted by mail or email.

**Mail to:**
Referrals Gateway
Environment Assessment Branch
Department of Environment
GPO Box 787
CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

**Email to:** epbc.referrals@environment.gov.au
- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**
What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department’s web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

**The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval**

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

**The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner**

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

**The proposed action is LIKELY to have a significant impact and does NEED approval**

If the action is likely to have a significant impact a decision will be made that it is a controlled action. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the controlling provisions.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department’s web site.)

**The proposed action would have UNACCEPTABLE impacts and CANNOT proceed**

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

**Compliance audits**

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See “Is your action in the Great Barrier Reef Marine Park,” p.2, for more details).

**For more information**

- call the Department of the Environment Community Information Unit on 1800 803 772 or

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.
Referral of proposed action

Project title: Wolfdene Quarry Extension

1 Summary of proposed action

1.1 Short description

Hanson Construction Materials Pty Ltd (Hanson) operates the existing Wolfdene Quarry at Luscombe, Queensland and propose to extend quarry operations onto adjacent land being described as Lot 2 on RP813599, part of Lot 80 on CP893560 and Lot 2 on RP15903.

1.2 Latitude and longitude

Refer to Attachment 1 - GIS Data for the GIS file of the above boundary points, in electronic format.

Refer to Attachment 2 - Quarry Boundary Points for an illustration of the boundary points around the Site.

Refer to Attachment 3 - Drawing No. 1001.228 R3 for the current and proposed site layout.

Refer to Attachment 4 - Terrestrial Ecology Assessment for locations, extent and consideration of EPBC Act listed species.

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### Locality and property description
The Site is located in the Gold Coast City Council area at 145 Harts Road, Luscombe QLD 4207, approximately 6.5km south of the centre of Beenleigh.

### Size of the development footprint or work area (hectares)
514.476 ha

### Street address of the site
145 Harts Road, Luscombe QLD 4207

### Lot description
The development relates only to the inclusion of two new extraction areas (Lot 2 on RP813599, part of Lot 80 on CP893560, and part of Lot 2 on RP15903), establishment of additional buffers on land surrounding the existing quarry (Lot 117 on CP893560, Lot 5 on CP893561, Lot 101 on CP893561, Lot 7 on CP893561, part of Lot 2 on RP813599, part of Lot 80 on CP893560, and part of Lot 2 on RP15903), and minor realignment of the approved access road directly onto Stanmore Road.

### Local Government Area and Council contact (if known)
Local Government: Gold Coast City Council, PO Box 5042 GOLD COAST MC 9729 (Telephone: (07) 5582 8211)
Application reference: MCU201300734

### Time frame
The proposal involves the extension of the existing Wolffdene Quarry onto adjacent land described as Lot 80 CP893560, Lot 67 WD1009 and Lot 2 RP813599. A development application for material change of use was lodged with the Gold Coast City Council in October 2013. It is anticipated that local government will decide the application in late 2014. Once local government approval is secured, the Site will be progressively developed in accordance with staged quarry development plans, eventually forming part of the active pit in the long term. Site rehabilitation works will occur throughout the life of the project. It is anticipated that it will take between 50 to 80 years to fully exhaust the extractive resource.

### Alternatives to proposed action
- **Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?**
  - No
  - Yes, you must also complete section 2.2

### Alternative time frames etc
- **Does the proposed action include alternative time frames, locations or activities?**
  - No
  - Yes, you must also complete Section 2.3.

### State assessment
- **Is the action subject to a state or territory environmental impact assessment?**
  - No
  - Yes, you must also complete Section 2.5

### Component of larger action
- **Is the proposed action a component of a larger action?**
  - No
  - Yes, you must also complete Section 2.7

### Related actions/ proposals
- **Is the proposed action related to other actions or proposals in the region (if known)?**
  - No
  - Yes, provide details:

### Australian Government funding
- **Has the person proposing to take the action received any Australian Government grant funding to undertake this project?**
  - No
  - Yes, provide details:

### Great Barrier Reef Marine Park
- **Is the proposed action inside the Great Barrier Reef Marine Park?**
  - No
  - Yes, you must also complete Section 3.1 (h), 3.2 (e)
2 Detailed description of proposed action

2.1 Description of proposed action

Hanson Construction Materials Pty Ltd (Hanson) seeks an approval for the inclusion of additional land into the existing, approved Extractive Industry operation at Wolffdene Quarry, located at 145 Harts Road, Luscombe (Site). This quarry has been in operation since 1981 and under Hanson’s management since 1983.

The development relates only to the inclusion of two new extraction areas (Lot 2 on RP813599, part of Lot 80 on CP893560, and part of Lot 2 on RP15903), establishment of additional buffers on land surrounding the existing quarry (Lot 117 on CP893560, Lot 5 on CP893561, Lot 101 on CP893561, Lot 7 on CP893561, part of Lot 2 on RP813599, part of Lot 80 on CP893560, and part of Lot 2 on RP15903), and minor realignment of the approved access road directly onto Stanmore Road refer Attachment 5 Planning Assessment Report. Importantly, the volume and type of materials extracted, haulage volumes (truck numbers), processing output and product distribution will not change as a result of this application.

Wolffdene Quarry is a high production quarry capable of producing in excess of 2.0 million tonnes of quarried product a year. As one of the largest quarries in Queensland it plays a critical role in South East Queensland's development and construction industry. Quarrying operations first commenced on the Site in 1981 following rezoning of part of the current Site to Extractive Industry by the then Albert Shire Council. Since this time, multiple approvals for Extractive Industry have been issued to allow for its expansion and integration of quarrying activities. The most recent development approval was issued by Council on 23 February 2011 however at this stage this approval has not yet been acted upon. As part of the assessment of the 2011 Development Application, careful consideration was given to the potential impacts that the development could have on the local and wider environment and appropriate design and management measures and conditions were incorporated for effective implementation to safeguard the amenity of the community and the ecological values of the surrounding environment. The existing quarry uses typical quarrying methodologies that involve clearing, topsoil and overburden stripping, drill and blast, extraction, processing and stockpiling, load and hauling. Further details are provided in the Site Based Management Plan (SBMP) prepared to assist in the management and protection of surrounding environmental values which describes how the operator proposes to manage potential environmental impact associated with Extractive Industry.

The Site is included within a Key Resource Area (KRA) under the Queensland State Planning Policy and within the Extractive Industry / Open Space Precinct on the Yatala Local Area Plan in the Gold Coast City Council Planning Scheme. The Site is located within an established and well recognised extractive industry precinct which includes three other working quarries (two Boral quarries and a Holcim quarry). These quarries have also operated within the surrounding community for many years and appropriate infrastructure exists to accommodate quarrying activities. The approval of this application is important for securing the long term production capacity of the quarry so that it can continue to satisfy the demand for construction materials within the Gold Coast and Southern Brisbane regions well into the medium and long term future. It will also result in the extraction of the total resource, under Hanson's control within the KRA. It will provide access to the best quality extractive resources within the Northern Darlington Range KRA, improve the operational efficiency and reduce environmental impacts through optimised staging of extraction and improve environmental management by providing additional buffer lands.

The Gondwana Ecology Group Pty Ltd have assessed the potential impact on species listed as threatened (endangered, vulnerable or as a MNES) under the EPBC Act. That assessment concludes that the only EPBC Act listed species (or MNES) that have any significant reliance on the site are the Koala and populations of Macadamia and Marsdenia.

2.2 Alternatives to taking the proposed action

Not Applicable.

2.3 Alternative locations, time frames or activities that form part of the referred action

Not Applicable.

2.4 Context, planning framework and state/local government requirements

Gold Coast City Council
- The proposal is located within the Gold Coast City Council Local Government Area.
- The Gold Coast City Council is the Assessment Manager for the application.
- The Site is located within the Yatala Enterprise Area (YEA) Local Area Plan Domain, Rural Domain and Extractive Industry Domain.
- The proposed development is considered Impact Assessable under the Gold Coast Planning Scheme.
- Under the YEA Local Area Plan, the Site is located within the Future Industry, Extractive Industry and Open Space Precincts.
State referral agencies

- The Development Application triggers referral to the following referral agencies:
  - State Assessment Referral Agency (SARA) (Environmentally Relevant Activities (ERAs) and development impacting on State transport infrastructure)
  - Powerlink (Electricity infrastructure)
  - Gold Coast City Council (Development in distributor-retailer’s geographic area)

Southeast Queensland Regional Plan 2009 – 2031

- The Site is located within the Southeast Queensland Regional Plan 2009 - 2031.
- The majority of the Site is located within the ‘Regional Landscape and Rural Production Area’, while part of the Site (i.e. Lot 1 on SP244693) is included in the ‘Urban Footprint’ of the Regional Plan, however the State determined that the development is an Urban Purpose in an Urban Area.

Environmental Protection Act 1994 and Regulation

- The proposal includes ERAs, which are assessed under the Environmental Protection Act 1994.
- The following ERAs are proposed to be carried out on the Site:
  - ERA 16, 2(c) extracting other than by dredging, more than 1,000,000 t/a
  - ERA 16, 3(c) screening more than 1,000,000 t/a.

Vegetation Management Act 1999

- The Site comprises remnant vegetation, which is assessed under the Vegetation Management Act 1999. However, correspondence from the Department of Natural Resources and Mines (DNRM) confirmed that the proposed clearing is exempt development pursuant to the Sustainable Planning Regulation 2009 being for an ‘urban purpose’ in and ‘urban area’.

Water Act 2000

- The Water Act 2000 regulates the taking and interfering with water in Queensland. The Site is included within the Water Resource (Logan Basin) Plan 2007 area. Any applications for entitlements / allocations for water resources will be made separately to the development application process in accordance with the provisions of the Water Act.

State Planning Policies

- Temporary SPP 2/12 Planning for Prosperity
- SPP 2/07 Protection of Extractive Resources identifies the Site as being located within the Northern Darlington Range Key Resource Area (KRA 67).
- It should be noted that since lodgement of the development application to the Council in 2013 both SPP2/07 and 2/12 have been replaced by the Queensland State Planning Policy. The site remains a Key Resource Area (KRA 67) under the new Queensland State Planning Policy.

Queensland Biodiversity Offset Policy

- The State has advised that the Queensland Biodiversity Offset Policy (QBOP) applies to the development as an environmental offset condition can be applied under section 346A of the Sustainable Planning Act 2009 or section 207 of the Environmental Protection Act 1994.
- Based on State government mapping ‘State Significant Biodiversity Values’ may be impacted by the development. Where residual impacts from development on SSBV can’t be avoided an environmental offset can be applied by the State to ensure ‘there is no net loss of biodiversity’. It is anticipated that an environmental offset will be required for SSBV impacted by the development. Negotiations with the State on an offset strategy are well advanced and will be included as a condition of any development approval granted, refer Attachment 6 – Biodiversity Offset Strategy.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

Not Applicable.

2.6 Public consultation (including with Indigenous stakeholders)

The application currently being assessed by the Gold Coast City Council will be required to undertake public notification in accordance with the requirements of the Sustainable Planning Act 2009 (SPA). It is anticipated that the public notification period will occur in late 2014. In addition to the mandatory public notification period under SPA, the applicant has implemented an ongoing community engagement strategy. A detailed report on the community engagement initiatives of the Wolffdene Quarry was prepared for the DA and is available upon request.

2.7 A staged development or component of a larger project

Not Applicable.
3 Description of environment & likely impacts

3.1 Matters of national environmental significance

3.1 (a) World Heritage Properties

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.1 (b) National Heritage Places

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description
An EPBC protected matters report generated in February 2014 (with a 10km buffer around the subject area) identified one wetland of international importance (i.e. Moreton Bay).

Nature and extent of likely impact
The potential for the proposed action to impact on the Ramsar Wetland located more than 1km from the Site is considered to be minimal to non-existent. Appropriate water management measures will be carried out as part of the operation and regulated by the conditions of the environmental authority authorised under the Environmental Protection Act 1994 (EP Act) by the Department of Environment and Heritage Protection (DEHP).

3.1 (d) Listed threatened species and ecological communities

Description
The Gondwana Ecology Group Pty Ltd have assessed the potential impact on species listed as threatened (endangered, vulnerable or as a MNES) under the EPBC Act. That assessment concludes that the only EPBC Act listed species (or MNES) that have any significant reliance on the site are the Koala and populations of Macadamia and Marsdenia.

Nature and extent of likely impact
The populations of Macadamia do not occur within the proposed extension area and therefore will not be impacted. The populations of Marsdenia are located on the north eastern boundary of the proposed extension area. The quarry footprint avoids disturbance of that area and therefore the populations of Marsdenia will not be impacted. It is considered that the Koala is the only threatened species that has the potential to be impacted by the development. The Matters of National Environmental Significance: Significant impact guidelines 1.1 outline the ‘significant impact criteria’ on vulnerable species, including the Koala. As stated in the guideline, “an action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of species
- reduce the area of occupancy of an important population
- fragment an existing important population into two or more populations
- adversely affect habitat critical to the survival of the species
- disrupt the breeding cycle of an important population
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
- result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species’ habitat
- introduce disease that may cause the species to decline, or
- interfere substantially with the recovery of the species.”

While the habitat located on the site is considered suitable for Koala, supporting a number of known food trees, the subject area is considered a “low usage” area. The targeted and intensive survey completed in 2014 and numerous past surveys by BAAM (2008 and 2013) only located limited evidence (single records of scat/scratches) of Koala. Koalas are known to prefer eucalypts on lower slopes/plains that support higher nutrient soils. The subject area has limited habitat meeting this criteria. While the subject area is not discounted as koala habitat, it is not considered “critical” but rather “low-value”. Accordingly, it is considered that the site does not host an important population of the species. As such, the development would not reduce the area of occupancy of an important population nor fragment an existing important population. Having considered that the site does not host an important population of Koala it is logical to conclude that the site does not include habitat that is critical to the survival of the species and the development can not disrupt the breeding cycle of an important population of Koala. Considering that the site does not host an important population of Koala and does not support habitat critical to the survival of the species it is unlikely that the removal of the habitat on site would result in the decline of the species. The existing and proposed extractive industry operation is conducted in accordance with the conditions of an environmental authority issued pursuant to the Environmental Protection Act 1994 which requires the implementation of a Site Based Management Plan which includes measures to manage invasive species and therefore it is unlikely that the development would result in invasive species becoming established in the Koala habitat. As the site does not host an important population of Koala it is unlikely that development of the site would introduce a disease that may cause the species to decline and it is unlikely that development of the site would interfere substantially with the recovery of the species. Accordingly, it is considered that the proposed activity is not likely to have a significant impact on Koala, in accordance with the criteria listed above.
3.1 (e) Listed migratory species
Description
Five (5) listed migratory species are shown as likely to occur within the area in the EPBC Act Protected Matters Report. Based on assessments conducted to date six (6) species listed under the migratory provisions have been recorded within the area included the, Rainbow Bee-eater, Cattle Egret, Great Egret, Satin Flycatcher, Rufus Fantail and White-throated Neddleail (refer Attachment 4 - Terrestrial Ecology Assessment). None of the five (5) listed, or six (6) recorded species under the migratory provisions are considered to be endangered or vulnerable.

Nature and extent of likely impact
With suitable rehabilitation planning and management of retained habitats, potential ecological impacts of the proposed activity can be effectively managed without resulting in significant impact to migratory species. Please refer to Attachment 4 - Terrestrial Ecology Report, for detailed information on the nature and extent of likely impacts on those species and environmental protection measures to be undertaken A copy of the Targeted Flora and Fauna Assessment and Site Based Management Plan forming part of development application can be provided upon request.

3.1 (f) Commonwealth marine area
(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.1 (g) Commonwealth land
(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.1 (h) The Great Barrier Reef Marine Park

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description
Not Applicable.

Nature and extent of likely impact
Not Applicable.

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a) Is the proposed action a nuclear action? ✓ No

If yes, nature & extent of likely impact on the whole environment

3.2 (b) Is the proposed action to be taken by the Commonwealth or a Commonwealth agency? ✓ No

If yes, nature & extent of likely impact on the whole environment

3.2 (c) Is the proposed action to be taken in a Commonwealth marine area? ✓ No

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))
3.2 (d) **Is the proposed action to be taken on Commonwealth land?**

<table>
<thead>
<tr>
<th></th>
<th>Yes (provide details below)</th>
<th>No</th>
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**If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))**

3.2 (e) **Is the proposed action to be taken in the Great Barrier Reef Marine Park?**

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<tr>
<th></th>
<th>Yes (provide details below)</th>
<th>No</th>
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</table>

**If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))**

### 3.3 Other important features of the environment

#### 3.3 (a) Flora and fauna

The Site is mapped as comprising non-remnant vegetation, high value regrowth vegetation, and remnant vegetation on the Queensland Government’s Vegetation Mapping. The remnant vegetation is predominantly ‘Least Concern Regional Ecosystem’ with pockets of ‘Of Concern Regional Ecosystem’. These are as follows:

- Remnant Vegetation Containing Of Concern Regional Ecosystems:
  - 12.3.11 (100%) - Eucalyptus siderophloia, E. tereticornis, Corymbia intermedia open forest on alluvial plains usually near coast.
  - 12.11.9 (100%) - Eucalyptus tereticornis open forest on metamorphics +/- interbedded volcanics. Usually higher altitudes.

- Remnant Vegetation Containing Least Concern Regional Ecosystems:
  - 12.11.3 (100%) - Open forest generally with Eucalyptus siderophloia, E. propinqua on metamorphics +/- interbedded volcanics.
  - 12.11.5 (100%) - Open forest complex with Corymbia citriodora, Eucalyptus siderophloia, E. major on metamorphics +/- interbedded volcanics.
  - 12.11.10 (100%) - Notophyll vine forest +/- Araucaria cunninghamii on metamorphics +/- interbedded volcanics.
  - 12.11.11 (100%) - Araucarian microphyll vine forest on metamorphics +/- interbedded volcanics; usually southern half of bioregion.

There are also areas mapped as comprising of high value regrowth vegetation, containing ‘Least Concern Regional Ecosystem’ and a PMAV Category X area. However, it should be noted that High Value Regrowth Vegetation is no longer regulated by the Vegetation Management Act 1999.

The Terrestrial Ecology Assessment tabulates an assessment of EPBC Act listed flora and fauna species, and likely occurrence within the subject area (refer **Attachment 4 - Terrestrial Ecology Assessment**: Table 5: EPBC Flora Assessment and Table 7: EPBC Fauna Assessment).

BAAM have prepared a Targeted Flora and Fauna Assessment for the Site which confirms the Site’s moderate to high ecological values as part of the development application. A copy of this report can be provided upon request. The BAAM Report finds, “with suitable rehabilitation planning and management of retained habitats potential detrimental ecological impacts of the proposed activity can be effectively managed without resulting in significant impact to local ecological values.”

The project involves the establishment of a 100 metre wide covenant area from the Northern Boundary of Lot 1RP54359, and a 100 metre wide area for rehabilitation at cessation of works adjacent to the entire boundary of the Site. Furthermore a licensed fauna spotter and catcher will be engaged prior to any clearing activities on the Site. The SBMP for the quarry (which is to be approved by the State Government) outlines provisions and management practices for any clearing activities on-site, which will ensure responsible clearing activities in accordance with legislative requirements. A copy of the SBMP can be provided upon request.
3.3 (b) Hydrology, including water flows

A broad scale assessment of surface water runoff characteristics has been completed for the proposed quarry development. This assessment included modelling of sub-catchment runoff for various stages of quarry development, including water treatment systems which have been integrated into the staged quarry designs and a Stormwater Erosion and Sediment Control Plan as part of the SBMP for the Site which is available upon request.

The main principles for water management at this Site which have been the basis for the design of water control and treatment features and have been incorporated in the existing quarry are as follows:

- Drainage systems and flow control devices are designed to control stormwater for a minimum design Average Recurrence Interval (ARI) of 5 years for a 24 hour event. Designs are based on calculated water discharge rates and velocities and are accompanied by construction dimensions.
- Land disturbance will be minimised to the maximum practicable extent.
- Stormwater drainage elements (catch drains, check dams, diversion drains/banks, sediment traps) will be installed as soon as practical and in a logical progression.
- Diversion or catch drains will be rip-rapped unless otherwise stated. Drains will be excavated and lined with specified rock materials to the design depth.
- Mobile equipment will be restricted to designated roads or hardstand areas.
- Water treatment systems comprising of grit traps, sediment settling ponds and filtration systems will be constructed to treat stormwater reporting to the quarry sumps. Monitoring and maintenance of the water treatment systems will ensure that sediment trapping capacity remains effective.
- Water will be recycled to the maximum practicable extent.

The water management strategy for the Site incorporates the physical controls that have been integrated into the quarry design process and the Stormwater Erosion and Sediment Control Plan for the Site which addresses operational procedures and requirements that support the physical controls.

Future water demand on-site will be dependent on production rates and market demand. Based on anticipated production rates, an average daily water consumption of 150 Kilolitres is estimated. Water usage has been estimated based on current experience and approximate average water requirements per tonne of material processed and average daily usage for dust suppression and cleaning requirements. Water will be harvested and stored on-site within sumps, water settling basins and purpose built water storage areas. Water losses from the Site are primarily water used for dust suppression, materials processing and evaporation losses. Future water demand will be met by the proposed water ponds. Additional water storage capacity may be established if necessary.

A Stormwater Erosion and Sediment Control Plan is included as part of the SBMP for the Site. The emphasis of the Stormwater Erosion and Sediment Control Plan is on the ongoing maintenance of the water conveyancing and treatment structures on-site and day to day operational activities and procedures which may impact on water quality. The Plan sets out the principles for water management and erosion control on-site and builds on current procedures and requirements for the following:

- installation and maintenance of erosion control devices
- installation and maintenance of water conveyancing and drainage controls
- management of fuel, oil, and chemical systems
- general housekeeping
- water conservation / reuse
- monitoring
- review of the Plan.

3.3 (c) Soil and Vegetation characteristics

The soils occurring on the Site generally reflect the underlying rock types of the Neranleigh Fernvale beds and are strongly correlated to the topography. The soil profile thickness was generally around 300mm over the main ridgelines; however, the soil and alluvium increases away from the ridgelines down the slope, with the overburden thickness at the base of the slope up to 10m thick.

3.3 (d) Outstanding natural features

Not Applicable.
3.3 (e) Remnant native vegetation

Refer to Attachment 4 - Terrestrial Ecology Assessment for detailed information on the vegetation values of the affected area.

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The Site comprises elevations between 25 m AHD to 275 m AHD. The Site consists of rugged hilly terrain in the east, south and north whilst the areas on the west are of a more gentle relief and less incised nature. The northern, southern and eastern landforms are characterised by steep slopes and gullies. The slopes of these upper flanks of the ridges are steep to very steep while the lower flank slopes are generally moderately inclined.

3.3 (g) Current state of the environment

Quarrying operations commenced as the Pioneer Quarry in about 1981 following rezoning of part of the current Site by Gold Coast City Council to Extractive Industry. Approvals were also issued by Council for an Excel Quarry on the Site in 1995. Since this time, the Site has been subject to multiple development approvals for expansion and integration of the Pioneer Quarry and the Excel Quarry to form the Wolffdene Quarry. The area of the proposed extension is currently not intensely used. The area is vegetated, and is improved by fences and trails. Parts of the proposed extension area are used for cattle grazing.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

Not Applicable.

3.3 (i) Indigenous heritage values

Hanson engaged Jabree Limited to undertake a Preliminary Cultural Heritage Assessment of the Site. Under the Aboriginal Cultural Heritage Act 2003, Jabree Limited is the Registered Aboriginal Cultural Heritage Body for the Gold Coast Native Title Group QUD346/2006 claim area. In accordance with the recommendations of the Preliminary Cultural Heritage Assessment, Hanson will engage suitably qualified and approved experts to undertake further investigations of Aboriginal cultural heritage prior to undertaking any land disturbing activities associated with the extension of the quarry. In the event the further investigations find items of cultural heritage significance, further investigations will be undertaken and approvals sought in accordance with the requirements of the Aboriginal Cultural Heritage Act 2003.

3.3 (j) Other important or unique values of the environment

Extensive field surveys were undertaken to assess the terrestrial vertebrate fauna and associated habitat values within the proposed extension area. The Terrestrial Ecology Assessment prepared by Gondwana Ecology Group Pty Ltd identifies the significant fauna confirmed on the Site (refer Attachment 4 - Terrestrial Ecology Assessment). Six EPBC Act species listed under the Migratory provisions were recorded within the subject area: Rainbow Bee-eater; Cattle Egret, Great Egret; Satin Flycatcher; Rufous Fantail; and White-throated Needletail. Three species listed as Vulnerable under the NC Act were confirmed on the Site: Glossy Black-cockatoo; Powerful Owl and Koala. Koala is also listed as Vulnerable under the EPBC Act. While the habitat is considered suitable for Koala, supporting a number of known food trees, the subject area is considered a “low usage” area. The targeted and intensive survey completed in 2014 and numerous past surveys by BAAM (2008 and 2013) only located evidence (single records of scat/scratches). Koalas are known to prefer eucalypts on lower slopes/plains that support higher nutrient soils. The subject area has limited habitat meeting this criteria. While the subject area is not discounted as koala habitat, it is not considered “critical” but rather “low-value”. The area associated with the waterway (in the west) supports large E.tereticornis on alluvial soils, considered more suitable for Koala. Refer Attachment 4 - Terrestrial Ecology Assessment for more detailed information.

3.3 (k) Tenure of the action area (eg freehold, leasehold)

Freehold.

3.3 (l) Existing land/ marine uses of area

Land surrounding the Site is predominantly used for extractive industry, rural and rural residential. The existing extractive industry operation is located on Lot 2 on RP167150 and Lot 1 CP893562. Ancillary facilities include a crushing and screening plant, workshops, stockpile areas, water storage dams, weighbridge, laboratory, core shed, offices, employee amenities, and a concrete batching plant. The area of the proposed extension is currently not intensively used. Improvements to the land are of a rural residential nature and include fences and stock yards, for the use of cattle grazing.
3.3 (m) Any proposed land/marine uses of area

- Extension of the existing extractive industry at Wolffdene
- Retention of additional buffer land

4 Measures to avoid or reduce impacts

Development planning for the proposal has involved the consideration of environmental, physical and operational constraints to evolve the development proposal and associated progressive rehabilitation. A Site Based Management Plan (SBMP) for the proposed development has been prepared to provide a practical guide at the operational level to contain potential environmental impacts and establish monitoring programs. The proposed activity cannot commence without approval of the SBMP by the State Government. The following measures will be undertaken to avoid or reduce potential environmental impacts generated by the proposed development.

Fauna and Flora

- Any necessary vegetation and fauna protection measures will be in place prior to the commencement of any stage of site excavations and be maintained until the area is fully rehabilitated, and will include:
  - Surveying area to be cleared to be undertaken by an appropriately qualified person prior to clearing.
  - Engaging a spotter-catcher holding a valid Rehabilitation Permit from the EHP prior to any clearing operations to supervise, minimise risk of injury to fauna and undertake the removal and relocation of fauna where necessary, when recommended by the pre-clearing fauna survey and approved by EHP.
  - Transplanting any identified species for protection as necessary or practicable.
  - Installing markers, flagging or fencing around protected vegetation/vegetation to be retained zones or areas under rehabilitation.
  - Implementing stormwater, erosion and sediment controls before any excavation works commence for each stage of extraction and are maintained until the area is fully rehabilitated.

Vegetation Clearing

- Prior to the clearing of any vegetation, a Vegetation Clearing Plan shall be prepared in accordance with the following protocols:
  - Land disturbance is to be minimised and clearing limited, as far as practical, to the extent necessary for each stage.
  - The sequence and direction of vegetation clearing will be designed to ensure fauna have sufficient opportunity to move from the clearing Site without human intervention.
  - Vegetation clearing shall be carried out in stages using a sequential clearing technique.
  - Prior to clearing, the limits of the approved area to be cleared shall be clearly marked with markers, flagging or fencing prior to clearing.
  - A pre-clearing survey of area(s) to be cleared shall be undertaken by an appropriately qualified person and where fauna is identified on-site appropriate action is to be undertaken to minimise potential harm to fauna.
  - Trees containing fauna or suspected of containing fauna shall be marked with coloured survey tape which is wrapped several times around the tree trunk at chest height.

Topsoil Management

- Topsoil is the material that supports and promotes plant growth, and contains soil micro-organisms, organic matter and nutrients. Topsoil is defined as the organic-rich and friable layer beneath the natural ground surface.
- The following measures will be implemented for topsoil stripping:
  - Topsoil should be stripped at an appropriate moisture content (e.g. when it is too wet or too dry).
  - Topsoil when stripped, should be used directly for rehabilitation to the maximum practicable extent or appropriately stockpiled and preserved for later use.
  - Stockpiling of topsoil not to exceed a height of 2 m, shaped (i.e. batters no greater than 1H:2V) and revegetated to protect the soil from erosion and weed infestation.
  - Maintain stockpiles in a free draining condition and avoid long-term soil saturation.
  - “Run on” water should be prevented from flowing across the area to be stripped.
  - Stripping of topsoil should be limited to the minimum area necessary.
- The following measures will be implemented for topsoil spreading, wherever possible:
  - Stripped topsoil should be directly placed on an area undergoing rehabilitation.
  - Areas to be topsoiled should be re-shaped prior to placing topsoil.
  - Equipment used to spread topsoil should be scheduled to avoid compaction.
  - Before respreading the topsoil, loosen the subsoil to break up any compacted or surface sealing and to enable keying of the two soils.
  - On slopes less than 3:1 (H:V) loosen compacted subsoil with a tined implement to an appropriate depth, ensuring all ripping operations occur along the contour.
- Topsoil to be removed from stockpiles in a manner that avoids vehicles travelling over the stockpiles.
- Topsoil to be re-spread in the reverse sequence to its removal so that the original upper soil layer is returned to the surface to re-establish the entrapped seed content of the soil.
- Ensure all exposed subsoils are covered.
- Topsoil be respread over selected batters, contours, bunds and disturbed areas to an appropriate thickness.
- After spreading topsoil, ensure the surface is left in a roughened state to assist moisture infiltration and inhibit soil erosion.
- Prior to any planting, cultivate any compacted or crusted topsoil surfaces.
- Soil spreading is to be immediately followed by seeding or planting if applicable.
- Where necessary, straw or organic mulch may be spread over the soil to minimise potential soil erosion until the area is revegetated.
- If erosion occurs on treated surfaces, the area should be re-topsoiled and sown with cover grass.

**Revegetation**

**Methods:** There are a range of methods for establishing vegetation including natural regeneration, hydro mulching, seed broadcasting, seeding planting and direct seeding. Natural regeneration by careful management of natural soil clearing on Site will be the preferred method of establishing vegetation. Effective quarry bench rehabilitation at the Site has been achieved as part of normal quarry activities with existing Site conditions providing appropriate foundations for natural regeneration rehabilitation strategy, with well established topsoils containing abundant seed material supported by the regional subtropical climate. Hanson’s leading practice rehabilitation methods through natural regeneration were recognised by the industry during the 2011 Cement Concrete and Aggregates Australia (CCAA) Queensland Environmental Health and Safety Awards where Hanson received the Environmental Award for innovation.

During the process of stripping overlying soils from the rock resource, topsoil and overburden is removed separately and immediately transported and relocated against terminal quarry faces. Overburden is placed at a minimum depth of one metre against terminal quarry faces (as wide as the terminal bench) before the terminal bench width is reached.

Topsoil (containing an abundant natural seed bank) is then placed on top of the overburden to a minimum depth of 5cm. By placing both the overburden and topsoil against the quarry terminal face before the terminal bench width is achieved, the rehabilitation material can be safely and effectively positioned without being track rolled by quarry machinery on narrow benches. This enables a less compacted growing medium and far higher germination rates from the natural seed bank. Planting media has also been shaped to assist in retaining precipitation and controlling sediment movement.

Because topsoil is sourced from the immediate area, the species that germinate are best suited for the rehabilitated area. This ensures the best possible rate of survival for the rehabilitated flora. In addition, as the rehabilitated flora is consistent with the surrounding ecosystem, native fauna can quickly inhabit the rehabilitated area as it develops. As the process forms part of the normal quarrying activities, it is efficient, effective and allows for true progressive and sustainable rehabilitation.

As an alternative, seedling planting and direct seeding may be used in the event that natural regeneration is not successful. The following methods relate to establishing seedlings.

The following general planting methodology will be used on-site:

- In areas where planting is required, tubestock will be used.
- Plants should be true to the scheduled nomenclature, healthy, well formed, not root bound, sun hardened and sourced pest and disease free.
- Plants shall be container grown in soil with the root system firmly established, but with no large roots growing out of the container nor shall there be any indication of the plants being restricted or damaged at any time. Trees and shrubs shall have been grown in their final containers.
- If required, planting sites will be sprayed with glyphosate or a suitable alternative non-residual herbicide at least two weeks prior to planting.
- A shallow basin will be constructed when planting to encourage water to enter the plant root area.
- Tubestock will be watered in with a minimum of two litres of water.
- Maintenance and monitoring will be carried out on planted areas for at least 12 months from the time of planting.
- Regular weed control campaigns will be used and, where necessary, mulch will be periodically replaced and topped up as the mulch breaks down.

Ground surfaces including the quarry floor will be grass seeded in accordance with the conceptual final land use. Where seed is required for the rehabilitation works, they will preferably be supplied with information on the source and if possible should be certified for viability.

**Staging:** Initially, rehabilitation will focus on rehabilitating terminal batters once final limits are reached and batters of sediment basin(s) and any clean water catchment diversion channels and/or diversion banks are finalised. Rehabilitation of the quarry floor will commence following terminal batter formation, subject to meeting safety expectations and once areas become available following the cessation of quarrying activities. The timing of rehabilitation will also depend on market and general economic and climatic conditions.
Ground Preparation: For the quarry floor, where necessary topsoil is to be placed on areas to be re-vegetated, with any compacted areas ripped prior to placement of topsoil. For quarry batters and benches, topsoil will be applied where necessary. Any fresh-to-moderately weathered rock should be fragmented prior to topsoil placement.

Watering: Direct seeding is best carried out prior to good rainfall or following soaking rain. Following seeding or planting, areas should be watered as required to ensure soil moisture is retained during establishment.

5 Conclusion on the likelihood of significant impacts

5.1 Do you THINK your proposed action is a controlled action?

- [ ] No, complete section 5.2
- [x] Yes, complete section 5.3

5.2 Proposed action IS NOT a controlled action.

The proposed action relates to the ongoing extractive industry and an extension of the area of quarry workings. The fauna and flora values of the proposed area of extension have been subject to studies which indicate that significant impacts on matters of National Environmental Significance are not likely.

The Significant Impact Criteria in the Significant Impact Guidelines have been reviewed. Consequently, it appears that the proposed action is not likely to have a significant impact on a matter of National Environmental Significance.

5.3 Proposed action IS a controlled action

Not Applicable.
## 6 Environmental record of the responsible party

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>6.1 Does the party taking the action have a satisfactory record of responsible environmental management?</strong></td>
<td>✓</td>
<td></td>
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<td><strong>Provide details</strong></td>
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<tr>
<td>Hanson has operated in Australia for over 50 years and currently operates approximately 300 sites. To date, Hanson has not been subject to any known prosecution for environmental breaches. Approximately 100 of Hanson’s sites have third party certification to 14001 and the remainder operate to 14001 but are yet to be certified.</td>
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<td><strong>6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</strong></td>
<td>✓</td>
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<td><strong>If yes, provide details</strong></td>
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<td><strong>6.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation’s environmental policy and planning framework?</strong></td>
<td>✓</td>
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<tr>
<td><strong>If yes, provide details of environmental policy and planning framework</strong></td>
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<td>Hanson implements an environmental policy in which Hanson accepts the responsibility for environmental protection which is integral to the conduct of its commercial operations. Hanson is committed to:</td>
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<tr>
<td>- <strong>Operating practices</strong> which seek to minimise impacts, prevent pollution and minimise the likelihood of environmental harm through work and management practices, continual improvement, training and the use of new technology;</td>
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<td>- <strong>Compliance</strong> with all applicable environmental laws and regulations and Codes of Practice in existing operations, new developments and upgrades;</td>
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<td>- <strong>Management review</strong> of environmental objectives and targets;</td>
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<td>- <strong>Waste management</strong> to minimise wastes, develop viable recycling opportunities, and ensure proper handling and disposal methods;</td>
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<td>- <strong>Product development</strong> which seeks to combine commercial viability and efficient use and conservation of resources;</td>
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<tr>
<td>- <strong>Environmental assessment</strong> of new products, asset purchases, sales and existing operations;</td>
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<tr>
<td>- <strong>Environmental Incident Response</strong> - contingency plans to minimise health, safety and environmental risks;</td>
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<td>- <strong>Rehabilitation</strong> of areas affected by business operations;</td>
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<td>- <strong>Communication</strong> of the Hanson environmental policy;</td>
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<td>- Striving to meet community expectations through consultation within Hanson and with other relevant bodies, community groups and neighbours about environmental matters of common concern;</td>
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<td>- <strong>Water management</strong> which is integral to achieving sustainability, balancing today’s needs with those of the future (refer to Water Policy for more information); and</td>
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<tr>
<td>- <strong>Energy management</strong> which is integral to managing greenhouse gas emissions from our operations and thus abating the impact of our business on the climate (refer to Hanson’s Energy Management Policy for more information).</td>
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<tr>
<td>Hanson will encourage concern and respect for the environment and will emphasise every employee’s responsibility for environmental performance.</td>
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</tbody>
</table>
### 6.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

<table>
<thead>
<tr>
<th>EPBC Reference</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>2012/6664</td>
<td>Hanson Construction Materials Pty Ltd/Mining/Approx 45km south east of Townsville/QLD/Hanson Fine Sand Quarry, Cungulla</td>
</tr>
<tr>
<td>2010/5347</td>
<td>Hanson Construction Materials/Mining/Marbury Park, Mambourin, 13 km West of Werribee/VIC/Werribee Stone Extraction Project</td>
</tr>
<tr>
<td>2009/4984</td>
<td>Hanson Construction Materials Pty Ltd/Mining/Flinders Hwy, Brookhill/QLD/Extension to existing Extractive Industry, Roseneath Quarry</td>
</tr>
<tr>
<td>2009/4747</td>
<td>Hanson Construction Materials/Mining/Transport - land/Kirks Bridge &amp; Live Bomb Rds Mambourin 10km west of Werribee/VIC/Construction of Haulage Road</td>
</tr>
<tr>
<td>2008/4210</td>
<td>Hanson Construction Materials Pty Ltd/Mining/Flagstaff Rd Lindisfarne/TAS/Extension of Flagstaff Quarry</td>
</tr>
<tr>
<td>2007/3433</td>
<td>Hanson Construction Materials (Pty Ltd)/Mining/Red Hill/WA/Extension of Red Hill hard rock quarry, Lot 11 Toodyay Road</td>
</tr>
</tbody>
</table>
7 Information sources and attachments
(For the information provided above)

7.1 References
Refer to the relevant section of the attachments to this referral application for the full list of references used in the preparation of this referral application.

7.2 Reliability and date of information
Refer to the relevant section of the attachments to this referral application for details on the reliability and date of information used to support the contents of those reports and plans.

7.3 Attachments

<table>
<thead>
<tr>
<th>You must attach</th>
<th>Title of attachment(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>figures, maps or aerial photographs showing the project locality (section 1)</td>
<td>Attachment 5 - Planning Assessment Report</td>
</tr>
<tr>
<td>figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)</td>
<td>Attachment 5 - Planning Assessment Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If relevant, attach</th>
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</tr>
</thead>
<tbody>
<tr>
<td>copies of any state or local government approvals and consent conditions (section 2.5)</td>
<td>Attachment 5 - Planning Assessment Report</td>
</tr>
<tr>
<td>copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)</td>
<td>Attachment 5 - Planning Assessment Report</td>
</tr>
<tr>
<td>copies of any flora and fauna investigations and surveys (section 3)</td>
<td>Attachment 4 - Terrestrial Ecology Assessment; Attachment 5 - Planning Assessment Report</td>
</tr>
<tr>
<td>technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)</td>
<td>Attachment 4 - Terrestrial Ecology Assessment; Attachment 5 - Planning Assessment Report; Attachment 6 - Biodiversity Offset Strategy</td>
</tr>
<tr>
<td>report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)</td>
<td>Attachment 5 - Planning Assessment Report</td>
</tr>
</tbody>
</table>
8 Contacts, signatures and declarations

**Project title:** Wolffdene Quarry Extension

### 8.1 Person proposing to take action
- **Name:** Peter Martin
- **Title:** Development Manager
- **Organisation:** Hanson Construction Materials Pty Ltd
- **ACN / ABN (if applicable):** ABN 90 009 679 734
- **Postal address:** C/- Jim Lawler, Groundwork Plus, PO Box 1779, Milton BC, QLD, 4064
- **Telephone:** (07) 3871 1239
- **Email:** jlawler@groundwork.com.au
- **Declaration:**
  I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
  I understand that giving false or misleading information is a serious offence.
  I agree to be the proponent for this action.

**Signature**

**Date**

### 8.2 Person preparing the referral information (if different from 8.1)
- **Name:** Jim Lawler
- **Title:** Project Director
- **Organisation:** Groundwork Plus
- **ACN / ABN (if applicable):** ABN 80 829 145 906
- **Postal address:** PO Box 1779, Milton BC, QLD, 4064
- **Telephone:** (07) 3871 0411
- **Email:** jlawler@groundwork.com.au
- **Declaration:**
  I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
  I understand that giving false or misleading information is a serious offence.

**Signature**

**Date**
REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- Completed all required sections of the referral form?
- Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- Provided a map showing the location and approximate boundaries of the project area?
- Provided a map/plan showing the location of the action in relation to any matters of NES?
- Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- Provided complete contact details and signed the form?
- Provided copies of any documents referenced in the referral form?
- Ensured that all attachments are less than three megabytes (3mb)?
- Sent the referral to the Department (electronic and hard copy preferred)?
Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:
- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:
- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
  - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
  - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or ‘information about data’ will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department’s preferred method is using ANZMet Lite, however the Department’s Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (http://creativecommons.org/licenses/by/3.0/au/)