

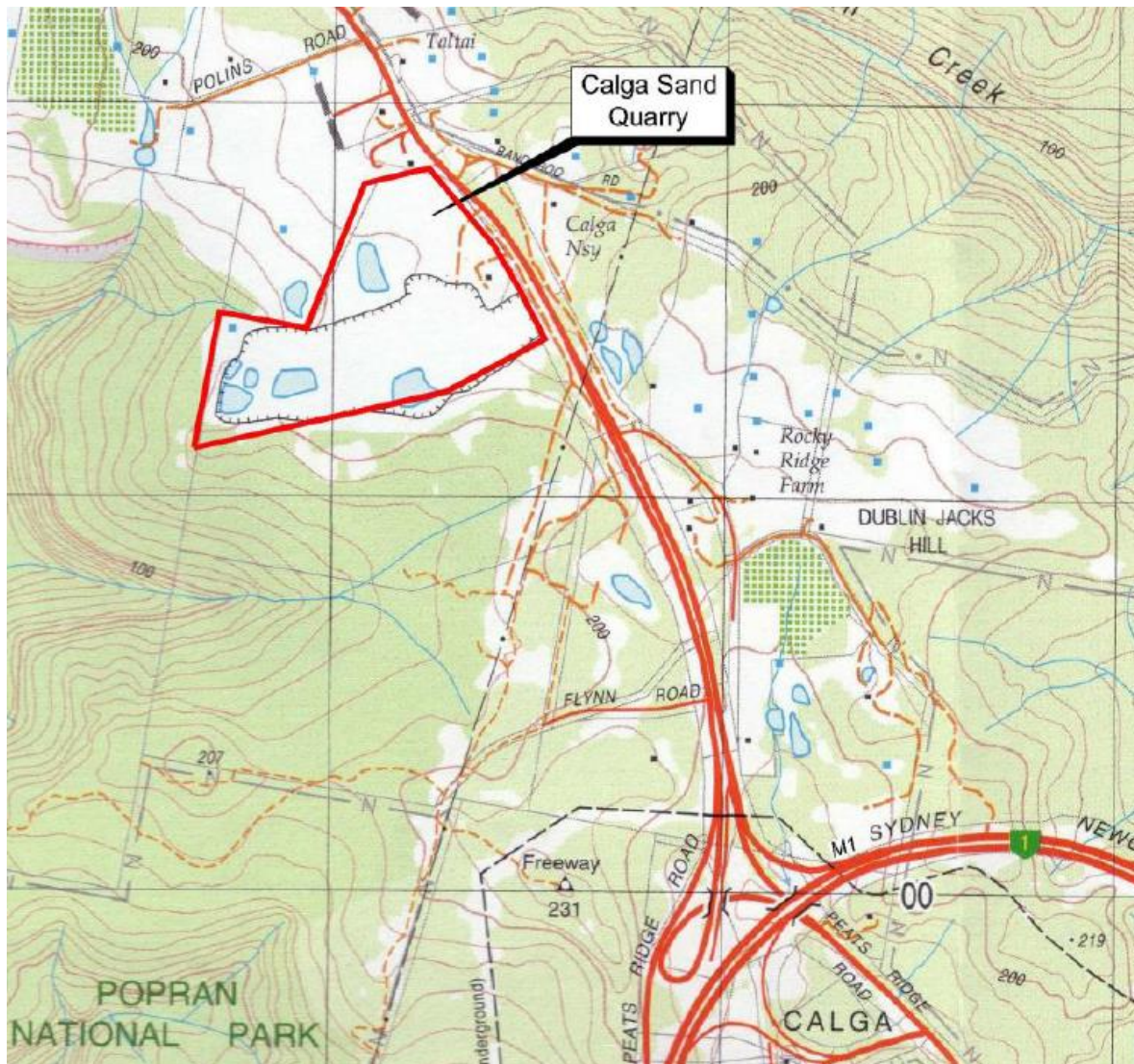
## Calga Sand Quarry Modification 3 – Crushing System (DA 94-4-2004 MOD 3)

### Environmental Assessment Report

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

#### 1. BACKGROUND

Calga Sand Quarry is located at 1215 Peats Ridge Road, Calga, in the Central Coast local government area. The site is approximately 1.7 kilometres northwest of the Calga Interchange on the M1 Freeway (see **Figure 1**).



**Figure 1: Locality Map**

Hanson Construction Materials Pty Ltd (Hanson) owns and operates the quarry, which extracts friable sandstone which is crushed and screened for the production of sand to make concrete and mortar. Operations at the quarry commenced in 1991, under a Court approved consent (Development Consent No.10604) for extraction of Stages 1 and 2. However, the quarry currently

operates under a Ministerial development consent granted in October 2005 (DA 94-4-2004) for the extension of operations to the north, known as Stage 3. This consent allows Hanson to:

- extract the friable sandstone by bulldozer ripping;
- process the resource on site at one of two plants;
- transport up to 400,000 tonnes per annum (tpa) of product from the site via public roads; and
- progressively rehabilitate the site.

This consent was previously modified to permit the relocation of the existing administration facilities (Modification 1). A second modification application was lodged in November 2015 which proposed the installation of a crushing system. However, this application was withdrawn in December 2015.

In 2006, the former operator of the quarry (Rocla Pty Ltd), sought approval to extend extraction and processing operations on lots to the south of the site. This was known as the 'Southern Extension Project'. This application was initially approved by the Planning Assessment Commission but, following appeal, was refused by the NSW Land and Environment Court (LEC) in November 2015. This project was refused on the grounds of Aboriginal heritage, as it was considered to pose significant impacts to a nearby Aboriginal women's site (the 'Women's Site') and other potential Aboriginal heritage sites and items within the proposed additional extraction areas.

## 2. PROPOSED MODIFICATION

On 11 July 2016, Hanson lodged a modification application and accompanying Environmental Assessment (EA) under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The modification application (Modification 3) seeks to install and operate a diesel-powered crushing system within the quarry pit in order to reduce the quantity of oversized raw material unable to be processed by the existing processing plant. This would improve the yield of processed quarry products that could be despatched to the market. In addition, installation of a crushing system would reduce the need for the bulldozer to rip the sandstone multiple times in order to reduce the size of the material.

Although the modification would increase the amount of saleable product, it does not seek to increase the amount of product permitted to be transported from the site per year. Also, it does not seek to amend the quarry life, operating hours, water usage, extraction depth or extraction methods.

The proposed crusher would be located adjacent to the boundary of extraction in Stage 3/1, within an area currently designated for processing and stockpiling activities (see **Figure 2**).

## STATUTORY CONTEXT

### 3.1 Section 75W

DA 94-4-2004 was granted under Part 4 of the EP&A Act. In accordance with clause 8J(8) of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation) and the transitional arrangements under Schedule 6A of the EP&A Act, the modification must be determined under the former section 75W of the EP&A Act.

The Department is satisfied that the nature of the modification is within the scope of section 75W. Although the proposed modification seeks to install a crushing system on site, it does not seek to change the nature or scale of the approved quarry operations. The Department is satisfied that the proposed modification is within the scope of section 75W, and may be determined accordingly.

### 3.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, the Planning Assessment Commission must determine the application under the Minister's delegation of 16 February 2015, as more than 25 public submissions objected to the proposal.

### 3.3 Environmental Planning Instruments

A number of environmental planning instruments apply to the modification, including:

- *State Environmental Planning Policy (SEPP) (Mining, Petroleum and Extractive Industries) 2007*;



- SEPP (Infrastructure) 2007;
- SEPP (State and Regional Development) 2011;
- SEPP No. 33 – Hazardous and Offensive Development;
- SEPP No. 55 – Remediation of Land; and
- Gosford Local Environmental Plan 2014.

The Department has assessed the proposed modification against the relevant provisions of these instruments and reviewed Hanson’s consideration of these matters in its EA. The Department is satisfied that the proposed modification can be carried out in a manner that is consistent with the aims, objectives and provisions of these instruments.

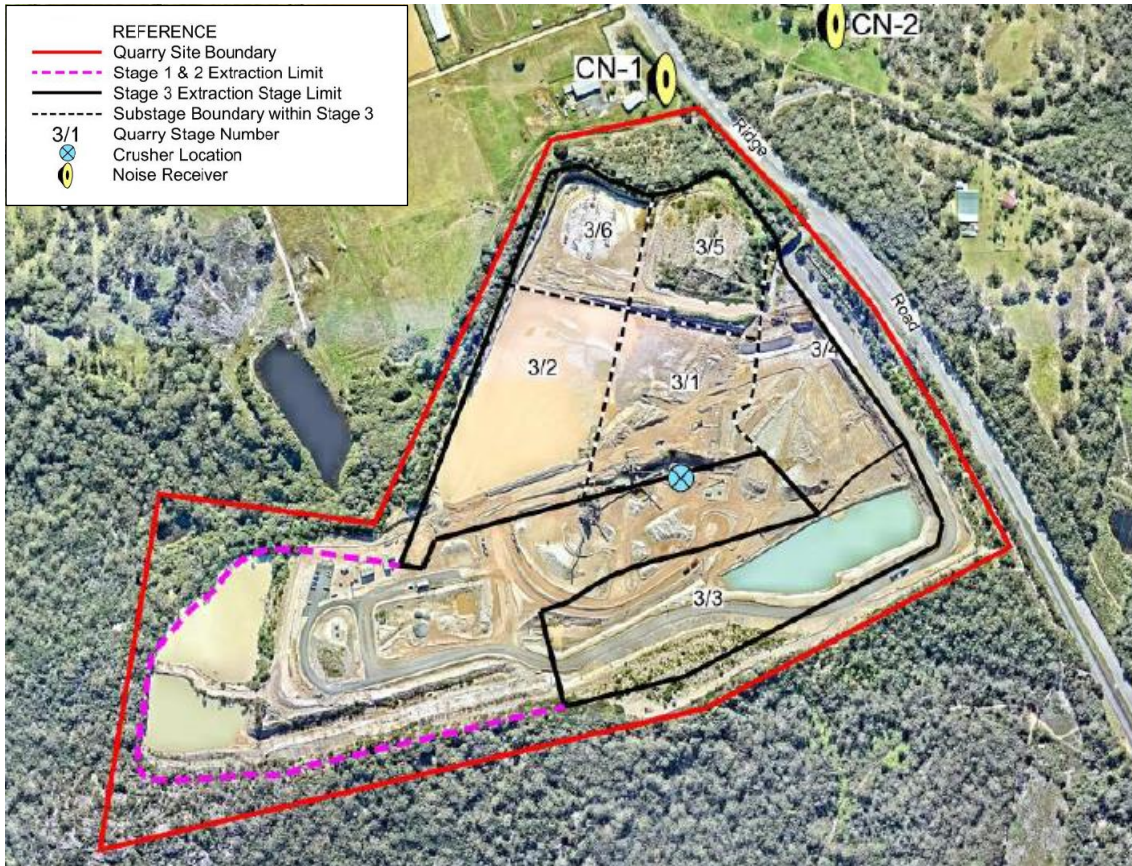


Figure 2: Proposed crusher location

### 3. CONSULTATION

After accepting the EA for the proposed modification, the Department:

- publicly exhibited the EA from 29 August until 12 September 2016 on the Department’s website and at the:
  - Department’s Information Centre;
  - Central Coast Council’s Gosford office; and
  - Nature Conservation Council’s office;
- advertised the exhibition of the EA in the *Central Coast Express Advocate*; and
- notified relevant State government agencies and Central Coast Council.

The Department is satisfied that the notification process met the requirements of the EP&A Act and the EP&A Regulation.

The Department received 31 submissions in response to the exhibition, including:

- three government agency submissions; and
- 28 public and special interest group submissions objecting to or commenting on the project;

A summary of the issues raised in submissions is provided below. Full copies of these submissions and Hanson’s Response to Submissions (RTS) are provided in **Appendices B** and **C**, respectively.

#### 4.1 Agency Submissions

The **Environment Protection Authority (EPA)** requested further information on the scenarios used in the noise modelling, attended noise monitoring and the calculation of predicted noise levels of the crushing system in isolation. The EPA also noted that the Women's Site located to the south of the quarry was not identified as a sensitive receiver in the Noise Impact Assessment and questioned whether it should be identified as a 'place of worship' under the *NSW Industrial Noise Policy (INP)*. However, EPA indicated that it was not in a position to answer this question, despite administering the application of the INP. The Department has considered this matter (see **Section 5.3**).

The **Office of Environment and Heritage (OEH)** considered that the installation and operation of the crushing system would not result in additional impacts to biodiversity, flooding or Aboriginal cultural heritage. However, OEH reinforced the importance of the Aboriginal cultural landscape surrounding the quarry site and advised that an 'Aboriginal Place' nomination had been received for the Calga cultural landscape. As a result of this nomination, additional cultural studies of the Calga landscape have been undertaken and have further identified the social, cultural, spiritual and scientific significance of the Women's Site and surrounding landscape.

OEH advised that suitable mechanisms should be developed in consultation with members of the Aboriginal community, to avoid and mitigate harm to Aboriginal cultural heritage values as a result of the ongoing operation of the quarry.

The **Division of Resources and Energy (DRE)** within the Department of Industry (which has since become the Division of Resources and Geoscience (DRG) within the Department) noted the importance of the quarry's source of construction sand for the local and regional area. DRG encouraged the incorporation of a crushing system to allow for the greater recovery of the extracted resource to achieve maximum resource utilisation.

**Central Coast Council** did not provide comment on the proposed modification.

#### 4.2 Public and Special Interest Group Submissions

The Department received 28 submissions from the public and special interest groups including:

- 26 objections; and
- two comments.

Most objections raised concerns about the scope of the modification. There was general dissatisfaction with the level of consultation that had been undertaken in relation to the proposed crusher. In particular, there was speculation of the company's motive to install the crusher as the EA did not clearly demonstrate how the crusher would be utilised and why it was needed. These submissions identified that it was unclear as to how the crusher would affect existing quarrying operations, including depth of extraction, operating hours, water usage, truck movements and product despatch. Hanson provided this information in their RTS and this has been incorporated in the description of the proposed modification (see **Section 2** above).

In addition, objectors raised several key issues with the proposed crusher including its proximity to the nearby Women's Site and associated impacts on the site and surrounding areas due to additional noise, dust and vibration. In addition, some objectors raised concerns regarding the amount of water the crushing system would require and the progression of rehabilitation as a result of processing extra material.

The Darkinjung Local Aboriginal Land Council (DLALC) provided comment on the proposed modification. DLALC emphasised that the Women's Site forms part of a complex Aboriginal cultural landscape and that the physical effects of noise, vibration and dust on the Women's Site and the surrounding landscape should be considered. It was also recommended that the Land and Environment Court's judgement on the Southern Extension Project be considered.

## 5. ASSESSMENT

In assessing the merits of the proposal, the Department considered:

- the project's original Environmental Impact Statement and existing conditions of consent (as modified);
- the EA supporting the proposed modification (see **Appendix A**);
- agency and community submissions (see **Appendix B**);

- Hanson's RTS (see **Appendix C**);
- the NSW LEC 2015 refusal of the Southern Extension Project (NSWLEC 1465);
- provisions of relevant environmental planning instruments, policies and guidelines; and
- relevant provisions of the EP&A Act.

The Department considers the key assessment issues to be noise, air quality and Aboriginal cultural heritage. Consideration of these issues is provided below, with consideration of other impacts provided in **Table 1**.

### 5.1 Noise

Under the existing consent, the  $L_{Aeq(15min)}$  noise impact criterion for all surrounding receptors is 35 dB(A) at all times, except for Receptors 3, 4 and 5 which have Day period limits of 41, 40 and 39 dB(A), respectively.

The EA provided noise predictions at sensitive receptors using the noise model prepared for the Southern Extension Project's Noise Assessment, with the inclusion of the crushing system's sound power level of 109 dB(A). Additionally, the EA provided noise level predictions for the crushing system alone at the two closest receivers (CN1 and CN2), based on attended noise monitoring data from 2013. The noise level of the crushing system alone was predicted to be approximately 30 dB(A) at these receivers.

The EPA requested further clarification on the noise scenario that was modelled, the conditions experienced during attended noise monitoring and how noise levels for the crushing system in isolation were calculated.

Hanson's RTS advised that the modelling scenario was based on extraction activities during Stage 3/6 and the location of processing equipment to the south of Stage 3/2. The predictions considered 41 meteorological scenarios including wind speeds of 0.5 – 3 metres / second in each of eight directions. Additionally, the RTS provided additional information concerning the operational conditions during attended noise monitoring and justification of the crushing system's predicted noise level. The EPA considered the additional information acceptable and requested no further information.

The proposed crushing system would be located at the base of an existing extraction face, which would provide some noise shielding. With the added crushing system, noise levels generated by the quarry are predicted to meet the existing noise criteria in the consent for all receptors, except at Receptor 8 (3 Jones Road), where an exceedance of 1 dB(A) is predicted during the Day period (ie a predicted noise level of 36 dB(A)).

The consent's existing noise impact criteria were first set in 2005. Subsequently, new rating background levels (RBLs) were established for Receptors 8, 9, 13 and 20 during the noise assessment undertaken for the Southern Extension Project. This assessment identified that the RBLs had increased since 2005.

The opportunity therefore arises to set new noise criteria in line with revised PSNLs (ie the more-recently calculated RBLs plus 5 dB(A)) at Receptors 8, 9, 13 and 20. However, the noise impacts associated with the proposed modification are predicted to be less than these PSNLs, and the Department considers it inappropriate to set noise criteria that are higher than current predictions.

The EPA agreed with this approach and recommended that no changes be made to existing noise criteria except Receptor 8, where the day time noise criterion would be reset at 36 dB(A)  $L_{Aeq(15min)}$ . This 1 dB(A) increase in sound level would not be discernible to the human ear and the Department agrees with EPA's recommendation. Amended conditions of consent have been drafted to this effect.

Hanson is currently required to implement a Noise Monitoring Program (NMP) to evaluate compliance with the consent's noise impact criteria. The Department has recommended that this condition be replaced with contemporary noise operating and Noise Management Plan conditions.

As the proposed modification would result in only a single minor change to existing noise impact criteria, the Department is satisfied that the predicted noise impacts would be acceptable and could be managed in accordance with the requirements of a contemporary Noise Management Plan and the site's existing Environmental Protection Licence.

## 5.2 Air Quality

The EA for the proposed modification included the Southern Extension Project's Air Quality Assessment (AQA). Hanson considered that this assessment would provide a conservative assessment of the potential impacts of the proposed crushing system because the:

- AQA was based on an annual production rate of one million tonnes per annum (tpa), whereas quarry production under the current consent would not exceed 400,000 tpa;
- AQA assumed two crushing systems in operation, whereas the proposed modification only proposes one crushing system;
- proposed modification proposes that the crushing system is in a similar location to one of the crushing systems proposed in the Southern Extension Project; and
- AQA assumed emission sources from two extraction areas (Stage 3 and 4), whereas the existing quarry would only extract in the Stage 3 area.

The EPA raised no concern in relation to the use of the AQA to assess impacts of the proposed modification.

Under the AQA, the maximum predicted 24-hour and annual average PM<sub>10</sub> impacts at private receivers is 22 µg/m<sup>3</sup> and 17.9 µg/m<sup>3</sup>, respectively. These predictions are below the relevant criteria of 50 µg/m<sup>3</sup> (24-hour average) and 30 µg/m<sup>3</sup> (annual average). The AQA also predicted no exceedances of the total suspended particulates or deposited dust criteria at any private receiver.

The Department considers that these predictions are very conservative, for the reasons noted above. However, it also notes that the predictions are based on the baseline assumption that Hanson would apply dust mitigation measures including watering of stockpiles, access tracks and haul roads, and progressively rehabilitating disturbed areas.

The direct air quality impacts of the proposed crushing system are likely to be minor. However, the proposed mitigation measures in the AQA should be implemented to ensure that all adverse air quality impacts from the quarry are reduced as much as possible. The Department has recommended contemporary air quality operating and Air Quality Management Plan conditions to replace the existing condition simply requiring an Air Quality Monitoring Program.

## 5.3 Aboriginal Cultural Heritage

The Women's Site is located approximately 360 metres (m) from the proposed crusher site and 90 m from the quarry boundary on land which is owned by Hanson (see **Figure 3**). The Women's Site comprises a stone arrangement and a series of rock engravings and possesses high archaeological and cultural significance. Due to the location of the Women's Site and the uncertainty of whether other sites exist in the cultural landscape, the threat of serious and irreversible damage to Aboriginal cultural heritage was a key factor in the LEC's refusal of the Southern Extension Project.

The Department therefore asked Hanson to provide an assessment of the crusher's potential impacts on the Women's Site. DLALC recommended that the effects of noise, dust and vibration be considered in relation to the Women's Site and the surrounding cultural landscape. Consideration of potential impacts is discussed below.

### Noise

Some submissions raised concerns over potential noise impacts that could be experienced at the Women's Site. Additionally, EPA questioned whether this site should be identified a sensitive receiver, and in particular whether it should be regarded as 'a place of worship' under the INP, and therefore be subject to the relevant amenity criterion of 40 dB(A) L<sub>Aeq(period)</sub>. The EPA could provide no expert opinion in this regard, other than it was unaware of any other Aboriginal sacred place being so designated.

Firstly, the Department notes that there are no sensitive receiver criteria under the INP that specifically relate to significant Aboriginal sites. The only criteria which may be considered to have some relevance are those for a 'place of worship' or an 'area specifically reserved for passive recreation'. The Department agrees with the EPA that consideration of these criteria may offer assistance in the assessment of noise impacts at the Women's Site.

Secondly, the Department notes that the *Standard Instrument Principal Local Environmental Plan* defines a 'place of public worship' as a 'building or place used for the purpose of religious worship by a congregation or religious group, whether or not the building or place is also used for counselling, social events, instruction or religious training'. The *Standard Instrument* separately defines an

‘Aboriginal place of heritage significance’ as ‘an area of land, the general location of which is identified in an Aboriginal heritage study adopted by the [relevant local] Council after public exhibition and that may be shown on the [LEP’s] Heritage Map, that is:

- (a) the site of one or more Aboriginal objects or a place that has the physical remains of pre-European occupation by, or is of contemporary significance to, the Aboriginal people. It may (but need not) include items and remnants of the occupation of the land by Aboriginal people, such as burial places, engraving sites, rock art, midden deposits, scarred and sacred trees and sharpening grooves, or
- (b) a natural Aboriginal sacred site or other sacred feature. It includes natural features such as creeks or mountains of long-standing cultural significance, as well as initiation, ceremonial or story places or areas of more contemporary cultural significance.

While helpful, neither of these definitions has direct application to the INP, which also contains no relevant definitions. Nonetheless, it is worth noting that a ‘place of public worship’ and an ‘Aboriginal place of heritage significance’ are subject to separate and specific definitions under the *Standard Instrument*.

Thirdly, the INP’s 40 dB(A)  $L_{Aeq(15min)}$  amenity criterion for a place of worship appears to be based on active use of a building. That is, it only has application ‘internally’ and when the place of worship is ‘in use’. It is important to note that it does not have application in the external surroundings of the place of worship, nor does it protect the ‘place’ itself. Instead, it protects people against intrusive noise while the ‘place’ is in active use.

Specifically, the criterion does not apply to worshippers who may gather immediately outside the ‘place’ (eg before or after worship), but appears to reflect the view that it is people actively engaged in worship who are to be protected from intrusive noise, and that the dampening effect of a built structure is to be taken into account in setting the applicable criterion.

This view is strengthened by the fact that the equivalent amenity criterion for an ‘area specifically reserved for passive recreation’ such as a national park is 10 dB(A) higher (ie 50 dB(A)  $L_{Aeq(15min)}$ ). This criterion also applies only while the area is ‘in use’. The importance of peace, quiet and solitude is very important for many bushwalkers and other users of national parks and similar reserves. The wilderness experience is considered (by some) to be akin to visiting a place of worship. The assumed presence of a building would therefore appear to be the key difference between the two criteria.

Hanson’s RTS provided an assessment of noise impacts at the Women’s Site in relation to the amenity criterion of 40 dB(A)  $L_{Aeq(15min)}$  for places of worship. Hanson predicted that this site would experience a noise level of 42 dB(A)  $L_{Aeq(15min)}$  when the crusher was in use. Hanson noted that  $L_{Aeq(15min)}$  measurements are typically 2-3 dB(A) higher than  $L_{Aeq(1hr)}$  measurements and therefore the  $L_{Aeq(1hr)}$  level at the Women’s Site would be 39-40 dB(A). However, it also predicted that noise impacts at the site would not change with the addition of the crusher. That is, the noise of quarrying activities which have taken place in the Stage 3 area for at least the past 10 years would not be increased by the addition of the crusher.

In the Department’s view, nothing in the INP suggests that the Women’s Site should be subject to amenity criteria which have application inside the walls of a built ‘place of worship’. Nonetheless, if similar principles were to be applied at the Women’s Site, they would provide amenity protection for people who are present and actively engaged with the spiritual and cultural significance of the site.

However, the value of setting any particular criterion at the Women’s Site, which would in turn lead to an implied requirement for noise monitoring, should also be considered. In the Department’s view, direct noise monitoring at the Women’s Site while it is in use would be impracticable and may also be highly culturally inappropriate. Monitoring closer to the boundary of the quarry may be acceptable, but the practicalities of identifying when the site is ‘in use’ and applying ‘period’ noise criteria to shorter periods of use also come into question.<sup>1</sup> In the Department’s view, the most practical and mutually beneficial outcome is for Hanson to minimise the intrusive noise from the quarry while ever the site is in use, providing that it has been given reasonable notice. The Department understands that this notice is already required, since Hanson is the owner of the land on which the site is located.

<sup>1</sup> For example, under the INP, the “Day” period is defined as the whole of 7 am to 6 pm, Monday to Saturday, and 8 am to 6 pm, Sundays and Public Holidays. Noise received over the entire Day period must be averaged to determine whether it meets or exceeds the relevant criterion. The quarry has approved hours of operation of 7 am to 6 pm, Monday to Friday, and 7am to 4 pm on Saturday.



The Department has recommended a condition requiring Hanson to prepare and implement an Aboriginal Cultural Heritage Management Plan. This plan would have to be prepared in consultation with members of the Aboriginal community and OEH, and outline management measures that Hanson would implement to reduce noise impacts at the Women's Site, while ever it is in use. The draft condition also requires that Hanson must undertake 'reasonable and feasible' measures to reduce intrusive noise at the Women's Site while it is in use.

#### Air Quality

Some submissions raised concerns over potential dust impacts that could be experienced at the Women's Site.

As this site is located on land owned by Hanson, the emissions limits under the *Approved Methods for modelling and assessment of air pollutants in NSW* do not apply. However, to understand the potential dust impacts at this site, Hanson provided an assessment of the likely dust impacts using existing monitoring data. Hanson's RTS provided data from a dust deposition gauge (DDG) located on the southern boundary of the extraction area, in between the existing processing facilities and the Women's Site (see **Figure 3**). This DDG data comprised monthly readings from 2007 to 2015.

No exceedances of the annual average dust deposition criteria were recorded during this nine year period. The highest annual average result recorded over this period was 1.5 g/m<sup>2</sup>/month, which is substantially less than the 4 g/m<sup>2</sup>/month criterion.

The Women's Site is located approximately 90 m south of this monitoring location and the predominant seasonal winds generally do not blow in that direction. Accordingly, air quality impacts experienced at this location would likely be less than those recorded at the DDG and substantially below the dust deposition criteria that would apply if the land was privately-owned.

#### Vibration

Some submissions raised concerns over potential vibration impacts that could be experienced at the Women's Site.

Hanson used vibration measurements for the existing processing plant to model vibration impacts at the Women's Site. The site was predicted to experience less than 0.5 millimetres per second (mm/s) peak particle velocity (ppv). Whilst there is some uncertainty regarding whether vibration criteria would formally apply to this site, the Department notes that under *Technical basis for guidelines to minimise annoyance due to blasting and overpressure and ground vibration* (ANZEC, 1990), the recommended maximum level for ground vibration is 5 mm/s ppv.

#### Consideration of the LEC's Judgement

The Department has also considered the LEC's 2015 refusal of the Southern Extension Project. The appeal over the Commission's approval of that project was lodged by the Darkinjung Local Aboriginal Land Council, which submitted that that project would have an adverse impact on cultural heritage values, including potential isolation of the Women's Site and disconnection from the cultural landscape. Secondly, it argued that there was insufficient information to assess the application due to an incomplete understanding of Aboriginal cultural values within the project area and surrounding landscape.

The LEC's judgement concluded that there was a threat of serious or irreversible damage to Aboriginal cultural heritage and that there was scientific uncertainty as to the nature and scope of the damage that could result. There was insufficient evidence to assess the impacts of the project on Aboriginal cultural heritage and it could not be demonstrated that mitigation measures proposed in a Cultural Heritage Management Plan would alleviate the threat of serious or irreversible damage to the landscape, particularly as the project required incremental stripping.

The proposed modification does not pose these kinds of threat to the Women's Site, nor does it present uncertainty regarding impacts on cultural heritage values. The proposed crushing system would be a minor addition to the existing quarrying operation and would not require any additional clearing within the previously approved project area. Additionally, the modification would not result in any isolation of the Women's Site. Further, it presents the opportunity to implement additional measures to manage impacts on Aboriginal cultural heritage values from ongoing quarry operations.



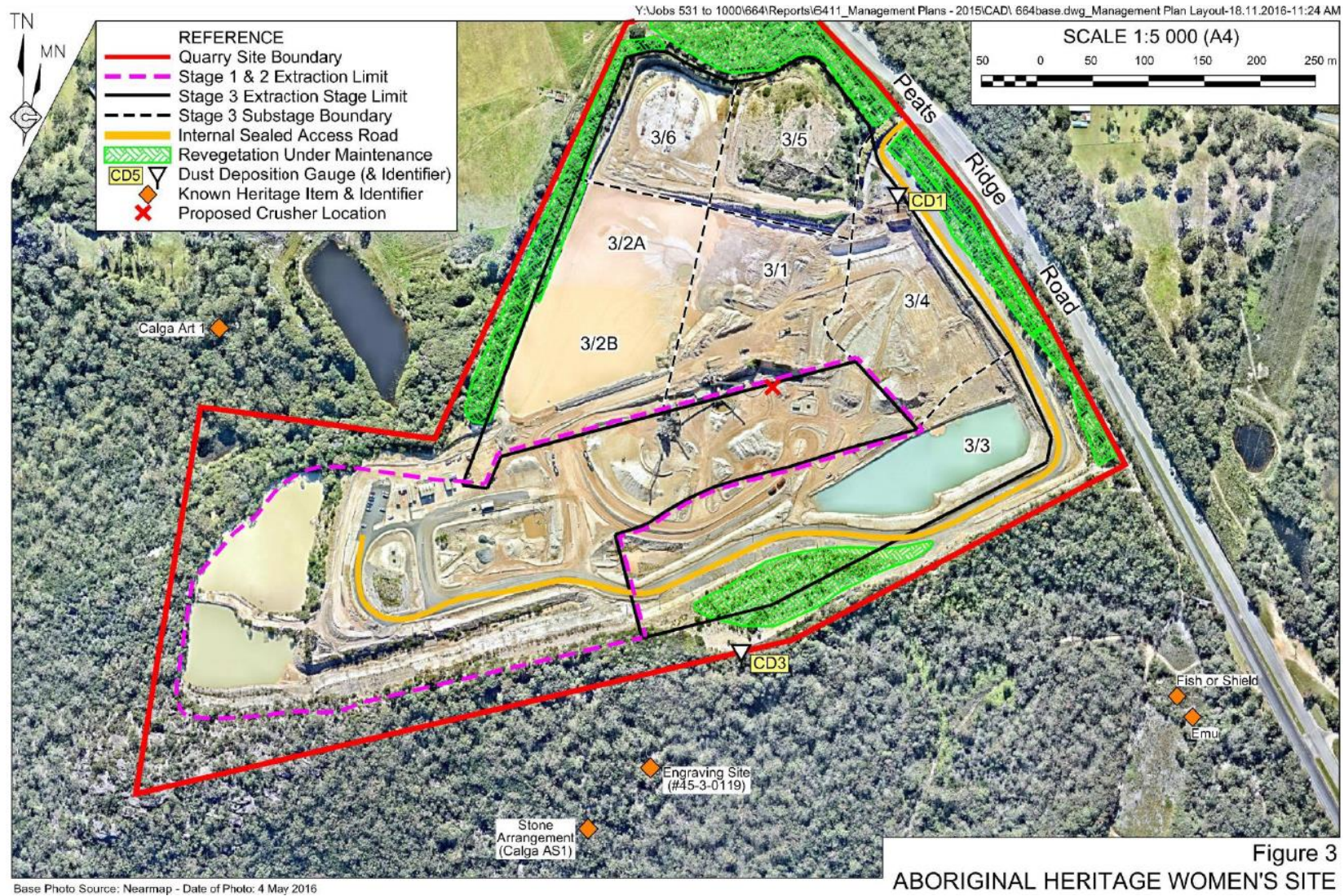


Figure 3: Location of Women's Site

### Management and Mitigation

The Department considers that the physical impacts to the Women's Site from the addition of the crusher would be negligible. Additionally, OEH advised that the crushing system would not result in additional impacts to Aboriginal cultural heritage. However, in order to avoid and mitigate physical and cultural impacts to the Women's Site and the surrounding cultural landscape from the ongoing operation of the quarry, the Department proposes that Hanson prepare and implement an Aboriginal Cultural Heritage Management Plan.

This plan would have to be prepared in consultation with members of the Aboriginal community and OEH, and would require measures to minimise impacts at the Women's Site, particularly during times of use. Hanson would have to undertake 'reasonable and feasible' measures to reduce intrusive noise at the Women's Site while it is in use. Additionally, this plan would require the identification of any Aboriginal sites within the existing Stage 3 extraction areas that may be affected by the continued operations of the quarry. OEH supports this approach.

The Department considers that the implementation of this management plan would allow for appropriate management of Aboriginal cultural heritage within and surrounding the existing quarry.

### 5.4 Other impacts

The Department is satisfied that the other impacts of the proposed modification are likely to be minor. Assessment of other impacts is summarised in **Table 1** below.

**Table 1: Assessment of Other Impacts**

<b>Issue</b>	<b>Consideration and Assessment</b>	<b>Recommendation</b>
<i>Rehabilitation</i>	<ul style="list-style-type: none"> <li>A key process in the quarry's rehabilitation is to cap the silt cells (see <b>Figures 2</b> and <b>3</b>) with oversized extracted materials.</li> <li>The introduction of the crushing system would result in a lesser quantity of oversize material available for capping.</li> <li>Hanson has proposed to continue to cap completed silt cells with both overburden and oversized friable sandstone, and has committed to ensuring that a sufficient amount of material generated through extraction will be available for rehabilitation purposes.</li> <li>Existing conditions of consent require Hanson to rehabilitate the site to the satisfaction of the Secretary and implement a Rehabilitation and Landscape Management Plan.</li> <li>During the quarry's life, the significance of the local Aboriginal cultural landscape has been further realised. OEH recommended that Aboriginal cultural heritage should be considered during the site's rehabilitation.</li> </ul>	<ul style="list-style-type: none"> <li>The Department has recommended changes to the Rehabilitation and Landscape Management Plan condition to ensure consideration of Aboriginal cultural heritage during site rehabilitation.</li> </ul>
<i>Water</i>	<ul style="list-style-type: none"> <li>Some objections raised concern regarding the amount of water the crushing system would require.</li> <li>Hanson's RTS confirmed that the crushing system would not require the use of water as the moisture content of the oversize material would be suitable to suppress dust from the operation of the crusher.</li> <li>The Department is satisfied that the quarry's water use would not change as a result of the proposed modification and would remain within the limits of the existing water licence.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions necessary.</li> </ul>
<i>Visual</i>	<ul style="list-style-type: none"> <li>The EA provided an assessment of the potential visual impacts of the proposed crusher, which would not be visible from nearby private residences.</li> <li>The Department considers that the visual impacts of the proposed crushing system would be negligible.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions necessary.</li> </ul>

## 6. RECOMMENDED CONDITIONS

The Department has drafted a recommended Notice of Modification (see **Appendix D**) and a consolidated version of the consent as it is proposed to be modified (see **Appendix E**). The environmental impacts associated with the proposed modification can be managed through appropriate conditions of consent.

The Department has taken the opportunity to review the overall consent for the quarry, and include a revised and updated suite of conditions that are consistent with current practice and contemporary



standards. These conditions will improve the management of noise and air quality emissions and the important Aboriginal cultural heritage values located on and close to the site.

Hanson has reviewed and accepted the recommended conditions of consent.

## 7. CONCLUSION

The Department has assessed the merits of the proposed modification in accordance with the requirements of the EP&A Act. The proposed crushing plant is a minor change to the processing operations of an existing quarry. It is predicted to have negligible additional impacts on the surrounding residents or environment, including the Aboriginal cultural heritage landscape.

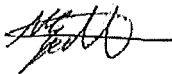
This assessment has shown that, subject to the application of updated and contemporary conditions, the proposed modification can be carried out with minimal environmental impact.

The Department is therefore satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.

## 8. RECOMMENDATION

It is recommended that the Planning Assessment Commission, as delegate of the Minister for Planning:

- considers the findings and recommendations of this report, noting that the Department considers that the modification is approvable, subject to conditions;
- determines that the applicant's request is a modification under section 75W of the EP&A Act; and
- if the Commission determines to modify the approval, signs the attached notice of modification.



OBO Howard Reed 21.04.2017  
Director  
Resource Assessments



21.4.2017  
Ben Harrison  
A/Executive Director  
Resource Assessments and Compliance

## **APPENDIX A – ENVIRONMENTAL ASSESSMENT**

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=7758](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7758)



## **APPENDIX B – SUBMISSIONS**

Refer to the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=7758](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7758)

**APPENDIX C – RESPONSE TO SUBMISSIONS**

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=7758](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7758)

## APPENDIX D – NOTICE OF MODIFICATION

## APPENDIX E – CONSOLIDATED CONSENT