

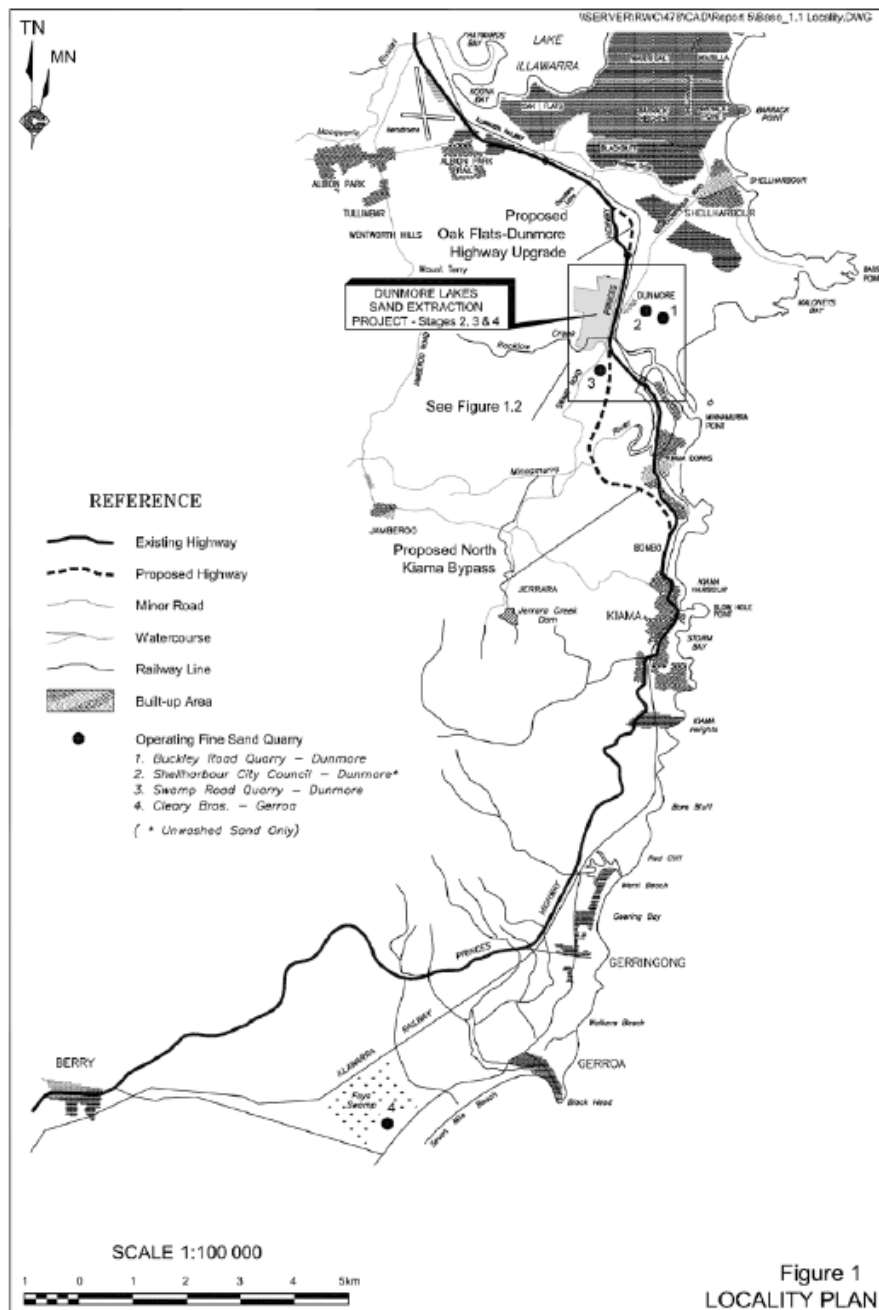
Dunmore Lakes Sand Extraction Project Creek Realignment Modification (DA 195-8-2004 MOD 1)

Environmental Assessment Report

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

1. BACKGROUND

The Dunmore Lakes Sand Extraction Project is located on the western side of the Princes Highway, about 3 kilometres (km) southwest of Shellharbour and 7 km north of Kiama (see Figure 1).



Source: EIS 2004

Figure 1: Locality Map

The site is adjacent to Boral's Dunmore Quarry, and within reasonably close proximity to the Bass Point and Albion Park quarries. The Dunmore Lakes Project is operated by Dunmore Sand & Soil Pty Ltd (DSS), a wholly-owned subsidiary of Boral Resources (NSW) Pty Ltd.

Stage 1 of the Dunmore Lakes project was approved in 1999 by the then Minister for Urban Affairs and Planning following a Commission of Inquiry, and commenced operation in 2000. Stage 1 operations have now concluded, and rehabilitation of the extraction area was completed in 2013. Under DA 195-8-2004, Stages 2, 3 and 4 of the project were approved by the then Minister for Infrastructure and Planning on 29 June 2005. The approved project involves:

- extracting and processing approximately 8 million tonnes of sand and soil, using a combination of excavation and dredging methods;
- producing up to 800,000 tonnes of extractive materials annually; and
- progressively rehabilitating the site, including backfilling of excavated areas with virgin excavated natural material (VENM).

Dredging operations for Stage 2 commenced in 2007, and are now nearing completion. Due to the high demand for sand in the Sydney market, DSS estimates that the Stage 2 sand resource will be exhausted within 6 months. As such, DSS now intends to proceed with Stage 3 of the development. The approved lifespan of the quarry is 25 years.

2. PROPOSED MODIFICATION

Under the conditions of DA 195-8-2004, DSS is required to realign a section of Rocklow Creek before extraction operations for Stage 3 can commence. This section of the creek was previously modified by the creation of a man-made channel to support past agricultural activities. The conditions require the creek to be temporarily reinstated to follow its original natural alignment (see **Figure 2**).

Conditions 10 – 12 of Schedule 3 of the development consent state:

10. *Prior to the commencement of extraction in Stage 3 the Applicant shall complete the realignment and rehabilitation of Rocklow Creek, to the satisfaction of the Director-General. The realignment shall be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45). The realigned channel shall be designed so as to safely convey, without bed or bank erosion, the 1 in 20 year ARI peak flow.*
11. *The Applicant shall not undertake extraction within 3 metres of the bank of the realigned Rocklow Creek. Batter slopes from this extraction limit shall be no steeper than 1:2 (V:H).*
12. *The Applicant shall provide for the ultimate redirection of the realigned Rocklow creek into the lake in Stage 3, unless otherwise approved by the Director-General. The redirection shall be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45).*

The land which comprises Stage 3 is owned partly by Boral Resources (NSW) Pty Ltd and partly by a third party. Both the man-made channel and the proposed realignment of Rocklow Creek are located within the private landholding of the third party. The private landowner has advised both DSS and the Department that they wish to continue to use this area of land for other purposes and have no objections to DSS commencing Stage 3 dredging operations and delaying the realignment of Rocklow Creek. As DSS is unable to obtain a Controlled Activity Approval (see **Section 5.1** below) without the landowner's consent, DSS is unable to proceed with extraction of Stage 3 based on the current conditions.

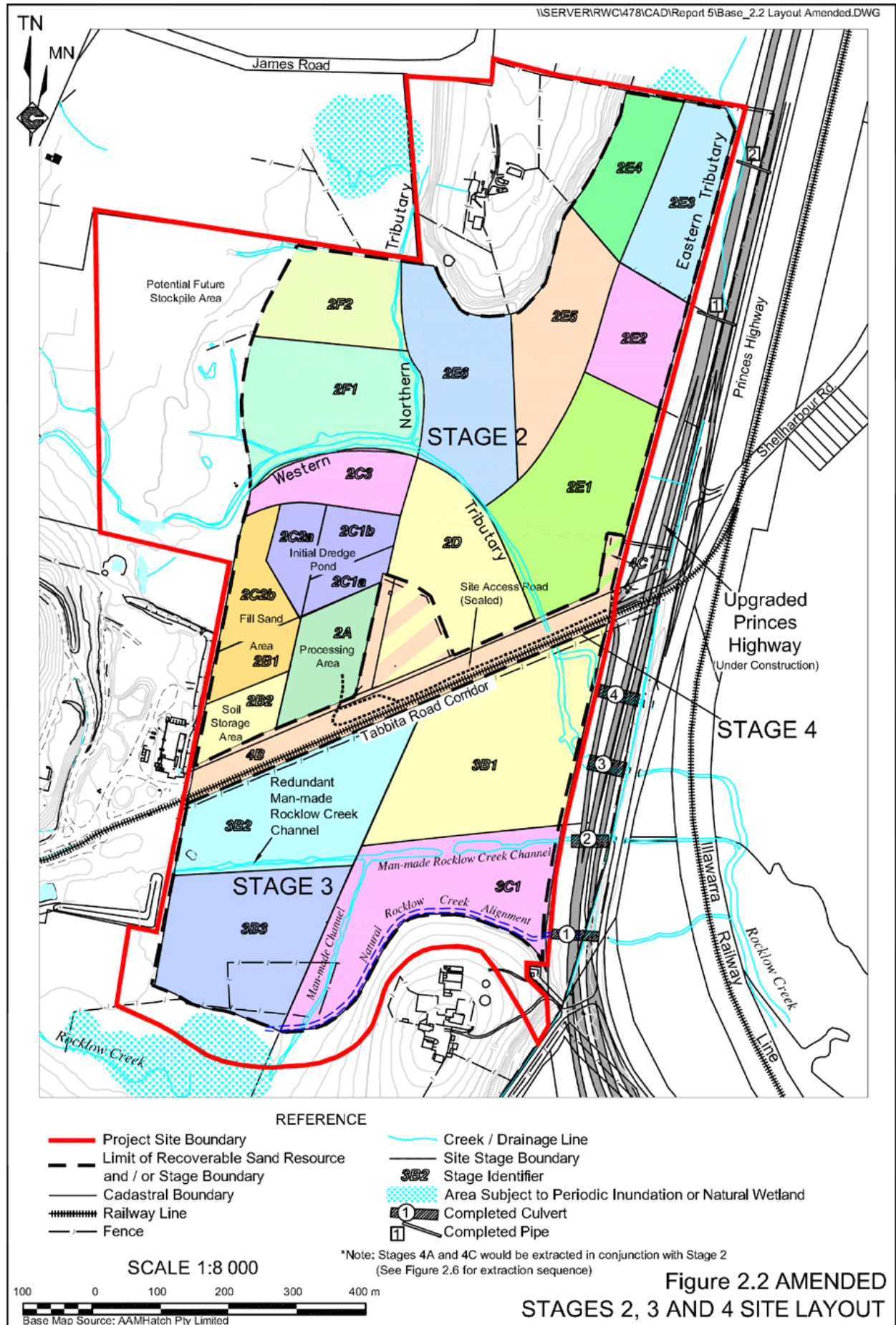
Therefore DSS is seeking to modify condition 10 of Schedule 3 of the consent to remove the requirement for the creek realignment to occur prior to commencing Stage 3 extraction, and to allow this realignment to be carried out a later date, concurrent with extraction operations.

3. STATUTORY CONTEXT

3.1 Section 75W

DA 195-8-2004 was granted under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). In accordance with Clause 8J(8) of the *Environmental Planning and Assessment*

Regulation 2000 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 proposal can be characterised as a modification to the existing consent. The proposed modification would not change the nature or scale of the approved quarry operations. It seeks only to alter the timeframe for complying with a requirement of the existing consent.

Given these considerations, 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 Director, Resource Assessments may determine the application under the Minister's delegation of 16 February 2015, as DSS has not declared any reportable political donations, Council does not object to the proposal and there were less than 10 public objections.

3.3 Environmental Planning Instruments

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

- 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. 44 – *Koala Habitat Protection*;
- SEPP No. 55 – *Remediation of Land*;
- *Shellharbour Local Environmental Plan 2000*;
- *Shellharbour Rural Local Environmental Plan 2004*; and
- *Shellharbour Local Environmental Plan 2013*.

The Department has assessed the proposed modification against the relevant provisions of these instruments. Based on this assessment, 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.

4. CONSULTATION

Due to the administrative nature of the proposed modification, the Department considered that public exhibition was not required. However, the application and Environmental Assessment (EA – see **Appendix A**) were placed on the Department's website and comments were sought from the Environmental Protection Authority (EPA), the Department of Primary Industries - Water (DPI-Water) and Shellharbour City Council.

In response, the Department received 3 submissions from Government agencies. Copies of these submissions are included at **Appendix B**. A summary of the issues raised in these submissions is provided below.

4.1 Agency Submissions

The **Department of Primary Industries – Water (DPI-Water)** advised that it had no comments in relation to the proposal.

The **Environment Protection Authority (EPA)** raised no objections with respect to the proposed modification. The EPA did note, however, that the proposal would require a variation to the site's existing Environmental Protection Licence.

Shellharbour City Council (Council) advised that it does not object to the proposed modification.

5. ASSESSMENT

In assessing the merits of the proposal, the Department considered the EA and submissions received. The Department considers the key assessment issue to be the potential for surface water impacts that may arise as a result of delaying realignment of Rocklow Creek. Consideration of these impacts is provided below, with consideration of other impacts provided in **Table 1**.

5.1 Surface Water Resources

5.1.1 Introduction

As part of the original Environmental Impact Statement accompanying DA 95-8-2004, a Surface Water Impact Assessment was prepared by Bewsher Consulting Pty Ltd. The Department's assessment of the development application stated:

'The proposal is based on the basic principle of providing for the maintenance of off-line dredging for as long as practicable – i.e. by allowing the drainage channels to flow through the site without interacting with active dredging areas. For Rocklow Creek, this principle would be achieved by realignment of the creek to the southern boundary of the site, outside the extraction area, prior to the commencement of dredging.'

Concerns were raised by the former Department of Environment and Conservation (DEC), which stressed the need to maintain off-line dredging for as long as possible in order to reduce downstream water quality impacts. DEC also raised doubts as to the hydraulic capability of the realigned Rocklow Creek to cope with flows over the long term. An agreement was reached between the Department and DEC, whereby the Rocklow Creek realignment would be undertaken prior to the commencement of Stage 3 to provide for the temporary management of surface flows during Stage 3. Following the conclusion of extraction, the realigned creek would be diverted into the new lake which forms part of the Stage 3 final land form (see **Figure 3**). The location of the realigned creek is shown on **Figure 2**, labelled 'Natural Rocklow Creek Alignment'.

5.1.2 Assessment of Impacts

The EA does not explain how surface water would be managed during Stage 3, without the benefit of the creek realignment. Rather, it focuses on the present practical barriers to the realignment and the economic need for a rapid transition from Stage 2 to Stage 3. Therefore, the Department sought additional information from DSS as to how it would manage surface water in the absence of the realignment.

DSS advised that quarrying operations and subsequent surface water management would be undertaken in a manner similar to that for Stage 2. The Department notes that the Western and Northern Tributaries traversed Stage 2, yet dredging was able to be undertaken 'offline' on the floodplain. The dredge ponds remained 'offline' until they were sufficiently sized to become 'online' and act in a manner similar to large sediment traps. DSS is proposing that dredging in Stage 3 would also begin 'offline' in the northern end of Stage 3B1 and remain at least 40 m away from Rocklow Creek, unless otherwise approved by DPI-Water under a Controlled Activity Approval.

Both the existing channel and the proposed creek realignment fall outside the first three sub-stages of Stage 3 (3B1, 3B2 and 3B3). The process would stay 'offline' as dredging progresses westwards into Stage 3B2 and then south into 3B3. DSS would also be required to apply for a Controlled Activity Approval under the *Water Management Act 2000* to undertake any extraction within 40 m of Rocklow Creek. While the Department notes that there is a redundant man-made Rocklow Creek channel within sub-stage 3B2 (see **Figure 2**), DSS advises that this channel is basically a ditch which does not flow and has not been used since at least the 1980s.

On this basis, the Department accepts that the realignment can be delayed with minimal environmental impact. The Department considers that the first three sub-stages of Stage 3 can be undertaken as neither the existing or proposed creek alignment is located within these sub-stages. However, on the basis of the information currently held by the Department, quarrying operations should not proceed to sub-stage 3C1 (see **Figure 2**) without first realigning and rehabilitating Rocklow Creek. The Department has recommended conditions to this effect. The Department has also recommended updating existing conditions to note the need for a Controlled Activity Approval to undertake any extractive operations within 40 m of Rocklow Creek.

5.1.3 Conclusion

The Department is satisfied that condition 10 of Schedule 3 may be modified to delay the Rocklow Creek realignment but that this realignment should be completed prior to commencement of sub-stage 3C1. This would permit Stage 3 to commence, and the creek realignment to occur in conjunction with dredging activities.

The Department considers that this represents a reasonable compromise which considers the private landowner's wishes and the resultant practical difficulties in realigning the creek at the present time, as well as the need for adequate surface water management for the duration of dredging activities. The Department is satisfied that, subject to the recommended conditions, the proposal would not significantly increase the surface water impacts of the approved development.



5.2 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

Issue	Consideration and Assessment	Recommendation
<i>Rehabilitation</i>	<ul style="list-style-type: none"> DSS is undertaking progressive rehabilitation in accordance with its approved Flora, Fauna and Site Rehabilitation Management Plan (FFSRMP). Following completion of Stage 3, the extraction area would be partially backfilled to establish a mix of wetland and Swamp Oak Floodplain Forest, with a large central lake incorporating habitat islands. The realigned Rocklow Creek would be diverted into the new lake, which would discharge to two existing culverts under the Princes Highway. The final approved landform would be unaffected by the modification. However, the FFSRMP would need to be revised to reflect the altered timeframe for the temporary realignment of the creek. The Department currently holds a rehabilitation bond in the amount of \$192,500. Existing conditions also require DSS to establish a Long Term Management Trust with a minimum balance of \$300,000 over the life of the development. To date, this trust has not been established, and this matter is being pursued by the Department independently of the modification. 	<ul style="list-style-type: none"> Existing conditions require DSS to review the FFSRMP and submit it for the Secretary's approval every four years. This regular review is currently overdue. The Department considers that the necessary changes can be incorporated with this review process. The Department is satisfied that the proposal would not significantly alter the current rehabilitation strategy for the site and that progressive rehabilitation is suitably managed under existing conditions.
<i>Social and Economic Impacts</i>	<ul style="list-style-type: none"> The existing quarry operation provides a variety of social and economic benefits including local employment and the provision of sand products for the construction industry in the greater region. In particular, the quarry supplies sand locally to the Illawarra market by road and the Sydney Metropolitan market by rail. Sand from the quarry has recently been used in concrete for Barrangaroo and Westconnex. Future supply to the Northconnex project is also expected. The modification would enable DSS to continue quarrying operations without delay. 	<ul style="list-style-type: none"> The Department is satisfied that the proposed modification would yield a range of socio-economic benefits to the local and regional economies by enabling the continued operation of the quarry.

6. RECOMMENDED CONDITIONS

The Department has drafted a recommended notice of modification (see **Appendix C**) and a consolidated version of the consent as it is proposed to be modified (see **Appendix D**). 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.

DSS does not object to the recommended conditions.

7. CONCLUSION

The Department has assessed the merits of the proposed modification in accordance with the requirements of the EP&A Act. This assessment has shown that, with the implementation of minor amendments to existing conditions, the proposed modification can be carried out with minimal environmental impact.

The Department considers that the proposed modification would facilitate the continued operation of the Dunmore Lakes Sand Extraction Project, and continue the supply of sand products for the Illawarra and Sydney construction materials markets.


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 Director Resource Assessments, as delegate of the Minister:

- **considers** the findings and recommendations of this report;
- **determines** that the modification is within the scope of section 75W of the EP&A Act;
- **approves** the modification application, under section 75W, subject to conditions; and
- **signs** the notice of modification at **Appendix C**.


2-6-16
Jessie Evans
Team Leader
Resource Assessments


2-6-16
Howard Reed
Director
Resource Assessments

APPENDIX A – ENVIRONMENTAL ASSESSMENT

Refer to the Department's

website: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7626

APPENDIX B – SUBMISSIONS

Refer to the Department's website:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7626

APPENDIX C – NOTICE OF MODIFICATION

APPENDIX D – CONSOLIDATED DEVELOPMENT CONSENT