

Statement of Environmental Effects

Redevelopment of an existing Gravel Quarry

Mellburra road
Narrabri



Prepared for:

Glencairn Quarry Supplies Pty Ltd

746 Mellburra Road

Narrabri, NSW, 2390

Date: 27/03/2020

Prepared by:

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**Submission of
Statement of Environmental Effects (SEE)**
Prepared under the Environmental Planning and Assessment Act
1979.

SEE Prepared by

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In respect of

Proponent Name	Glencairn Quarry Supplies Pty Ltd
Proponent address	746 Mellburra Road Narrabri, NSW,

Land on which activity to be carried out:	Lot 24 DP 753920 Parish of Cowimangarah County of Jamison
Zoning:	RU1 – Primary Production
Proposed development	Redevelopment of existing Gravel Quarry

**Statement of
Environmental Effects**

A SEE is attached.

Certificate

I certify that I have prepared the contents of this Statement and to
the best of my knowledge:

- It is true in all material particulars and does not, by its
presentation or omission of information, materially
mislead.

Signature



Name	Rodney Dunlop
Date	7 th April 2020

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2. Introduction

This *Statement of Environmental Effects* accompanies a development application to Narrabri Shire Council for a proposed redevelopment of an existing gravel quarry. The site is located 32km from Narrabri and 6.7km along Mellburra Road (Shire Road 3) on the property ‘Glencairn’ as indicated in the locality map in **Figure 1**. The quarry is located on lot 24 DP 753920 and the site is surrounded by land used predominately for cropping and grazing that has occurred over many decades. The quarry was originally developed by Narrabri Shire Council in 1990, and has been used for road and construction material since that time.



FIGURE 1 LOCATION OF QUARRY

3. Proposed Development

The gravel material forms part of the geological formation of the Digby conglomerate that out crops at the surface at this particular location. The Digby formation has been described as a: Triassic period deposition of quartz-lithic sandstone which gradually changes into quartzose sandstone unit of cross-bedded sandstone with well-rounded quartz pebbles. The base of the formation is targeted for gravel material as this contains the well rounded quartz pebbles. The gravel quarry has proven to provide a robust material for road and construction purposes.

The quarry would have a redeveloped footprint of 1.9Ha with approximate dimensions of 240m x 80m shown in the layout in **Figure 2** . The depth of the gravel material varies according to the depth to the basement of the Digby formation but is typically 6m. The quarry will be developed by Glencairn Quarry Supplies Pty Ltd with the intention of supplying local roads, farms and construction sites with up to 29 000T per annum. The quarry would have a potential operating life of approximately 10-20 years depending on the extraction rate which can vary significantly. Upon completion of the quarry the site would be rehabilitated back to land use consistent with the immediate surrounding area.

The quarry operations would involve:

- Stripping and stockpiling the topsoil material
- Ripping and winning the gravel.
- Stockpiling directly for transport or
- Crushed and or screened for market specifications
- Transport from the quarry to the construction site
- Final rehabilitation upon cessation of quarry

The equipment that would likely to be used consists of a: bulldozer, front end loader, excavator, trucks and the use of a mobile crushing or screening plant. The normal hours of operation would be 6am to 6pm Monday to Friday and 6am to 1pm Saturday. On exception site activity could be required to operate outside of these hours for emergency repairs to infrastructure. The operational traffic is based on the hours of operation of the quarry and the demand for gravel material. Gravel quarries must meet the demand which fluctuates outside of the control of the quarry operator. During peak times 1500T of gravel could be required per day, however this would be offset by significant periods where no gravel would be transported. Flexibility is required in the operating conditions so that these peak periods can be met. The gravel material would be transported along the existing haul road and to the intersection at 668Mellburra Road.



FIGURE 2 QUARRY LAYOUT

4. Infrastructure

4.1. Electricity and Telecommunications

No additional telecommunication would be required. Diesel powered plant will be utilised and mobile phone coverage is sufficient.

4.2. Water Supply

No water supply is required for operational activities. Should water be required it will be sourced from farm dams.

4.3. Sewage

No permanent buildings are required to be erected on site. During intensive operations portable toilets will be utilised if required.

4.4. Stormwater

The quarry is located on the top of a local hill and therefore receives no water from upslope. A sediment basin will collect the run off from the disturbed areas during rainfall periods. The sediment basin will prevent the runoff from allowing excessive sediment laden water to be discharged from site.

4.5. Property Access

The gravel will be transported to the intersection on Mellburra road utilising the existing haul road. The access on to Mellburra road is shown in **Figures 3,4 and 5** below. The low level of traffic to be generated from the quarry would be consistent with current use from trucks required for rural production. There is acceptable sight distance in both directions from the intersection.



FIGURE 3 INTERSECTION AT 668 MELLBURRA ROAD LOOKING EAST



FIGURE 4 INTERSECTION LOOKING NORTH



FIGURE 5 INTERSECTION LOOKING SOUTH

5. PLANNING CONISERATIONS

The Narrabri Local Environmental Plan (LEP) 2012 zones the redevelopment as Zone RU1 Primary Production. The proposed quarry is considered to be a local development, as it does not trigger the requirements for designated development, under Schedule 3 of the Environmental Planning and Assessment Regulation Act 2000. The development requires an average of approximately 29,000T per year. The area identified for extraction covers approximately 1.9 Ha. There is no statutory requirement to forward the application to a Joint Regional Planning Panel for consideration. The applicant has requested that the application be dealt with by the local consent authority, being the Narrabri Shire Council.

5.1.State Environment Planning Policies

State Environmental Planning Policy No. 44 – Koala Habitat Protection:

The Narrabri Shire is included in schedule 1 of SEPP 44 and therefore an assessment of Koala Habitat is required. The proposed site has been largely cleared and developed for agriculture, though there are small remnant patches left adjacent to the development. The immediate area surrounding the proposed extraction comprises a mixture of woodland vegetation comprising mostly White Cypress (*Callitris glaucophylla*), Ironbark (*Eucalyptus creba*), Cyprus Pine (*Callitris* spp.) and scrubby acacia species. None of these species are considered as (Scheduled) primary food sources for Koala.

5.2.Land use zoning

The subject land is zoned as RU1 – Primary Production under the Narrabri Local Environment Plan 2012 (The LEP). The proposed development is permissible with consent from Council under Part 2 and Part 4 of the Narrabri LEP 2012. The objectives of the zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To permit development for certain purposes if it can be demonstrated that suitable land or premises are not available elsewhere.

The quarry will occupy a comparatively small area that has a low agricultural value due to the rocky and sandy nature of the topsoil. After the quarry operations have ceased the area will be returned to a land use comparable to the adjoining areas. The gravel material has been used previously for farm infrastructure and roads that are required for efficient farming. Therefore, assessment of the proposed development has determined that the proposal generally conforms to the aims and objectives of the LEP & land use zone.

6. ENVIRONMENT CONISERATIONS

6.1.Adjoining Land use

The adjoining land has a similar history of long-term agricultural use to that of the proposed development site. The land is surrounded by either cropping land or sheep and cattle grazing land. Crops that are frequently grown on the surrounding land include but are not limited to: wheat, barley oats, canola, chickpeas, faba beans, mung beans, cotton, sorghum, and cowpeas.

6.2. Flora & Fauna

The proposed development site contains agricultural land which has been extensively cleared. proposed site has been largely cleared and developed for agriculture, though there are small remnant patches left adjacent to the development. The immediate area surrounding the proposed extraction comprises a mixture of woodland vegetation comprising mostly White Cypress (*Callitris glaucophylla*), Ironbark (*Eucalyptus creba*), Cyprus Pine (*Callitris spp.*) and scrubby acacia species.

The quarry would be unlikely to have a significant impact on any threatened or endangered species and communities as only minor clearing of vegetation is required and the intended operation hours would be limited by the intermittent nature of the work required. The redeveloped area will be located within an area of sparse vegetation and as such, minimal clearing will be required; nor would any areas of native remnant vegetation be segregated by this proposal.

6.3.Land contamination

The extraction of gravel from this site is not considered to have the potential to contaminate the land. Machinery to be operated on the site will be temporary and no permanent hydrocarbon storage is intended to be located on the quarry site.

6.4.Flooding

The proposed development site is situated on the ridgeline dividing the tributary of Grayvania and Nundi streams which are part of the Gwydir Catchment. The proposed quarry site is approximately 55 and 65m above these creek lines and therefore poses no flooding risk.

6.5.Erosion and Sediment Control

The disturbed active area of the quarry will direct run off into one of two sediment control dams as shown in figure 2. The sediment control dams will be of sufficient capacity to capture rainfall from a 1 in 10 year annual return rainfall event. This will prevent sediment entering the receiving environment under normal operating conditions.

6.6. Visual, Dust and Noise Impact

The quarry is located approximately 3km East of 668 Mellburra Road and is not visible from the roadside due to the natural topography of the land. This quarry is also not visible from either residences that are closest to the quarry. Due to the isolated manner and natural topography there will be no aesthetic public impacts. The noise impacts will be negligible during normal operations due to the distance to the nearest receptor. The nearest residence to the quarry is located approximately 3.2km and 3.8km from the nearest point. These residences are both owned by the proponent. In addition to this no evening or night work is intended under normal operating conditions which minimises inversion conditions exacerbating noise impacts. Dust generation onsite will be visually monitored during operations and water carts utilised when required.

6.7. Social and Economic

The social and economic impacts of this proposal will be minimal. Economic impacts are limited to the increased trade of these raw materials for the proponent, which will inadvertently maintain or potentially increase the economic activity of the Narrabri Shire. Any negative social impacts from approval of the proposed development are considered to be limited to a minor increase in regular traffic between the quarry and construction projects, during days of operation.

6.8. Bushfire Assessment

The proposed development falls within bushfire prone land. The quarry will form a natural asset protection zone for any mobile machinery that will be located onsite. No permanent infrastructure or flammable materials are intended to be stored at the quarry. Due to the open and clear nature of the quarry along with no permanent infrastructure or plant onsite the bushfire risk is considered to be negligible.

7. ENVIRONMENTAL IMPACTS AND SUMMARY

The following points provide a summary of the proposed redevelopment of the quarry within Lot 24 DP 753920.

The findings of this *Statement of Environmental Effects* include:

- The proposal is considered to comply with local planning guidelines and objectives of the Narrabri Shire Council *Local Environmental Plan 2011 and applicable Development Control Plan*;
- The proposal is not considered to have any major additional environmental impact does not pose any significant amenity of the surrounding area;
- The proposal is not considered to pose adverse effects to the social or economic feasibility of the surrounding area
- The impact of flora and fauna is considered to be minimal and similar to that of the accepted farming practices in the area.

Appendix

Site Location

Site Layout

Site Location



Site Layout

