

BACKGROUND REPORT

for

THE EXPANSION & INCREASE IN THE RATE OF PRODUCTION AT 'ROBINSON'S' QUARRY WOODBURN

on behalf of
**NEWMAN QUARRYING PTY LTD
REARDONS LANE
WOODBURN NSW 2472**

land
**Lot 193 in DP 755603
Bungawalbin-Whiporie Road,
Bungawalbin Woodburn NSW**

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1. INTRODUCTION

The purpose of this report is to:

1. introduce and describe a proposal to expand and deepen existing quarry extraction areas and increase the rate of production of quarrying from land on which 'Robinsons' Quarry, Woodburn is located and
2. provide an overview of the potential environmental issues associated with the quarry expansion and increase the rate of production.

'Robinsons' Quarry is owned and operated by Newman Quarrying Pty Ltd.

'Robinsons' Quarry comprises 2 quarries extracting sandstone material which is processed and used for a variety of purposes including; road base, rock walls, brick sand concrete sand sandy loam & building materials (dimensioned stone paving stone).

In general terms the proposed development is to:

- increase the depths of 'Pit B' and 'Pit C'
- the progressive lateral expansion of 'Pit B' and 'Pit C'
- the closure, importation of discarded soil and rock for the rehabilitation of 'Pit A' and other exhausted areas
- the use of a mobile crusher in the 'Pit B' and 'Pit C' to produce road base
- the progressive increase in the rate of production from 'Pit B' and 'Pit C' to a maximum of 400,000 tonnes per annum and
- the installation of a weighbridge and provision of on-site amenities for staff.

The proposed increase in the rate of production from the quarries exceeds the production threshold of 200,000 tonnes per annum specified for extractive industries within Schedule 1 Group 2 Item 7 of SEPP (Major Projects).

As a consequence of Clause 6 of State Environmental Planning Policy (Major Projects) [SEPP (Major Projects)], the proposal is a 'major project' subject to Part 3A of the Environmental Planning and Assessment Act, 1979 as amended (EP&A Act).

This report has been prepared for submission to the Director-General of the NSW Department of Planning to accompany a project application under Part 3A of the EP&A Act and to facilitate the development of the Director-General requirements for the Environmental Assessment (EA) of the proposal.

Malcolm Scott MPIA CPP, Consultant Town Planner, in association with Mr Greg Alderson of Greg Alderson & Assoc Pty Ltd and Mr Noel Newman of Newman Quarrying Pty Ltd, has prepared this report.

2. EXISTING OPERATION

2.1 Background

The land on which 'Robinsons' Quarry is located has been quarried since the 1960's by number of operators including the former NSW Department of Main Roads and the former Woodburn Shire Council.

Newman Quarrying Pty Ltd commenced extraction of material from 2 existing pits ('Pit A' & 'Pit B') on the land in 1985.

As a consequence of the introduction of State Environmental Planning Policy No. 37 - Continued Mines and Extractive Industries a Development Application (No. 127/95) for the continuing use and expansion of 2 existing pits at the quarry was made to and conditionally approved by Richmond River Shire Council on 19 February 1997.

Appendix No. 1 is a copy of the Development Consent and approved 'stamped' plans for 'Pits A & B'.

Newman Quarrying Pty Ltd commenced extraction of material from 'Pit C' believing if maintained existing use rights. Material (surface ironstone) was previously extracted from 'Pit C' in the 1960's by the former Department Main Roads for construction of the existing Pacific Highway and local regional roads.

Extraction of material from 'Pit C' has ceased as it does not have consent under the EP&A Act.

Plan No. 1 and **Illustration No. 1** shows the location of 'Pits A, B & C'.

2.2 Location of land

The land on which 'Robinsons' Quarry is located is approximately 12.5km west of Woodburn via Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road.

The Coraki-Woodburn Road is a regional road known as Main Road 145.

The land and quarry is presently accessed via an access road from Boggy Creek Road. The access road is currently being acquired as a public road by Richmond Valley Council. The access road is located on Crown land known as Lot 188 in DP 755603. The Crown land comprises Crown Reserves No. 51896 for Refuge in Time of Flood (notified 15 December 1916) and No. 93864 for Future Public Requirements (notified 17 October 1980).

The land on which the quarrying is located is known as Lot 193 in DP 755603 Bungawalbin-Whiporie Road, Bungawalbin.

The land area of Lot 193 in DP 755603 is 518ha.

Map No. 1 shows the location of the land in the Northern Rivers region and Woodburn.

Map No. 2 shows cadastral, topographic information and land use zones within approximately 1km of the land.

Illustration No. 1 is a satellite image showing the land, quarry 'Pits A, B & C' and adjoining lands.

2.3 Overview of existing operations

2.3.1 Existing quarry layout

The following generally describes the operation of the 'pits'.

Plan No. 1 and **Illustration No. 1** shows the extent of existing operations at 'Pits A, B & C' in relation to the boundaries of the land.

Appendix No. 1 shows the approved extraction areas for 'Pits A & B'.

'Pit A'

'Pit A' had an approved operation area of approximately 0.66ha.

The present operational area, including the existing resource stockpiles, of 'Pit A' is approximately 1.5ha.

The existing quarry floor level within the 'Pit A' varies between approximately RL95m(AHD) and RL100m(AHD). The approval for the 'pit' nominates an extraction depth of RL93m(AHD).

Presently there is no quarry face at 'Pit A' as sand has been removed by grading.

'Pit B'

'Pit B' had an approved operation area of approximately 0.65ha.

The present operational area, including the existing resource stockpiles, of 'Pit B' is approximately 6.2ha.

The southern quarry face of 'Pit B' is approximately 15m deep and northern quarry face approximately 10m deep.

The existing quarry floor level within the 'Pit B' varies between approximately RL95m(AHD) and RL120m(AHD). The approval for the 'pit' nominates an extraction depth of RL96m(AHD).

'Pit C'

'Pit C' present occupies an area of approximately 8ha.

The southern face of 'Pit C' is approximately 10m deep.

The existing quarry floor level of 'Pit C' varies between approximately RL106m(AHD) and RL130m(AHD).

The extraction of material from 'Pit C' has ceased.

2.3.2 Existing quarry operations

The basic activities undertaken to quarry the sandstone resource are:

- clearing and grubbing of vegetation
- topsoil removal and stockpiling
- overburden removal and stockpiling
- drilling and blasting
- raw feed winning and transportation
- crushing and screening
- stockpiling of product and
- sale and transport of product.

Clearing and grubbing of vegetation is undertaken using dozers and loaders. Small stockpiles of 'grubbed out' trees exist in various locations adjoining the operational 'pits'.

Topsoil and overburden is removed and stockpiled in various locations away from the 'pits' and used for rehabilitation.

Drilling and blasting is undertaken by specialist contractors who hold appropriate State and Federal licences and authorities. Drilling and blasting occurs on an as required basis. Presently some 12 blasts per year are undertaken.

After blasting, raw material is loaded using either a rubber tyred 4m³ front end loader or 25 tonne excavator directly to the feed hopper of the mobile crushing plant.

Existing crushing operations consist of a primary jaw crusher, screens and conveyors with recycle system linking each of these components.

The crushing and screening plant has a throughput capacity of approximately 200 tonnes per hour or 1,500 tonnes per day.

2.3.3 Existing quarry products

The following products are produced at the quarry:

- road base
- select fill
- fill sand
- sandy loam
- brick sand
- concrete sand
- aggregates and
- dimensioned stone & rock.

2.3.4 Existing quarry days and hours of operation and workforce **Days and hours of operation**

The quarry operates the following days and hours.

General operations and product transportation

Monday to Friday 7am to 6.00pm

Saturday 7am to 2.30pm

Drilling and blasting
Monday to Friday 9.00am to 5pm

Workforce

The quarry directly employs 4 persons. All operations are under the control of the Quarry Manager.

Personnel are as follows:

- 1 x Quarry Manager
- 1 x Excavator operator
- 1 x Crusher operator and
- 1 x Loader driver.

2.3.5 Existing quarry output

The rate of extraction and production from the quarry is greater than that approved in DA No. 127/95. Refer to **Appendix No. 1**.

The approved rate of extraction is 30,000m³ per annum which is equivalent to 72,000 tonnes per annum @ 2.4 tonnes per solid m³ in situ - banked.

2.3.6 Existing quarry product haulage

The main haulage route from the quarries is Boggy Creek Rd, Reardons Lane, then east via the Coraki-Woodburn Road and the Pacific Highway (State Highway No. 10).

Small quantities of product material is taken west via the Coraki-Woodburn Road to Coraki.

Map No. 3 shows the main haulage roads.

The Coraki-Woodburn Road is a 2 lane rural sealed road of variable width.

Reardons Lane is a 2 lane rural sealed road of variable width.

Boggy Creek Road is a 2 lane rural gravel road of variable width.

The access road to the land and quarries is a 2 lane gravel road of variable width.

2.3.7 Existing quarry services

Water

Currently there is no potable water provided at the existing 'pits'. Presently potable water is sourced from the dwelling on the land. Refer Section 2.3.8.

Electricity

Currently there is no electricity supplied to the existing 'pits'.

Wastewater disposal

Currently there is no toilet facilities supplied to the existing 'pits'. Presently toilet facilities at the dwelling on the land are utilised. Refer Section 2.3.8.

Telephone

Mobile telephone coverage to the land is good. Refer Section 2.3.8.

Fuel storage

There is currently no on-site storage of fuel at the existing 'pits'. A 1,800 litre mobile fuel cart is currently used on the quarry floor to refuel operating vehicles and plant. The mobile cart is refuelled at Newman's Quarrying Pty Ltd supplies depot in Reardons Lane.

2.3.8 Other development on the land

Other existing development on the land comprises:

1. a dwelling-house occupied by the landowner and quarry operators Mr Noel & Mrs Kerrie Newman and
2. the 2 communication towers located near the 'Moonimba' trig station.

Dwelling-house

The dwelling-house was approved by Council in Development Application No. 135/96, dated 4 December 1996 and Building Application No. 211/96, dated 23 January 1997.

The dwelling-house is occupied by Mr & Mrs Newman.

Communication towers

Two communications towers exist on the land near the 'Moonimba' trig station. The larger tower is owned by Crown Castle and used by Vodaphone, Telstra and Optus. Police Radio, Rural Fire Service, Northern Communications and Radio 88.9 utilise the smaller tower.

Access to the communications towers is via the existing access road from Boggy Creek Rd.

2.3.9 Existing quarry environmental management and rehabilitation

The following generally describes the existing management responses to the environmental issues and/or impacts generated by quarrying on the land.

General noise management

To the operator knowledge the existing quarry operation has not received any noise complaints. The distances between the quarry work areas and the nearest 2 dwellings to the southwest is greater than 1km.

There are 5 dwellings along the haulage route from the quarry to the Woodburn-Coraki Road (2 dwellings adjoining Boggy Creek Road and 3 dwellings adjoining Reardons Lane) which may be affected by haulage truck noise. There are 2 vacant lots adjoining Reardons Lane.

All plant and equipment used in the quarries is modern and of a high quality. All plant is regularly inspected and licensed as required.

Drilling and blast noise and vibration management

Drilling and blasting presently takes place at the quarries approximately once every month (12 per year). For each blast event the contractor monitors noise, air blast over-pressure and ground vibration at a different boundary location approximately 800m from blast site. Licensed drilling and blasting contractors are always used in the quarries.

Dust management

A 15,000 litre water truck is kept at the quarry at all times and used to control dust generated by use of internal haulage access roads.

Water injection on the crusher can be used as required to control dust emissions of the crusher and screening plant. The quartz sandstone product is not particularly dusty.

Only nominated and stabilised internal access roads are used for haulage.

The loads of haulage trucks leaving the quarry and using the public road system are covered.

Water management

Stormwater diversion drains and bunds have been provided to direct overland flow outside the active quarry areas.

Stormwater in the quarry floor and active areas is directed to collection sumps and sediment ponds.

Stormwater in sediment ponds is either re-used and/or released. The quality of stormwater is visually monitored prior to release.

A number of sediment ponds have also been located in un-named watercourse within the land below 'Pit C'. The watercourse would be classified as a 1st order stream using the 'Strahler' stream ordering system.

Soils management

Topsoil and overburden stockpiles are placed away from drainage lines and in areas surrounded by good ground cover vegetation. Topsoil is stockpiled and retained for rehabilitation. Stockpiles are seeded to reduce erosion.

Flora and fauna management

A preliminary flora and fauna assessment has been carried out by Conacher Travers of the land immediately adjoining 'Pit C'. Refer to **Appendix No. 2**.

Rehabilitation

Rehabilitation of a previously quarried area has been previously undertaken. The effectiveness of the rehabilitation works will be assessed to determine the future rehabilitation methods.

3. PROPOSED OPERATION

3.1 Overview of proposed expansion

In general terms and subject to further satisfactory detailed environmental assessment the proposal is:

- to increase the depths of 'Pit B' and 'Pit C'
- the progressive lateral expansion of 'Pit B' and 'Pit C'
- the closure, importation of discarded soil and rock for the rehabilitation of 'Pit A' and other exhausted areas
- the use of a mobile crusher in the 'Pit B' and 'Pit C' to produce road base
- the progressive increase in the rate of production from 'Pit B' and 'Pit C' to a maximum of 400,000 tonnes per annum and
- the installation of a weighbridge and provision of on-site amenities for staff.

The period over which the expansion is proposed is from 2007 to 2017 (10 years).

It is anticipated that the quarry operation and output will be increased to provide material for the up-grade of the Pacific Highway in the region.

It is then anticipated that production will be reduced to approximately 50,000 tonne per annum (20,800 m³ per annum in situ - banked). The reduction in the rate of extraction and output will extend the operational life of the quarry.

3.1.1 Proposed quarry output

The proposed output of the quarrying operations on the land is the progressive increase in the rate of production from 'Pit B' and 'Pit C' to a maximum of 400,000 tonnes per annum.

Plan No. 1 shows the existing quarry operations in relation to the boundaries of the lands.

Plan No. 2 shows the approximate location of the expansion areas associated with 'Pits B & C'.

To achieve the output of the quarrying operations on the land is proposed to:

- Increase the depth of the existing floor in the 'Pit B' from its current level of approximately RL110m(AHD) to approximately RL90m(AHD) and laterally expand operations. Potentially this might yield in the order of 2,500,000m³ (6,000,000 tonnes @ 2.4 tonnes per solid m³ in situ - banked) of solid raw product material.
- Increase the depth of the existing floor in the 'Pit C' from its current level of approximately RL120m to approximately RL90m and laterally expand operations. Potentially this might yield in the order of 3,000,000m³ (7,200,000 tonnes @ 2.4 tonnes per solid m³ in situ - banked) of solid raw product material.

3.1.2 Proposed quarry layout and operations

The quarry operations will include:

- clearing and grubbing of vegetation
- topsoil removal and stockpiling
- overburden removal and stockpiling

- drilling and blasting
- raw feed winning and transportation
- crushing and screening
- stockpiling of product and
- sale and transport of product.

Clearing and grubbing of vegetation will be undertaken using dozers and loaders. 'Grubbed out' trees not suitable for milling will be stockpiled adjoining the operational 'pits'.

Topsoil and overburden will be removed and stockpiled to be used for rehabilitation.

Drilling and blasting will continue to be undertaken by specialist contractors who hold appropriate State and Federal licences and authorities. It is estimated that blasting will occur on 20 occasions per year.

After blasting, raw material will be loaded using either a rubber tyred 4m³ front end loader or 25 tonne excavator directly to the feed hopper of the mobile crushing and screening plant.

The crushing and screening plant has a throughput capacity of approximately 200 tonnes per hour or 1,500 tonnes per day.

3.1.3 Proposed quarry days and hours of operation and workforce

Days and hours of operation

It is proposed that the quarrying will operate the following days and hours.

General operations and product transportation

Monday to Friday 7am to 6.00pm

Saturday 7am to 2.30pm

Drilling and blasting

Monday to Friday 9.00am to 5pm

The quarry will close for 2 weeks over the Christmas break and there will be no work on Public Holidays or Sundays unless there is an emergency or specific projects such as the highway reconstruction which may require Sunday work.

Workforce

The proposed quarry will employ an additional 2 persons.

3.1.4 Proposed quarry product haulage

The increase in rate of production will cause a significant increase in the number of haulage trucks using the Coraki-Woodburn Road, Reardons Lane, Boggy Creek Road and the existing internal access road from Boggy Creek Road.

B-Double trucks have now been approved for use on the Coraki-Woodburn Road.

It is anticipated that the increase in production will necessitate the bitumen sealing of:

- the access road near the dwelling at the corner of Boggy Creek Road and

- Boggy Creek Road in the vicinity of existing dwellings to control dust emissions and reduce potential truck noise.

A traffic impact study will be undertaken as part of the detailed environmental assessment of the proposed development to:

- evaluate the capacity and capability of Coraki-Woodburn Road to accommodate additional heavy vehicle movements
- identify those sections of Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road that may need to be up-graded and
- evaluate the capacity and capability of the intersections of the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road to accommodate additional heavy vehicle movements.

3.1.5 Proposed quarry services

Water

Potable water will be supplied either by roof water harvesting or by water brought in by tanker truck.

Electricity

No electricity is proposed to be supplied to the 'pits'.

Wastewater disposal

A site office and staff facilities such as toilets, shower, kitchen and lunch room will be provided in the proposed amenities building.

Telephone

Mobile telephone.

Fuel storage

A bunded and covered fuel storage facility will be provided at 'Pit C'.

Weighbridge

A weighbridge will be constructed near the amenities building.

3.1.6 Proposed quarry environmental management

An environmental management and rehabilitation plan will be prepared to manage the 'day to day' operations of the quarrying.

The plan will ensure that the commitments in the Environmental Assessment, subsequent assessment reports (if required) and approval or licence conditions are fully implemented and provide a comprehensive framework for the managing or mitigating environmental impacts for the duration of the quarrying operation.

The plan will establish a program for managing and monitoring the quarrying operation and address the following matters and issues (where relevant):

1. Management of quarrying
 - a. Quarry establishment and expansion, e.g. soil erosion and sedimentation management and revegetation plans
 - b. Operations management
 - i. Stockpiles
 - ii. Explosives, chemicals, fuels
 - iii. Water, dust and erosion
 - iv. Transport

- v. Maintenance and security
 - vi. Emergency response
 - vii. Progressive rehabilitation
 - c. Implementation of monitoring results to improve environmental performance
 - d. Training programs
 - e. Strategies to demonstrate compliance with approval and licensing conditions and
 - f. Reporting mechanisms for environmental performance, payment of contributions and bonds.
- 2. Monitoring
 - a. Establishment of performance indicators including:
 - b. Quality of discharge water
 - c. Noise and dust
 - d. Waste management
 - e. Complaints procedures
 - f. Monitoring details including:
 - i. Information to be monitored
 - ii. Monitoring locations, intervals and duration
 - iii. Monitoring procedures
 - iv. Procedures if monitoring shows non-compliance or abnormalities
 - v. Internal reporting and
 - vi. Reporting to relevant authorities.

3.2 Geology and resource assessment

A geological investigation and resource assessment of 'Pits A, B & C' has been undertaken by Dr John Smith of the School of Civil, Environmental and Chemical Engineering at RMIT University.

Appendix No. 3 is a copy of the report by Dr Smith.

Dr Smith identified 2 layers of quartz sandstone within the quarry area comprising an upper (western) layer and a lower (eastern) layer. Both layers dip at approximately 5° to the west following the general fall of the land.

Dr Smith estimated an inferred resource of approximately 7,000,000m³ in each of the western ('Pit B') and eastern ('Pit C') pits. The total resource would be in the order of 14,000,000m³.

3.3 Workforce

Refer to Sections 2.3.3 and 2.4.3.

3.4 Possible end use

The quarried areas will be rehabilitated and revegetated.

4. PLANNING CONTROLS

4.1 Environmental Planning and Assessment Act 1979

The proposed development is a 'major project' and subject to the provisions of Part 3A of the EP&A Act. Section 75B of the EP&A Act states that Part 3A applies to a project carrying out development identified in a State environmental planning policy. SEPP (Major Projects) applies to extractive industries that will extract greater than 200,000 tonnes of material per annum or extracts from a total resource of more than 5 million tonnes.

Other than for making provision for payment of contributions under Sections 94, 94A or 94F, Section 75R of the EP&A Act exempts Part 3A major projects from the provisions of Part 4 and Part 5 of the Act and other environmental planning instruments other than State environmental planning policies.

The following identifies the State environmental planning policies and other environmental planning instruments that would but for Section 75R of the EP&A Act have otherwise applied to the proposal.

4.2 State Environmental Planning Policies (SEPP's)

The following SEPP's apply to the proposed development.

4.2.1 SEPP No. 11 – Traffic Generating Developments

The proposal is subject to the provisions of SEPP No. 11 and is a Schedule 1 development pursuant to the SEPP.

This necessitates the application being referred by the consent authority to the NSW Roads and Traffic Authority who will in turn refer it to the Regional Traffic Committee for consideration and comment.

4.2.2 SEPP No. 33 – Hazardous and Offensive Industries

SEPP No. 33 defines 'hazardous industry', 'hazardous storage establishment', 'offensive industry' and 'offensive storage establishment'. The Policy aims to ensure that in the determination of a development that is a 'hazardous industry' or 'offensive industry' measures proposed to be employed to reduce the impact of the development are taken into account and sufficient information is provided to the consent authority to assess whether or not the development is hazardous or offensive.

An application for a 'potentially hazardous industry' should be accompanied by a preliminary hazard analysis prepared in accordance with guidelines and circular produced by the Department of Planning.

It is not proposed to store explosives and/or detonators on the land, therefore the development is not either a 'hazardous industry', 'hazardous storage establishment', 'offensive industry' or 'offensive storage establishment'.

4.2.3 SEPP No. 44 – Koala Habitat Protection

Koala (*Phascolarctos cinereus*) is a threatened fauna species listed in Schedule 2 (vulnerable) of the Threatened Species Conservation Act 1996.

SEPP No. 44 aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for Koalas to ensure a permanent free-living population over their present range and reverse the current trend of Koala Population decline:

- a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat and
- b) by encouraging the identification of areas of core koala habitat and
- c) by encouraging the inclusion of areas of core koala habitat in environmental protection zones.

SEPP No. 44 outlines a number of steps or considerations to be assessed to determine whether or not the Policy applies. The Policy applies to the lands and the lands contain potential core Koala habitat.

The fauna and flora assessment undertaken did not identify Koalas or Koala habitat on the land. Refer to **Appendix No. 2**.

The land was found to contain 3 Koala food tree species - *Eucalyptus microcorys*, *E. signata* and *E. robusta*. Due to the large size of the land preferred feed tree percentage counts were not undertaken over the whole of the land. However areas of the survey land were observed to contain percentages of Koala feed trees greater than 15%. Thus parts of the land forms potential Koala habitat.

Preferred feed tree species were targeted during surveys for signs of use by the Koala including scats at the base and scratches on the trunks. No evidence of any signs of use was observed during these surveys. Koalas were also targeted during spotlighting with no observations of the Koala made.

The survey land does form potential koala habitat by definition, however it does not form core Koala habitat.

Additional fauna and flora assessment will further clarify and determine whether or not a Koala Plan of Management has to be prepared for the land and proposed development.

4.2.4 SEPP (Major Projects)

As a consequence of Clause 6 and Schedule 1 Group 2 Item 7 of SEPP (Major Projects) applies to the proposed development.

4.3 Regional Environmental Plan and Strategies

The following regional environmental plan and strategies would but for the exemption of Section 75R(3) apply to the proposed development.

4.3.1 North Coast Regional Environmental Plan (NCREP)

Clause 12 of the NCREP requires that the impact of development on agricultural activities be assessed and considered.

The existing quarry development has existed on the land since the 1960's and has not adversely impacted on the on-going use of adjoining land for grazing of cattle and growing of tea tree.

Clause 18 of the NCREP requires the implementation both during and after extraction operations of an erosion and sediment control plan and rehabilitation

plan. The existing quarrying operation has implemented some erosion and sediment control strategies.

4.3.2 North Coast Urban Planning Strategy into the 21st Strategy

The North Coast Urban Planning Strategy (NCUPS) notes that the demand for extractive materials will increase with continued population growth in the region. Preliminary estimates in NCUPS indicated that the 20 year period 1995 to 2015 the average requirement for construction materials will be at least 3.6 million tonnes per annum. NCUPS notes that the use of materials source from rivers is not sustainable and alternative sources of supply should be located.

The existing quarry is not identified in the NCUPS. The expansion of and more effective utilisation an existing resource is consistent with the NCUPS.

4.3.3 Far North Coast Regional Strategy

The Far North Coast Regional Strategy does not identify the quarrying operation on the land as a quarry of regional importance.

The expansion and more effective utilisation of an existing construction resource is consistent with the Strategy. It is anticipated that the material will be utilised in the construction of the up-graded Pacific Highway which is of regional, state and national significance.

4.3.4 North Coast Extractive Industries Standing Committee

The 1996 report by the North Coast Extractive Industries Standing Committee did not identify the quarry as a quarry of regional significance.

The expansion and more effective utilisation of an existing construction resource is consistent with the Standing Committee report and recommendations.

4.4 Local Environmental Plans

The following local environmental plan and strategies would but for the exemption of Section 75R(3) apply to the proposed development.

4.4.1 Richmond River Local Environmental Plan 1992

The land on which the quarry is located is zoned 1(b1)(Rural - Secondary Agricultural Land) and 7(b)(Environmental Protection - Scenic escarpment) under the Richmond River Local Environmental Plan 1992.

Quarry 'Pits A, B & C' are located on land zoned 1(b1)(Rural - Secondary Agricultural Land).

Map No. 2 shows land cadastral and zoning information within approximately 1km of the quarry.

The expansion of the quarrying on the land is a permissible development in the 1(b1)(Rural - Secondary Agricultural Land) zone.

4.4.2 Development Control Plans

No Richmond River Development Control Plans apply to the land and proposal to increase the rate of production of the quarry.

4.4.3 Section 94 Contributions Plan

The Richmond River Section 94 Contributions Plan applies to the proposal to increase the rate of production of the quarry.

4.5 Other Approvals

Section 75U of the EP&A Act exempts approved Part 3A major projects from gaining authorisations issued under the following legislation that might have otherwise applied to a Development Application on the lands:

- Section 87 or consent under Section 90 of the National Parks and Wildlife Act 1974
- Section 12 of the Native Vegetation Act 2003
- Section 100B of the Rural Fires Act 1997 and
- Sections 89, 90 or 91 of the Water Management Act 2000.

4.5.1 Protection of the Environment Operations Act 1997

The existing quarry does not operate under an Environment Protection Licence issued by the Dept of Environment and Conservation under the Protection of the Environment Operations Act 1997.

The increase to the quarry rate of production requires the issue of an Environment Protection Licence by the Department of Environment and Climate Change.

4.5.2 National Parks and Wildlife Act 1974

A permit under Section 87 or consent under Section 90 of the National Parks and Wildlife Act 1974 may have been required but for the exemption provisions of Section 75U of the EP&A Act that apply to the proposed development.

4.5.3 Native Vegetation Act 2003

Authorisation under Section 12 of the Native Vegetation Act 2003 may have been required but for the exemption provisions of Section 75U of the EP&A Act that apply to the proposed development.

4.5.4 Rural Fires Act 1997

Authorisation under Section 100B of the Rural Fires Act 1997 may have been required but for the exemption provisions of Section 75U of the EP&A Act that apply to the proposed development.

4.5.5 Threatened Species Conservation Act 1997

A fauna and flora study was undertaken on the land adjoining 'Pit C'.

The land contains habitats for a number of locally occurring threatened flora species. One threatened flora species *Marsdenia longiloba* (Slender Marsdenia) was recorded during the flora survey. The plant was within the riparian vegetation to the west of 'Pit C'. No endangered ecological communities were observed within the area during the surveys.

A total of 77 fauna species (43 bird, 19 mammal, 7 reptile, 8 amphibian) were observed during fauna surveys. The land contains habitats for a number (39) of locally occurring threatened fauna species. Of these species seven were identified within the land. These were the Squirrel Glider (*Petaurus norfolcensis*), Grey-headed Flying-fox (*Pteropus poliocephalus*), Hoary Wattled Bat (*Chalinolobus nigrogriseus*), Eastern False Pipistrelle (*Falsistrellus*

tasmaniensis), Little Bentwing-bat (*Miniopterus australis*), Greater Broad-nosed Bat (*Scoteanax rueppellii*) and Yellow bellied Sheath-tail Bat (*Saccolaimus flaviventris*). No endangered fauna populations were recorded within the surveyed land.

A detail flora and fauna assessment of the operating and proposed quarry expansion will identify whether or not the proposed expansion of the quarrying areas has the potential to impact on threatened or regionally significant flora and fauna species, populations and ecological communities.

5. STAKEHOLDER ENGAGEMENT

5.1 General

As part of the preparation of the Environmental Assessment (EA) a Stakeholder Engagement Plan has been developed. The principal aims and objectives of the engagement plan are to:

- identify all stakeholders
- develop appropriate techniques and methods to engage all identified stakeholders
- establish positive relationships with all stakeholders
- ensure there are no misconceptions about the proposed expansion to 'Robinsons' Quarry
- provide a framework for responding to questions and issues raised by stakeholders and
- provide a process for frequent monitoring and evaluation of the effectiveness of stakeholder engagement.

The following sections provide an overview of the stakeholder engagement strategy and the outcomes of the initial consultation.

5.2 Identification of stakeholders

The following individual and groups are identified as key stakeholders in the proposed expansion to 'Robinsons' Quarry.

1. Residents living within 1km of the quarry.
2. Residents living along the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road between the land and Pacific Highway.
3. State regulatory agencies including; Department of Planning, Department of Environment and Climate Change, Department of Primary Industries, Department of Water and Energy and NSW Roads and Traffic Authority.
4. The Minister for Planning.
5. Richmond Valley Council.
6. State Member of Parliament – The Hon Mr Stephen Cansdell, Member for Clarence.
7. Employees at 'Robinsons' Quarry.
8. The Local Aboriginal Land Council.
9. The media.

5.3 Stakeholder strategies and progress

A range of stakeholder engagement strategies have been developed to tailor future communication methods with selected stakeholder groups during the preparation of the EA.

The following provides a brief discussion of the objectives and methods for communication with each of the stakeholder groups to be commenced after receiving the Director-General requirements for the EA.

Stakeholder	Communication method
Residents living within 1km of the quarry and along the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road between the land and Pacific Highway	<ul style="list-style-type: none">• Contact by letter to all residents and provide summary outline of proposal.• Face to face contact with residents who own land immediate adjoining quarry land.• On-going contact by letter supply of briefing notes / newsletter during the EA process.• General information posted on a website to be established.• Public information meetings / sessions.
Government / regulatory authorities	<ul style="list-style-type: none">• Conduct Planning Focus Meeting.
Richmond Valley Council	<ul style="list-style-type: none">• Meeting with relevant staff from Council's Town Planning, Engineering and Environmental Health sections.• Meeting with Mayor.• Invitation to Planning Focus Meeting.
State Member of Parliament	<ul style="list-style-type: none">• Introductory letter and provision of Preliminary Assessment.• Offer face to face meeting and briefing.• Supply copy of briefing notes / newsletter during the EA process.
Quarry employees	<ul style="list-style-type: none">• 'Tool box' meeting at commencement of EA process.• Supply copy of briefing notes / newsletter during the EA process.
Local Aboriginal Land Council	<ul style="list-style-type: none">• Introductory letter and provision of Preliminary Assessment.• Offer face to face meeting and briefing.• Supply copy of briefing notes / newsletter during the EA process.
Media	<ul style="list-style-type: none">• Offer face to face meeting and briefing.• On-going media statements and supply copy of briefing notes / newsletter during the EA process.

6. ENVIRONMENTAL ISSUES

6.1 Overview

The decision to seek the expansion of quarrying operations at 'Robinsons' Quarry is a result of consideration of a number of pertinent factors including:

- That the quarry exists and is in operation. The quarry is in a relatively isolated location and is a land use about which its off-site impacts are known and largely understood by the local community.
- That the NSW Northern Rivers region has experienced considerable population growth and it is planned that the population growth will continue. Population growth generates a demand for construction materials. The existing approved rate of production will not meet the demand for construction materials.
- Newman Quarrying Pty Ltd has received a number of representations from contractors involved in the up-grading of the Pacific Highway. The land and resource is strategically located close to the Pacific Highway and sections proposed to be up-graded.
- That the quarry is of significant local economic importance.
- That sufficient high quality resource exists within the quarry lands.
- That opening an alternative quarry supplying the same quality of material in the North Coast region would be very difficult.

At this stage of the environmental assessment process it is difficult to accurately predict the extent of impacts associated with the proposal.

While detailed assessment will be undertaken to address all potential impacts the key important issues for consideration are expected to relate to potential for impact on threatened flora and fauna, transport and management of noise and dust.

An outline of key issues and results of the early assessment to-date is outlined in the following sections.

6.2 Transport and traffic

The proposed increase in production will generate a significant number of additional heavy vehicle movements on the internal access road, Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road.

A traffic impact study is required and will be undertaken as part of the detailed environmental assessment of the proposed development to:

- evaluate the capacity and capability of the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road to accommodate additional heavy vehicle movements
- identify those sections of the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road that may need to be up-graded and

- evaluate the capacity and capability of the intersections of the Coraki-Woodburn Road, Reardons Lane and Boggy Creek Road to accommodate additional heavy vehicle movements.

The traffic impact study will be undertaken in accordance with the NSW Roads and Traffic Authorities guidelines titled:

- 'Guide to Traffic Generating Development' and
- 'Road Design Guide'.

The scale of the proposal necessitates the application being referred to the Regional Traffic Committee for consideration. Refer to Section 3.2.1.

6.3 Water resources

A detailed description of and assessment for potential environmental impact on surface and groundwater is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

It is fortunate that the land is situated on a plateau which drains via natural watercourses and wetland areas and constructed drains to the floodplain of the Bungawalbin Creek and Rocky Mouth Creek to the Richmond River some 5.5-6.0km to the north of the quarried land.

Water management measures and design capabilities of the sediment control structures should be contained within the quarried area thereby providing a 'closed catchment' from which it is possible to effectively manage the release and reuse of stormwater from collection sumps, sediment ponds and clean water dams.

Diversion drainage should be provided around the excavation areas diverting clean surface water away from excavation and stockpile areas.

The detailed description and assessment of surface and groundwater resources will reveal known groundwater bores within 1km of the quarry.

Further assessment of the surface and groundwater hydrology of the proposed extraction areas is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

The preparation of a water and soils management plan is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

The assessment of surface and groundwater hydrology and water and soils management plan will be based on the following guidelines:

- 'Managing Urban Stormwater: Soils and Construction' (Landcom 2004)
- 'Guidelines for Fresh and marine Water Quality and Guidelines for Water Quality Monitoring and Reporting' (ANZECC 2000)
- 'Rehabilitation Manual for Australian Streams' (Land and Water Resources Research and Development Corporation) and
- 'Approved Methods for the Sampling and Analysis of Water Pollutants in NSW' (DECC 2004).

6.4 Noise and vibration

A noise and vibration impact assessment of the operating and proposed quarry and transport of product is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

The noise impact assessment will be based on the Department of Environment and Climate Change guidelines titled:

- 'Industrial Noise Policy'
 - 'Environmental Criteria for Road Traffic Noise' and
 - 'Assessing Vibration; a technical guideline
- the ANZECC guidelines titled; 'Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration'.

6.5 Air quality

A dust impact assessment of the operating and proposed quarry expansion is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

The dust assessment will be based on the Department of Environment and Climate Change guidelines titled:

- 'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW' and
- 'Approved Methods for the Sampling and Analysis of Air Pollutants in NSW'.

6.6 Ecology

Further flora and fauna assessment of the operating and proposed quarry expansion is required and will be undertaken as part of the detailed environmental assessment of the proposed development.

The flora and fauna assessment will be based on the following guidelines:

- 'Guidelines for Threatened Species Assessment' (DECC)
- 'Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities' (DECC) and
- 'Guidelines for Assessment of Aquatics Ecology in EIA' (Dept of Planning).

6.7 Landscape and visual

The location of the quarry on the summit plateau area minimises the potential for impact on the existing landscape and scenic qualities of the locality.

A landscape impact assessment of the operating and proposed quarry expansion is required will be undertaken as part of the detailed environmental assessment of the proposed development.

6.8 Socio-economic

A resource assessment has been undertaken for the proposed development. Refer to **Appendix No. 3**.

'Robinsons' Quarry is the major source of roadbase and aggregate within Richmond Valley local government area and is a major supplier of these materials to the NSW Roads and Traffic Authority.

The quarry currently directly employs 5 people full time and 4 regular subcontractors on an as required basis.

It is estimated that the expanded quarry will directly employ 6-7 people full time.

The operation of the quarry on an as required basis also employs plant service technicians, plumbers and requires provision of services such as rubbish removal, fuel supply and other trade services such as carpenters and metal fabricators.

The existing quarry is of local significance.

6.9 Aboriginal archaeology

A search was undertaken of the Department of Environment and Conservation Aboriginal Heritage Information Management System (AHIMS). The search shows that the land contains what is known as the "Moonimba Forbidden Place".

An Aboriginal Archaeological and Anthropological survey of the land is required will be undertaken as part of the detailed environmental assessment of the proposed development.

7. CONCLUSION

This report is a preliminary assessment to outline the process and key important issues relating to the proposed expansion of 'Robinsons' Quarry.

The report has been prepared for the Major Development Assessments Section of the NSW Department of Planning in order to provide the Director-Generals requirements for a major project Environmental Assessment.

An Environmental Assessment in accordance with the Director-Generals requirements will provide a full impact assessment of the proposed quarry expansion and define the quarry 'footprint' for the next 10+ years.

The Director-General of the Dept of Planning is requested to provide the requirements for an Environmental Assessment.

USAGE NOTE

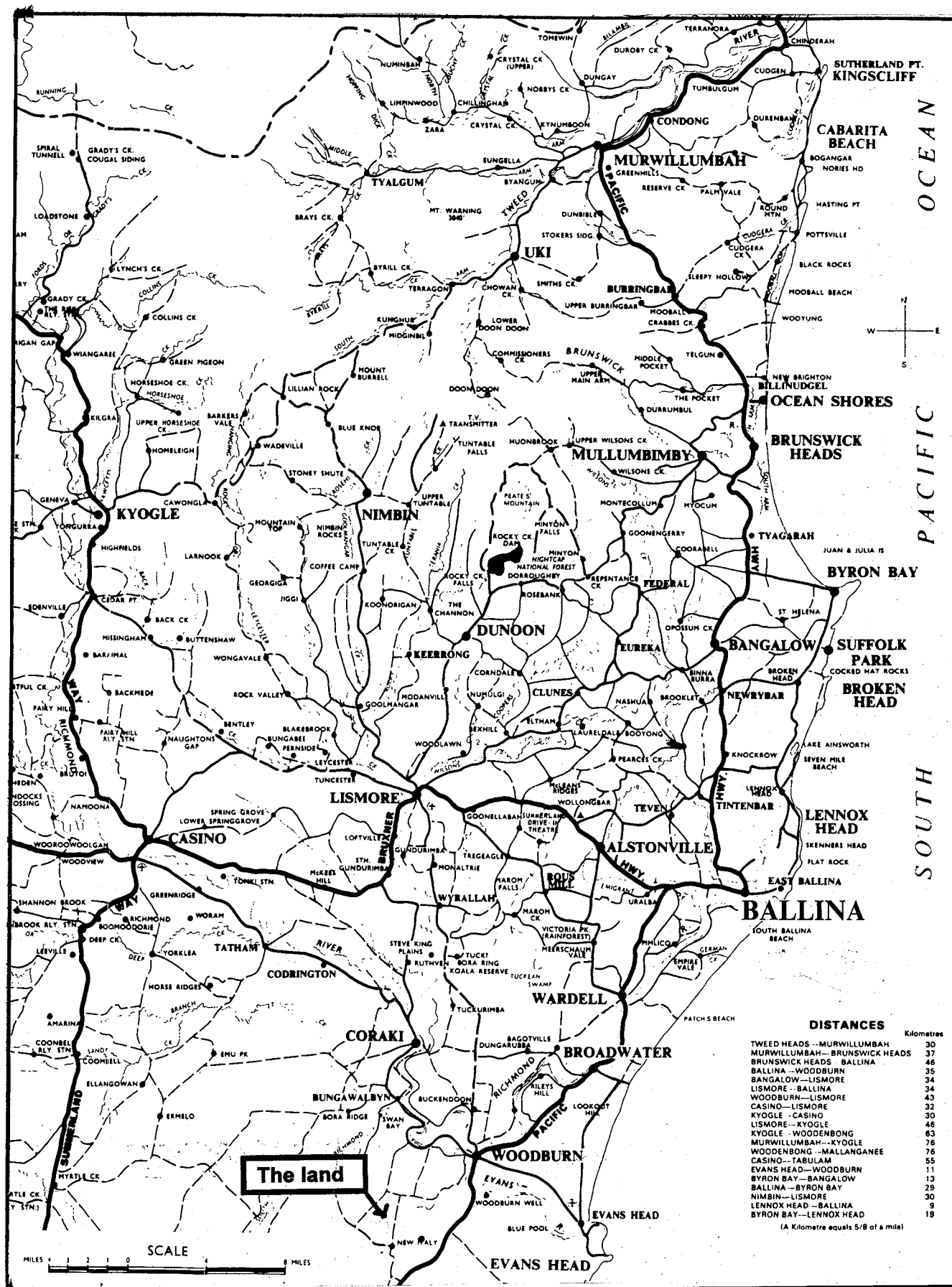
This report was prepared for the purpose and exclusive use of Newman Quarrying Pty Ltd and is not to be used for any other purpose or by any other person or corporation. Malcolm Scott, Consultant Town Planner, accepts no responsibility for any loss or damage suffered, however so arising, to any person or corporation who may use or rely on this report for a purpose other than that described above.

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END OF REPORT

17 October 2007



MAP No. 1

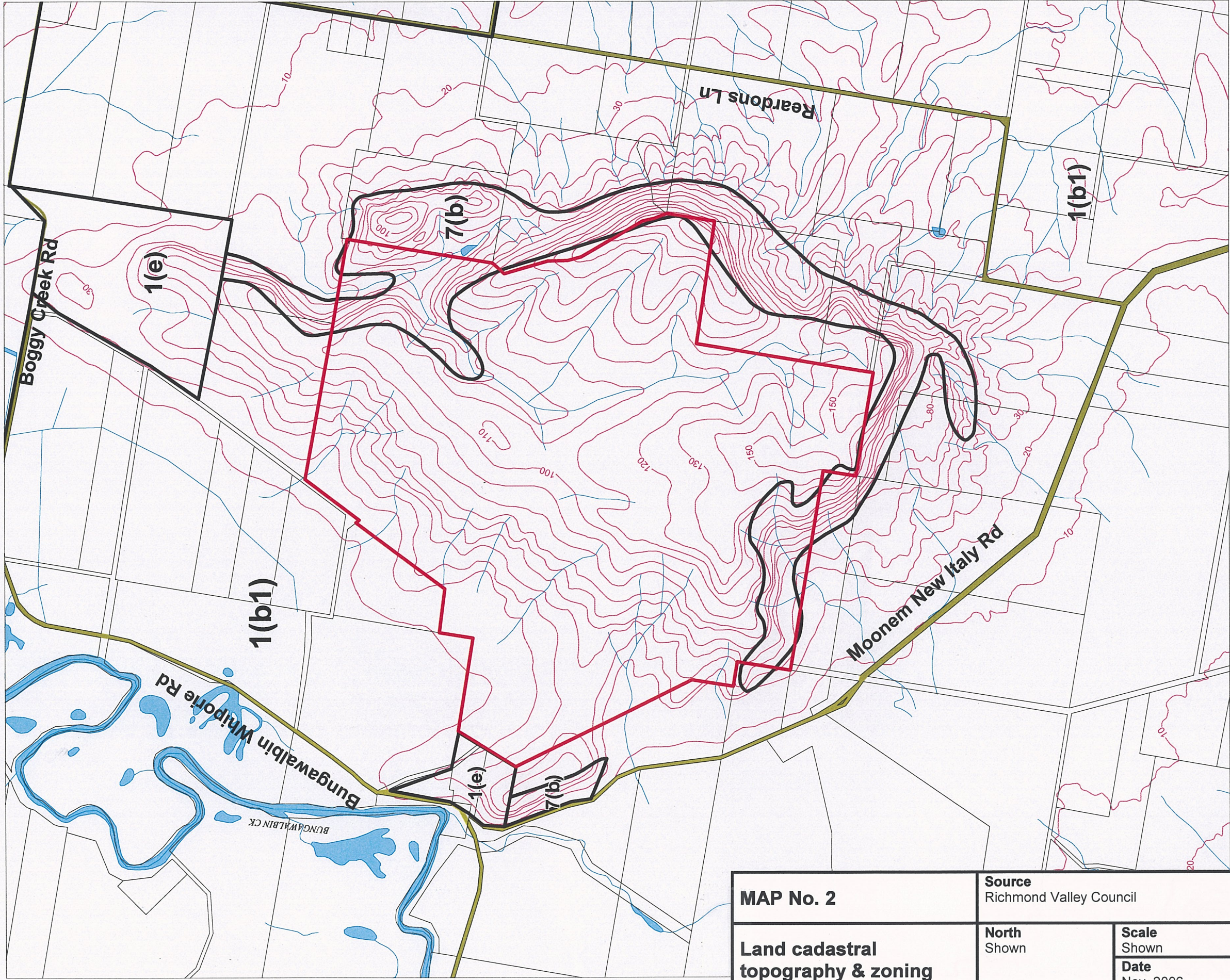
Location of land in
Region and Woodburn

Source
Unknown

North

Scale
NTS

Date
Unknown



MAP No. 2	Source Richmond Valley Council	
	North Shown	Scale Shown
		Date Nov. 2006



Produced by
Richmond Valley Council

	SUBJECT LAND
	1(b1) RURAL (Secondary Agricultural Land) ZONE
	1(e) RURAL (Extractive & Mineral Resources) ZONE
	7(b) ENVIRONMENTAL PROTECTION (Scenic Escarpment) ZONE
	MAINTAINED ROADS
	DRAINAGE LINES
	10m CONTOURS

NEWMAN QUARRY
LOT 193 DP 755603

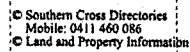
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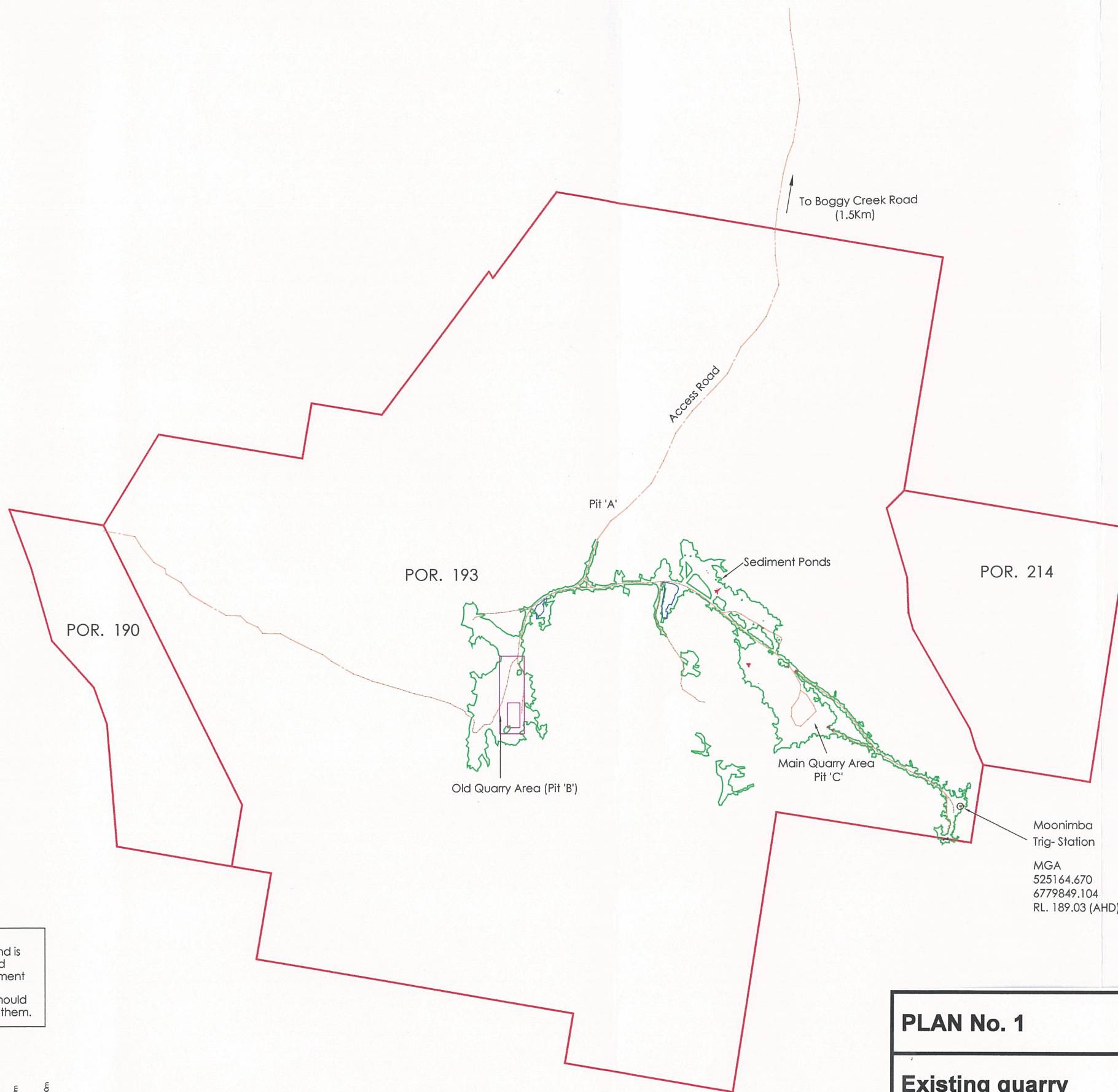
Printed - 08/11/2006

DISCLAIMER

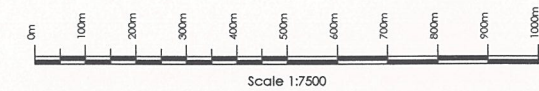
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Date
Oct 2007

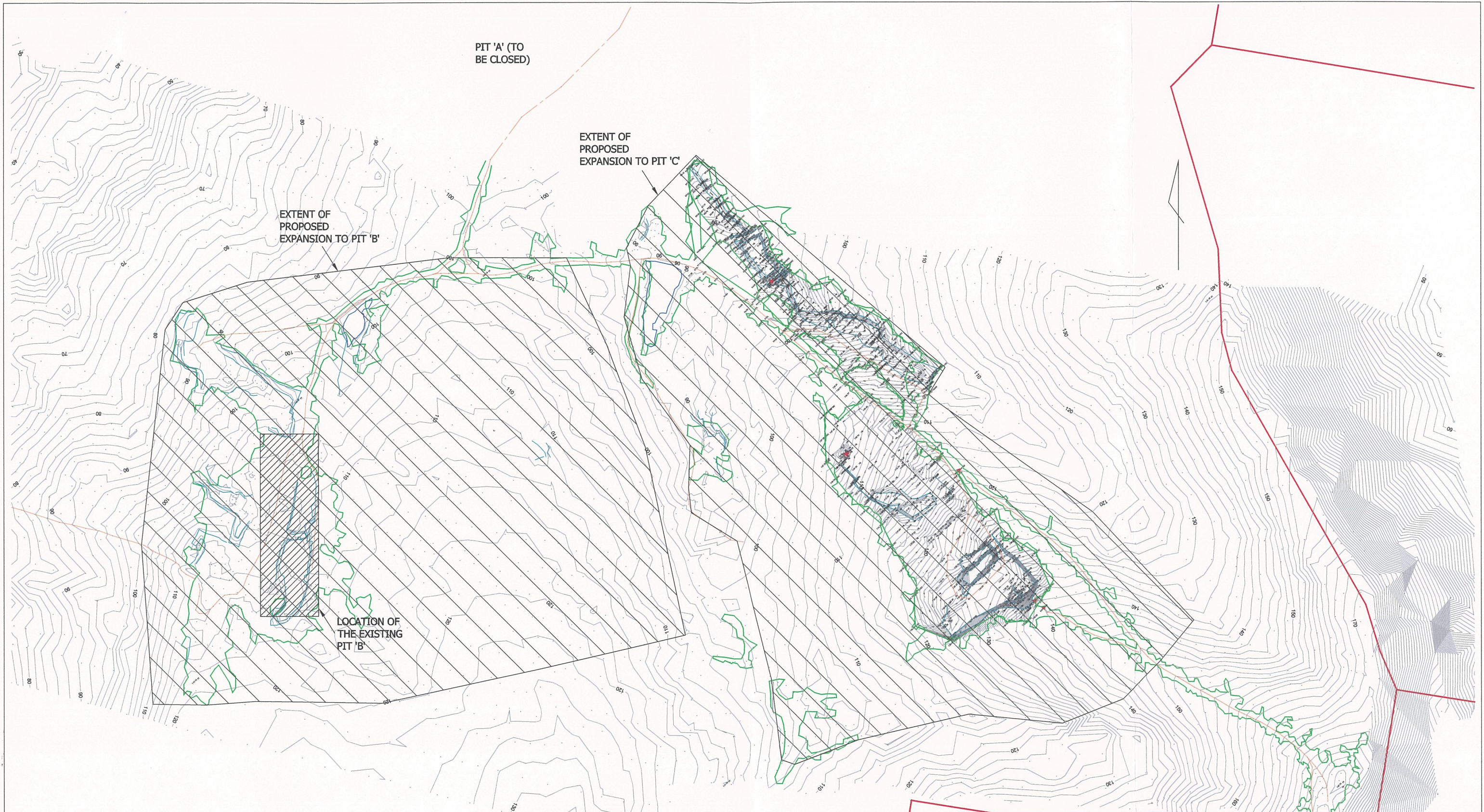


NOTE
Location of Services both above and below ground is by visual field inspection. Further verification should be carried out on the site prior to the commencement of any excavation work.
Location of Boundaries is approximate only and should be verified before any works commence close to them.



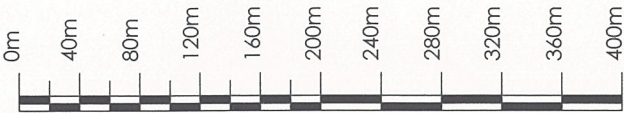
PLAN No. 1		Source Greg Alderson & Assoc. Pty Ltd	
Existing quarry operations		North Shown	Scale Shown
			Date March 2007

			SCALE 1:7500 @ A1	Survey:- 23/8/06, 4/10/06 30/11/06 & Aerial Photography Northern Photogrammetric Surveys P/L	JOB TITLE NEWMAN QUARRYING PTY. LTD. REARDON'S LANE ~ WOODBURN	DRAWING TITLE OVERALL PLAN PORTION 193 14/3/07	JOHN WADE ENGINEERING SURVEYING Phone (02) 66214334	No OF SHEETS 2	SHEET No 1
			DATUM AHD	Computer File :- ALD1133 Aerial.dwg				PLAN NUMBER 07/922	
No	DATE	AMENDMENTS							



PART SITE PLAN

1:5000 @ A3



Scale 1:5000 @ A3

Scale: 1:5000 @ A3
Source: John Wade Engineering Surveying
File: 06193 Proposed Quarry Setout

Date: 4th October 2007
Job No. 06193

Checked:
Greg Alderson, BSc(Eng), MIEAust, CPEng, RPEQ 4907, Member
Civil School, NPRegistered-3 Civil, LGEC

PLAN No. 2

**Proposed quarry
operations**

Source
Greg Alderson & Assoc. Pty Ltd

North
Shown

Scale
Shown

Date
Oct 2007

**GREG ALDERSON &
ASSOCIATES PTY LTD**

ABN 60 059 559 858
Scarrabelottis Rd NASHUA NSW 2479
Ph: 02 6629 1552 Fax: 02 6629 1566 Email: alderson@spot.com.au

PLAN No. 2
**PROPOSED EXPANSION AREAS
ASSOCIATED WITH PITS B & C**
POR 193 REARDON'S LANE, WOODBURN, NSW
For: NEWMAN QUARRYING PTY LTD

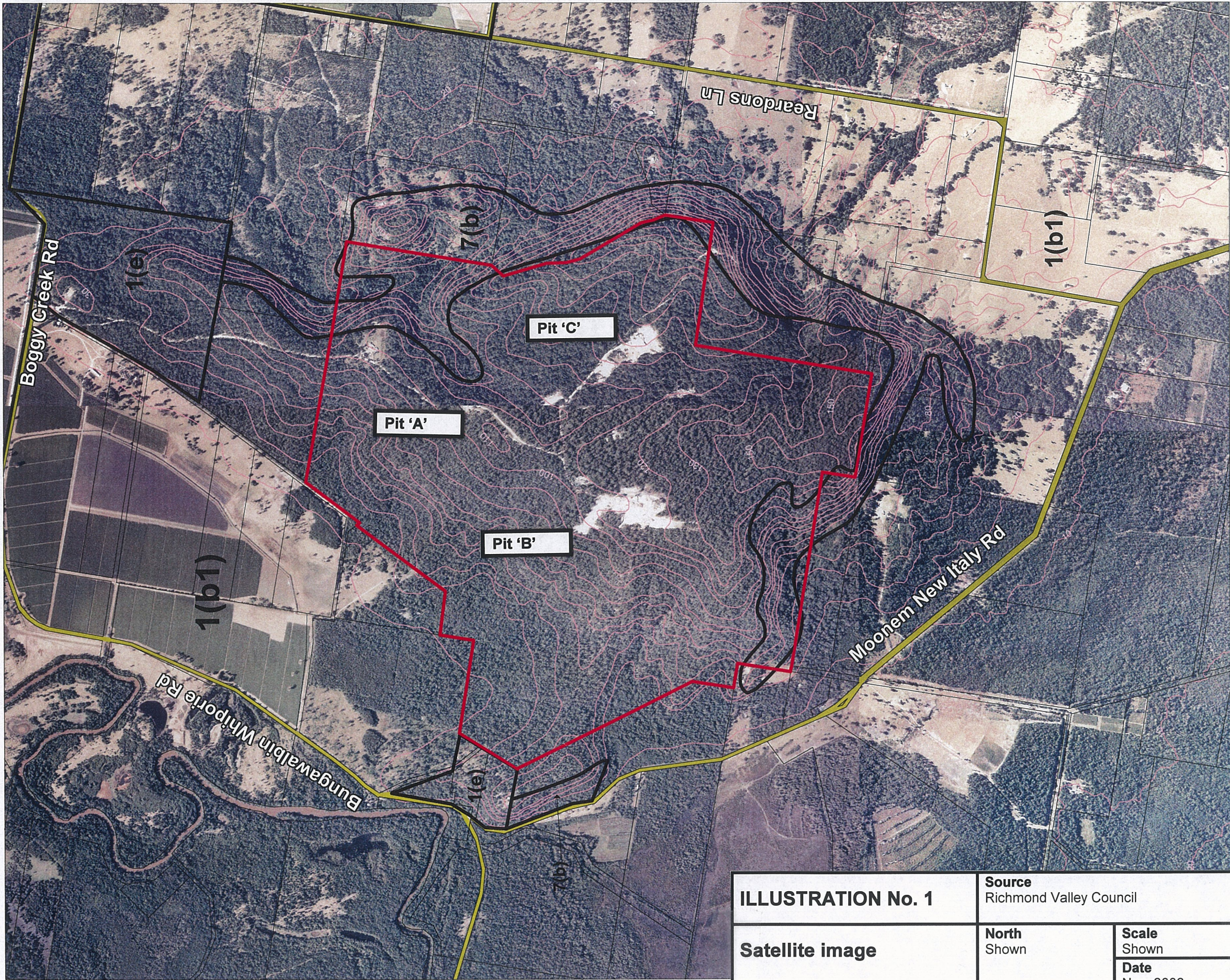


ILLUSTRATION No. 1

Satellite image

Source
Richmond Valley Council

North
Shown

Scale
Shown

Date
Nov. 2006

- SUBJECT LAND
- RURAL (Secondary Agricultural Land) ZONE
 - 1(b1) RURAL (Extractive & Mineral Resources) ZONE
 - 1(e) ENVIRONMENTAL PROTECTION (Scenic Escarpment) ZONE
 - 7(b) MAINTAINED ROADS
 - 10m CONTOURS

NEWMAN QUARRY
LOT 193 DP 755603



Aerial Photo Date : June 2004 - NSW Dept. Lands

Printed - 08/11/2006



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