

ENVIRONMENTAL IMPACT ASSESSMENT

MARY'S MOUNT BLUE METAL QUARRY

BURLEITH

Prepared for:
Gunnedah Quarry Products Pty Ltd

Prepared by:
Stewart Surveys Pty Ltd



17th May 2013

Stewart Surveys Pty Ltd
PO Box 592
Gunnedah NSW 2380

AMENDMENT 1

Ph. (02) 6742 2966
Fax: (02) 6742 0684
E: office@stewartsurveys.com

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Amendment Report Authors

Environmental Assessment Prepared by:

Company: **Stewart Surveys Pty Ltd**

Name: Kathryn Yigman

Qualifications: Masters of Environmental Management
& Bachelor of Landscape Architecture (UNSW)

Address: PO Box 592,
GUNNEDAH NSW 2380

Areas of Responsibility:

Revised Quarry Design & Staging, Introduction and Description of Proposal

Company: **Northwest Projects**

Name: Phil Hutchison

Qualifications: BE (Civil) & Grad.Dip LGE

Address: 62 Eveleigh Road
GUNNEDAH NSW 2380

Areas of Responsibility:

Water, and Drainage

Company: **Pacific Environmental Limited**

Name: Greer Laing

Qualifications: MSc (Masters) in Environmental Science

Address: Suite 1, Level 1
146 Arthur Street,
NORTH SYDNEY NSW 2060

Areas of Responsibility:

Air Quality Report and Dust dissipation modeling

Company: **Ardill Payne and Partners**

Name: Tony Cromack

Qualifications: BTech (Eng) TMIEAust

Address: Germane House
285 Conadilly Street,
GUNNEDAH NSW 2380

Areas of Responsibility:

Traffic Impact Assessment

Company: **Spectrum Acoustics**

Name: Neil Pennington

Qualifications: B.Sc., B. Math.(Hons), MAAS, MASA

Address: PO Box 374

WALLSEND NSW 2287

Areas of Responsibility:

Noise and Blasting Impact Assessment

Company: **Niche Environment and Heritage Pty Ltd**

Name: Mark Aitken

Qualifications: B. Appl Sc (Env Biol)

Address: PO Box 3104

UMINA BEACH NSW 2257

Areas of Responsibility:

BioBanking Assessment, Biodiversity Inventory Report & Koala Plan of Management

Planning Approval application by:

Gunnedah Quarry Products Pty Ltd

PO Box 259

GUNNEDAH NSW 2330

Address and Details of the land:

Property: "Burleith"

Land Particulars: Lot 161, DP. 755508

Land Owners: Mr and Mrs M. Swain

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AMENDMENT MAY 2013

**ENVIRONMENTAL IMPACT ASSESSMENT
MARY'S MOUNT BLUE METAL QUARRY**

**SECTION 1:
INTRODUCTION**

PREPARED BY:

Stewart Surveys Pty Ltd



This document outlines the proposed amendments to DA 2012/185 lodged in December 2012 with Gunnedah Shire Council for the expansion of the Mary's Mount Blue Metal Quarry on Burleith prepared for Gunnedah Quarry Products.

This amendment report only outlines proposed changes to the content in the original development application 'Environmental Impact Assessment Mary's Mount Blue Metal Quarry, Burleith' lodged by Stewart Surveys, Dated 13th December 2012 Volume 1 and 2. This document should be read in conjunction with the original application.

The format of this amendment reflects the original Environmental Impact Assessment (EIA) format with section number remaining consistent.

Summary of Amendments

- I. Annual extraction rate reduction from 200,000bcm or 600,000 tonnes to 120,000bcm or 360,000 tonnes
- II. Quarry footprint redesign, to minimise impact on Semi Evergreen Vine Thicket Endangered Ecological Community and to enable retention of the 'Burleith' residence.
- III. Proposed haul route changed to Barker Road – Goolhi Road to Kamilaroi Highway at Emerald Hill and Goolhi Road to Quia Road to Oxley Highway at Gunnedah – estimated 50:50 split
- IV. Method of extraction, new quarry design excavates to greater depths and approval for drill and blast extraction is sought.

Reasons for Amendment

- I. Annual extraction rate has been reduced as a result of a change in the expected market.
- II. Quarry Footprint redesign has occurred for the following reasons;
 - a. During the review of the EIA the Office of Environment and Heritage requested further flora and fauna studies be carried out. Niche Environment and Heritage were engaged to carry out these studies which identified the site contained 7.57 hectares of Semi Evergreen Vine Thicket (SEVT). SEVT is listed as an endangered ecological community (ECC) under the Threatened Species Conservation Act 1995. To reduce the impact of the quarry on this ECC the proposed expansion has been redesigned so that proposed removal of SEVT is limited to 3.17 hectares.
 - b. The property owners of "Burleith" are no longer in a position to sell the property to the proponent and wish to remain living in the "Burleith" residence. They now intend to subdivide the north eastern section of the property which contains the quarry and sell to the proponent (this subdivision will be processed following DA approval for the quarry expansion). The proposed quarry footprint meets the expectations of Mr M. and Mrs M. Swain who own and reside in the "Burleith" residence as agreed upon in a contractual agreement for the subdivision and purchase of part of the property with the proponent.
- III. During Gunnedah Shire Council's review of the EIA further meetings and discussions were held regarding the proposed haul route. It was during these discussions between the proponent and Council's engineering department that it was decided the haul route would be best located along the currently approval route, with upgrades including bitumen sealing to Barker Road and Mary's Mount Road and an upgrade to the intersection of Goolhi Road and Mary's Mount Road would satisfy Council and the proponents objectives.
- IV. Method of extraction: Generally the preferred method of extraction is mechanical as per the original application, however due to the redesign of the quarry, deepening the final pit floor it has been advised that material densities may require drill and blast extraction methods to be employed.

Clarification of Terms

Cubic metres refers to 'Bank Cubic Metres' which is defined as a cubic metre of material in-situ. Cubic metres are

converted to tonnes using the Dry Particle Density of the material, which is defined as the density of the soil particles in geotechnical reporting.

Approval Sought

Extraction of up to 120,000 bank cubic metres of extractive material per annum for a 38 year period.

Summary of request for additional information from Gunnedah Shire Council during Council's DA evaluation period

Organisation	Date	Section of Amendment which addresses information required.	Prepare by:
Office of Environment and Heritage			
Flora, Fauna and Threatened Species	Undated Ref: DOC13/3143	Flora and Fauna Section 4.3	Niche Environment & Heritage
Transport - Roads and Maritime Services			
Traffic Impact Assessment	28 February 2013	Traffic Section 4.5	Ardill Payne and Partners
Environmental Protection Authority			
Surface Water	6 February 2013	Surface Water Study Section 4.2	North West Projects
Noise	6 February 2013	Noise Section 4.6	Spectrum Acoustics
Gunnedah Shire Council			
Detailed Traffic Impact Assessment	31 January 2013	Traffic Section 4.5	Ardill Payne and Partners
Detailed Koala Plan of Management	31 January 2013	Flora and Fauna Section 4.3	Niche Environment and Heritage
Namoi Catchment Management Authority	31 January 2013	Various	

Environmental Impacts resulting from proposed changes in this amendment

To address the environmental impacts associated with the proposed amendments to DA2012/185 the following reports have been prepared;

Section 2: Description of the Proposal

The description of the proposal outlined in the original EIA section 2 has been updated by Stewart Surveys to reflect the approval sought.

Section 4: Surface Water

North West Projects have updated section 4.2 of the original EIA to address issues raised by the Environmental Protection Authority. In addition a North West Projects have prepared a Sediment and Surface Water Management report for the site. These reports reflect the impacts on surface water resulting redesign of the quarry to deepen the pit. Surface water is proposed to be collected along the southern extent of the quarry and drained into a sediment basin before being carried to Dam A via an existing drainage gully.

Section 4: Flora and Fauna

Niche Environment and Heritage have been engaged to prepare undertake additional flora and fauna studies and they have prepared the following reports;

- Biobanking Assessment
- Biodiversity Inventory Report, and
- Koala Plan of Management

These reports address issues raised by the Office of Environment and Heritage and Gunnedah Shire Council during the DA evaluation period. These reports replace section 4.3 of the December 2012 EIA.

Section 4: Traffic

The reduction in extraction volume results in a reduction in proposed truck movements associated with the quarry. Ardill Payne have been engaged to prepare a Traffic Impact Assessment for the proposed haul route Barker Road – Goolhi Road to Kamilaroi Highway at Emerald Hill and Goolhi Road to Quia Road to Oxley Highway at Gunnedah – estimated 50:50 split addressing the existing and projected traffic impacts resulting from the proposed quarry operations. This report replaces section 4.5 of the EIA.

A draft Voluntary Planning Agreement (VPA) has been prepared to cover the agreed maintenance contribution the proponent will pay Gunnedah Shire Council for its impact on the local road network.

Section 4: Noise

Spectrum Acoustics have been engaged to prepare a Noise and Blasting Impact Assessment for the quarry. This report addresses the impacts of noise and vibration along the proposed haul route and at the Burleith residence which was previously proposed to be demolished. This report addresses issues raised by the Environmental Protection Authority during the DA evaluation period.

Section 4: Air Quality

Pacific Environment have prepared a new air quality assessment for the quarry to reflect impacts on the 'Burleith' Residence which is now identified as a sensitive receiver and to review the impacts of drill and blast on all sensitive receivers surrounding the quarry and haul route. This report replace the original DA air quality assessment, section 4.7.

Section 5: Conclusion and justification of identified impacts in the amendment document.

This section of the report has been prepared to conclude and justify against environmental criteria the impacts environmental identified in this report. This section does not replace section 5 of the December 2012 Environmental Impact Assessment, which included an analysis of mitigated environmental risk associated with the quarry.