

CLEARLY BROS (BOMBO) PTY LTD

CONTINUATION OF SAND MINING AT
GERROA

PROJECT APPLICATION

Revised January 2006
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 TABLE OF CONTENTS

Page No.

1.	INTRODUCTION	
1.1	PURPOSE OF THE REPORT	1.1
1.2	BACKGROUND	1.1
2.	PROJECT OUTLINE	2.1
2.1	THE NEED	2.1
2.2	ADDITIONAL EXTRACTION AREA	2.1
2.3	EXTRACTION METHOD	2.1
2.4	REHABILITATION	2.2
2.5	HOURS OF OPERATION	2.2
2.6	ENVIRONMENTAL MANAGEMENT PLAN	2.2
2.7	CAPITAL INVESTMENT VALUE	2.7
3.	THE SITE	
2.1	LOCALITY	3.1
2.2	SITE DESCRIPTION	3.1
2.3	SURROUNDING LAND USE	3.1
2.4	PLANNING PROVISIONS	3.2
4.	PUBLIC AUTHORITY INVOLVEMENT	
4.1	PLANNING FOCUS MEETING	4.1
4.2	OTHER APPROVALS REQUIRED	4.1
5.	PRELIMINARY ASSESSMENT	
5.1	POSITIVE OUTCOME	5.1
5.2	NATIVE VEGETATION	5.1
5.3	HYDROLOGY	5.2
5.4	ARCHAEOLOGY AND HERITAGE	5.2
5.5	NOISE	5.3
5.6	TRAFFIC AND TRANSPORT	5.3
5.7	VISIBILITY	5.3

INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report has been prepared to accompany a request to the Minister for Planning for a declaration that the proposed extension of Cleary Bros Gerroa sand mining operations is a project to which Part 3A of the Environmental Planning and Assessment Act applies. The report contains an outline of the proposal and a brief discussion of key environmental issues.

The report was prepared and submitted in September 2005 and revised in January 2006 to address additional matters listed in the Department of Planning's draft guideline *Steps in the Assessment and Approval of Major Projects under Part 3A*.

1.2 BACKGROUND

Cleary Bros has been mining sand from the company's land at Gerroa for approximately 50 years. The Minister for Infrastructure and Planning issued the current development consent for sand extraction in September 2003. The consent defines the area of operation, the maximum rate of production and requires that the operation be decommissioned and the site rehabilitated within six years.

The 2003 development consent enabled the company to continue operating beyond a previous cut-off date and extended the area of land from which sand was approved for extraction.

Figure 1 shows the extent of the land currently approved for Cleary Bros' operations and highlights the location of sand deposits within that area at the time the consent was granted. Since then the company has all but exhausted sand from the northern deposit. The southern deposit lies beneath operational land used for stockpiling and loading products.

Sand extraction was completed some years ago from the southern part of the dredge pond. Foreshore revegetation in this area is now approaching maturity. Revegetation works are ongoing beside the other parts of the pond that are not subject to plans for further disturbance.

2

PROJECT OUTLINE

2.1 THE NEED

Recovery of the Gerroa sand resource is of economic importance to the Illawarra Region. Cleary Bros needs to secure sand supplies for the company's operations supplying building and construction materials within the Region. In the absence of a source of sand controlled by the company, its concrete division would be unable to compete with major competitors in the industry and would inevitably close, with significant loss of employment in the Illawarra.

2.2 ADDITIONAL EXTRACTION AREA

It is proposed to seek approval to extend sand extraction operations onto the company's land to the north of the current operational area. The area proposed for extraction comprises cleared and timbered land, carefully defined to avoid the large contiguous area of swamp mahogany forest on the site. This forest is a sub-group of an endangered ecological community and will be protected from disturbance.

It is intended that the proposed extension will provide Cleary Bros with up to 20 years of sand resource for extraction. *Figure 2* is a 2001 aerial photograph with a dashed pink line outlining the extent of the additional extraction area to the north of the dredge pond.

2.3 EXTRACTION METHOD

There are no changes proposed to the current method of sand extraction. Vegetation and topsoil is firstly removed from the sand deposit. Topsoil is stockpiled nearby or transferred directly to a rehabilitation site elsewhere on the property. Where necessary, monitoring for sub-surface archaeological material is carried out during the stripping process. The thin layer of organic rich sand immediately beneath the topsoil is used for site works or stockpiled for sale as top dressing.

The floating suction dredge, extracts material from beneath the surface of the dredge pond, extending the pond as necessary into the area of sand resource. The resulting slurry is piped to the shore and passed through various screens in the wet sorter. The

wet sorter separates stone from sand and finer particles. Screened sand is pushed away from the sorter and allowed to drain. Heavier materials are removed and stockpiled for sale. Fine particles return to the dredge pond with the wash water.

A dry sorter (currently decommissioned) has been used to further screen the stone to grade it into saleable size ranges.

After standing and draining, screened products are stockpiled for sale. Sand is normally left in freestanding stockpiles, while storage bins are used to hold grades of stone and specialised products. Other saleable construction materials such as blue metal, road base, top soil and mulch may be brought to the site from time to time and stockpiled in bins. A rubber tyred loader loads products to transportation vehicles.

Vehicular access to the site is from its southern end off Beach Road via a sealed access road.

2.4 REHABILITATION

Stable batters around the dredge pond are obtained by a combination of partial backfill and shaping using the dredge. The shoreline zone, extending ten metres above and below "normal" water level is graded to a maximum slope of one in six and rehabilitated with a combination of dryland and aquatic plants.

Ongoing rehabilitation of disturbed areas is carried out in accordance with a rehabilitation and landscape plan.

2.5 HOURS OF OPERATION

The existing development consent limits the sand quarry to operating between the hours of 7 am to 6 pm Monday to Friday and 7 am to 1 pm on Saturday. No change is proposed to these limits.

2.6 ENVIRONMENTAL MANAGEMENT PLAN

An environmental management plan, approved by the Director-General of DIPNR, has been prepared to describe construction work and operations at the Gerroa sand quarry. The management plan is a reference document for quarry staff, containing all approvals, permits and licences applicable to the site.

2.7 CAPITAL INVESTMENT VALUE

The sand mine is an ongoing operation, with vegetation clearing, topsoil removal, dredging/screening and rehabilitation all being part of normal operations. Construction activities necessary prior to extending the extraction area include:

- extend safety signage;
- extend visual/flood bunding; and
- extend vehicular access.

The estimated value of these works is \$75,000.

3

THE SITE

3.1 LOCALITY

Figure 3 shows the locality of the site at the corner of Beach Road and Crooked River Road, Gerroa. The sand extraction area extends across the local government boundary, being partly within Kiama and Shoalhaven local government areas.

The existing sand extraction area comprises all of Lot A DP 185785 and part of the land in certificate of title Volume 5841 Folio 139 with a total area of about 20 hectares. The proposed extension will add a further 8.5 hectares.

3.2 SITE DESCRIPTION

The site occupies the south-eastern corner of a farming property owned by Bridon Pty Ltd, a member of the Cleary Bros group of companies. The property is mainly cleared with an area of remnant vegetation adjacent to the sand mining area. Apart from sand dunes within the sand extraction site, the land is generally low lying with a number of channels having been constructed to provide better drainage for the farmland.

The property drains to Blue Angle Creek, a tributary of Crooked River which discharges to the sea at Gerroa Beach. A bund wall has been constructed around the sand extraction area to a height of 3.2 metres AHD to prevent floodwaters entering the quarry site when the surrounding farmland is flooded.

3.3 SURROUNDING LAND USE

The sand extraction area has frontages to Crooked River Road and Beach Road. Seven Mile Beach National Park occupies the strip of land to the east of the site between Crooked River Road and the Pacific Ocean. The National Park is heavily timbered. To the immediate north and west of the extraction area is a relatively narrow band of native forest, giving way to cleared farming paddocks that occupy the bulk of the property. Farming land extends westwards about 1.5 kilometres to the South Coast Railway.

Blue Angle Creek generally flows north from the site, paralleling Crooked River Road for two kilometres to the Crooked River. The land in this direction is largely undeveloped through to Gerroa village apart from a sewage treatment plant constructed near the roadside.

The closest residences are located south of the site on the southern side of Beach Road near the site entrance. The closest residence is approximately 90 metres from the entrance and 400 metres from the main processing, stockpiling and loading area. Caravan parks are the closest development with Gerroa village.

3.4 PLANNING PROVISIONS

The southern part of the site within the City of Shoalhaven is zoned partly Rural 1(a) and partly Environment Protection (Special Scenic) 7(d2). Extractive industries are permissible within the 1(a) zone but are prohibited within the 7(d2) zone under Shoalhaven Local Environmental Plan 1985. The small portion of the site within 7(d2) adjoins Crooked River Road and has been fully extracted in the past. It is now either permanent pond or revegetated foreshore.

The northern section in Kiama Municipality is zoned Rural 1(a) under Kiama Local Environmental Plan 1996. Extractive industries are permissible within this zone, except where the land is designated an *Area of High Conservation Value*. The designated *Area of High Conservation Value* does not correlate accurately with bushland on the property. Instead, it includes some cleared land and a section of the existing dredge pond. The existing development consent confines the operational area of the sand quarry to remain within the land where extractive industry is permissible under the LEP.

The additional area now proposed for extraction includes some land within the designated *Area of High Conservation Value*. This proposed extraction area avoids the large contiguous stand of Swamp Mahogany forest, being the endangered ecological community on the site. *Figure 2* shows the boundary of the *Area of High Conservation Value* in yellow.

In addition to the relevant LEPs, the following planning instruments also apply to the site:

- Illawarra Regional Environmental Plan No 1 - 1986;
- SEPP 11 - Traffic Generating Development;
- SEPP 26 - Littoral Rainforest;
- SEPP 44 - Koala Habitat Protection; and
- SEPP 71 - Coastal Protection.

4

PUBLIC AUTHORITY INVOLVEMENT

4.1 PLANNING FOCUS MEETING

A planning focus meeting (PFM) was held at Gerroa on 8 December 2004. The following organisations attended:

- Cleary Bros
- Perram & Partners
- DIPNR (Planning)
- DIPNR (Natural Resources)
- DPI (Mineral Resources)
- DEC (representing EPA and NIPWS)
- Shoalhaven Council
- Kiama Council

The planning focus meeting was held prior to the Part 3A of the Environmental Planning and Assessment Act coming into force. The sand mine extension presented to the PFM was slightly larger than now proposed.

Written responses from public authorities were forwarded to the Department of Planning and taken into account in the Director-General's requirements for the project issued on 11 April 2005. Those requirements became inoperative after Part 3A of the Act came into force in mid 2005.

4.2 OTHER APPROVALS REQUIRED

The existing sand mine is licensed under the Protection of the Environment Operations Act. The proposed extension will be contained within the same premises as currently licensed, so the existing licence will continue to apply. DEC may wish to re-issue the licence.

Subject to the findings of an archaeological survey, a consent to destroy Aboriginal archaeological relics may be sought from DEC. Such consents have been issued for previous extensions of the sand mine.

The proposed extension and its flood bund will come close to Blue Angle Creek. Subject to detailed boundary location, it is possible the flood bund may require filling land within 40 metres of the creek bank. In that case a permit would normally be sought from the Department of Natural Resources under Part 3A of the Rivers and Foreshores Improvement Act.

5

PRELIMINARY ASSESSMENT

5.1 POSITIVE OUTCOME

Extension of the sand quarry will provide sand supplies for up to 20 years, facilitating continuity of Cleary Bros operations in the Illawarra and the associated economic benefits to the region. In April 2003, Gillespie Economics examined the regional economic impact of cessation of sand extraction at Gerroa, concluding that this would be the annual loss of \$20 million in direct and indirect regional output, \$7 million in direct and indirect regional value added, including \$4 million in wages to in the order of 96 direct and indirect jobs. This was considered a conservative estimate and included the assumption that displaced workers would stay in the region.

5.2 NATIVE VEGETATION

Kevin Mills & Associates has previously investigated the southern part of the extension area and identified four vegetation communities:

- Blackbutt Tall Forest - growing on the sand dunes beside Crooked River Road, above about two metres AHD;
- Swamp Mahogany- - present on land below about two metres AHD to the Swamp Oak Forest west of the extraction area;
- Bangalay Woodland - on semi-cleared land north of the Blackbutt Forest; and
- non-native grassland - cleared lands to the west and north of the extraction area.

The Swamp Mahogany - Swamp Oak Forest is a sub-group of the *Sydney Coastal Estuary Swamp Forest in the Sydney Basin Biorregion*, listed as an endangered ecological community in the Threatened Species Conservation Act 1995. This forest is of high conservation significance and will not be affected by the proposal.

Mills reports that the Blackbutt Tall Forest on the site is of lesser significance as it in a poor condition with no very large trees and abundant lantana. There are extensive stands of better quality Blackbutt Tall Forest on the dune system in the adjoining

national park. The other vegetation communities are of no particular conservation significance.

The proposed extension involves removal of some Blackbutt Tall Forest, Bangalay Woodland and non-native grassland, but does not affect the endangered Swamp Mahogany-Swamp Oak Forest. Mills is further investigating the extension area to produce a report specifically for the proposed extension.

5.3 HYDROLOGY

In January 2003, Perrrens Consultants Pty Ltd undertook a flood study of the area reporting that Foy's Swamp and Blue Angle Creek, to the west and north of the site, act as a large storage area during floods. The effect of bunding the existing site has marginally reduced the available flood storage area and has been predicted to raise the external flood level by 20 millimetres in the 100 year ARI (average recurrence interval) event. The report concluded that this would have no significant effect on flood velocities.

The calculated flood height at the site for the 100 year ARI event is approximately 2.7 metres AHD. Bunding has been provided to 3.2 metres AHD to provide 0.5 metres of freeboard.

The hydrology study is being updated to consider the effect of the proposed extension.

5.4 ARCHAEOLOGY AND HERITAGE

The site has been the subject of a number of investigations to determine the presence of Aboriginal archaeological relics. The most recent subsurface study by Southern Cross Heritage Surveys 2002 found a pattern of shell middens across the current north-western extraction area similar to findings in previous surveys elsewhere on the site and at the sewage plant to the north. These findings were rated as having a low to moderate significance at the local and regional levels.

Two deposits within the proposed extension to the extraction area previously considered significant have been fenced as required by conditions of a "consent to destroy" approval issued by NPWS. A further archaeological assessment of the extension area is in progress. The significance of the fenced areas will be re-evaluated as part of this assessment.

5.5 NOISE

A noise assessment has recently been prepared for the proposed extension in accordance with current DEC requirements. The proposal has been confirmed to comply with all relevant criteria and no additional noise mitigation measures are needed.

5.6 TRAFFIC AND TRANSPORT

The proposed extension will not alter the number of truck movements associated with the sand quarry. Hence it is considered a further traffic assessment is not necessary.

The existing development consent requires that trucks proceeding south from the site towards Nowra or Berry utilise Beach Road and the Princes Highway. Seven Mile Beach Road is not used except where the destination of the truck is along that road or accessed directly from it.

Similarly the route to be followed by trucks proceeding in a northerly direction from the site is specified in the existing development consent. These trucks are to follow the route of Beach Road, Crooked River Road, Fern Street , Belinda Street and Princes Highway.

There is no proposal to change these requirements.

5.7 VISIBILITY

A vegetated buffer zone has been maintained along Crooked River Road to minimise the opportunity for motorists to obtain views into the site. This barrier is fully effective at the southern end where vegetation has matured and blocks views to the west. At the northern the vegetation is still maturing, but views have been reduced to a minor glimpse.

Further planting and maintenance of the buffer zone will be undertaken as part of the proposed site extension so that the extractive operations remain hidden from public view.

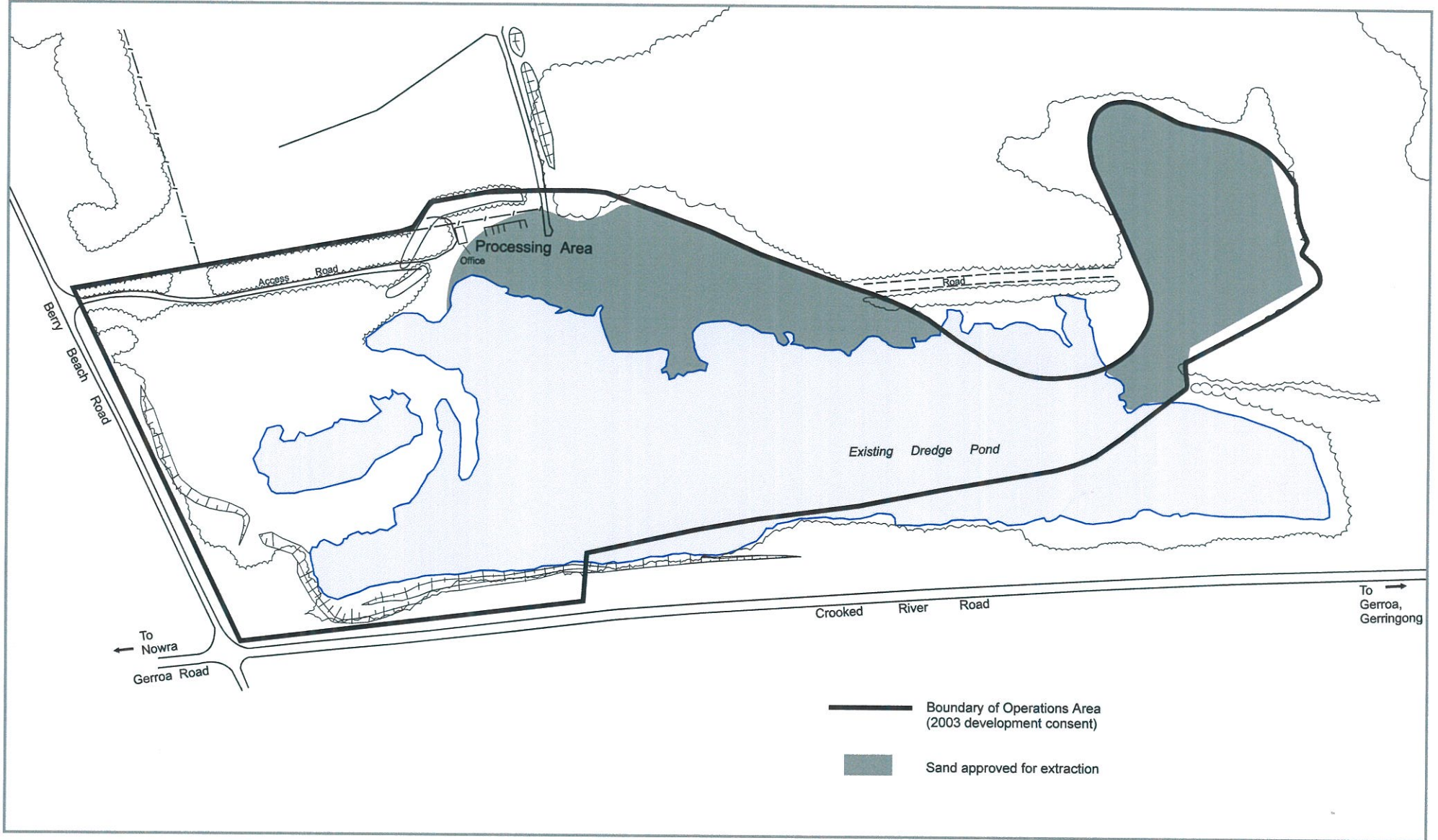


Figure 1 Approved Operations Area, 2003 Consent



Figure 3 Locality Plan