



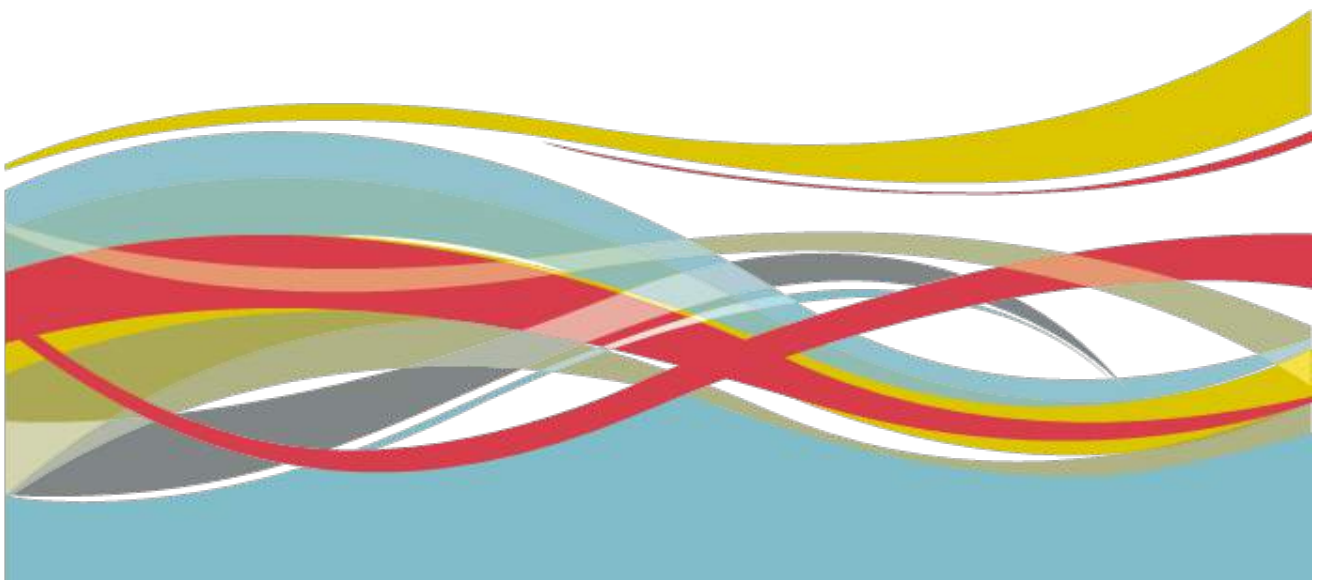
**muswellbrook
shire council**

Muswellbrook Shire Council

**DEVELOPMENT ASSESSMENT
COMMITTEE MEETING**

BUSINESS PAPER

23 SEPTEMBER 2019



Development Assessment Committee

Aim

The aim of the Development Assessment Committee is to:

- To determine development applications;
- To monitor the progress of development applications not yet determined;
- To recommend to Council the need to develop or amend policies in relation to planning related matters – including strategic planning.

Associated Principal Activities:

Development Assessment & Regulation

Specific Tasks & Parameters

1. The determination of development applications under the *Environmental Planning and Assessment Act* 1979 not otherwise delegated to the General Manager except where: the development application is for, or in any way related to:
 - (a) (i) food and drink premises used for, or proposed to be used for, the sale of alcohol;
 - (ii) electricity generating works;
 - (iii) mines and extractive industries;
 - (iv) a waste disposal facility; or
 - (v) subdivisions into more than ten lots; or
 - (b) where the capital investment value of the development specified in the development application exceeds \$2,000,000; or
2. The Development Assessment Committee the determination of any development applications under the *Environmental Planning and Assessment Act* 1979 otherwise delegated to the General Manager, which the Development Assessment Committee by resolution elects to determine.
 3. The Development Assessment Committee be constituted as follows:
 - (i) the Councillor Spokesperson for Planning (as Chair);
 - (ii) the Councillor Spokesperson for Infrastructure;
 - (iii) the Councillor Spokesperson for Utilities; andin the absence of any of the councillors set out in (i) to (iii) any other councillor nominated by the Committee Chair or Acting Chair (as the case may be).

Recommendations

- Make recommendations Council;

Staff Support:

Director – Environment & Community Services
Assistant Director – Environment & Community Services
Senior Development Co-Ordinator
Project Engineer – Water & Waste
Manager – Roads, Drainage & Technical Services
Environment & Sustainability Co-Ordinator

DEVELOPMENT ASSESSMENT COMMITTEE MEETING, 23 SEPTEMBER 2019

MUSWELLBROOK SHIRE COUNCIL

P.O Box 122

MUSWELLBROOK

20 September, 2019

Cr Martin Rush (Chair)
Cr Brett Woodruff
Cr Rod Scholes
Carolyn O'Brien
Sharon Pope
Hamish McTaggart
Gamini Hemachandra
Kellie Scholes

You are hereby requested to attend the Development Assessment Committee Meeting to be held in the COUNCILLORS ROOM, Administration Centre, Muswellbrook on **23 September, 2019** commencing at 4.00pm.

Joshua Brown
MANAGER - INTEGRATED PLANNING & GOVERNANCE

Order of Business

ITEM	SUBJECT	PAGE NO
1	APOLOGIES AND LEAVE OF ABSENCE	5
2	CONFIRMATION OF MINUTES OF PREVIOUS MEETING	5
3	DISCLOSURE OF ANY PECUNIARY AND NON-PECUNIARY INTEREST	9
4	PUBLIC PARTICIPATION	9
5	BUSINESS ARISING	9
6	BUSINESS	10
6.1	DA 25/2019 DWELLING ALTERATION AND ADDITIONS (LIVING EXTENSION, VERANDAH, DECK AND SHED) - 58 PALACE STREET, DENMAN	10
6.2	DA 51/2019 ANCILLARY DEVELOPMENT - SHED - 27 PALACE STREET, DENMAN	42
6.3	DA 342/2002 SECTION 4.55(2) MODIFICATION APPLICATION - WILDS GRAVEL QUARRY - 8440 NEW ENGLAND HIGHWAY, MUSWELLBROOK	120
6.4	OUTSTANDING DEVELOPMENT APPLICATIONS	344
7	DATE OF NEXT MEETING 7 October 2019	354
8	CLOSURE	354



**MUSWELLBROOK SHIRE COUNCIL
DEVELOPMENT ASSESSMENT COMMITTEE MEETING**

AGENDA

MONDAY 23 SEPTEMBER 2019

1 APOLOGIES AND LEAVE OF ABSENCE

Moved: _____ Seconded: _____

2 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

RECOMMENDATION

That the Minutes of the Development Assessment Committee held on **11 September 2019**, a copy of which has been distributed to all members, be taken as read and confirmed as a true record.

Moved: _____ Seconded: _____

PRESENT: Cr M. Rush (Chair), Cr R. Scholes and Cr M. Bowditch.

IN ATTENDANCE: Mr D. Finnigan (Acting General Manager), Ms S. Pope (Assistant Director – Environment & Community Services), Mr H. McTaggart (Co-Ordinator Development), Mr I. Dencker (Consultant), Mr G. Hemachandra (Project Engineer) and Mrs M. Sandell-Hay (PA to GM).

1 APOLOGIES AND LEAVE OF ABSENCE

RECOMMENDED on the motion of Crs Bowditch and Scholes that:

The apologies for inability to attend the meeting submitted by Cr B. Woodruff be ACCEPTED and the necessary Leave of Absence be GRANTED.

2 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

RECOMMENDED on the motion of Crs Scholes and Bowditch that:

The Minutes of the Development Assessment Committee held on 26 August 2019, a copy of which has been distributed to all members, be taken as read and confirmed as a true record.

3 DISCLOSURE OF ANY PECUNIARY AND NON-PECUNIARY INTEREST

Nil

4 PUBLIC PARTICIPATION

Mr D. Moore – In support of Item 6.2.

Mr P. Wild – In support of Item 6.4

5 BUSINESS ARISING

Nil

6 BUSINESS

RECOMMENDED on the motion of Crs Rush and Scholes that:

The order of proceedings be altered to allow Item 6.2 and 6.4 to be considered as the first items of business.

Mr Moore arrived at 4.40pm

6.2 DA 33/2019 DWELLING ALTERATIONS AND ADDITIONS - OUTDOOR KITCHEN AND BARBECUE AREA - 28 TURNER STREET, DENMAN

Mr Moore provided the Committee with a brief overview of the renovations that had been undertaken on the site and discussions that had been held with neighbours.

RECOMMENDED on the motion of Crs Rush and Scholes that:

Development Application No. 33/2019, for dwelling alteration and additions for an outdoor kitchen and barbecue area, at Lot 1 and 2, DP 112315, 28 Turner Street Denman, be approved subject to the conditions in Attachment B to the report.

MINUTES OF THE DEVELOPMENT ASSESSMENT COMMITTEE MEETING OF THE MUSWELLBROOK SHIRE COUNCIL HELD IN THE COUNCILLORS ROOM, ADMINISTRATION CENTRE, MUSWELLBROOK ON WEDNESDAY 11 SEPTEMBER, 2019 COMMENCING AT 4.30PM.

In Favour: Crs M. Bowditch, M. Rush and R. Scholes.

Against: Nil.

Mr Wild entered the meeting at 4.53pm

6.4 DA 342/2002 SECTION 4.55(2) MODIFICATION APPLICATION - WILDS GRAVEL QUARRY - 8440 NEW ENGLAND HIGHWAY, MUSWELLBROOK

Mr Wild provided the Committee with a brief overview of the proposed works to be undertaken at the Quarry.

Discussion took place on this item and it was noted that Clauses 9, 22, 37 and 38 and the Bond Condition needed to be reviewed by staff and a condition regarding a Closure Plan also needs to be included.

RECOMMENDED on the motion of Crs Rush and Scholes that:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee to provide time for the Committee and staff to review the proposed Conditions.

In Favour: Crs M. Bowditch, M. Rush and R. Scholes.

Against: Nil.

Mr Wild left the meeting at 4.59pm

6.1 DA 51/2019 ANCILLARY DEVELOPMENT - SHED - 27 PALACE STREET, DENMAN

RECOMMENDED on the motion of Crs Rush and Scholes that:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee so that options for conditions can be prepared in accordance with the revised draft Rivers and Drainage Channel Policy.

In Favour: Crs M. Bowditch, M. Rush and R. Scholes.

Against: Nil.

6.1a RIVERS AND DRAINAGE CHANNEL POLICY

RECOMMENDED on the motion of Crs Rush and Scholes that:

A revised draft Rivers and Drainage Channels policy together with proposed amendments to the Development Control Plan (DCP) be provided to the next Development Assessment Committee Meeting.

6.3 DA 25/2019 DWELLING ALTERATION AND ADDITIONS (LIVING EXTENSION, VERANDAH, DECK AND SHED) - 58 PALACE STREET, DENMAN

RECOMMENDED on the motion of Crs Rush and Scholes that:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee so that options for conditions can be prepared in accordance with the a revised draft Rivers and Drainage Channel Policy.

In Favour: Crs M. Bowditch, M. Rush and R. Scholes.

Against: Nil.

6.5 OUTSTANDING DEVELOPMENT APPLICATIONS

RECOMMENDED on the motion of Crs Rush and Bowditch that:

The Committee note the undetermined Development Applications listed in Attachment A and the status of their assessment.

7 DATE OF NEXT MEETING

23 September 2019

8 CLOSURE

The meeting was declared closed at 5.58pm.

.....
Cr M. Rush
Chairperson

3 DISCLOSURE OF ANY PECUNIARY AND NON-PECUNIARY INTEREST

Section 451 of the Local Government Act requires that if a councillor or member of a council or committee has a pecuniary interest in any matter before the council or committee, he/she must disclose the nature of the interest to the meeting as soon as practicable and must not be present at, or in sight of, the meeting, when the matter is being discussed, considered or voted on.

A pecuniary interest is an interest that a person has in a matter because of a reasonable likelihood or expectation of financial gain or loss (see sections 442 and 443 of the Local Government Act).

A non-pecuniary interest can arise as a result of a private or personal interest which does not involve a financial gain or loss to the councillor or staff member (eg friendship, membership of an association, or involvement or interest in an activity). A councillor must disclose the nature of the interest to the meeting as soon as practicable.

Council's Model Code of Conduct now recognises two forms of non-pecuniary conflict of interests:

- Significant
- Less than significant

A Councillor must make an assessment of the circumstances and determine if the conflict is significant.

If a Councillor determines that a non-pecuniary conflict of interests is less than significant and does not require further action, they must provide an explanation of why it is considered that the conflict does not require further action in the circumstances.

If the Councillor has disclosed the existence of a significant non-pecuniary conflict of interests at a meeting they must not be present at, or in sight of, the meeting, when the matter is being discussed, considered or voted on.

4 PUBLIC PARTICIPATION

5 BUSINESS ARISING

6 BUSINESS

6.1 DA 25/2019 DWELLING ALTERATION AND ADDITIONS (LIVING EXTENSION, VERANDAH, DECK AND SHED) - 58 PALACE STREET, DENMAN

Responsible Officer:	Sharon Pope - Assistant Director - Environment & Community Services
Author:	Hamish McTaggart - Co-Ordinator - Development
Community Plan Issue:	<i>A Council that is well managed, efficient and properly resourced and that is responsive to its communities and stakeholders</i>
Community Plan Goal:	<i>Maintain a strong focus on financial discipline to enable Council to properly respond to the needs of the communities it serves.</i>
Community Plan Strategy:	<i>Provide efficient and effective Development Application, Complying Development Certificate, Construction Certificate and Occupational Certificate assessment services.</i>
Attachments:	A. DA 25/2019 Section 4.15 Assessment B. DA 25/2019 Recommended Conditions of Consent C. DA 25/2019 Site and Dwelling Plans D. DA 25/2019 - Proposed Shed Plan E. Council's Rivers and Drainage Channels Policy - R25-1

PURPOSE

This report has been prepared to inform the Development Assessment Committee in determining Development Application (DA) 51/2019. This Development Application has been assessed by Council Officers and a copy of the Section 4.15 Assessment Report and recommended conditions of Consent are attached for the Committee's information.

Delegations issued to the General Manager include a limitation on the General Manager determining matters under the Environmental Planning and Assessment Act 1979 as follows:

- (iii) [determine matters] which are for, or in any way related to;
- (f) works alongside or adjoining any waterway

A former local waterway, which feeds Denman Lagoon and is a tributary of Sandy Creek, is located on the property, but has been piped in the past by Council. An easement was not obtained at the same time so the piped drain is still classified as a waterway.

Accordingly, the determination of the development application is not within the functions Council has delegated to the General Manager and Council Officers.

The determination of this development is within the function delegated to the Development Assessment Committee.

RECOMMENDATION:

- 1. Development Application No. 25/2019, involving dwelling alterations and additions (living room extension, and verandah, deck and shed) at Lot 1 & 2 DP 782847 known as 58 Palace Street, be approved subject to the recommended conditions contained in Appendix B.**
- 2. Request the General Manager to prepare a report for Council's consideration, to initiate negotiations with the land owner to obtain an easement over the piped waterway in favour**

of Council. The terms of any easement should include:

- A restriction on the carrying out of works or the installation of structures in the easement.
- Provide Council with the authority to enter the land to carry out the works associated with the management of the stormwater system.

Moved: _____ Seconded: _____

DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development relates to 58 Palace Street Denman. The formal identification for the site is Lot 1 & 2 DP 782847

An existing dwelling located at the property. There are no recent development applications in relation to the dwelling or property.

This land is identified as being part of the Denman Heritage Conservation Area by the Muswellbrook Local Environmental Plan (LEP) 2009. Under the Muswellbrook LEP 2009 the land is zoned RU5 Village.

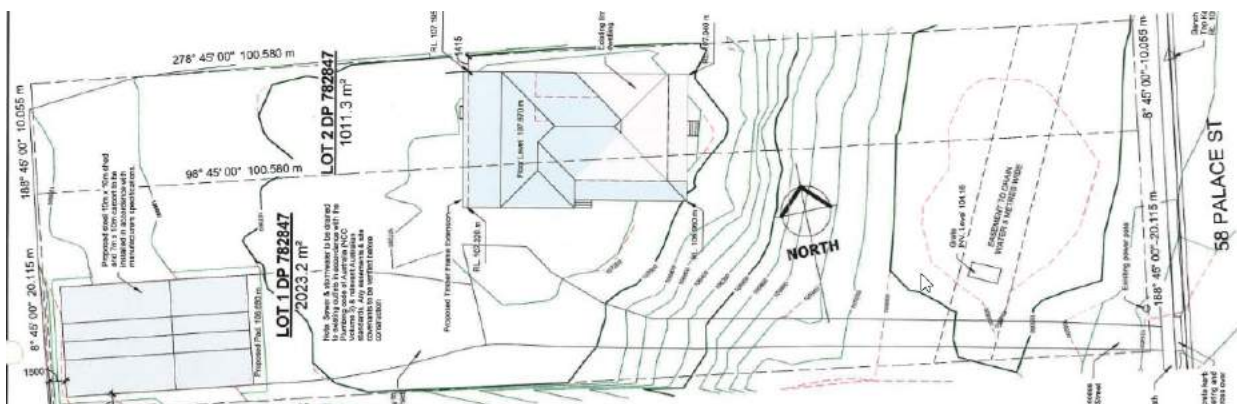
The eastern part of the land is flood liable. The Muswellbrook Flood Risk Management Study and Plan, 2018, identifies this part of the site is affected by the 1 in 100 year flood event.

The proposed development involves alterations and additions to the existing dwelling located on the site and the construction of a new shed on the land.

Key components of the proposed alterations and additions include:

- The demolition of existing external walls as marked on the proposed plans.
- The construction of a 49.4m² extension to the building to be used for a living/dining space and laundry.
- Construction of a new 18.5m² new verandah to be attached to the dwellings southern (side) elevation.
- Construction of a 37.1m² deck to be attached to the buildings western (rear) elevation.
- The alteration of the building's roof to include a hip end roof for the proposed extension
- Construction of a new detached shed and carport at the south eastern corner of the subject site. The proposed shed would have a width and depth of 10m and the proposed carport a width of 10m and depth of 7m. The carport and shed would have an identical roof structure which would have a height of 2.5m at the building's eaves and a maximum height of 3.962m.

The site plan below provides an overview of the subject site and the proposed development.



ASSESSMENT SUMMARY

Council Officers have assessed the development application against the relevant heads of consideration prescribed by Section 4.15 of the Environmental Planning and Assessment Act 1979.

A copy of the Section 4.15 Assessment is provided in Attachment A. As an outcome of this assessment Council Officers recommend that development consent is granted to the proposed development subject to recommended conditions of consent. The recommended conditions of consent are provided in Attachment B.

Key considerations and findings of the section 4.15 assessment include:

- The proposed development is in accordance with relevant provisions of the Muswellbrook Local Environmental Plan (LEP) 2009.
- The proposed development was considered against the provisions of relevant State Environmental Planning Policies (SEPP's) and there are no inconsistencies which would prevent Council from granting development consent to the proposed development.
- The proposed development is in accordance with the requirements of the Muswellbrook Development Control Plan (DCP) 2009.
- The land subject to this development application is located within the Denman Heritage Conservation Area. The proposed development was referred to Council's Heritage Advisor to consider its impact on the conservation area and consistency with the Muswellbrook LEP 2009 and Muswellbrook DCP requirements related to development within conservation areas. Council's Heritage Advisor supports the proposal subject to recommended conditions about the buildings colour scheme and replacement door which have been incorporated into conditions of consent.
- A piped drain is located on the property. The piped drain was formerly a tributary of Sandy Creek. It is understood the waterway was piped by Council, but an easement was not obtained as Council has access to maintain the pipes under the Local Government Act and the Water Management Act. The proposed development was referred to Council's Community Infrastructure Department to provide comments related to the impact of the development on this waterway. The response provided by Council's Community Infrastructure Department raised no concern related to the impact of the development on drain and recommended measures to manage stormwater runoff from the development. An easement was not requested.
- The proposed development would be located outside the portion of the site identified as being affected by the 1 in 100 year flood event and that the finished floor level of habitable rooms proposed would be 2.09m above the anticipated flood height.
- The development is unlikely to have any adverse environmental impacts that would prevent Council from granting development consent to this development application.

MATTERS RELATED TO THE DEFERRAL OF DETERMINATION

This development application was reported to the 11 June 2019 Development Assessment Committee for determination. The draft Meeting Minutes show that the Development Assessment Committee passed the following resolution in relation to the application:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee so that options for conditions can be prepared in accordance with the revised draft Rivers and Drainage Channel Policy.

At the time of this report a revised *Rivers and Drainage Channel Policy* was not available for review, nor had any revised policy been reported to Council for notification and/or adoption. Council Officers consider that there is sufficient information to determine this application rather than deferring it until the *Rivers and Drainage Channel Policy* is revised. Council Officers have considered the development application against the controls of the existing Policy and Development Control Plan.

The application was previously deferred by the Committee as the Committee requested a condition be included requiring the registration of an easement over the piped waterway located on the land in favour of Council.

In this instance Council Officers consider that it would be unreasonable to impose a condition requiring the land owner to establish an easement over the land at their cost, in favour of Council, as the proposed

development is minor and would not have a direct the capacity of stormwater system, and the waterway has previously been piped by Council and no easement was obtained at the time.

It is recognised that individual land owners may not be aware of their responsibilities under legislation and Council's authority to enter their land to carryout works on their infrastructure where required. In this regard it is recognised that the registration of an easement could have the benefit of informing the land owner of their legislated obligations and reducing the likelihood of works being carried out that impact the piped waterway.

Council has the ability to negotiate an easement under the provisions of the Local Government Act 1993. The Development Assessment Committee does not have delegations to resolve that Council commence these negotiations. As a way forward, Staff, have recommended that the General Manager prepare a report on this matter for Council's consideration.

COMMUNITY CONSULTATION

Surrounding properties were notified of the development proposal between 20 March 2019 and 4 April 2019. A notice was also placed in the local newspaper, the Hunter Valley News, at the commencement of the notification period.

No submissions were received from the public in relation to the proposed development during the notification period.

OPTIONS

The Development Assessment Committee may:

- A. Grant development consent to the proposed development subject to the recommended conditions of consent,
- B. Resolve to determine the development application in accordance with the recommended conditions of consent contained in Attachment B and the following additional condition:
 - # The provision of an easement over the piped waterway in favour of Council. The terms of any easement should include:
 - A restriction on the carrying out of works or the installation of structures in the easement.
 - Provide Council with the authority to enter the land to carry out the works associated with the management of the stormwater system.
- C. Refuse development consent to the proposed development and nominate reasons for refusal.

FINANCIAL IMPLICATIONS

The determination of this development application does not have any immediate financial implications for Council.

The registration of an easement on the title of the land will have financial implications. The full cost will be dependent on the outcome of any future negotiations between the land owner and Council representatives.

LEGAL IMPLICATIONS

Where the applicant is dissatisfied with the determination of the development application they have an opportunity under the provisions of the Environmental Planning and Assessment Act 1979 to appeal that determination at the Land and Environment Court.

CONCLUSION

DA 25/2019 has been reported to the Development Assessment Committee as it involves the development of a parcel of land that encompasses stormwater pipes, that is still technically classified as

a waterway. Therefore, the determination of this development application is outside the function delegated to Council Officers by Council.

The application was previously reported to the Development Assessment Committee where it was deferred to be reconsidered at this meeting.

Council Officers have reviewed matters related to the previous Development Assessment Committee resolution and have adjusted the recommendation to the Development Assessment Committee to recommend that the application be approved in accordance with the recommended conditions of consent and that Council approach the land owner to negotiate the registration of an easement in favour of Council.

In preparing this report Council Officers have completed a Section 4.15 Assessment of the proposed development. The findings of this 4.15 Assessment recommend that the Development Assessment Committee grant development consent to DA 25/2019 subject to conditions of consent outlined in Attachment B.

DEVELOPMENT ASSESSMENT REPORT

Attached: Site Plan

REPORT TO THE GENERAL MANAGER

ADDRESS:	LOT: 1 DP: 782847, LOT: 2 : DP: 782847 58 Palace Street DENMAN			
APPLICATION No:	25/2019			
PROPOSAL:	Dwelling Alterations and Additions (Living Extension, Verandah, Deck and Shed)			
PLANS REF:	Drawings no.	Drawn by	Date	Received
	Layout (Dwelling) Sheet No 1	MLS	1 February 2018	11 March 2019
	Layout (Shed) Sheet No 2	MLS	1 February 2018	11 March 2019
	Downpipe and Stormwater Plan	Unknown	Unknown	26 July 2019
OWNER:	Mr J N & Mrs E K Buckley			
APPLICANT:	Mr J N Buckley 58 Palace Street DENMAN NSW 2328			
AUTHOR:	Mr T Bhuiya			
REVIEWED BY:	Mr H McTaggart			
DATE LODGED:	11/03/2019			
AMENDED:	NA			
ADD. INFO REC'D:	NA			
DATE OF REPORT:	22 August 2019			

SUMMARY

ISSUES: Heritage Conservation Area, Floor Prone Land (partial)

SUBMISSIONS: Nil

RECOMMENDATION: Approval subject to conditions

1.0 SITE AND LOCALITY DESCRIPTION

The proposed development is relates to 58 Palace Street Denman. The formal identification for the site is Lot 1 & 2 DP 782847

An existing dwelling located at the property. There are no recent development applications in relation to the dwelling or property.

This land is identified as being part of the Denman Heritage Conservation Area by the Muswellbrook Local Environmental Plan (LEP) 2009. Under the Muswellbrook LEP 2009 the land is zoned RU5 Village.

The eastern part of the land is identified as being flood liable by the Muswellbrook Flood Risk Management Study and Plan, 2018. This study identifies this part of the site is affected by the 1 in 100 year flood event.

An aerial image of the property has been included below



2.0 DESCRIPTION OF PROPOSAL

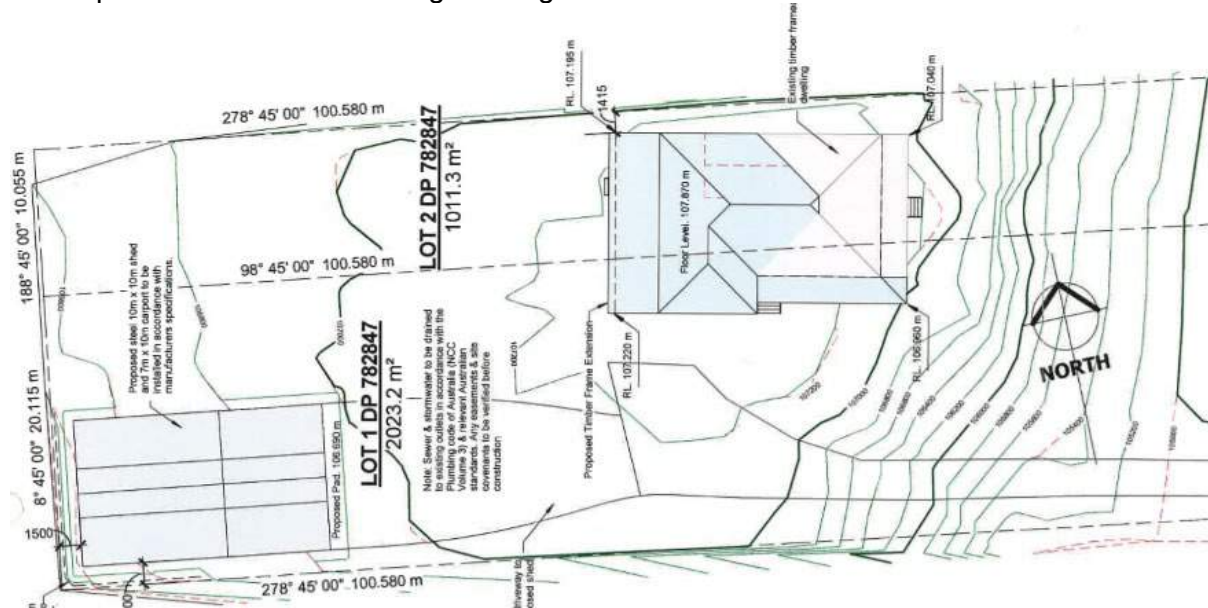
The proposed development involves alterations and additions to the existing dwelling located on the site and the construction of a new shed on the land.

Key components of the proposed alterations and additions include:

- The demolition of existing external walls as marked on the proposed plans.
- The construction of a 49.4m² extension to the building to be used for a living/dining space and laundry.
- Construction of a new 18.5m² new verandah to be attached to the dwellings southern (side) elevation.
- Construction of a 37.1m² deck to be attached to the buildings western (rear) elevation.
- The alteration of the building's roof to include a hip end roof for the proposed extension
- Construction of a new detached shed and carport at the south eastern corner of the subject site. The proposed shed would have a width and depth of 10m and the proposed carport a width of 10m and depth of 7m. The carport and shed would have an identical roof structure which would have a height of 2.5m at the building's eaves and a maximum height of 3.962m.

The image below illustrates the proposed works in context with the parameters of the

development site and the existing buildings located on the site.



3.0 Referrals

The proposed development was referred to Council's Heritage advisor and Roads & Drainage for review and comment.

Council's Heritage Advisor

The application was referred to Heritage Advisor as the proposed development is located in the Denman Heritage Conservation Area.

A Heritage Impact Statement was prepared by P B Eveleigh Plan Service on behalf of the applicant and has been submitted with the development application.

Council's Heritage Advisor indicates that the proposed development could be supported from a heritage impact perspective, provided that the development was carried out in accordance with recommended conditions as follows:

1. *An external colour scheme is to be provided for the new garage and extension. Manufacturers paint colour samples are to be provided and colours are to be indicated on the drawings. If the colours are to match the existing cottage a photograph of the existing cottage is to be provided and all other external colours are to be confirmed as matching.*
2. *Door D3 on the extension will be visible and this door is to be of timber frame construction.*

These recommendations have informed recommended conditions of consent.

Roads & Drainage

Council's Roads and Drainage Team raised no issue with the proposed development and included recommendations related to the management of stormwater from the development. These recommendations indicate that it would be acceptable for stormwater from the development to be managed by one of the following measures:

- Plumbed directly into the kerb and gutter or the existing on-site stormwater pit.
- Collected into rainwater tanks with an overflow discharge point provided with appropriate sediment control measures in accordance with Council's DCP and standard requirements.

These recommendations have informed the recommended conditions of consent.

4.0 ASSESSMENT

This report provides an assessment of the material presented in the Application against the relevant State and local planning legislation and policy.

Section 4.15 Matters for Consideration

Section 4.15(1)(a)(i) The provisions of any Environmental Planning Instrument (EPI)

The following EPIs, DCPs, Codes and Policies are relevant to this Application:

1. Muswellbrook Local Environmental Plan 2009 (MLEP 2009)

Land Use Zone and Permitted Land Use

The development site is zoned RU5 Village pursuant to MLEP 2009. The proposal is best defined as Dwelling alterations, additions and an ancillary development - new shed, which is permitted with consent in the subject Zone.

Objectives of the RU5 Village Zone

Clause 2.3(2) of the Muswellbrook LEP 2009 requires the consent authority to consider the relevant land use zone objectives when determining a development application. The land use zone objectives for the RU5 Village Zone are as follows:

- To provide for a range of land uses, services and facilities that are associated with a rural village.
- To allow more flexibility in the development of the town of Denman and village of Sandy Hollow.
- To allow for future development of residential, commercial or low-impact land use within the town of Denman and village of Sandy Hollow.
- To ensure that non-residential uses do not result in adverse amenity impacts on residential premises.
- To minimise the impact of non-residential uses and ensure these are in character and compatible with surrounding development.
-

It is considered that the development proposal is not contrary to the objectives of the Zone.

Relevant Clauses applicable under the Muswellbrook Local Environmental Plan 2009

<i>Part 1 Preliminary</i>	
<i>Part 2 Permitted or prohibited development</i>	
<i>2.3 Zone objectives and Land Use Table</i>	The proposed development is a permissible development under the RU5 land use table as expressed above and in accordance with the relevant to the land use zone objectives
<i>Part 3 Exempt and complying development</i>	
<i>Part 4 Principal development standards</i>	
<i>4.1 Minimum subdivision lot size</i>	The proposed development does not relate to this clause
<i>4.3 Height of buildings</i>	MLEP 2009 specifies a maximum building height of 8.5m in relation to the land. The maximum height of the proposed development is 6.54m (this measurement has been taken from plans provide by the applicant). Complies.

4.4 Floor space ratio	<p>MLEP 2009 specifies a floor space ratio of 0.5:1 in relation to the land.</p> <p>The existing dwelling on the site has an area of approximately 134m² (this measurement has been taken from SIX Maps online as Council does not have readily available information of the floor area of the existing dwellings at the site). The proposed addition of the dwelling would have an area of 105 m2, the proposed shed would have an area of 100m2 and the proposed carport would have an area of 70m2. The Lot has an area of 3034.5m².</p> <p>The FSR of the proposed development would be 0.14:1. Complies.</p>
Part 5 Miscellaneous provisions	
5.10 Heritage Conservation	<p>The proposed development involves works within a heritage conservation area identified by the LEP. Council's Heritage Advisor recommended approval of the development subject to conditions. It is considered that where the development is carried out in accordance with these recommendations it would be in accordance with the requirements of this Clause. Complies</p>
Part 6 Urban release areas	
Part 7 Additional local provisions	
7.1 Terrestrial biodiversity	<p>The subjected site is not identified as "Biodiversity" by Council's biodiversity Mapping and therefore the provision of this clause do not require further consideration in relation to the proposed development</p>
7.6 Earthworks	<p>Earthworks involved with the proposed development would be minimal and associated with establishment of the foundation. The proposed earthwork is not anticipated to have a detrimental impact on existing drainage patterns, soil stability and amenity of the adjoining properties.</p>

2. State Environmental Planning Policy No. 55 – Remediation of Land

Council officers are unaware of any activities which have carried out on the site likely to have caused the contamination of the land. As the proposed development is an addition, alterations and new ancillary development (shed and carport) and no visual evidence of any contamination was observed by council officers during an inspection of the site. It is therefore considered that the subject site is unlikely to be affected by contamination requiring remediation in accordance with the SEPP. The proposed development may therefore proceed without the need of further consideration of the provisions of this SEPP

3. SEPP (Building Sustainability Index: BASIX) 2004

The proposed development involves the alterations and additions to an existing dwelling house. A BASIX Certificate has been prepared and submitted in relation to the BASIX Affected Building proposed. The buildings will need to be constructed in accordance with the provisions of the BASIX Certificate or a subsequent modified version of the relevant certificate.

Section 4.15(1)(a)(ii) the provisions of any draft EPI.

There are no draft EPIs relevant to the subject Application.

Section 4.15(1)(a)(iii) the provisions of any development control plan

Section 3 – Site Analysis

It is considered that the documentation provided with the Development Application satisfies

the provisions of Section 3 of the Muswellbrook DCP.

Section 4 – Notification

In accordance with the provisions of Section 4 of the Muswellbrook DCP 2009, the Application was notified for a period of not less than fourteen days from 14 March 2019 to 4 April 2019. A notice was also placed in the local newspaper, the Hunter Valley News, at the commencement of the notification period.

No submissions were received during the notification period. The issues raised in the submissions are addressed in this Report.

Section 6 – Residential Development

	Comments
6.1 Built Form	
6.1.1 Context	The built form of the proposed development would be in accordance with the requirements of the DCP and would respond to the physical capabilities of the site and the design limitations of Council's DCP.
<ul style="list-style-type: none"> i. The location, boundary dimensions of the site. ii. The position of true north. iii. The contours of the site iv. The movement of the sun across the site. v. The prevailing wind direction and, if in an exposed area, the likely wind speed across the site. vi. The zone and the zone boundaries (if there are multiple zones), protected areas and riparian corridors. vii. The location of any slopes greater than 20% (1 in 5) and the direction or fall of drainage from those areas. viii. The location of existing vegetation. Specify the type of vegetation present. ix. Identify any noxious or environmental weeds. <p>The location of any significant natural features such as cliffs, rock outcrops, water holes.</p>	<ul style="list-style-type: none"> i. Location and boundary dimensions are Provided ii. True north marked on the drawings iii. The contour of site provided iv. Single storied developments with adequate setback from neighbouring properties. Will not have any significant shadow on adjacent properties v. NA vi. NA vii. Marked on contour plan viii. Existing vegetation is marked on plan ix. NA x. NA
6.1.2 Front Setbacks	<p>The proposed alterations and additions to the existing dwelling will not change the current existing front setbacks</p> <p>The proposed shed and carport are back of the existing dwelling and will not change the current existing front setbacks</p>
6.1.3 Side and Rear Setbacks	<p>The proposed additions would be setback 1.4m from nearest northern property boundary and 16.5m from the rear boundary. Setback from the southern property line would be remains the same.</p> <p>The proposed shed and carport would be setback 1.5m from the nearest property boundary which meets the DCP requirements.</p>
6.1.4 Building Height and Scale	The proposed dwelling would be consistent to the height bulk and scale of existing neighbouring dwellings nearby the subject site. Proposed building height is approximately 6.54m. Thereby the proposal would be in accordance with the requirements of this part.
6.1.5 Front Fencing and Retaining Walls	The proposed development would not have any front fence to obscure the view of the building meet the DCP requirements.
6.1.6 Garages, Carports and Sheds	The proposal complies with this sub-section of the DCP
<ul style="list-style-type: none"> a. Garages, carports and sheds visible from the street shall compliment (i.e. not detract from) the colour and roof form (i.e. pitch) of the dwelling on that allotment. 	<ul style="list-style-type: none"> a. Shed and carport would be visible from the street. Conditions of Consent are required to ensure the shed and carport not detract from the colour

<ul style="list-style-type: none"> b. Garages and sheds are not located forward of the established building line. c. Open carports, less than 36m² in roof area and no greater than 6m wide, may be built to the side boundary or no closer than 1m to the street frontage provided they meet the objectives of this clause. 	<ul style="list-style-type: none"> and roof form (i.e. pitch) of the dwelling on that allotment. b. Proposed carport and shed are rear to the existing dwelling and behind the established building line. c. NA
6.1.7 Dwelling Entry	The entry of the dwelling would be clearly identifiable from the front Palace Street
6.1.9 Reflective Materials	Conditions of Consent are required to nominate external colours by the applicant (or confirm the colours if they are to match the existing cottage) and that door D3 is to be a timber frame door.
6.2 Urban Landscape	
6.3 Environmental	
6.3.1 Topography	Finished ground level will not alter the existing Natural topography and landform.
6.3.2 Solar Access	As the site is single storey and well within the setback requirements there would not be any overshadowing or impeded solar access to the site.
6.4 Site Operation	
6.4.1 Energy Conservation	A BASIX certificate has been provided for the proposal in question. This ensures that energy efficient housing with the use of passive solar design would allow for residence to experience year round comfort and reduce total energy consumption for heating and cooling.
6.4.2 Stormwater Management	Condition to be included on any consent requiring stormwater drainage to the street or via existing drainage.

Section 7 – Village Zones

This Section of the DCP specifies requirements for development in the RU5 Village zone and is a relevant consideration for this development application as it relates to development in this zone.

Sub-section 7.3 of the DCP prescribes that residential development in the village zone must comply with the provisions of Section 6 of the DCP relevant to Residential Development. The proposed development has been reviewed against these provisions in the table above and is considered to comply with the relevant DCP requirements. This Section of the DCP does not prescribe any further requirements that would affect the granting of consent to the proposed development.

Section 13 – Flood Prone Land

The Muswellbrook Floodplain Risk Management Plan 2018 identifies a portion of the site subject to this development application as being affected by the 1% AEP flood event.

The flood information map included below shows the 1% AEP flood event in relation to the subject site.



Image.3 (1 in 100 year flood event marked in blue).

This image indicates that the portion of the site proposed for development would be above the 1% or anticipated 1 in 100 year flood event. Council flood information suggests that the flood level for the 1% flood event at the site would be 105.78 Australian Height Datum (AHD).

The portion of the development site on which the proposed dwelling extension and shed are to be located have ground levels above this anticipated flood height with the floor level of the proposed extension being designed to a height of 107.87 AHD, 2.09m above the anticipated 1 in 100 year flood event.

As the proposed development would be constructed above the anticipated 1 in 100 year flood event the proposal is considered to comply with the requirements of this Section of the DCP and the imposition of additional conditions related to managing the impact of flooding on the development are not required.

Section 15 – Heritage Conservation

The heritage provisions of this section of the MDCP 2009 were considered. This application was referred to Council's Heritage Advisor for review and comment.

Where the development is carried out in accordance with the recommendations of Council's Heritage Advisor Council Officers are satisfied that it would satisfy the DCP provisions related to development in conservation areas.

Section 7.11 (Previous Section 94) Contributions Plan 2001

Not Applicable

Section 7.12 (Previous Section 94A) Contributions Plan 2010

Estimated cost of the development is \$146,500. A Section 7.12 contribution in accordance with Council's section 7.12 Contribution Plan would be applicable. A developer contribution of \$732.50 will apply to the proposed development should the Application be approved

Section 4.15(1)(a)(iiia) the provisions of any planning agreement

There are no planning agreements relevant to the subject Application.

Section 4.15(1)(a)(iv) the provisions of the regulations

Division 8A of the Environmental Planning and Assessment Regulation 2000 applies to the development.

Section 4.15(1)(a)(v) the provisions of any coastal zone management plan

This item is not relevant to the subject Application. The Application does not relate to a coastal area.

Section 4.15(1)(b) the likely impacts of that development

Given the limited scope of the proposed development and its compatibility with the relevant provisions of Council's DCP and LEP the proposed development is considered be reasonably in accordance with the type of residential development expected within the Denman Residential Area. Accordingly the proposed development is considered unlikely to have any significant adverse environmental impacts.

Section 4.15(1)(c) the suitability of the site for the development

It is considered that the development is compatible with surrounding land uses and site characteristics, subject to consent conditions.

Section 4.15(1)(d) any submissions made

A total of no submissions were received during the notification period:

Section 4.15(1)(e) the public interest.

Council's Rivers and Drainage Channels Policy – R25/1 has been considered. The waterway was previously piped by Council. Council did not obtain easement over the pipe at the time, as Council has authority to enter the property to repair the pipe under both the Local Government Act and the Water Management Act. Community Infrastructure have not requested an easement be obtained as part of this proposal. Requiring the landowner to create an easement over Council's pipe is not considered to be a reasonable condition under the EP&A Act.

The proposed development would be in accordance with the Muswellbrook LEP 2009, Muswellbrook DCP and is unlikely to have any adverse environmental impacts. Accordingly, the proposed development is considered to be generally in accordance with the public interest.

5 CONCLUSION

The application has been assessed in accordance with the legislation listed at the beginning of the report.

The application has also been placed on public exhibition for a minimum of fourteen days with no submissions being received.

It is recommended the application be approved subject to conditions of consent.

Signed by:



Taraqual Bhuiya
Building Surveyor
Date: 22 August 2019

Reviewed by:

Hamish McTaggart
Senior Development Planner

IDENTIFICATION OF APPROVED PLANS

(1) Development in Accordance with Plans

The development being carried out in accordance with the development application and the drawings referenced below, and endorsed with Council's approval stamp, except where amended by the following conditions.

Drawing No.	Revision	Drawn by	Drawing Date	Received
004-18 Proposed Timber Frame Extension (dwelling and site plan)	-	MLS	1 February 2018	11 March 2019
004-18 proposed timber frame extension (shed plan and elevations)	-	MLS	1 February 2018	11 March 2019
Downpipe and Stormwater Plan	-	Unknown	Unknown	26 July 2019

OPERATIONAL CONDITIONS IMPOSED UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT AND REGULATIONS AND OTHER RELEVANT LEGISLATION

(2) Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

(3) Home Building Act

- (1) Building work that means residential building works (under the meaning and exemptions of the *Home Building Act 1989*) must not be carried out unless the Principal Certifying Authority for the development which the work relates:
 - (a) In the case of work being carried out by a licensed builder :
 - (i) Has been informed in writing of the licensee's name and license number, and;
 - (ii) Has received Home Owners Warranty Insurance for works where the contract price of the works exceeds \$20,000.
 - (b) In the case of an Owner Builder:
 - (i) Has been informed in writing of the person's name and Owner Builder permit number where the cost of works is greater than \$10,000, or;
 - (ii) Has been given declaration signed by the owner of the land that states that the reasonable market cost of the labour and materials is less than \$10,000.
- (2) A certificate purporting to be issued by an approved insurer under Part 6 of the *Home Building Act 1989* that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

- (3) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: (1) The amounts referred to in point 1 may be subject to change as regulations are amended.

- (2) An owner that engages multiple licensees/contracts or contracts for part of the work and completes work themselves is considered an Owner Builder under the *Home Building Act 1989*.

(4) Carrying out of demolition work

All demolition work shall be carried out in accordance with the relevant provisions of Australian Standard 2601:2001: Demolition of Structures.

ANCILLARY MATTERS TO BE COMPLETED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

(5) Construction Certificate Requirement

No works shall commence on-site until such time as a Construction Certificate has been issued for either part or all of the works to be undertaken. If a Construction Certificate is issued for part of the approved works it must relate to all works being undertaken.

Note: a construction certificate issued by an Accredited Certifying Authority must be deposited with Council at least 48 hours prior to the commencement of any earthworks, engineering or building work at the site.

(6) Section 7.12 Contributions

Pursuant to section 4.17(1) of the Environmental Planning and Assessment Act 1979, and the Muswellbrook Shire Council Section 94A Development Contributions Plan 2010, a contribution of \$732.50 shall be paid to Muswellbrook Shire Council.

The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the Muswellbrook Shire Council Section 94A Development Contributions Plan 2010. The contribution is to be paid prior to the issue of a Construction Certificate. Documentation is to be provided to the Certifying Authority demonstrating that this payment has been made prior to the issue of a Construction Certificate.

(7) Heritage Design Requirements to address the recommendations of Council's Heritage Advisor

Prior to the issue of a Construction Certificate the person acting with this consent is to provide the Certifying Authority with design plans that address the following heritage design requirements:

- a) Plans to include an external colour scheme for the new garage and extension inclusive of manufacturers paint colour samples. Colours selected for the external cladding of the building extension and shed are to match or compliment the colour scheme of the existing cottage building.
- b) Detail that the door marked D3 on the proposed plans is to be of a timber frame construction.

(8) Waste Management Plan

A Waste Management Plan is to be submitted with the Construction Certificate. The plans should include, but not be limited to, the estimated volume of waste and method of disposal for the construction and operation phases of the development, all landfill removed from the site, haulage routes, design of on-site wind proof waste storage and recycling area and administrative arrangements for waste and recycling management during the construction process.

(9) BASIX Commitments

Under clause 97A(3) of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. Details and plans demonstrating compliance with these requirements are to be submitted to the Certifying Authority for approval with the Construction Certificate.

In this condition:

- (a) relevant BASIX Certificate means:
 - i. a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
 - ii. if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- (b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO COMMENCEMENT
--

(10) Sediment and Erosion Control

Where construction or excavation activity requires the disturbance of the soil surface and existing vegetation, adequate measures for erosion and sediment control shall be provided. As a minimum control techniques are to be in accordance with 'The Blue Book' published by Landcom provisions on Erosion and Sediment Control, or a suitable effective alternative method.

All required sedimentation control techniques are to be properly installed prior to the commencement of any site works and maintained in a functional and effective condition throughout the construction activities until the site is stabilised

(11) Site Sign

A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:

- (a) stating that unauthorised entry to the work site is prohibited;
- (b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
- (c) showing the name, address and telephone number of the Principal Certifying Authority for the work.

Any such sign must be maintained while building work or demolition work is being carried out, but must be removed when the work has been completed.

This condition does not apply to building works being carried out inside an existing building.

(12) Damage to Public Infrastructure

The applicant shall bear the cost of all restoration works to Council property damaged during the course of this development. The applicant shall submit in writing and/or photographic record, of any existing damage to Council property before commencement of work.

Note: This documentation will be used to resolve any dispute over damage to infrastructure. If no documentation is received prior to commencement of work it will be assumed that the infrastructure was undamaged and the applicant will be required to restore all damaged infrastructure at their expense.

CONDITIONS THAT MUST BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK
--

(13) Construction Hours

- (a) Subject to this clause, building construction is to be carried out during the following hours:
 - i. between Monday to Friday (inclusive)—7.00am to 6.00pm
 - ii. on a Saturday—8.00am to 1.00pm
- (b) Building construction must not be carried out on a Sunday or a public holidays.

- (c) Demolition works and excavation works must only be carried out between Monday to Friday (inclusive) between 8.00am and 5.00pm.
- (d) The builder and excavator must display, on-site, their 24 hour contact telephone numbers, which are to be clearly visible and legible from any public place adjoining the site.

(14) Prohibition on Use of Pavements

Building materials and equipment must be stored wholly within the work site, unless prior written approval has been obtained from council. Equipment must not be operated on the footpath or roadway, unless prior written approval has been obtained from council.

(15) Demolition or Removal of Buildings

- (a) Demolition must be carried out in accordance with AS 2601–1991, *Demolition of structures*.
- (b) Demolition materials must not be burnt or buried on the work site.
- (c) A person having the benefit of this certificate must ensure that all vehicles leaving the work site carrying demolition materials, have their loads covered and do not track soil or waste material onto the road.
- (d) If demolition work obstruct or inconvenience pedestrians or vehicular traffic on an adjoining public road or reserve, a separate application must be made to council to enclose the public place with a hoarding or fence.
- (e) Erosion and sediment controls must be provided in accordance with the details shown on the approved plans, prior to the disturbance of any soil on the work site and must be maintained in a functional condition throughout the construction activities until the site is stabilised.
- (f) The work site must be left free of waste and debris when work has been completed.

(16) Mandatory inspections under Section 68 of the Local Government Act 1993

The person acting with this consent shall ensure that all mandatory sewer, water and stormwater inspections are carried out by Council Officers at the relevant stages of construction in accordance with any Section 68 approval issued for the development.

Note: a minimum notice of 48 hours is required when booking an inspection. Inspection fees will be charged in accordance with Council's adopted fees and charges and must be paid prior to the issue of the Construction Certificate.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE
--

(17) Occupation

The building is not to be used or occupied until a final inspection has been carried out and an occupation certificate has been obtained from the Principal Certifying Authority.

(18) Driveway Crossover Construction

Prior to the issue of any Occupation Certificate a sealed vehicle crossover is to be constructed from the existing driveway layback to the property boundary. Any new vehicle layback will require approval from Council's Community Infrastructure Department pursuant to Section 138 of the Roads Act 1993 prior to its construction; this is to be in accordance with Council's Footpath, Kerb & Guttering Policy (F10/1), or any Policy which supersedes this document.

CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

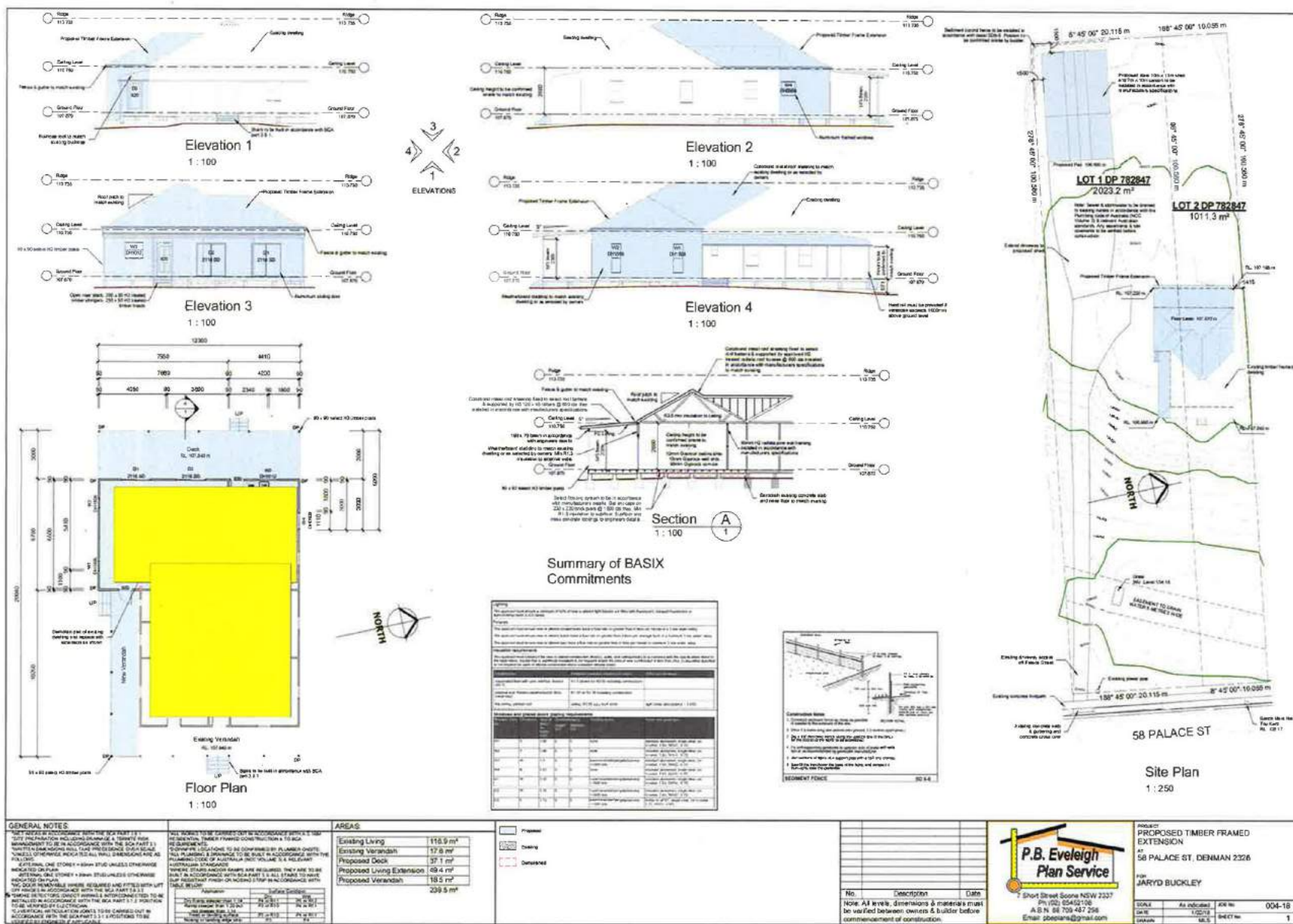
(19) Stormwater Disposal

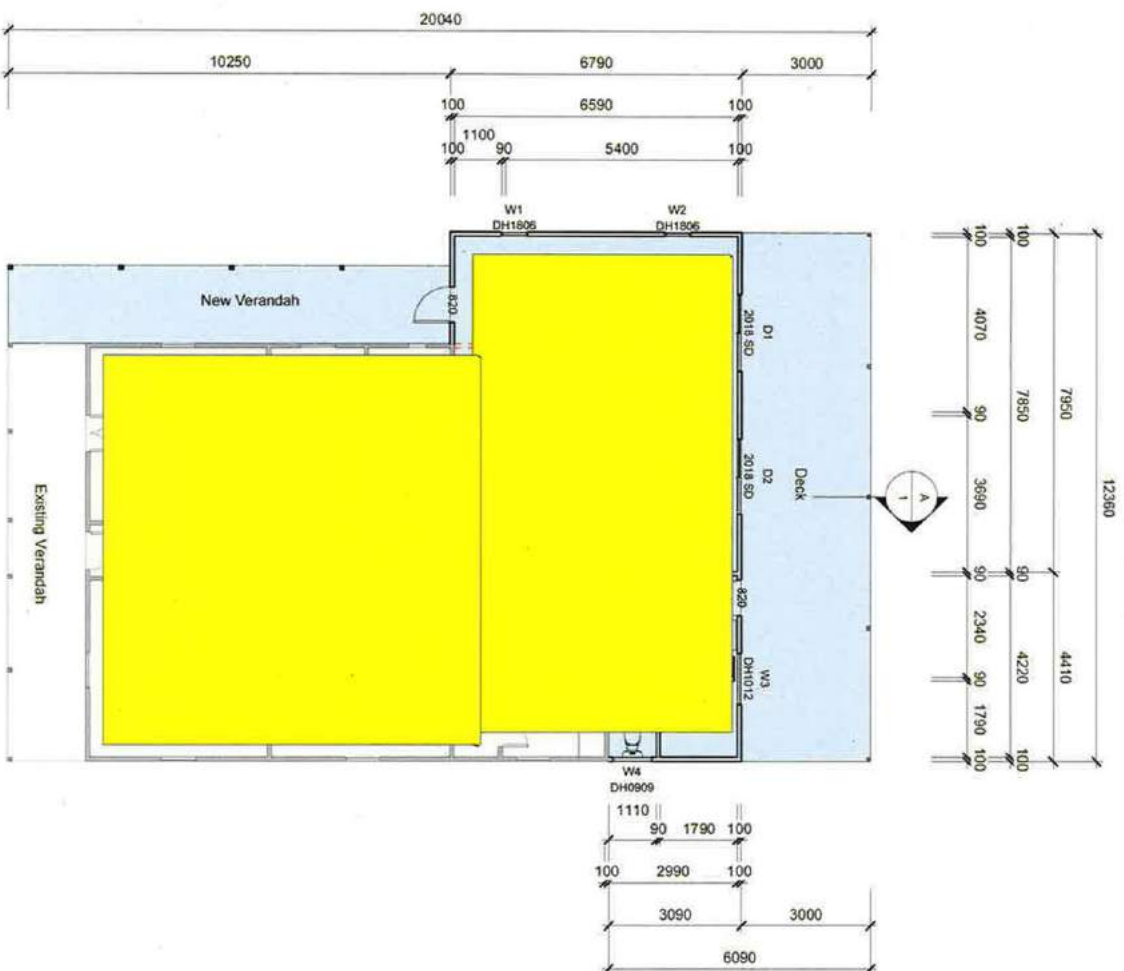
All stormwater from the development including all hardstandings and overflows from rainwater tanks is to be collected and disposed of via:

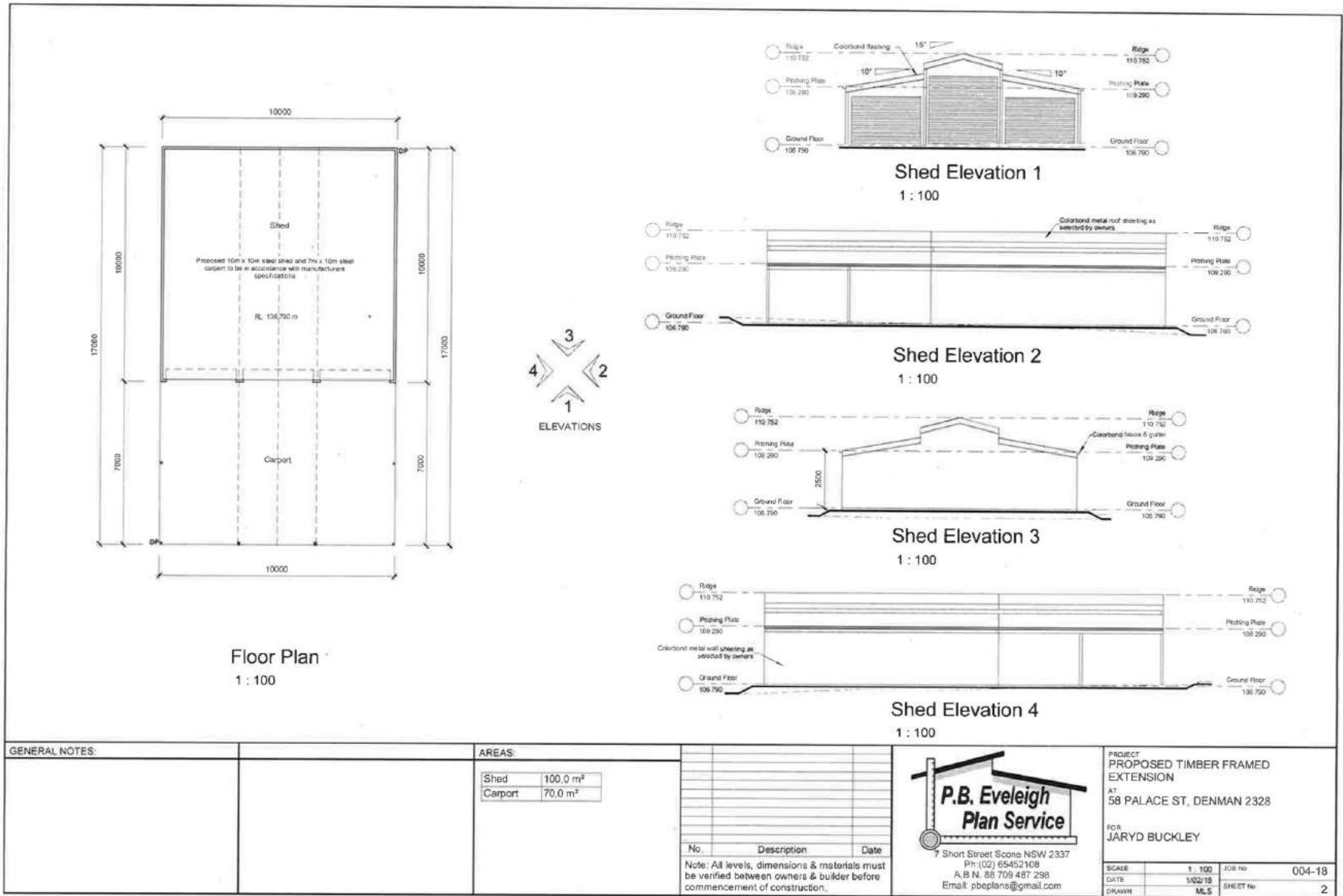
- (a) A direct plumbing direction installed in accordance with the requirements of Council's Community Infrastructure Department to the existing stormwater pit located on the development site or the kerb and gutter, or
- (b) Where a connection to the kerb and gutter or stormwater infrastructure is impractical stormwater may be managed via an a rainwater tank with an overflow outlet drained to suitably sized rubble drain. The rubble drain is to have a minimum dimension of 1m wide by 1m deep and a minimum length determined by allowing 1m for every 100m² of stormwater collection area. Any rubble should be setback a minimum of 6m clear of the proposed building and adjoining buildings.

(20) No Commercial Use

The Shed and carport is to be used for domestic purpose only. The shed and carport must not be used for any home based commercial or industrial purpose without prior written consent from council. At no times shall the shed be used for short or long term residential accommodation.









Rivers and Drainage Channels Policy – R25/1

Authorisation Details:

Authorised by:	Council
Minute No:	266
Date:	9 November, 2015
Review timeframe:	December, 2015
Department:	Environmental Services
Document Owner:	Manager Planning & Building Services

Details History;

Version No.	Date changed	Modified by	Amendments made

This document is a controlled document. Before using this document, check it is the latest version by referring to the Controlled Document Register. Unless otherwise shown, printed or downloaded versions of this document are uncontrolled.

This document is a controlled document. Before using this document, check it is the latest version by referring to the Controlled Document Register. Printed or downloaded versions of this documents are uncontrolled.

POLICY STATEMENT

Muswellbrook Shire Council is committed to ensuring the responsible and orderly management of rivers and urban drainage systems throughout the Shire and so enhance and improve them with respect to:

- a) natural environmental values;
- b) aquatic fauna habitat;
- c) water quality or availability;
- d) drainage and flood risk management;
- e) maintainability;
- f) accessibility; and
- g) visual amenity.

POLICY OBJECTIVES

To define Council's obligations and expectations about maintenance, improvements and rehabilitation of rivers including urban drainage systems.

To provide development standards and guidelines for development that is proposed on land that includes or is adjacent to rivers and urban drainage systems.

To manage and affect ownership of rivers (including adjacent levees) and urban drainage systems in order to achieve better environmental outcomes in a financially sustainable manner.

1. APPLICATION

The policy applies to development in the urbanised areas of the Shire, which impacts upon, adjoins or crosses rivers and urban drainage systems.

For the purpose of this policy a river has the same meaning as in the Water Management Act 2000, being

"river includes:

- (a) any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved, and*
- (b) any tributary, branch or other watercourse into or from which a watercourse referred to in paragraph (a) flows, and*
- (c) anything declared by the regulations to be a river,*

whether or not it also forms part of a lake or estuary, but does not include anything declared by the regulations not to be a river."

2. RIPARIAN CORRIDORS

A riparian corridor forms a transition zone between the land, also known as the terrestrial environment, and the river. Riparian corridors perform a range of important environmental functions such as:

- providing bed and bank stability and reducing bank and channel erosion
- protecting water quality by trapping sediment, nutrients and other contaminants

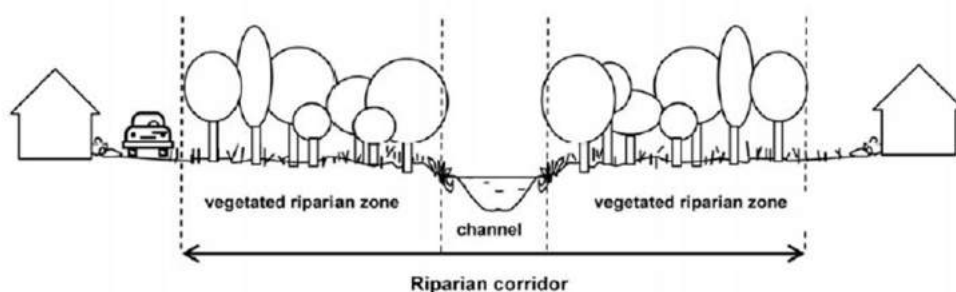
- providing diversity of habitat for terrestrial, riparian and aquatic plants (flora) and animals (fauna)
- providing connectivity between wildlife habitats
- conveying flood flows and controlling the direction of flood flows
- providing an interface or buffer between developments and waterways
- providing passive recreational uses.

The protection, restoration or rehabilitation of vegetated riparian corridors is important for maintaining or improving the shape, stability (or geomorphic form) and ecological functions of a river.

The riparian corridor consists of:

- the channel which comprises the bed and banks of the river (to the highest bank) and
- the vegetated riparian zone (VRZ) adjoining the channel.

Figure 1 - Vegetated Riparian Zones (VRZ)



The NSW Officer of Water recommends a VRZ width based on an order as classified under the Strahler System of ordering rivers and using current 1:25 000 topographic maps (see Figure 2 and Table 1). The width of the VRZ should be measured from the top of the highest bank on both sides of the river.

Figure 2 The Strahler System

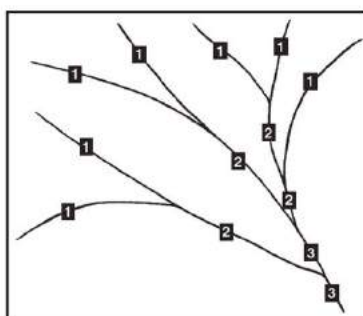


Table 1 Types of Rivers VRZ Width

Types of Rivers	VRZ Width (Each side of river)	Riparian Corridor Width
Any first order ¹ river	10 metres	20m + channel width
Any second order ¹ river	20 metres	40m + channel width
Any third order ¹ river	30 metres	60m + channel width
Any fourth order ¹ river or greater	40 metres	80m + channel width

¹ As classified under the Strahler System of ordering rivers.

3. REQUIREMENTS FOR DEVELOPMENT ON LAND ADJACENT TO RIVERS AND RIPARIAN ZONES

- 3.1. Rivers must be maintained in as natural a state as is feasible, including the maintenance of riparian vegetation and habitat.
- 3.2. Where a development is associated with, or will affect a river, rehabilitation must occur to return that river, as much as possible, to a natural state.
- 3.3. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines or rivers.
- 3.4. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 1 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible and can be managed effectively.
- 3.5. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
- 3.6. Bushfire Asset Protection Zones must not be located within the Vegetated Riparian Zones.
- 3.7. Suitable public and/or Council access is to be provided for maintenance of the riparian corridor.
- 3.8. Where the riparian corridor or drainage reserve is to be in public ownership, the development is to be planned such that there are suitably sized interfaces between the corridor and a public road or public reserve. These interfaces, and any other points of access shall be provided with suitable vehicle barriers and heavy duty locked gates to control unauthorised vehicular access.
- 3.9. The riparian corridor or drainage reserve shall be connected to other reserve and natural areas in an approved manner that facilitates vegetated corridors of suitable habitat.
- 3.10. Development to which the policy applies must include, together with the environmental assessment the following:
 - Detailed engineering survey of the river that extends sufficiently across the land and immediate upstream and downstream reaches and any lateral tributaries or drainage connections;
 - Confirmation of the tenure of the land and river;
 - Flood risk impact assessment by a suitably qualified engineer, including either detailed reference to an adopted formal flood study, floodplain risk management plan; OR provision of an adequate level of flood analysis and flood risk analysis by original work to a standard acceptable to Council;
 - Review of existing vegetation of the river that extends sufficiently across the land and immediate upstream and downstream reaches; and a statement addressing improvements or enhancements to be gained by the application; and
 - Review of existing interventions in the river that extends sufficiently across the land and immediate upstream and downstream reaches; for example: bed and bank works, buildings, retaining walls, fences, cut and fill works, drainage

connections, services crossings, etc; and a statement about how the river is to be improved or enhanced by the application

4. GUIDELINES FOR DEVELOPMENT ASSESSMENT

- 4.1 The following may require development consent from Council, including any necessary Controlled Activity Approval from the NSW Office of Water or a Dredging Permit from Fisheries NSW as required:

- the removal of trees or vegetation;
- any works in locations that contain threatened species, or threatened ecological communities, or their habitats as listed under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*, or in Key Fish Habitat as mapped by Fisheries NSW; and
- works, including excavation, scour protection and engineered bed or bank stabilisation works.

In most instances, waterfront land and river activities will require a Controlled Activity Approval (CAA) pursuant to the *Water Management Act (WMA) 2000*.

- 4.2 Where the requirement for referral to the NSW Office of Water is not triggered, similar principles will be followed along a given river, or where relevant, adapted from those applied in similar situations; or apply standard consistent conditions to similar applications. For example requirements for waterway and vegetation restoration and improvement works to an approved design, and requirements for a waterway maintenance plan with a suitable bond held for an establishment period of at least two years.

- 4.3 In some instances waterfront land and river activities may require a permit under s.90 of the National Parks and Wildlife Act 1974 where the works may affect Aboriginal heritage.

- 4.4 Development assessment will also include:

- assessment of the flood information either by a suitably qualified council engineer, or a council appointed independent expert engineer.
- Assessment of flood risk; assessment of all the applicable waterway requirements in terms of: capacity, depth and velocity and potential impacts upstream and downstream, bed and bank stabilisation requirements; appropriate vegetation; water quality requirements, treatment of crossings and service crossings, maintainability, access, fencing, need for easements etc.

5. GUIDELINES FOR REZONING PROPOSALS

The following section applies to future rezoning requests/planning proposals. Council considers that identification of rivers, drainage channels and riparian vegetation is a critical component of early stage in the land use planning process, and requires proponents to ensure that protecting and maintaining of rivers and drainage channels will be one of the factors to be considered in the preparation of overall stormwater management strategy for greenfield sites. The Planning proposal should:

- i. Identify existing rivers and drainage channels

- ii. Determine appropriate riparian corridor width, in accordance with Table 1 of this Policy.
- iii. Take into consideration riparian vegetation connectivity and potential opportunities for future connectivity of riparian vegetation
- iv. Incorporate identified rivers, drainage channels and associated riparian zones into a concept plan
- v. Recognise potential social, economic and environmental benefits and potential land use activities within identified areas (i.e. easements, passive recreational areas)

6. OWNERSHIP OF RIVERS AND URBAN DRAINAGE SYSTEMS

Wherever possible rivers (including adjacent levees) and urban drainage systems are to be publicly accessible. Wherever possible easements for access and drainage must be created to the benefit of Council.

Council will consider the transfer of ownership to Council of rivers (including adjacent levees) and urban drainage systems only in circumstances where the outcomes of this policy will only be achieved through that dedication. Transfer will only be agreed to following rehabilitation of the river (including adjacent levees) and/or urban drainage system to a standard agreed to by Council. Transfer will only be agreed to at a nil cost to Council.

7. EASEMENTS AND RESTRICTIONS AS TO USER

Easements and restrictions as to user will be required depending on the extent to which access to Council assets is required and to ensure minimisation of the risk to urban drainage and flooding.

Drainage easements are generally for the purpose of:

- (a) protecting Council's assets and other property from damage and to prevent injury;
- (b) ensure access to Council's works for operations and maintenance;
- (c) alert owners of property that pipe work and/or other infrastructure is on their property and that special conditions apply; and
- (d) to facilitate construction and limit the future use of the land in a particular way so as to satisfy the above.

Where rivers are predominantly functioning as an integral part of an urban drainage system, (such as Possum Gully), easements to drain water in favour of council will be required for all new development. The size and alignment is to be guided by a stormwater study should one exist or by an assessment by Council's engineer based on the assessment of the application. Generally, it will involve at least the 'Floodway' as defined in the Floodplain Development Manual; however, in some instances additional lands may be required for riparian management reasons, and or maintenance/access considerations. Depending on location, easement for access may also be required.

Restrictions as to user may also be required to control floor levels and flood risk requirements, and matters associated with land and waterway management, fencing etc as appropriate to the application.

In the case of rivers that are predominantly draining large rural and natural catchments beyond the urban areas, but which do receive a small proportion of flow from urban runoff, including Denman Creek, Muscle Creek, and the Hunter River, easements to drain water in favour of Council will not be required over the river, but may be required over any lateral drainage systems. The size and alignment is to be guided by a stormwater study should one exist or an assessment by councils engineer based on the assessment of the application.

Depending on location, easements for access for rivercare, waterway and land management activities may also be required.

8. MAINTENANCE REQUIREMENTS

This policy recognises that rivers (including adjacent levees) and drainage channels and their associated vegetation should be left in as undisturbed a state as possible, unless extraordinary circumstances apply. Notwithstanding this, Council recognises that there are instances in which the condition of rivers may deteriorate as a result of inappropriate development, erosion and/or sedimentation, overgrowth with weeds or dumping or accumulation of rubbish. In such cases, it is recognised that maintenance and/or rehabilitation of these waterways may be required.

8.1 Drainage Easements

Council is responsible for the maintenance of all of its structures within private property where Council has acquired a drainage easement on such property.

8.2 Rivers

It is important that river and riparian areas are maintained by the landowner to the extent reasonably practical. Rivers form a valuable component of the environment and should be sensitively and effectively managed. A well-managed river also has high aesthetic values and provides valuable habitat.

In general, only minor maintenance activities are permitted. Such activities should occur with care and consideration of the physical and ecological integrity of the river and in accordance with relevant environmental legislation and guidelines.

Major maintenance work ie excavation, filling, diversion, scour protection, improvements etc, will require development consent including the necessary approvals from state government agencies under the Water Management Act 2000, the Fisheries Management Act 1994 and possibly the National Parks and Wildlife Act 1974.

Council will address significant incidences of bank and bed erosion/scour/siltation, if this damage is a direct result of Council's actions.

Easements, where required, are intended to give Council rights to drain water, install or maintain infrastructure, or intervene in land management matters that potentially impact on the viability of the river. The easement is not intended to imply that Council will maintain the vegetation or fencing, etc.

9. FENCING REQUIREMENTS

It is important that the river is maintained and utilised by the landowner to the extent reasonably practical. Fencing of private land along a river forms an interface between the built and natural environment and should be sensitively managed.

To this end the fencing shall achieve the following objectives:

- a) Lateral fencing shall allow for unimpeded passage of stormwater flows and floodwaters, and for overland flow to the river. Consideration of the risk associated with the fencing in respect to things like debris loadings, and potential to cause downstream issues if washed away;
- b) Longitudinal fencing along the easement or riparian zones shall be see-through and permeable and incorporate suitable gates to allow maintenance access.

10. APPLICATIONS OR REQUESTS FOR IMPROVEMENTS OR REHABILITATION

10.1 Within Drainage Easements

All requests for improvements in Council drainage easements within private property are to be received and assessed as to whether the work is of net benefit to the community and the environment and prioritised according to budget constraints. If Council is to contribute to the works, the property owner must contribute at least one-half of the cost of the work.

If the work is required to facilitate the development of the land, then the works, if approved, will be at the owner's full cost.

10.2 Within Rivers and Riparian Corridors

Owners wishing to make improvements or to rehabilitate rivers and or riparian corridors in private property are responsible for arranging and carrying out the work at their own cost.

The owner will need to obtain development consent from Council, including the necessary approvals from state government authorities under the Water Management Act 2000 and the Fisheries Management Act 1994.

Council may determine that an easement in favour of Council should be created over the improved riparian corridor and/or river in order to ensure drainage of a public road, in which case granting of the easement should be at no cost to Council.

10.3 Inter-allotment Drainage Easements (Benefiting private property owners)

In most cases all maintenance, improvements and rehabilitation works to drains in inter-allotment drainage easements within private property are the responsibility of property owners and users of the easement. These drains are usually 'private' drains and do not belong to Council. There are a few exceptions to this where the inter-allotment drainage easements benefit Council by enabling the drainage of public land. In these cases the drain is in the ownership of Council.

If there is a problem, ie damaged or defective pipes or flooding to a lower property, Council (under Section 124 of the Local Government Act 1993) may direct the owners and users of the drain to undertake repairs or maintenance.

10.4 Within Public Reserves, Drainage Reserves, Public Road Reserves or Council owned land

- (a) Maintenance – Council is responsible for maintenance of rivers and drainage channels in council-managed public land.
- (b) Improvements and Rehabilitation – All requests for improvements and rehabilitation will be assessed to determine desirability, prioritised according to budget constraints, and considered for allocations of funds in Council's Works Programs.

11. UNAPPROVED DRAINAGE WORKS

Property owners are required to accept natural flows from adjoining properties and control and dispose of flows properly.

11.1 Unapproved Drainage Works on Council Land

If unapproved drainage works are carried out on Council land, Council may remove the works and recover costs from the owner that carried out the work.

11.2 Unapproved Drainage Works on Private Land.

- (a) If new unapproved drainage works (approvals required under the Muswellbrook Local Environment Plan) are carried out on private land, Council may require the owner to remove the works at the owner's expense.
- (b) Maintenance – where existing unapproved drainage infrastructure is located on private owned land, Council will not maintain the infrastructure.

6.2 DA 51/2019 ANCILLARY DEVELOPMENT - SHED - 27 PALACE STREET, DENMAN

Responsible Officer:	Sharon Pope - Assistant Director - Environment & Community Services
Author:	Hamish McTaggart - Co-Ordinator - Development
Community Plan Issue:	<i>A Council that is well managed, efficient and properly resourced and that is responsive to its communities and stakeholders</i>
Community Plan Goal:	<i>Maintain a strong focus on financial discipline to enable Council to properly respond to the needs of the communities it serves.</i>
Community Plan Strategy:	<i>Provide efficient and effective Development Application, Complying Development Certificate, Construction Certificate and Occupational Certificate assessment services.</i>
Attachments:	A. DA 51/2019 Section 4.15 Assessment B. DA 51/2019 Recommended conditions for DAC C. DA 51/2019 Proposed Plans D. Levee Bank Deed of Agreement and Manual for the Operations and Maintenance of the Denman Levee E. Council Policy Rivers and Drainage Channels - R25-1

PURPOSE

This report has been prepared to inform the Development Assessment Committee in determining Development Application (DA) 51/2019. This Development Application has been assessed by Council Officers and a copy of the Section 4.15 Assessment Report and recommended conditions of Consent are attached for Council's information.

Delegations issued to the General Manager include a limitation on the General Manager determining matters under the Environmental Planning and Assessment Act 1979 as follows:

- (iii) [determine matters] which are for, or in any way related to;
- (f) works alongside or adjoining any waterway

The site subject to this development application adjoins Sandy Creek. Accordingly, the determination of the development application is outside the functions Council has delegated to the General Manager and Council Officers. The determination of this development is within the function delegated to the Development Assessment Committee.

This development application was reported to the 11 September 2019 Development Assessment Committee Meeting where the determination of the application was deferred by the Committee. The application is now being re-reported to this Meeting of the Development Assessment Committee for further consideration.

RECOMMENDATION

That the Development Assessment Committee:

- 1. Approve Development Application No. 51/2019, involving the erection of a shed at Lot 2110 DP 864033, known as 27 Palace Street, Denman, is approved subject the recommended conditions of consent included in Attachment B.**
 -
- 2. Request the General Manager to prepare a report for Council's consideration, to initiate negotiations with the land owner to obtain an easement over the Denman Levee Bank in**

favour of Council. The terms of any easement should include:

- A restriction on the installation of structures and the carrying out of works to the levee bank by the land owner.
- A restriction on the grazing of stock on the levee bank without prior consent of the relevant public authority.
- Provide the relevant public authority with authority to enter the land to carry out works associated with the management of the levee bank
- The easement is to be located over the entirety of the levee bank located on the land.

•

Moved: _____ Seconded: _____

DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development involves the construction of a shed at 53 Palace Street Denman. The formal identification of the land subject to this development application is Lot 2110 DP 864033.

The subject site is currently used for residential purposes with an existing dwelling, pool and carport located on the site. The property has previously been fenced to exclude the Levee from the yard of the dwelling. The proposed shed would be situated toward the rear of the site behind the building line of the existing dwelling. Under the proposal the shed would be setback 1.5m from the closest adjoining property boundary and 6.5m from the toe of the Denman Levee bank which intersects the eastern portion of the site.

The shed would have a width of 8m, depth of 7m an eave height of 2.7m and a maximum height of 3.38m.

The site subject to this development application is zoned RU5 Village under the Muswellbrook Local Environmental Plan (LEP) 2009 and is situated within a heritage conservation area.

The Muswellbrook Floodplain Risk Management Study and Plan 2018 identifies land east of the levee bank is flood affected, along with a small portion of land west of the levee bank.

The images below include an aerial view of the site and a site plan identifying the location of the proposed shed in relation to existing site improvements.

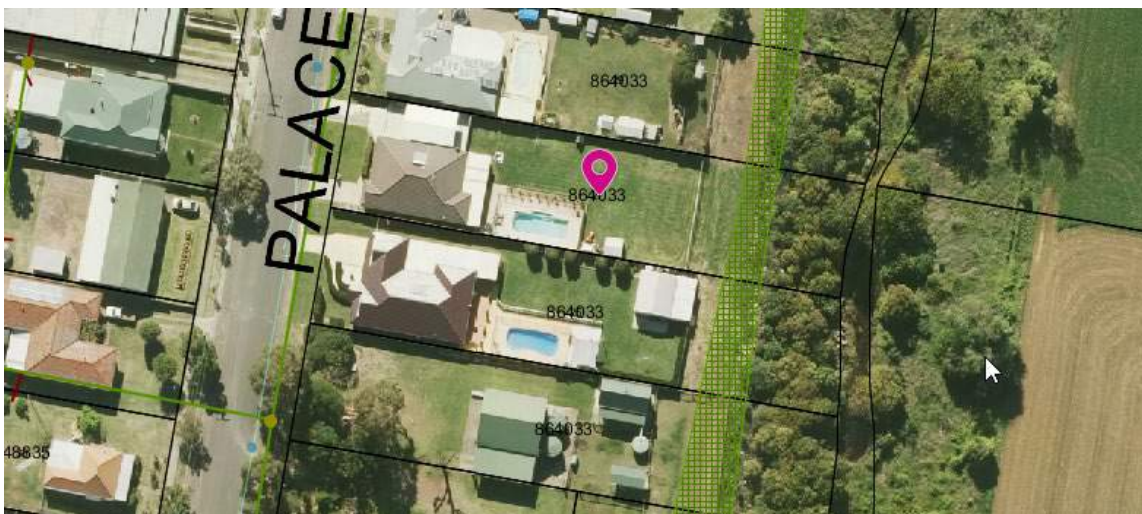


Image.1 (Aerial view of the site)

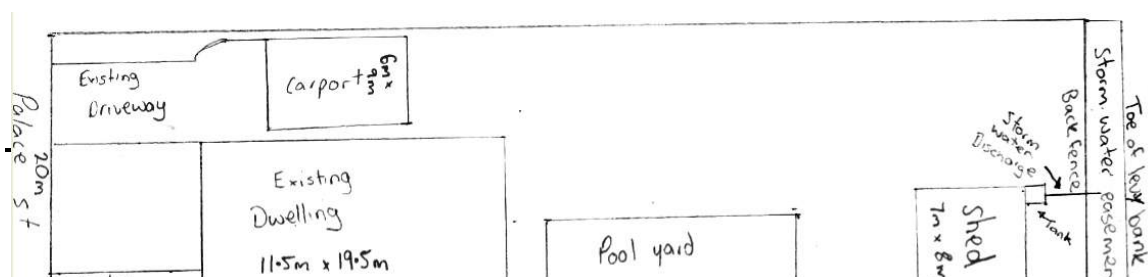


Image.2 (Proposed Site Plan)**ASSESSMENT SUMMARY**

Council Officers have assessed the development application against the relevant heads of consideration prescribed by Section 4.15 of the Environmental Planning and Assessment Act 1979.

A copy of the Section 4.15 Assessment is provided in Attachment A. The findings of this assessment report have informed Council Officers in recommending that the development application be approved subject to the recommended conditions of consent put forward in Attachment B.

Key considerations and findings of the section 4.15 assessment include:

- The proposed development is in accordance with relevant provisions of the Muswellbrook Local Environmental Plan (LEP) 2009.
-
- The proposed development was considered against the provisions of relevant State Environmental Planning Policies (SEPP's) and there are no inconsistencies with their requirements which would prevent Council from granting development consent to the proposed development.
-
- The proposed development was considered against the requirements of the Muswellbrook Development Control Plan (DCP) 2009 and was considered to be generally in accordance with the relevant DCP requirements. A number of the standard conditions of consent included in Attachment B have been imposed to manage the carrying out of the development and ensure that the works are carried out in accordance with the DCP requirements.
-
- The Denman Levee Bank is constructed on the eastern portion of the lot. Council accepted responsibility for the maintenance and management of the levee bank from the Department of Water and Resources in 1992. Council's upkeep responsibilities for the Denman Levee Bank are guided by the 'Manual for the Operations and Maintenance of the Denman Levee'. Part 5.2 of this document establishes the responsibilities and limitations for landholders whose land the levee bank has been constructed over. This document has been attached for Council's information. Part 2 Division 1 of the Water Management Act 2000 sets a further legal framework for the management of flood mitigation works and penalties for the carrying out of works or actions that affect flood mitigation works. Council Officers are satisfied that the proposed development is unlikely to impact the integrity and functionality of the Denman Levee bank. A condition is recommended requiring that stormwater is discharged clear of the levee bank via either a connection to Council's drainage network or a rubble drain setback a minimum of 6m clear of the levee bank and adjoining properties.
-
- Section 13 of the Muswellbrook DCP includes additional provisions for development within 40m of the Denman Levee Bank. This section of the DCP restricts the carrying out of development within a 40m buffer of the levee bank unless the structure is designed to withstand flood forces at the site should the levee bank fail. Should Council approve the development application it is recommended that a condition of consent be imposed to require the preparation of detailed design plans demonstrating that the structure would comply with the relevant flood forces.

-
- The development is unlikely to have any adverse environmental impacts that would prevent Council from granting development consent to this development application.

MATTERS RELATED TO THE DEFERRAL OF DETERMINATION

This development application was reported to the 11 June 2019 Development Assessment Committee for determination. The draft Meeting Minutes show that the Development Assessment Committee passed the following resolution in relation to the application:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee so that options for conditions can be prepared in accordance with the revised draft Rivers and Drainage Channel Policy.

At the time of this report a revised *Rivers and Drainage Channel Policy* was not available for review, nor had any revised policy been reported to Council for notification and/or adoption. Council Officers consider that there is sufficient information to determine this application rather than deferring it until the *Rivers and Drainage Channel Policy* is revised. Council Officers have considered the development application against the controls of the existing Policy and Development Control Plan.

The application was previously deferred by the Committee as the Committee requested a condition be included requiring the registration of an easement over the Denman Levee Bank in favour of Council.

In its recent determination of DA 34/2019 (a new garage at 53 Palace Street, Denman), the Development Assessment Committee imposed conditions related to the fencing of a levee bank and the registration of an easement over the levee bank to the benefit of Council.

-
- The conditions limited the type of fencing that could be constructed on the land and required an easement to be registered over the levee bank in favour of Council. The conditions read as follows:
 - (#) *Any new fence is to be installed within the site boundaries, parallel to the eastern base of the Denman Levee Bank. Any new fence is to comply with the Fencing requirements of Section 9 of Muswellbrook Shire Council's Rivers and Drainage Policy, as amended from time to time. In particular Any new fence is to comply with the following:*
 - *Materials used in the fence are to be selected to not inhibit the uninterrupted overland flow of storm water*
 - *The fence is to incorporate suitable gates to allow for the maintenance of the riparian area.*
 - *The fence must be permeable and see-through. Any new fence is to be maintained in good order at all times.*
 - (#) *An easement for establishment of a Riparian corridor, access and ongoing maintenance, is to be registered over the land, land on which the Denman Levee Bank is situated, in favour of Council. The easement will cover the entirety of the levee bank located on the land. The terms of the easement are to restrict the installation of structures, the carrying out of works or the grazing of stock on the Levee Bank, without the prior consent of Council, and will provide Council with the authority to enter the land to carry out the works associated with the management of the Levee Bank.*
-
- Council Officers have reviewed development applications related to land adjacent the Denman Levee lodged between 2006 and the present day. With the exception of DA 34/2019 Council Officers have not identified a circumstance where Council has imposed a condition requiring the registration of an easement over the developed land related to the management of the levee bank.
-
- Council Officers did identify a development application involving the subdivision of 2 Ogilvie Street where a condition was imposed by Council requiring an easement for bed and bank stabilisation.
-

Section 4.17 of the *Environmental Planning and Assessment Act 1979* outlines circumstances under which a consent authority can impose conditions of consent on a development. A condition must fairly and reasonably relate to the development subject of the development application and be for a planning purpose. Council Officers consider that it would be unreasonable for Council to impose a condition requiring the landowner to create an easement in this instance as the proposed development is minor, the expense of creating an easement is disproportionate to the nature of the development, there is no impact on the levee bank, and Council has power to enter the land to repair the levee without an easement, although the negotiation required with multiple landowners for non-urgent maintenance creates delays. It is recognised that individual land owners may not be aware of their responsibilities under the legislation or Operations Manual and the registration of an easement would ensure current and future land owners are informed of their obligations.

Council does have the ability to negotiate an easement under the provisions of the LG Act and the Water Management Act. The Development Assessment Committee does not have delegations to resolve that Council commence these negotiations, however as a way forward, staff have recommended that the General Manager prepare a report on this matter for Council's consideration.

COMMUNITY CONSULTATION

Surrounding properties were notified of the development proposal between 5 July 2019 and 25 July 2019. A notice was also placed in the local newspaper, the Hunter Valley News, at the commencement of the notification period.

No submissions were received from the public in relation to the proposed development during the notification period.

OPTIONS

The Development Assessment Committee may:

- A. Grant development consent to the proposed development subject to the recommended conditions of consent,
 -
- B. Resolve to determine the development application in accordance with the recommended conditions of consent contained in Attachment B and the following additional conditions:
 -
 - (#) An easement for establishment of a Riparian corridor, access and ongoing maintenance, is to be registered over the land on which the Denman Levee Bank is situated, in favour of Council. The easement will cover the entirety of the levee bank located on the land. The terms of the easement are to restrict the installation of structures, the carrying out of works or the grazing of stock on the Levee Bank, without the prior consent of Council, and will provide Council with the authority to enter the land to carry out the works associated with the management of the Levee Bank.
 -
- C. Refuse development consent to the proposed development and nominate reasons for refusal, or
 -

FINANCIAL IMPLICATIONS

The determination of this development application does not have any immediate financial implications for Council.

The registration of an easement on the title of the land will have financial implications. The full cost will be dependent on the outcome of any future negotiations between the land owner and Council representatives.

LEGAL IMPLICATIONS

Where the applicant is dissatisfied with the determination of the development application they have an opportunity under the provisions of the Environmental Planning and Assessment Act 1979 to appeal that determination at the Land and Environment Court.

CONCLUSION

DA 51/2019 has been reported to the Development Assessment Committee for determination as it is outside the delegations to the General Manager for the determination of matters under the *Environmental Planning and Assessment Act 1979*.

The application was previously reported to the Development Assessment Committee where it was deferred to be reconsidered at this meeting.

Council Officers have reviewed matters related to the previous determination and have adjusted the recommendation to the Development Assessment Committee to recommend that the application be approved in accordance with the recommended conditions of consent and to request the General Manager prepare a report for Council's consideration, to initiate negotiations with the land owner to obtain an easement over the Denman Levee Bank in favour of Council.

In preparing this report Council Officers have completed a Section 4.15 Assessment of the proposed development. The findings of this 4.15 Assessment recommend that the Development Assessment Committee grant development consent to DA 51/2019 subject to conditions of consent outlined in Attachment B.

DEVELOPMENT ASSESSMENT REPORT

Attached: Site Plan

REPORT TO THE GENERAL MANAGER

ADDRESS:	LOT: 2110 ALT: DP: 864033 27 Palace Street DENMAN			
APPLICATION No:	51/2019			
PROPOSAL:	Ancillary Development - Shed			
PLANS REF:	Drawings no.	Drawn by	Date	Received
	Site Plan	Unknown	Unknown	25 June 2019
	Foundation Plan (sheet 1 of 6)	FDS	12 June 2019	25 June 2019
	Shed Elevations (sheet 2 of 6)	FDS	12 June 2019	25 June 2019
OWNER:	Mr D J Collins			
APPLICANT:	Mr D J Collins 27 Palace Street DENMAN NSW 2328			
AUTHOR:	Mr T Bhuiya			
REVIEWED BY:	Mr H McTaggart			
DATE LODGED:	24/06/2019			
AMENDED:	NA			
ADD. INFO REC'D:	NA			
DATE OF REPORT:	22 August 2019			

SUMMARY

ISSUES: Heritage Conservation Area, Flood Prone Zone,
Land adjacent to a watercourse

SUBMISSIONS: Nil

RECOMMENDATION: Approval subject to conditions

1.0 SITE AND LOCALITY DESCRIPTION

The proposed development is relates to land identified as Lot 2110 DP 864033. The street address is 53 Palace Street Denman. The lot was created by subdivision in 1996.

The subject site has been developed with a dwelling and associated structures. A search of Council's records identified the following development consents in relation to the site.

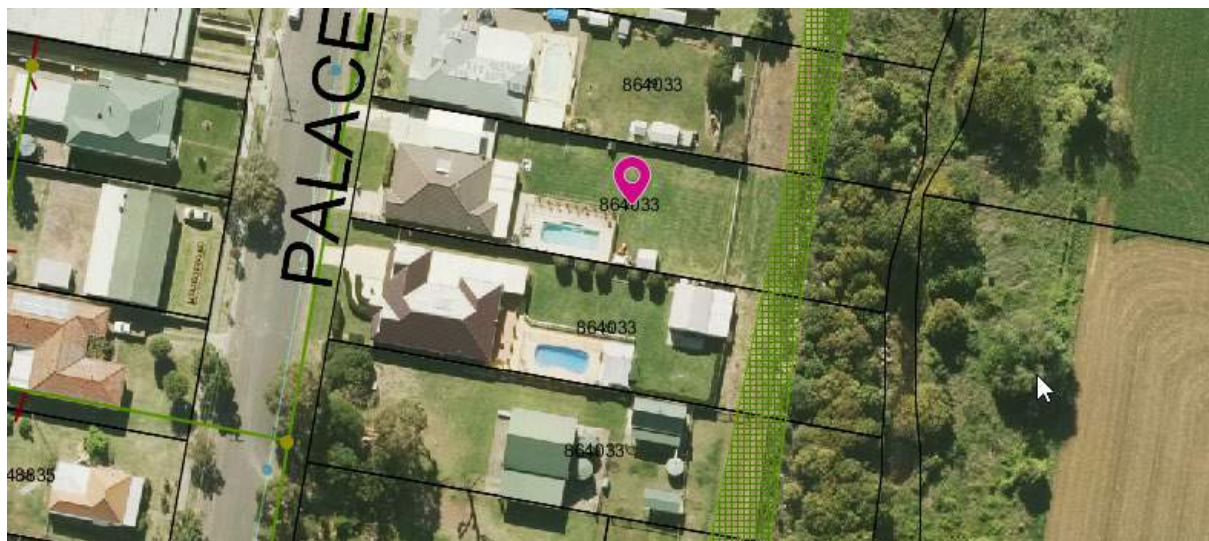
DA 199/2002 – Dwelling
DA 9/2008 – Swimming Pool
DA 8/2015 – Carport

The rear yard is fenced to exclude the Levee Bank.

The Denman Levy Bank is constructed on the eastern part of the subject site. The Muswellbrook Flood Risk Management Study and Plan identifies a portion of the site as being affected by the 1 in 100 year flood event.

The land is zoned RU5 Village under the provisions of the Muswellbrook Local Environmental Plan (LEP) 2009 and is identified as being situated within the Denman Heritage Conservation Area.

An aerial image of the property has been included below

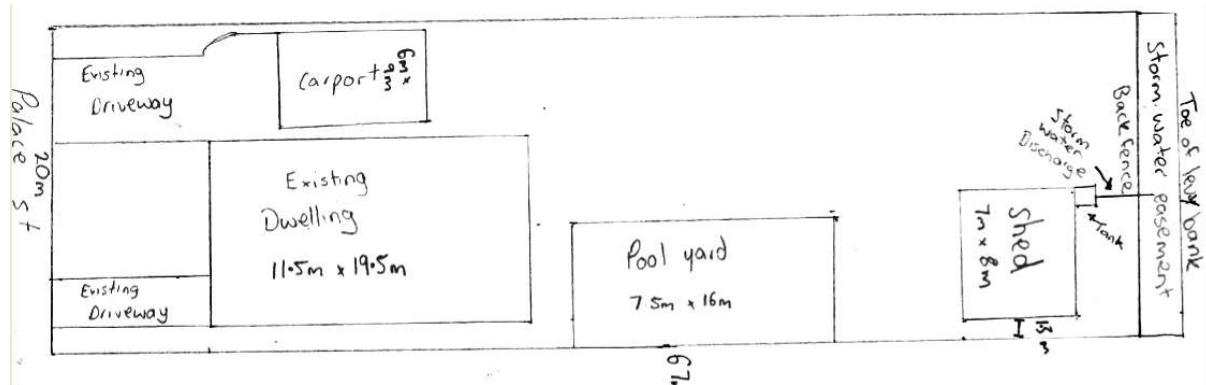


2.0 DESCRIPTION OF PROPOSAL

The proposed development involves the construction of a shed. The shed is proposed to be located behind the building line of an existing dwelling on the site and would be setback 1.5m from the nearest adjoining property and 6.5m from the toe of the Denman Levy bank.

The shed would have a width of 8m a depth of 7m and an eave height of 2.7m. At the apex of its roof the maximum height of the proposed shed would be 3.38m.

The image below is the site plan submitted with the development application which details the location of the proposed shed in relation to existing buildings on the site.



3.0 Referrals

The proposed development relates to land within a heritage conservation area. The proposed development was referred to Council's Heritage advisor to provide comments on the impact of the development on the heritage significance of the locality.

Council's Heritage Advisor

The application was referred to Heritage Advisor as the proposed land is located in the Denman Heritage Conservation Area.

Council's heritage advisor raised no objection to the proposed development or concerns in relation to its impact on the heritage conservation area.

3.0 ASSESSMENT

This report provides an assessment of the material presented in the Application against the relevant State and local planning legislation and policy.

Section 4.15 Matters for Consideration

Section 4.15(1)(a)(i) The provisions of any Environmental Planning Instrument (EPI)

The following EPIs, DCPs, Codes and Policies are relevant to this Application:

1. Muswellbrook Local Environmental Plan 2009 (MLEP 2009)

Land Use Zone and Permitted Land Use

The development site is zoned RU5 Village pursuant to MLEP 2009. The proposal is ancillary to the residential use of the land. The land is currently developed for residential use as a dwelling. The proposed development is considered to be permissible with consent as development ancillary to the dwelling house.

Objectives of the RU5 Village Zone

Clause 2.3(2) of the Muswellbrook LEP 2009 requires the consent authority to consider the relevant land use zone objectives when determining a development application. The land use zone objectives for the RU5 Village Zone are as follows:

- To provide for a range of land uses, services and facilities that are associated with a rural village.
- To allow more flexibility in the development of the town of Denman and village of Sandy Hollow.
- To allow for future development of residential, commercial or low-impact land use within the town of Denman and village of Sandy Hollow.

- To ensure that non-residential uses do not result in adverse amenity impacts on residential premises.
- To minimise the impact of non-residential uses and ensure these are in character and compatible with surrounding development.

It is considered that the development proposal is not contrary to the objectives of the Zone.

Relevant Clauses applicable under the Muswellbrook Local Environmental Plan 2009

<i>Part 1 Preliminary</i>	
<i>Part 2 Permitted or prohibited development</i>	
<i>2.3 Zone objectives and Land Use Table</i>	The proposed development is a permissible development under the RU5 land use table as expressed above and in accordance with the relevant to the land use zone objectives
<i>Part 3 Exempt and complying development</i>	
<i>Part 4 Principal development standards</i>	
<i>4.3 Height of buildings</i>	MLEP 2009 specifies a maximum building height of 8.5 m in relation to the land. The maximum height of the proposed development is approximately 3.38m. Complies
<i>4.4 Floor space ratio</i>	MLEP 2009 specifies a floor space ratio of 0.5:1 in relation to the land. As the proposed development is an associated structure (in accordance with Local Government Act 1993) it does not contribute to the floor space ratio, so the FSR would be unchanged and is 0.18:1. Complies
<i>Part 5 Miscellaneous provisions</i>	
<i>5.10 heritage conservation</i>	The proposed development involves works within a heritage conservation area identified by the LEP. Council's Heritage Advisor recommended the approval of the development as a development that would not adversely impact the heritage conservation area. Complies
<i>Part 6 Urban release areas</i>	
<i>Part 7 Additional local provisions</i>	
<i>7.1 Terrestrial biodiversity</i>	The subject site is not identified as 'biodiversity' by Council's Biodiversity Mapping. Accordingly, the provisions of this Clause do not require further consideration in relation to the proposed development.
<i>7.6 Earthworks</i>	Earthworks involved with the proposed development would be minimal and associated with establishment of the foundation. The proposed earthwork is not anticipated to have a detrimental impact on existing drainage patterns, soil stability and amenity of the adjoining properties. Conditions of Consent are required for earthworks for this proposed development to ensure the works are carried out in accordance with council's standard requirements.

2. State Environmental Planning Policy No. 55 – Remediation of Land

Council officers are unaware of any activities which have carried out on the site likely to have caused the contamination of the land. As the land of the proposed development is vacant and no visual evidence of any contamination was observed by council officers during an inspection of the site. It is therefore considered that the subject site is unlikely to be affected by contamination requiring remediation in accordance with the SEPP. The proposed development may therefore proceed without the need of further consideration of the provisions of this SEPP

Section 4.15(1)(a)(ii) the provisions of any draft EPI.

There are no draft EPIs relevant to the subject Application.

Section 4.15(1)(a)(iii) the provisions of any development control plan

Section 3 – Site Analysis

It is considered that the documentation provided with the Development Application satisfies the provisions of Section 3 of the Muswellbrook DCP.

Section 4 – Notification

In accordance with the provisions of Section 4 of the Muswellbrook DCP 2009, the Application was notified for a period of not less than fourteen days from 5 July 2019 to 25 July 2019. A notice was also placed in the local newspaper, the Hunter Valley News, at the commencement of the notification period.

No submissions were received during the notification period.

Section 6 – Residential Development

	Comments
6.1 Built Form	
6.1.1 Context	The built form of the proposed development would be in accordance with the requirements of the DCP and would respond to the physical capabilities of the site and the design limitations of Council's DCP.
6.1.2 Front Setbacks	The proposed development is back of the existing dwelling and will not change the current existing front setbacks
6.1.3 Side and Rear Setbacks	The proposed shed would be setback 6.5m from the Levee and 1.3m from side boundary and would be fully enclosed. This complies with the minimum DCP setback (450mm)
6.1.4 Building Height and Scale	The proposed dwelling would be consistent with the height, bulk and scale of existing neighbouring dwellings nearby the subject site. The maximum height of the proposed ancillary development is 3.38m. Thereby the proposal would be in accordance with the requirements of this part.
6.1.6 Garages, Carports and Sheds	
1. Garages, carports and sheds visible from the street shall compliment (i.e. not detract from) the colour and roof form (i.e. pitch) of the dwelling on that allotment.	1. Proposed shed is not visible from Palace street. Colour is proposed to be "sand" to compliment the dwelling on that allotment
2. Garages and sheds are not located forward of the established building line.	2. Proposed shed is behind the dwelling
3. Open carports, less than 36m ² in roof area and no greater than 6m wide, may be built to the side boundary or no closer than 1m to the street frontage provided they meet the objectives of this clause.	3. NA
6.1.7 Dwelling Entry	NA
6.1.9 Reflective Materials	Natural colours, muted and earth tones for major areas of the building will be used for the proposed development
6.2 Urban Landscape	
6.3 Environmental	
6.3.1 Topography	Finished ground level will not alter the existing Natural topography and landform.
6.4 Site Operation	
6.4.2 Stormwater Management	The proposed plans suggest that stormwater from the development can be drained to a drainage easement located situated to the rear of the property adjacent the levee bank. Council Officers have reviewed asset records, the land deposited plan and inspected the site and have

	<p>not identified any stormwater drainage infrastructure or drainage easement.</p> <p>In order to manage stormwater from the development Council Officers have proposed a standard condition of consent requiring the management of stormwater by a connection to the kerb and gutter, or a rubble drain where a connection to the kerb and gutter is impractical.</p>
--	--

Section 7 – Village Zones

This Section of the DCP specifies requirements for development in the RU5 Village zone and is a relevant consideration for this development application as it relates to development in this zone.

Sub-section 7.3 of the DCP prescribes that residential development in the village zone must comply with the provisions of Section 6 of the DCP relevant to Residential Development. The proposed development has been reviewed against these provisions in the table above and is considered to comply with the relevant DCP requirements. This Section of the DCP does not prescribe any further requirements that would affect the granting of consent to the proposed development.

Section 13 – Flood Prone Land

The site subject to the proposed development is located immediately adjacent the Denman Levy Bank. Section 13.5 of the DCP includes additional provisions for development protected by a levy.

This clause requires that structural certification for development within 40m of a levee to ensure that it is designed to withstand flood pressures in the event of the levee's failure. To ensure the proposed development is carried out in accordance with this requirement of the DCP it is recommended that a condition of consent is imposed on the development requiring the submission of a detailed engineered design capable of withstanding flood pressures at the site should the levee bank fail.

Section 15 – Heritage Conservation

The proposed development involves the development of land in the Denman Heritage Conservation Area. Accordingly, the provisions of this Section of the DCP are relevant to the assessment of the development application. The proposed development was referred to Council's Heritage Advisor to consider against the relevant provisions of the Muswellbrook DCP.

Council's Heritage Advisor did not raise any concern with the proposed development. Accordingly, Council Officers are satisfied that the proposed development would be compatible with the requirements of this section of the DCP and can be supported by Council.

Section 7.11 (Previous Section 94) Contributions Plan 2001 Not Applicable

Section 7.12 (Previous Section 94A) Contributions Plan 2009
Estimated cost of the development is \$17,035. A Section 7.12 contribution in accordance with Council's section 7.12 Contribution Plan would not be applicable given the value of the proposed development would be less than \$100,000.

Section 4.15(1)(a)(iia) the provisions of any planning agreement

There are no planning agreements relevant to the subject Application.

Section 4.15(1)(a)(iv) the provisions of the regulations

Division 8A of the Environmental Planning and Assessment Regulation 2000 applies to the development.

Section 4.15(1)(a)(v) the provisions of any coastal zone management plan

This item is not relevant to the subject Application. The Application does not relate to a coastal area.

Section 4.15(1)(b) the likely impacts of that development

Given the limited scope of the proposed development and its compatibility with the relevant provisions of Council's DCP and LEP the proposed development is considered to be reasonably in accordance with the type of residential development expected within a large lot residential area. Accordingly the proposed development is considered unlikely to have any significant adverse environmental impacts in any of the following areas.

Context & Setting	Waste
Built Form	Energy
Potential Impact on Adjacent Properties	Noise and Vibration
Access, Traffic and Transport	Natural hazards
Public Domain	Technological hazards
Utilities	Safety, Security, and Crime Prevention
Heritage	Social Impact on Locality
Other land resources	Economic Impact on the Locality
Water	Site Design and Internal Design
Soils	Construction
Air & microclimate	Cumulative Impacts
Flora & fauna	

Section 4.15(1)(c) the suitability of the site for the development

It is considered that the development is compatible with surrounding land uses and site characteristics, subject to consent conditions.

Section 4.15(1)(d) any submissions made

No submissions were received during the notification period:

Section 4.15(1)(e) the public interest.

The proposed development would be in accordance with the Muswellbrook LEP 2009, Muswellbrook DCP and is unlikely to have any adverse environmental impacts.

The Denman Levee Bank is located on the land subject to this application. The proposal does not involve any work that would directly alter or affect the levee bank and the proposed development would comply with the provisions of the Muswellbrook DCP related to development adjacent a levee bank.

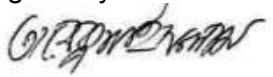
In view of the above considerations the proposed development is considered to be generally in accordance with the public interest.

5 CONCLUSION

The application has been assessed in accordance with the legislation listed at the beginning of the report. The application has also been placed on public exhibition for a minimum of fourteen days with no submissions being received.

It is recommended the application be approved subject to conditions of consent.

Signed by:



Taraqual Bhuiya
Graduate Building Surveyor
Date: 15 August 2019

Reviewed by :

Hamish McTaggart
Senior Development Planner

IDENTIFICATION OF APPROVED PLANS

(1) Development in Accordance with Plans

The development being carried out in accordance with the development application and the drawings referenced below, and endorsed with Council's approval stamp, except where amended by the following conditions.

Drawing No.	Revision	Drawn by	Drawing Date	Received
Site Plan	-	Unknown	Unknown	25 June 2019
Foundation Plan (sheet 1 of 6)	-	FDS	12 June 2019	25 June 2019
Shed Elevations (sheet 2 of 6)	-	FDS	12 June 2019	25 June 2019

(2) Levee Bank Setback

The shed is to be setback 6.5m from the toe of the Denman Levee Bank in accordance with the building size and setback information submitted by the applicant on an untitled sheet submitted by the applicant with the proposed plans received by Council on the 25 June 2018.

OPERATIONAL CONDITIONS IMPOSED UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT AND REGULATIONS AND OTHER RELEVANT LEGISLATION

(3) Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

(4) Home Building Act

- (1) Building work that means residential building works (under the meaning and exemptions of the *Home Building Act 1989*) must not be carried out unless the Principal Certifying Authority for the development which the work relates:
 - (a) In the case of work being carried out by a licensed builder :
 - (i) Has been informed in writing of the licensee's name and license number, and;
 - (ii) Has received Home Owners Warranty Insurance for works where the contract price of the works exceeds \$20,000.
 - (b) In the case of an Owner Builder:
 - (i) Has been informed in writing of the person's name and Owner Builder permit number where the cost of works is greater than \$10,000, or;
 - (ii) Has been given declaration signed by the owner of the land that states that the reasonable market cost of the labour and materials is less than \$10,000.

- (2) A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.
- (3) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: (1) The amounts referred to in point 1 may be subject to change as regulations are amended.

(2) An owner that engages multiple licensees/contracts or contracts for part of the work and completes work themselves is considered an Owner Builder under the *Home Building Act 1989*.

ANCILLARY MATTERS TO BE COMPLETED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

(5) Construction Certificate Requirement

No works shall commence on-site until such time as a Construction Certificate has been issued for either part or all of the works to be undertaken. If a Construction Certificate is issued for part of the approved works it must relate to all works being undertaken.

Note: a construction certificate issued by an Accredited Certifying Authority must be deposited with Council at least 48 hours prior to the commencement of any earthworks, engineering or building work at the site.

(6) Potential Flood Damage to Buildings

Prior to the issue of a Construction Certificate the Certifying Authority is to be provided with a report and certification by a qualified practising Consulting Engineer stating that the structure has been designed to withstand the flood pressures, including debris and buoyancy forces in the event of the failure of the Denman Levee Bank during a flood event.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO COMMENCEMENT
--

(7) Sediment and Erosion Control

Where construction or excavation activity requires the disturbance of the soil surface and existing vegetation, adequate measures for erosion and sediment control shall be provided. As a minimum control techniques are to be in accordance with 'The Blue Book' published by Landcom provisions on Erosion and Sediment Control, or a suitable effective alternative method.

All required sedimentation control techniques are to be properly installed prior to the commencement of any site works and maintained in a functional and effective condition throughout the construction activities until the site is stabilised

(8) Site Sign

A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:

- (a) stating that unauthorised entry to the work site is prohibited;
- (b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
- (c) showing the name, address and telephone number of the Principal Certifying Authority for the work.

Any such sign must be maintained while the building work or demolition work is being carried out, but must be removed when the work has been completed.

This condition does not apply to building works being carried out inside an existing building.

(9) Damage to Public Infrastructure

The applicant shall bear the cost of all restoration works to Council property damaged during the course of this development. The applicant shall submit in writing and/or photographic record, of any existing damage to Council property before commencement of work.

Note: This documentation will be used to resolve any dispute over damage to infrastructure. If no documentation is received prior to commencement of work it will be assumed that the infrastructure was undamaged and the applicant will be required to restore all damaged infrastructure at their expense.

(10) Materials

In accordance with the provisions of the Muswellbrook Development Control Plan the external cladding of the building shall be constructed from non-reflective metal cladding. Zinalume or reflective white sheet metal cladding is not be used without the prior written approval from Council.

CONDITIONS THAT MUST BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK
--

(11) Construction Hours

- (a) Subject to this clause, building construction is to be carried out during the following hours:
 - i. between Monday to Friday (inclusive)—7.00am to 6.00pm
 - ii. on a Saturday—8.00am to 1.00pm
- (b) Building construction must not be carried out on a Sunday or a public holidays.
- (c) Demolition works and excavation works must only be carried out between Monday to Friday (inclusive) between 8.00am and 5.00pm.
- (d) The builder and excavator must display, on-site, their 24 hour contact telephone numbers, which are to be clearly visible and legible from any public place adjoining the site.

(12) Prohibition on Use of Pavements

Building materials and equipment must be stored wholly within the work site, unless prior written approval has been obtained from council. Equipment must not be operated on the footpath or roadway, unless prior written approval has been obtained from council.

(13) Mandatory inspections under Section 68 of the Local Government Act 1993

The person acting with this consent shall ensure that all mandatory sewer, water and stormwater inspections are carried out by Council Officers at the relevant stages of construction in accordance with any Section 68 approval issued for the development.

Note: a minimum notice of 48 hours is required when booking an inspection. Inspection fees will be charged in accordance with Council's adopted fees and charges and must be paid prior to the issue of the Construction Certificate.

(14) Site Waste Minimisation

Throughout the carrying out of building works the person acting with this consent shall take reasonable steps to minimise waste from the carrying-out of the development in accordance with the following objectives of Chapter 24 Waste Minimisation and Management of Council's Development Control Plan.

- Optimise adaptive reuse opportunities of existing building/structures.
- Maximise reuse and recycling of materials.
- Minimise waste generation.
- Ensure appropriate storage and collection of waste.
- Minimise environmental impacts associated with waste management.
- Avoid illegal dumping.
- Promote improved project management.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE
--

(15) Occupation

The building is not to be used or occupied until a final inspection has been carried out and an occupation certificate has been obtained from the Principal Certifying Authority.

CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

(16) Stormwater Disposal

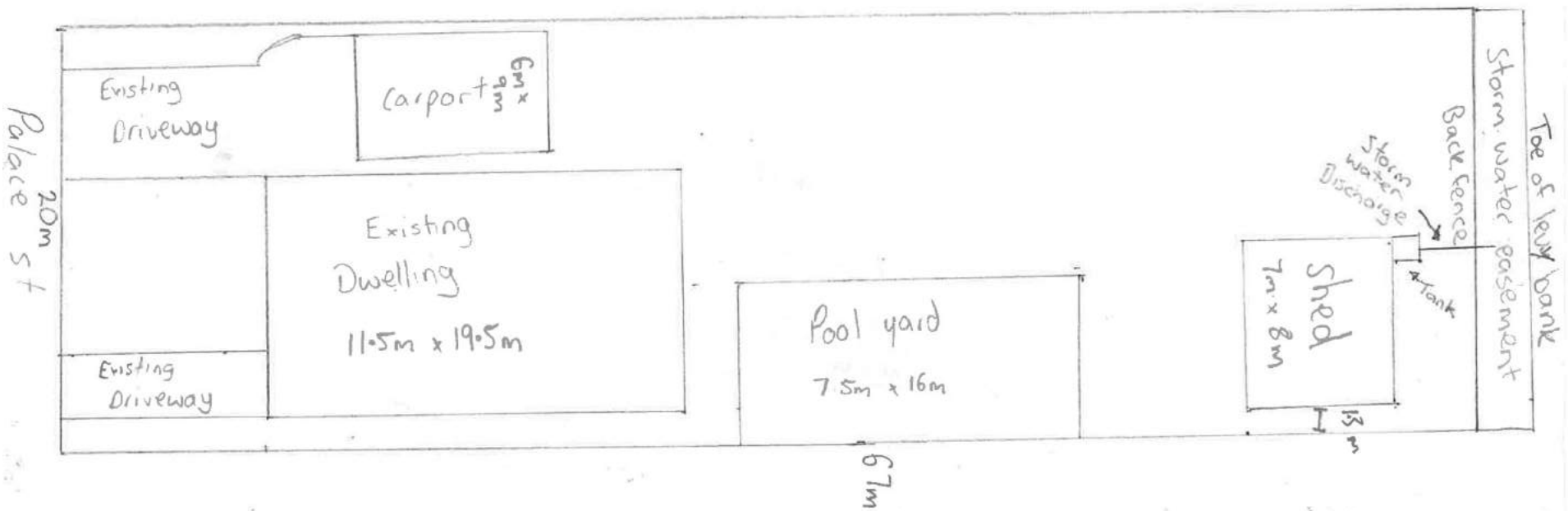
Stormwater from the development is to be collected and disposed of to:

- (a) The kerb and gutter piped, or
- (b) Where a connection to the kerb and gutter is impractical stormwater is to be collected via a water tank with an overflow outlet drained to a suitably sized rubble drain. The rubble drain is to have a minimum dimension of 1m wide by 1m deep and a minimum length determined by allowing 1m for every 100m² of stormwater collection area. Any rubble should be setback a minimum of 6m clear of the levee bank, the proposed building and adjoining buildings.

(17) Shed Use

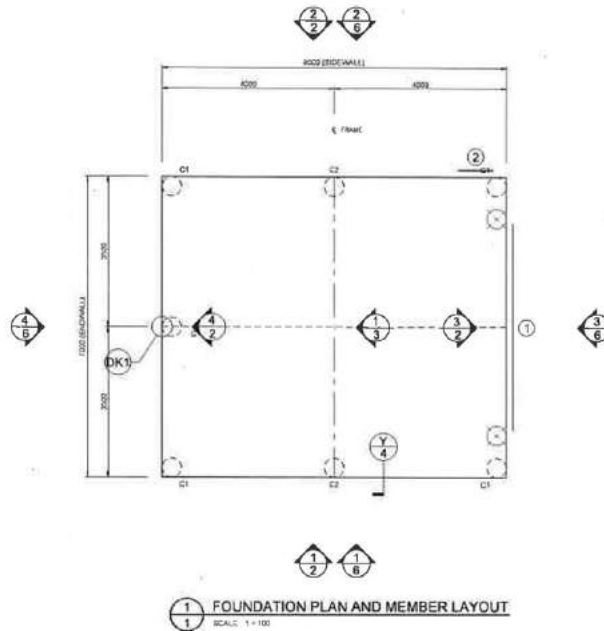
The Shed is to be used for domestic purpose only. The shed must not be used for any home based commercial or industrial purpose without prior written consent from council. At no times shall the shed be used for short or long term residential accommodation.

1cm = 2.5m



The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBMS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.

IF IN DOUBT, ASK.



DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY. ALL DIMENSIONS TO BE VERIFIED ON SITE.

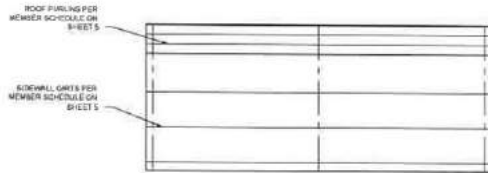
MEMBER LEGEND

C1	C15012
C2	C15019

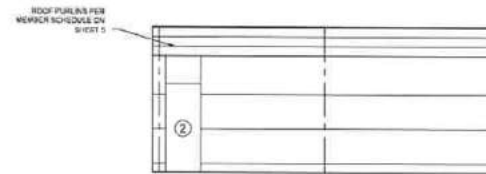
• INDICATES ROLLER DOOR COLUMNS

1 OF 6	SHEET	DATE: 12/02/2019	DESIGNED: TM	DRAWN: FDB	STEEL BUILDING BY:	<p>(CONTACT)</p> <p>GREAT VALUE GARAGES</p> <p>02 67622200</p> <p>DUNCAN COLLINS</p> <p>27 PALACE STREET</p> <p>DENMAN</p>		<p>NORTHERN CONSULTING</p> <p>Civil & Structural Engineers</p> <p>50 Punnett Street</p> <p>Currajong, Qld 4812</p> <p>Fax: 07 4725 5850</p> <p>Email: design@nceng.com.au</p> <p>ABN 341 008 173 56</p>	<p>Mr Timothy Roy Messer BE MIEAust RPEQ</p> <p>Registered Professional Engineer 2558980</p> <p>Signature: <i>T. Messer</i></p> <p>Date: 12/02/2019</p> <p>Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register</p>
		JOB NO: GRVGS3192	NCC 2016	FOR	AT				

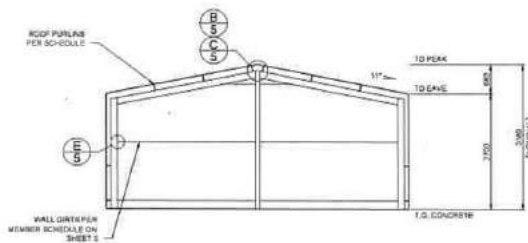
The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBMS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



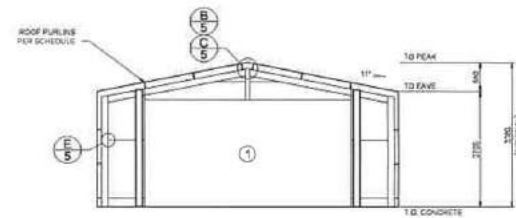
1 SIDEWALL EXTERIOR ELEVATION
2 SCALE 1:100



2 SIDEWALL EXTERIOR ELEVATION
2 SCALE 1:100



4 ENDWALL INTERIOR ELEVATION
2 SCALE 1:100



3 ENDWALL INTERIOR ELEVATION
2 SCALE 1:100

DIAGONAL X BRACING NOT REQUIRED IN THIS BUILDING.
CLADDING DIAPHRAGM SUFFICIENT.

2 OF 6	SHEET 12/06/2019 NCC GWS/03/192 2016	DATE 12/06/2019 NCC GWS/03/192 2016	CHECKED TM	DRAWN FDS	STEEL BUILDING BY	(CONTACT)	GREAT VALUE GARAGES 02 67622200 DUNCAN COLLINS 27 PALACE STREET DENMAN	SHED SAFE	fairdinkum SHEDS	0° NORTHERN CONSULTING engineers Civil & Structural Engineers 50 Purwill Street Curralong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56	Mr Timothy Roy Messer BE MIEAust RPEQ Registered Professional Engineer 2558980 Signature: <i>T. Messer</i> Date: 12/06/2019 Registered on the NPFR in the areas of practice of Civil & Structural National Professional Engineers Register
					FOR	AT					



THIS DEED is made the 4TH day of FEBRUARY 1992

BETWEEN: WATER ADMINISTRATION MINISTERIAL CORPORATION a corporation constituted by section 7 of the Water Administration Act 1986 (NSW) of 10 Valentine Avenue, Parramatta in the State of New South Wales (the "Corporation")

AND: MUSWELLBROOK SHIRE COUNCIL duly constituted under the Local Government Act 1919 and having its office at the Administration Centre, Muswellbrook in the said State (the "Council")

WHEREAS:

- A. The Corporation is a Constructing Authority pursuant to Section 2 of the Hunter Valley Flood Mitigation Act, 1956 (N.S.W.) (the "Act");
- B. Section 9(3)(a) of the Act empowers a Constructing Authority to enter land and use it for the construction and maintenance of certain work;
- C. Pursuant to its powers under ^{the} Act the Corporation constructed a levee at Denman in the Hunter Valley (the "Levee") as shown in Annexure "A" hereto;
- D. On 27th November, 1986, the Council and the Corporation decided to enter into an agreement whereby the Council would be responsible for maintenance of the Levee in perpetuity at its own cost.
- E. The parties wish to make provision for maintenance of the Levee.

THIS DEED WITNESSES:

- 1.. The Corporation hereby appoints the Council an "authorised person" for the purposes of section 9(3)(a) of the Act.
2. The Council shall at its own cost and expense entirely be responsible for the maintenance of the Levee and shall at all times keep it in good and substantial repair and condition.
3. Without limiting the nature of the maintenance work to be carried out by the Council it shall maintain the Levee generally in accordance with the manual annexed hereto and marked "B".
4. The Corporation reserves the right to inspect the levee whenever it wishes to and to direct the Council to carry out such maintenance work which in the reasonable opinion of the Corporation is desirable or necessary.

2.

5. In the event of the Council failing to carry out work which is in the reasonable opinion of the Corporation desirable or necessary, then the Corporation may elect to carry out the said work, in which case the cost of the work will constitute a debt owing by the Council to the Corporation. The Corporation shall be entitled to sue upon the debt in any Court of competent jurisdiction.
6. The Council shall take out a public risk policy in the joint names of the Council and the Corporation for an amount in respect of any single accident or event of not less than ten million dollars (\$10,000,000.00). Such policy shall indemnify the Corporation against actions suits claims and demands arising from the use and maintenance of the levee. The Corporation may from time to time require the amount of such policy to be increased by such amount as may be reasonable having regard to the effect of inflation.
6. The Council hereby indemnifies the Corporation against all actions suits claims and demands arising from the Council's failure to properly maintain the levee.
7. GENERAL
 - (a) The terms and provisions of this Deed may not be modified or varied unless done in writing and signed by the parties.
 - (b) This Deed shall bind the heirs, executors and successors of each of the parties.

IN WITNESS WHEREOF the parties hereto have executed these presents the day and year first hereinbefore written.

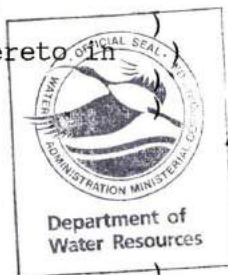
THE CORPORATE SEAL of the WATER

ADMINISTRATION MINISTERIAL

CORPORATION was affixed hereto in

the presence of

M. Jeffries



Susan M. Kemp

The Common Seal of the

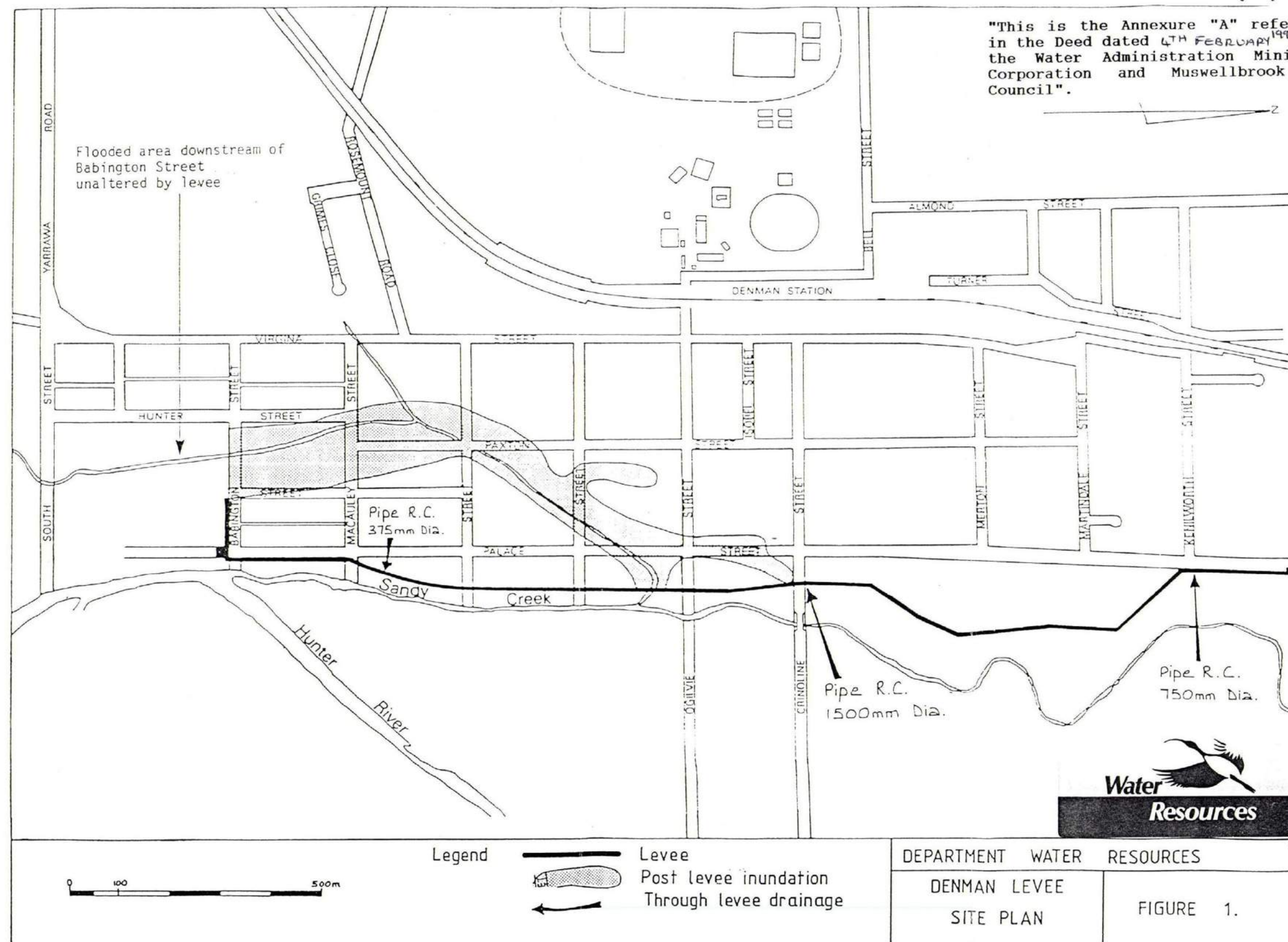
MUSWELLBROOK SHIRE COUNCIL was

hereunto duly affixed in the

presence of

[Signature]
SHIRE PRESIDENT
[Signature]
SHIRE CLERK

"A"



"B"

"This is the Annexure "B" referred to in the Deed dated between the Water Administration Ministerial Corporation and Muswellbrook Shire Council".

MANUAL FOR THE
OPERATIONS AND MAINTENANCE
OF DENMAN LEVEE

X



TABLE OF CONTENTS

	Page
1. INTRODUCTION	1
2. OPERATION OF THE LEVEE	3
2.1 General	
2.2 Plan of Operations	
3. MAINTENANCE	7
3.1 General	
3.2 Maintenance of the Crest Height	
3.3 Maintenance of the Batters	
3.4 Maintenance of all Flood Valves and Flap Valves	
4. CHANGES TO EXISTING DESIGN	10
4.1 General	
4.2 Summary of Construction Details	
4.3 Indemnity Forms	
5. LOCAL ISSUES	13
5.1 General	
5.2 Responsibilities and Limitations on the Landholder	
6. FLOOD MONITORING	16
6.1 Purposes	
6.2 Flood Levels	
6.3 Flood Flows	
6.4 Priorities	
APPENDICES	
1. PHOTOGRAPHS	
2. GUIDE-LINES TO THE HUNTER VALLEY FLOOD MITIGATION ACT	
3. EXAMPLE OF INDEMNITY FORM	
4. WORK AS EXECUTED - PLAN	
5. WORK AS EXECUTED - LONGITUDINAL SECTION	
6. CRIB RETAINING WALL	
7. CRIB WALL CONSTRUCTION DETAILS	
8. DETAILS OF SLIDE GATES	
9. AGREEMENT BETWEEN MINISTER AND SHIRE PRESIDENT	
10. ACCESS RAMPS AND CROSS-SECTIONS OF LEVEE	

1.0 INTRODUCTION

The employment of a levee bank to protect towns located adjacent to major streams is not a new concept. In the Hunter Valley, Singleton and Aberdeen are already protected from the ravages of floods following the construction of a levee bank.

The construction of a levee bank for Denman was proposed following extensive flooding in February 1971. At the Council's request, the Department of Water Resources designed a levee which would protect vulnerable areas of the town from damaging floods.

With the combined inputs of the Hunter Valley Conservation Trust, Muswellbrook Shire Council and the Department of Water Resources, funds were provided to implement the works.

The levee was completed in August 1988 and commissioned on 27 October 1988.

The levee will protect the town from overbank flooding from the Hunter River and will close off the breakout into the town from Sandy Creek.

The levee will virtually eliminate damage to Denman in major floods by excluding active floodwaters from the urban area. Although some parts of the town will still be flood liable, any minor residential flooding which occurs will be quiet backwater reflecting the flood level at Babbington Street on the southern fringe of the urban area.

The major benefits of the levee are:

- * flood levels experienced in 1955 at the Ogilvie/Palace Street corner, will be reduced by 1.75 metres.
- * inundated area in a 1 in 100 year flood will be reduced from 55.5 hectares to 12.5 hectares.
- * inundated residential and commercial properties will be reduced from over 100 to one or two.
- * major structures inundated by the 1 in 100 year flood will be reduced from 140 to 15.
- * Increased confidence in the investment potential of Denman.
- * Increased property values.

In addition to reducing flood damage to homes and businesses in Denman, the social cost of flooding will also be reduced. Stress, anxiety, consequential increases to ill-health and disruption to lifestyle will clearly reduce as a direct consequence of the levee.

X

To ensure that funds from all contributors are well spent, regular maintenance of the levee will be necessary. And to ensure that the levee operates at its maximum potential, a Plan of Operations is required so that all efforts are made to protect residential area.

This manual has been prepared to provide Council with guidelines to operate and maintain the town's most valuable asset. It is expected that (provided the O & M principles outlines are adhered to), the Denman community may be assured that its private assets will not be at risk from major flooding which can be expected in the area.



2.0 OPERATION OF THE LEVEE

2.1 General

As discussed previously, the levee will protect the town from flooding due to direct overbank flow from the Hunter River and will close off the breakout into the town from Sandy Creek. As local drainage considerations made it impractical to tie the levee into high ground to the south of the town and across Denman Creek, some parts of the town still remain flood liable. As a result, Denman residents should not be led to believe that they are completely immune from flooding. The potential still exists for flooding to cause extensive damage to low lying residential and commercial properties following major floods.

Any combination of the following can cause a flooding crisis in Denman:

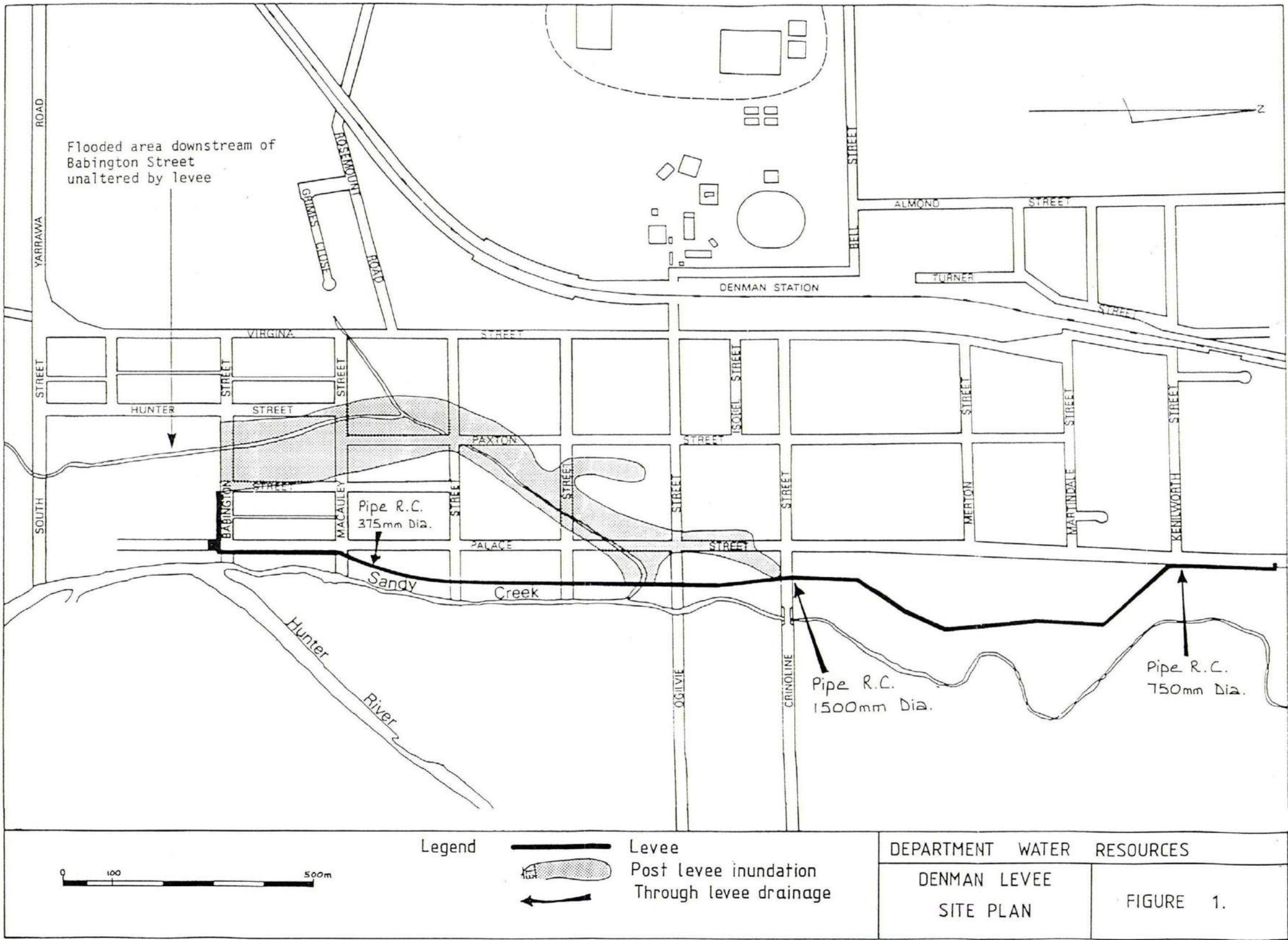
- * a flood event greater than the 1955 flood.
- * water backing up from Babbington Street.
- * extensive run-off from steep landscape to the west of the town.
- * ineffective levee operations plan.

As a result, a Plan of Operations should be prepared.

2.2 Plan of Operations

A Plan of Operations for the Denman Levee involves the following points:

1. Identification of a threatening flood.
2. Implement levee operation procedures.
 - * mobilise operations personnel.
 - * mobilise men and equipment.
3. Observe external floodwater rise and internal drainage behaviour.
4. Operate control gates, sandbag and/or block (using stockpiled material) Crinoline Street and extend northern end of the levee if and when required.
5. Monitor flooding throughout the event.
6. Observe floodwater fall.
7. Operate control gates to facilitate town drainage.
8. Report on levee damage.



9. Carry out repair works. Restore levee to original condition.

Figure 1 shows the layout of the levee and the location of all major structures which require attention during flood events.

As there are few major structures built into the levee, the physical operation does not involve a substantial input on the part of the local authorities. The Plan of Operations is, therefore, more a case of:

- (a) preparation
- (b) when to act
- (c) how to act
- (d) restoration

* Preparation

It is important that all preparations work be carried out before the flood season. Major floods most commonly occur in the summer months, January and March with a secondary winter period of large floods from June to August.

Preparation involves:

- . organising personnel to perform emergency duties;
- . regular checking of the levee to ensure that not only is the bank in first class condition, but also all structures are operating as designed.
- . stockpiling of materials for sandbagging and/or filling at critical locations (a suitable location for stockpiling is where Crinoline Street crosses the levee, at the north-western corner).

* When to Act

The Muswellbrook SES has provided guide-lines to implement emergency procedures in Muswellbrook. These same guide-lines may be used to implement the Plan of Operations at Denman. They include:

-
- a. Heavy rain north of Muswellbrook.
 - b. Hunter River running at half bank and rising at Muswellbrook. Gauge height approximately 7.0 m at Muswellbrook.
 - c. Warnings from Divisional Headquarters of further heavy rain in all catchment areas.
 - d. Pages River at Gundy reported 5.50 metres and rising.
 - e. The creeks at Scone all in flood.
-

How to Act

All trained personnel should perform their duties as outlined in the preparation procedure. This involves:

- . unlocking all chains on major structures (chains can be cut in emergency);
- . check all flap valves and gates before floodwaters rise, to ensure no foreign objects are obstructing free operation of the valves;
- . implement sandbagging and/or filling at all major sites;
- . observe and clean internal drainage grids at all gates. Early drainage events will result in rubbish and other foreign objects floating towards the inlets;
- . close all flood gates when external waters rise above internal drainage waters;
- . check 375 mm flap gate and sandbag inlet if gate not sealing;
- . monitor flood levels as discussed in Section 6.1.

During flood subsidence:

- . monitor the drop in water level and operate flood gates as required to facilitate drainage of the town area. Equipment may be required to relieve blocked drainage outlets.
- . remove and store in the predetermined place, all sandbags and/or fill material.
- . Lock all gates and valves.

* Restoration Work

This should commence as soon as possible following a flood event. A qualified officer should inspect the entire levee to identify if any restoration works are necessary. Damage to the levee could include:

- . removal of protective grass cover
- . erosion
- . slumps in the creek bank adjacent to the levee
- . damaged crest due to equipment activities during the flood
- . damaged flood valves
- . scour around structures
- . settlement of the levee
- . breached levee

See Section 3.0 for details on how to carry out the above restoration works.

3.0 MAINTENANCE

3.1 General

Although the Levee was constructed using the best construction standards and quality-selected materials, it is still subject to conditions which, if not attended to on a regular basis, could result in poor performance or even failure in the event of a major flood.

The following points should be considered when carrying out routine maintenance checks:

- * maintenance of the crest height
- * maintenance of the batter shape
- * maintenance of the grass cover
- * maintenance of all flood and flap valves
- * maintenance of rip rap on Levee and all structures

In addition, controls to maintaining the quality of the finished Levee must be adhered to, to avoid situations which may upset local residents and organisations at a later date. These measures include:

- * prevention of the planting of certain trees and shrubs which, when mature, will have to be removed.
- * discouraging the use of the Levee bank for vehicular access (other than along officially defined routes) to properties adjacent to the Levee.

3.2 Maintenance of the Crest Height

The Levee was constructed to a level of 1 metre above the 1955 (or 1 in 100 year) flood. Any substantial drop in the level of the crest could subject Denman to a threat in the event of a greater frequency flood. For this reason, the crest level must be maintained.

Although the Levee has been constructed using standard construction techniques, settlement of the bank may occur over a period of time. To determine if this has occurred, a work as executed survey was carried out immediately after the completion of the Levee. The details of the survey are provided in Appendix 5.0. Approximately every 5 years, the crest level should be checked against this plan to determine if any change in the crest level has occurred.

In the event that restoration works are necessary, the following procedures should be followed:

- . Existing grass and topsoil should first be removed and placed to one side.
- . Scarify and moisten surface to provide adequate bonding.

- . Suitable clay loam fill should be deposited in layers of no more than 200 mm, wetted and rolled (at optimum moisture content) before the next layer is applied.
- . When the crest level has been restored, the original topsoil and grass cover can be replaced.

3.3 Maintenance of the Batters

Generally, the levee was constructed using batters of 1 in 3 on the wet side and 1 in 2 on the dry side. These batters were selected to ensure adequate stability of the Levee under critical conditions. Alteration of them may result in accelerated erosion during any flood event.

Use of the Levee banks for general access to adjoining properties, or any other purpose not planned for in the original design, could result in the batters being progressively worn down to lower than designed grades. Slumping of the bank will also severely alter the batters.

For the above reasons, irregularities should be repaired and the batters restored to their original shape.

Restoration of the batters should be carried out as follows:

- . remove any existing grass cover and top soil and store to one side;
- . restore batters to original shape using selected fill as described in Section 4.2;
- . compact the fill using a roller (if possible) or a semi-portable motorised compacter.

If additional rock protection is required along the bank to protect it from fast flowing flood waters, durable reasonably well-graded stone with a minimum size of 40 mm and a maximum size of 250 mm should be used.

3.4 Maintenance of the Grass Cover

Following construction of the levee, a grass cover was planted to protect the levee from:

- . longitudinal water erosion
- . overbank flow
- . wind erosion
- . wear and tear from maintenance vehicles

Apart from the above protective measures, the grass cover is provided to reduce dust as well as for aesthetic reasons. For these reasons, the grass cover should be routinely inspected and maintained when necessary. Although the existing cover should be self-maintained by natural growth and rain, the effect of droughts and maintenance vehicles may result in areas of the bank being exposed to erosive forces.

3.5 Maintenance of all Flood Valves and Flap Valves

Appendix 4 and 5 shows the location of all flood valves built into the bank of the levee. Each valve should be regularly checked to ensure its free operation in the event of a flood.

Seals should be visually checked to ensure that they are not damaged and a good closure is obtained.

An inspecting officer should operate the valve to its fullest potential to ensure that no obstructions hinder the operation of the valve during emergency periods.

Obstructions like stones, sticks or any other rubbish should be cleared and all working parts greased to ensure easy operation. In addition, where the potential for corrosion exists, gates and valves should be painted to prevent premature failure of any moving parts.

- . The use of a general purpose grease (like Caltex Molytex EP2) is recommended for all moving parts.
- . For corrosion protection, approved inorganic zinc-rich paint is recommended.

4.0 CHANGES TO EXISTING DESIGN

4.1 General

The Denman Levee was designed based on present conditions and requirements in the area. In future years, alterations to the Levee may be required for any number of reasons. This includes:

- * lengthening the Levee to protect new developments;
- * extending the Levee further into the flood plain to protect new development;
- * raising the Levee to cope with changes to the hydrology and/or hydraulics of the area (eg Greenhouse effect).

In the event that changes are required, the minimum design criteria should be the same as the criteria used for construction of the original Levee.

4.2 Summary of Construction Details

Appendix 4 shows the location of all major structures on the Levee. The plan also shows the major construction details of the Levee bank.

The Council should maintain full-sized copies of the Work as Executed Plans and enter on them any changes which may occur in the future.

4.2.1 Main Embankment

The Levee was designed for the 1% AEP (1 in 100) flood. Except at Crinoline Street, the crest level is 1 metre above the level of the 1% AEP flood.

- | | | |
|---------------|---|-------------------------------|
| * Length | - | 2.4 km |
| * Height | - | averages 2 to 3 metres |
| | - | 4 metres at its highest point |
| * Crest width | - | 3 metres |
| * Batters | - | wet side 1:3 |
| | - | dry side 1:2 |

The embankment was constructed of a selected clay loam with a moisture content not more than 2% above not more than 3% below "optimum" and compacted until the Hill Density Ratio was greater than 95%.

Where a new bank is proposed or reconstruction of the levee is necessary due to local civil works (eg, laying of a new underground pipe), restoration of the embankment should be carried out by the following method:

- a. remove the levee in the vicinity of the proposed works as indicated in Figure 2;

- b. install the works;
- c. rebuild the embankment as outlined in Section 3.2.

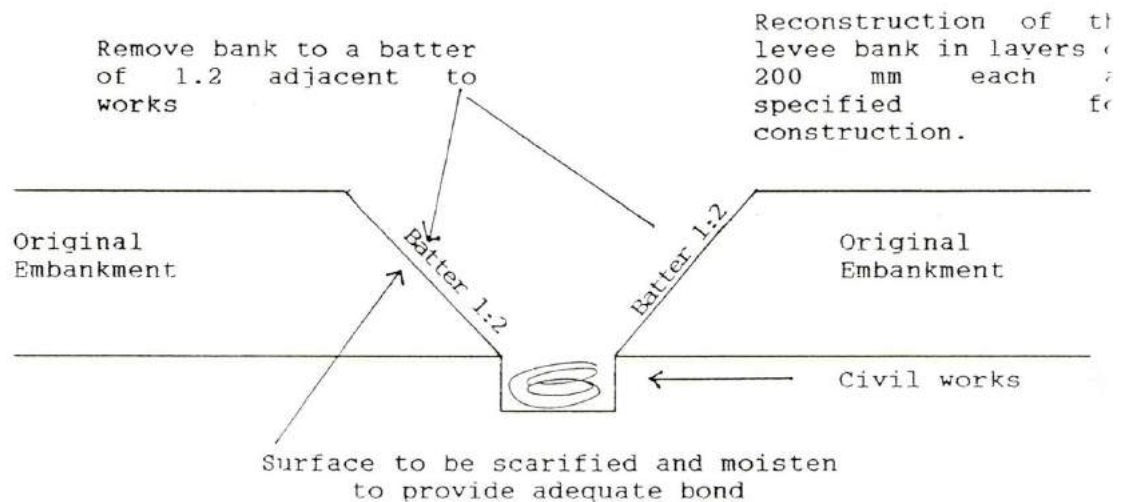


FIGURE 2 - BANK RESTORATION

4.2.2 Main Outlets

Chainage	Description	Plan Reference
- 7	2 x 750 mm dia RC pipes with gate valves	Appendix 4 & 5
819	1 x 1500 mm dia RC pipe with gate valve	
1680	1 x 375 mm dia RC pipes with flap valves	

4.2.3 Stone Pitching

This consists of durable reasonably well-graded rock (minimum 40 mm maximum 250 mm) excavated from a quarry located at Pickering. Any replacement rock should be of a similar nature.

4.2.4 Crib Block Walls

On the Denman Levee, crib block walls are provided where no alternative to steep batters is available. This occurs where the levee is built in tight situations adjacent to houses and river banks.

General details of the wall are provided in Appendix 6 and 7.

4.3 Indemnity for New Works

Where new works are installed or existing works altered (ie works of a major nature), an indemnity is required to release the Department of Water Resources from any responsibility for damages arising from altered design conditions. Appendix 3 provides an example of an indemnity form which must be completed by Council and presented to the Department before approval of the works can be given.

5.0 LOCAL ISSUES

5.1 General

No land was purchased for the construction of the Levee. Part 3(a) of Section 9 of The Hunter Valley Flood Mitigation Act permits the construction of necessary works on private lands by public authorities. Most of the residents on whose land the Levee was constructed accept that the Levee is a necessary work which is required to protect the town (as well as their own properties) from the ravages of flood waters.

However, a number of residents object to the Levee on the grounds:

- * that the Levee has obstructed their views;
- * that the levee bank obstructs cooling breezes, therefore causing higher temperatures in the adjoining houses;
- * that the Levee lacks aesthetic appeal.

5.2 Responsibilities and Limitations of the Landholder

Regardless of the attitude of the local residents whose land the Levee has been built on, all residents need to know what their rights are regarding the levee bank.

The Hunter Valley Flood Mitigation Act (HVFMA) provides guide-lines for Council to refer to for contentious issues. Appendix 2 provides a guide-line for Council to locate the relevant section in the Act which refers to these issues. However, most general enquiries should be readily answered without having to refer to the Act.

Typical questions which may be asked are as follows:

- * Q. Can residents grow trees on the Levee
 - A. No trees should be planted on or adjacent to the levee bank without approval from Council authorities.

This condition must be enforced to prevent possible weaknesses developing in the bank when large trees die. The inevitable decay of the root system may result in "flaws" developing in the bank which can result in a bank weakness during flood events.

Trees may be washed out during a flood or blown down in a storm causing extensive damage to the levee.



Some shrubs may not cause any concern because of their shallow and limited root depth. However, before establishing any shrubs on the bank, Council permission should be sought.

* Q. Who is responsible for maintaining the levee bank?

A. Council is responsible for the maintenance of the levee bank, as agreed by the Minister and the Shire President on 27 November 1986 (Appendix 9).

Council should regularly inspect the bank as well as all structures to ensure that all facilities are 100% operative in the event of a major flood. Council is responsible for the aesthetic appearance of the Levee and maintaining all gates and fences constructed on the Levee.

* Q. Who maintains the land on the wet side of the Levee?

A. The property owner is responsible for maintaining the land on the wet side of the Levee.

As no land was purchased for the construction of the Levee, all land (other than the Levee bank) is still the responsibility of the property owner.

* Q. Can the residents build adjacent to the dry side of the Levee?

A. A resident may build adjacent to the dry side of the Levee provided he first obtains permission from Council.

As some construction techniques may weaken the stability of the bank or may prevent access to the Levee by emergency crews during flood events, permission should be obtained from Council before commencement of works. Drainage of local run-off must not be obstructed.

* Q. Can a resident build adjacent to the wet side of the Levee?

A. No construction or building should be permitted on the levee bank or adjacent to the wet side of the Levee.

Any building on the bank may obstruct the free access of maintenance and emergency groups.

Any building on the levee bank or adjacent to the wet side of the bank may cause unnatural eddies and redistribution of flows during major flood events which may cause erosion of the levee.

* Q. Can a resident maintain a garden on the wet side of the Levee?

A. Residents can maintain a garden on the wet side of the levee.

Provided the maintenance of a garden does not affect the stability of the levee bank, residents should be permitted to maintain a garden.

* Q. Who is allowed access to the levee bank adjacent to the resident's land?

A. Residents are allowed access within their own properties and Operation and Maintenance personnel are allowed access to all parts for official purposes.

The Hunter Valley Flood Mitigation Act gives the Constructing Authority (DWR) the right to authorise access to the Levee for operation and maintenance of the Levee. Authorisation includes Council, SES and emergency personnel and others engaged to carry out works. As the Levee is constructed on private property, the owner retains all other rights of access, but such access must not result in damage to the lease.

* Q. May an owner allow stock to graze on the Levee?

A. There is no prohibition on grazing stock on the Levee.

The owner can be required to repair any damage caused by stock or rabbits.

6.0 FLOOD MONITORING

6.1 Purpose

Every flood investigation is handicapped to some degree by the lack of adequate hydrologic or hydraulic information. It is therefore imperative that every opportunity be taken to make measurements and observations of flood behaviour. This information can subsequently be used to test assumptions made and generally improve the accuracy of predicted flood levels and velocities. The use of observed data engenders a greater confidence in the reliability of the results obtained and enables the predicted flood behaviour to be related to an actual event.

Many useful observations can be made during a flood event without any special equipment or training. These can include estimates of flood velocities, flow directions, locations of still water or back eddies, areas of turbulent water, rate of rise and fall in water level and, of course, maximum flood levels.

The rapid onset of flooding and cuts to road links may prevent Departmental gauging staff reaching the town. This section, therefore, highlights the measurements and observations which can be made by Council staff or other interested persons during a flood.

6.2 Flood Levels

The overall assessment of flood levels requires a good coverage of recorded flood levels over the whole area. A series of peak level indicators would provide this information.

The recommended form of peak level indicator consists of a length of wood, coated with a water soluble paint material and housed vertically within a protective tubing (either plastic or galvanised steel pipe). Each indicator is levelled to a known datum by ground survey. During floods, the soluble coating is dissolved and the peak flood level is clearly marked.

Careful setting of each indicator is required:

- * to facilitate relocating and servicing;
- * to provide a representative water level;
- * to minimise the possibility of vandalism.

The indicators should be inspected every three months for the deterioration of the paint and possible vandalism.

A minimum of four installations are proposed. Their recommended locations are indicated in Figure 1.

6.3 Flood Flows

An accurate knowledge of peak flood flows is essential for accurate model calibration should it become necessary to develop a hydraulic model of the river and flood plain.

As the Department proposes to maintain the rating at the Denman gauge, it is possible that high flow gaugings may be made in future flood events. This would be invaluable in checking the reliability of the extrapolated rating table presented in Table 4.2 of the Denman Flood Study Report.

Whilst high flow gaugings can be made from the Denman Bridge, information on total flows during a major flood would require gaugings across the entire flood plain. an appropriate site for such gaugings would be along the Muswellbrook Road which stretches across the Hunter River and its flood plain.

If a gauging party is not available, it would be useful to observe maximum flood levels along the Denman - Muswellbrook Road, together with estimates of the surface water velocities. The latter can be estimated by timing the travel of surface debris along a measurable distance.

6.4 Priorities

Priorities have been assigned to the various data collection tasks which are considered necessary to maintain or improve suitable operation and maintenance standards:

* Before the flood occurs:

Establish a peak level indicator network and maintain the installations.

Establish sites for "before and after" photographs. Take photographs for pre-flood records and catalogue them.

* During minor floods (below bank level <6.9 at gauge).

Peg the maximum river levels along the river.

Take photographs from pre-established photograph sites (note time and date).

* During Moderate Floods (main flood runners operate) (Gauge Height > 6.9 metres).

At the peak gauge height, measure the water velocities at defined locations along the Muswellbrook Road.

Take photographs from pre-established photograph sites (note time and date).

- * During Major Floods (eg 1955 flood)
(Gauge Height > 7.9 m)

At the peak gauge height, measure the water velocities at defined locations along the Muswellbrook Road.

Take photographs and videos from pre-established photograph sites. (Note time and date).

- * After Major Floods

Read peak height indicators.

Photograph flood damage before clean-up starts.

APPENDIX 1



1. FLOOD CONTROL GATES
Twin 750 mm dia reinforced concrete pipes with
vertical slide gates. Near Kenilworth Street.



2. FLOOD CONTROL GATES
View of one of the two 750 mm dia slide gates

2



3. INLET TO FLOOD CONTROL GATE WITH TRASH RACK
(1500 mm dia). Near Crinoline Street.



4. VIEW OF INLET TO FLOOD CONTROL GATE
Near Crinoline Street.
Note: Erosion due to drainage after heavy rain.

X

APPENDIX "I"



5. FLOOD CONTROL GATE WITH VERTICAL SLIDE GATE
Near Crinoline Street.



6. FLOOD CONTROL GATE WITH VERTICAL CONTROL GATE

△

APPENDIX "1"



7. VIEW OF VERTICAL SLIDE GATE NEAR CRINOLINE STREET



8. VIEW OF CRINOLINE STREET LOOKING WEST ACROSS THE
LEVEE
The truck is at the top of the 1:100 year flood
level.

✍

APPENDIX "1"



9. *CRINOLINE STREET LOOKING EAST*
Sandbagging of the road is necessary during floods greater than 1:100 years.



10. *VIEW OF THE INSIDE OF THE LEVEE*
Looking south. Levee batter is 1:2.

✱

APPENDIX "1"



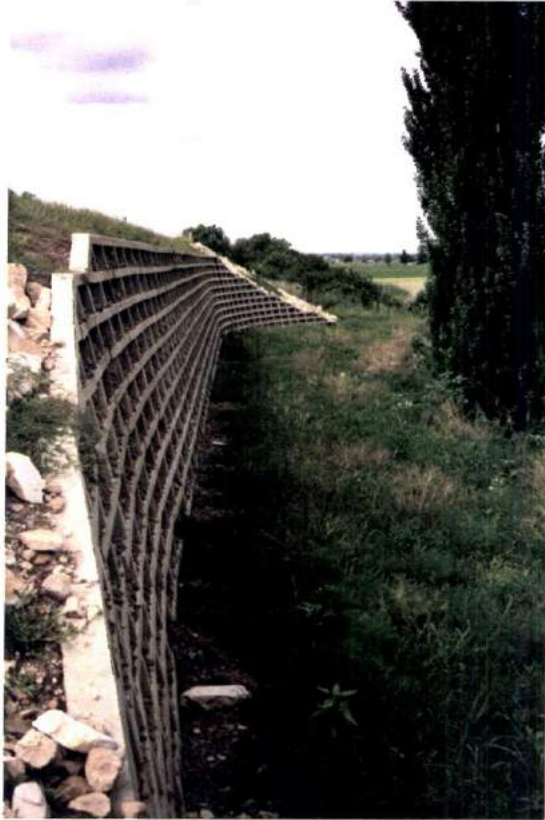
11. VIEW OUTSIDE THE LEVEE SHOWING BANK PROTECTION
Sandy Creek in the foreground. Near Ogilvie
Street.



12. VIEW INSIDE THE LEVEE BANK SHOWING CRIBB WALL
CONSTRUCTION
Near Macauley Street.

8

APPENDIX "1



13. VIEW OF THE CRIBB WALL
OUTSIDE THE LEVEE BANK
Near Macauley Street.



14. VIEW OF THE LEVEE BANK
SHOWING 1:2 BATTER,
CRIBB WALL AND INLET TO
THE 375 mm dia CONCRETE
DRAINAGE PIPE

[Handwritten signature]

APPENDIX 2

HUNTER VALLEY FLOOD MITIGATION ACT

Guide-lines for locating relevant sections of the Act relating to Levee Banks.

NOTE: CA = Constructing Authority or any person authorised by the Construction Authority.

Section	Subsection	Reference
9	3(a)	The CA may enter land for the purpose of construction and Operations and Maintenance.
	(b)	The CA may enter land and take or use materials.
	4	Anyone obstructing access of Operations and Management staff is guilty of an offence. Anyone removing survey pegs is guilty of an offence.
12		No fence or any structure is permitted on the Levee without permission.
13	1	Permission from the CA for the above, after application in writing
	4	The CA may remove or alter the above and recover the cost.
15	1	The CA may impose restrictions on the use of land between the Levee and the river in writing.
	4	If the above is ignored, the CA can take remedial measures and recover costs.
16		The Governor may Proclaim an area to be a flood plain.
20		No compensation unless expressly provided.
22		Compensation by mutual agreement, then Assessment Board. Appeal to the Land and Valuation Court.
24		No compensation for survey work.

- 25 (a) No compensation for the use of the land.
(b) Except for damage or injury to property.
(c) Except if property is rendered too small.
- 26 (a) No compensation for gravels or soil removed between the Levee and the river. The CA should leave the bank well graded and sown or planted.
(b) Compensation payable for materials removed from other areas.
- 27 Compensation payable to properties where extra flooding occurs due to the Levee.
- 29 Compensation for restrictions in Section 15 due to Levee construction.
- 32 Claims of compensation to be made within 90 days.
- 34 (a) Compensation set-off against enhancement of value.
(b) No compensation for speculative damages.
- 46 Damaging the Levee is an offence.
- 49 Owner to repair damage caused by stock or rabbits.
- 50, 51 Floodgates.
- 52 Reparation of roads.
- 57 No person has the right to claim damages or injunction against CA.

X

APPENDIX 3

THIS DEED OF INDEMNITY is made the day of
1988 BETWEEN THE COUNCIL OF THE SHIRE OF.....
(hereinafter called the Council) of the one part AND THE
WATER ADMINISTRATION MINISTERIAL CORPORATION (hereinafter
called the Corporation) of the other part.

WHEREAS the Council proposes to provide a.....
on thelevee in the vicinity of
..... as located on the sketch attached

AND WHEREAS the Council has submitted to the
Corporation certain proposals for such relocation and sought
approval of the Corporation to such proposals

AND WHEREAS the Corporation has agreed in
principle to such proposals subject to the indemnity herein
contained

NOW THIS DEED WITNESSETH that in pursuance of the
said agreement:

- (i) Council undertakes and agrees to save harmless
indemnify and keep indemnified the Corporation
against damage to the levee and to any other
property or works of the Corporation and against
claims of any person or body for compensation for
death or injury or loss or damage to property
caused by or in any manner connected with the
construction, installation, presence, operation,
use maintenance, or non-maintenance of the said
.....

Page 1 of 2

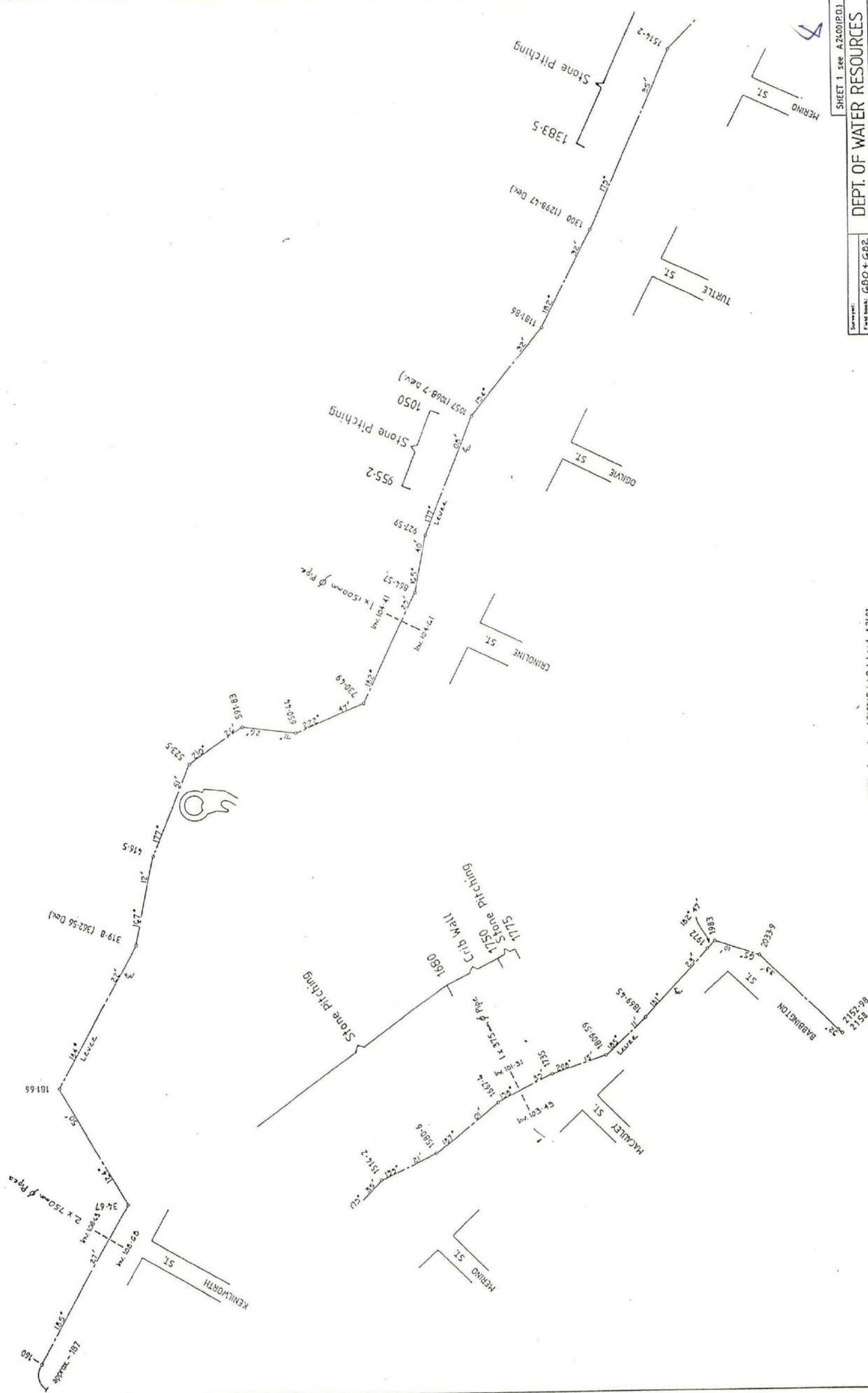
X

(ii) The Corporation is to have the right at any time and from time to time, as it considers necessary or desirable, to remove, relocate, demolish, add to or otherwise alter the levee without giving rise in Council to any claims whatsoever against the Department arising thereout

IN WITNESS whereof the parties hereunto have hereunto subscribed their names and affixed their seal the

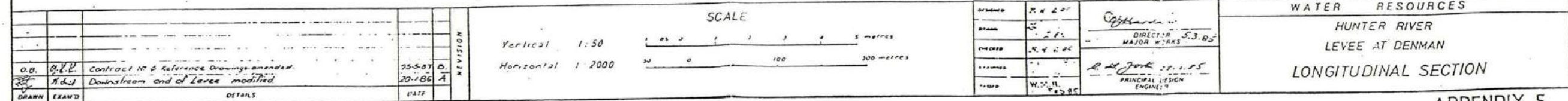
X

SHEET 2 of 2 SHEETS

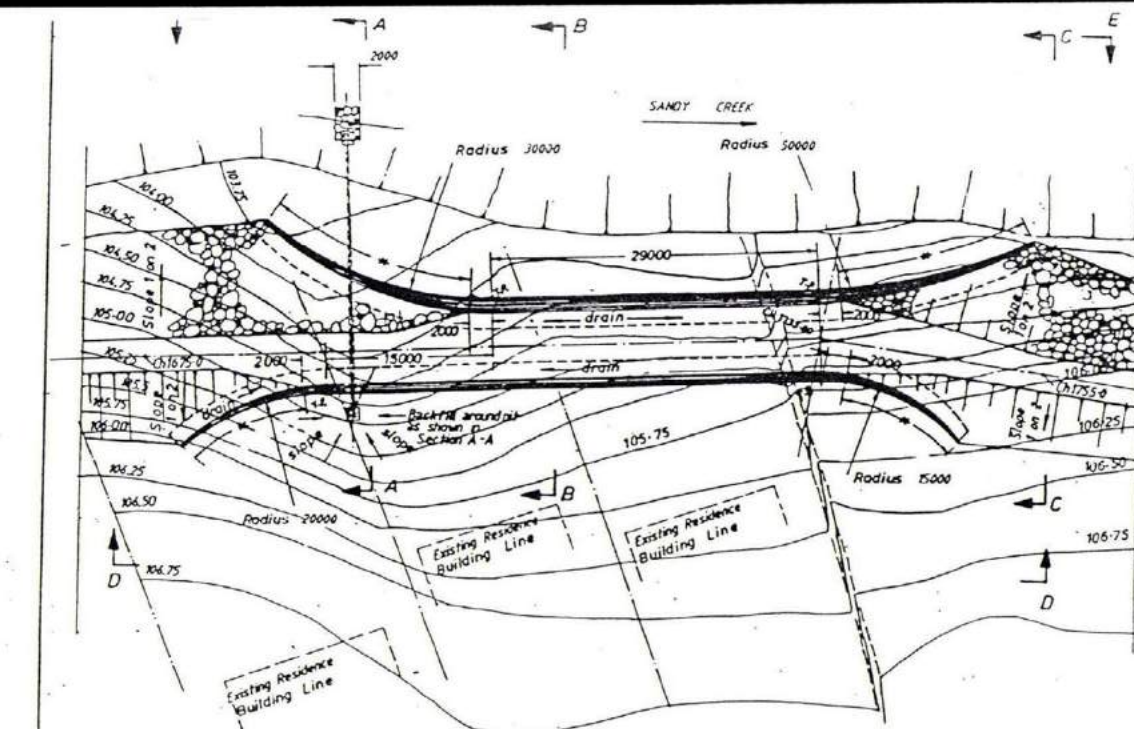


SHEET 1 see A2400(P.O.)		DEPT. OF WATER RESOURCES		DENMAN LEVEE		PLAN - WORK AS EXECUTED		Scale: 1:2000 Reduction 51%		Sheet Number: A 2403	
Surveyed:		Field Books: G80 + C82		Drawn: -		Traced: SNG		H.D. Pac:		Date: JULY 1988	
								L.O. Pac: 71/2424		Dittler Engineer	
APPENDIX 4											

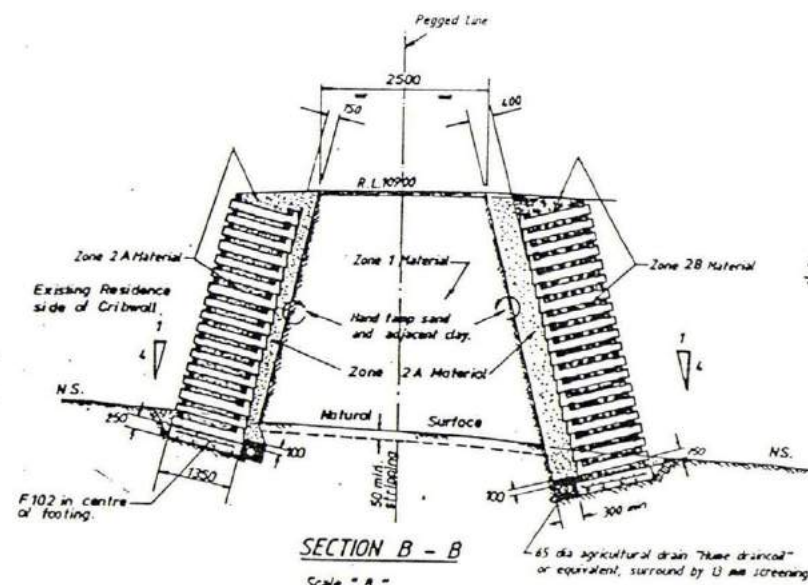
NOTE: See also A2400 (Print Only) and A2401



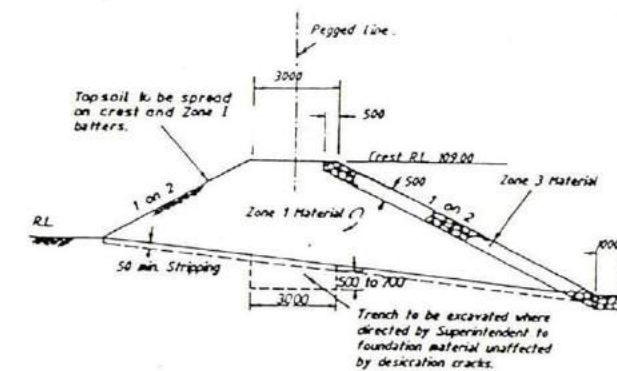
APPENDIX



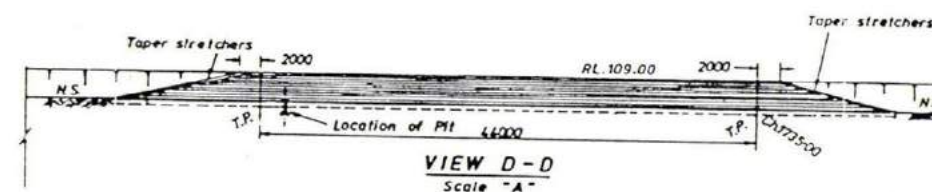
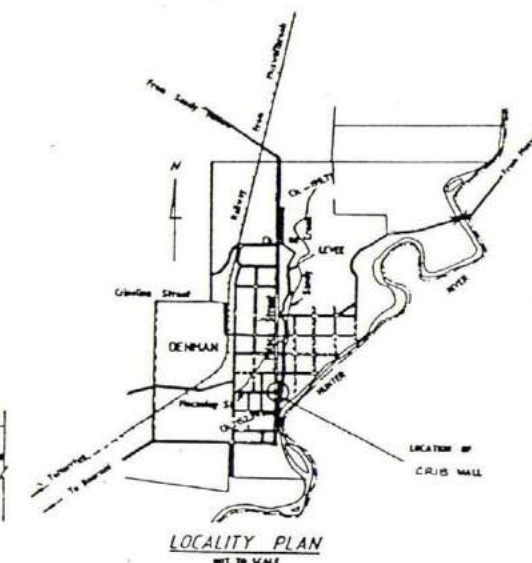
PLAN ADJACENT TO INTERSECTION OF PALACE AND MACAULEY STREETS
Scale "A"



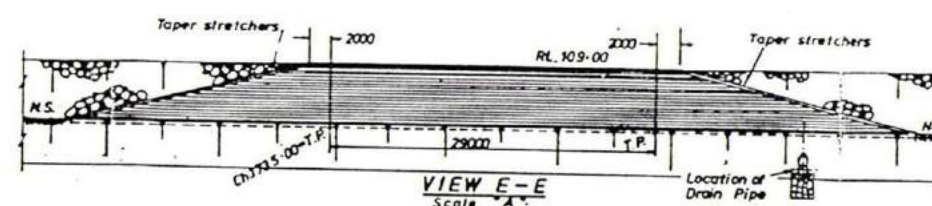
SECTION B-B
Scale "B"



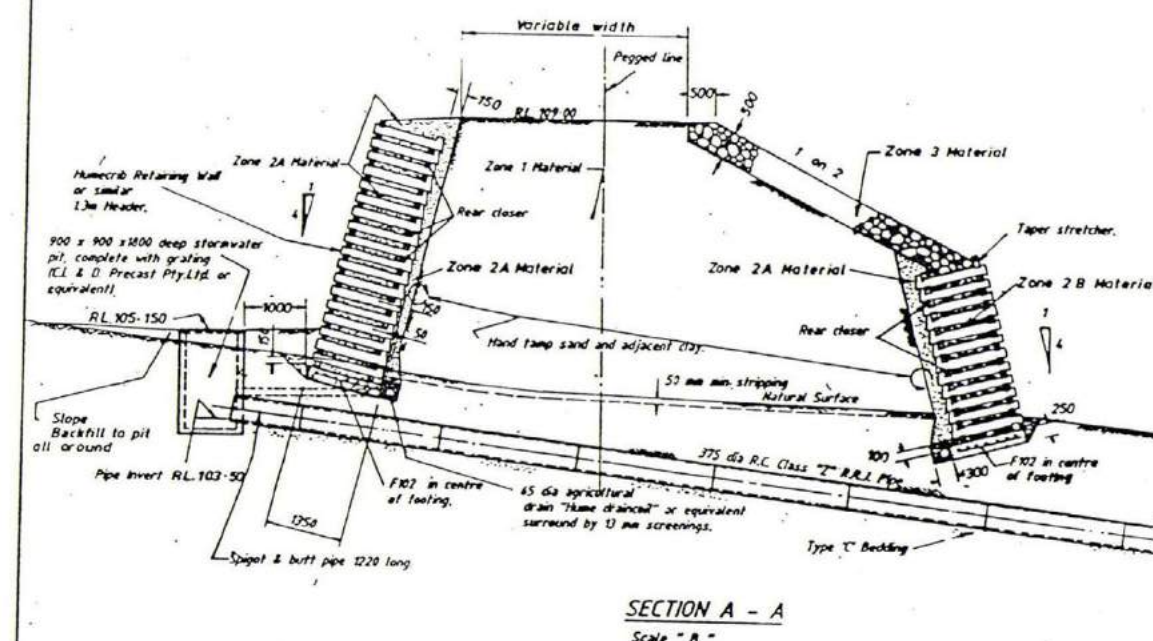
SECTION C-C
Scale "C"



VIEW D-D
Scale "A"



VIEW E-E
Scale "A"



SECTION A-A
Scale "B"

NOTES

1. This drawing shall be read in conjunction with the Specification for Contract No. 340B.
2. All dimensions are in millimetres and all levels are in metres to A.M. Datum.

REFERENCE DRAWINGS

General Arrangement 45 / 1118

REVISION	DATE	BY	CHKD
1	26-5-87	A.	
2	26-5-87	A.	

SCALE 'A'	1: 250	0	5000	10000	15000	20000	25000	30000	35000	40000
SCALE 'B'	1: 50	0	1000	2000	3000	4000	5000	6000	7000	8000
SCALE 'C'	1: 10	0	2000	4000	6000	8000	10000	12000	14000	16000

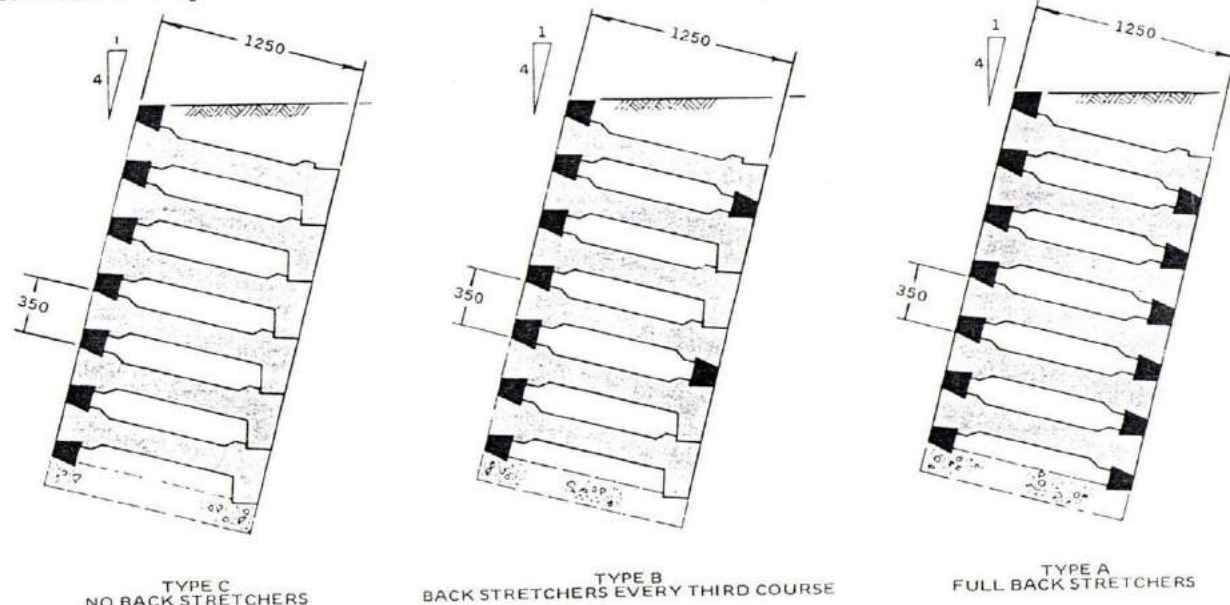
DESIGNED	K. Smit 1985
DRAWN	J. C. A. Smit 1985
CHECKED	A. Smit 1985
EXAMINED	B. H. A. Smit 1985
PASSED	17/9/85

WATER RESOURCES COMMISSION

HUNTER RIVER
LEVEE AT DENMAN
CRIB WALL

CONTRACT NO.	3108
DRAWING NO.	45 / 1121
A.B.	

Standard Taperlock Crib Wall

TYPE C
NO BACK STRETCHERSTYPE B
BACK STRETCHERS EVERY THIRD COURSETYPE A
FULL BACK STRETCHERS

A crib wall is simply a gravity retaining wall, and should be designed as such. The design charts shown are indicative only and engineering advice should be sought where wall heights approach the maximum indicated or where unusual conditions of foundation, fill, surcharge or other criteria exist. Rescrete Industries can supply such engineering advice, or can refer you to consultants where appropriate.

The following items are among those which should be considered in design:

- Drainage around, above and behind the wall should be installed to

eliminate hydrostatic pressure.

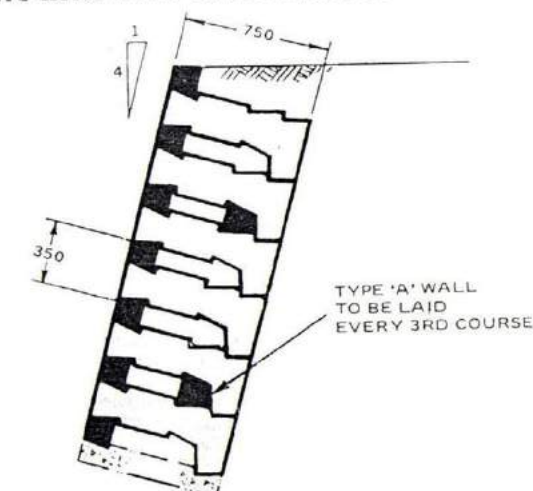
- Back fill should have a high angle of repose to minimise pressure on the wall.
- Foundation conditions should be checked and a concrete footing used where necessary.
- The fill within the wall should be dense and compact.
- The base of the wall should be keyed with the footing to protect against sliding.

Taperlock crib walling was developed by Rescrete Industries Pty. Limited, and is manufactured at Riverstone. The design is registered.

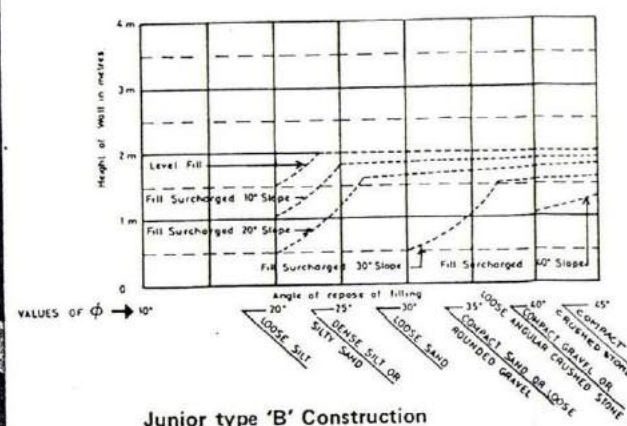
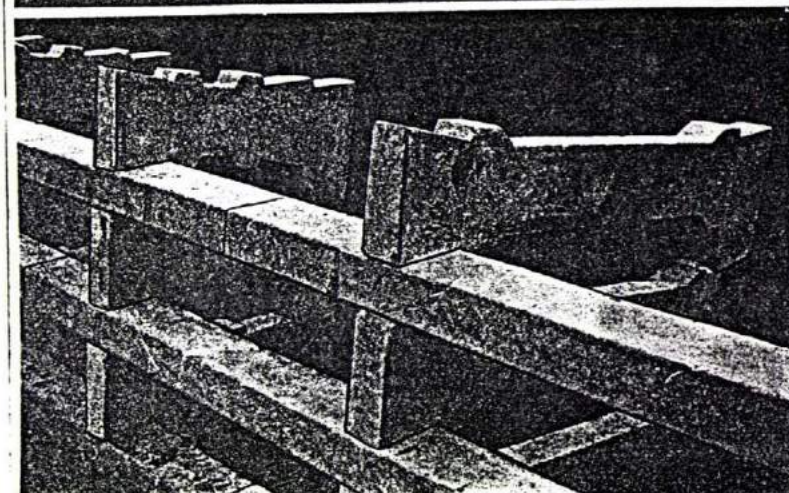
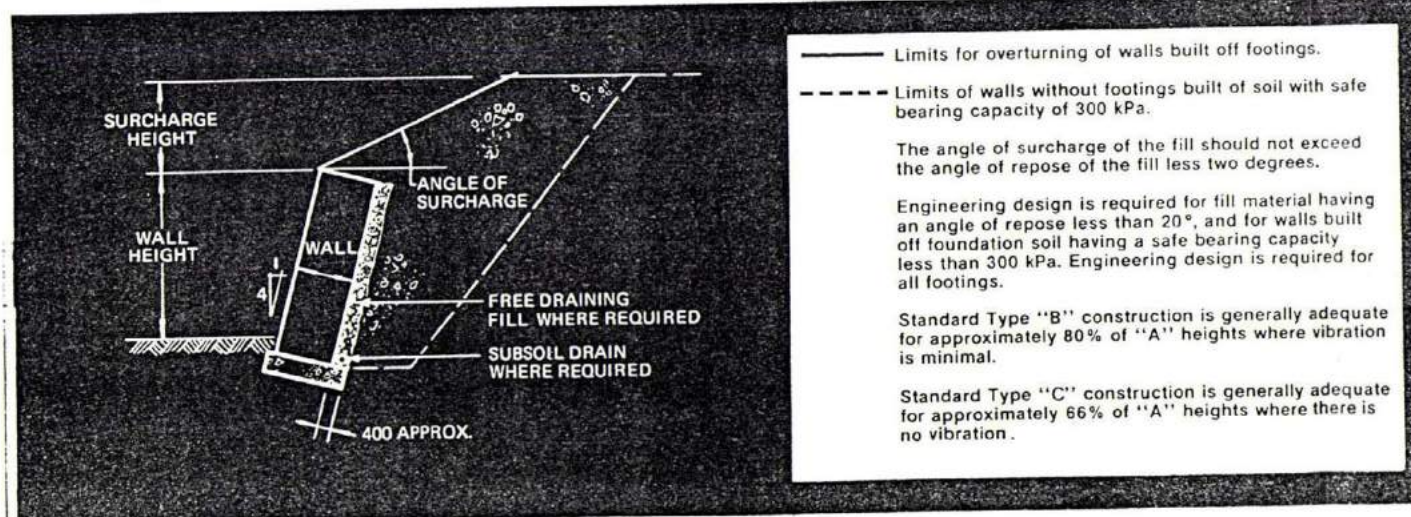
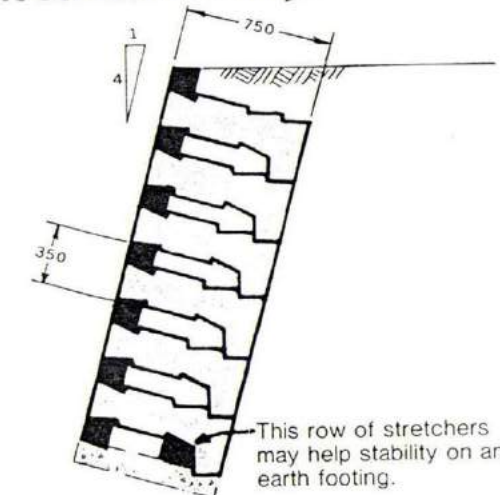
Although the design parameters are no different from other crib walling, Rescrete have discontinued production of pin crib and mini crib walling, because of the advantages of the Taperlock system, including:—

- Positive wedge action interlocking.
- No unsightly protrusions from the face of the wall.
- No steel pins.
- Complete compatibility of appearance between standard and Junior Taperlock construction.
- The capability to use back stretchers in any course or to omit them thus providing an efficient matching of load to strength.
- Coping units lock into the wall rather than merely sitting on top.

Taperlock Junior Crib Wall TYPE A (front and rear stretchers)

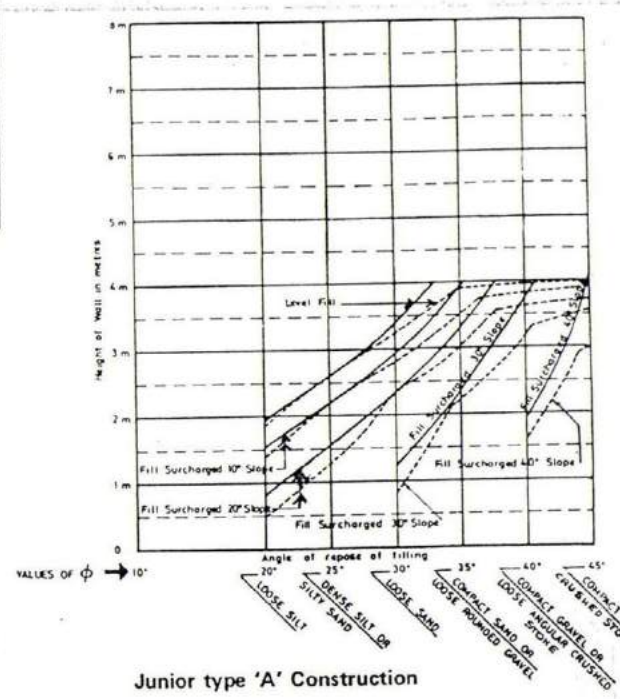


Taperlock Junior Crib Wall TYPE B (front stretchers only)

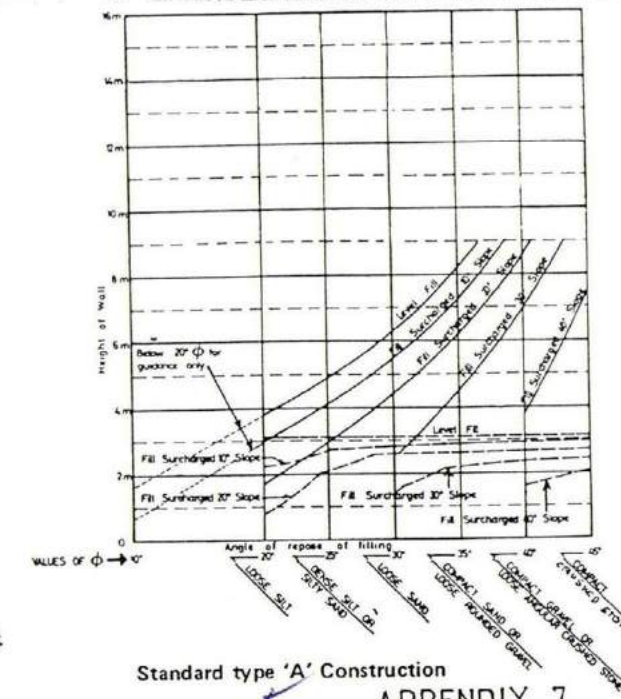


Junior type 'B' Construction

CRIB WALL construction method

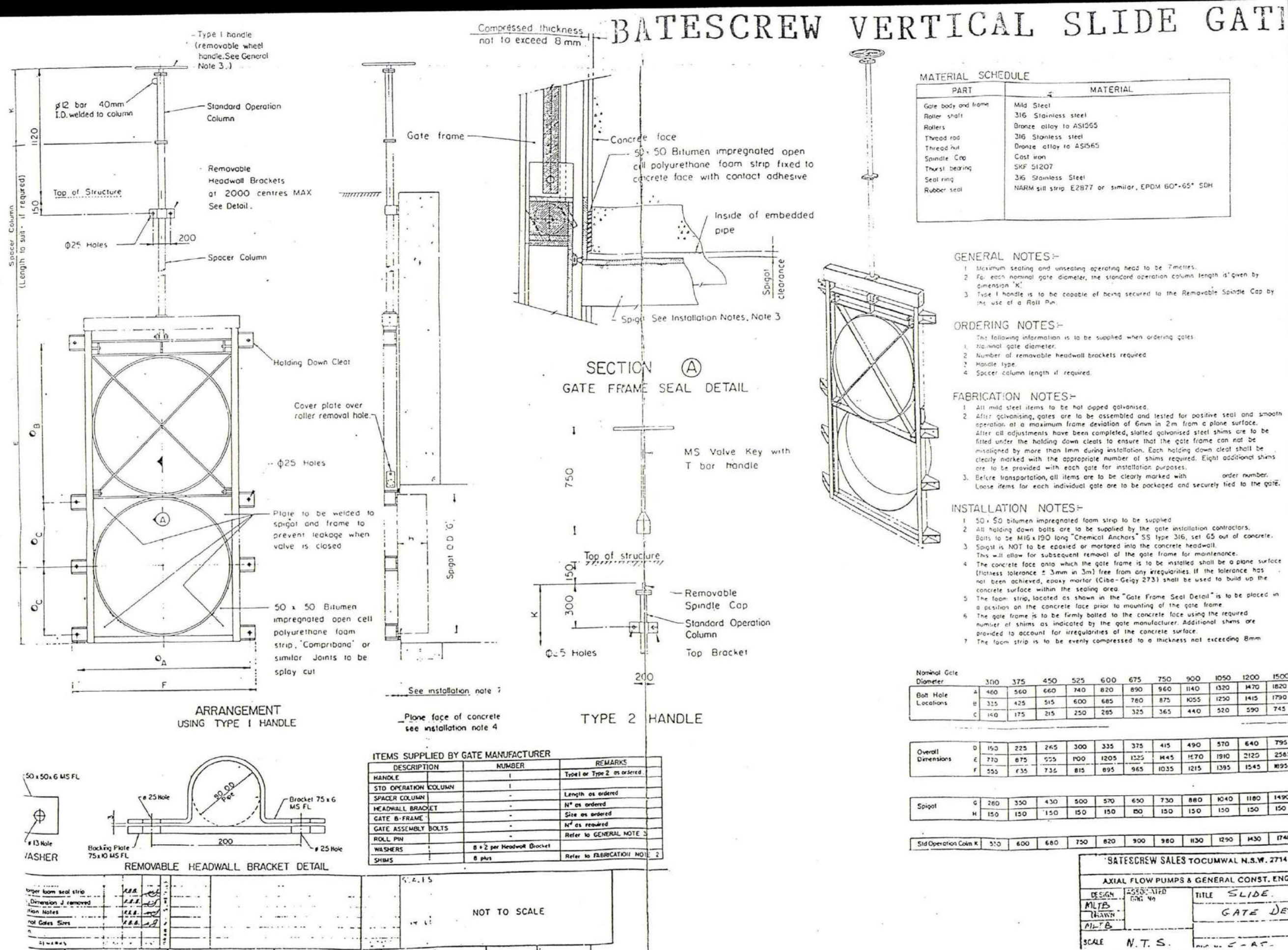


Junior type 'A' Construction



Standard type 'A' Construction

APPENDIX 7





NEW SOUTH WALES

MINISTER FOR LOCAL GOVERNMENT
MINISTER FOR WATER RESOURCES

APPENDIX "9"

37th Floor
Legal and General House
8-18 Bent Street
Sydney, N.S.W. 2000
Telephone: 221 3244

Cr. E.I. Wolfgang,
Shire President,
Muswellbrook Shire Council,
P.O. Box 122,
MUSWELLBROOK, N.S.W. 2333

18 DEC 1986

Dear Cr. Wolfgang,

I refer to my meeting with a deputation from Council on 27th November 1986 to discuss the proposed construction of the Denman levee. The following is provided in confirmation of (and agreement reached with) the advice I provided:

- Project funds to be provided on the basis that Council meets the full cost of internal drainage works and twelve per cent of the cost of the levee construction.

The remaining cost of the project will be met by the Commonwealth and State Governments each contributing three-sevenths and the Hunter Valley Conservation Trust contributing one-seventh. This formula will also apply to compensation payments.
- Commonwealth and State Government funds to be provided for project, with an initial contribution of \$400,000 being made in the 1987/88 financial year and the remainder being paid during 1988/89.
- Fair compensation payments to be made to affected landholders, based on the Valuer-General's assessments.
- The Water Resources Commission to submit a development application to Council to cover the proposed works, at the earliest possible date to ensure that actual construction will commence in or about October 1987.
- The Commission to arrange for the calling of tenders and associated documentation. However, Council will be invited to submit a list of prospective tenderers.
- Actual supervision of the construction of the works to be responsibility of the Commission, but Council will participate in supervision on a consultative basis.

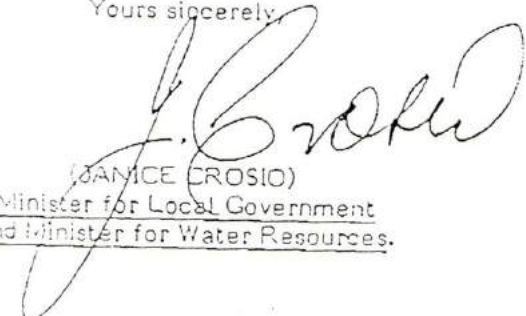
✓

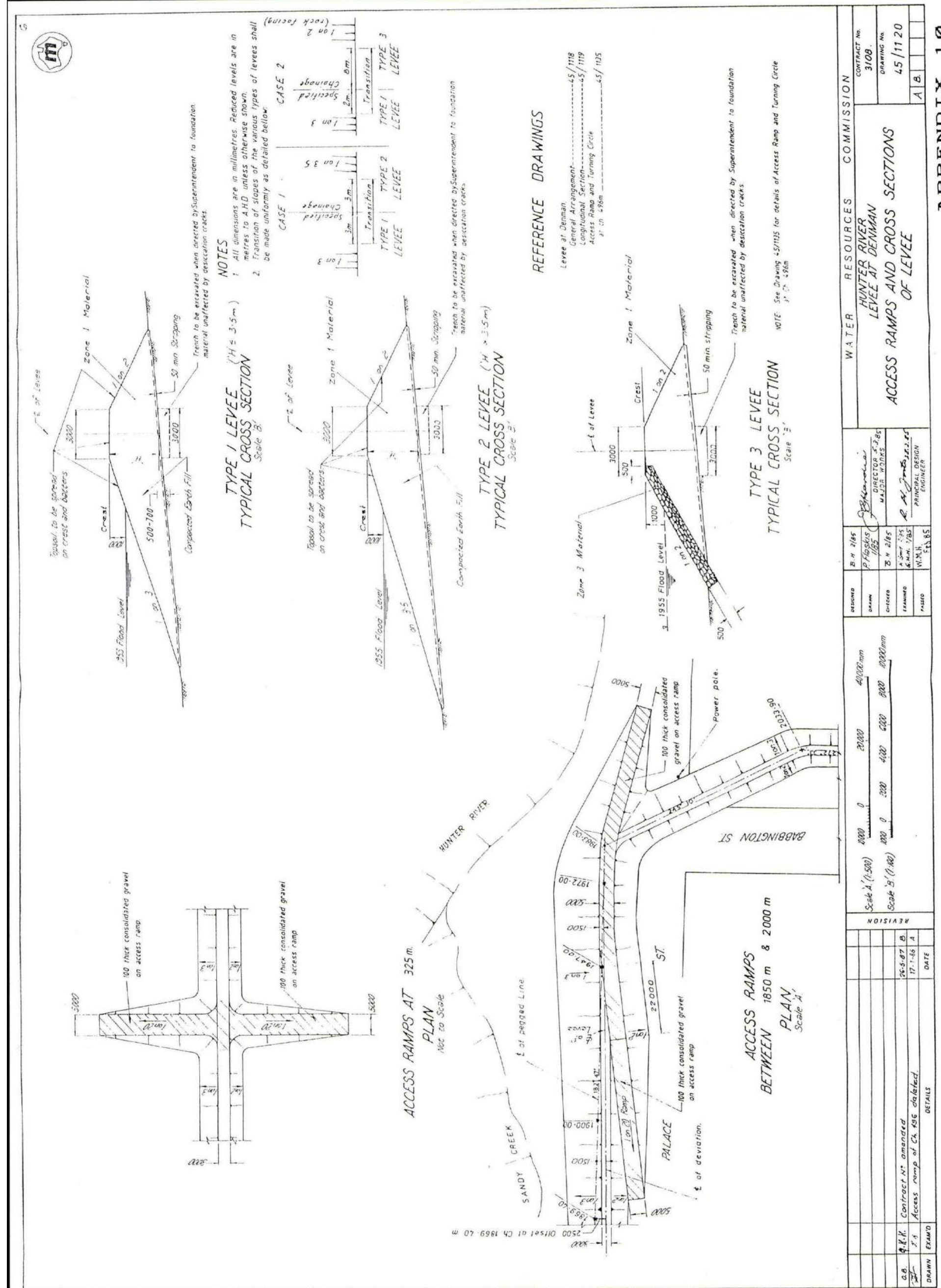
- 2 -

Council to enter into an agreement to maintain the completed works in perpetuity at its own cost.

I trust that these arrangements are to Council's satisfaction.

Yours sincerely,


(JANICE CROSIO)
Minister for Local Government
and Minister for Water Resources.





**muswellbrook
shire council**

Rivers and Drainage Channels Policy – R25/1

Authorisation Details:

Authorised by:	Council
Minute No:	266
Date:	9 November, 2015
Review timeframe:	December, 2015
Department:	Environmental Services
Document Owner:	Manager Planning & Building Services

Details History;

Version No.	Date changed	Modified by	Amendments made

This document is a controlled document. Before using this document, check it is the latest version by referring to the Controlled Document Register. Unless otherwise shown, printed or downloaded versions of this document are uncontrolled.

This document is a controlled document. Before using this document, check it is the latest version by referring to the Controlled Document Register. Printed or downloaded versions of this documents are uncontrolled.

POLICY STATEMENT

Muswellbrook Shire Council is committed to ensuring the responsible and orderly management of rivers and urban drainage systems throughout the Shire and so enhance and improve them with respect to:

- a) natural environmental values;
- b) aquatic fauna habitat;
- c) water quality or availability;
- d) drainage and flood risk management;
- e) maintainability;
- f) accessibility; and
- g) visual amenity.

POLICY OBJECTIVES

To define Council's obligations and expectations about maintenance, improvements and rehabilitation of rivers including urban drainage systems.

To provide development standards and guidelines for development that is proposed on land that includes or is adjacent to rivers and urban drainage systems.

To manage and affect ownership of rivers (including adjacent levees) and urban drainage systems in order to achieve better environmental outcomes in a financially sustainable manner.

1. APPLICATION

The policy applies to development in the urbanised areas of the Shire, which impacts upon, adjoins or crosses rivers and urban drainage systems.

For the purpose of this policy a river has the same meaning as in the Water Management Act 2000, being

"river includes:

- (a) any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved, and*
- (b) any tributary, branch or other watercourse into or from which a watercourse referred to in paragraph (a) flows, and*
- (c) anything declared by the regulations to be a river,*

whether or not it also forms part of a lake or estuary, but does not include anything declared by the regulations not to be a river."

2. RIPARIAN CORRIDORS

A riparian corridor forms a transition zone between the land, also known as the terrestrial environment, and the river. Riparian corridors perform a range of important environmental functions such as:

- providing bed and bank stability and reducing bank and channel erosion
- protecting water quality by trapping sediment, nutrients and other contaminants

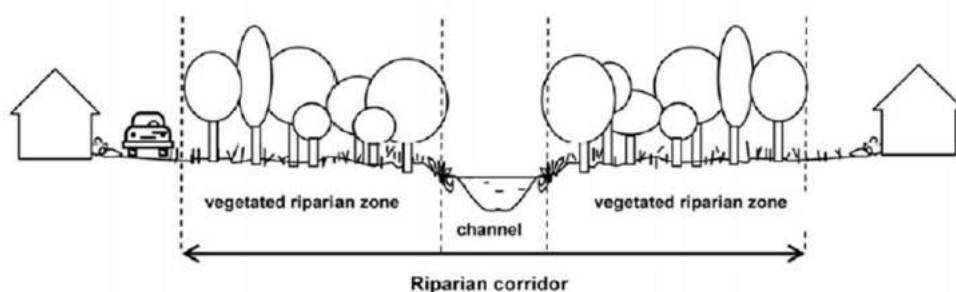
- providing diversity of habitat for terrestrial, riparian and aquatic plants (flora) and animals (fauna)
- providing connectivity between wildlife habitats
- conveying flood flows and controlling the direction of flood flows
- providing an interface or buffer between developments and waterways
- providing passive recreational uses.

The protection, restoration or rehabilitation of vegetated riparian corridors is important for maintaining or improving the shape, stability (or geomorphic form) and ecological functions of a river.

The riparian corridor consists of:

- the channel which comprises the bed and banks of the river (to the highest bank) and
- the vegetated riparian zone (VRZ) adjoining the channel.

Figure 1 - Vegetated Riparian Zones (VRZ)



The NSW Officer of Water recommends a VRZ width based on an order as classified under the Strahler System of ordering rivers and using current 1:25 000 topographic maps (see Figure 2 and Table 1). The width of the VRZ should be measured from the top of the highest bank on both sides of the river.

Figure 2 The Strahler System

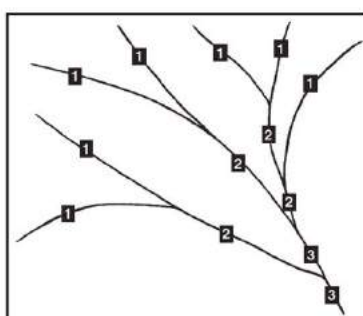


Table 1 Types of Rivers VRZ Width

Types of Rivers	VRZ Width (Each side of river)	Riparian Corridor Width
Any first order ¹ river	10 metres	20m + channel width
Any second order ¹ river	20 metres	40m + channel width
Any third order ¹ river	30 metres	60m + channel width
Any fourth order ¹ river or greater	40 metres	80m + channel width

¹ As classified under the Strahler System of ordering rivers.

3. REQUIREMENTS FOR DEVELOPMENT ON LAND ADJACENT TO RIVERS AND RIPARIAN ZONES

- 3.1. Rivers must be maintained in as natural a state as is feasible, including the maintenance of riparian vegetation and habitat.
- 3.2. Where a development is associated with, or will affect a river, rehabilitation must occur to return that river, as much as possible, to a natural state.
- 3.3. Stormwater must be managed to minimise nutrient and sediment run-off entering constructed drainage lines or rivers.
- 3.4. Development within a Vegetated Riparian Zone (VRZ), as shown in Figure 1 – Vegetated Riparian Zones, should be avoided where possible to retain its ecological processes. Where development is unavoidable within the VRZ, it must be demonstrated that potential impacts on water quality, aquatic habitat, and riparian vegetation will be negligible and can be managed effectively.
- 3.5. A Plan of Management must be submitted in accordance with State Government guidelines for development proposed within a VRZ.
- 3.6. Bushfire Asset Protection Zones must not be located within the Vegetated Riparian Zones.
- 3.7. Suitable public and/or Council access is to be provided for maintenance of the riparian corridor.
- 3.8. Where the riparian corridor or drainage reserve is to be in public ownership, the development is to be planned such that there are suitably sized interfaces between the corridor and a public road or public reserve. These interfaces, and any other points of access shall be provided with suitable vehicle barriers and heavy duty locked gates to control unauthorised vehicular access.
- 3.9. The riparian corridor or drainage reserve shall be connected to other reserve and natural areas in an approved manner that facilitates vegetated corridors of suitable habitat.
- 3.10. Development to which the policy applies must include, together with the environmental assessment the following:
 - Detailed engineering survey of the river that extends sufficiently across the land and immediate upstream and downstream reaches and any lateral tributaries or drainage connections;
 - Confirmation of the tenure of the land and river;
 - Flood risk impact assessment by a suitably qualified engineer, including either detailed reference to an adopted formal flood study, floodplain risk management plan; OR provision of an adequate level of flood analysis and flood risk analysis by original work to a standard acceptable to Council;
 - Review of existing vegetation of the river that extends sufficiently across the land and immediate upstream and downstream reaches; and a statement addressing improvements or enhancements to be gained by the application; and
 - Review of existing interventions in the river that extends sufficiently across the land and immediate upstream and downstream reaches; for example: bed and bank works, buildings, retaining walls, fences, cut and fill works, drainage

connections, services crossings, etc; and a statement about how the river is to be improved or enhanced by the application

4. GUIDELINES FOR DEVELOPMENT ASSESSMENT

4.1 The following may require development consent from Council, including any necessary Controlled Activity Approval from the NSW Office of Water or a Dredging Permit from Fisheries NSW as required:

- the removal of trees or vegetation;
- any works in locations that contain threatened species, or threatened ecological communities, or their habitats as listed under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*, or in Key Fish Habitat as mapped by Fisheries NSW; and
- works, including excavation, scour protection and engineered bed or bank stabilisation works.

In most instances, waterfront land and river activities will require a Controlled Activity Approval (CAA) pursuant to the *Water Management Act (WMA) 2000*.

4.2 Where the requirement for referral to the NSW Office of Water is not triggered, similar principles will be followed along a given river, or where relevant, adapted from those applied in similar situations; or apply standard consistent conditions to similar applications. For example requirements for waterway and vegetation restoration and improvement works to an approved design, and requirements for a waterway maintenance plan with a suitable bond held for an establishment period of at least two years.

4.3 In some instances waterfront land and river activities may require a permit under s.90 of the National Parks and Wildlife Act 1974 where the works may affect Aboriginal heritage.

4.4 Development assessment will also include:

- assessment of the flood information either by a suitably qualified council engineer, or a council appointed independent expert engineer.
- Assessment of flood risk; assessment of all the applicable waterway requirements in terms of: capacity, depth and velocity and potential impacts upstream and downstream, bed and bank stabilisation requirements; appropriate vegetation; water quality requirements, treatment of crossings and service crossings, maintainability, access, fencing, need for easements etc.

5. GUIDELINES FOR REZONING PROPOSALS

The following section applies to future rezoning requests/planning proposals. Council considers that identification of rivers, drainage channels and riparian vegetation is a critical component of early stage in the land use planning process, and requires proponents to ensure that protecting and maintaining of rivers and drainage channels will be one of the factors to be considered in the preparation of overall stormwater management strategy for greenfield sites. The Planning proposal should:

- i. Identify existing rivers and drainage channels

- ii. Determine appropriate riparian corridor width, in accordance with Table 1 of this Policy.
- iii. Take into consideration riparian vegetation connectivity and potential opportunities for future connectivity of riparian vegetation
- iv. Incorporate identified rivers, drainage channels and associated riparian zones into a concept plan
- v. Recognise potential social, economic and environmental benefits and potential land use activities within identified areas (i.e. easements, passive recreational areas)

6. OWNERSHIP OF RIVERS AND URBAN DRAINAGE SYSTEMS

Wherever possible rivers (including adjacent levees) and urban drainage systems are to be publicly accessible. Wherever possible easements for access and drainage must be created to the benefit of Council.

Council will consider the transfer of ownership to Council of rivers (including adjacent levees) and urban drainage systems only in circumstances where the outcomes of this policy will only be achieved through that dedication. Transfer will only be agreed to following rehabilitation of the river (including adjacent levees) and/or urban drainage system to a standard agreed to by Council. Transfer will only be agreed to at a nil cost to Council.

7. EASEMENTS AND RESTRICTIONS AS TO USER

Easements and restrictions as to user will be required depending on the extent to which access to Council assets is required and to ensure minimisation of the risk to urban drainage and flooding.

Drainage easements are generally for the purpose of:

- (a) protecting Council's assets and other property from damage and to prevent injury;
- (b) ensure access to Council's works for operations and maintenance;
- (c) alert owners of property that pipe work and/or other infrastructure is on their property and that special conditions apply; and
- (d) to facilitate construction and limit the future use of the land in a particular way so as to satisfy the above.

Where rivers are predominantly functioning as an integral part of an urban drainage system, (such as Possum Gully), easements to drain water in favour of council will be required for all new development. The size and alignment is to be guided by a stormwater study should one exist or by an assessment by Council's engineer based on the assessment of the application. Generally, it will involve at least the 'Floodway' as defined in the Floodplain Development Manual; however, in some instances additional lands may be required for riparian management reasons, and or maintenance/access considerations. Depending on location, easement for access may also be required.

Restrictions as to user may also be required to control floor levels and flood risk requirements, and matters associated with land and waterway management, fencing etc as appropriate to the application.

In the case of rivers that are predominantly draining large rural and natural catchments beyond the urban areas, but which do receive a small proportion of flow from urban runoff, including Denman Creek, Muscle Creek, and the Hunter River, easements to drain water in favour of Council will not be required over the river, but may be required over any lateral drainage systems. The size and alignment is to be guided by a stormwater study should one exist or an assessment by councils engineer based on the assessment of the application.

Depending on location, easements for access for rivercare, waterway and land management activities may also be required.

8. MAINTENANCE REQUIREMENTS

This policy recognises that rivers (including adjacent levees) and drainage channels and their associated vegetation should be left in as undisturbed a state as possible, unless extraordinary circumstances apply. Notwithstanding this, Council recognises that there are instances in which the condition of rivers may deteriorate as a result of inappropriate development, erosion and/or sedimentation, overgrowth with weeds or dumping or accumulation of rubbish. In such cases, it is recognised that maintenance and/or rehabilitation of these waterways may be required.

8.1 Drainage Easements

Council is responsible for the maintenance of all of its structures within private property where Council has acquired a drainage easement on such property.

8.2 Rivers

It is important that river and riparian areas are maintained by the landowner to the extent reasonably practical. Rivers form a valuable component of the environment and should be sensitively and effectively managed. A well-managed river also has high aesthetic values and provides valuable habitat.

In general, only minor maintenance activities are permitted. Such activities should occur with care and consideration of the physical and ecological integrity of the river and in accordance with relevant environmental legislation and guidelines.

Major maintenance work ie excavation, filling, diversion, scour protection, improvements etc, will require development consent including the necessary approvals from state government agencies under the Water Management Act 2000, the Fisheries Management Act 1994 and possibly the National Parks and Wildlife Act 1974.

Council will address significant incidences of bank and bed erosion/scour/siltation, if this damage is a direct result of Council's actions.

Easements, where required, are intended to give Council rights to drain water, install or maintain infrastructure, or intervene in land management matters that potentially impact on the viability of the river. The easement is not intended to imply that Council will maintain the vegetation or fencing, etc.

9. FENCING REQUIREMENTS

It is important that the river is maintained and utilised by the landowner to the extent reasonably practical. Fencing of private land along a river forms an interface between the built and natural environment and should be sensitively managed.

To this end the fencing shall achieve the following objectives:

- a) Lateral fencing shall allow for unimpeded passage of stormwater flows and floodwaters, and for overland flow to the river. Consideration of the risk associated with the fencing in respect to things like debris loadings, and potential to cause downstream issues if washed away;
- b) Longitudinal fencing along the easement or riparian zones shall be see-through and permeable and incorporate suitable gates to allow maintenance access.

10. APPLICATIONS OR REQUESTS FOR IMPROVEMENTS OR REHABILITATION

10.1 Within Drainage Easements

All requests for improvements in Council drainage easements within private property are to be received and assessed as to whether the work is of net benefit to the community and the environment and prioritised according to budget constraints. If Council is to contribute to the works, the property owner must contribute at least one-half of the cost of the work.

If the work is required to facilitate the development of the land, then the works, if approved, will be at the owner's full cost.

10.2 Within Rivers and Riparian Corridors

Owners wishing to make improvements or to rehabilitate rivers and or riparian corridors in private property are responsible for arranging and carrying out the work at their own cost.

The owner will need to obtain development consent from Council, including the necessary approvals from state government authorities under the Water Management Act 2000 and the Fisheries Management Act 1994.

Council may determine that an easement in favour of Council should be created over the improved riparian corridor and/or river in order to ensure drainage of a public road, in which case granting of the easement should be at no cost to Council.

10.3 Inter-allotment Drainage Easements (Benefiting private property owners)

In most cases all maintenance, improvements and rehabilitation works to drains in inter-allotment drainage easements within private property are the responsibility of property owners and users of the easement. These drains are usually 'private' drains and do not belong to Council. There are a few exceptions to this where the inter-allotment drainage easements benefit Council by enabling the drainage of public land. In these cases the drain is in the ownership of Council.

If there is a problem, ie damaged or defective pipes or flooding to a lower property, Council (under Section 124 of the Local Government Act 1993) may direct the owners and users of the drain to undertake repairs or maintenance.

10.4 Within Public Reserves, Drainage Reserves, Public Road Reserves or Council owned land

- (a) Maintenance – Council is responsible for maintenance of rivers and drainage channels in council-managed public land.
- (b) Improvements and Rehabilitation – All requests for improvements and rehabilitation will be assessed to determine desirability, prioritised according to budget constraints, and considered for allocations of funds in Council's Works Programs.

11. UNAPPROVED DRAINAGE WORKS

Property owners are required to accept natural flows from adjoining properties and control and dispose of flows properly.

11.1 Unapproved Drainage Works on Council Land

If unapproved drainage works are carried out on Council land, Council may remove the works and recover costs from the owner that carried out the work.

11.2 Unapproved Drainage Works on Private Land.

- (a) If new unapproved drainage works (approvals required under the Muswellbrook Local Environment Plan) are carried out on private land, Council may require the owner to remove the works at the owner's expense.
- (b) Maintenance – where existing unapproved drainage infrastructure is located on private owned land, Council will not maintain the infrastructure.

6.3 DA 342/2002 SECTION 4.55(2) MODIFICATION APPLICATION - WILDS GRAVEL QUARRY - 8440 NEW ENGLAND HIGHWAY, MUSWELLBROOK

Attachments:	<ul style="list-style-type: none"> A. DA 342/2002 S4.55(2) Modification Assessment Report B. DA 342/2002 S4.55(2) Modification Recommended Modified Conditions of Consent C. DA 342/2002 S4.55(2) Amended SEE submitted October 2018 D. DA 342/2002 S4.55(2) Modification Additional Information Letter 10 December 2018 E. DA 342/2002 S4.55(2) Traffic Impact Assessment F. DA 342/2002 Existing Notice of Determination and Conditions of Consent G. DA 96/2017 Concrete Batching Plant Notice of Determination H. DA 342/2002 S4.55(2) NSW RMS referral response I. DA 342/2002 S4.55(2) Modification NSW Environmental Protection Authority General Terms of Approval and referral response J. DA 342/2002 S4.55(2) Submission 1 K. DA 342/2002 S4.55(2) Submission 2 (comprised of two emails from the same submitter) L. DA 342/2002 S4.55(2) Modification Applicant's Responses to submissions
Responsible Officer:	Sharon Pope - Assistant Director - Environment & Community Services
Author:	Hamish McTaggart - Co-Ordinator - Development
Community Plan Issue:	<i>A Council that is well managed, efficient and properly resourced and that is responsive to its communities and stakeholders</i>
Community Plan Goal:	<i>Maintain a strong focus on financial discipline to enable Council to properly respond to the needs of the communities it serves.</i>
Community Plan Strategy:	<i>Provide efficient and effective Development Application, Complying Development Certificate, Construction Certificate and Occupational Certificate assessment services.</i>

PURPOSE

This report has been prepared to inform the Development Assessment Committee in determining a Section 4.55(2) Modification to DA 342/2002. This modification request has been assessed by Council Officers and is recommended for approval.

This modification relates development consent for an extractive industry (quarry), to extend the timeframe of its operation, and to extend the timeframe of the operation of a concrete batching plant also approved at the site, under DA 96/2017, and to consolidate these operation into a single consent.

Delegations issued to the General Manager and the Development Assessment Committee limit the determination of applications for or in any way related to *Mines or extractive industries*.

The application was reported to the 27 August 2019 Council Meeting where Council resolved to defer the determination of the modification application and delegate its determination to the Development Assessment Committee. The relevant Draft Council Minute reads as follows:

The determination DA 342/2002 Section 4.55(2) Modification Application - Wilds Gravel Quarry - 8440 New England Highway, Muswellbrook be delegated to the Development Assessment Committee.

RECOMMENDATION:

The Development Assessment Committee approve the Section 4.55(2) modification of DA 342/2002, subject to the recommended amended conditions of consent set out in Attachment B.

Moved: _____ **Seconded:** _____

DESCRIPTION OF THE PROPOSED DEVELOPMENT

This section 4.55(2) modification has been lodged with Council to modify the development consent issued by Council for the operation of Wild's Gravel Quarry. The operation of the quarry was approved by Council in 2004 (DA 342/2002). The current consent permits the operation of the quarry until 8 June 2024, with a maximum extraction rate of 100,000 tonnes per annum. This application seeks approval to extend the operation of the quarry for an additional 20 years to 2044, however Council staff recommend that the extension be limited to 20 years (to 31 January 2040).

The application also seeks to consolidate an approval issued by Council for the operation of a concrete batching plant on the same site under DA 96/2017 into a single consent.

This proposed modification does not propose any significant change to the operation of either the extractive industry or concrete batching plant beyond extending the duration of both operations. The quarry extraction area and concrete batching plant location would remain unchanged along with the annual maximum production capacity of both operations. The quarry currently has an extraction limit of 100,000 tonnes and the concrete batching plant a production limit of 30,000 tonnes.

The aerial images below identify the land subject to this application in context with the wider locality and the locations of key infrastructure on the site.



Image. 1 (Site Location Map, RPS SEE 15 October 2018: page 7)



Image. 2 (Subject Site and Extent of operations, RPS SEE, 15 October 2018: page 8)

ASSESSMENT SUMMARY

Council Officers have assessed the development application under the relevant provisions of Section 4.55(2) and Section 4.15(1) of the Environmental Planning and Assessment Act 1979. A copy of the Section Assessment Report prepared by Council Officers has been included as Attachment A. Based on the findings of this assessment report it is recommended that the proposed modification be approved, subject to conditions of consent included in Attachment B.

Key considerations and findings of the Assessment Report include:

- Council Officers are satisfied that the proposed development, as modified, would be substantially the same as the development previously approved by Council, and therefore can be considered as a Section 4.55(2) modification.
- The quarry extraction area and concrete batching plant location would remain unchanged, as would the maximum annual production of both operations. In view of the scope of the proposed modifications, Council Officers are satisfied that the modification of the consent is unlikely to have a significant environmental impact that would substantiate a decision to refuse consent to the development.
- The proposed modification was referred to the NSW Environmental Protection Authority (EPA) as a modification to an 'integrated development' application. The NSW EPA issued General Terms of Approval to the modification in correspondence dated 20 February 2019. These General Terms of Approval have been incorporated into recommended conditions of consent and their correspondence has been included as an attachment to this report.
- The proposed development was referred to NSW Roads and Maritime Services (RMS) for comment in accordance with the provisions of the State Environmental Planning Policy (SEPP) (Mining Petroleum and Extractive Industries) 2007. Correspondence was received from the NSW RMS on the 22 February 2019. This correspondence raised no objection to the proposal and provided advice about the sites existing access which has been incorporated into a condition of consent at the recommendation of Council's Community Infrastructure Department.
- The proposed modification was referred to Council's former Mining Liaison Office. Comments

provided by this Officer have informed the assessment of the application and the recommended modified conditions of consent.

- The proposed development was referred to Council's Community Infrastructure Department. Comments provided raised no objection to the proposed development, or the site's access arrangements. The response provided included recommendations around providing additional safety measures relating to the internal vehicle access which have been incorporated into recommended conditions of consent.
- Council received two (2) submissions relating to the proposed development. Matters raised by the submissions relate primarily to vehicle traffic and the operators compliance with the existing consent. The submissions are attached to this report for Council's information and reviewed under the Submitter Concerns heading of the attached assessment report.
- The proposed development complies with the relevant provisions of the Muswellbrook Local Environmental Plan (LEP) 2009 and the Muswellbrook Development Control Plan (DCP).
- The proposed development has been considered against the provisions of the relevant SEPPs, including the State Environmental Planning Policy (Mining Petroleum and Extractive Industries) 2007. The proposal is considered to be compatible with the requirements of these relevant environmental planning instruments and therefore may be approved by Council.
- The proposed development is considered unlikely to result in any significant environmental impacts that would support a decision to refuse the proposed modification, while the proposed modification is considered to be compatible with the public interest as it would support local economic activity and provide employment opportunities associated with the continued operation of the approved extractive industry and concrete batching plant

In view of the relevant considerations of Section 4.55(2) and Section 4.15(1) of the Environmental Planning and Assessment Act 1979, it is recommended that the Development Assessment Committee grant development consent to this section 4.55 modification subject to the recommended conditions of consent which have been updated in line with the recommendations of the NSW EPA, NSW RMS, Council's Mining Liaison Officer and Council's Community Infrastructure Department.

MATTERS RELATED TO THE DEFERRAL OF DETERMINATION

This development application was reported to the 11 September 2019 Development Assessment Committee for determination. The draft Meeting Minutes note that the following discussion to place regarding the recommended conditions of consent and that the following resolution was passed:

Mr Wild provided the Committee with a brief overview of the proposed works to be undertaken at the Quarry.

Discussion took place on this item and it was noted that Clauses 9, 22, 37 and 38 and the Bond Condition needed to be reviewed by staff and a condition regarding a Closure Plan also needs to be included.

RECOMMENDED on the motion of Crs Rush and Scholes that:

Determination of this matter be deferred to the next meeting of the Development Assessment Committee to provide time for the Committee and staff to review the proposed Conditions.

In line with the discussion points above Council Officers have sort to review the referenced recommended conditions of consent against applications extractive industry applications recently determined by Council and the relevant planning assessment criteria for the determination of this application to ensure that the recommended conditions align with best practice, Council's standard requirements and respond to the relevant Section 4.15 assessment provisions.

Council Officers have reviewed the conditions of consent and discussion points referenced in the meeting minutes under the following sub-headings. Comments have been included under these headings in relation to the reasoning that has informed the recommended conditions of consent and outlining any changes to the recommended conditions previously put forward to Council.

Condition 9

3. (9) *All management plans required by this approval are to be submitted to and approved by Council. Management plans are to be reviewed and provided to Council for approval every 3 years from the date of the previous management plan approval.*

This condition requires the applicant to review all management plans required for the operation of the development on a 3 year period. The Committee raised concerns as to whether recommended condition 1 which endorsed the rehabilitation management plan for the site would conflict with this condition and it would restrict the continued revision of the remediation plan to ensure it exists as a living document. Recommended condition 1 identifies plans and documentation which the approved development must be carried out generally in accordance with except as otherwise provided for by the terms of the development consent.

To ensure that the objective of this condition is achieved and that management plans (including the rehabilitation management plan) are subject to review and update with the progressive operation of the development an additional recommended condition has been proposed to outline the requirements for the regular upkeep and update of the rehabilitation management plan. This additional recommended condition is outlined under the closure Plan and Rehabilitation sub-heading.

Condition 22

- (22) *No more than 10 hectares of land shall be disturbed at any time in the quarry area and in the working area / base of the extraction site.*

This recommended condition of consent has been put forward on advice from Council's Mining Liaison Officer. Under Council's previous Notice of Determination for the determination of this development application Council restricted the total disturbance area to 2ha. Council's Mining Liaison Officer provided advice indicating that the 2ha disturbance limit was overly restrictive and did not support the functional operation of the quarry. A 10ha disturbance area was put forward as a reasonable restriction on the total disturbance area and which would require the operator to carryout progressive rehabilitation of disturbed areas to ensure that the operation does not exceed the total disturbance area.

To ensure that the requirement for progressive rehabilitation of the site is made clear an additional condition has been recommended. This recommended condition has been informed by a review of conditions on other extractive industries and mining developments and is included as condition No29 in the recommended conditions of consent.

- (#) *The applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and reasonable to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.*

Condition 37

- (37) *The applicant shall arrange for a minimum 5m wide two coat bitumen seal of the access way from the existing office to the concrete batching plant.*

- 4.
5. This condition has been informed by Council's determination of DA 96/2017 for the installation of the concrete batching plant at the site. This consent required the upgrade of the access as outlined by the recommended condition. The condition is yet to be complied with. The works required by the

condition remain relevant to the determination of this application to ensure the safety of vehicle movements between the site office and the concrete batching plant. The quarry owner has advised Council Officers that it is his intention to carry out these required works following the determination of this application. Where this requirement is imposed on this development consent and the works are not duly completed Council Officers would consider taking regulatory action to ensure the works are completed in accordance with the consent requirements.

Condition 38

6.
(38) *Unless otherwise approved by the Environmental Protection Authorities Environmental Protection License noise generated by Concrete Batch Plant Operations must not exceed the limits outlined in the Global Acoustics Noise Impact Assessment Report, dated 20th December 2016 being:*

	<i>Day Laeq (15 minute)</i>
<i>R1 to R7</i>	<i>43</i>
<i>R8</i>	<i>36</i>

The drafting of this condition of consent has been informed by the Environmental Protection Licensing provisions of the Protection of the Environment Operations (POEO) Act 1997. Under the provisions of POEO Act 1997 an Environmental Protection License is required for the carrying out of certain 'scheduled activities' under the provisions of that Act.

Schedule 1 of the POEO Act 1997 identifies 'extractive activities' and 'concrete works' with production capacities of more than 30,000 tonnes per annum as 'scheduled activities'. The quarry subject to this modification application has a production capacity greater than 30,000 tonnes per annum threshold for scheduled activities while the concrete batching plant would not exceed the 'scheduled activity' threshold.

The Environmental Protection Authority is the relevant public authority for issuing and managing of Environmental Protection Licenses under the POEO Act 1997 for the carrying out of scheduled activities. The NSW Environmental Protection Authority have issued General Terms of Approval for the development and indicated that they are able to license the operation under the POEO Act 1997. The License issued by the NSW Environmental Protection Authority would control environmental pollution (including noise emissions) related to the 'scheduled activity'. As the concrete batching plant is not a scheduled activity condition 38 has been recommended to ensure that the operation of this plant remains limited in accordance with the requirements imposed by Council at the time it was approved under DA 96/2017, unless varied by the NSW Environmental Protection Authority.

Bond Condition

The Notice of Determination for the operation of the quarry is subject to a condition that requires a \$50,000 bond as an assurance that the conditions of consent will be complied with. Council's Mining Liaison Officer recommended that this bond be adjusted to \$75,000 and a condition requiring the registration of a bond to this amount was adopted as a recommended condition of consent.

Based on discussions at the previous Development Assessment Committee Meeting and the Committee's deliberations with the recent determination of another application for the modification of another quarry it is understood that the Committee is interested in ensuring that any bond would be adequate to cover outstanding rehabilitation works at the time of closure.

With this in mind Council Officers have reviewed the recommended bond condition.

No change to the \$75,000 base value of the bond has been proposed by Council Officers noting that this figure was recommended by Council's former Mining Liaison Officer who had substantive experience regulating mines and extractive industries. However, to ensure that the bond amount is effective to

account for the cost of outstanding works at a future stage it is recommended that the bond amount is tied to inflation and adjusted every five years based on CPI increases.

The recommended condition has been adjusted as follows:

- (3) *The Applicant shall lodge a bond or bank guarantee with Council in assurance that all conditions are fully complied with and the requirements of the rehabilitation management plan complied with in full at the conclusion of the premises operation.*
7.
8. *In the event that conditions are not adhered to, operations will cease on notification by Council and not recommence until such conditions have been complied with.*
9.
10. *The value of the bond or bank guarantee is to be adjusted for inflation every five (5) years from the 30 March 2020 in line with the Consumer Price (All Ordinaries) Index.*
11.
12. *The minimum value of the bond or bank guarantee is to be \$75,000. The bond or bank guarantee is to be adjusted for inflation by reference to the Consumer Price (All Ordinances) Index every five (5) years from the 30 March 2020 from the \$75,000 minimum value and a revised bond or bank guarantee provided.*
13.

Closure Plan and Rehabilitation

A rehabilitation management plan was submitted by the application with this application to modify the development consent.

At its 11 September 2019 Meeting the Development Assessment Committee raised an interest in ensuring that the rehabilitation management plan is a living document and is updated with the progressive rehabilitation of the site and developments in industry best practice. To ensure the rehabilitation management plan is regularly updated and prepared to achieve best practice rehabilitation outcomes the following additional condition has been recommended as new condition No10 in the recommended consent:

(#) The person acting with this consent shall ensure that the development is carried out in accordance with the Rehabilitation Management Plan referenced in condition 1 and that this document is regularly updated in accordance with the following criteria

(a) The rehabilitation management strategy is to be reviewed every 3 years from the date of the previous management plan approval and provided to Council for approval. The Rehabilitation Management Plan must:

- i) Be prepared by a suitably qualified and experienced person;*
- ii) Build upon the site rehabilitation and land use outcomes expressed in the Rehabilitation Management Plan approved at the time of any revision;*
- iii) Identify the future land use or uses for the site and a reference site for each such use;*
- iv) Describe the measures to be implemented to ensure that the land is rehabilitated to the standard required to support its future use;*
- v) Include a staging plan for the progressive rehabilitation of the site;*
- vi) Include a weed management strategy to control the spread of weeds within the site, and particularly in relation to rehabilitated areas; and*
- vii) Include a closure plan outlining the removal of any non-essential infrastructure.*

The terms of this condition have been partly informed by a condition of consent the Development Assessment Committee imposed in its determination of the modification of another quarry in the Local Government Area .

COMMUNITY CONSULTATION

The modification was publically notified and advertised on two occasions. The modification was originally notified from the 5 March 2018 to the 28 March 2018. No submissions were received by Council in relation to the application through this notification period.

Following the receipt of additional information, the proposed development was re-notified to neighbouring property owners between the 28 November 2018 and the 13 December 2018. Two (2) submissions were received by Council following this notification period. Both submissions were received outside the notification period as advertised, but were accepted by Council Officers and have been considered in the assessment of the proposed modification.

At the request of an interested adjoining land-owner, this notification period was extended until the 8 January 2019. Council received one submission through this notification period and a second submission following the conclusion of the notification period from individuals raising concerns for the Development Assessment Committee to consider in its assessment of the application.

Matters raised by the submissions relate to vehicle traffic, consent compliance and the management of environmental impacts.

The submissions received have been included in full as attachments to this Report and the issues raised in relation to the proposed development have been reviewed and commented on in the assessment report attached.

OPTIONS

Council may:

- A) Grant development consent to the proposed modification subject to the recommended amended conditions of consent,
- B) Grant development consent to the proposed modification unconditionally or subject to amended conditions of consent recommended by Council, or
- C) Refuse development consent to the proposed modification and nominate reasons for refusal.

LEGAL IMPLICATIONS

Where the applicant is dissatisfied with the determination of the development application they have an opportunity under the provisions of the Environmental Planning and Assessment Act 1979 to appeal that determination at the Land and Environment Court.

CONCLUSION

This section 4.55(2) modification has been reported to the Development Assessment Committee for determination as it relates to an extractive industry and its determination is outside the delegations of the General Manager.

Council Officers have completed an assessment of the modification application against the relevant provisions of Section 4.55(2) and 4.15(1) of the Environmental Planning and Assessment Act 1979, and the findings of this assessment have been included in detail in the Assessment Report included as Attachment A. This report recommends that the Development Assessment Committee determine the development application by granting it approval subject to the recommended conditions of consent outlined in Attachment B.

SECTION 4.55 (2) ASSESSMENT REPORT

ADDRESS:	LOT: 30 DP: 815308 8440 New England Highway MUSWELLBROOK
APPLICATION No:	342/2002
PROPOSAL:	S96(2) Modification - Consolidate Two Consent Documents into One with Modified Conditions Where Applicable
OWNER:	Wild Group Pty Limited
APPLICANT:	RPS Group Unit 2a 45 Fitzroy Street CARRINGTON NSW 2294
AUTHOR:	Mr H McTaggart
DATE LODGED:	28/02/2018
AMENDED:	10 December 2018
DATE OF REPORT:	21 August 2019

SUMMARY

SUBMISSIONS: Two (2)

RECOMMENDATION: Approval subject to conditions

1.0 BACKGROUND

This Section 4.55(2) request has been lodged with Council to modify the development consent issued by Council for the operation of a quarry at Lot 30 DP 815308, approved by Council on 8 June 2004 under DA 342/2002, and modified by Section 96 applications approved in 2007 and 2016.

As part of the modification of this consent, the applicant is also seeking to obtain approval for the continued operation of a concrete batching plant at the site. The operation of this batching plant was approved by Council on 15 November 2017 under DA 96/2017. The applicant is seeking to have the concrete batching plant and quarry approvals consolidated into a single development consent for the operation of the site.

This assessment report considers the proposed development against the relevant assessment criteria of Section 4.55(2) of the Environmental Planning and Assessment Act 1979.

2.0 SITE AND LOCALITY DESCRIPTION

The land subject to this Section 4.55(2) modification is identified as Lot 30 DP 815308, and is known as 8440 New England Highway, Muswellbrook.

The land is located approximately 9km south east of the Muswellbrook township, with direct frontage to the New England Highway, a classified State Road. The site is situated in the vicinity of Liddell and Bayswater power stations, the Mount Arthur North mine site and the now closed Drayton mine.

The subject land is zoned E3 Environmental Management under the Muswellbrook Local Environmental Plan (LEP) 2009, and adjoins land zoned E3 Environmental Management to the north, land zoned RU1 Primary Production to the east and west, and land zoned SP2 Power Station to the south.

The site is currently operating as a gravel quarry and concrete batching plant.

Existing approvals permit the operation of the site as follows:

DA 342/2002

- Approved the operation of a gravel quarry with a maximum production capacity of 100,000 tonnes of material per annum for a 20 year period from the 8 June 2004. This consent also permitted an equipment and plant hire service at the site.

Section 96 Modifications of this application:

6 December 2007: Increased the quarry's approved extraction rate from 50,000 tonnes per annum to 100,000 tonnes per annum, increase the number of permitted annual blasts from 4 to 8, and reduced the quarry's bond amount to \$50,000.

7 January 2017: Permitted a boundary adjustment to rectify a historic encroachment of the quarry operation on adjoining land. The modification did not alter any additional conditions of consent. The Subdivision Certificate for the approved boundary adjustment has been lodged with Council.

DA 96/2017

- Approved operation of a mobile concrete batching plant at the site with a maximum production capacity of 30,000 tonnes per annum for a maximum period of 3 years from the date of consent, being 15 November 2017.

The operation of the site permitted by this consent is set to conclude by **15 November 2020**.

3.0 DESCRIPTION OF PROPOSAL

This section 4.55(2) application seeks Council approval for the modification of DA 342/2002 to extend the lifetime of the approved operation of the quarry and concrete batching plant at the site.

The application also seeks approval to the continued operation of both activities for an additional 20 years, to January 2044. The development application does not propose any significant alterations to the operation of the site beyond the extension of the operational lifetime of the quarry and concrete batching plant.

Under the proposal the disturbance footprint of both activities would remain unchanged along with the intensity of the site's operation.

The maximum production capacity for the quarry would remain at 100,000 tonne per annum and the concrete batching plant 30,000 tonne per annum.

A detailed description of the current and proposed operating parameters of the quarry have been included in Section 3 of the Statement of Environmental Effects submitted to Council in relation to the development.

4.0 REFERRALS

External Referrals

NSW Roads and Maritime Services

Under the provisions of the State Environmental Planning Policy (SEPP) (Mining Petroleum Production and Extractive Industries) 2007 this application requires referral to the NSW Roads and Maritime Services (RMS) for comment.

The proposed development was referred to the NSW RMS on the 10 December 2018. A request for further information was received from the RMS in an email dated 16 January 2018. The applicant provided additional information in response to this request and the RMS provided comments in correspondence dated 22 February 2019. This correspondence raised no objection to the proposed development and provided advice about the existing site access.

On the recommendation of Council's Community Infrastructure Department, the advisory comments provided by NSW RMS in relation to the site's access have been included in the recommended conditions of consent.

NSW Environmental Protection Authority

The development relates to an activity which requires an Environmental Protection License under the Protection of the Environment Operations Act 1993, and is 'integrated development' under Section 4.46 of the Environmental Planning and Assessment (EP&A) Act 1979. This requires referral to and the issue of General Terms of Approval from the NSW Environmental Protection Authority (EPA).

The NSW EPA provided General Terms of Approval for the development on 20 February 2019. In accordance with the requirements of the EP&A Act 1979, Council would need to condition any approval to line with the General Terms of Approval specified by the EPA.

Internal Referrals

Community Infrastructure

The proposed development was referred to Council's Community Infrastructure Department to consider and provide comment on matters related to the impact of the development on Council infrastructure.

Council's Community Infrastructure Chief Engineer and Assistant Director raised no objection to the proposed development and made the following comments:

Background

Wild quarry is seeking to include a concrete plant. They additional advise 20 trips per day; this assumes each order is for a full truck load of concrete. The traffic generated may be more than that. Cumulative truck loads will be less than 96 per day

Access

- *Access is from the New England Highway and therefore will require compliance with conditions set by the RMS. Current condition of the RMS is no right turn for heavy vehicles (vehicle over 5 ton Gross weight) out of the site. This should remain.*
- *The main access to the quarry and access way to the batching plant is proposed to be two coat bitumen sealed.*
- *A holding line should be marked from the right of way to the crest of batching plant entry where they use as two way road for light vehicle.*

Parking

As the site will not be open the general public there is no need for car parking to be provided in conjunction with the operation of the batching plant

Drainage

No comments as previously requested conditions already addressed.

Flood Risk

Nil

Draft Conditions

- *RMS condition re Access to New England Highway.*

These comments have informed recommended updated conditions of consent related to vehicle access to the site.

The recommended conditions include reference the Traffic Impact Assessment, the inclusion of RMS requirements, inclusion of access requirements from DA 96/2017, and an additional condition requiring the preparation of a plan for line-marking the internal access way.

Mining Liaison Officer

During their employment with Council, Council's Mining Liaison Officer was involved in the assessment of the application and reviewed the documentation submitted with the application.

Council's Mining Liaison Officer recommended a number of updated conditions be imposed on any Notice of Determination to ensure that the development is carried out in accordance with current industry best practice.

A summary of the modifications to the consent conditions that have been proposed, based on the comments put forward by Council's Mining Liaison Officer are:

- The maximum period of consent be limited to January 2040.
- Changes to conditions to reference the documents and information approved as part of this modification.
- Changes to conditions to reference plans of management and related documents to account for batching plant operation.
- Increase of the bond amount from \$50,000 to \$75,000. Additional bond amount to be paid prior to March 2020.
- Inclusion of a new condition requiring the preparation of a pollution incident response plan in relation to the operation of the site (see condition 7 in the recommended conditions of consent).
- Update annual reporting requirements to include information relating to concrete batching plant production.
- Deletion of condition related to 6 monthly compliance reports. This condition was additional to annual reporting requirements.
- Deletion of the condition requiring a CCC. Requirement is understood to be obsolete.
- Deletion of condition requiring annual report to Department of Mineral Resources as a mineral license is not required for the operation of the premises.
- Inclusion of a requirement for a review of the site's management plans to be completed every 3 years.
- Recommended application of CPI to annual Section 7.11 payments commencing March 2020.
- Inclusion of a condition requiring installation of road signage within the site to ensure large vehicles are aware that right turns from the site onto the New England Highway are prohibited.
- Deletion of condition requiring the submission of an erosion plan. This plan has been provided with this application.
- Deletion of a condition requiring the installation of screening prior to commencement. Screening at the site is currently in place.
- Alteration to the condition restricting the total area of the site that can be disturbed at any single point in time. Previously restricted to a maximum disturbance area of 2ha. Council's Mining Liaison Officer recommended that the disturbance area condition be modified to restrict disturbance area to 10ha.
- Removal of condition related to rehabilitation of the site adjacent to the plant hire site as work has been completed.
- Removal of condition related to the installation of a bund wall prior to commencement, in accordance with landscape plan, as work has been completed.
- Deletion of condition related to the completion of flora and fauna survey 1 year from the date of consent. The required surveys have been completed.
- Inclusion of new environmental condition related to the minimisation of dust from the site by the covering of loads (see condition No 27).
- Update of conditions related to blasting to avoid duplication and ensure blasting is primarily managed under approved blast management plan.

- Deletion of DIPNR General Terms of Approval conditions. This government department no longer exists and the functions of the legislation it formerly administered is now administered by the Natural Resources Access Regulator under the Water Management Act 2000. This application is not identified as integrated development for the purpose of the Water Management Act 2000 and thereby an application that required referral to and approval from the Natural Resource Access Regulator. If at any future stage the works carried out on site are altered to require a controlled activity permit, or water license under the Water Management Act 2000, the proponent will need to engage with the Natural Resource Access Regulator to obtain the appropriate approvals.
- Remove NSW RMS requirements related to the construction of the Grasstree Ridge Right of Way New England Highway intersection. All required works have been completed.
- Include updated conditions related to access to reflect the comments provided by the RMS in its letter dated 22 February 2019 and Council's Community Infrastructure Department comments.
- Update of EPA conditions to reflect the GTA's issued by the EPA for the modification in correspondence dated 20 February 2019.
- Include conditions related to the function of the concrete batching plant taken from DA 96/2017 consent.

A number of general conditions recommended by Council's Mining Liaison Officer, which did not propose specific operational requirements, were considered to have the potential to conflict with the NSW EPA's Environmental Protection License or were covered elsewhere in the consent, and have not been included in the final draft of the recommended conditions of consent following its review by the Assessing Officer.

Council's Mining Liaison Officer identified a discrepancy in vehicle movements approved. The EIS identified that the maximum vehicle movements to the site would be 30 in and 30 out, while the proposed modification indicates a maximum of 80 vehicle movements per day and an expected average of 40. A Traffic Impact Assessment was requested and submitted to Council which identified the total combined maximum daily vehicle movements for the operation of the quarry and batching plant at 80. This Traffic Impact Assessment was provided to NSW RMS and Council's Community Infrastructure Department. No objection was raised to the volume of traffic proposed. Accordingly, the Assessing Officer is satisfied that the proposed development can be recommended for approval subject to the total vehicle movements set out in the Traffic Impact Assessment.

5.0 SECTION 4.55 CONSIDERATIONS

The application lodged with Council is a Section 4.55(2) modification application. When considering whether to grant consent to a Section 4.55(2) modification application a consent authority must take the following matters into consideration:

- 4.55 (2)(a)** whether it is satisfied that the development the consent as modified relates to is substantially the same development for which consent was originally granted.

Planning comment:

Council Officers are satisfied that the modification before Council relates to an application that is substantially the same as the development for which consent was originally granted. In forming this position Council Officers have observed that:

- This application seeks to extend the operational lifetime of two activities previous granted development consent for their operation at the site.
- The proposed development does not seek any change to the footprint of the existing quarry and concrete batching plant and the operation of the site will remain generally consistent with the operation previously approved by Council.
- Although not approved under the consent subject to this modification, the concrete batching plant operating at the site has been approved by Council, is operating on the land, and is permissible with consent on land operated for the purpose of an extractive industry by virtue of the co-location of industry provisions of the SEPP (Mining Petroleum and Extractive Industries) 2007.

4.55(2)(b) Comments from any approval body, public authority or the Minister where any such authority is required to be notified of the development application and provide approval or concurrence in relation to that application.

Planning Comment:

The proposed development required approval from the NSW EPA under the integrated development provisions of the EP&A Act 1979 and concurrence from the NSW RMS under the provisions of the SEPP (Mining Petroleum and Extractive Industries) 2007. Neither approval body raised an objection to the proposed development and their requirements have been incorporated into recommended conditions of consent.

4.55(2)(c) Whether it has notified the development application in accordance with any requirements of the Regulations or a DCP.

Planning Comment:

The proposed development was placed on public notification in accordance with the notification requirements of the Muswellbrook DCP. Two submissions were received.

4.55(2)(d) Matters raised by any submissions received through the notification of the development application.

Planning Comment:

Council received two submissions in relation to the proposed development. Matters raised by these submissions have been considered through the assessment of this application and have been summarised and commented on under the submitter concerns heading of this report.

4.55(3) General development assessment requirements referred to in Section 4.15 of the Environmental Planning and Assessment Act 1979 so far as they are relevant to the proposed modification.

Planning Comment:

Section 4.15 of the Environmental Planning and Assessment Act 1979 prescribes matters for consideration when determining a development application. Council Officers have completed an assessment of relevant Section 4.15 matters as they relate to the aspects of the development proposed to be modified under this application.

6.0 ASSESSMENT

This Section of the assessment reviews the proposed modification against the relevant development assessment matters prescribed by Section 4.15 of the Environmental Planning and Assessment Act 1979.

S 4.15(1)(a)(i) The provisions of any environmental planning instruments

The Muswellbrook Local Environmental Plan 2009

Permissibility

The subject land is zoned E3 Environmental Management under Muswellbrook LEP 2009.

The land use classifications most relevant to the operation of the site are considered to be an extractive industry (quarry) and general industry (concrete batching plant).

The Muswellbrook LEP 2009 land use table relevant to the E3 Environmental Management zone prohibits development for the purpose of extractive industries and general industries. The proposed development is permissible development by virtue of the provisions of the SEPP (Mining, Petroleum Production and Extractive Industries) 2007 and the Existing Use provisions of the Environmental Planning and Assessment Regulation 2000 (the Regulation).

As the use of the site as an extractive industry commenced prior to the coming into force of the Muswellbrook LEP 2009, the use of the site is an 'existing use' within the meaning given to that term by the Regulations, and in accordance with the provisions of the Regulations an existing use may be altered, expanded or intensified with development consent. The establishment of the concrete batching plant (a general industry) is also permissible, but through the provisions of the SEPP (Mining, Petroleum Production and Extractive Industries) 2007. This SEPP allows for the 'co-location of industry' which permits industrial type land uses with consent on any land on which an extractive industry is being carried out with development consent.

General Muswellbrook LEP 2009

The following table considers the proposed development against the provisions of the proposed development relevant to the assessment of the proposed development.

Table 1 – Muswellbrook LEP 2009 provisions

<u>MUSWELLBROOK LEP 2009 CLAUSE PROVISIONS</u>	<u>PLANNING CONSIDERATION</u>	<u>COMPATIBLE WITH</u>
Part 2 Permitted or Prohibited Development		
2.3 Zone Objectives	<p>clause 2.3 (2) of the Muswellbrook LEP 2012 requires the following:</p> <p><i>The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone.</i></p> <p>The zone objectives for the E3 Environmental Management land use zone are as follows:</p> <ul style="list-style-type: none"> <i>To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.</i> <i>To provide for a limited range of development that does not have an adverse effect on those values.</i> <i>To maintain, or improve in the long term, the ecological values of existing remnant vegetation of significance including wooded hilltops, river valley systems, major scenic corridors and other local features of scenic attraction.</i> <i>To limit development that is visually intrusive and ensure compatibility with the existing landscape character.</i> <i>To allow agricultural activities that will not have an adverse impact</i> 	No. This is an existing use permitted SEPP (Mining, Petroleum Production and Extractive Industries) 2007

	<p>on the environmental and scenic quality of the existing landscape.</p> <ul style="list-style-type: none"> • To promote ecologically sustainable development. • To ensure that development in this zone on land that adjoins land in the land zoned E1 National Parks and Nature Reserves is compatible with the objectives for that zone. <p>Planning Comment: The proposed development involves the continued operation of an established extractive industry and associated concrete batching plant. The proposed development would not expand the disturbance footprint of either land use or significantly alter the parameters of the current on-site operation. Furthermore, the proposed modification would allow for Council to review existing environmental conditions on the development consent and update these requirements to ensure improved environmental outcomes where required.</p>	
Part 4 Principle Development Standards Additional local provisions		
4.3 Height of Buildings	<p>The maximum building height for the land is 12m.</p> <p>The proposed development does not involve the construction of any new buildings and that the existing buildings on the site have previously been approved by Council and do not contravene the 12m maximum building height relevant to the site.</p>	Yes
4.4 Floor Space Ratio	<p>The land subject to this development application is not affected by any maximum floor space ratio. Accordingly further consideration of the provisions of this clause are not required.</p>	NA
Part 7 Additional Local Provisions		
7.1 Terrestrial Biodiversity	<p>The land subject to this development application is identified as 'biodiversity' by the 'terrestrial biodiversity map'.</p> <p>When determining applications involving 'biodiversity' land Council is required to consider the following Clause objectives:</p> <ul style="list-style-type: none"> (a) protecting the biological diversity of native fauna and flora, and (b) protecting ecological processes necessary for their continued existence, and (c) encouraging the recovery of threatened species, communities and populations and their habitats. <p>And, additional provisions:</p> <ul style="list-style-type: none"> (a) the development is designed and will be located and managed to avoid any potential adverse environmental impact, or (b) if a potential adverse environmental impact cannot be avoided, the development: <ul style="list-style-type: none"> (i) is designed and located so as to have minimum adverse impact, and (ii) incorporates effective measures to remedy or mitigate any adverse impact caused. <p>The proposed development involves the continuation of quarrying and associated operations on previously disturbed land, and this use of the land has been</p>	YES

	<p>previously approved by Council following an assessment of the environmental impacts of this development and use of the site.</p> <p>The development conditions of consent related to the management of environmental impacts associated with the operation are to be updated to ensure that activities carried out at the site are carried out in accordance with best practice requirements.</p>	
7.6 Earthworks	<p>Clause 7.6(3) provides a number of matters which a consent authority is required to consider prior to granting development consent to development involving earthworks. Each of the relevant matters have been listed and commented on below.</p> <p><i>(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:</i></p> <ul style="list-style-type: none"> <i>(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,</i> <i>(b) the effect of the development on the likely future use or redevelopment of the land,</i> <i>(c) the quality of the fill or the soil to be excavated, or both,</i> <i>(d) the effect of the development on the existing and likely amenity of adjoining properties,</i> <i>(e) the source of any fill material and the destination of any excavated material,</i> <i>(f) the likelihood of disturbing relics,</i> <i>(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,</i> <p>The proposed development would involve the carrying out of earthworks in accordance with Council, NSW EPA requirements, and the current stormwater and erosion sediment control management plan requirements. Where these works are carried out in accordance with these requirements it is considered that they would be in accordance with the Clause requirements.</p>	Yes

State Environmental Planning Policy No 33 Hazardous and Offensive Development:

The potentially hazardous and offensive nature of the proposed development and the dangerous goods to be stored and/or used on-site were considered as part of the EIS submitted with the original DA 342/2002. This investigation found that the proposed development was not likely to present any significant hazard risk beyond the site's boundaries and that the operation would not be particularly offensive where carried out in accordance with EPA requirements.

This development application does not seek approval for the change to site operations by increasing its intensity or disturbance footprint. Accordingly the factors which inform the classification of the development as a hazardous or offensive development will not be subject to significant change as part of this modification. Accordingly, Council Officers are satisfied that the proposed development is unlikely to comprise a hazardous or offensive development where it is carried out in accordance with existing requirements.

State Environmental Planning Policy No 44 Koala Habitat Protection:

This SEPP aims to encourage the protection of areas of natural vegetation that provide habitat for koalas and applies to development applications in the Muswellbrook LGA with involve land with an area greater than 1ha.

The potential for koala habitats to exist at the site was considered as part of the EIS submitted with DA 342/2002. This investigation found that the subject site 'does not constitute a core koala habitat as defined under SEPP 44.'

Since the granting of development consent under DA 342/2002 the site has been subject to disturbance associated with the carrying out of quarry operations on the land. It is unlikely that there has been any significant change to the distribution of flora and fauna on the site following this investigation and during this period of disturbance which would cause for the site to be classified as a core koala habitat under the provisions of this SEPP.

Accordingly, Council Officers are satisfied that the development may proceed without the need for further investigations into koala populations or the preparation of a plan of management in accordance with the SEPP.

State Environmental Planning Policy No. 55 – Remediation of Land:

Under Clause 7 of this SEPP a consent authority must not consent to the carrying out of any development on land unless:

- (a) It has considered whether the land is contaminated, and*
- (b) If the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

It is noted that the site has been used in an industrial capacity for a long period. However, for the duration of this operation the site has been required to comply with Environmental Protection License requirements imposed by the NSW EPA. Council Officers are satisfied that the site is unlikely to be subject to any substantial contamination which requires remediation for this application to be supported.

In view of the above considerations Council Officers are satisfied that the proposed development is unlikely to be subject to any contamination requiring remediation under this SEPP should the development application be approved.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

This SEPP specifies additional provisions relevant to the assessment of development applications involving extractive industries. The provisions of this SEPP also take precedence over the provisions of any other planning instrument where there is any inconsistency between the provisions of the relevant instrument or instruments and the SEPP. The SEPP applies to any development involving an extractive industry.

Part 2 Permissible Development

Relevant to this development application are the permissible development provisions of the SEPP specified by Clause 7. Clause 7(4) allows for the carrying out of a range of additional

development with consent on land which an extractive industry is being carried out. The provisions of this clause are as follows:

(4) Co-location of industry

If extractive industry is being carried out with development consent on any land, development for any of the following purposes may also be carried out with development consent on that land:

- (a) the processing of extractive material,*
- (b) the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,*
- (c) facilities for the processing or transport of extractive material,*
- (d) concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix.*

As previously discussed, the modification of this development consent involves the consolidation of a development consent previously approved for the operation of a concrete batching plant (DA 96/2017) into this development consent.

The establishment of this concrete batching plant at the site is viewed as a permissible development by virtue of the SEPP, as a concrete works that produces pre-mixed concrete.

Part 3 Matters for Consideration

This Part of the SEPP prescribes a range of matters that a consent authority must take into consideration when determining a development application to which the SEPP relates. The relevant matters for consideration prescribed by Part 3 have been considered and commented on in the table below.

Table 2 – SEPP (Mining, Petroleum Production and Extractive Industries) 2007 Matters for consideration

<u>SEPP CLAUSE</u>	<u>PLANNING CONSIDERATION</u>	<u>COMPATIBLE WITH</u>
12AB Non-discretionary development standards for mining	This clause applies to development applications involving mining. The proposed development involves an extractive industry and does not fall within the mining land use classification. Accordingly the provisions of this clause are not relevant to the assessment of this development application.	NA
12 Compatibility of proposed mine, petroleum production or extractive industry with other land uses	<p>This Clause requires a consent authority to consider the following provisions when determining an application for an extractive industry</p> <p><i>Before determining an application for consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must:</i></p> <ul style="list-style-type: none"> <i>(a) consider:</i> <ul style="list-style-type: none"> <i>(i) the existing uses and approved uses of land in the vicinity of the development, and</i> <i>(ii) whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and</i> <i>(iii) any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and</i> <i>(b) evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a) (i) and (ii), and</i> <i>(c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii).</i> <p><u>Planning Comment:</u></p>	YES

	<p>The land subject to this application adjoins rural and environmental management zoned land and the operational area of the Bayswater and Liddell Power Stations.</p> <p>The extractive industry subject to this modification application has been operating at the site since 2005. During that period the current land uses of adjoining properties have continued to be carried on neighbouring properties. Accordingly, it is considered that the proposed development is not incompatible with adjoining land uses and that it would remain compatible with adjoining land uses where it is carried out in accordance with the conditions of consent and the EPA's Environmental Protection License requirements.</p>	
12A Consideration of voluntary land acquisition and mitigation policy	The proposed development does not involve a 'state significant' development application. Accordingly, the provisions of this Clause do not relate to the assessment of this application.	NA
13 Compatibility of proposed development with mining, petroleum production or extractive industry	<p>The provisions of this clause apply to development for the purpose of extractive industries where that development is located on land that is:</p> <ul style="list-style-type: none"> (a) <i>in the vicinity of an existing mine, petroleum production facility or extractive industry, or</i> (b) <i>identified on a map (being a map that is approved and signed by the Minister and copies of which are deposited in the head office of the Department and publicly available on the Department's website) as being the location of State or regionally significant resources of minerals, petroleum or extractive materials, or</i> (c) <i>identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials.</i> <p>The proposed development is not located in any of the areas specified above. Accordingly, the provisions of this Clause are not relevant to the assessment of the development application. With respect to 13(a) it is noted that there are a large number of existing mines in the Muswellbrook locality. However, there are no mines in the immediate vicinity of the development site.</p>	NA
14 Natural Resource Management	<p>The clause specifically references a need to consider conditions related to managing impacts on significant water resources, threatened species and the minimisation of greenhouse gas emissions.</p> <p><u>Planning Comment</u> The impact of the proposed development on water sources and ecology was considered by the consent authority at the time the original development application was determined. At this time it was considered that the proposed development would not have an adverse impact on either item, and there is no new evidence or information that suggests the proposed development would have a more substantial impact than previously identified. In relation to</p>	Yes

	greenhouse emissions, the proposed modification would extend the operational timeframe of the extractive industry and thereby greenhouse emissions associated with that operation. The operation of the site would not cause a significant amount of greenhouse gas emissions compared to the NSW's overall greenhouse gas emissions. Accordingly, Council Officers are satisfied that the proposed development would not conflict with this clause of the SEPP and can be supported without the need for any additional conditions to be imposed.	
15 Resource Recovery	This modification application seeks approval for the continued extraction of gravel from the site. Council was provided with information regarding the quantity and plans for the extraction of this material at the site and it has no concerns with the efficiency of extraction processes.	Yes
16 Transport	The proposed development has been reviewed by the NSW RMS and Council's Community Infrastructure Roads and Drainage Team. No objection was raised in relation to the proposed development. Comments provided in response to these referrals have also been considered under the referrals section of this report and incorporated into conditions of consent where appropriate.	Yes
17 Rehabilitation	This clause specifies the following: <ol style="list-style-type: none"> (1) <i>Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.</i> (2) <i>In particular, the consent authority must consider whether conditions of the consent should:</i> <ol style="list-style-type: none"> (a) <i>require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated, or</i> (b) <i>require waste generated by the development or the rehabilitation to be dealt with appropriately, or</i> (c) <i>require any soil contaminated as a result of the development to be remediated in accordance with relevant guidelines (including guidelines under clause 3 of Schedule 6 to the Act and the Contaminated Land Management Act 1997), or</i> (d) <i>require steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation, does not jeopardize public safety.</i> <p><u>Planning comment:</u> A rehabilitation management plan has been submitted for the site as part of this section 4.55(2) modification application. The proponent will be required to carry out rehabilitation of the site in accordance with this document, the EIS and the quarries Environmental management Plan.</p>	Yes

The proposed development does not meet the criteria of a 'State Significant Development' application and as a modification to an approved development does not comprise a designated development application that would require approval from the Regional Planning Panel as 'Regionally Significant Development'. Although new extractive industries are categorised as regionally significant development it is understood that Council remains the consent authority for this modification as it was the consent authority for the development application subject to the modification application at the time that application was determined.

Section 4.15(1)(a)(ii) the provisions of any draft EPI.

There are no draft EPIs relevant to the subject Application.

Section 4.15(1)(a)(iii) the provisions of any development control plan

Section 11 – Extractive industry

This section of the DCP establishes the minimum information and operational requirements for an application involving the establishment of an extractive industry. This modification would not alter the quarry footprint or operational intensity. The only proposed change to the operation would be the extension of the approved lifetime of the sites operation.

Considering that limited changes to the existing approved operation Council Officers are satisfied that the changes to the approved development proposed would not contravene the relevant DCP requirements.

Section 94 Contributions Plan 2001

The development consent issued by Council for the approval of the development application for the establishment of the extractive industry included conditions relating to the payment of Section 94 contributions for the development.

Conditions 12 and 13 required the applicant to enter into an agreement for the payment of section 94 contributions and the submission of tonnage details to inform the calculation of relevant contributions.

Council's 2001 Section 94 Plan includes the provision of a Section 94 contribution on extractive industries determined on a case by case basis based on the impact of the development on the road network.

The agreement between Council and the applicant related to condition 12 of the consent has set the contribution for the operation of the premises at \$0.30 per tonne. The proposed development was referred to Council's Community Infrastructure Roads and Drainage Team who raised no issue with the existing rate of contributions paid by the operator of the development. Council's Mining Liaison Officer has recommended that CPI be applied to the rate of contributions paid to Council from March 2020. The relevant Section 94 condition has been modified to reflect this recommendation.

Section 94A Contributions Plan 2009

The provisions of the EP&A Act 1979 prevent a consent authority from imposing a condition requiring the payment of a Section 94A contribution on a development subject to a condition requiring the payment of a Section 94 Contribution.

Section 4.15(1)(a)(iiia) the provisions of any planning agreement

Council Officers are not aware of any voluntary planning agreements that relate to this development application or the subject site.

Section 4.15(1)(a)(iv) the provisions of the regulations

Division 8A of the Environmental Planning and Assessment Regulation 2000 applies to the development.

Section 4.15(1)(a)(v) the provisions of any coastal zone management plan

This item is not relevant to the subject Application. The Application does not relate to a coastal area.

Section 4.15(1)(b) the likely impacts of that development

In its original determination of the development applications for the extractive industry and concrete batching plant, Council considered the likely environmental impacts associated with the development, and in both cases determined these impacts to be acceptable to support the granting of development consent subject to conditions. This proposed development does not seek to modify the operational processes, disturbance footprint or operational intensity of either the quarry or concrete batching plant. The only change is the extension of the period that both activities are approved to operate at the site. The environmental impacts associated with the development will remain relatively unchanged, save that they would occur at the site over a longer period.

Council Officers are satisfied that the proposed development is unlikely to result in any substantive environmental impacts that would support a decision to refuse the development application. It is recommended that the conditions of consent surrounding the operation of the premises be updated where appropriate.

Section 4.15(1)(c) the suitability of the site for the development

It is considered that the development is compatible with surrounding land uses and site characteristics, subject to consent conditions.

Section 4.15(1)(d) any submissions made

The proposed Section 4.55 modification was publically notified and advertised on two occasions.

The modification was originally notified from the 5 March 2018 to the 28 March 2018. No submissions were received by Council in relation to the application through this notification period.

Following the receipt of additional information, the proposed development was re-notified to neighbouring property owners between the 28 November 2018 and the 13 December 2018. At the request of an interested adjoining land-owner, this notification period was extended until the 8 January 2019. Council received one submission through this notification period and a second submission following the conclusion of the notification period.

The matters raised by the submitters have informed Council's Assessment of the development application and some additional conditions of consent have been proposed or modified to mitigate some of the concerns raised.

Table 3 – Submitter Concerns

<u>Submitter Concerns</u>	<u>Planning Comment</u>
Concern regarding the use of exhaust brakes at the site and noise generated by the use of	The EPA have issued an Environmental Protection License for the operation of the

<p>these brakes.</p>	<p>site which includes requirements related to noise emissions. The issues raised in the submission were communicated to the applicant, who advised that they would accept a new condition to limit the use of exhaust braking at the site and educate drivers on this requirement.</p> <p>A new condition of consent has been recommended to limit exhaust braking and educate operators on this requirement has been recommended in accordance with the mitigation measures put forward by the applicant.</p>
<p>Concern relating to the right of way and the safety of the sharing of the site access between operational quarry vehicles and the light vehicles used by neighbouring residents.</p>	<p>Grasstree Ridge Road is a right of way, that exists over the land the quarry operates on, which benefits three (3) properties to the rear of the site, on which dwellings are located.</p> <p>The right of way was established prior to the 2004 approval of the quarry.</p> <p>Under the conditions of consent imposed on the original quarry, site access was required to be constructed to a standard approved by Council and the NSW RMS.</p> <p>Further improvements to the haul road were required in the approval for the concrete batching plant (DA 96/2017). This requirement has been retained.</p> <p>Council's Community Infrastructure Department raised no issue with the site access arrangements. Recommendations were put forward to improve the safety of parts of the right of way shared by both light and heavy vehicles. A condition of consent has been recommended requiring the design and implementation of line marking improvements and any related traffic signs for the length of the site access from the New England Highway to the concrete batching plant.</p>
<p>Concern regarding the return of unused concrete and the possibility of concrete trucks being washed down at the site.</p>	<p>Under the proposed modification it is recommended that the concrete batching plant remain subject to the operational conditions imposed on DA 96/2017. The operation of the site will also be subject to the EPA's Environmental Protection License and the provisions of the PoEO Act 1993 that prevent land pollution.</p> <p>In the event that the operator does not comply with their operating requirements, and dumps waste at the site, or washes</p>

	<p>down vehicles outside of any approved wash bay, regulator action may be taken by the EPA or Council.</p> <p>As an additional measure to prevent and manage pollution at the site, Council's Mining Liaison Officer has recommended a condition of consent requiring the preparation of a pollution incident response management plan.</p>
Vehicles leaving the site regularly breach the no-right turn restriction imposed by the consent	<p>The conditions of the existing approval restrict heavy vehicles from leaving the site by making right hand turns. This requirement will be maintained in any modified consent.</p> <p>Staff have raised the issue of right hand vehicle turns being carried out at the site with the site operator, who has advised Council that drivers are educated on their responsibility not to make right turns.</p> <p>Council has the opportunity to undertake compliance inspections or investigations and take regulatory action against the operator for non-compliance with this condition.</p>
Concern about the accuracy of a statement in the SEE indicating no trucks will use Grass Tree Ridge Road, as access to the site from the New England Highway is from Grass Tree Ridge Road.	<p>The quarry site has direct access to the New England Highway via Grass Tree Ridge Road. Grass Tree Ridge Road is located on land owned and operated by the quarry, and was constructed by the Quarry operator, as required by conditions of consent. The SEE may have meant to refer to the Grass Tree ROW which connects with Muscle Creek Road.</p> <p>The quarry and concrete batching plant will be required to operate in accordance with the submitted traffic impact assessment and recommended conditions of consent which restrict vehicles from leaving the site other than by the New England Highway intersection.</p>
The safety of a residential dwelling being located on land in the ownership and operation of the quarry	<p>The dwelling is currently occupied by the owner and operator of the quarry as a caretakers residence. There is no new information that has caused the Assessing Officer to form a view that it is inappropriate to have a dwelling on the land. The dwelling is not located the part of the site actively used for quarrying and, as previously stated, that it is occupied by the quarry owner/operator.</p>
The location of a dam in the ownership of the quarry in relation to the neighbouring property and the restriction of runoff to neighbouring properties due to the location	<p>The dams are part of the water management system for the site. The quarry site slopes toward the New England Highway and it is unlikely that the location of the dams would</p>

of this dam.	significantly affect water availability to neighbouring sites. No new dams are proposed as part of this application, though some improvements to stormwater management have been proposed by the Stormwater and Erosion Sediment Control Management Plan.
--------------	---

Section 4.15(1)(e) the public interest.

The proposed modification is viewed as being compatible with the public interest. The proposal will extend the operational lifetime of an existing approved extractive industry and concrete batching plant, and support local economic activity and employment opportunities. Conditions of consent have been updated in accordance with recommendations from Council's Mining Liaison Officer to ensure the operation is carried out in accordance with current industry best practice.

5 CONCLUSION

This section 4.55(2) modification has been assessed under the relevant provisions of Section 4.55 of the EP&A Act 1979 and the alterations to the approved development considered against the relevant considerations prescribed by Section 4.15 of the EP&A Act 1979.

In view of the relevant considerations it is recommended that Council grant development consent to this section 4.55 modification subject to the recommended conditions of consent.

Section 4.55(2) DA 342/2002 – Recommended Modifications to the conditions of consent

PLANNING MATTERS:

1. The development must be undertaken **generally** in accordance with the proposal contained in:
 - a) The development application DA 342/2002, as amended by the Section 96 modification application submitted to Council dated 2nd April 2007.
 - b) The accompanying document titled “Proposed Gravel Quarry and Plant Hire Operation, Lot 30 DP 815308, Grasstree Ridge Road, Shire of Muswellbrook, Environmental Impact Statement” dated 25th October 2002.
 - c) The document titled “Response to Submissions from the Exhibition of the Environmental Impact Statement” dated 5th May 2003.
 - d) The facsimile and attached diagrams to Council from Wild Plant Hire dated 27th May 2004.
 - e) The report to Council dated 8th June 2004.
 - f) Boundary adjustment plan prepared by MM Hyndes Bailey dated 19 September 2016, reference 216175/2
 - g) The document titled “Wild Quarries and Civil – Continued Quarry and Concrete Batching Operations and Consent Amalgamation” SEE dated 15th Oct 2018 by RPS. The
 - h) The document titled Erosion and Stormwater Management Plan prepared by Steve Eccles Consulting, dated 8 October 2018 and included as Attachment D to the 15 October 2018 SEE.
 - i) The document titled Rehabilitation Management Plan prepared by Steve Eccles Consulting, dated 8 October 2018 and included as Attachment D to the 15 October 2018 SEE.
 - j) RPS additional information letter dated 10 December 2018.
 - k) The document titled Statement of Environmental Effects by Casson Planning and Development Services dated August 2016.
 - l) The document titled Air Quality Assessment by Todoroski Air Sciences dated 14th December 2016.
 - m) The document titled Noise Impact Assessment by Global Acoustics dated 20th December 2016.
 - n) The document titled Waste Management Plan by RPS dated December 2016.
 - o) The document titled Water Management Plan by RPS dated December 2016.
 - p) Site Plan (Batch Plant) – aerial drawn by Global Acoustics undated.
 - q) Site Plan (Batch Plant) by RPS undated.
 - r) The Traffic Impact Assessment prepared by Pavey Consulting Services dated 15 November 2018

Unless otherwise specified in the terms of this development consent.

2. The consent shall lapse on 31 January 2040. All works associated with the development, including rehabilitation of the site, shall be completed by the date the consent lapses. If operation is required beyond this point, a new development application is to be submitted with sufficient time to be assessed and determined prior to the lapse date.

3. The Applicant shall lodge a bond or bank guarantee with Council in assurance that all conditions are fully complied with and the requirements of the rehabilitation management plan complied with in full at the conclusion of the premises operation.

In the event that conditions are not adhered to, operations will cease on notification by Council and not recommence until such conditions have been complied with.

The value of the bond or bank guarantee is to be adjusted for inflation every five (5) years from the 30 March 2020 in line with the Consumer Price (All Ordinaries) Index.

The minimum value of the bond or bank guarantee is to be \$75,000. The bond or bank guarantee is to be adjusted for inflation by reference to the Consumer Price (All Ordinances) Index every five (5) years from the 30 March 2020 from the \$75,000 minimum value and a revised bond or bank guarantee provided.

4. The Applicant shall not produce or transport more than 100,000 tonnes of material from and to the site per year. Should the Applicant wish to produce or transport more than 100,000 tonnes per year, separate application shall be made to Council.

Hours of Operation:

5. The use of plant and equipment and site operations at the quarry and concrete batching plant shall be restricted to the hours of:

Monday to Friday: **7am – 5pm**
Saturdays: **7am – 1pm**
Sundays and Public Holidays: **No operations**

The use of plant and equipment and site operations at the plant hire operation shall be restricted to the hours of:

Monday to Friday: **7am – 3pm**
Saturdays: **7am – 1pm**
Sundays and Public Holidays: **No operations**

The start-up of vehicles or attendance on site by contractors or employees must not be undertaken outside of these hours.

Environmental Management Plans and Environmental Reporting:

6. Prior to the commencement of construction, the Applicant shall prepare an Environmental Management Plan for approval by Council. The Plan is to reflect modifications made via the Section 96 applications dated 2nd April 2007 and 28th February 2018, the RPS SEE, and the Concrete Batch Plant.

The Plan shall include, but not be limited to:

- a) Environmental management practices to be implemented at the site, including erosion and sediment control, water management, Batch plant water management, waste water management, landscaping, dust management, noise management, visual treatments, rehabilitation, complaints procedures. Storm water management is to be managed in accordance with “Managing Urban Stormwater – Soils and Construction”.

- b) Environmental monitoring program to be developed and implemented.
7. The applicant is to prepare a Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must be developed in accordance with the requirements in Part 5.7 A of the POEO Act or equivalent. The Applicant must keep the PIRMP on the premises at all times. The PIRMP must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire that may occur at the premises, or may be associated with activities that occur at the premises, and which are likely to cause harm to the environment). The PIRMP must be tested at least annually or following a pollution incident.
8. An Annual Environmental Management Report is to be submitted to Muswellbrook Shire Council by 31st January each year covering the preceding calendar year. The report is to, at a minimum, include:
- a) Production quantities for the year
 - b) The implementation and effectiveness of environmental controls
 - c) Details on erosion and sediment control measures undertaken to minimise soil erosion and runoff
 - d) Details on dust control measures undertaken to minimise dust generated on site, including the results of dust monitoring and weather monitoring undertaken
 - e) Details of noise impacts associated with the development, including results of noise monitoring undertaken
 - f) Details on rehabilitation activities undertaken in the preceding 12 months
 - g) Details of any complaints received, identifying the source of the complaints and the actions taken to rectify the situation.
 - h) Details of production tonnages from the concrete batching plant.
9. All management plans required by this approval are to be submitted to and approved by Council. Management plans are to be reviewed and provided to Council for approval every 3 years from the date of the previous management plan approval.
10. The person acting with this consent shall ensure that the development is carried out in accordance with the Rehabilitation Management Plan referenced in condition 1 and that this document is regularly updated in accordance with the following criteria
- (a) The rehabilitation management strategy is to be reviewed every 3 years from the date of the previous management plan approval and provided to Council for approval. The Rehabilitation Management Plan must:
 - i) Be prepared by a suitably qualified and experienced person;
 - ii) Build upon the site rehabilitation and land use outcomes expressed in the Rehabilitation Management Plan approved at the time of any revision;
 - iii) Identify the future land use or uses for the site and a reference site for each such use;
 - iv) Describe the measures to be implemented to ensure that the land is rehabilitated to the standard required to support its future use;
 - v) Include a staging plan for the progressive rehabilitation of the site;
 - vi) Include a weed management strategy to control the spread of weeds within the site, and particularly in relation to rehabilitated areas; and
 - vii) Include a closure plan outlining the removal of any non-essential infrastructure.

Section 94 Contributions:

11. Prior to the commencement of commercial operations, the Applicant shall enter into an agreement with Muswellbrook Shire Council regarding appropriate Section 94 Contributions for road maintenance in accordance with Council's DCP 7, Section 94 Contributions Plan. CPI is to be applied to all Section 94 Contributions commencing 30 March 2020.
12. Section 94 contributions and submission of tonnage details are to be provided to Council on a quarterly basis as requested by Council.

Access and Transport:

13. The Applicant shall, to the satisfaction of Council, undertake dust control measures in carrying out excavation, transport, rehabilitation, rehabilitation and operation of the concrete batching plant, including the use of water trucks and water spraying of working areas and roads (including the haul road).
14. The Applicant shall install and maintain truck warning signs on both approaches to the haul road on Grasstree Ridge Road. Truck warning signs are to also be installed and maintained on the southern bound lane of the New England Highway.
15. The Applicant shall seal the private haul road from the agreed intersection point with Grasstree Ridge Road (as defined in the information submitted to Council from Wild Plant Hire dated 27th May 2004) to a point at least 10 metres past the access road to the machinery shed. A shaker grid is to be installed at the end of this sealed section. The sealing shall be undertaken and maintained to Council's satisfaction.
16. The Applicant shall provide a two lane sealed access road from the intersection with the New England Highway, to a point 10 metres (at a minimum) past the intersection of Grasstree Ridge Road and the private haul road. A secured pedestrian access shall also be provided adjacent to the two lane sealed access Road. The sealing shall be undertaken and maintained to Council's satisfaction. The applicant shall install regulatory signage banning the right turn movements out of the site onto the New England Highway for vehicles over 5 tonnes. Heavy vehicles are not permitted to turn right onto the highway at any time.
17. The Applicant is to erect a stop sign on the haul road at its intersection with the Grasstree Ridge Road. Grasstree Ridge Road is to remain as the priority road.
18. No more than 80 truck movements per day are permitted to and from the site. This is to include quarry trucks, concrete batching plant trucks and trucks importing or transferring material to or from the site.
19. All loading and unloading operations shall be carried out wholly within the confines of the site at all times and within loading bays designated on the approved plans where relevant.
20. The Applicant is to install, maintain and operate a weighbridge or other approved weighing device at the site to ensure proper recording of tonnages being transported.
21. The Applicant shall permanently close off the western access road from the Grasstree Ridge Road to the existing machinery shed prior to site operations commencing, and install a 1 metre high fully landscaped bund wall parallel to the

ROW from the haul road intersection to an approved (by Council) point east of the machinery shed.

Environmental Matters:

22. All plants and trees used in landscaping/screening works shall be watered by a suitable irrigation system maintained in good working order at all times.
23. No more than 10 hectares of land shall be disturbed at any time in the quarry area. and in the working area / base of the extraction site.
24. Only clean fill is to be brought onto the site for rehabilitation purposes.
25. The Applicant shall dispose of all solid waste and putrescible matter from the site in accordance with EPA guidelines and industry best practice.
26. Prior to the commencement of construction, the Applicant shall establish, to the satisfaction of Council, a conservation agreement and management plan for the land within Lot 30 DP 815308 not included in the defined construction or operational activities for the development (as detailed in the DA and EIS). The conservation area will ensure that the remaining flora and fauna and aboriginal heritage values are managed for biodiversity and conservation purposes.
27. Except as may be expressly provided under the Protection of the Environment Operations Act 1997, in relation to the development, Section 120 of the Protection of the Environment Operations Act 1997 must be complied with in connection with the carrying out of the development.
28. The premises must be maintained in a condition which minimizes or prevents the emission of dust from the site:
 - a) Trucks entering and leaving the premises that are carrying loads that include dust generating materials, including gravel or soil, must have their loads covered at all times, except during loading and unloading.
29. The applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and reasonable to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

Blasting:

30. Muswellbrook Shire Council, and the occupiers of buildings located within 2kms of the quarry, are to be advised one (1) week prior to each blast event, including any changes to blasting schedules. In the event of blast failure, the Applicant is to reschedule the blast at a time to be notified to residents in accordance with this clause.

31. Use of Grasstree Ridge Road is to be permitted during blasting, in consultation with Council and potentially affected residents, and in accordance with the Blast Management Plan.
32. The Applicant shall prepare and implement a Blasting/Vibration Management Plan to the satisfaction of Council, prior to the commencement of any blasting. This Plan is to be reviewed and updated within 3 years of the most recently approved Blasting/Vibration Management Plan. The Plan must include, but not be limited to, the following matters:
 - a) compliance standards
 - b) blast limits
 - c) restriction of blasting during adverse conditions
 - d) monitoring methods and program
 - e) monitoring program for flyrock distribution
 - f) procedures for the notification of occupiers of buildings and residents prior to detonation of each blast
 - g) measures to ensure no damage by flyrock to people, property, livestock and powerlines / other utilities.
33. No more than 8 blasts are to occur per year.
34. No explosives are to be stored on site at any time.

Noise Management:

35. The operator is to manage the site to minimise the generation of noise from the site, and to operate in accordance with the Environmental Management Plan. Should a complaint be received by the applicant or Council, actions are to be taken as outlined in the PIRMP for the site.
36. In the event that a landowner or occupier of a property located within 2kms of the excavation site or concrete batching plant considers that noise from the development is excessive, and Muswellbrook Shire Council is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request:
 - a) consult with the landowner or occupant affected to determine his / her concerns;
 - b) make arrangements and bear the costs of appropriate independent noise investigations to the satisfaction of Council, to quantify the impact and noise levels of the development at the property.
 - c) Implement appropriate noise mitigation measures and conduct follow up investigations to the satisfaction of Council to quantify the noise levels following the implementation of mitigative measures;
 - d) If the independent noise investigations referred to in condition 39(a) confirm that noise from the development is excessive and the mitigative measures in condition 39(c) do not reduce noise levels to a level acceptable to Council, the operation is to cease until satisfactory noise levels are achieved.
37. The operator is required to install noise alarms (quakers) on all mobile equipment where a reversing alarm is required.
38. Trucks entering and leaving the site are to limit exhaust breaking. If exhaust brakes are to be used, they shall be set to the lowest setting to minimise any impacts to surrounding receivers, and drivers are to be educated on the use of exhaust breaks.

Additional Operational Conditions Associated with the Concrete Batching Plant

39. The applicant shall arrange for a minimum 5m wide two coat bitumen seal of the access way from the existing office to the concrete batching plant.
40. Unless otherwise approved by the Environmental Protection Authorities Environmental Protection License noise generated by Concrete Batch Plant Operations must not exceed the limits outlined in the Global Acoustics Noise Impact Assessment Report, dated 20th December 2016 being:

	Day Laeq (15 minute)
R1 to R7	43
R8	36

Government Agency Requirements:

ENVIRONMENT PROTECTION AUTHORITY GENERAL TERMS OF APPROVAL AS SETOUT IN CORRESPONDANCE DATED 20 FEBRUARY 2019:

41. Activities at the premises must only be carried out between the hours of 7.00am and 5.00pm Monday to Friday, and 7.00am and 1.00pm Saturday, and at no time on Sundays and Public Holidays.
42. The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.
43. Activities occurring at the premises must be carried out in a manner that will minimize emissions of dust from the premises.
44. Offensive blast fume must not be emitted from the premises.
45. All above ground tanks containing a material that is likely to cause environmental harm must be bunded or have an alternative spill containment system.
46. Except as expressly provided by these General Terms of Approval, works and activities must be carried out in accordance with the proposal contained in:
- The development application 342/2002 submitted to Muswellbrook Shire Council on 28 February 2018;
 - Statement of Environmental Effects titled *Wild Quarries Civil – Continued Quarry and Concrete Batching Operations and Consent Amalgamation* relating to the development; and
 - Wild Quarries, proposed concrete batching plant Noise Impact Assessment prepared by Wild Quarries and Civil Pty Ltd by Global Acoustics, reference number 16356-R01 dated 20 December 2016.

NSW ROADS AND MARATIME SERVICES COMMENT

47. The property has a common boundary with the New England Highway (HW9) which has been declared as Controlled Access Road by notification in Government Gazette No 139 of 26/09/1980 Folio 4961. Direct access across this boundary is restricted.

Access with consent has been provided (9.14m) at the location of the existing driveway.

Council's Community Infrastructure Department Requirements

48. The main internal access to the quarry and concrete batching plant is to be maintained as a sealed access bitumen access at all times.
49. A line marking plan must be prepared detailing holding lines and give way lines and submitted to Muswellbrook Shire Council for approval within 3 months of the determination of the Section 4.55(2) modification. The line marking plan must:
- Detail traffic safety line marking to be installed along the length of the sealed vehicle access from the New England Highway the concrete batching plant site
 - Include holding lines to be installed at the crest of the hill where the right hand turn for vehicles toward the concrete batching plant is located.
 - Identify any additional traffic safety and warning signs to advise drivers of hazards or driving requirements.

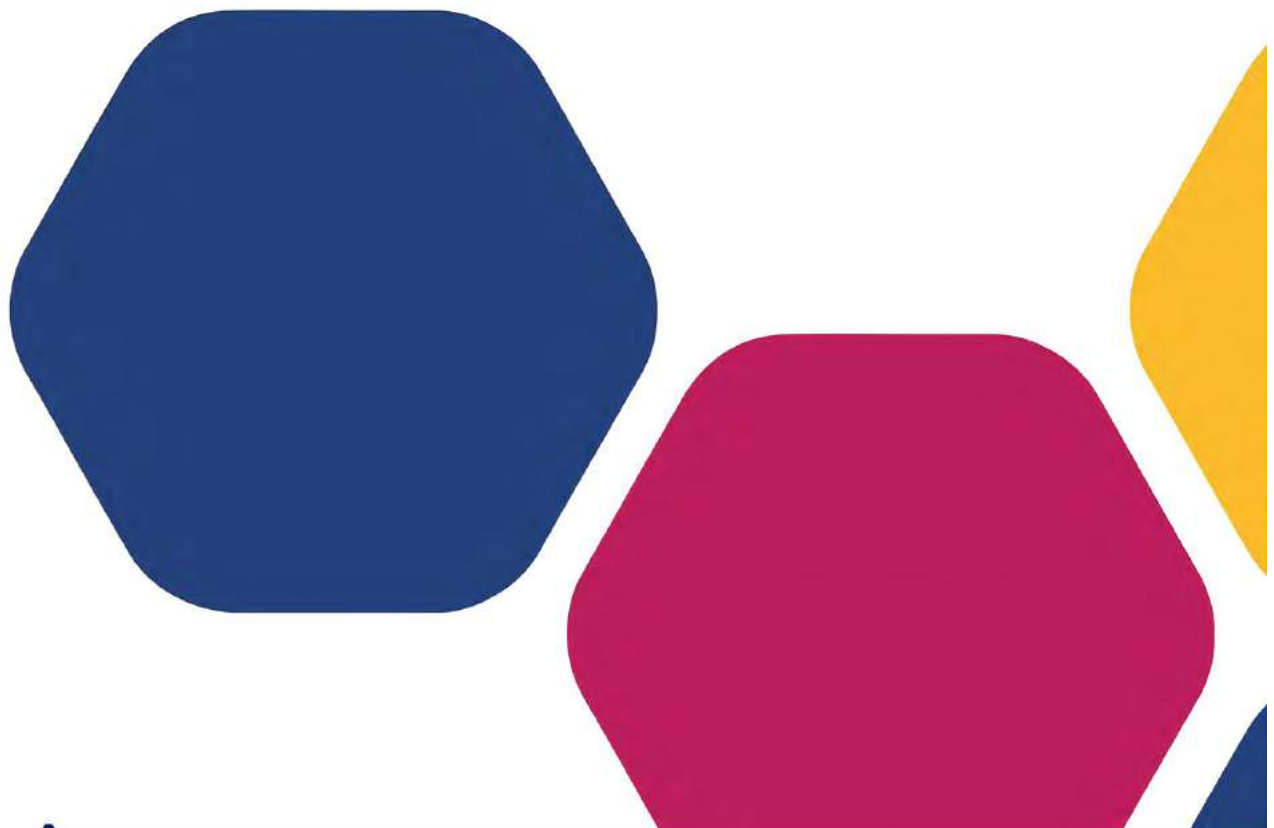
All line marking shown on the approved plan is to be installed maintained at the site by the operator of the development.

RPS

15 OCTOBER 2018

Wild Quarries and Civil - Continued Quarry and Concrete Batching Operations and Consent Amalgamation

Statement of Environmental Effects



rpsgroup.com.au

Report

RPS

Document status

Version	Purpose of document	Authored by	Reviewed by	Review date
1	Draft for review	Shaun Smith	Andrew Biller	15.10.2018
2	Final for client issue	Shaun Smith	Rob Dwyer	15.10.2018

Approval for issue

Name	Signature	Date
Shaun Smith		15.10.2018

This report was prepared by RPS Australia East Pty Ltd ('RPS') within the terms of its engagement and in direct response to a scope of services. This report is strictly limited to the purpose and the facts and matters stated in it and does not apply directly or indirectly and must not be used for any other application, purpose, use or matter. In preparing the report, RPS may have relied upon information provided to it at the time by other parties. RPS accepts no responsibility as to the accuracy or completeness of information provided by those parties at the time of preparing the report. The report does not take into account any changes in information that may have occurred since the publication of the report. If the information relied upon is subsequently determined to be false, inaccurate or incomplete then it is possible that the observations and conclusions expressed in the report may have changed. RPS does not warrant the contents of this report and shall not assume any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report howsoever. No part of this report, its attachments or appendices may be reproduced by any process without the written consent of RPS. All enquiries should be directed to RPS.

Prepared by:	RPS AUSTRALIA EAST PTY LTD Unit 2A, 45 Fitzroy Street Carrington, NSW 2294 Australia PO Box 120, Carrington NSW 2294	Prepared for:	WILD QUARRIES AND CIVIL PTY LTD 8440 New England Highway Muswellbrook NSW 2333 Australia
T:	+61 2 4940 4200	T:	02 65 411 828
E:	shaun.smith@rpsgroup.com.au	E:	patrick@wildgroup.com.au
		W:	www.wildquarriesandcivil.com.au
Author:	Shaun Smith		
Reviewed:	Andrew Biller		
Approved:	Shaun Smith		
No.:	PR142135-1		
Version:	2		
Date:	15 October 2018		

Contents

1	INTRODUCTION.....	6
1.1	Background	6
1.2	Site History	6
1.3	The Proposed Activity	9
1.4	The Applicant.....	9
1.5	Site Description	9
1.6	Existing Approved Development.....	9
1.7	Permissibility	10
1.8	Consultation	11
1.9	Consent Authority	11
2	EXISTING ENVIRONMENT	12
2.1.1	Topography	12
2.1.2	Hydrology	12
2.1.3	Flora and Fauna	12
2.1.4	Transport and Access	12
2.1.5	Utilities and Services	12
2.1.6	Surrounding Development	13
3	PROJECT DESCRIPTION.....	14
3.1	Continued Quarry and Plant Hire Operations	14
3.1.1	Description	14
3.1.2	Market Assessment.....	19
3.1.3	Resource Estimate and Extended Operational Life	19
3.1.4	Staging and Quarrying	19
3.1.5	Equipment	19
3.1.6	Truck Movements.....	20
3.1.7	Plant Hire Operations	25
3.1.8	Work Force	25
3.1.9	Hours of Operation	25
3.2	Continued Concrete Batching Operations	26
3.2.1	Description	26
3.2.2	Plant and Equipment.....	26
3.2.3	Site Facilities and Work Area	26
3.2.4	Truck Movements.....	28
3.2.5	Hours of Operation	28
3.3	Proposed Conditions	28
4	PLANNING AND STATUTORY CONSIDERATIONS	29
4.1	Environmental Planning and Assessment Act 1979	29
4.2	State Environmental Planning Policies.....	29
4.2.1	Mining, Petroleum Production and Extractive Industries SEPP 2007.....	29
4.2.2	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development	30
4.2.3	State Environmental Planning Policy No. 44 – Koala Habitat Protection	30

4.3	Muswellbrook Local Environmental Plan 2009	31
4.3.1	Zoning and Permissibility	31
4.4	Muswellbrook Development Control Plan 2009	31
4.5	Other Relevant Environmental Legislation	32
4.5.1	Protection of the Environment Operations Act 1997	32
4.5.2	Section 4.46 of the EP&A Act, 1979	32
5	IMPACT ASSESSMENT	33
5.1	Environment	33
5.1.1	Traffic	33
5.1.2	Noise	33
5.1.3	Dust	34
5.1.4	Visual	34
5.1.5	Flora and Fauna	35
5.1.6	Aboriginal Heritage	36
5.1.7	Erosion and Stormwater Management	37
5.1.8	Rehabilitation	37
5.1.9	Socio-Economic	39
5.1.10	Waste Management	39
6	JUSTIFICATION AND CONCLUSIONS	41

Figures

Figure 1	Site Location	7
Figure 2	Subject Site and Extent of Operations	8
Figure 3	Land Use Zoning	10
Figure 4	Quarry Plan Stage 1	21
Figure 5	Quarry Plan Stage 2	22
Figure 6	Quarry Plan Stage 3	23
Figure 7	Quarry Plan Stage 4	24
Figure 8	Existing Concrete Batch Plant Layout	27

Plates

Plate 1	Site Access and Upgraded Intersection	15
Plate 2	Existing Maintenance Shed and Site Offices	15
Plate 3	Haul Road Entrance from New England Highway	16
Plate 4	Existing Concrete Batching Plant	16
Plate 5	Crushing and Screening Equipment	17
Plate 6	Quarry Face and Raw Material for Processing	17
Plate 7	Erosion and Sediment Control Dam	18
Plate 8	Existing Site Rehabilitation	18



Appendices

Appendix A	Proposed Quarry Conditions
Appendix B	Proposed Concrete Batching Plant Conditions
Appendix C	Carbon Based Environmental Supporting Document
Appendix D	Erosion and Stormwater Management Plan
Appendix E	Rehabilitation Management Plan

1 Introduction

1.1 Background

RPS Australia East Pty Ltd (RPS) act on behalf of Wild Quarries and Civil (the 'Applicant') in preparing the subject Statement of Environmental Effects (SEE) to support an application under Section 4.55 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The modified application seeks to amalgamate the existing consents that permit the operation of a 100,000tpa gravel quarry (DA 342/2002), plant hire operations, and a 30,000tpa concrete batching plant (DA 96/2017) at 8440 New England Highway, Muswellbrook, NSW (the 'site'). The application also seeks to extend the operational life of the quarry operations for an additional 20 years. Activities occur within Lot 30 DP815308 which is part of the Muswellbrook Shire Council Local Government Area (LGA). Access to the site is via Grasstree Ridge Road. The location of the site is shown as **Figure 1** and the extent of the site encompassing both activities is shown as **Figure 2**.

The subject site is located approximately 9 kilometres (km) south-east of Muswellbrook within a rural setting. Smaller rural properties with residences, sheds and dams are located on the western side of the of the New England High. Thomas Mitchell Drive, which meets the New England Highway adjacent to the quarry, provides access to the open cut coal mining operations of Drayton (closed), and Mount Arthur North which are located 2km to the south-west.

Bayswater and Liddell Power Stations, the latter situated on the western shores of Lake Liddell, are located approximately four kilometres south of the site. Land uses associated with the power stations and mining are located to the south west of the site.

This Application and SEE have been prepared in accordance with the provisions of the Environmental Planning and Assessment Act 1979 (EP&A Act) and is submitted to Muswellbrook Shire Council for assessment and consideration accordingly. This SEE provides the following:

- A description of the site and locality
- A description of the development
- Assessment of the relevant environmental planning matters for consideration under Section 4.15 of the EP&A Act, including compliance with environmental planning instruments and development control plans, environmental impacts, site suitability, submissions and public interest
- A conclusion with respect to the development.

1.2 Site History

The site is currently the location of an operating 100,000tpa gravel quarry which was approved in 2004 (DA 342/2002), and a 30,000tpa concrete batching plant which was approved in 2017 (96/2017). Prior to these activities the site was utilised as a depot for a local transport business approved under DA 141/96 and DA 2/97. The site has also been utilised for pastoral grazing activities and some minor quarrying activities. A residential house is also located on the site which is the dwelling of the current and previous landowners.



Figure 1 Site Location



Figure 2 Subject Site and Extent of Operations

1.3 The Proposed Activity

The proposed activities relate to the existing approved 100,000tpa quarry operations and 30,000tpa concrete batch plant activities at the site. This application seeks to continue the current operations at the same intensity and within the same disturbance footprint and extend the life of the quarry by a further 20 years. As part of the continued operations of the site it is also proposed to amalgamate the respective consents for each activity into one consolidated approval. Further detail on the continuation of operations is provided below in **Section 3**.

1.4 The Applicant

This SEE has been prepared on behalf of Wild Quarries and Civil Pty Ltd who own and operate both the quarry and concrete batch plant operations.

1.5 Site Description

The subject site is located within the Muswellbrook Shire Council Local Government Area (LGA) with a property address of 8440 New England Highway, Muswellbrook, NSW and a legal property description of Lot 30 in DP 815308 (refer **Figure 1**). Current operations generally occupy the north-eastern portion of the site, with haul roads connecting active pit areas with the site office and maintenance areas in the north-western portion.

The subject site forms an irregular shaped parcel of land with a site area of approximately 82ha. Approximately 16ha of the site is approved for disturbance as part of the current operations. The site consists of cleared grazing and disturbed woodland areas. A cliff line physically divides the property into two sections, the lower section consists of disturbed woodland with open grazing areas, dams, site office and maintenance shed, while the upper section consists of a residence, shed, open grazing areas, operational quarry pits, and concrete batching plant (refer **Figure 2**).

1.6 Existing Approved Development

DA 342/2002 (as amended)

Existing quarry operations at the site are approved under DA 342/2002 (as modified 2007, 2016, and 2018). Approved activities include the following components:

- Site office, maintenance shed, staff amenities, and associated hard stand areas for equipment maintenance;
- Upgraded intersection of Grasstree Ridge Road with the New England Highway;
- Haul road from Grasstree Ridge Road near the intersection with the New England Highway to the quarry area;
- Equipment and plant hire;
- Crushing and screening of up to 100,000tpa of extracted material over a 20 year period;
- Stockpiling of material on site;
- Haulage of material from the site by 12 to 30 tonne highway trucks;
- Water management and erosion and sediment control structures including dams, culverts, pipes, and pits; and
- Progressive rehabilitation of quarried areas.

DA 96/2017

Existing concrete batching activities at the site are approved under DA 96/2017. Approved activities including the following components:

- A mobile concrete batching plant producing up to 30,000tpa of product per year;
- Cement silo, including cement auger;
- Transit mixer loading area;
- Raw product storage bins;
- Water storage tank;
- 2 x water recycling pits;
- Loadout apron; and
- Site office, light vehicle parking, staff amenities, and equipment laydown area.

1.7 Permissibility

Muswellbrook Local Environment Plan 2009 (MLEP) is the principal local environment planning instrument governing development on the site. The subject site is currently zoned E3 Environmental Management under MLEP 2009 and identified in the zoning map shown as **Figure 3**.



Figure 3 Land Use Zoning

Under zoning E3 extractive industries and concrete batching plants are not permitted uses.

However, prior to the implementation of MLEP in 2009 the site was zoned 1 (a) Rural which did allow for the development of extractive industries on the subject site. The original approval of the quarry operations

occurred in 2004 prior to the site being rezoned. Under the provisions of Section 4.65 of the EP & A Act existing use rights would apply. In this regard, Section 4.65 of the EP & A Act defines existing use as,

'Existing Use' means:

(a) the use of a building, work or land for a lawful purpose immediately before the coming into force of an environmental planning instrument which would, but for this Division, have the effect of prohibiting that use, and

(b) the use of a building, work or land:

(i) for which development consent was granted before the commencement of a provision of an environmental planning instrument having the effect of prohibiting the use

As such the provisions of 'existing use' apply due to the quarry being approved prior to the land zone changing by way of an update to the MLEP.

The approval of the subsequent concrete batch plant operations was permissible through the State Environmental Planning Policy (SEPP) (Mining, Petroleum Production and Extractive Industries) 2007 which allows for the 'co-location of industry' where an approved extractive industry already exists. Industries that are included in the co-location include 'concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix'. Therefore, the concrete batch plant was permissible under SEPP Mining 2007.

1.8 Consultation

Consultation has been undertaken with Scott Brooks from Muswellbrook Shire Council prior to and during the preparation of this SEE. Consultation will continue will Council through the assessment and determination process for the subject application.

1.9 Consent Authority

Muswellbrook Shire Council is the consent authority for the proposed modification.

2 Existing Environment

2.1.1 Topography

The site is physically divided into two sections, the lower section generally consisting of disturbed woodland with open grazing areas and dams, and the upper section consisting of a residence, shed, open grazing areas and areas cleared for various easements. The upper section, divided from the lower by an escarpment and steeper slopes, rises to 292 metres. The lower section, near Maidswater Creek and the New England Highway, is approximately 180 metres in elevation. The steep slope dividing the two sections of the property, which forms the southwestern boundary of the quarry, is between 220 and 270 metres in elevation.

The area surrounding the site is characterised by the water bodies associated with the Liddell and Bayswater power stations, woodland areas, rural and rural residential cleared areas and mining infrastructure. The New England Highway provides a transport corridor through the visual landscape, which rises on both sides of the highway.

2.1.2 Hydrology

The site flows towards Maidswater Creek, which enters Lake Liddell to the south east. There are approximately 12 existing dams on the site that are used to capture and retain any sediment laden water. Maidswater Creek only flows intermittently and during periods of excessive rainfall. All sediment laden water from the site operations is retained in existing site dams. The main dam receiving runoff from the quarry operations is used to supply dust suppression water for the onsite water cart and crushing equipment.

2.1.3 Flora and Fauna

Historically, the site has been used for pastoral practices, as well as some small-scale quarrying in the past, which has resulted in some areas being predominantly cleared and the vegetated areas degraded and simplified to varying degrees over. The site does, however, contain habitats known to be used by threatened species, habitats that are potentially utilised by other threatened species, and habitats of significance for local biodiversity. Previous assessments over the site have found that a total of 20 species of threatened fauna were considered to be potential subject species. Of these 20 species, 5 were positively identified during field surveys. This includes the Southern Myotis *Myotis macropus*, Large Bentwing Bat *Miniopterus schreibersii*, Speckled Warbler *Pyrholaemus sagittatus*, Hooded Robin *Melanodryas cucullata* and Squirrel Glider *Petaurus norfolcensis*.

2.1.4 Transport and Access

Access to the site utilises an intersection and access road off the New England Highway. This intersection was ungraded to an Austroad C standard as part of the consent conditions for DA 342/2002 for the original quarry approval. This upgrade included a right hand turn in, deceleration and storage lane, left turn in, deceleration lane and left turn out, and acceleration lane. This intersection upgrade provided the site with more than adequate capacity to cater for both the quarry and batch plant truck movements.

2.1.5 Utilities and Services

The following utilities and services are currently connected to or are traversing the site:

- an electricity transmission line easement containing a 132kV line;
- a transmission line easement crossing the site, vested to the 'Council of the Upper Hunter County District', from which the transmission line has been removed;
- an 11kV single phase electricity line from the New England Highway to the lower shed, residence and mobile phone tower within Lot 30 DP 815308;

- an underground telephone cable adjacent to Grasstree Ridge Road and the access track to the existing residence on Lot 30 DP 815308;
- a mobile telephone tower with transmitter, located within Lot 30 DP 815308 under a lease agreement;
- state survey marker 39234 FD; and
- television repeater station.

2.1.6 Surrounding Development

The subject site is located in a rural setting, with mining, industrial and agricultural uses in the vicinity. The immediate surroundings are described as follows:

- **North** – Directly north of the site is a rural residential property on Lot 2 DP258548;
- **South** – To the south of the site are 2 operating coal fired power stations owned by AGL Macquarie;
- **East** – To the east of the site is rural grazing land, of which a significant portion is owned by AGL Macquarie, and 1 rural residential property on Lot 4 DP258548; and
- **West** – To the west is the New England Highway and approximately 7 rural residences. Further west off Thomas Mitchell Drive are the previous Drayton Coal operations and the currently operating Mt Arthur Coal Mine.

3 Project Description

The development consists of the continued operations of the existing 100,000tpa gravel quarry for a further 20 years and the continued operations of the existing 30,000tpa concrete batching plant. Both activities are to be approved under one consent with consolidated conditions. Details of the ongoing operations for both activities are detailed below.

Further detail can also be found in the Environmental Impact Statement prepared for the original quarry approval in 2002 by Pelican Environment and Business Solutions and also in the Statement of Environmental Effects prepared for the concrete batching plant in 2016 by Casson Planning and Development Services.

3.1 Continued Quarry and Plant Hire Operations

3.1.1 Description

The following components will continue as part of the ongoing operations for the quarry and plant hire aspects of the development:

- Existing site office, maintenance shed, staff amenities, and associated hard stand areas for equipment maintenance;
- Existing upgraded intersection of Grasstree Ridge Road with the New England Highway;
- Existing haul road from Grasstree Ridge Road near the intersection with the New England Highway to the quarry area;
- Existing equipment and plant hire operations;
- Continued crushing and screening of up to 100,000tpa of extracted material over a further 20 year period;
- Continued stockpiling of material on site;
- Continued haulage of material from the site by 12 to 30 tonne highway trucks;
- Existing water management and erosion and sediment control structures including dams, culverts, pipes, and pits; and
- Ongoing progressive rehabilitation of quarried areas.

No aspects of the quarry and plant hire operations will change apart from the extension of the quarry life by a further 20 years. Site layout is shown on **Figure 2. Plates 1 to 8** show the various existing components of the site operations.

RPS



Plate 1 Site Access and Upgraded Intersection



Plate 2 Existing Maintenance Shed and Site Offices

RPS



Plate 3 Haul Road Entrance from New England Highway



Plate 4 Existing Concrete Batching Plant

RPS



Plate 5 **Crushing and Screening Equipment**



Plate 6 **Quarry Face and Raw Material for Processing**

RPS



Plate 7 **Erosion and Sediment Control Dam**



Plate 8 **Existing Site Rehabilitation**

3.1.2 Market Assessment

Wild Quarries and Civil will continue to market the gravel material for road base and other construction purposes, particularly in the local road building and mining industries. The proponent's plant hire operation also has an ongoing need for gravel material for the supply to road and local infrastructure projects.

The demand for aggregate material in the Muswellbrook, Singleton, Denman, and Scone areas is high due to road and infrastructure projects and also the ongoing development of open-cut and underground coal mines in the region. Road maintenance and rail upgrade works are also ongoing in the area, and the proponent is strategically placed to service this market, having a long association in the local area providing plant and equipment for construction projects.

The operations are only 9 kilometres from Muswellbrook and is also well placed to service coal mines south of the site, off Thomas Mitchell Drive and towards Singleton.

3.1.3 Resource Estimate and Extended Operational Life

To date, resource has been quarried from several areas of the development, including Stages 1, 2, 3 and 4 (refer **Figure 4 - 7** for stages). The majority of material has been extracted from Stage 1 with the remainder extracted from the western areas of Stages 2-4. Based on the extraction to date it has been estimated that approximately 700,000 tonnes have been extracted since the original approval was granted in 2004. Revised resource estimates for the site suggested that there were in excess 2,900,000 tonnes of material within the original approved quarry footprint. On this basis it is estimated that there are 2,200,000 tonnes of material remaining in situ. This remaining resource will allow for the continued operations of the quarry at 100,000tpa for an additional 20 years and beyond.

3.1.4 Staging and Quarrying

The staged quarry plans (refer **Figure 4 - 7**) show that the design adopted for the pit orientates the quarry face in a south east - north west direction, moving the mine face in a northerly direction. This provides the best acoustic and visual screening to the closest northern neighbour. This orientation assists in projecting noise and overpressure towards the south, where there are no near neighbours, and visually screening operations.

Due to the strength of the conglomerate material, each stage requires an initial drill and blast to fragment the rock. An excavator then loads the blasted rock into a mobile crusher that crushes to required sizes. A front-end loader is then used to move stockpiles and load highway trucks to haul the material off site.

The benefit of the mobile crusher is the flexibility of the location of the equipment and stockpiles. Equipment is situated such as to minimise the noise impacts on all surrounding residents. Crushing operations occur as close to the blasted face as possible to reduce double handling of material.

Stockpiles are situated on the quarry floor adjacent to crushing equipment to allow for easy loading. And are no more than 4 metres in height to avoid any visual intrusion.

3.1.5 Equipment

The following equipment is currently utilised for quarry activities at the site and was assumed for the original noise modelling for the development.

- 1 x Drill rig;
- 1 x Excavator;
- 1 x Mobile crusher;
- 1 x Front end loader;
- 1 x Dozer; and

- Highway trucks (12 to 30 tonne capacity).

3.1.6 Truck Movements

As is detailed in the original quarry EIS, the maximum predicted truck movements from the site peak at 60 movements per day (60 inbound and 60 outbound) at full extraction capacity of 100,000tpa. Over the 14 years that the quarry has been operating the site has only produced, on average, 50,000tpa and as such the peak truck movements have never been achieved. It is anticipated that there will be no increase to the predicted traffic movements to and from the development.

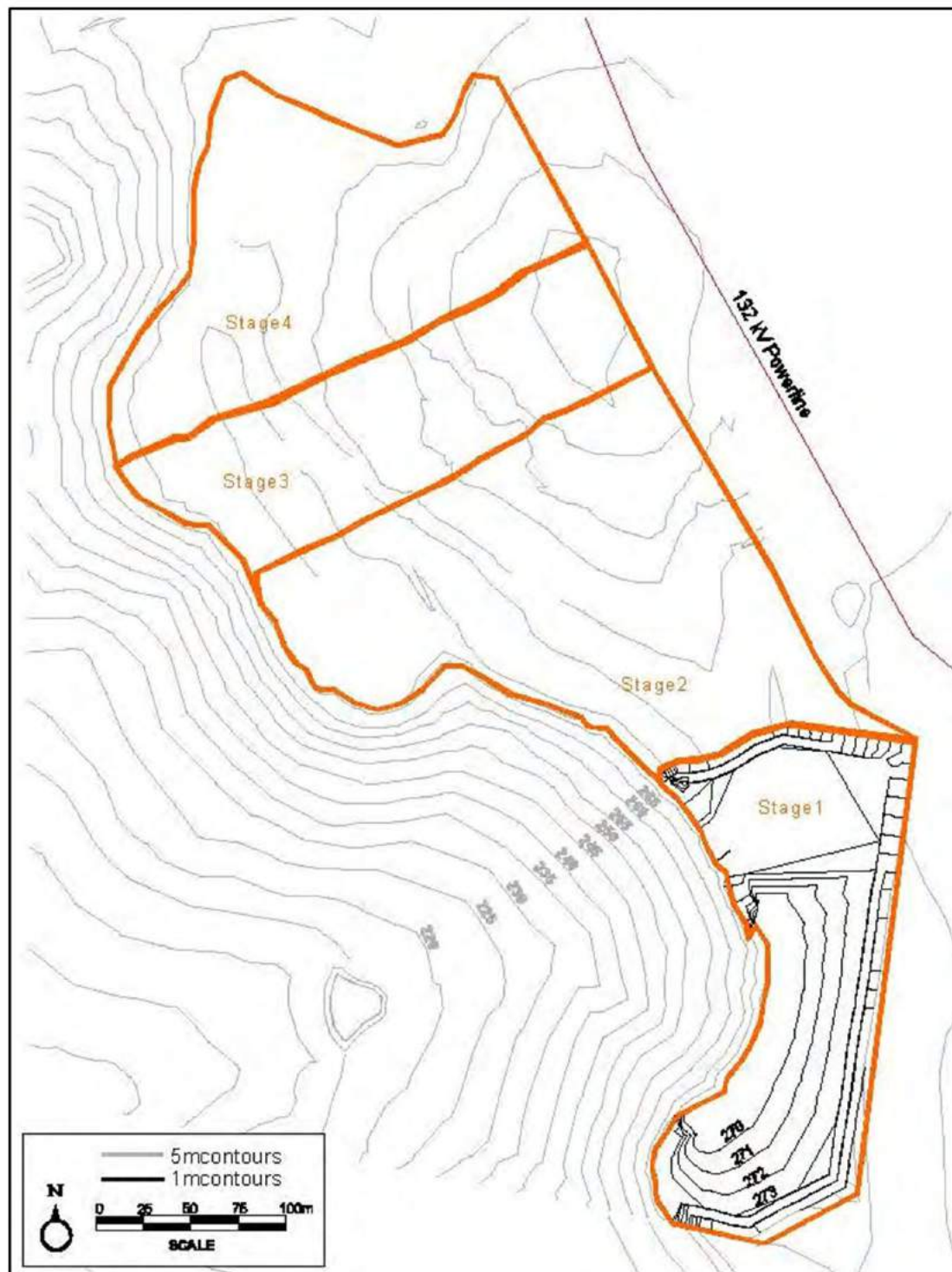


Figure 4 Quarry Plan Stage 1

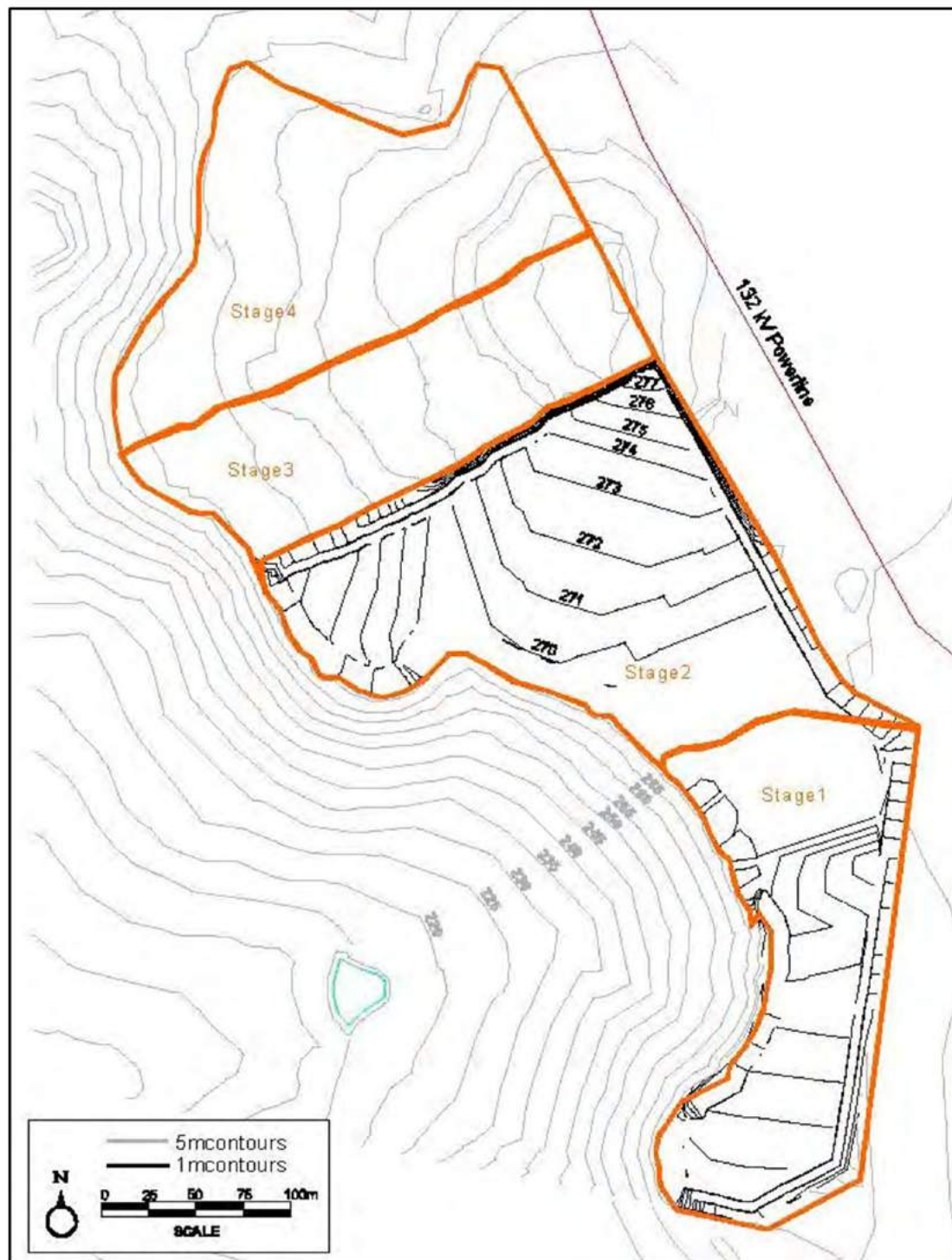


Figure 5 Quarry Plan Stage 2

RPS

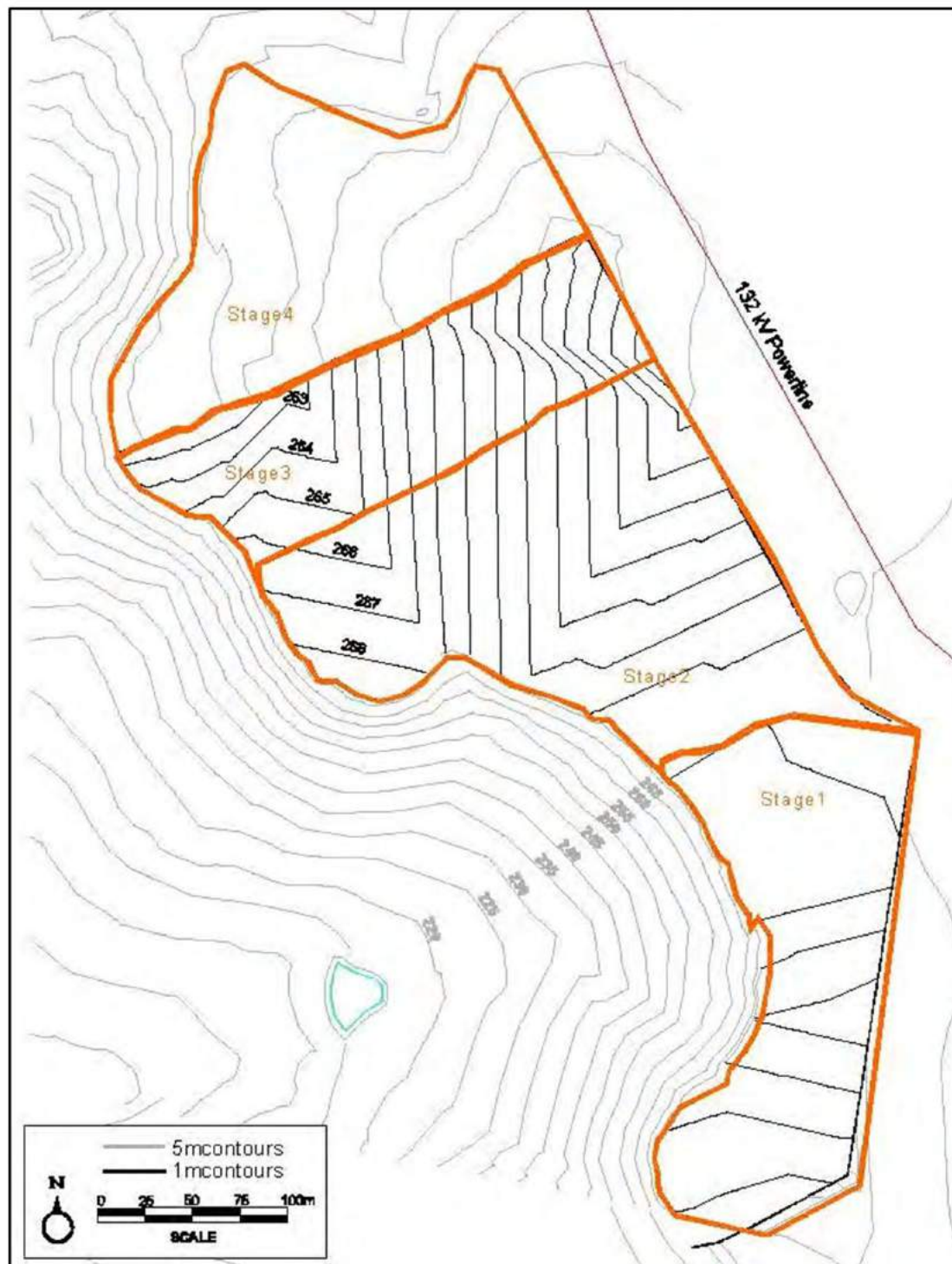


Figure 6 Quarry Plan Stage 3

RPS

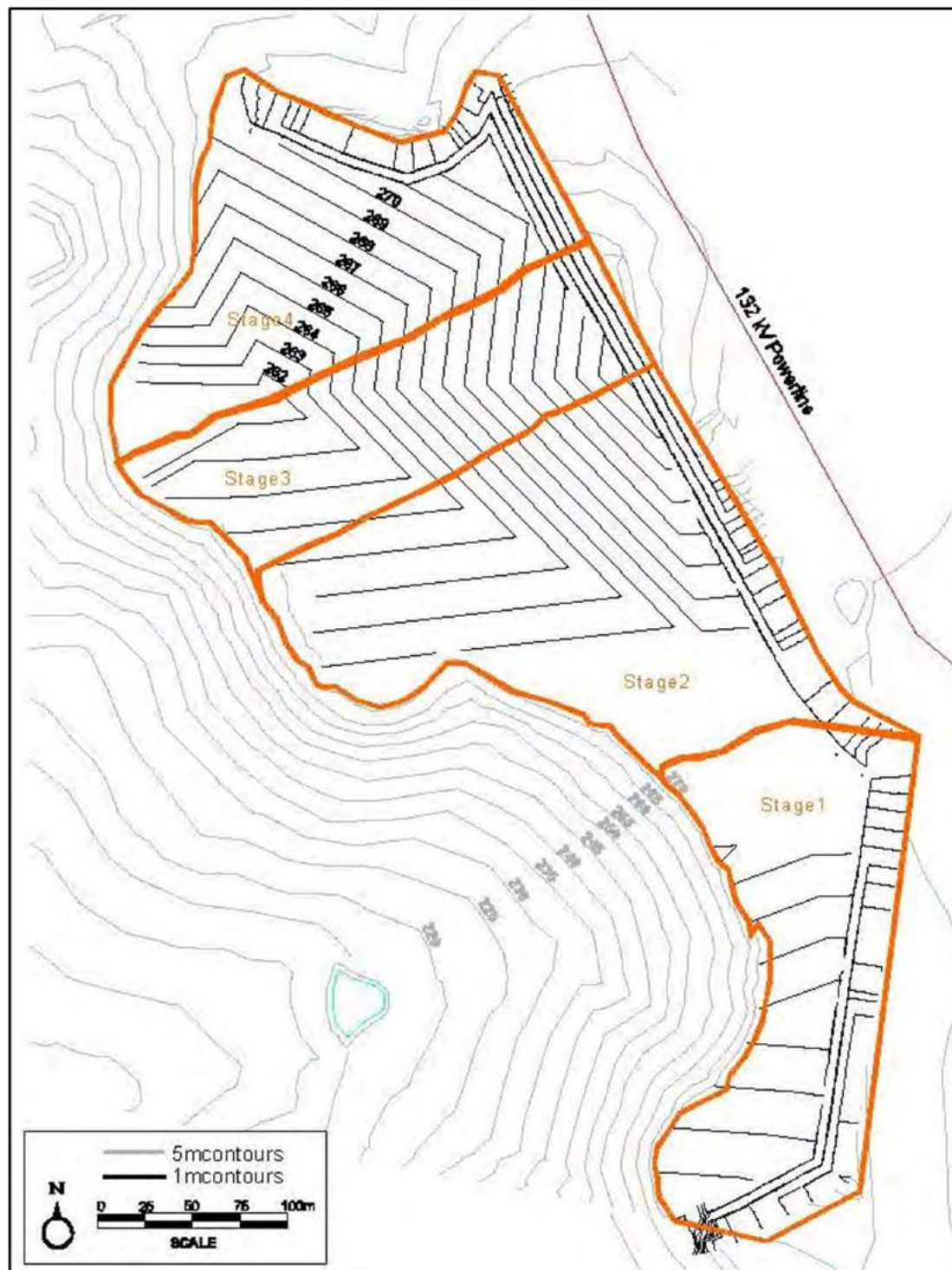


Figure 7 Quarry Plan Stage 4

3.1.7 Plant Hire Operations

The plant hire operations consist of the following plant and equipment:

- 1 x Float truck;
- 4 x Trucks;
- 4 x Excavators;
- 2 x Dozers;
- 3 x Water carts;
- 8 x Tipper trucks;
- 2 x Rollers; and
- 2 x Graders.

Due to the nature of the hire operation not all equipment is stored on site at the same time. Plant is often hired for long-term projects and it is the aim of the operation to have plant constantly in use. Therefore, some plant may only return to the site once every few weeks for maintenance. The float truck generally exits the site once or twice per day as it is used to transfer equipment between sites.

Maintenance is carried out on the site include such activities as grease and oil changes, engine maintenance, tyre changes and other vehicle maintenance activities. These are conducted within the large maintenance shed.

A wash down bay is located directly adjacent to the maintenance shed for the cleaning of plant and equipment. An oil/water separator treats oily water generated from this area.

3.1.8 Work Force

The existing workforce for the gravel quarry, plant hire operation, and batch plant is up to 40 persons. Some contract staff are utilised as required for both campaign work and also for rail shut down works.

3.1.9 Hours of Operation

Current hours of operation for the quarry are:

- Monday to Friday 7am to 5pm;
- Saturday 7am to 1pm; and
- Sunday and Public Holidays no operations.

The above hours of operation are for quarrying and general operations. Haulage would be within the same hours.

Current hours of operation for the plant hire operation are:

- Monday to Friday 7am to 3pm;
- Saturday 7am to 1pm; and
- Sunday and Public Holidays no operations.

There will be no change to current operating hours for either the quarry or plant hire.

3.2 Continued Concrete Batching Operations

3.2.1 Description

The operations consist of a mobile concrete batching plant that utilises the raw materials produced from the co-located quarry. The main components of the batching plant and associated infrastructure include:

- Cement silo, including cement auger;
- Transit mixer loading area;
- Raw product storage bins;
- Water storage tank;
- 2 x recycling pits; and
- Loading apron.

The concrete plant is established in an area of the quarry that has previously been subject to extraction, therefore there is no additional disturbance from its establishment. In addition, as mobile plant is being utilised there has been minimal erection of permanent infrastructure. This allows the plant to be transported to other sites where onsite concrete production is required.

Water for the operations is sourced from storage dams utilised for the existing quarry, with wash down water recycled and re-used as part of the batching process.

The volume of concrete produced is up to 30,000 tonnes per annum or up to 120 tonnes per day. The layout of the batch plant operation is shown on **Figure 8**. There are no proposed alterations to the existing batching operations as part of this application.

3.2.2 Plant and Equipment

The following mobile plant and equipment are utilised for the concrete batching operations and will continue to be utilised:

- Front end loader
- Rigid and articulated tip trucks;
- Agitator trucks; and
- Water trucks.

3.2.3 Site Facilities and Work Area

The work area and site facilities include:

- Site office;
- Amenities;
- Light vehicle parking; and
- Material and equipment storage/lay-down areas.

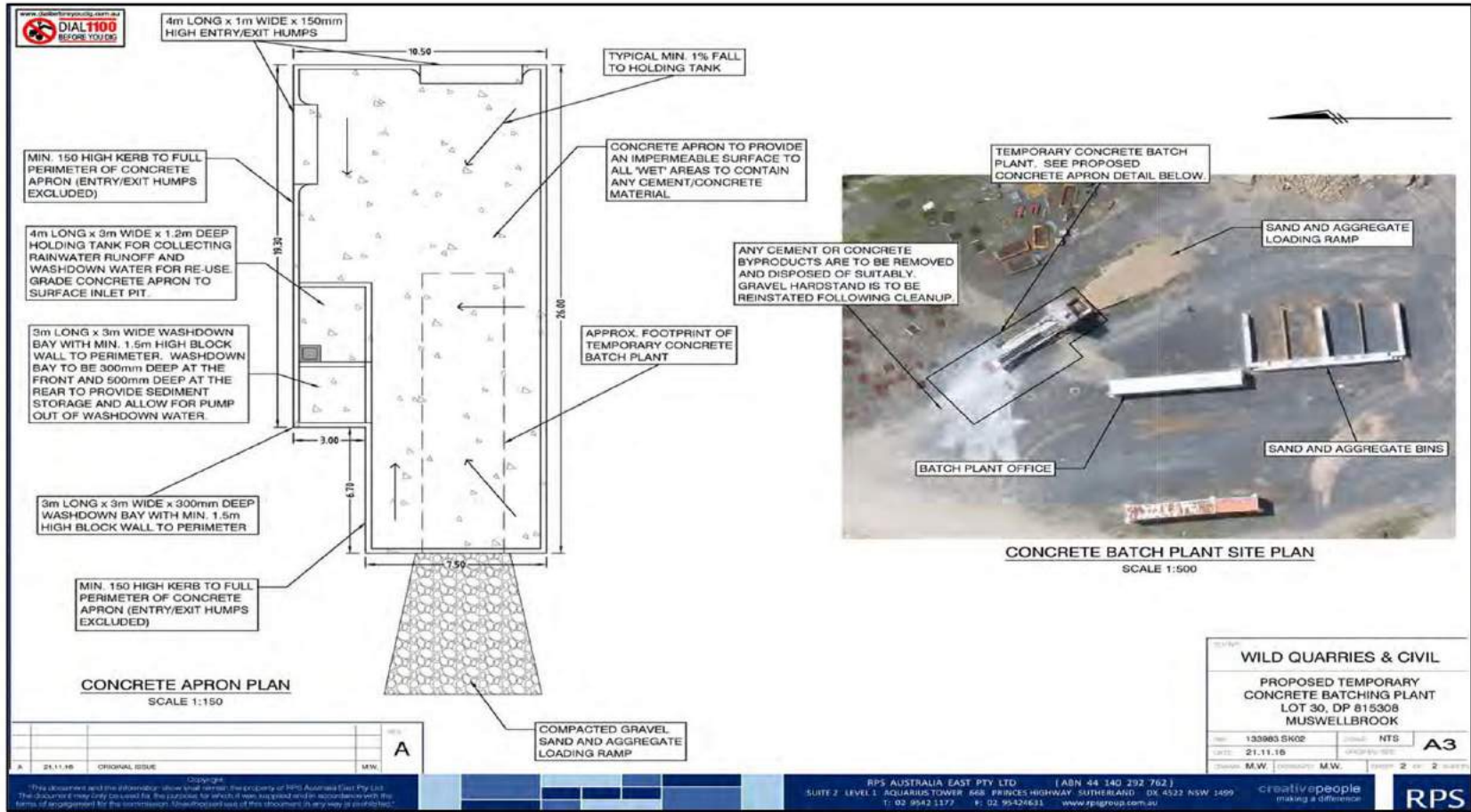


Figure 8 Existing Concrete Batch Plant Layout

3.2.4 Truck Movements

The batch plant operations produce in order of 20 truck movements per day as a worst-case scenario. This will not change for the continuation of operations. Both the existing upgraded intersection and the New England Highway have adequate capacity to accommodate both the quarry and batch plant truck movements. The intersection upgrade that was undertaken for the original quarry approval was designed to cater for the 60 truck movements therefore that is also adequate capacity within the existing access design.

3.2.5 Hours of Operation

The batching plant operates during the same hours as the quarry, which are:

- Monday to Friday 7am to 5pm; and
- Saturday 7am to 1pm.
- Sunday and Public Holidays no operations

There will be no change to operating hours.

3.3 Proposed Conditions

The site currently operates under 2 separate approvals (DA 342/2002 and DA 96/2017) and 2 sets of conditions. As such some of the conditions are extremely onerous and now not relevant to the development. It is proposed, as part of this application, to consolidate both existing approvals and remove or modify any onerous or outdated conditions and extend the approved term of the quarry operations for an additional 20 years.

A review has been undertaken approval conditions for DA 342/2002 and DA 96/2017 and draft modified conditions have been prepared as part of this application. The 2 draft modified sets of conditions are to be amalgamated as part of a consolidated approval for the operations. A revised set of conditions for the quarry and plant hire operations are attached as **Appendix A** and a revised set of conditions for the concrete batching plant are attached as **Appendix B**. Further supporting information, prepared by Carbon Based Environmental with regarding to environmental monitoring, is attached as **Appendix C**.

4 Planning and Statutory Considerations

This section identifies the relevant strategic and statutory planning provisions that apply to the site.

4.1 Environmental Planning and Assessment Act 1979

The modification of the development is being assessed under the provisions of the EP&A Act. The proposal will be determined under Part 4 of the EP&A Act with Muswellbrook Shire Council being the consent authority.

Section 4.55 of the EP&A Act allows for the modification of a consent where the subject modification is considered to be substantially the same development as the development for which consent was originally granted. The subject application seeks to consolidate 2 existing consents without changing the design or intensity of either activity, therefore satisfying the requirement to be 'substantially the same development'.

Section 4.15 (1) of the EP&A Act outlines the matters for consideration for development applications prepared under Part 4. In determining a DA, a consent authority is to take into consideration the following matters that are of relevance to the development:

- a. the provisions of:
 - i. any environmental planning instrument, and
 - ii. any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
 - iii. any development control plan, and
 - iv. any planning agreement that has been entered into under Section 7.14, or any draft planning agreement that a developer has offered to enter into under Section 7.14, and
 - v. the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and
 - vi. any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,
- b. the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- c. the suitability of the site for the development,
- d. any submissions made in accordance with this Act or the regulations,
- e. the public interest.

4.2 State Environmental Planning Policies

4.2.1 Mining, Petroleum Production and Extractive Industries SEPP 2007

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (NSW) applies to the activity. In recognition of the importance to NSW of mining, petroleum production and extractive industries, the Mining SEPP aims to:

- Provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State

- Facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources
- Establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources

Section 4 of Clause 7 of the Mining SEPP allows for the establishment of additional development on lands where extractive industry is already being carried out with development consent. The Mining SEPP refers to this as the 'Co-location of Industry'. Specifically, the Section 4 of Clause 7 of the SEPP states:

Co-location of industry

If extractive industry is being carried out with development consent on any land, development for any of the following purposes may also be carried out with development consent on that land:

- (a) the processing of extractive material,*
- (b) the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,*
- (c) facilities for the processing or transport of extractive material,*
- (d) concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix.*

Under the 'Co-location of Industry' provisions the concrete batching plant was permissible due to the quarry operations being approved and operational at the site.

4.2.2 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

SEPP 33 provides definitions for hazardous industry and offensive industry, as well as potentially hazardous industry and potentially offensive industry. An application to carry out a potentially hazardous or offensive industry is required to be accompanied by a preliminary hazard analysis (PHA).

The potential for hazard and/or offence as a result of the proposed development is considered in the original EIS for the quarry development. It considers the potential risks of transporting, storing and using dangerous goods such as fuels and explosives, and concludes that as the quantities of materials are small and will be stored in accordance with relevant standards for the storage of flammable and combustible liquids and in accordance with Dangerous Goods licencing requirements, they are not considered to present any significant hazard or risk beyond the site boundary.

Offensiveness is considered to be minimal given that an EPA licence is required, and such operations must comply with the licence conditions. It is concluded that there is no significant risk associated with the transport, storage or use of hazardous material.

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

SEPP 44 encourages the conservation and management of koala habitats to ensure that permanent free-living koala populations will be maintained over their present range. The policy applies to specific LGAs including Muswellbrook Shire. Development cannot be approved in the areas listed in SEPP 44 without investigation of the presence of core koala habitat.

The potential for koala habitat to exist on the site was considered in the original project EIS. It was found that the disturbance area for the operations does not constitute core koala habitat as defined under SEPP 44 and therefore a koala management plan was not required.

4.3 Muswellbrook Local Environmental Plan 2009

4.3.1 Zoning and Permissibility

Muswellbrook Local Environment Plan 2009 (MLEP) is the principal local environment planning instrument governing development on the site. The subject site is currently zoned E3 Environmental Management under MLEP 2009. Under zoning E3 the following land uses are permitted with and without consent or prohibited:

2 Permitted without consent

Extensive agriculture; Home occupations

3 Permitted with consent

Air transport facilities; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Camping grounds; Caravan parks; Cellar door premises; Dwelling houses; Eco-tourist facilities; Environmental facilities; Environmental protection works; Farm buildings; Farm stay accommodation; Flood mitigation works; Home-based child care; Home businesses; Home industries; Information and education facilities; Intensive plant agriculture; Recreation areas; Recreation facilities (outdoor); Research stations; Roads; Rural worker's dwellings; Secondary dwellings; Sewerage systems; Water supply systems

4 Prohibited

Industries; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Within the E3 zoning 'Industries', including extractive industries and concrete batching plants (ie. general industry), are prohibited.

However, prior to the implementation of MLEP in 2009 the site was zoned 1 (a) Rural which did allow for the development of extractive industries on the subject site. The original approval of the quarry operations occurred in 2004 prior to the site being rezoned. Under the provisions of Section 4.65 of the EP & A Act existing use rights would apply. In this regard, Section 4.65 of the EP & A Act defines existing use as,

'Existing Use' means:

(a) the use of a building, work or land for a lawful purpose immediately before the coming into force of an environmental planning instrument which would, but for this Division, have the effect of prohibiting that use, and

(b) the use of a building, work or land:

(i) for which development consent was granted before the commencement of a provision of an environmental planning instrument having the effect of prohibiting the use

As such the provisions of 'existing use' apply due to the quarry being approved prior to the land zone changing by way of an update to the MLEP.

The approval of the subsequent concrete batch plant operations was permissible through the State Environmental Planning Policy (SEPP) (Mining, Petroleum Production and Extractive Industries) 2007 which allows for the 'co-location of industry' where an approved extractive industry already exists. Industries that are included in the co-location include 'concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix'. Therefore, the concrete batch plant was permissible under SEPP Mining 2007.

4.4 Muswellbrook Development Control Plan 2009

Muswellbrook Development Control Plan 2009 (MDCP) supplements the MLEP 2009 and provides additional information that should be considered when preparing a Development Application.

The purpose of the MDCP is to provide guidance to proponents carrying out development in the LGA and to promote development that is consistent with Council's overarching vision for the LGA. MDCP also seeks to ensure development incorporates principles of ecologically sustainable development and foster development that responds appropriately to both the natural and built environments.

Muswellbrook Shire Council has a land use specific DCP for extractive industry within its LGA. **Section 11 – Extractive Industry** of MDCP represents Council's commitment to Ecological Sustainable Development (ESD) by establishing a framework in which the industry, community, state government and Council all work together to achieve sustainable outcomes.

The Section 11 of the MDCP sets out land use specific requirements for the development and operation of extractive industries. Specific requirements relate to Application Assessment, Community Consultation, Transport, Visual Amenity, Flora and Fauna, Noise, Blasting, Air Quality, Erosion and Sediment Control, Socio-economic, Rehabilitation, and Environmental Management. These DCP requirements were addressed as part of the original EIS prepared for the quarry in 2002 and also through post consent approvals.

4.5 Other Relevant Environmental Legislation

4.5.1 Protection of the Environment Operations Act 1997

The Protection of the Environment Operations Act 1997 (POEO Act) establishes the State's environmental regulatory framework and includes licensing requirements for certain activities. As the site is an operation processing 100,000tpa of gravel material it is deemed to be a *land-based extractive activity* under Clause 19(1), Schedule 1 of the POEO Act and as such requires an Environmental Protection Licence (or EPL) under Section 43(b) of the Act. The site currently operates under EPL12301.

4.5.2 Section 4.46 of the EP&A Act, 1979

The proposed development is also *Integrated Development* under Section 4.46 of the EP&A Act, 1979, requiring approvals from other consent authorities including the NSW Environment Protection Authority (EPA). The EPA will be consulted with regard to a potential EPL variation.

5 Impact Assessment

5.1 Environment

The following sections provide an assessment of the potential environmental impacts resulting from the proposed activities.

5.1.1 Traffic

A Traffic Impact Assessment was prepared in 2002 as part of the EIS for the original development. The assessment investigated existing traffic conditions, including the road network, traffic flows, site access and accident history, and assessed the traffic implication of the proposed development.

The assessment concluded that the proposed development will increase the existing traffic movements accessing Grasstree Ridge Road at the New England Highway from an average of 30 to 60 vehicle movements per day. It was considered that the increase to traffic along the New England Highway would be minor (in the order of 0.3%) and that additional traffic generated by the proposed development would not adversely impact on Highway capacity or operation for both the existing and predicted future conditions.

An assessment of the New England Highway and Grasstree Ridge Road intersection indicated that the available sight distances on all legs of the intersection comply with the requirements specified in the RTA's Road Design Guide.

Accident history was reviewed which indicated that there were no particular safety concerns relating to intersection operation. It was considered that the existing intersection safety would not be adversely affected by the proposed development. Notwithstanding the above, the intersection has subsequently upgraded to an Austroad C standard as part of the consent conditions for DA 342/2002 for the original quarry approval. This upgrade included a right hand turn in, deceleration and storage lane, left turn in, deceleration lane and left turn out, and acceleration lane. This intersection upgrade provided the site with more than adequate capacity to cater for both the quarry and batch plant truck movements.

Over the 14 years that the quarry has been operating the site has only produced, on average, 50,000tpa and as such the peak truck movements of 60 per day have never been achieved. As such there is more than adequate capacity for the consolidated operations. It is anticipated that there will be no increase to the predicted traffic movements to and from the development.

5.1.2 Noise

A Noise Impact Assessment was prepared in 2002 as part of the EIS for the original development.

The assessment was undertaken in accordance with the EPA's 'Industrial Noise Policy' (INP) and addressed the following:

- Ambient (or background) noise levels in the area;
- Noise levels likely during quarrying;
- Transport noise from highway trucks on site; and
- Blast noise and vibration, particularly impact on the 132kV transmission line and television repeater station.

Background noise monitoring was undertaken as part of the study, as well as modelling of equipment proposed to be used in the quarry operation. Activities associated with the operation of the plant hire business were also considered. Subsequent noise modelling was undertaken for the batching plant which included the impacts of both the quarry and plant hire operations.

In accordance with EPA guidelines daytime L_{A90} were measured at representative residences. Intrusiveness criteria were derived from these and found to be lower than the amenity criterion. Accordingly, these intrusiveness criteria were adopted as the project specific criteria for noise.

Two blast vibration criteria were determined for the project, 50 millimetres per second for a nearby power line and television repeater tower, and, 5 millimetres per second for nearby residences. A third blasting criterion was that blast overpressure should not exceed 115 dB(Lin) at nearby residences.

Modelling of results indicated that all operations should comply with criteria at the nearest western and northern residences for all stages of operation (including the contribution of site truck movements at the northern residence).

Accordingly, it is considered that there will be no additional noise impacts from the consolidated operations.

5.1.3 Dust

A Dust Impact Assessment was prepared in 2002 as part of the EIS for the original development.

Airborne particulate matter (dust) produced by quarrying activities has the potential to impact adversely upon local air quality. Other dust sources in the vicinity of the study area include nearby open cut coal operations, cleared land surfaces within grazing areas, electric power generation, and unsealed gravel roads.

Larger sized particulates can settle as dust fall out. Dust deposition rates of less than 2 g/m²/month are typical in rural areas. Studies at adjacent sites including those for Mount Arthur Coal (URS Australia Pty Ltd, 2000) and the Liddell Colliery (Umwelt Australia Pty Ltd, 2001) indicate that in the vicinity of the study site even lower rates of dust deposition could be expected, more likely to be less than 1 g/m²/month.

Wind speed and direction, and temperature inversions can affect air quality. An AGL Macquarie Meteorological Station on the Mount Arthur Coal site was the principal station used to assess meteorological conditions. That station is located approximately 7 km west-northwest of the subject site, so its data is considered relevant to conditions likely to be experienced at the site.

Over a year, prevailing winds tend to be aligned along a NW-SE axis which is common for most sites in the Upper Hunter valley. Summer winds are generally from the south-east, while in winter north-west winds are more common. Average annual wind speeds of 3-4 m/s were recorded, depending on elevation.

Dust producing activities at the include occasional intermittent blasting, crushing and screening, loading, front-end loader movements, and truck movements to and from the operations.

Operational control strategies are incorporated into environmental management procedures to manage short-term impacts, such as ceasing to blast and move material when there are strong prevailing winds from a direction which has the potential to blow dust towards the nearest residences. In addition, a water cart is regularly used on trafficked areas, dust control measures are applied in crushing and loading and stockpile areas, and the site is progressively rehabilitated to minimise the extent of bare area at any one time.

Site procedures should ensure that the operations do not have a significant impact on air quality in the surrounding area. A complaints procedure is in place to address any concerns neighbours may have regarding dust generating activities or dust levels. Over the 14 years that the site has been operational no complaints have been received.

Accordingly, it is considered that there will be no additional dust impacts from the consolidated operations.

5.1.4 Visual

A Visual Impact Assessment was prepared in 2002 as part of the EIS for the original development.

The site is physically divided into 2 sections, the lower section generally consisting of disturbed woodland with open grazing areas and dams, and the upper section consisting of a residence, shed, open grazing areas and areas cleared for various easements. The upper section, divided from the lower by an escarpment and steeper slopes, rises to 292 metres. The lower section, near Maidswater Creek and the New England

Highway, is approximately 180 metres in elevation. The steep slope dividing the 2 sections of the property, which forms the southwestern boundary of the quarry, is between 220 and 270 metres in elevation. The conglomerate resource comprises the top 10m or so of this slope.

A small natural wooded amphitheatre which slopes down towards the intermittent creek line forms the western boundary.

The area surrounding the site is characterised by the water bodies associated with the Liddell and Bayswater power stations, woodland areas, rural and rural residential cleared areas and mining infrastructure. The New England Highway provides a transport corridor through the visual landscape, which rises on both sides of the highway.

The partly cleared lower hills closer to the highway are backed in the distance by the higher and steeper, mostly forested hills that form the backdrop to the Hunter Valley towards the east and west. The visual landscape created is therefore diverse, with its varied combination of natural and man-made features and activities.

Due to the higher elevation of the quarry area above the surrounding landscape, sections of the quarry are visible from the New England Highway however, these impacts are minimal as these views are filtered by existing trees, distance, and the speed at which the vehicles travel.

Views from surrounding residences are generally be screened by existing vegetation. Views from residences to the north west and west will generally be of Stage 3 and 4 as the pit face is progressing. As operations progress deeper and the pit is developed in this these areas operations will be screened. As the quarry face is orientated away from the north and north west, the benches are not visible from this direction. The most noticeable visual change will most likely occur from the relocation of the mobile phone tower during Stage 4, as this is an easily identifiable landmark on the ridgetop.

Views from the residence to the east of the site are filtered by existing vegetation and the active quarry floor are not be able to be viewed from this direction. As Stages 1 and 2 have been developed there is now no view of these stages, however during initial operations on the ridge some filtered views through trees were visible. During Stages 3 and 4 initial operations on the ridge will be viewed until a quarry face is developed.

Although no trucks will use Grasstree Ridge Road, the visual amenity of the shed area from this direction has been enhanced over the past 14 years by the provision of one metre high planted bunds on the northern side of the shed.

Accordingly, it is considered that there will be no additional visual impacts from the consolidated operations.

5.1.5 Flora and Fauna

A Flora and Fauna Assessment was prepared in 2002 as part of the EIS for the original development. The flora and fauna impact assessment addressed the potential adverse impacts on threatened species and local biodiversity.

The general aims of the assessment were to:

- describe the existing biological environment of the study area in relation to flora and fauna;
- discuss the potential impacts of the proposal for any threatened species that occur or would be likely to occur in the subject site; and
- provide discussion on measures to mitigate impacts.

The assessment included:

- a review of available literature pertaining to the site and surrounding locality and preliminary habitat assessment of the subject site; and
- the completion of targeted field surveys for threatened species regarded as potential subject species, and surveys to investigate the inherent biological attributes of the site.

The site has been used for pastoral practices, as well as some small-scale quarrying in the past, which has resulted in some areas being predominantly cleared and the vegetated areas degraded and simplified to varying degrees. The site does, however, contain habitats known to be used by threatened species, habitats that are potentially utilised by other threatened species, and habitats of significance for local biodiversity.

The assessment determined that a total of 20 of threatened fauna were considered to be potential subject species. Of these 20 species, 5 were positively identified during the field surveys. These included the Southern Myotis *Myotis macropus*, Large Bentwing Bat *Miniopterus schreibersii*, Speckled Warbler *Pyrrholaemus sagittatus*, Hooded Robin *Melanodryas cucullata* and Squirrel Glider *Petaurus norfolkensis*.

In addition, the Large-eared Pied Bat *Chalinolobus dwyeri* was identified from a probable ultrasonic call and the Eastern False Pipistrelle *Falsistrellus tasmaniensis* and East Coast Freetail-bat *Mormopterus norfolkensis* were identified by possible ultrasonic calls.

The remaining 12 species considered as potential subject species included the Square-tailed Kite, Black-chinned Honeyeater, Barking Owl, Grey-crowned Babbler, Diamond Firetail, Regent Honeyeater, Swift Parrot, Grey-headed Flying-fox, Spotted-tailed Quoll, Koala and Green and Golden Bell Frog.

No threatened flora species were recorded in any part of the study area during the field surveys, and none are considered likely to occur.

In terms of threatened species, the results indicated that any impacts from the quarry development were likely to be minimal. With the possible exception of the Large-eared Pied Bat, such impacts were not considered likely to significantly affect the life-cycles of local populations. This conclusion is based largely on the presence of extensive areas of equal quality habitat throughout the wider locality and within this particular portion of the bio-region. Therefore, the habitat that occurs on the site is not likely to be essential for the life-cycles of these threatened subject species.

The assessment also investigated the requirements of the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and the State Environmental Planning Policy No. 44 - Koala Habitat Protection (SEPP 44) and subsequent amendments to these and concluded that the proposed did not require reference to the Commonwealth under the EPBC Act nor did it require a Koala Plan of Management under SEPP 44.

As it is not proposed to increase the intensity or disturbance footprint of any aspects of the current approved activities no further flora and fauna assessment is required. Accordingly, it is considered that there will be no additional impacts to biodiversity from the consolidated operations.

5.1.6 Aboriginal Heritage

An Aboriginal Heritage Assessment was prepared in 2002 as part of the EIS for the original development. A field survey was also undertaken at that time with the Wonnarua Local Aboriginal Land Council and the Upper Hunter Wonnarua Council.

The survey of the site located three sites comprising two isolated finds and one site of two artefacts (refer to 2002 EIS for locations). The sites were considered of low significance and the potential for further material was deemed limited. The soils on the site are generally thin and there is little potential for stratified deposit.

Due to the low volume of material was found on the ridge, in spite of good visibility (80 or 90 % of 25% of the area proposed for the quarry foot print), it was interpreted as an area that was not a focus of Aboriginal activities. Evidence is there for passing use by small bands of hunters and gatherers moving through the area but not as a camp.

A thorough investigation was made of the eroded overhangs on the boulders forming the side of the ridgetop. There was no evidence of human occupation, and the shelters are obviously well used by wallabies local to the area. It is possible that these shelters are significantly larger than they were at the time of Aboriginal occupation of the area. The stone is quite coarse grained and not suitable for engravings or art. The floor was uneven and sloped at >10 deg to the rear of the shelter and appears to have been subject to

quite rapid deposition from the roof. The shelters are generally too small (in depth and height) for human occupation.

The drip lines of the overhangs were carefully inspected to ensure that material was not buried. The shelters did not have potential stratified archaeological deposit on the floors due to the sharp slope of floor deposit and the shallowness of deposit over the base of the boulder.

The footprint of the quarry impacted on the first site which was an isolated artefact on the ridge top. There was no evidence to suggest that this isolated piece is an indication of further material in the soil on the ridge top. The exposure was adequate to indicate the low potential that this artefact is part of a larger more complex site. No further artefacts have been discovered to date. The other two artefact sites, near Maidswater Creek, will not be disturbed by current or future development.

As it is not proposed to increase the intensity or disturbance footprint of any aspects of the current approved activities no further archaeological assessment is required. Accordingly, it is considered that there will be no additional impacts to archaeological items from the consolidated operations.

5.1.7 Erosion and Stormwater Management

A Hydrological Assessment was prepared in 2002 as part of the EIS for the original development. Further to this assessment a revised Erosion and Stormwater Management Plan has been prepared for the subject application. A copy of this management plan is attached as **Appendix D**.

The site has a number of existing erosion and sediment control devices, including a network of dams and gully erosion control devices. Existing site dams are shown on **Figure 2**.

During the construction of the haul road a diversion drain was constructed on the high side of the road to capture clean water and divert it to existing watercourses via stormwater culverts. This was designed to limit erosion potential of the road. During construction for the haul road temporary sediment control devices such as silt fencing were placed downslope of larger earthworks areas. Disturbed areas were stabilised as soon as possible after construction was complete.

Sediment loading generated from the exposed rock surface during quarrying is quite coarse and therefore has a relatively fast settling time. Grass swales build during the original quarry development extract the majority of sediment particles prior to the water entering the main site sediment dam. As the main dam is used to supply water to the crusher and water cart, this dam remains at a relatively low levels and therefore reduces the amount of sediment laden water entering the drainage channel and downstream dam on the site.

Dams and drainage channels on the site have been stabilised for erosion in the past are inspected on a regular basis to determine any works that may be required to prevent further erosion. Any works are undertaken in consultation with the NSW EPA, Local Land Services, and the NSW Office of Water.

Further detail on erosion and stormwater management for the site is attached as **Appendix D**.

5.1.8 Rehabilitation

Rehabilitation design was undertaken as part of the EIS in 2002 for the original development. Further to this design work a revised Rehabilitation Management Plan has been for the subject application. A copy of this plan is attached as **Appendix E**.

Rehabilitation Objectives

The objectives of the rehabilitation program are to:

- minimise the area of disturbance required at any one time;
- minimise erosion and sedimentation from the quarry operation;
- maximise the retention of topsoil on the site; and

- reduce long-term change to the existing landscape by importing virgin excavated natural material to the site where possible via backloads.

Vegetation Management

The area of disturbance was originally selected to minimise the removal of native vegetation. The quarry area was previous grazing land and as such required minimal tree removal for establishment. The haul road corridor was generally aligned with an existing track therefore only requiring the minimal removal of trees during the initial quarry construction phase. Trees that were removed were mulched for use in landscape areas and in rehabilitation works. Logs and large branches are placed on the ground within the lower section of the site to provide habitat for native fauna.

Topsoil Management

Topsoil is progressively removed prior to quarrying. While there is minimal topsoil available on the section of land where quarrying occurs, what soils is available is scraped off and stockpiled for use in rehabilitation activities. Landscaping mounds adjacent to the haul road at the quarry entrance contain the topsoil resources stripped from Stage 1 quarrying activities. Topsoil was also place on road batters to aid in the establishment of cover crops. Topsoil removed from subsequent sections of the quarry is used for the preceding sections to topsoil benches and those parts of the quarry floor that are not required for plant or stockpiles.

Surface Shaping and Final Landform

At maximum disturbance (as shown on **Figure 7**), four 5 metre high benches (vertical section) with 4 metre wide batters (horizontal section) will be located against the south west to north west oriented quarry face. The quarry floor will slope at approximately 1 % south to north and 8 % east to west, towards the steep slope that divides the property into the upper and lower sections. Approximately 80 % of this slope from its lower elevation will be retained.

To reduce the visual impact of the final quarry batters, reject material from crushing and screening will be backfilled against the quarry face. Where possible, virgin excavated natural material will be imported via truck backloads. Opportunities for backloads will be maximised as the proponent's plant hire operation regularly removes clean fill during construction projects and requires a suitable location to deposit this material. The aim of backfilling is to reduce the slope angle of the quarry batters so that they can be vegetated.

Backfilling and revegetation of the batters and benches occurs progressively during quarrying, moving from the south east to the north. The quarry floor will be revegetated when all quarrying at the site is complete as the floor is required for stockpiles and movement of equipment.

Revegetation

Areas of quarry disturbance, including the quarry floor and benches will be covered in 0.2 metres of topsoil and seeded with native species similar to those currently found on the site (refer **Appendix E**). Sediment and erosion control structures will remain in place to ensure any runoff from the areas of reestablishment do not convey sediment laden water towards Malswater Creek.

The final site land use is proposed to be open woodland/low intensity grazing as was the land use prior to development. Due to the proximity of the transmission line it is not proposed to plant tall tree species at the top of the quarry as these may interfere with lines.

Areas of disturbance associated with the haul road and its access point to the quarry floor will be revegetated using a suitable native seed mix. Watering of rehabilitation areas created during the life of the quarry operation would be undertaken as required using the site water cart.

Further detail on rehabilitation for the site is attached as **Appendix E**.

5.1.9 Socio-Economic

An assessment of socio-economic impacts was prepared in 2002 as part of the EIS for the original development.

All approved activities at the site employ up to 40 permanent staff. In addition to this there are contractors who supply support services to the operations. The quarry, plant hire, and batching operations provide material for road, civil, mining, and other industries in the area that assist in continued employment within these industries.

Local amenity and health issues arising from any potential changes in air quality, noise and vibration, and safety on roads, as well as visual impact, have been discussed in this document and the EIS prepared for the original quarry operations. It is considered that any identified potential adverse impacts from the ongoing operations are suitably mitigated and managed by the site Environmental Management Plan (EMP).

5.1.10 Waste Management

Any waste generated onsite as part of general operations will be disposed of in accordance with the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*.

Waste Hierarchy

Waste management at the site across all operations is undertaken consistent with the waste management hierarchy in the following order of priority from most desirable to least desirable:

- **Avoid:** Waste avoidance by reducing the quantity of waste being generated. This is the simplest and most cost-effective way to minimise waste. It is the most preferred option in the waste management hierarchy.
- **Re-use:** Reuse occurs when a product is used again for the same or similar use with no reprocessing. Reusing a product more than once in its original form reduces the waste generated and the energy consumed, which would have been required to recycle.
- **Recycle:** Recycling involves processing waste into a similar non-waste product consuming less energy than production from raw materials. Recycling spares the environment from further degradation, saves landfill space and saves resources.
- **Dispose:** Removing waste from worksites and dumping on a licensed landfill site, or other appropriately licensed facility.

Waste Streams

Any wastes generated during operations is classified in accordance with the NSW EPA Waste Classification Guidelines (2014), which classifies wastes into the following streams:

- Special waste (e.g. clinical and related waste, asbestos, waste tyres);
- Liquid waste (e.g. fuels, oils, chemicals and pesticides);
- Hazardous waste (e.g. lead-acid batteries and lead paint);
- Restricted solid waste (currently no wastes pre-classified as restricted by EPA);
- General solid waste (putrescible) (e.g. general litter and food waste); and
- General solid waste (non-putrescible) (e.g. glass, paper, plastic, building demolition waste, concrete).

Waste Classification

Waste that cannot be avoided, re-used or recycled will be classified in accordance with the *Waste Classification Guidelines* (EPA, 2014) and disposed of at appropriately licensed facilities. The guidelines

detail how to assess and classify waste and management options for disposal of the classified waste. A summary of the waste classification steps is provided below:

- Establish if the waste should be classified as special waste;
- If not special waste, establish whether the waste should be classified as liquid waste;
- If not special waste or liquid waste, establish whether the waste is of a type that has already been classified. Note EPA has 'pre-classified' a number of commonly generated wastes;
- If the waste is not special waste, liquid waste or pre-classified waste, establish if it has certain hazardous characteristics and can therefore be classified as hazardous waste;
- If the waste does not possess hazardous characteristics, it needs to be chemically assessed to determine what class of waste it is. If the waste is not chemically assessed, it should be treated as hazardous waste; and
- If the waste is chemically assessed as general solid waste, a further test is available to determine whether the waste is putrescible or non-putrescible. This test determines whether the waste is capable of significant biological transformation. If the waste is not tested, it should be managed as general solid waste (putrescibles).

Mitigation and Management

Mitigation measures and responsibilities associated with waste management on the site are outlined below and have been developed to ensure consistency with industry best practice:

- Ensure that all waste is managed in accordance with waste hierarchy (avoid, reuse, recycle, dispose) to reduce adverse impact on the environment;
- Manage and reduce consumption and use of natural resources and promote the use of alternative environmentally friendly materials where practical;
- Waste is to be collected, transported and disposed of at a licensed off-site facility in accordance with waste regulations;
- Waste will be appropriately stored away from any drainage paths;
- No burning of waste or vegetation is allowed under any circumstances;
- General and putrescible waste and recyclables such as metal, plastic, glass, paper, cardboard will be segregated and appropriately disposed;
- Soil materials will be stored in stockpiles away from drainage lines and drip lines of trees with appropriate run-off controls;
- All waste bins will have secure lids in place to prevent water ingress and access for animals;
- Quantities of waste kept on-site will be kept to a minimum;
- Excavated soil will be re-used on-site within the test pits; and
- Should any Asbestos Containing Materials (ACM) be identified during construction activities it will be suitably contained and disposed off-site at a licensed facility in accordance with waste classification guidelines.

6 Justification and Conclusions

This Statement of Environmental Effects has been prepared by RPS Australia East Pty Ltd (RPS) on behalf of Wild Quarries and Civil (the 'Applicant') to support an application under Section 4.55 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The modified application seeks to amalgamate the existing consents that permit the operation of a 100,000tpa gravel quarry (DA 342/2002), plant hire operations, and a 30,000tpa concrete batching plant (DA 96/2017) at 8440 New England Highway, Muswellbrook, NSW (the 'site'). The application also seeks to extend the operational life of the quarry operations for an additional 20 years.

The proposed amalgamation of consents DA 342/2002 and DA 96/2017 will provide a current and relevant set of consolidated conditions that better represent the combined activities across the development site. Currently there are outdated consent conditions for DA 342/2002 that are no longer relevant or contradictory to the approved activities. As part of this consolidation it is requested that quarry operations be extended for a further 20 years to allow the mining of the remaining gravel reserves not yet extracted under DA 342/2002.

Further, DA 96/2017 was issued for a 3 year interim period only, during which Council required DA 342/2002 and DA 96/2017 be amalgamated to allow concrete batching activities to continue in parallel with the quarrying and plant hire operations.

Wild Quarries and Civil operate an integrated business on the site which provides a unique opportunity for the 3 operations to supply the other with required materials and services for a range of products.

A review of the various environmental aspects of the site (including those in the original project EIS from 2002) concludes that with the implementation of existing environmental management practices as outlined in **Section 5**, the existing development can continue with minimal environmental impact, whilst providing direct employment for 40 people in the Muswellbrook area and indirect employment for contractors and other persons involved in the supply of products and services to the operations.

The continued operations are permitted with consent and will have minimal social, economic, or environmental impacts. It also complies with the relevant state and local environmental planning controls. The proposal is reasonable and appropriate and satisfies the relevant provisions of Section 4.15 (1) of the EP&A Act.

Accordingly, it is requested that Muswellbrook Shire Council approve the subject modification.



Appendix A

Proposed Quarry Conditions

APPENDIX A.

Proposed Revised Conditions – Quarry and Plant Hire Operations

Condition 1

The development must be undertaken generally in accordance with the proposal contained in:

- a) The development application DA 342/2002 and as amended by the Section 96 modification application submitted to Council dated 2nd April 2007.
- b) The accompanying document titled "Proposed Gravel quarry and Plant Hire Operation, Lot 30 DP 815308, Grassree Ridge Road, Shire of Muswellbrook, Environmental Impact Statement" dated 25 October 2002.
- c) The document titled "Response to Submissions from the Exhibition of the Environmental Impact Statement" dated 5th May 2003.
- d) The facsimile and attached diagrams to Council from Wild Plant Hire dated 27 May 2004.
- e) The report to Council dated 8th June 2004.
- f) Boundary adjustment plan prepared by MM Hyndes Bailey dated 19 September 2016, reference 216175/2.

Condition 2

The consent shall lapse twenty (20) years from the date of granting this development consent. All works associated with the development including rehabilitation of the site shall be completed by the date the consent lapses.

Response

If operation is required beyond this point, a new development application will be required. It is anticipated that the required lapse date shall be June 2044.

The existing conditions that we have, will remain in place until June 2024 when the DA lapses. And after that the new consent will be triggered on the anniversary of the old consent lapsing.

Condition 3

Prior to the commencement of construction, the applicant shall lodge a bond or bank guarantee of \$50,000 with Council in assurance that all conditions are fully complied with and subject to the bond being used by Council in default of these conditions. In the event that conditions are not adhered to, operations will cease on notification by council and not recommence until such conditions have been duly rectified.

Response

Acknowledge and agree with the current condition. However, to bring it up to current legislative requirements, using the current bond calculator, the new amount will be \$75,000.00 bank guarantee to be initiated at the commence of the new consent June 2024.

Condition 4

The Applicant shall not produce or transport more than 100,000 tonnes of material from and to the site per year. Should the Applicant wish to produce or transport more than 100,000 tonnes per year, separate application shall be made to Council.

Response

Agreed - no change.

Hours of Operation**Condition 5**

The use of plant and equipment and site operations at the quarry shall be restricted to the hours of:

Monday to Friday 7am-5pm
Saturdays 7am-1pm
Sundays and Public Holidays No operations

The use of plant and equipment and site operations at the plant hire operation shall be restricted to the hours of:

Monday to Friday 7am-3pm
Saturdays 7am-1pm
Sundays and Public Holidays No operations

The start-up of vehicles or attendance on site by contractors or employees must not be undertaken outside of these hours.

Response

Agreed - no change.

Condition 6

Request No Change

Condition 7

Request No Change

Condition 8

The Applicant shall submit to Council every 6 months from the date of this consent or at other times as determined by Council, a report detailing compliance with all conditions of the development consent.

Request to Delete

During the consultation it was considered unnecessary due to information being duplicated in the annual Environmental Management Report

Condition 9

The applicant is to support the establishment and operation of a Community Review Committee as appointed by Council whose role will be to monitor the operation of the development throughout the life of the development.

Request to Delete

It is the understanding that the requirement for a CCC is obsolete. It was relevant at the time of commencement and the operations did manage a committee however as we understand it there are no such requirements Community Review Committee.

Condition 10

The operator is required to provide annual production data as requested by the Department of Minerals Resources, in the manner required, on the standard form supplied for that purpose.

Request to Delete

The reference that an annual production data be submitted to Department of Mineral Resources needs to be removed now obsolete. In any event annual production data is provided to Council by way Annual Reporting and Section 94 Contributions as per Condition 13.

Condition 11

All management plans required by this approval are to be submitted to and approved by Councils Extractive Industry Committee prior to commencement of operations on site. The plans are to make available to the Review Committee for information.

Request to Delete

The Extractive Industry Committee no longer operates accordingly this condition should be removed.

Section 94 Contributions:**Condition 12**

Prior to the commencement of commercial operations, the Applicant shall enter into an agreement with Muswellbrook Shire Council regarding appropriate Section 94 Contributions for road maintenance in accordance with Council DCP7, Section 94 Contributions Plan.

Modification

As per discussions with Council, reference to CPI as per Council Management Plan.

Condition 13

Section 94 contributions and submission of tonnage details are to be provided to Council on a quarterly basis as requested by Council

Request to Modify

Wild Quarries and Civil submitted an application to alter the contribution schedule. This was approved by Muswellbrook Shire Council. The new condition is to complete this return on a six monthly basis.

Condition 14

Request
No Change

Condition 15

Request
No Change

Condition 16

Request
No Change

Condition 17

Request
No Change

Condition 18

Request
No Change

Condition 19

No more than 60 truck movements per day are permitted from the site. No truck movements are to occur during school bus pick up/set down the times on the New England Highway near Pamger Drive or adjacent areas.

Request to Modify

There is no request to alter number of truck movements from and to the site, however, there is no school bus stop near the entrance to the development on the New England Highway. Therefore, there are no pickup or drop-off points of students from a school bus in the vicinity of truck movement to and from the operation on weekdays. Accordingly, removal of bus stop restriction times to be adjusted to usual times.

Condition 20

Request
No Change

Condition 21

Request
No Change

Environmental Matters**Condition 22**

Prior to the commencement of construction, the Applicant shall implement to Council's satisfaction an Erosion and Sediment Control Plan in accordance with DCP 9 Erosion and Sediment Control Policy and Code of Practice.

Request to Delete

The wording of this condition relates to an Erosion and Sediment Control Plan being submitted and completed prior to commencement.

Condition 23

Prior to the commencement of construction, the applicant shall install to Council's satisfaction, appropriate visual screening measures to minimise the visual impact of the development.

Request to Delete

This condition should be considered for deletion. Completed prior to commencement.

Condition 24

Request

No Change

Condition 25

No more than 2 hectares of land shall be disturbed at any time in the quarry area. No more than 2 hectares of land shall be disturbed at any one time in the working area/base of the extraction area.

Request to Modify

This development consent was made under the premise of "designated development" ie automatically triggers a disturbance footprint greater than 2 hectares. The 2 hectare restriction is not relevant, or safe and impedes the quarry activities.

This condition is highly restrictive, the original application was made under Designated Development Legislation which allows for an area of disturbance greater than 2 hectares. There is no viable similar enterprise in the Muswellbrook Shire Council that has a restriction of two hectares.

The enterprise has shown over the entire duration of the operation, there has not been a single complaint in relation to dust exceedences on their operation. Reference to the complaints register found in the Mine Management Plan verify this.

The extractive condition can be considered an additional Safety Risk because it means there are various routine operations of diggers, trucks, plant and workers in a relatively confined area. Though all Safe Work Methods compliances are undertaken the restrictive area can be considered a risk.

The operation is in a confined area that is enclosed with no visual impact. The pit area and exposed batter is not visible outside the immediate pit area.

There has not been a single complaint on dust, noise or any other aspects that could impact to neighbours or the offsite environment. All monitoring of noise and dust also supports this

position. Refer to Annexures 'A' and 'B' attached herewith from Carbon Based Environmental.

Based on the above information though small areas can be rehabilitated progressively. Given the landform and type of operation it would be appropriate to undertake rehabilitation on completion of operations. This will be covered in the Rehabilitation Management Plan.

Condition 26

Prior to commencement of construction, the Applicant shall, to Council's satisfaction, rehabilitate the area of cleared vegetation adjacent to the plant hire operation site.

Request to Delete

This has been completed as per requirements prior to commencement.

Condition 27

Prior to the commencement of commercial operations, the Applicant shall install a bund wall and complete approved landscaping works on the eastern side of the excavation area.

Request to Delete

This has been completed and maintained prior to commencement.

Condition 28

Request
No Change

Condition 29

Request
No Change

Condition 30

Prior to the commencement of construction, the Applicant shall establish, to the satisfaction of Council, a conservation agreement and management plan for the land within Lot 30 DP 815308 not included in the defined construction or operation activities for the development (as detailed DA and EIS). The conservation area will ensure that the remaining flora and fauna and aboriginal heritage values are managed for biodiversity and conservation purposes.

Request to Delete

Compliant

There is a signed Conservation Agreement covering all requirements as specified in the above condition.

Condition 31

For the whole of Lot 30 DP 815308, the Applicant is to complete, within one year of the date of this consent, additional:

- a) flora surveys during the respective flowering seasons, *Bothriochloa biloba* (summer), *Diuris pedunculata* (August to September), *Diuris tricolor* (September to November) and *Goodenia macbarronii* (October to March).
- b) surveys to determine the species of eucalypt present in order to clarify the conservation significance of the communities present.
- c) Aboriginal heritage surveys to determine aboriginal heritage values across the whole of the property. Surveys are to be undertaken in consultation with the local Aboriginal community.

The outcomes of the above investigations are to be incorporated into a final conservation agreement and management plan.

Request to Delete

Compliant

- a) Detailed Flora and Fauna Survey and Assessment was undertaken in the EIS and specifics address in Appendix C of that report. The surveys were conducted during the appropriate recommended time frames for the three flowering plants as identified in the condition. None of these plants were found to be present on the area.
- b) The EIS Flora and Fauna Survey and Assessment Report undertaken by Ecotone Ecological Consultants identifies the type of Vegetation Communities present and the specific eucalyptus trees, other varieties of trees, shrubs and groundcover present identified (see Appendix C of the EIS). The landscape is dominated by Central Hunter Ironbark- Spotted Gum- Grey Box Forest.
- c) This has been addressed in the EIS Section 4.7 Archaeology. A detailed report was undertaken by Insite Heritage.

Blasting

Condition 32

Muswellbrook Shire Council and the occupiers of buildings / residents located within 2 km of the quarry are to be advised one (1) week prior to each blast even, including any changes to blasting schedules. This notice shall be in writing and at the end of each month, a written statement of all blasting taken place and quantities produced in the preceding month shall be submitted to Council. In the event of blast failure, the applicant is to reschedule the blast at a time to be notified to residents in accordance with this clause.

Request to Modify

Incorporate **Conditions 32-38** into one single condition. Blast Management Plan to include:

- Restriction of blasting in adverse weather conditions
- Traffic control as required on Grasstree ROW
- Max number of 8 blasts per year
- No explosives to be kept on site
- Monitoring results

As per approved consent 15 June 2004

Condition 33

Prior to the commencement of construction, the Applicant shall, upon the written request of the owner of any property located within 2 kms of the excavation area, arrange at its cost, for the inspection by a technically qualified person agreed to by both parties, to record the material condition of any structure on such property.

Delete

Consolidated Condition 32

Condition 34

Blast shall not take place in adverse weather conditions including overcast conditions or when the wind is from the south west.

Delete

Consolidated Condition 32

Condition 35

The applicant shall prepare and implement a Blasting / Vibration Management Plan to the satisfaction of Council, prior to the commencement of any blasting.

The Plan must include but not be limited to the following matters.

- a) compliance standards
- b) mitigation measures
- c) remedial action
- d) monitoring methods and program
- e) monitoring program for flyrock
- f) procedures for the notification of occupiers of building and residents prior to detonation of each blast
- g) measures to ensure no damage by flyrock to people, property livestock and powerlines/other utilities.

Delete

Consolidated Condition 32

Condition 36

The Applicant shall prepare and implement a Blasting / Vibration Management Plan to the satisfaction of Council, prior to the commencement of any blasting The Plan must include but not be, limited to the following matters.

- a) compliance standards
- b) mitigation measures
- c) remedial action
- d) monitoring methods and program
- e) monitoring program for flyrock distribution
- f) procedures for the notification of occupiers of building and residents prior to detonation of each blast

- g) measures to ensure no drainage by flyrock to people, property, livestock and powerlines/ other utilities.

Delete

Consolidated Condition 32

Condition 37

No more than 8 blasts are to occur per year.

Delete

Consolidated Condition 32

Condition 38

No explosives are to be stored on site at anytime

Delete

Consolidated Condition 32

Condition 39

No change

Noise Management

Condition 40

The operator is to develop strategies and procedures approved by Council to overcome noise from reversing beepers on operational equipment.

Request to Modify

Previous investigation confirmed use of **Quackers** (*imitating the noise of wild ducks*) to mitigate noise. Less intrusive natural woodland sound. The operation has implemented the use of Quackers.

Government Agency Requirements:

ENVIRONMENT PROTECTION AUTHORITY Revised General Terms of Approval

Condition 41

Request to Delete - works have been carried out and complete

Works to be undertaken in accordance with information supplied to the EPA,

- a) Except as provided by these general terms of approval. The work and activities must be undertaken in accordance with the proposal contained in:
- i) The Development Application No 342/2022 submitted to Muswellbrook Council; and
 - ii) The Section 96 modification application and supporting information submitted to Muswellbrook Council and

- iii) All additional documents supplied to the EPA in relation to the development prepared by Pelican Environment and business Solutions dated 5 May 2002.

Unless otherwise specified in these General Terms of Approval.

Discharges to Air and Water

Condition 42

Location of monitoring/discharge points

- a) The following points referred to in the table below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants from the point.

Types of Monitoring point	Description of Location
Particulates - deposited matter	At Location(s) where dust disposition levels are representative of the levels experience at residential properties, or other sensitive receivers, resulting from the operation of the quarry.
Particulates - total suspended particles and PM	At location(s) where the level of particulate matter being sampled is representative of emissions from the operation of the quarry taking into account prevailing wind direction and the location of residential properties or other sensitive receivers.

Request to Delete - Refer to Condition 43 below.

Limit Conditions

Condition 43 Pollution of waters

- a) Except as may be expressly provided under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

Request to Delete - Historical and current reporting records indicate there have been no exceedances for the duration of the operation. It has been established that this requirement should be reduced to sampling from one dam monthly from the identified work shop location. Refer to Annexures "A" and "B"

Condition 44

Waste

- a) The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

- b) The above condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997

Request to Delete.

The requirement of Condition 44 has been revised and replaced by Condition 29.

Condition 45

Potentially offensive Odour

- a) No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997

NOTE: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

Request to Delete

No condition of this licence identifies a potentially offensive odour for the purpose of PEOA (1997).

Condition 46 Noise Limits

- a) Noise generated by the premises must not exceed the noise limits presented in the table below. Note the noise limits in the table below represent the noise contributions from the proposal.

Noise Limits (dB(A))

Location	Daytime Laeq(15 minute)
Sharman residence as indicated on the plan titled "Figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors" dated 16/09/04 in the document "Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 343/2002 (June 2004) dated October 2004	43
Cross residence as indicated on the plan titled Figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors" dated 16/09/04 in the document "Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 343/2002 (June 2004) dated October 2004	43

Smith residence as indicated on the plan titled Figure 1: <i>Offsite Environmental Monitoring Locations at Potential Sensitive receptors</i> dated 16/09/04 in the document "Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 343/2002 (June 2004) dated October 2004	43
---	----

- b) for the purpose of Condition 46(a) day is defined as the period from 7.00am to 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturday.
- c) the noise emission limits identified in condition 46(a) apply under meteorological conditions of:
 - i) Wind speeds up to 3m/s at 10 metres above ground level;
 - ii) Temperature inversion conditions of up to 30°C/100m and wind speeds up to 3m/s at 10 metres above ground level.

Request to Delete

Requirements of Condition 46 are encompassed in existing Environmental Protection Licence No. 12301

Condition 47 Blasting

- a) The Airblast overpressure level from blasting operations carried out in or on the premises must not exceed:
 - i) 115dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
 - ii) 120 dB (Lin Peak) at any time.

At any residential locations presented in the table under condition 46(a)

- b) the ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 - i) 5mm/s at nearby residences for more than 5% of the total number of blasts carried out in or on the premises during each reporting period;
 - ii) 10mm/s at nearby residences at any times; and
 - iii) 50mm/s at nearby power lines or television repeater tower.

Request to Delete

Requirements of Condition 47 are encompassed in existing Environmental Protection Licence No. 12301

Condition 48 Hours of Operation

All construction and quarrying work at the premises can only be conducted between 7.00am and 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturday

Request to Delete

Requirements of Condition 48 are encompassed in existing Environmental Protection Licence No. 12301

*Operating Conditions***Condition 49 Dust**

- a) the premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- b) Trucks entering and leaving the premises that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading

Condition 50 Wastewater Management

- a) A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of sewage effluent and other wastewater.

Request to Delete

Complete

Condition 51 Stormwater/sediment Control - soil and water management construction Phase

- a) Soil and water management controls must be employed to minimise soil erosion and discharge of sediment and other pollutants to lands and /or waters during construction activities in accordance with requirements outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing).

Request to Delete: Complete.

Condition 52 Stormwater/sediment Control - Operations Phase

- a) Following the construction phase, stormwater management measures must be implemented to mitigate the impacts of stormwater run-off and within the premises in a manner that is consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the measures should be consistent with guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA)

Request to Delete

Complete

Monitoring and Reporting Conditions

Condition 53 Monitoring records

- a) The results of any monitoring required to be conducted by the EPA's General Terms of Approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions 53 (b) and 53 (c)
- b) All records required to be kept by the licence must be:
 - i) in an legible form, or in a form that can readily be reduced to a legible form;
 - ii) Kept at least four (4) years after the monitoring or event to which they relate took place; and
 - iii) Produced in a legible form to any authorised officer of the EPA who asks to see them.
- c) the following records must be kept in respect of any samples required to be collected:
 - i) the date(s) on which the sample was taken;
 - ii) the time(s) at which the sample was collected;
 - iii) the point at which the sample was taken; and
 - iv) the name of the person who collected the sample

Request to Delete

Requirements of Condition 53 are encompassed in existing Environmental Protection Licence No. 12301

Condition 54 Testing methods - concentration limits

- a) Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
 - i) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
 - ii) if no such requirement is imposed by or under the Act, any methodology which a condition of his licence requires to be used for that testing; or
 - iii) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

NOTE:

- a) The Clean Air (Plant and Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for Sampling and Analysis of Air Pollutants in NSW"
- b) Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

Request to Delete

Requirements of Condition 54 are encompassed in existing Environmental Protection Licence No. 12301

Condition 55

Requirement to monitor dust and weather conditions

- a) For each monitoring point specified below the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.

Air Monitoring at the Locations(s) Identified by condition 42(a)

Pollutant	Units of Measure	Frequency	Sampling Method
Particulates-Deposited Matter	g/m2/month	monthly	AS 3580.10.1 - 1991 (or other method approved by the EPA)
Particulates - PM10	ug/m3	1 day in 6	AS 3580.9.6 - 1990 or other method approved by the EPA)
Total suspended particles	ug/m3	1 day in 6	24 hour composite sample (or other method approved by the EPA)

- b) The licensee must monitor (by sampling and obtaining results by analysis) each weather parameter specified in Column 1 using the sampling method, units of measure, and frequency specified opposite in the other columns:

Parameter	Units of Measurement	Frequency	Averaging Period	Sampling Method
Wind direction	degrees	continuous	1 hour	Instrumental
Wind Speed	m/s	continuous	15 minute	Instrumental
Rainfall	mm	continuous	1 hour	Instrumental

Request to Modify

Refer to report prepared by Carbon Based Environmental at Annexures 'A' and 'B'

Condition 56 Requirement to monitor Blasting and Noise

- a) The applicant must monitor ground vibration and overpressure of all blasts.

- b) Ground vibrations or the overpressure must be measured at noise sensitive (eg residences, hospitals, schools etc) selected in consultation with the EPA.
- c) To determine compliance with conditions 47(a) and 47(b):
 - i) Airblast overpressure and ground vibration must be measured at Cross residence (as indicated on the plan titled "figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors" dated 16/6/9/04 in the document "Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 342/2002 (June 2004)" dated October 2004 for all blasts carried out in or on the premises'.
 - ii) Instrumentation used to monitor compliance must meet the requirements of Australian Standard 2187.2. of 1993
- d) the noise monitoring is required, noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30 m from boundary to determine compliance with the Laeq (15 minute) noise limits in condition 46(a).

The modification factors presented in Section 4 of the NSW Industrial Noise policy shall also be applied to the measured noise level where applicable.

Request to Delete

Requirements of Condition 56 are encompassed in existing Blast Management Plan

Condition 57

Unchanged

Condition 58

Unchanged

DIRNP General Terms of Approval

Administrative

Condition 59

Prior to the commencement of any work within 40 metres of the Protected Waters, a permit under Part 3A of the Rivers and Foreshores Improvements Act 1948 (RFI) must be obtained from DIPNR.

Request to Delete

The EIS defines the area of the development. The proposed operations including Quarry Area, Haul Road, Crushing Plant, Hire Machinery Area, Workshop and Parking are all located above a series of dirty water containment structures. Figure 10 in the EIS shows the location of all the developments for the operation. All works are well away from the parameters of this Condition. Located away from Maidswater Creek. Note DIPNR does not exist as a government department. At present the Protection of Waters Part 3A of the Rivers and Foreshores Improvement Act 1948 is now included in the Water Management Act 2000. This condition appears to be a response from the then department, of matters to consider, not a response to the actual location of the operation. It is therefore requested that the condition to be deleted.

Condition 60

The works must be undertaken in accordance with the permit application, except as otherwise provided by the conditions of the permit.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

Condition 61

The permit will be granted for twelve months from the date of formal approval of the permit under Part 3A of the RFI Act

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

Condition 62

The Permit will not be transferable to any other person, company or site.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

Condition 63

The copy of the permit must be kept on site at all times and made available to DIPNIR Officers upon request.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

Condition 64

The permit holder is responsible for compliance with all of the permit conditions

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

Condition 65

If any of the permit conditions are breached, the permit holder will be subject to a breach inspection fee and required to pay DIPNR \$500.00 per inspection. The Applicant will be required to pay the fee with 28 days of being invoiced. The fee shall be charged for the initial

breach inspection and all subsequent inspections until the breach has been rectified to the satisfaction of DIPNR.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59.

General**Condition 66**

The works must be designed and constructed such that the works do not cause sedimentation, erosion, reduction in waterway or permanent diversion of the Protected Waters.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59. This relates to works with 40 m of Protected Waters. The operation is outside the specifications that constitutes Protected Waters.

Condition 67

Stormwater discharge for the area of works must not cause any erosion or instability of the bank or bed of the Protected Waters.

Request to Delete

The Water Monitoring Program and Reports demonstrate there is no breach of this requirement. Prevention of these occurrences are addressed in The EIS under Section 2 - Water Management (including Erosion and Sediment Control 2.11 and Waste Management 2.12 and in Section 4.4 Hydrology.

As per Carbon Based Environmental water monitoring program that has been conducted on a monthly basis demonstrates nil exceedances from commencement of quarry to date.

Climatic conditions and the monitoring program have indicated that there is very little water movement in the catchment. All monitoring reports and observations supports that there has not been any water quality programs leaving the site into Midswater Creek. We request that this condition be modify to a more realistic interval of 6 months intervals.

Condition 68

All demolition and construction materials are to be disposed of appropriately so as not too cause damage to the bank or bed of the Protected Waters.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59. This relates to works with 40 m of Protected Waters. The operation is outside the specifications that constitutes Protected Waters.

Condition 69

Scour Protection and energy dissipation must be designed and constructed to prevent erosion of the back or bed of the Protected Waters.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59. This relates to works with 40 m of Protected Waters. The operation is outside the specifications that constitutes Protected Waters.

Condition 70

The finished invert level of the culvert must be at the same level as the existing bed of the Protected Waters.

Request to Delete

This condition to be deleted for the reasons outlined in Condition 59. This relates to works with 40 m of Protected Waters. The operation is outside the specifications that constitutes Protected Waters.

*Additional Information***Condition 71**

In the assessing any subsequent permit application DIPNR will require the following additional information:

- a) An Erosion and Sediment Control Plan prepared in accordance with Council's Erosion and Sediment Control Plan Guidelines and to the satisfaction of DIPNR.
- b) A Stormwater Management Plan prepared to the proposal that addresses the following requirements:
 - i) Any nutrient, detention and sediment control facilities for the site are to be constructed outside the riparian buffer zone and are generally not to be situated on Protected Waters.
 - ii) Post-development flow in all Protected waters should mirror pre-development flow both in the site and downstream of the site.

Request to Modify

Section A - This condition was covered in the EIS Section 2:11. It however needs to be reviewed as part of Statement of Environmental Effects in Water Management Plans - including Erosion Sediment Control Plan and Rehabilitation Management Plan. The DIPNR no longer exists, the current relevant department is NSW Office of Water. The condition needs to include a statement that identifies a reference to or any subsequent departments or authorities that administer the Water Management Act of 2000.

Section B - This is covered in Section 2:10 Water Management in the EIS. It however needs to be reviewed as part of Statement of Environmental Effects in Water Management Plans - including Erosion Sediment Control Plan and Rehabilitation Management Plan. The DIPNR no longer exists and the current relevant department is NSW Office of Water. Current Water Monitoring Procedure and reporting demonstrate that there is compliance of this condition and has been since the development was approved.



Appendix B

Proposed Concrete Batching Plant Conditions

APPENDIX B.**Proposed Revised Conditions – Concrete Batching Operations****Identification of Approved Plans**

1. Development in Accordance with Plans

The development being carried out in accordance with the development application and the drawings referenced below and endorsed with Council's approval, except where amended by the following conditions

Drawing No	Drawn by	Drawing Date
Site Plan - aerial	Global Acoustics	undated
Site Plan	RPS	undated
Elevations - photographic	Applicant	undated

Comments**Consolidate at front of s96A consent**

2. Development in Accordance with Documentation

Title	Written	Date
Statement of Environmental Effects	Casson Planning and Development Services	August 2016
Air quality Assessment	Todoroski Air Services	14 December 2016
Noise Impact Assessment	Global Acoustics	20 December 2016
Waste Management Plan	RPS	December 2016
Water Management Plan	RPS	December 2016

Request – comments**Consolidate at front of s96A consent**

3. Plans on Site

A copy of all stamped approved plans, specifications and documents (including the Construction Certificate if required for the work incorporating certification of conditions of approval) must be

kept on site at all times so as to be readily available for perusal by any officer of Council or the Principal Certifying Authority

Request – comments

Consolidate at front of s96A consent

4. Limitation of Consent

The operation of the mobile concrete batching plant shall be limited to three (3) years

Request – comments

All components to have the same expiry date

The Mobile Batch Plant was limited to 3 years because the review would consolidate all three consents –

Quarry DA 342 - (modified 15/6/04, 13/12/07)

Gravel Quarry and Plant Hire Operation (Boundary Adjustment) Lot 30 DP 815308

DA 96/2017

Mobile Concrete Batching Plant - Lot 30 DP 815308

Details of Conditions

Conditions that must be complied with at all times.

14. Hours of Operation

The Concrete Batching Plant shall operate in accordance with the following hours:

Monday - Friday 7.00am to 5.00pm

Saturday 7.00am to 1.00pm

Sunday and Public Holidays

Request – comments

All components to have same operating hours

15. Noise- Compliance with Legislation

All noise generated from the premises must comply with the *NSW EPA Industrial Noise Policy* or equivalent, *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (General) Regulation 2009* and the *Protection of the Environment Operations (Noise Control) Regulation 2008*.

If council receives noise complaints and council verifies these as "offensive noise" an acoustic consultant must be engaged and the offending equipment modified to reduce noise emissions to comply with the above standards.

Requested Modification

Modify in single condition for all

If council receives noise or site complaint, the complaints register is filled out and investigated according to the Complaints procedure contained in the Mine Management Plan item 11.2. Meet with the complainant to discuss time, date and nature of complaint and investigate and mitigate so as a resolution can be achieved before activity resumes.

16. Noise criteria for the development

The premises must comply with following noise limits as specified in the Global Acoustics Noise Impact Assessment Report, dated 20 December 2016

	Day Laeq (15 minute)
R1	43
R2	43
R3	43
R4	43
R5	43
R6	43
R7	43
R8	36

The limits in the noise table above do not apply if the Applicant has a written agreement with the relevant owner(s) of these residences to generate higher noise levels, and Council has been advised in writing of the terms of this agreement.

Requested Modification

As Per Report

18. Loading within site

All loading and unloading operations shall be carried out wholly within the confines of the site at all times and with loading bays designated on the approval plans.

Request - comment

standard condition all components to have same requirement

19. Stormwater Disposal

All Stormwater from the development including all hardstandings and overflows from rainwater tanks is to be collected and disposed of to the existing stormwater drainage on site.

Requested Modification**As per Water Management Plan**

20. Restriction on vehicle movements

The Applicant shall install regulatory signage banning the right turn movement out of the site onto the New England Highway for vehicles over 5 tonnes. Heavy vehicles shall not be permitted to turn right onto the highway at any time.

Requested Modification comment

Standard Condition (no right turn for vehicles over 5 tonnes - sign all components to have the same requirement

22. EPA emergency response

The licensee must maintain and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must be developed in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEP) Act 1997 and POEO regulations. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g, spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The PIRMP must be tested at least annually or following a pollution incident

Request – comment

Standard condition - prepare, maintain and implement Pollution Incident Response Plan PIRMP - document Number WQC PLN 0019, Reviewed 01/08/2018 map updated. Attached herewith Annexure 'C'

23 EPA - bunding

All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in-place.

Request Modification

Delete as this condition is included in Wild Quarry Pollution Incident Response Management Plan PIRMP - document Number WQC PLN 0019, Revised 01/08/2018 map updated.

24. EPA - Water Management

A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of sewage effluent and other wastewater.

Requested Modification

Delete as this condition is included in Wild Quarry Pollution Incident Response Management Plan PIRMP - document Number WQC PLN 0019, Revised 01/08/2018

25. EPA Treated wastewater storage

A treated wastewater storage and reuse system must be in place at the concrete batch plant with sufficient capacity to ensure that there is no discharge to waters from the reuse system

Requested Modification

Delete as this condition is included in Wild Quarry Pollution Incident Response Management Plan PIRMP - document Number WQC PLN 0019, Revised 01/08/2018



Appendix C

Carbon Based Environmental Supporting Document



Cbased Environmental Pty Limited

ACN 611 924 264

28 February 2018

Review of the Wild Quarry (Muswellbrook) Regulatory Approvals for Air Quality, Meteorological and Water Monitoring

Summary

Please find following a review of the existing requirements for air quality and water monitoring at the Wild Quarry (Muswellbrook) site. The review is based on our experience at similarly sized quarries in NSW, the sites Development Approval DA342/2002 amended 3 January 2017 and the sites Environment Protection Licence from the NSW Environment Protection Authority (Licence No 12301). We have recommended changes to the sites air quality, meteorological and water monitoring requirements including:

- Reducing air quality monitoring to one High Volume Air sampler measuring PM₁₀ particulates
- Allowing meteorological monitoring from existing stations within 10km of the site
- Reducing water quality monitoring to one dam taking runoff from the workshop area on a monthly basis and monitoring any discharge to Maidswater Creek and also upstream and downstream of the discharge point in Maidswater Creek only during a discharge event.

To make changes to the environmental monitoring at the quarry, Development Approval and Environment Protection License modifications would be required from Muswellbrook Council and the NSW EPA.

The review is general in nature and may not be comprehensive. Cbased Environmental takes no responsibility for any omissions or mistakes. This report must not be taken as legal advice.

Existing Regulatory Monitoring Requirements

Air Quality

DA342/2002 clause 6 requires an environmental management plan for dust management. DA342/2002 Clause 43 (a) requires the monitoring of particulates by deposited matter, total suspended solids and PM₁₀. Clause 54 requires the testing methods to be to the "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW", or they may be to methodology approved by the EPA. Clause 54/55 specifies methods consistent with the "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW", apart from total suspended particulates, where the method code is not included.

EPL 12301 Clause P1 requires monitoring for Particulates - deposited matter, particulates PM₁₀ and particulates total suspended particulates. Clause M2 specifies the frequency of monitoring which is in line with the approved methods.

Cbased Environmental Pty Limited
Unit3, 2 Enterprise Crescent SINGLETON NSW 2330
P: 0265713334 E:cbased@bigpond.com

Page 1

Meteorological (Weather Conditions)

DA342/2002 Clause 55 (b) requires the monitoring of weather conditions (wind direction, wind speed and rainfall). It does not specify the location of the weather station.

EPL 12301 Clause M7 requires the monitoring of weather M7.1 requires wind speed, wind direction and rainfall to be monitored.

Monitoring must be to the "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

Water Quality (stormwater)

DA342/2002 clause 43(a) requires water pollution to be managed under section 120 of the Protection of the Environment Operations Act 1997. Clause 52 requires stormwater to be managed by a Stormwater Management Plan for the catchment or, if this is not yet prepared, measures should be consistent with guidance contained in the Managing Urban Stormwater Council Handbook. Clause 55 (b) specifies methods consistent with the Approved Methods Publication unless approved by the EPA in writing.

EPL 12301 Clause L1 requires compliance with section 120 of the Protection of the Environment Operations Act 1997. Clause O6.1 requires stormwater to be managed by a Stormwater Management Plan for the catchment or if this is not yet prepared measures should be consistent with guidance contained in the Managing Urban Stormwater Council Handbook.

Environmental Monitoring requirements at other similar operations and suggested monitoring at the Wild Quarry**Air Quality Monitoring**

Recent trends in air quality monitoring have moved towards continuous monitoring. To meet the NSW EPA "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW", this is required to be undertaken by a Tapered Element Oscillating Microbalance (TEOM) or a Beta Attenuation Monitor (BAM). Both methods are relatively expensive at around \$75,000 per unit and \$15,000 in annual operation costs. Some quarries have been able to negotiate non-approved methods with the EPA which include optical laser monitors such as the E-Sampler or Dusttrak. The costs for these monitors are still high at around \$25,000 per unit and \$10,000 in annual operation costs.

The Wild Quarry location allows for a less rigid approach as the NSW EPA, with funding from local coal mining companies, have a rigorous TEOM and BAM monitoring network including sites in Muswellbrook to monitor the wider community. We think it reasonable for a small quarry operation located between larger mining operations such as Drayton, Mt Arthur and Liddell Coal and power generators Liddell and Bayswater to have a smaller monitoring regime.

Local mining companies have also been allowed by the EPA and the Department of Planning and Environment to decommission or reduce their monitoring of deposited matter and particulate matter by High Volume Air Sampling (HVAS). Additionally, where HVAS sampling is still required, most coal mining sites in the Hunter Valley no longer monitor total suspended particulates by HVAS as it is generally recognized that total suspended particulates may be calculated by multiplying the PM₁₀ concentration by a factor of 2.5.

We would suggest that the current requirement for deposition monitoring at the Wild Quarry be deleted and HVAS be reduced to PM₁₀ monitoring at the nearest residence with total suspended particulates calculated by multiplying the obtained PM₁₀ concentration by a factor of 2.5.

We also recommend that the quarry implement the National Environment Protection Measure for PM₁₀ maximum levels and place a daily maximum limit of 50ug/m³ for PM₁₀ concentration

Cbased Environmental Pty Limited
Unit3, 2 Enterprise Crescent SINGLETON NSW 2330
P: 0265713334 E:cbased@bigpond.com

Page 2

and an annual average maximum limit of $25\mu\text{g}/\text{m}^3$. Readings above these values would require explanation of the particulates contribution by the quarry and efforts employed by the quarry to reduce such emissions.

A limit for total suspended particulates is not required as it is a calculated value from PM_{10} .

Meteorological Monitoring

The "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW", method AM2 lists AS2923 as the reference document for the measurement of horizontal wind for air quality applications. AS2923 generally specifies that wind monitoring, for air quality modelling, is generally applicable in an area of 100m to 10km. The Wild Quarry requires new meteorological equipment and the cost of this installation is approximately \$25,000 with annual operation costs of \$3,000. It is more appropriate for a small quarry, which is in an area where meteorological monitoring is widespread, to have an option of utilizing an existing station within 10km. We would recommend that an option to utilize an existing and nearby station be allowed.

Water Monitoring

Originally the site monitored a total of 8 dam or creek sites (Dam 2,3,4,6,8,9 and Maidswater Creek up and down). This program was for the initial construction phase, principally for erosion and sediment control, which is now less of an issue. We would suggest reducing the monitoring program to monitoring one dam taking runoff from the workshop area on a monthly basis for pH, electrical conductivity, total suspended solids, total dissolved solids and total oil and grease. This will provide a general assessment of water quality in this dam. Additional monitoring is recommended for any discharge to Maidswater Creek and also upstream and downstream of the discharge point in Maidswater creek only during a discharge event. Discharge samples would be monitored for pH, electrical conductivity, total suspended solids, total dissolved solids and total oil and grease to give a general assessment of water quality and impacts on Maidswater Creek for assessment against Section 120 in the Protection of the Environment Operations Acts 1997.



Colin Davies
Environmental Scientist

Cbased Environmental Pty Limited
Unit3, 2 Enterprise Crescent SINGLETON NSW 2330
P: 0265713334 E:cbased@bigpond.com

Page 3



Appendix D

Erosion and Stormwater Management Plan

Stormwater and Erosion Sediment Control Management Plan

Wild Quarries and Civil

South Muswellbrook Operation

Grasstree



**Prepared by
Steve Eccles
Consulting
Land and Environment
Consultant**

Table of Contents

1:1 Background.....	3
1.2 Location.....	3
1.3 Project Context	3
2.0 Catchment of the Quarry.....	3
2.1 Cleanwater Diversions.....	3
2.2 Dirty Water Containment/Sediment Control Structures.....	4
3.0 Haulage Road.....	8
3.1 Sealed Section.....	8
3.2 Unsealed section of the Haulage Road.....	9
3.3 Cleanwater Diversion Unsealed Section of the Haulage Road.....	11
4.0 Administration Workshop Area and Plant Hire Standing Area.....	15
5.0 Concrete Batching Plant	20
6.0 Monitoring Program.....	24
7.0 Recommended Improvements.....	24
7.1 Proposed Sediment Dam	24
7.2 Minor Drains.....	24
7.3 Number One Batter Open Boxed Culverts	24
8.0 Conclusion.....	25
Reference.....	28

1.1 Background

The operation on Lot 30 DP 813308, 8440 New England Highway Muswellbrook consists of Quarry and Plant Hire Operation, Mobile Concrete Batching Plant and an area set aside for Administration and Workshop. There is a constructed Haulage Road that connects the Quarry and Mobile Concrete Batching Plant operations to the approved connecting point onto the New England Highway.

The aim is to upgrade the Stormwater Management Plan to assess the current conditions, assess the status, compliance and make recommendations for any appropriate improvements.

1.2 Location

The operation is situated approximately 9 kilometres south-east of Muswellbrook and the entrance to the operation is off The New England Highway onto Grasstree Ridge Road.

The operation is solely situated on Lot 30 DP 813308 however there has been a surveyed boundary adjustment on the South East corner.

Note there has been a map of the adjusted boundary supplied to Council which was included with the proposed requested alterations and amalgamations of consent conditions. This adjustment was not available to be included in the attached Wild Quarries and Civil contour and drainage map at the time of constructing the map.

1.3 Project Context

Wild Quarries and Civil wish to amalgamate the operations undertaken on the site and to extend the life of the operations.

A further request includes permission to increase the disturbed areas of the quarry to be in keeping with other quarry operations approvals in the Council Area. It is requested that the exposed operational area will be granted to be expanded above two hectares current limitation.

This document is to undertake Stormwater Management Plan for the Operational area. This includes Erosion Control Works Designs and Sediment Settling requirements.

2.0 Catchment of the Quarry

The quarry disturbed areas currently have been calculated at 3.8 hectares. This area does include sediment dams, buildings and non-disturbed areas.

Current operations include the systematic shaping, topsoiling and rehabilitation of exhausted areas of material.

2.1 Cleanwater Diversions

The operation is on the crest of a ridge there is no catchment above the operation to be diverted. There is no catchment to divert, the operation cuts directly into a rock surface at the pinnacle of the ridge. Therefore, no upslope diversions are practical or appropriate.

2.2 Dirty Water Containment/Sediment Control Structures

There is a diversion bund around the lower slope perimeter of the quarry. All water is directed into two existing sediment dams (see Table A for specifications). These dams are regularly pumped to ensure they have ample storage capacity in case of run off events. These dams are ample in size to handle the calculated Peak Discharge and Settling Storage Volumes appropriate for this site. A summary is provided in Table A below and a figure of the locations is provided as Appendix A.

Note: these dams' base materials are porous by nature and storage waters do leak through the fractured strata. This reduces the frequency to physically pump water from these structures to ensure storage capacity in case of runoff events.

There is a proposal to construct a third Sediment Dam within the quarry area. This will increase the sediment containment capacity of the operation.

Sediment Dam No	Description	Basin Areas	Estimated Depth meters	Capacity (estimated) Cubic Meters	Peak Discharge 1 in 20 year Cubic Meters per Sec	Settling Zone Volume Cubic Meters	Total Volume Required Cubic Metres 5-day Management Period
1	Within the Quarry area, Closest to Concrete Batching Plant	2,100	3.5	5,100	1.189	361	721
2	Within the Quarry area, western corner of the pit	2,400	6.0	7,600	1.189	361	721
3	Proposed Future Dam located between Dam 1 & 2	1,575	3.5	3,500	1.189	361	721

Table A: Existing and Proposed Stormwater and Sediment Control Structures for the Quarry Pit area.

Note :Estimated current quarry exposed area is 3.80 hectares. The disturbed area calculation was for 4.0 hectares and a total area within the complex was calculated at 8.0 hectares. Soil Texture group Type C was used from Section 6.3.3 of The Blue Book. This is based on clay and dispersibility of the soils, in this situation the soil is low clay and low dispersibility. The calculations were undertaken using Soil Conservation Service Design Calculator from The Blue Book on Mines and Quarries.

The results portrayed in Table A demonstrate and show the existing sediment dams' capacities far exceed the required capacity to control sediment from the site. The proposed Sediment Dam 3 structure will increase the dirty water containment storage above the required to the design criteria for sediment control from the site.

There are additional Sediment Dams situated downslope in the catchments of the quarry operations. They will act as additional sediment dams for the quarry. The capacity and dimensions of these structures are listed below in Table C. It is not considered necessary to calculate the Sediment Storage Volume as the in-pit Sediment Dams and the proposed third Sediment Dam exceed the storage volumes required. There has been no occurrence of sediment leaving the quarry pit area.

ARI Years	Peak Flows Cubic Meters per Second
1	0.293
5	0.704
10	0.909
20	1.189
50	1.690
100	2.154

Table B: Peak Discharge

The peak discharge of the catchments of the in-pit sediment dams are included in the Table B. These calculations have been completed for 1 year, 1 in 5 year, 1 in 10 year, 1 in 20 year, 1 in 50 year and 1 in 100-year Runoff Storm Event.

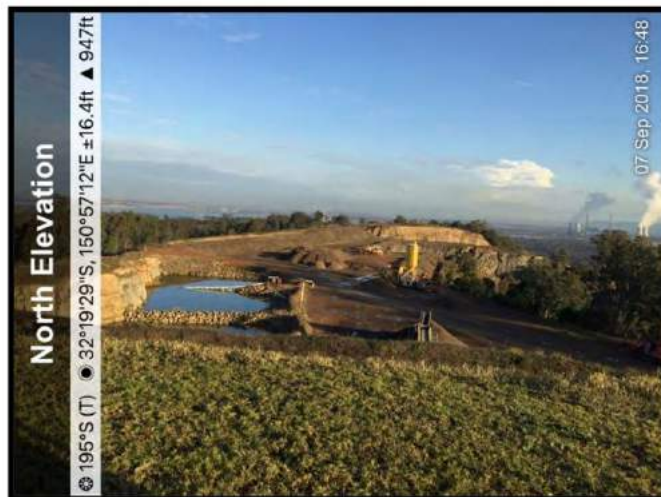
Table B includes the peak discharge for a 1 in 20-year Runoff Storm Event. The sediment dam's spillway design capacity meets the design criteria for this event.

Sediment Dam No	Description	Dam Areas	Estimated Depth meters	Capacity (estimated) Cubic meters
4	Below haulage road farthest to the south	1,600	6	5,000
5	Below in the Flowline Sediment Dam 4	1,575	4	2,200
5a	Below Haulage Road	1,675	4.5	3,500
10	Furthest to the South	1,400	4	2,200
11	Within conservation area	2,000	5	4,750
12	Within conservation area 11 flows into 12	1,650	4.5	3,300

Table C: Existing Erosion Control and Sediment Structures between the Quarry Pit and Maidswater Creek



Photograph 1: Sediment Dam 1 in Quarry in Pit Area – Note sediment is pumped to Sediment Dam 2 if this dam is at capacity to ensure it has detention capacity.



Photograph 2: View from the North showing the current quarry operations. Includes Sediment Dam 1.



Photograph 3: Proposed site of Sediment Dam 3.



Photograph 4: The revegetated dirty water containment and diverting bank that is constructed along the western side of the quarry. It is approximately 1 metre high and has a batter of 2:1.

3.0 Haulage Road

3.1 Sealed Section

The section of the Haulage Road and Access Road to the Administration area is bitumen sealed. Length of road is 380 metres. The road batters are stable with groundcover percent above 70 percent. There is no major issue with broadleaf weeds present on these batters. Less than 20 percent weeds in the overall groundcover percentage.

Runoff water above the road is directed to the culverts, with stable rocked inlets and outlets, that run under the road into Sediment Dam 8.

Sediment Dam 8 has a capacity of seven megalitres. There is no evidence of sediment movement in this catchment. Sediment Dam 8 is built to Soil Conservation Service standards with 3:1 batter, crestwidth of 3 metres and a freeboard of over 1 metre. During construction the wall was treated with gypsum and has a plastic liner built into the wall. The spillway was designed for a 1:20 year runoff event.

Sediment Dam No	Description	Dam Areas	Estimated Depth meters	Capacity (estimated) Cubic meters
8	Below sealed Bitumen Section Haulage and Access Road	2,750	5	7,000

Table D: Existing and Stormwater and Sediment Control Structure for Below the Sealed Haulage Road Area and located before Maidswater Creek.

There is no sediment movement from this site and there is no signs of sediment deposits or erosion rills from the catchment.



Photograph 5: Stable revegetated batter top side of the Haulage Road.



Photograph 6: Taken below sealed section of the Haulage Road. Stable well vegetated area with over 70% groundcover established.



Photograph 7 :Sediment Dam 8.

3.2 Unsealed Section of the Haulage Road

This section is not sealed it has a length of 1,360 metres. The road is situated to ensure there is no extreme steep sections, it meanders up the slope. The incline is kept to a minimum. Most of the incline is 1 in 20 with regular intervals of minor drains that prevent high volumes of run-off along its entire length.

The road surface is compacted gravel with low dispersible clay content. This compacted road freely drains to the sides of the road as the road has a camber within Soil Conservation Service Access Tracks guidelines reducing any accelerated flow from surface runoff down the track surface. There are little signs of riling on the road surface.

Sediment Dam No.	Description	Dam Areas	Estimated Depth Meters	Capacity (estimated) Cubic Meters
Clean Water Sediment Dams Above the Haulage Road				
6	Above Haulage Area Southern	2,700	7	9,200
7	Above Haulage Road to shared connected to 6	1,280	3	2,500
Dirty Water Containment Sediment Dams Below the Haulage Road				
4	Below haulage road farthest to the south	1,600	6	5,000
5	Below in the Flowline Sediment Dam 4	1,575	4	2,200
5a	Below Haulage Road	1,675	4.5	3,500
10	Furthest to the South	1,400	4	2,200
11	Within conservation area	2,000	5	4,750
12	Within conservation area 11 flows into 12	1,650	4.5	3,300
13	6 and 7 above haulage road flow into 14	3,300	7	10,300

Table E: Existing and Stormwater and Sediment Control Structure for the below Unsealed Haulage Road Area and located above and prior to Maidswater Creek entry.



Photograph 8: Sediment Dam 11. Note the algae growth due to the litter input from the Conservation Area and stagnation due to the drought.



Photograph: Sediment Dam 12.

3.3 Clearwater Diversion Unsealed Section of the Haulage Road

On topside of the road, the cut batter has been left to the natural solid rock face. There is no erosion or sediment movement from this batter. This also ensures the nature aspect of the site has been maintained reducing any impact the site and particularly the haulage road would have to passing traffic.

At the base of this Batter (solid rock face) the cleanwater runoff is diverted by an incised cut drain (this drain is down to rock). It is diverted to a safe flat disposable area where the road takes a curve in a different direction down the hill.

The next section of the road has a constructed cleanwater drain directly above the road. The channel base this drain has a series of rock detention works that capture and reduce the sediment movement.

There are a series of points where the culvert pipes collect cleanwater runoff and transport the water underneath the road. This safely directs water to a series of Sediment Dams located on the bottom side of the road. All inlets and outlets from these pipe culverts are rock stabilised to reduce erosion.

There are a series of rock stabilization works constructed in the drainage lines above the cleanwater drain. Water from these drainage lines fall safely without eroding. This has been done to prevent erosion and sediment movement.

There are a series of minor drains as per Soil Conservation Access Tracks Standards that direct water at regular intervals to the regular intervals along the road verge. All road verges are well vegetated to 70 % groundcover. In this top area all water is directed to Sediment Dam 4 this dam has a capacity of 5,000 cubic metres. Water will then flow into Sediment Dam 5 which has a capacity of 2,200 cubic metres.

Sediment Dams 11,12 and 5a, also located in the catchments below the unsealed haulage road (see Table D for details), collect runoff from the road.

The next section of road traverses a flatter section in the landform on Lot 30. In this section there is a soil conservation diversion bank above the road. This bank has a design capacity for a 1 in 10-year Storm Event, has stable 2.5:1 batter and is appropriately vegetated. This directs cleanwater to a series of points whereby open culverts drop the water to various open plastic or metal culverts to the pipe culverts under the road. The inlets and outlets of these culverts are rocked to prevent erosion and sediment movement.

The cleanwater is also captured in a series of connected sediment dams above the road Sediment Dam 6 with a capacity of 9,200 cubic meters and Sediment Dam 7 with a capacity of 2,500 cubic metres.

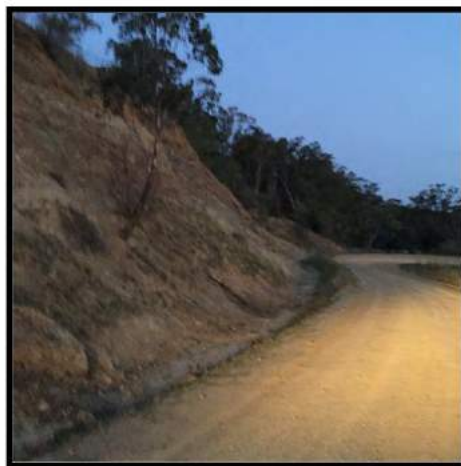
Runoff water via a concrete culvert pipe is transported under the road into Sediment Dam 13. This Sediment Dam has a capacity of 10,300 cubic metres. The inlets and outlets of this culvert pipe are rocked. There are also rocked chutes transporting runoff water on the bottom side of the road from the minor drains.

All sediment dams are constructed to Soil Conservation Service Standards. In fact, all the sediment dams below the haulage road were constructed by the Soil Conservation Service under The Category 2 Scheme to control erosion and rehabilitate an area that was eroding. The Sediment Dams were designed for a 1 in 20 years runoff Storm Event, 3:1 batter, 4-meter crestwidth, and at least 1-meter freeboard. One of the sediment dams is fitted with a trickle tube and sump inlet and outlet so the sediment dam can act as a detention basin.

Some of the Sediment dams were treated with gypsum and plastic liners installed in the walls to reduce the possibility of tunnel failure of the structures.

Note: Some of these dams below the haulage road at times are turbid. This is not due to excessive sediment movement. The soils (Liddell Soil as described in the 1:250,000 Scale Singleton Landscape Sheet) have a degree of dispersibility and some of these dams are turbid from the interaction of water and the soils of the batters of the dams. It was also noticed that litter decomposing in the Conservation Area has also coloured the water, the stagnation of the water in such a dry season has also contributed to algae in the water in some of the dams.

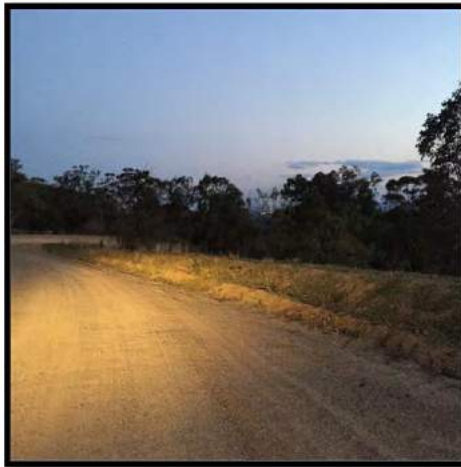
There is no sign of sediment movement residue, nor is there any evidence of sediment being discharged from any of the series of dams. The monitoring program undertaken by Carbon Base show no sediment is leaving the operation site into Maidswater Creek.



Photograph 9: Top section of the Haulage Road. Solid number 1 rock batter, well formed and compacted road surface.



Photograph 10: Stable number one batter on the Haulage Road.



Photograph 11: Stable Haulage Road Surface.



Photograph 12: Rock Flume Drop Structure directing clean water runoff to a concrete culvert under The Haulage Road.



Photograph 13: Rock Flume Drop Structure Directing clean water runoff from the concrete culvert outlet under The Haulage Road to Sediment Dam 13.



Photograph 14: Showing the stable vegetation flowline below Sediment Dam 5a. There is no sign of sediment movement from any of the drainage lines prior to entering Maidswater Creek.

4.0 Administration, Workshop Area and Plant Hire Standing Area

Runoff from all the roof tops of the buildings are drained to a series of water storage tanks to be used on the site. The roof top storage capacity of the tanks is of suitable size to ensure there is limited water flow from the flow over pipes this will reduce the possibility of runoff issues during storm events. The tank water is utilised for office use and to support watering of the visual screen areas. These visual screens are located on the northern and western side of the buildings.

The surrounding batters of the flat Administration and Workshop Area are stabilized with a percentage groundcover of over 70%. There are establishing native trees and shrubs on the batters.

There are a series of visual screen bunds surrounding the area on the northern and western sides of the area. These bunds are vegetated and stable

The carpark has a very low slope (less than 0.3 % slope), it has a compacted gravel base, all water is directed by containment banks to a culvert pipe. The inlet and outlet of this culvert pipe is stabilised by rock.

The total catchment area of the Administration, Workshop and Plant Hire Standing Area. The water is diverted by this pipe under the Haulage Road into Sediment Dam 9. This dam has a capacity of 6,375 cubic metres.

Sediment Dam No	Description	Basin Areas	Estimated Depth meters	Capacity (estimated) Cubic Meters	Peak Discharge 1 in 20 year Cubic Meters per Sec	Settling Zone Volume Cubic Meters	Total Volume Required Cubic Metres 5-day Management Period
9	Below the Administration	2,750	5	6,375	0.297	90	180

	Workshop and Standing Area for Plant Hire Equipment						
--	--	--	--	--	--	--	--

Table E: Existing and Proposed Stormwater and Sediment Control Structure for the Administration, Workshop and Plant Hire Standing Area

Note : The disturbed area calculation carpark surface is estimated at 2.0 hectares. Soil Texture group Type C was used from Section 6.3.3 from The Blue Book. This is based on clay and dispersibility of the soils, in this situation the soil is low clay and has low dispersibility. The calculations were undertaken from The Blue Book on Mines and Quarries.

The results portrayed in Table C demonstrate the existing sediment dam capacity far exceed the required capacity to control sediment from the site.

Appendix A provides the describes the minimum Length and Width dimensions of the sediment basins. Sediment dam 9 dimensions exceed these recommendations.

The peak discharge of the from this area is included in the Appendix A. These calculations have been completed for 1 year, 1 in 5 year, 1 in 10 year, 1 in 20 year, 1 in 50 year and 1 in 100-year Runoff Storm Event.

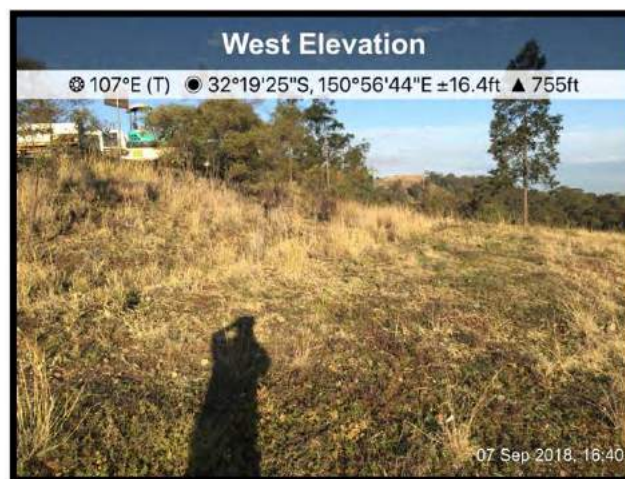
Table C includes the peak discharge for a 1 in 20-year Runoff Storm Event. The sediment dam's spillway design capacity meets the design criteria for this event.



Photograph 15: View of the compacted gravel area Administration, Workshop Area and Plant Hire Standing Area.



Photograph 16: View of the compacted gravel area Administration, Workshop Area and Plant Hire Standing Area. Note: All buildings are Green Colour Bond in the required colour range to reduce possible visual impact.



Photograph 17: Stable revegetated batter below Administration, Workshop Area and Plant Hire Standing Area.



Photograph 18: Planted Native Visual Screen, Administration, Workshop Area and Plant Hire Standing Area. Taken from the West looking to the East.



Photograph 19: Planted Native Visual Screen, Administration, Workshop Area and Plant Hire Standing Area. Taken from the North looking to the South.



Photograph 20: Visual Screen Bund, revegetated situated on the Northern Side of the Administration, Workshop Area and Plant Hire Standing Area.



Photograph 21: Native Forest Vegetation Screening Administration, Workshop Area and Plant Hire Standing Area. Looking east toward the Highway.



Photograph 22: Vegetation Community Screening Administration, Workshop Area and Plant Hire Standing Area and Haulage Road. Looking East toward the Highway

5.0 Concrete Batching Plant

The Concrete Batching Plant is situated directly above a concrete pad that has an internal underground containment tank. This tank meets the requirements to prevent any spillage leaving the site. From this tank any spillage is pumped out and disposed of as specified in the Consent Approvals.

There is a clean water concrete diversion around the batching plant that prevents any cleanwater runoff from the above small catchment entering the concrete pad site area.

This clean water is diverted by a concrete diversion wall/lip to a geofabric and rock lined drain to culvert area. This system collects any possible small and coarse sediment movement.

In the remote event of water leaving the site it is directed to Sediment Dams 5, 6 and 7. These dams are maintained to ensure they are not kept at full capacity to allow for storage in case of storms.



Photograph 23: Mobile Cement Batching Plant. Note the Concrete Walled Area to catch any spillage.



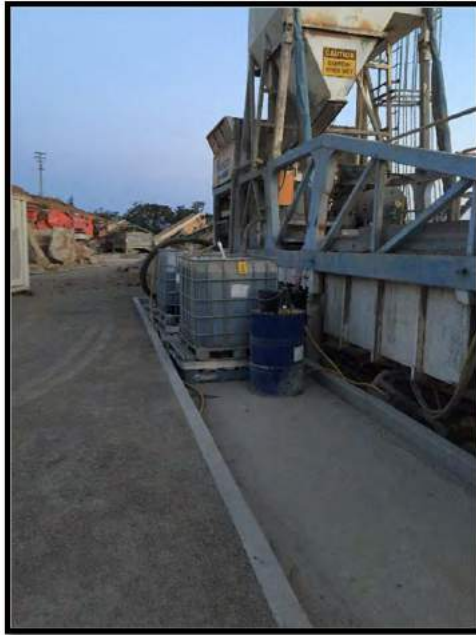
Photograph 24: Mobile Cement Batching Plant. Close up of the Concrete Walled Area to catch any spillage. This structure is also the top of the in-ground spillage containment tank that is regularly pumped out, so any spillage will be contained on site with in the tank.



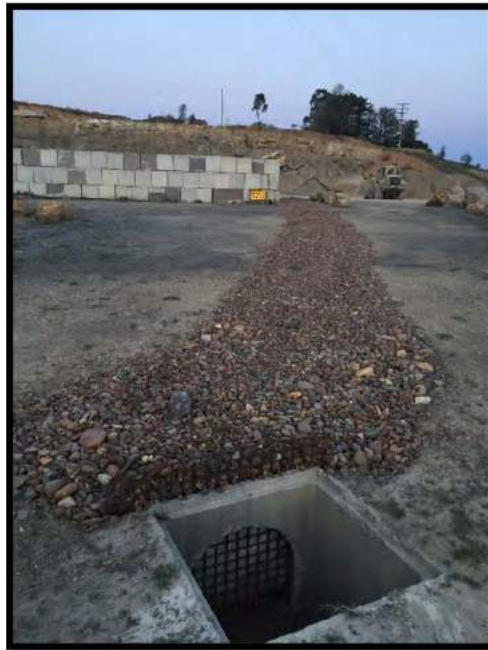
Photograph 25: This is the sump that directs spillage water from the concrete pad into the under-ground storage containment tank.



Photograph 26: Close up view of the Mobile Cement Batching Plant and operation all taking place above the Concrete Walled Area to catch any spillage.



Photograph 27: Demonstrating the Clean Water Diversion Concrete Lip (wall) around the Mobile Cement Batching Plant diverting any runoff away from the site.



Photograph 28: This is the rocky and geofabric drain for the clean water diversion from above the Concrete Batching Plant.

6.0 Monitoring Program

The current surface water monitoring program is being conducted by CBased Environmental Pty Ltd. The monitoring has demonstrated there is no sediment movement leaving the site into Maidswater Creek.

7.0 Recommended Improvements

7.1 Proposed Sediment Dam

It is proposed an additional Sediment Dam 3 is to be constructed to an estimated capacity of 3,500 cubic meters in the quarry pit area.

7.2 Minor Drains

The unsealed section of the haulage road there is a few minor adjustments required. Firstly the minor drains on the down slope side of the haulage road. Runoff should be directed to hard stable ground, either rocky outcrop areas or areas required to be rocked to ensure erosion at the end of these minor drains do not occur. If rock is to be added this rock needs to be at least 150mm in diameter. Sediment containment works, using oversize approximately 150 mm angular rock will act as sediment traps to prevent any sediment movement leaving the area. These sediment traps will require routine onsite maintenance, especially after major runoff events over 25mm rainfall. These structures should be implemented as per the Roadside Management Guidelines (Mid- Western Regional Council) developed by Richard Good Soil Conservation Service and Reviewed by Steve Eccles Hunter- Central Rivers Catchment Authority Published in 2011.

7.3 Number One Batter Open Boxed Culverts

There are several Open Boxed Culverts that transport cleanwater from the Cleanwater Diversion Banks above the unsealed section of the Haulage Road to inlet areas of the Concrete Culverts that transport runoff under the Haulage Road. Some of these have been inwardly compressed at the open top section of the culvert. This does restrict the runoff volumes being transported to the inlet areas of the Concrete Culverts. There needs to be maintenance of these Open Boxed Culverts to push the currently compressed inwardly areas back into shape. This will improve the integrity of the structures.

As stated previously in this document there is no evidence of any sediment movement off site into Maidswater Creek. In fact, there is no evidence of any minor volumes of sediment entering any of the sediment structures. Especially any of the numerous sediment structures situated between the quarry operations sediment structures and Maidswater Creek.

There is however some turbidity in several Sediment Structures. It should be pointed out a number of these structures were constructed to control Erosion and Sediment entering Maidswater Creek under a Category 2 Soil Conservation Project. The soil by nature is dispersible and even the exposed inside batters of these dam's interaction with the soil causes turbidity. If it is deemed necessary, some soil amelioration could be applied to some of the sediment dams.

There is also, under the current drought conditions some algal growth in some of the stagnate water in the sediment dams. This is not usual under the current climate conditions, It needs to be also noted the high litter content in the Conservation Area has also contributed

to rotten vegetation in the sediment dams. This and litter resin and contributed to algal growth in some of the structures.

8.0 Conclusion

This document has demonstrated the current operations undertaken by Wild Quarries and Civil Stormwater Management Plan does comply with the appropriate standards. All monitoring regarding water quality supports this position.

In fact, the series of Sediment Control Structures and Erosion and Sediment Control Works with the routine maintenance ensures the operation meets all requirements regarding containment and ensuring that water quality off site is not compromised.

This document has pointed out a few improvements that can be made in the regards to Stormwater Management.

References

- Interpreting Soil Test Results by Pam Hazelton and Brian Murphy.
- Management Urban Stormwater Soils and Conservation NSW Office of Environment and Heritage– Mines and Quarries Volume 2E.
- Hunter-Central Rivers The vegetation of the Central Hunter Valley, NSW Volume One: Main Report version 2.2 by Travis Peake.
- Hunter-Central Rivers The Vegetation of the Central Hunter Valley, NSW Volume Two: Profiles of the Vegetation Communities Version 2.2 by Travis C. Peake.
- Rehabilitation of Degraded, Highly Erodible Land and Saline Affected Sites – A Series of Case Studies in the Upper Hunter by Steven C. Eccles Hunter- Central Rivers Catchment Authority for Office of Heritage and the Environment.
- Soil Conservation Access Tracks Standards by Michael Norvill Soil Conservation Service
- Mid-Western Regional Council Roadside Management Guidelines by Richard Good of the Soil Conservation Service and Steven Eccles Hunter- Central Rivers Catchment Management Authority in conjunction with Shireen Murphy and Linda Shreeves of Mid -Western Council
- Soil Landscapes of the Singleton 1:250,000 Sheet – Soil Conservation Service.
- Land Capability Classifications Descriptions - Soil Conservation Service.
- Design Manual for Soil Conservation Works - Soil Conservation Service.





Steven Charles Eccles
Steve Eccles Consulting
Steveecclesconsulting@gmail.com
8/10/2018

APPENDIX A – FIGURES

Wild and Civil Grasstree

Wilds and Civil Access Roads

-  Haulage Road
-  Sealed Haulage Road



Wild and Civil Grasstree


Dam Layers

-  Sediment Dam 1
-  Sediment Dam 2
-  Proposed Sediment Dam 3
-  Sediment Dam 4
-  Sediment Dam 5
-  Sediment 5a
-  Sediment Dam 6
-  Sediment Dam 7
-  Sediment Dam 8
-  Sediment Dam 9
-  Sediment Dam 10
-  Sediment Dam 11
-  Sediment Dam 12
-  Sediment Dam 13



Wild and Civil Grasstree



- Areas Layers**
-  Workshop and Administration Area
 -  Quarry Area
 -  Wild Quarry Area and CBP
 -  Existing Quarry Area
 -  Quarry and CBP
 -  Administration and Workshop Area



Wild Quarries & Civil

*Note this cadastral layer does not include recent boundary adjustment to 30/815308

1:5,683

Disclaimer:
Map created by Hunter LLS. This map is not guaranteed to be free of error or omissions. The State of New South Wales and its employees, officers, agents or associates expressly disclaim all and any liability and responsibility to any person in respect of anything and of the consequences, of anything done or omitted to be done by any such person in reliance, whether wholly or partially upon the information contained on the map.
© New South Wales Government 2016. All Rights Reserved.

Sources: Data used may include
NSW Land and Property Information - Towns, parks and forests, roads, water, imagery
NSW Dept of Industry - Administrative boundaries
Includes material © CNES 2009, Distribution Spot Image S.A. France, all rights reserved

LLS, © Department of Finance, Services & Innovation 2017

The Coordinate System on this map uses the Geocentric Datum of Australia 1994 (GDA94)
(Some published topographic maps still use the Australian Geodetic Datum 1966 (AGD66). Coordinates on this map (GDA94) will lie in a different location on a published AGD66 topographic map.

Prepared By: bushas
Date: 3/10/2018

0 0.075 0.15 0.3 0.45 0.6 Kilometers

RPS

Appendix E

Rehabilitation Management Plan

Rehabilitation Management Plan

Grasstree Quarry

Wilds Quarries and Civil



**Prepared by
Steve Eccles
Consulting
Land and Environment
Consultant**

Table of Contents

1.1 Background	3
1.2 Location.....	3
1.3Project Context	3
2.0 Soils	3
3.0 Rehabilitation Measures	5
3.1Timber	5
3.2 Topsoil.....	5
3.3 Topsoil Management	5
3.4 Overland Flow	5
3.5 Operations	5
3.6 Soil preparation.....	5
3.7 Batters.....	6
3.8 Soil Tests	6
3.9 Certified Recycled Green Waste Organics	6
4. Revegetation	7
4.1 Groundcover	7
4.2 Tree and Shrub.....	7
4.3 Monitoring and Assessment	9
5. Conclusion.....	11

1.1 Background

The operation on Lot 30 DP 813308, 8440 New England Highway Muswellbrook consists of Quarry and Plant Hire Operation, Mobile Concrete Batching Plant and an area set aside for the Administration and Workshop. There is a constructed Haulage Road that connects the Quarry and Mobile Concrete Batching Plant Operations to the approved connecting point onto the New England Highway.

The aim of this document is to upgrade the Rehabilitation Management Plan to assess the current conditions, assess the status, compliance and make recommendations of any appropriate improvements to the rehabilitation parameters for the Quarry Footprint.

1.2 Location

The operation is situated approximately 9 kilometres south-east of Muswellbrook and the entrance to the operation is off The New England Highway onto Grassree Ridge Road.

The operation is solely situated on Lot 30 DP 813308 however there has been a surveyed boundary adjustment on the South East corner.

Please note there has been a map produced of the adjusted boundary supplied to Council which was included with the proposed requested alterations and amalgamations of consent conditions.

1.3 Project Context

Wild Quarries and Civil wish to amalgamate the operations undertaken on the site and to extend the life of the operations.

A further request includes permission to increase the disturbed areas of the quarry to be in keeping with other quarry operations approvals in the Council Area. It is requested exposed operational area will be granted to be expanded above two hectares.

This document is to undertake the Rehabilitation Management Plan for the Quarry Operation Footprint Area. The current exposed functional operation covers approximately 3.8 hectares. There are areas within that operation area that has been systematically rehabilitated. Therefore, the functional operation disturbed area is less than 3.8 hectares. The area already rehabilitated has been estimated as an area of 0.5 of an hectare. Other supporting documents have put forward the case to extend approved operating area of the quarry to be in keeping of other Muswellbrook Shire Council approvals for quarries.

2.0 Soils

The Singleton Soil Landscape 1:250,000 Sheet has determined the soil type in Lot 30 as Liddell Soil Landscape.

The Geology Unit is the Singleton Coal Measures with a variety of parent rock material Lithic sandstone, shale, mudstones, conglomerate and siltstones as well coal seams within the Soil Landscape Area. The approved EIS does cover the rock types present on Lot 30 in detail.

The soil types on Lot 30 can be defined as two different soil types.

The area surrounding the quarry footprint is a Yellow Soloths. The topsoil is a thin brown loamy sand to sandy loam. These soils have a pH of approximately 6.0 and have low fertility.

It has a shallow soil depth and in fact it does immediately go straight into bed rock at 50 cm below the surface. The soils are classed as moderately permeable. The soils are saline by nature and there is little sub soil or soil depth.

Land capability under The Soil Conservation Service Land Capability Classifications would include Classes VI and VII tending to VII due to the lack of depth of the soil.

The areas below the quarry and especially below the Haulage Road these Liddell Soils would be defined as a Yellow Solodic. Please note these soils are predominantly located in the Conservation Area where most of the sediment dams are situated. Every sediment dam apart from Sediment Dams 1 and 2 as well as the proposed Sediment Dam 3 that will be positioned in the quarry pit area, are on these Yellow Solodic Soils.

All rehabilitation needs to consider the chemical, organic and physical natures of the soils present. Soil tests may determine if there is required alterations, on sowing preparation and types and quantities of additives needed to maximise the success of the revegetation.

The topsoil in this area is a dark brown loam weak in structure. It has a pH of 6.5 low fertility and the soils have a high salinity as with all sodic soils. The topsoil overlay has a distinct bleached A2 horizon. This A2 is a dull orange clay loam with weak structure, is saline and has a depth of this horizon of 25cm. There is a defined pronounced change into the B horizon to a bright reddish-brown light clay with strong angular blocky peds with a pH 6.5. At further depth the soil becomes yellowish brown and becomes orange and grey mottles that has poor drainage.

Land capability under The Soil Conservation Service Land Capability Classifications would be Classes VI and VII

Land Capability Classes Present		
Class VI	Low capability land: Land has very high limitations for high impact land uses. Land uses restricted to low impact land uses such as grazing, forestry and nature conservation. Careful management of limitations is required to prevent severe land and environmental degradation.	Land Capability of the area below the haulage road on Lot 30.
Class VII	This land has extremely severe limitations for most land uses. It is unsuitable for any type of cropping or grazing because of its limitations. It is too steep, rocky, swampy or fragile for grazing. Class VII land includes slopes of 33–50% are Classed as VII. It also includes areas with extreme soil erodibility (often sodic soils), catchments where stoniness and shallow soils are a severe problem. Other limitations include flooding, wind erosion hazard and severe climatic limitations.	Land Capability of the quarry pit area.

Table 1: Extract from The Land and Soil Capability Assessment Scheme – Office of Environment and Heritage.

3.0 Rehabilitation Measures

3.1 Timber

The area yet to be quarried within the quarry's footprint is totally denuded of timber and woody vegetation.

3.2 Topsoil.

The topsoil will then be pushed to be stored in an appropriate adjacent area to the quarry. This will allow easy access to the topsoil during the rehabilitation of the site. The topsoil will be pushed and stored to a depth no greater than two metres in depth as this will ensure microbial activity in the soil.

Summary of Topsoil Management Procedure is as follows:-

3.3 Topsoil Management

- Strip topsoil from the site push topsoil above the quarry extraction area. To the top of the nearby ridge line. Do not push topsoil into the timber.
- Do not stack topsoil greater than 2 metres and with approximate batter of no greater than 2:1.
- Stockpile management assess the number of weeds that are growing in the topsoil. It may be necessary to apply a broadleaf herbicide prior to using the topsoil. Some scarifying of the topsoil area is another method to destroy established weeds in the stock pile.
- Avoid spreading the topsoil over the completed quarry landform in wet, windy or very dry conditions.
- Spread topsoil evenly over the area to be rehabilitated.
- This is the final step in the procedure of preparation for rehabilitation prior to seed and fertiliser application of the site.

3.4 Overland Flow

This is covered in the Stormwater Management and Erosion and Sediment Control Plan. The quarry pit is on a crest of a ridge. There is no catchment for any over land flow into the pit. Hence there is no requirement for clean water diversion works.

3.5 Operations

The pit operations will be an extension of operations currently undertaken in a relatively small area. It is a small extension where all overland flows will utilise the appropriate designed Sediment and Erosion control works. This is explained in the Stormwater Erosion and Sediment Management Plan.

There are no trees or shrubs to be removed during the proposed defined addition quarry operations. The area yet to be quarried is a degraded low condition grassland.

Following completion of the quarry activities the area will be rehabilitated.

3.6 Soil preparation

The landform of the pit needs to be shaped in a concave manner to utilise the existing erosion and sediment control measures.

3.7 Batters

The area will be shaped to ensure the all batters are no steeper than 3:1. The profile of the area will be shaped and formed to ensure all the existing internal drainage and control structures are utilised during runoff events.

Deep ripping is essential to ensure that perennial grasses, scrubs and trees to maximise the success of the rehabilitation process. This needs to occur throughout the area of the pit. The area needs to be ripped to an approximate depth of 0.5 metre depth but maybe limited due to lack of soil profile depth on this landform. The area needs to be cross ripped twice (right angles).

3.8 Soil Tests

Soil tests will be required in the topsoil and in the excavation area of the pit. This will determine requirements for soil ameliorants, fertilisers and confirm seed mixtures. It will also assist in determining limiting factors such trace element and soil structural issues. Soil tests will determine if additional soil ameliorants will be required.

For such a relatively small area, a total of four soil sample sites would be appropriate. In one or more of these locations it may be required to collect soil samples at depth (approximately 30 cm).

These soil samples will assist in determining the groundcover species, soil ameliorants required and fertiliser requirement.

3.9 Certified Recycled Green Waste Organics

There has been a considerable number of trials undertaken in the Upper Hunter area especially in the Muswellbrook Shire Council area. These trials were undertaken on highly erodible areas, degraded sites, saline and sodic areas. Steve Eccles was the Project Manager for the Hunter Catchment Management Authority and sponsored by the Office of the Environment and Heritage.

The summary of the findings was, all the areas applied with Certified Recycled Green Waste Organics (CRGWO) all had improved the fertility and nutrient levels, improved the soil structure, all the sites had resilience the groundcover was less effected by dry spells and droughts, responded well after rain, groundcover germination was high usually above 80 percent.

Sometimes soil ameliorants such as gypsum or lime were required. Any soil tests will assist in determining if any soil ameliorant requirements.

The downside of using CRGWO is that it is likely there will be an initial flush of broadleaf weeds. In dry conditions kangaroos will be attracted to eat the grass the establishing grasses.

Please note it is essential to use CRGWO from an appropriate source such as Australian Native Landscapes and ensure that they provide a contents certificate.

By adding CRGWO at an application depth of 25 to 32mm, will reduce the quantities of chemical fertilisers required at the site.

4. Revegetation

4.1 Groundcover

The below seed and fertiliser list include an appropriate up to date and resilient groundcover establishment mixture. This list may be altered following soil test results.

Species	Seeding Rate per hectare
Couch grass (hulled and unhulled)	8
Subterranean clover	3
Woolly pod vetch	3
Digit grass	6
Perennial ryegrass	6
Ryegrass (winter)	7
Millet (summer)	7
Ryecorn or Barley (winter)	7
Fertiliser (starter15)	250
Additional NPKS Fertiliser Application	200

Table 2: Proposed Groundcover Seed and Fertiliser Mixtures. Note to be confirmed after soil tests.

4.2 Tree and Shrub

The Vegetation Community as identified by The Vegetation of the Central Hunter Valley, NSW Volume 1 and 2 along with the associated supporting Maps has identified the Vegetation as dominated on Lot 30 as Central Hunter Ironbark – Spotted Gum- Grey Box Forest. The Flora and Fauna Report by Ecotone Ecological Consultants Pty Ltd has the following communities listed on the site.

- Open Forest to Woodland: Spotted Gum/Ironbark/Grey Box
- Tall Open Forest; Forest Red Gum/Spotted Gum/Rough-bark Apple
- Moist Rocky Escarpment Community: Port Jackson Fig/Rough-barked Apple
- Open Pasture with scattered native trees.

The below table provides the appropriate tree and shrub species for the Central Hunter Ironbark – Spotted Gum- Grey Box Forest which is similar to the species associated with the Open Forest to Woodland: Spotted Gum/Ironbark/Grey Box and Tall Open Forest; Forest Red Gum/Spotted Gum/Rough-bark Apple.

The spacing of trees in a visual screen would be as per tree establishment guidelines for that species (approximately 6 metres spacing). For shrubs the spacing would be as per establishment guidelines for that species (for shrubs usually approximately 3 metres spacing).

For the plantings across the proposed rehabilitation area it needs to be noted that the main priority is to establish groundcover. The quarry pit area was originally mainly an open pasture, it is and was a harsh environment. Taking this into account planting on average number 50 trees and shrubs per hectare, would be an appropriate number to ensure any plantings would not dominate the required groundcover.

Planting methods would be establishment from tube stocks, seedlings or may include tree and shrub seeds broadcasting during sowings of the groundcover rehabilitation mixture. All plantings will be done using Best Site Preparation Practices and Planting Guidelines.

The area under the quarry footprint is predominantly "Open Pasture with Scattered Native Trees". In keeping with the communities' present, mentioned above, though the site is mainly just open pasture – Trees and shrubs should be planted using the following lists

Tree Species	Corymbia maculata
	Eucalyptus crebra
	Eucalyptus fibrosa
	Eucalyptus moluccana
	Eucalyptus tereticornis
	Eucalyptus canaliculata
Small Tree and Shrub Species	Allocasuarina luehmannii
	Acacia parvipinnula
	Pultenaea spinosa
	Bursaria spinosa
	Acacia falcata
	Indigofera australis
	Cassubua aculeata
	Acacia amblygona

Table 3: Proposed Tree and Scrub Species to be used in Visual Screens and Revegetation. Note the specific plantings will depend on availability of the species and the species will not limited to these species but will be species from these vegetation communities present on Lot 30.

Rehabilitation Element	Indicator	Criteria
Vegetation	Land use	A healthy groundcover with a variety of species composition, resilience of the groundcover with the sustainability criteria as listed below
	Ground cover	To achieve a minimum of 70% groundcover
	Species composition	A balanced mixture of grasses, shrubs and trees. Trees and shrubs to be in keeping with local endemic species comparable to the surrounding Ecological Community
	Resilience	The proposed preparation of the site, the use of existing viable topsoil. The use of soil conditioners (Green Waste Organics) fertiliser and soil ameliorants. Will provide a basis of appropriate soil profile resilience that will provide a good platform for success. These will be utilised in association with appropriate manufactured fertilisers.
	Sustainability	The plant selection will be in keeping of known ground cover species that have succeed in rehabilitation areas (mines, quarries, erosion, salinity and degraded site in the Muswellbrook Shire. The use of species such as woolly pod vetch is known not to be palatable to for kangaroo grazing. This will assist in sustainability of the site. Native Trees and shrubs selected that are endemic to the area.
	Logs	Available suitable logs in the existing stock pile located on Lot 30 will be used. Any logs with hollows will be placed on the rehabilitation area after topsoil is spread over the formed area. Suitable logs will be mostly over 35 cm in diameter will also be placed over the area. All logs will be placed across the slope

		at an angle of 15 degrees from the contour or on the contour. In some cases, a number of logs will be stacked together to provide habitat for native fauna. These logs will also be placed to direct surface flow to the erosion and sediment control structures.
	Weeds	Weed Control Management Plan developed, and this will cover control of weeds procedures. Ensure weeds are less than 20% of the total groundcover plant species on-site. This plan will include, assessment of weed numbers and varieties. Control methods and procedures and monitoring of any weed populations and assessment of timing and description of actions required.

Table 4: Performance and Completion Criteria

5. Monitoring and Assessment

The area to be rehabilitated will be assessed following the sowing and establishment of the groundcover.

This will be supported with additional assessments and monitoring using the ten separate assessment quadrants locations throughout the area. A quarter metre square quadrant will be used. This assessment is in line with DPI Agronomic pasture assessment groundcover assessment methods.

Timing of the first assessment will be undertaken six weeks after sowing. A further assessment will be undertaken four months after the sowing. Other intervals maybe required depending on the success of the revegetation.

The assessment will provide details whether the area has achieved.

The criteria include:

- 70 percent groundcover
- the level of health of the pasture
- check the germination
- check the varieties of species established
- the level and type of weeds that have germinated and are establishing.

The monitoring and assessment will determine any if remedial actions are required to support the establishing groundcover.

It is envisaged as they will be an amount of Certified Organic Green Waste Recycles that meets 4552 OEH standards will be applied to assist in the germination, establishment and long-term resilience of the area. Often this results in a flush of broadleaf weeds due to the nutrient increase of the soil.

Therefore, there may be a need that a broadleaf based herbicide application to control and reduce the weeds. The aim would be to eradicate these weeds. Following further monitoring and assessment it may require another broadleaf weed targeted herbicide application.

Caution may be needed not to kill any legumes in the planting mixture.

An additional application of a blended fertiliser may be needed to ensure establishing groundcover plants are healthy and will flourish. It may require an additional application of 200kg hectare of a NPKS pelleted fertiliser. A broadcast method would be used over the site to add additional fertiliser top dressing.

Aspect Rehabilitation	Elements to be monitored	Methodology	Monitoring Frequency
Landform stability			
Slope Gradient	Inspection by walk over of the site. Photographs inspect for rills, erosion, slumping and condition of structures and outlets.	Establish monitoring points (GPS), photograph with geotag, record, observations and any remedial actions and risk, submit a written report	Monitor during the Rehabilitation phase, at the conclusion of the rehabilitation, six monthly monitoring checks
Erosion control			
Surface water drainage			
Erosion and sediment control structures	inspect by walk over the site. Photograph Inspect outlets, inlets and integrity of the structures	Photograph the points that maybe at-risk record, observations and any remedial actions and risk, submit a written report	Monitor during the Rehabilitation phase, at the conclusion of the rehabilitation, six monthly monitoring checks
Vegetation			
Land use	Describe and measure all the slopes and batters and overall concave shape to direct flow to the erosion and sediment control structures	Utilisation of an inclinometer to verify the slopes, submit written report.	Check during the rehabilitation final land form works.
Groundcover	Estimate percentage groundcover and health of the ground cover	Calculate using the DPI quadrant methods for assessing groundcover. Establish monitoring points (GPS), photograph with geotag, record, observations and any remedial actions and risk, submit a written report	Check after groundcover established. Approximately six weeks after sowing depending on seasonal conditions. Then six-monthly inspections.
Species composition Including Trees and shrubs.	Identify species present and percentage composition. Note it is envisaged that legumes will be added to the groundcover after an application of broadleaf herbicide to control weed germination after sowing of the grass species.	Calculate using the DPI quadrant methods for assessing species composition. Establish monitoring points (GPS), photograph with geotag, record, Written report	Check after groundcover established. Percentage trees and shrubs survival. Number trees and shrubs per hectare and their Health. Approximately six weeks after sowing depending on seasonal conditions. Then six-monthly inspections.
Resilience	Groundcover and tree and shrub health. Assess	Calculate using the DPI quadrant methods	Check after groundcover

	natural regeneration and plantings, Identification of threats such as weeds, diseases, feral herbivorous pest animals and insect attacks.	for assessing species composition. Establish monitoring points (GPS), photograph. Check establishment numbers per hectare and survival percentage Written report	established. Approximately six weeks after sowing depending on seasonal conditions. Then six-monthly inspections.
Sustainability	Visual observations Check for obvious signs of groundcover health, threats	Walk over site record any signs of feral pests, weeds and potential weed invasion. Calculate using the DPI quadrant methods for assessing species composition. Written report	Check after groundcover established. Approximately six weeks after sowing depending on seasonal conditions. Then six-monthly inspections.

Table 4: Monitoring Program Procedure

6. Conclusion

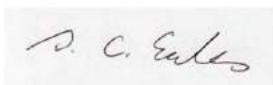
The above document provides a detailed more appropriate methodology for the systematic rehabilitation of the operation area. It points out the investigations required, the implementation and most importantly the monitoring and maintenance of the rehabilitation.

The most up to date rehabilitation procedures many that have been successful trailed in the Muswellbrook have been included in this plan.

This Rehabilitation Management Plan has included recommendations that more appropriate to the site. These include vegetation community tree and shrub species, the use of appropriate logs, more modern groundcover mixture and alternative resilient fertilisers including organic fertilisers.

References

- A Field Guide to The Trees and Tall Shrubs of the North-West Slopes by David Carr 3rd Edition
- A Guide to Better Pastures in the Temperate Climates by Malcolm V. Reilly B.Sc. Agr. M.A.I.A.S
- Design Manual for Soil Conservation Works - Soil Conservation Service
- Hunter-Central Rivers The vegetation of the Central Hunter Valley, NSW Volume One: Main Report version 2.2 by Travis Peake
- Hunter-Central Rivers The vegetation of the Central Hunter Valley, NSW Volume Two: Profiles of the Vegetation Communities version 2.2 by Travis C. Peake
- Interpreting Soil Test Results by Pam Hazelton and Brian Murphy
- Land Capability Classifications Descriptions - Soil Conservation Service
- Pasture Pic – DPI South Australia
- Pasture Plants of the Slopes and Tablelands of NSW Second Edition
- Pastures N.S.W Department of Agriculture
- Planting Native Trees on Farms – A Guide to Revegetation in the Namoi Catchment
- Rehabilitation of Degraded, Highly Erodible Land and Saline Affected Sites – A Series of Case Studies in the Upper Hunter by Steven C. Eccles Hunter- Central Rivers Catchment Authority for Office of Heritage and the Environment
- Soil Landscapes of the Singleton 1:250,000 Sheet – Soil Conservation Service
- Weeds - An Illustrated Botanical Guide to Weeds of Australia by B.A. Auld and R.W. Medd



Steven Charles Eccles
Steve Eccles Consulting
Steveecclesconsulting@gmail.com
8/10/2018



Newcastle Office
Unit 2A, 45 Fitzroy Street, Carrington NSW 2294
PO Box 120, Carrington NSW 2294
T +61 2 4940 4200
D +61 2 4940 4226

RPS Australia East Pty Ltd
A member of the RPS Group Plc

10 December 2018

Attn: Hamish McTaggart
Muswellbrook Shire Council
PO Box 122
Muswellbrook NSW 2333
Australia

Our ref: 142135
Via: Email

Dear Hamish,

Continued Quarry and Concrete Batch Plant Operations: Request for Information

I make reference to your meeting with Patrick Wild from Wild Quarries and Civil on 23 December 2018 and subsequent email correspondence from Scott Brooks on the same date requesting additional information on an area within the SEE and DA under assessment labelled as 'Lay Down Area'. This email correspondence also requested detail on changes to a washdown tank on an existing mobile concrete batching plant. The contents of this letter seek to address those matters raised by Council.

Lay Down Area

The lay down area, as shown on Figure 2 of the SEE, provides a set down area where large equipment and machinery can be safely unloaded and also provides temporary storage for such equipment. Generally, it is used for the receipt, storage and partial assembly of the equipment and plant to be installed or constructed either on or off site.

Typical machinery used in this area include:

- Truck and low-loader trailer;
- Cranes;
- Flat-bed trucks;
- Front end loaders;
- Pug mill;
- Excavators; and
- Stationary plant.

Typical materials stored in this area include:

- Stationary plant;
- Cranes;
- Pug mill;
- Large metal fabrication works; and

rpsgroup.com.au

Australia Asia Pacific | Europe, Middle East & Africa | North America



- Low-loader trailer.

No maintenance is carried out in this area. All maintenance is undertaken either in or adjacent to the large maintenance shed near the site office. Any work in this area that has the potential to release oil or grease is undertaken over large catch trays and spill kits are kept adjacent to the work area to assist with the management of oil spills.

Surface water generated from this lay down area is directed via drains and bunds to the site stormwater system where it is captured and treated within existing sediment control dams.

Washdown Tank

Wild Quarries and Civil have advised that they now do not wish to increase the size of this tank. Therefore, no further information is provided on this item.

I trust that the information provided in this correspondence is sufficient to resolve the outstanding matters regarding the subject application, however should you need any further clarification please contact Shaun Smith, Principal Environmental Planner, on 4940 4226.

Yours sincerely

RPS

A handwritten signature in black ink, appearing to read 'S. Smith'.

Shaun Smith
Principal Environmental Planner

cc: Reggie Mikellides, Wild Quarries and Civil

Traffic Impact Assessment
Continued Quarry and Concrete Batching Operations

Pavey Consulting Services

David Pavey Pty Ltd trading as
Pavey Consulting Services
Traffic Studies and Transportation Planning
Road Safety Reviews
Project Management and Contract Administration
Mediation and Government Relations
Civil and Structural Design

Traffic Impact Assessment

Wild Quarries and Civil - Continued Quarry and Concrete Batching Operations LOT 30 DP 815308 8440 NEW ENGLAND HIGHWAY MUSWELLBROOK

Prepared By

David Pavey
Pavey Consulting Services
Director
B.E. (Civil), Grad Dip LGE, LGE Cert, MAIPM, MAICD

Copyright © 2018 David Pavey Pty Ltd, trading as Pavey Consulting Services. This report has been prepared by David Pavey Pty Ltd. Reproduction without written authority from David Pavey Pty Ltd is prohibited.

Restrictions on Use

This report has been prepared specifically for **Wild Group of Companies** as the client. No part of this report may be referred to or quoted in any way without the express written approval of David Pavey Pty Ltd. No party other than **Wild Group of Companies** may rely upon any representation in this report for any purpose whatsoever, and David Pavey Pty Ltd accepts no liability for any such party relying upon this report.

David Pavey Pty Ltd
23 Stanley Street Merewether NSW
ABN 12 150 774 413
ACN 150 774 413

David Pavey Pty Ltd © 2018
Page 1 of 10
Revision 0

Traffic Impact Assessment
Continued Quarry and Concrete Batching Operations

Pavey Consulting Services

PAVEY CONSULTING SERVICES

DOCUMENT CONTROL SHEET

Document Type:	REPORT
Title:	TRAFFIC IMPACT ASSESSMENT Wild Quarries and Civil - Continued Quarry and Concrete Batching Operations 8440 NEW ENGLAND HIGHWAY MUSWELLBROOK
Job No.:	DCS_2019_024_1

Release Level:

<input type="checkbox"/>	Issued for Review	<input type="checkbox"/>	Issued for Tender
<input type="checkbox"/>	75% Complete	<input type="checkbox"/>	Issued for Construction
<input checked="" type="checkbox"/>	100% Complete	<input type="checkbox"/>	Restricted Distribution

Sign Off:

By	Name	Position	Signed	Date
Originator	D. Pavey	Lead Engineer	<i>David G. Pavey</i>	12/11/18
Checked	S. Pavey	Reviewer	<i>Sharon Pavey</i>	14/11/18
Approved	D. Pavey	Director	<i>David G. Pavey</i>	15/11/18

Revisions:

Rev No	Revision Details	Date	By	Chkd	Appd
0	Final	15/11/19	DGP	SVP	DGP

David Pavey Pty Ltd, 23 Stanley St MEREWETHER, NSW, 2291 Phone: 0419696212 e/mail: paveyconsulting@iinet.net.au

Table of Contents

1. INTRODUCTION	4
1.1 OVERVIEW	4
1.2 BASIS OF TRAFFIC IMPACT ASSESSMENT	5
2 EXISTING CONDITION	5
2.1 EXISTING APPROVED DEVELOPMENT	5
2.2 NETWORK AND TRANSPORT ROUTES	6
2.3 SITE ACCESS	6
2.4 EXISTING TRAFFIC VOLUMES	6
2.4.1 New England Highway	6
2.4.2 Quarry Operations	7
3 TRAFFIC DEMANDS FOR CONTINUED OPERATIONS	7
3.1 TRAFFIC DEMAND	7
3.2 TRAFFIC DISTRIBUTION	8
3.3 CAPACITY STANDARDS	8
4 TRAFFIC IMPACT AT INTERSECTIONS	9
5 SUMMARY	9

FIGURES:

Figure 1 Project Location

Figure 2 Austroads warrant design charts for rural intersection turn lanes

TABLES:

Table 1,2 and 3 Existing Peak hour traffic volumes

1. INTRODUCTION

1.1 Overview

Pavey Consulting Services has been requested by Wild Quarries and Civil to prepare a Traffic Impact Statement to support an application under Section 4.55 of the Environmental Planning and Assessment Act 1979 (EP& A Act). The modified application seeks to amalgamate the existing consents that permit the operation of a 100,000 tpa gravel quarry (DA 342/2002), plant hire operations, and a 30,000 tpa concrete batching plant (DA 96/2017) at 8440 New England Highway, Muswellbrook, NSW (the 'site'). The application also seeks to extend the operational life of the quarry operations for an additional 20 years. Activities occur within Lot 30 DP815308 which is part of the Muswellbrook Shire Council Local Government Area (LGA). Access to the site is via Grasstree Ridge Road.

The location of the site is shown as **Figure 1**

The subject site is located approximately 9 kilometres (km) south-east of Muswellbrook within a rural setting.



Figure 1 Site Location

The proposed activities relate to the existing approved 100,000 tpa quarry operations and 30,000 tpa concrete batch plant activities at the site. This application seeks to continue the current operations at the same intensity and within the same disturbance footprint and extend the life of the quarry by a further 20 years. As part of the continued operations of the site it is also proposed to amalgamate the respective consents for each activity into one consolidated approval. Further detail on the continuation of operations is provided below

1.2 Basis of Traffic Impact Assessment

This Traffic Management Plan (TMP) has been prepared in accordance with the relevant governmental assessment requirements, guidelines and policies, and in consultation with the relevant Government Agencies.

The TMP has been developed in accordance with:

- Austroads Guide to Traffic Management Part 3 Traffic Studies and Analysis;
- Austroads Guide to Traffic Management Part 12 Traffic Impacts of Developments; and
- NSW Roads and Maritime Services (RMS) Guide to Traffic Generating Developments (2002).

The assessment is based on the following general scope for matters to consider in a TMP which is defined by the NSW Roads and Maritime Services (RMS) Guide to Traffic Generating Developments (RTA 2002):

- The existing locality and surrounding land uses;
- The existing road network;
- Traffic generation characteristics;
- Traffic impacts; and
- A summary of assessed traffic impacts and any traffic mitigation measures proposed.

2 Existing Condition

2.1 Existing Approved Development

DA 342/2002 (as amended)

Existing quarry operations at the site are approved under DA 342/2002 (as modified 2007, 2016, and 2018). Approved activities include the following components:

- Site office, maintenance shed, staff amenities, and associated hard stand areas for equipment
- maintenance;
- Upgraded intersection of Grasstree Ridge Road with the New England Highway;
Haul road from Grasstree Ridge Road near the intersection with the New England Highway to the
- quarry area;
- Equipment and plant hire;
- Crushing and screening of up to 100,000 tpa of extracted material over a 20-year period;
- Stockpiling of material on site;
- Haulage of material from the site by 12 to 30 tonne highway trucks;
- Water management and erosion and sediment control structures including dams, culverts, pipes, and pits; and
- Progressive rehabilitation of quarried areas.

DA 96/2017

Existing concrete batching activities at the site are approved under DA 96/2017. Approved activities including

the following components:

- A mobile concrete batching plant producing up to 30,000 tpa of product per year;
- Cement silo, including cement auger;
- Transit mixer loading area;
- Raw product storage bins;
- Water storage tank;
- 2 x water recycling pits;
- Loadout apron; and
- Site office, light vehicle parking, staff amenities, and equipment laydown area.

2.2 Network and Transport Routes

Access to the site utilises an intersection and access road off the New England Highway. This intersection was upgraded to an Austroad C (CHR/AUL) standard as part of the consent conditions for DA 342/2002 for the original quarry approval.

This intersection (see Figure 1) provides:

- a right turn in
- deceleration and storage lane for right turn in
- a left turn in
- a deceleration lane for the left turn in
- and an extending acceleration and climbing lane for left turn out movements

The speed limits on the relevant State Highways roads are generally 100 km/hr near the site.

Condition 20 of Development Consent 85/2016 restricts vehicle movements to ensuring that vehicles over 5 T do not leave the site

2.3 Site Access

As detailed above the principal access to the site is via the existing intersection on New England Highway which was design and construction and approved by the Roads and Maritime Services.

The sight distances for traffic approaching this intersection along New England Highway are very good, as the road is straight and level in both directions and drivers can clearly see for at least 300 m both north and south of the intersection.

2.4 Existing Traffic Volumes**2.4.1 New England Highway**

The latest traffic volumes available for the site have primarily been determined from published RMS daily traffic surveys last carried out in 2017. Table 1 and 2 (below) provides Daily traffic movements and peak hour movements along the New England Highway in the vicinity of the existing intersection.

Road	AADT	% heavy vehicles
New England Highway North Bound	4563	18.1%
New England Highway South Bound	4608	19.8%
New England Highway Combined	9171	18.9%

Table 1 RMS 2017 AADT Traffic Volumes New England Highway¹

Road	Peak hr	% heavy vehicles
New England Highway North Bound	277	23.2%
New England Highway South Bound	279	20.7%
New England Highway Combined	569	21.9%

Table 2 RMS 2017 AM Peak Hr Traffic Volumes New England Highway²

Road	Peak hr	% heavy vehicles
New England Highway North Bound	350	13.3%
New England Highway South Bound	308	15.9%
New England Highway Combined	658	14.5%

Table 2 RMS 2017 PM Peak Hr Traffic Volumes New England Highway³

2.4.2 Quarry Operations

As detailed in the EIS the exiting quarry has approval for 100,000 tonnes per annum to leave the site, this equates to approx. 60² truck movements per day. Deliveries are evenly distributed over a 8 hr shift meaning that peak movements are approx. 8 movements per hour in the peak.

3 Traffic Demands for Continued Operations

3.1 Traffic Demand

As is detailed in the original quarry EIS and its subsequent approval, the maximum predicted truck movements from the site peak at 60 movements per day (60 inbound and 60 outbound) at full extraction capacity of 100,000 tpa. Over the 14 years that the quarry has been operating the site has only produced, on average, 50,000 tpa due to changing RMS standards and specifications for road base resulting in a reduced market for the material produced by the quarry and as such the peak truck movements have never been achieved.

The concrete batch plant operations produce in order of 20 truck movements per day based on plant capacity (based on a campaign demand) typically the total number per day is between 4 and 5 deliveries

It is anticipated that there will be no increase to the predicted traffic movements to and from the development in fact the total vehicle movements will be significantly less than these and are more likely to be around 40 vehicles per day on average.

¹ RMS Traffic Volume Viewer

² RMS Traffic Volume Viewer

³ RMS Traffic Volume Viewer

Therefore, to assess the impact that the continued operations will have on the existing intersection the worst case (i.e. peak / approved production) volumes have been used in this TIA. Consequently, the peak hourly volumes are as detailed in section 3.2

3.2 Traffic Distribution

To determine the effect of the current combined traffic has on the capacity on the existing intersections traffic distribution has been assumed as follows:

- Finished product is generally distributed in a directional split (due to conditions imposed in Development Consent 85/2016 to restrict vehicles over 5 Tonnes to left out only) will be 10% right and 90% left
- Likewise, it can be assumed that the split (due to locations of clients and for incoming material will be approx. 50% from the north and 50% from the south
- Consequently, the distribution of traffic used in this assessment (peak hour) Campaign deliver (i.e. worst case) is as follows:
 - Peak Movements of truck of trucks turning left into New England Highway from development is 72 vehicle per hour (Q_L)
 - Peak Movements of truck of trucks turning right into New England Highway from development is 8 vehicle per hour (Q_R)
 - Peak Movements of truck of trucks turning right into site from New England Highway is 40 vehicle per hour (Q_R)
 - Peak Movements of truck of trucks turning left into site from New England Highway is 40 vehicle per hour (Q_L)
 - New England Traffic Volume Q_M is 658 veh per hour

3.3 Capacity Standards

Rural intersection operations are assessed from the combination of the peak hourly through and turning traffic volumes, which are occurring at the intersection. This determines the need for additional intersection turning lanes for which the current Austroads design standards are shown in Figure 2.

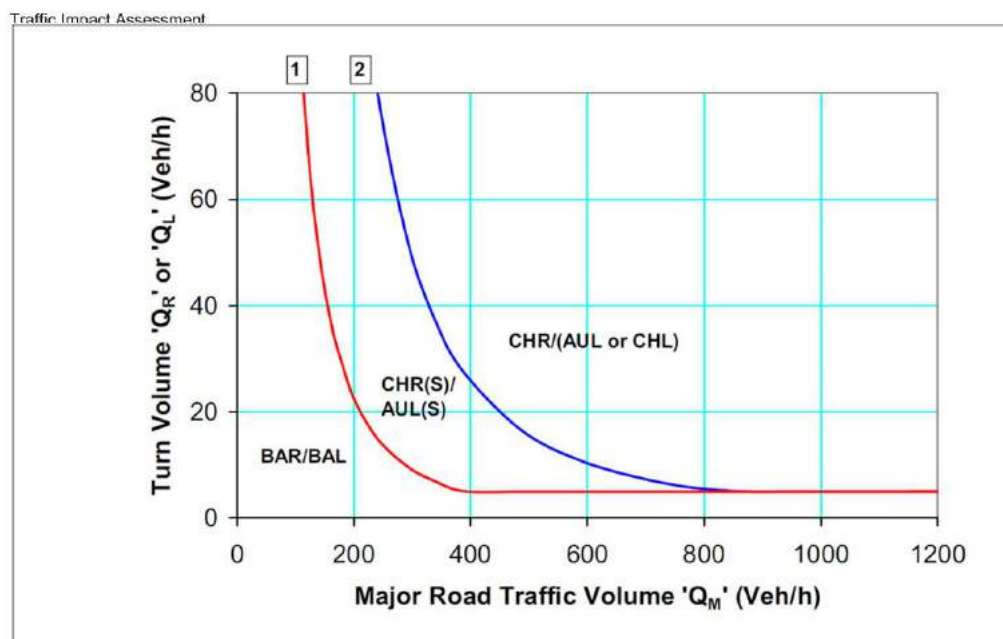


Figure 2 Austroads warrants design charts for rural intersection turn lanes⁴

Warrant Chart for additional turn lanes for traffic volumes for design speeds 100 km/hr or greater.

The design speed for intersection New England Highway and Site Entrance in the locality of the proposed site access is 100 km/hr.

4 Traffic Impact at Intersections

The available sight distances on all legs of the intersection comply with the requirements specified in the RTA's Road Design Guide.

Accident history was review which indicated that there were no particular safety concerns relating to intersection operation. It was considered that the existing intersection safety would not be adversely affected by the continued development,

Utilising the above demands for turning movements and the current traffic volumes along the New England Highway, the existing upgraded intersection and the New England Highway have adequate capacity to accommodate both the quarry and batch plant truck movement.

5 Summary

The traffic impacts from the combined development have been assessed and the key findings are as follows:

- The available sight distances of the existing site access with New England Highway are adequate for the speed environment.
- The intersection has straight and level approaches and more than adequate for the road speed limit which is 100 km/hr;

Traffic Impact Assessment
Continued Quarry and Concrete Batching Operations

Pavey Consulting Services

- The assessment of Austroads Warrant Design Charts for Additional Turning Lanes at Rural Intersections indicates the current intersection meets the requirements set out in this standard and as such that additional intersection works are not required at the intersection New England Highway.

Based on the findings of this report, Pavey Consulting Services is of the opinion that there are no traffic engineering related matters that should preclude approval of this Development Application.

Prepared by:
David Pavey
B.E (Civil) Grad Dip LGE, LGE Cert MAICD, MAIPM
Director,
David Pavey Pty Ltd

David Pavey Pty Ltd © 2018
Page 10 of 10
Revision 0

3 January 2017

Casson Planning and Development Services
5 Stanstead Close
SCONE NSW 2337

Dear Sir

Development Application No. 342/2002 - S96(1a) Modification: Boundary Adjustment To Correct Encroachment Of Quarry Activities On Adjoining Land Lot 30 DP 815308 and Lot 3 DP 1027484 – 8440 New England Highway Muswellbrook

I refer to your application received by Council on 13 October 2016, requesting an amendment to the subject development consent.

The application to amend the development consent was considered by Council pursuant to Section 96 of the Environmental Planning and Assessment Act 1979, and Council has now determined the application.

In this regard, conditions of the development consent have been amended in the following manner:

- Amend Condition No. 1

Council advises that the conditions of development consent have been amended and now comprise:

PLANNING MATTERS:

1. The development must be undertaken **generally** in accordance with the proposal contained in:
 - a) The development application DA 342/2002 and as amended by the Section 96 modification application submitted to Council dated 2nd April 2007.
 - b) The accompanying document titled "Proposed Gravel Quarry and Plant Hire Operation, Lot 30 DP 815308, Grasstree Ridge Road, Shire of Muswellbrook, Environmental Impact Statement" dated 25th October 2002.
 - c) The document titled "Response to Submissions from the Exhibition of the Environmental Impact Statement" dated 5th May 2003.
 - d) The facsimile and attached diagrams to Council from Wild Plant Hire dated 27th May 2004.
 - e) The report to Council dated 8th June 2004.

f) Boundary adjustment plan prepared by MM Hyndes Bailey dated 19 September 2016, reference 216175/2

Unless otherwise specified in the terms of this development consent.

2. The consent shall lapse twenty (20) years from the date of granting this development consent. All works associated with the development, including rehabilitation of the site, shall be completed by the date the consent lapses. If operation is required beyond this point, a new development application will be required.
3. Prior to the commencement of construction, the Applicant shall lodge a bond or bank guarantee of \$50,000 with Council in assurance that all conditions are fully complied with and subject to the bond being used by Council in default of these conditions. In the event that conditions are not adhered to, operations will cease on notification by Council and not recommence until such conditions have been duly rectified.
4. The Applicant shall not produce or transport more than 100,000 tonnes of material from and to the site per year. Should the Applicant wish to produce or transport more than 100,000 tonnes per year, separate application shall be made to Council.

Hours of Operation:

5. The use of plant and equipment and site operations at the quarry shall be restricted to the hours of:

Monday to Friday:	7am – 5pm
Saturdays:	7am – 1pm
Sundays and Public Holidays:	No operations

The use of plant and equipment and site operations at the plant hire operation shall be restricted to the hours of:

Monday to Friday:	7am – 3pm
Saturdays:	7am – 1pm
Sundays and Public Holidays:	No operations

The start up of vehicles or attendance on site by contractors or employees must not be undertaken outside of these hours.

Environmental Management Plans and Environmental Reporting:
--

6. Prior to the commencement of construction, the Applicant shall prepare an Environmental Management Plan to the satisfaction of Council. Sections of this plan are to be amended in regards to the modifications made via the Section 96 application dated 2nd April 2007.

The Plan shall include, but not be limited to:

- a) Environmental management practices to be implemented at the site, including erosion and sediment control, water management, landscaping,

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- dust management, noise management, visual treatments, rehabilitation, complaints procedures.
- b) Environmental monitoring program to be developed and implemented.
7. An Annual Environmental Management Report is to be submitted to Muswellbrook Shire Council by 31st January each year covering the preceding calendar year. The report is to, at a minimum, include:
- a) Production quantities for the year
 - b) The implementation and effectiveness of environmental controls
 - c) Details on erosion and sediment control measures undertaken to minimise soil erosion and runoff
 - d) Details on dust control measures undertaken to minimise dust generated on site, including the results of dust monitoring and weather monitoring undertaken
 - e) Details of noise impacts associated with the development, including results of noise monitoring undertaken
 - f) Details on rehabilitation activities undertaken in the preceding 12 months
 - g) Details of any complaints received, identifying the source of the complaints and the actions taken to rectify the situation.
8. The Applicant shall submit to Council every 6 months from the date of this consent or at other times as determined by Council, a report detailing compliance with all conditions of development consent.
9. The Applicant is to support the establishment and operation of a community Review Committee as appointed by Council whose role will be to monitor the operation of the development throughout the life of the development.
10. The operator is required to provide annual production data as requested by the Department of Mineral Resources, in the manner required, on the standard form supplied for that purpose.
11. All management plans required by this approval are to be submitted to and approved by Council's Extractive Industry Committee prior to commencement of operations on site.

The plans are to be made available to the Review Committee for information.

Section 94 Contributions:

12. Prior to the commencement of commercial operations, the Applicant shall enter into an agreement with Muswellbrook Shire Council regarding appropriate Section 94 Contributions for road maintenance in accordance with Council's DCP 7, Section 94 Contributions Plan.
13. Section 94 contributions and submission of tonnage details are to be provided to Council on a quarterly basis as requested by Council.

Access and Transport:

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

14. The Applicant shall, to the satisfaction of Council, undertake dust control measures in carrying out excavation, transport and rehabilitation, including the use of water trucks and water spraying of working areas and roads (including the haul road).
15. The Applicant shall install and maintain truck warning signs on both approaches to the haul road on Grasstree Ridge Road. Truck warning signs are to also be installed and maintained on the southern bound lane of the New England Highway.
16. The Applicant shall seal the private haul road from the agreed intersection point with Grasstree Ridge Road (as defined in the information submitted to Council from Wild Plant Hire dated 27th May 2004) to a point at least 10 metres past the access road to the machinery shed. A shaker grid is to be installed at the end of this sealed section. The sealing shall be undertaken and maintained to Council's satisfaction.
17. The Applicant shall provide a two lane sealed road on Grasstree Ridge Road from its intersection with the New England Highway to a point 10 metres (at a minimum) past the intersection of Grasstree Ridge Road and the private haul road. A secured pedestrian access shall also be provided adjacent to the two lane sealed section of Grasstree Ridge Road. The sealing shall be undertaken and maintained to Council's satisfaction.
18. The Applicant is to erect a stop sign on the haul road at its intersection with the Grasstree Ridge Road. Grasstree Ridge Road is to remain as the priority road.
19. No more than 60 truck movements per day are permitted from the site. No truck movements are to occur during school bus pick up / set down times on the New England Highway near Pamger Drive or adjacent areas.
20. The Applicant is to install, maintain and operate a weighbridge or other approved weighing device at the site to ensure proper recording of tonnages being transported.
21. The Applicant shall permanently close off the western access road from the Grasstree Ridge Road to the existing machinery shed prior to site operations commencing and install a 1 metre high fully landscaped bund wall parallel to the ROW from the haul road intersection to an approved (by Council) point east of the machinery shed.

Environmental Matters:

22. Prior to the commencement of construction, the Applicant shall implement to Council's satisfaction an Erosion and Sediment Control Plan in accordance with DCP 9 Erosion and Sediment Control Policy and Code of Practice.
23. Prior to the commencement of construction, the Applicant shall install to Council's satisfaction, appropriate visual screening measures to minimise the visual impact of the development.
24. All plants and trees used in landscaping / screening works shall be watered by a suitable irrigation system maintained in good working order at all times.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

25. No more than 2 hectares of land shall be disturbed at any time in the quarry area. No more than 2 hectares of land shall be disturbed at any one time in the working area / base of the extraction site.
26. Prior to the commencement of construction, the Applicant shall, to Council's satisfaction, rehabilitate the area of cleared vegetation adjacent to the plant hire operation site.
27. Prior to the commencement of commercial operations, the Applicant shall install a bund wall and complete approved landscaping works on the eastern side of the excavation area.
28. Only clean fill approved by Council is to be brought onto the site for rehabilitation purposes.
29. The Applicant shall dispose of all solid waste and putrescible matter from the site to the satisfaction of Muswellbrook Shire Council or the Department of Environment and Conservation, as relevant.
30. Prior to the commencement of construction, the Applicant shall establish, to the satisfaction of Council, a conservation agreement and management plan for the land within Lot 30 DP 815308 not included in the defined construction or operational activities for the development (as detailed in the DA and EIS). The conservation area will ensure that the remaining flora and fauna and aboriginal heritage values are managed for biodiversity and conservation purposes.
31. For the whole of Lot 30 DP 815308, the Applicant is to complete, within one year of the date of this consent, additional:
 - a) flora surveys during the respective flowering seasons, for *Bothriochloa biloba* (summer), *Diuris pedunculata* (August to September), *Diuris tricolor* (September to November) and *Goodenia macbarronii* (October to March).
 - b) surveys to determine the species of eucalypt present in order to clarify the conservation significance of the communities represented.
 - c) Aboriginal heritage surveys to determine aboriginal heritage values across the whole of the property. Surveys are to be undertaken in consultation with the local Aboriginal community.

The outcomes of the above investigations are to be incorporated into a final conservation agreement and management plan.

Blasting:

32. Muswellbrook Shire Council and the occupiers of buildings / residents located within 2kms of the quarry are to be advised one (1) week prior to each blast event, including any changes to blasting schedules. This notice shall be in writing and at the end of each month, a written statement of all blasting taken place and quantities produced in the preceding month shall be submitted to Council. In the event of blast failure, the Applicant is to reschedule the blast at a time to be notified to residents in accordance with this clause.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

33. Prior to the commencement of construction, the Applicant shall, upon the written request of the owner of any property located within 2kms of the excavation area, arrange at its cost, for the inspection by a technically qualified person agreed to by both parties, to record the material condition of any structure on such property.
34. Blasting shall not take place in adverse weather conditions including overcast conditions or when the wind is from the south west.
35. Road usage of Grasstree Right of Way during blasting is to be provided in agreement with the Community Review Committee and Council in accordance with the Blast Management Plan.
36. The Applicant shall prepare and implement a Blasting / Vibration Management Plan to the satisfaction of Council, prior to the commencement of any blasting. The Plan must include, but not be limited to, the following matters:
 - a) compliance standards
 - b) mitigation measures
 - c) remedial action
 - d) monitoring methods and program
 - e) monitoring program for flyrock distribution
 - f) procedures for the notification of occupiers of buildings and residents prior to detonation of each blast
 - g) measures to ensure no damage by flyrock to people, property, livestock and powerlines / other utilities.
37. No more than 8 blasts are to occur per year.
38. No explosives are to be stored on site at any time.

Noise Management:

39. In the event that a landowner or occupier of a property located within 2kms of the excavation site considers that noise from the development is excessive and Muswellbrook Shire Council is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request:
 - a) consult with the landowner or occupant affected to determine his / her concerns;
 - b) make arrangements and bear the costs of appropriate independent noise investigations to the satisfaction of Council, to quantify the impact and noise levels of the development at the property.
 - c) Implement appropriate noise mitigation measures and conduct follow up investigations to the satisfaction of Council to quantify the noise levels following the implementation of mitigative measures;
 - d) If the independent noise investigations referred to in condition 39(a) confirm that noise from the development is excessive and the mitigative measures in condition 39(c) do not reduce noise levels to a level acceptable to Council, the operation is to cease until satisfactory noise levels are achieved.
40. The operator is to develop strategies and procedures approved by Council to overcome noise from reversing beepers on operational equipment.

Government Agency Requirements:

ENVIRONMENT PROTECTION AUTHORITY Revised General Terms of Approval

Administrative Conditions

41. Works to be undertaken in accordance with information supplied to the EPA
- a) Except as provided by these general terms of approval, the work and activities must be undertaken in accordance with the proposal contained in:
- i) The Development Application No. 342/2002 submitted to Muswellbrook Council; and
 - ii) The Section 96 modification application and supporting information submitted to Muswellbrook Council; and
 - iii) All additional documents supplied to the EPA in relation to the development prepared by Pelican Environment and Business Solutions dated 5th May 2002.

Unless otherwise specified in these General Terms of Approval.

Discharges To Air And Water

42. Location of monitoring / discharge points
- a) The following points referred to in the table below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants from the point.

Type of monitoring point	Description of location
Particulates – deposited matter	At location(s) where dust disposition levels are representative of the levels experienced at residential properties, or other sensitive receivers, resulting from the operation of the quarry
Particulates – total suspended particles and PM ₁₀	At location(s) where the level of particulate matter being sampled is representative of emissions from the operation of the quarry taking into account prevailing wind direction and the location of residential properties or other sensitive receivers.

Limit Conditions

43. Pollution of waters
- a) Except as may be expressly provided under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.
44. Waste

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- a) The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.
- b) The above condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

45. Potentially offensive odour

- a) No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.

NOTE: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

46. Noise limits

- a) Noise generated by the premises must not exceed the noise limits presented in the table below. Note the noise limits in the table below represent the noise contributions from the proposal.

Noise Limits (dB(A))

Location	Daytime
	L_{Aeq} (15 minute)
Sharman residence as indicated on the plan titled " <i>Figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors</i> " dated 16/09/04 in the document " <i>Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 342/2002 (June 2004)</i> " dated October 2004.	43
Cross residence as indicated on the plan titled " <i>Figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors</i> " dated 16/09/04 in the document " <i>Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 342/2002 (June 2004)</i> " dated October 2004.	43
Smith residence as indicated on the plan titled " <i>Figure 1: Offsite Environmental Monitoring Locations at</i> "	36

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

<p><i>Potential Sensitive receptors</i>” dated 16/09/04 in the document “<i>Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 342/2002 (June 2004)</i>” dated October 2004.</p>	
--	--

- b) For the purpose of Condition 46(a) day is defined as the period from 7.00am to 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturday.
- c) The noise emission limits identified in condition 46(a) apply under meteorological conditions of:
 - i) Wind speeds up to 3m/s at 10 metres above ground level;
 - ii) Temperature inversion conditions of up to 3°C/100m and wind speeds up to 3m/s at 10 metres above ground level.

47. Blasting

- a) The Airblast overpressure level from blasting operations carried out in or on the premises must not exceed:
 - i) 115dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
 - ii) 120dB (Lin Peak) at any time.

at any residential locations presented in the table under condition 46(a).

- b) The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 - i) 5mm/s at nearby residences for more than 5% of the total number of blasts carried out in or on the premises during each reporting period; and
 - ii) 10mm/s at nearby residences at any time;
 - iii) 50mm/s at nearby power lines or television repeater tower.

48. Hours of operation

All construction and quarrying work at the premises can only be conducted between 7.00am and 5.00pm Monday to Friday and 7.00am to 1.00pm on Saturday.

Operating Conditions

49. Dust

- a) The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- b) Trucks entering and leaving the premises that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading.
50. Wastewater management
- a) A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of sewage effluent and other wastewater.
51. Stormwater/sediment control – Construction Phase
- a) Soil and water management controls must be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities in accordance with the requirements outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing).
52. Stormwater/sediment control – Operations Phase
- a) Following the construction phase, stormwater management measures must be implemented to mitigate the impacts of stormwater run-off and within the premises in a manner that is consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the measures should be consistent with guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA).

Monitoring And Reporting Conditions

53. Monitoring records
- a) The results of any monitoring required to be conducted by the EPA's General Terms of Approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions 53(b) and 53(c).
 - b) All records required to be kept by the licence must be:
 - i) In a legible form, or in a form that can readily be reduced to a legible form;
 - ii) Kept for at least four (4) years after the monitoring or event to which they relate took place; and
 - iii) Produced in a legible form to any authorised officer of the EPA who asks to see them.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- c) The following records must be kept in respect of any samples required to be collected:
- i) the date(s) on which the sample was taken;
 - ii) the time(s) at which the sample was collected;
 - iii) the point at which the sample was taken; and
 - iv) the name of the person who collected the sample.

54. Testing methods – concentration limits

- a) Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
- i) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
 - ii) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
 - iii) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

NOTE: The Clean Air (Plant & Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW"

- b) Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

55. Requirement to monitor dust and weather conditions

- a) For each monitoring point specified below the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns

Air Monitoring at the location(s) identified by Condition 42 (a)

Pollutant	Units of Measure	Frequency	Sampling Method
Particulates – Deposited Matter	g/m ² /month	Monthly	AS 3580.10.1 – 1991 (or other method approved by the EPA)
Particulates – PM10	µg/m ³	1 day in 6	AS 3580.9.6 – 1990 (or other method approved by

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

Total suspended particles	µg/m ³	1 day in 6	the EPA) 24 hour composite sample (or other method approved by the EPA)
---------------------------	-------------------	------------	--

- b) The licensee must monitor (by sampling and obtaining results by analysis) each weather parameter specified in Column 1 using the sampling method, units of measure, and frequency specified opposite in the other columns:

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Wind direction	°	Continuous	1 hour	Instrumental
Wind speed	m/s	Continuous	15-minute	Instrumental
Rainfall	mm	Continuous	1 hour	Instrumental

56. Requirement to monitor blasting and noise

- a) The applicant must monitor ground vibration and overpressure of all blasts.
- b) Ground vibrations or the overpressure must be measured at noise sensitive (eg residences, hospitals, schools etc) selected in consultation with the EPA.
- c) To determine compliance with conditions 47(a) and 47(b):
- i) Airblast overpressure and ground vibration must be measured at Cross residence (as indicated on the plan titled "Figure 1: Offsite Environmental Monitoring Locations at Potential Sensitive receptors" dated 16/9/04 in the document "Supporting Documentation to Accompany Section 96 Minor Changes to Development Consent DA 342/2002 (June 2004)" dated October 2004) for all blasts carried out in or on the premises'
 - ii) Instrumentation used to monitor compliance must meet the requirements of Australian Standard 2187.2 of 1993.
- d) When noise monitoring is required, noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from boundary to determine compliance with the L_{Aeq} (15 minute) noise limits in condition 46(a).

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

The modification factors presented in Section 4 of the NSW Industrial Noise policy shall also be applied to the measured noise level where applicable.

57. Reporting Conditions

- a) The applicant must provide an annual report to the EPA in relation to the development as required by any licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based calculation worksheets with the return.

58. General conditions

- a) The applicant must nominate at least two (2) person (and their telephone numbers) who will be available to the EPA and Muswellbrook Shire Council on a 24 hours basis, and who have authority to provide information and to implement such measures as may be necessary from time to time to address a pollution incident or to prevent from continuing as directed by an authorised officer of the EPA.

DIPNR General Terms of Approval

Administrative

59. Prior to the commencement of any work within 40 metres of the Protected Waters a permit under Part 3A of the Rivers and Foreshore Improvements Act 1948 (RFI) must be obtained from DIPNR.
60. The works must be undertaken in accordance with the permit application, except as otherwise provided by the conditions of the permit.
61. The permit will be granted for twelve months from the date of formal approval of the permit under Part 3A of the RFI Act.
62. The permit will not be transferable to any other person, company or site.
63. A copy of the permit must be kept on site at all times and made available to DIPNR officers upon request.
64. The permit holder is responsible for compliance with all of the permit conditions.
65. If any of the permit conditions are breached, the permit holder will be subject to a breach inspection fee and required to pay DIPNR \$500.00 per inspection. The applicant will be required to pay the fee within 28 days of being invoiced. This fee shall be charge for the initial breach inspection and all subsequent inspection until the breach has been rectified to the satisfaction of DIPNR.

General

66. The works must be designed and constructed such that the works do not cause sedimentation, erosion, reduction in waterway or permanent diversion of the Protected Waters.
67. Stormwater discharge from the area of works must not cause any erosion or instability of the bank or bed of the Protected Waters.
68. All demolition and construction materials are to be disposed of appropriately, so as not to cause damage to the bank or bed of the Protected Waters.
69. Scour protection and energy dissipation must be designed and constructed to prevent erosion of the bank or bed of the Protected Waters.
70. The finished invert level of the culvert must be at the same level as the existing bed of the Protected Waters.

Additional Information

71. In assessing any subsequent permit application DIPNR will require the following additional information:
 - a) An Erosion and Sediment Control Plan prepared in accordance with Council's Erosion and Sediment Control Plan Guidelines and to the satisfaction of DIPNR.
 - b) A Stormwater Management Plan prepared for the proposal that addresses the following requirements:
 - i) Any nutrient, detention and sediment control facilities for the site are to be constructed outside the riparian buffer zone and are generally not to be situated on Protected Waters.
 - ii) Post-development flow in all Protected Waters should mirror pre-development flow both in the site and downstream of the site.

NATIONAL PARKS AND WILDLIFE SERVICE General Terms of Approval

72. Section 90 consent to destroy will be considered for the site Maid 1.

ROADS AND TRAFFIC AUTHORITY REQUIREMENTS

73. The New England Highway (SH9)/Grasstree Ridge Road intersection shall be ungraded to a RTA Type "AUR" intersection (AUSTROADS Type C) as shown on the attached Figure 1 and include:
 - a) A right turn in deceleration and storage lane, left turn in deceleration lane and left turn out acceleration lane, extended as a climbing lane.
 - b) Appropriate regulatory signage banning the right turn movement out of Grasstree Ridge Road onto the New England Highway for vehicles over 5 tonnes. Heavy vehicles shall not be permitted to turn right at any time. Light vehicles would be able to turn right at any time.

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- c) Pavement widening to accommodate all existing and additional auxiliary lanes, primarily on the southern side of New England Highway, including the retention of the 3.0 metre wide shoulder.
 - d) All storm water drainage and public utility adjustments required to accommodate the revised intersection arrangements.
74. An 80-metre painted chevron (buffer) shall be provided between the end of the Pamper Drive right turn acceleration lane and the Grasstree Ridge Road right turn lane.
75. All required works shall be designed and constructed to RTA/Council requirements in accordance with the RTA's Road Design Guide, AUSTRROADS guidelines and relevant Australian Standard, as directed by the RTA at full cost to the developer and include:
- a) Auxiliary land for the 100 kph speed limit or 85th percentile speed, whichever is greater.
 - b) Provisions for on-road cyclists (road shoulder).
 - c) Sign posting and line marking.
76. The new road works shall be constructed to the satisfaction of the RTA prior to commercial operations of the new quarry. Material may be extracted from the quarry area for the purposes of constructing the intersection, but no material shall be sold or transported from the site during that time. The material used in the construction of the intersection is to be to the RTA's standards.
77. The developer shall provide a Traffic Management Plan to RTA/Council requirements that addresses the management of construction and operational traffic.

REASONS:

The Reason for the imposition of the conditions is to:

- (i) Comply with the Environmental Planning and Assessment Act 1979 and Regulations 2000, the Local Government Act, 1993, and the Building Code of Australia;
- (ii) Ensure the development is carried out to standards as determined by State Government authorities;
- (iii) Comply with Council's Codes and Development Control Plans;
- (iv) Confirm and clarify the terms of Council's approval;
- (v) Ensure the development is within the public interest, to minimise community costs with regard to infrastructure and to protect the amenity of the area; and
- (vi) Protect the environment, ensure that developments are sustainable and to reduce cumulative effects.

ADVICE:

DEC (EPA) ADVICE:

The DEC (EPA) advises the following conditions are mandatory for all EPA licences:

1. Operating conditions
Activities must be carried out in a competent manner.

Licensed activities must be carried out in a competent manner. This includes:

- The processing, handling, movement and storage of materials and substances used to carry out the activity; and
- The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity

Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity:

- Must be maintained in a proper and efficient condition; and
- Must be operated in a proper and efficient manner.

2. Monitoring and Reporting conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies. The record must include details of the following:

- The date and time of the complaint
- The method by which the complaint was made
- Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect
- The nature of the complaint
- The action taken by the licensee in relation to the complaint, including any follow up contact with the complainant
- If no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made. The record must be produced to any authorized officer of the EPA who asks to see them.

Telephone complaints line

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in this licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint. This condition does not apply until 3 months after this condition takes effect.

3. Reporting Conditions

Annual Return Documents

What documents must an Annual return contain?

The licensee must complete and supply the the EPA an Annual Return in the approved form comprising:

- A statement of compliance
- A monitoring and complaints summary

A copy of the form in which in the Annual return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by the Annual Return

An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term “reporting period” is defined in the dictionary at the end of the licence. Do not complete the Annual Return until after the end of the reporting period. Where a licence is transferred from the licensee to a new licensee,

- The transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- The new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose. Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on:

- In relation to the surrender of a licence – the date which notice in writing of approval of the surrender is given, or
- In relation to the revocation of he licence – the date from which the notice revoking the licence operates.

Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the ‘due date’).

Licensee must retain copy of Annual Return

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the monitoring and complaints summary must be signed by:

- The licence holder, or
- By a person approved in writing by the EPA to sign on behalf of the licence holder

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act is taken to be approved for the purpose of this condition until the date of first review of this licence.

Notification of Environmental Harm

The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the EPA's Pollution Line service in 131 555. The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Written Report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- Where this licence applies to premises, an event has occurred at the premises, or
- Where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off the premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request. The request may require a report which includes any or all of the following information:

- The cause, time and duration of the event
- The type, volume and concentration of every pollutant discharged as a result of the event
- The name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- The name, address and business hours telephone numbers of every other person (or whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort
- Action taken by the licensee in relation to the event, including any follow up contact with any complainants
- Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event
- Any other relevant matters

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

4. General Conditions

Copy of licence kept at the premises or on the vehicle or mobile plant

A copy of the licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

DIPNR ADVICE:

1. The permit will not apply to works already undertaken. Retrospective approval will not be granted under the RFI Act 1948.
2. The permit will not give the permit holder the right to occupy any land without the consent of all owners.
3. The permit will not relieve the permit holder of any obligation or requirements of any other acts, planning controls of Australian Standard.
4. The permit does not apply to any works on Crown Land. Works on Crown Land must satisfy the statutory requirements of the Crown Lands Act 1989.
5. Works on Crown public roads require DIPNRs approval and must satisfy the statutory requirements of the Roads Act 1993.

Definitions under the RFI Act:

- Protected land means:
 - a) land that is the bank, shore or bed of protected waters, or
 - b) land that is not more than 40 metres from the top of the bank or shore of protected waters (measured horizontally from the top of the bank or shore), or

Item 6.3 - Attachment F DA 342/2002 Existing Notice of Determination and Conditions of Consent

- c) material at any time deposited, naturally or otherwise and whether or not in layers, of or under land referred to in paragraph a) or b).
 - o Protected waters means a river, lake into or from a river flow, coastal lake or lagoon (including any permanent or temporary channel between a coastal lake or lagoon and the sea).
 - o River includes any stream of water, whether perennial or intermittent, flowing in a natural channel, or in a natural channel artificially improved, or in a artificial channel which has changed the course of the stream of water and any affluent, confluent, branch, or other stream into a from which the river flows and, in the case of a river running to the sea or into any coastal bay or inlet or into a coastal lake, include the estuary of such river and any arm or branch of same and any part of the river influenced by tidal waters.

RIGHT OF APPEAL:

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act 1979 gives you the right to appeal to the Land and Environment Court within 12 months after the date on which you receive this notice.

APPROVED AT COUNCIL MEETING HELD 15 JUNE 2004

AND AS MODIFIED AT COUNCIL MEETING HELD 13TH DECEMBER 2004

AND AS MODIFIED AT COUNCIL MEETING HELD 10th DECEMBER 2007

It should be noted that this approval remains effective from the original date of consent, 15th June 2004.

Section 96 confers on an applicant who is dissatisfied with this determination a right of appeal to the Land and Environment Court under Section 96(6) of the Environmental Planning and Assessment Act 1979 (except in the case of State Significant Development). This appeal provision is pursuant to the Land and Environment Court Rules and is exercisable within sixty (60) days of the date of determination.

Should you require further information in relation to this matter, please contact me on 02 6549 3777.

APPROVED BY DELEGATED AUTHORITY

Donna Watson
Development Planner

COPY



Enquiries
Please ask for Mrs D L Watson
Direct 02 6549 3777
Our ref DA 96/2017
Your ref

MUSWELLBROOK SHIRE COUNCIL

NOTICE OF DETERMINATION OF DEVELOPMENT APPLICATION
Issued under the Environmental Planning
and Assessment Act 1979 (Section 81)

DEVELOPMENT APPLICATION:	96/2017
APPLICANT NAME:	Casson Planning and Development Services
APPLICANT ADDRESS:	5 Stanstead Close SCONE NSW 2337
LAND TO BE DEVELOPED:	Lot 30 DP 815308 8440 NEW ENGLAND HIGHWAY MUSWELLBROOK
PROPOSED DEVELOPMENT:	Mobile Concrete Batching Plant

DETERMINATION MADE ON:	15 November 2017
DETERMINATION:	Consent granted subject to conditions described below.
CONSENT TO OPERATE FROM:	15 November 2017
CONSENT TO LAPSE ON:	15 November 2022 if work has not commenced in accordance with Section 95(4) of the Environmental Planning and Assessment Act 1979.

DETAILS OF CONDITIONS:

IDENTIFICATION OF APPROVED PLANS

1. Development in Accordance with Plans

The development being carried out in accordance with the development application and the drawings referenced below, and endorsed with Council's approval stamp, except where amended by the following conditions.

Drawing No.	Drawn by	Drawing Date
Site Plan – aerial	Global Acoustics	Undated
Site Plan	RPS	Undated

Muswellbrook Shire Council ABN 86 864 180 944

Address all communications to The General Manager • PO Box 122 • Muswellbrook NSW 2333
Phone 02 6549 3700 • Email council@muswellbrook.nsw.gov.au • Web www.muswellbrook.nsw.gov.au

Page 1 of 8

DA 96/2017

- 2 -

Muswellbrook Shire Council

Elevations – photographic	Applicant	Undated
---------------------------	-----------	---------

2. Development in Accordance with Documentation

The development is to be carried out generally in accordance with the following documents:

Title	Written by	Date
Statement of Environmental Effects	Casson Planning and Development Services	August 2016
Air Quality Assessment	Todoroski Air Sciences	14 December 2016
Noise Impact Assessment	Global Acoustics	20 December 2016
Waste Management Plan	RPS	December 2016
Water Management Plan	RPS	December 2016

3. Plans on Site

A copy of all stamped approved plans, specifications and documents (including the Construction Certificate if required for the work incorporating certification of conditions of approval) must be kept on site at all times so as to be readily available for perusal by any officer of Council or the Principal Certifying Authority.

4. Limitation of consent

The operation of the mobile concrete batching plant shall be limited to three (3) years.

ANCILLARY MATTERS TO BE ADDRESSED TO THE SATISFACTION OF COUNCIL PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

5. Traffic Management Plan

Prior to the issuing of the Construction Certificate, the developer shall provide a Traffic Management Plan to Roads and Maritime/Council's requirements that addresses the management of construction and operational traffic and any impact on the New England Highway.

OPERATIONAL CONDITIONS IMPOSED UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT AND REGULATIONS AND OTHER RELEVANT LEGISLATION

6. Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

ANCILLARY MATTERS TO BE COMPLETED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE**7. Structural Engineer's Plans and details – Proposed Works**

A certificate and detailed drawings issued by an appropriately qualified structural engineer are to be submitted to the Certifying Authority with the Construction Certificate application, which certifies that the design and construction of the structural elements will be structural adequate for its intended purpose.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO COMMENCEMENT**8. Construction Certificate Requirement**

No works shall commence on site until such time as a Construction Certificate has been issued for either part or all of the works. If a certificate is issued for part of the works it must cover the works being undertaken onsite.

9. Sediment and Erosion Control

All required erosion and sedimentation techniques are to be properly installed prior to the commencement of any site works and maintained in a functional and effective condition throughout the construction activities until the site is stabilised.

10. Site Facilities

- (a) If the development involves building work or demolition work, the work site must be fully enclosed by a temporary security fence (or hoarding) before work commences.
- (b) A minimum width of 1.2m must be provided between the work site and the edge of the roadway so as to facilitate the safe movement of pedestrians.
- (c) Any such hoarding or fence is to be removed when the work has been completed.
- (d) A garbage receptacle fitted with a tight fitting lid for the reception of all food scraps and papers from the work site must be provided prior to building work commencing and must be maintained and serviced for the duration of the work.
- (e) Toilet facilities must be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the work site.
- (f) Each toilet provided must:
 - be a standard flushing toilet, connected to a public sewer, or
 - if connection to a public sewer is not available, to an on-site effluent disposal system approved by the council, or
 - an approved temporary chemical closet.
- (g) The provision of toilet facilities must be completed before any other work is commenced.
- (h) A person having the benefit of this certificate who causes an excavation that extends below the level of the base of the footings of a building on an adjoining allotment of land must at their own expense and where necessary:

- protect and support the building from damage, and
 - If necessary, underpin and support the building in accordance with the details prepared by a professional engineer.
- (i) A person having the benefit of this certificate who causes the excavation must, at least 7 days before commencing this work, give notice of intention to do so to the owner of the adjoining allotment of land and provide particulars of the proposed work.
- (j) Erosion and sediment controls must be provided in accordance with the details shown on the approved plans, prior to the disturbance of any soil on the work site.

11. Site Sign

A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:

- (a) stating that unauthorised entry to the work site is prohibited;
- (b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
- (c) showing the name, address and telephone number of the Principal Certifying Authority for the work.

Any such sign must be maintained while building work or demolition work is being carried out, but must be removed when the work has been completed.

This condition does not apply to building works being carried out inside an existing building.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE
--

12. Occupation

The building is not to be used or occupied until a final inspection has been carried out and an occupation certificate has been obtained from the Principal Certifying Authority.

13. Driveway - sealing

The applicant shall arrange for a minimum 5m wide two coat bitumen seal of the accessway from the existing office to the concrete batching plant to the satisfaction of the Certifying Authority prior to the issuing of any Occupation Certificate.

CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES
--

14. Hours of Operation

The Concrete Batching Plant shall operate in accordance with the following hours:

Monday – Friday	7.00am to 5.00pm
Saturday	7.00am to 1.00pm
Sunday and Public Holidays	Closed

15. Noise – Compliance with Legislation

All noise generated from the premises must comply with the *NSW EPA Industrial Noise Policy* or equivalent, *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (General) Regulation 2009* and the *Protection of the Environment Operations (Noise Control) Regulation 2008*.

If council receives noise complaints and council verifies these as “offensive noise” an acoustic consultant must be engaged and the offending equipment modified to reduce noise emissions to comply with the above standards.

16. Noise criteria for the development

The premises must comply with following noise limits as specified in the Global Acoustics Noise Impact Assessment Report, dated 20 December 2016.

	Day L _{aeq} (15 minute)
R1	43
R2	43
R3	43
R4	43
R5	43
R6	43
R7	43
R8	36

The limits in the noise table above do not apply if the Applicant has a written agreement with the relevant owner(s) of these residences to generate higher noise levels, and Council has been advised in writing of the terms of this agreement.

17. Impact on Amenity of Surrounding Area – Non Residential Areas

The development shall not adversely affect the amenity of the locality by reason of excessive levels of illumination (internal or external), solar glare arising from the building materials utilised in any construction processes or fit-out, the emission of noises, noxious fumes, odours and waste.

18. Loading Within Site

All loading and unloading operations shall be carried out wholly within the confines of the site, at all times and within loading bays designated on the approved plans.

19. Stormwater Disposal

All stormwater from the development including all hardstandings and overflows from rainwater tanks is to be collected and disposed of to the existing stormwater drainage on site.

20. Restriction on vehicle movements

The applicant shall install regulatory signage banning the right turn movement out of the site onto the New England Highway for vehicles over 5 tonnes. Heavy vehicles shall not be permitted to turn right onto the Highway at any time.

21. Cost of services

All works associated with the proposed development shall be carried out at full cost to the developer and at no cost to Roads and Maritime or Council, to written satisfaction of Roads and Maritime and Council's requirements.

22. EPA - Emergency Response

The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must be developed in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The PIRMP must be tested at least annually or following a pollution incident.

23. EPA – bunding

All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in-place.

24. EPA – Water Management

A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of sewage effluent and other wastewater.

25. EPA – Treated wastewater storage

A treated wastewater storage and reuse system must be in place at the concrete batch plant with sufficient capacity to ensure that there is no discharge to waters from the reuse system.

REASON FOR IMPOSITION OF CONDITIONS:

The reason for the imposition of the following conditions is to ensure, to Council's satisfaction, the objects of the *Environmental Planning and Assessment Act 1979* (as amended) are achieved:

- (a) To encourage:
 - (i) The proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forest, minerals, water, cities, towns, and villages for the purpose of promoting the social and economic welfare of the community and a better environment;
 - (ii) The promotion and co-ordination of the orderly and economic use of development of land;
 - (iii) The protection, provision, and co-ordination of communication and utility services;
 - (iv) The provision of land for public purposes;
 - (v) The provision and co-ordination of community services and facilities;
 - (vi) The protection of the environment, including the protection and conservation of native animals and plants including threatened species, populations, and ecological communities and their habitats;
 - (vii) Ecologically Sustainable Development; and
 - (viii) The provision and maintenance of affordable housing.
- (b) To promote the sharing of the responsibility for environmental planning between the different levels of government in the State.
- (c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.

ADVICE:**1. Location of Services**

Prior to construction work commencing you should ensure that all services have been clearly located and identified by contacting "Dial before you Dig" by telephoning 1100.

2. EPA – Environmental Protection Licence

The applicant shall contact the EPA regarding a modification to the existing EPL to include the concrete batching plant.

- Failure to comply with any of the above requirements is an offence under the provisions of the Act, and may result in enforcement action being taken by Council if these requirements are not complied with.

DA 96/2017

- 8 -

Muswellbrook Shire Council

RIGHT OF APPEAL:

Section 82A of the Environmental Planning and Assessment Act 1979 provides that the applicant may request the Council to review the determination. The request must be made in writing (or on the review application form) within six (6) months *after receipt of this Notice of Determination*, together with payment of the appropriate fees. It is recommended that the applicant discuss any request for a review of the determination with Council Officers before lodging such a request.

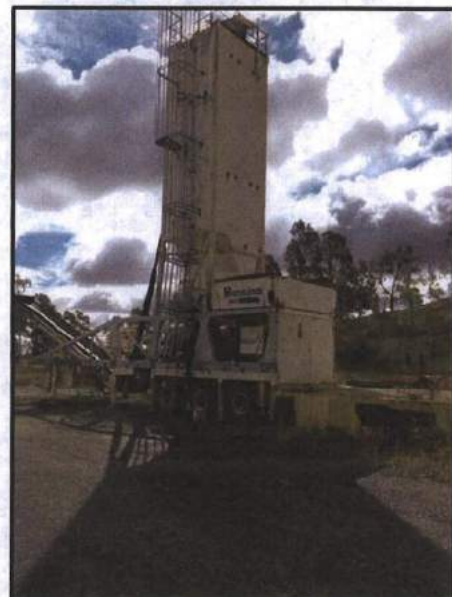
If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act, 1979 gives you the right to appeal to the Land and Environment Court within six (6) months after the date on which you receive this notice.

APPROVED UNDER DELEGATED AUTHORITY

Donna Watson
Development Planner

Date 15 / 11 / 2017

Proposed Mobile Concrete Batching Plan – Wild Quarries



**MUSWELLBROOK SHIRE COUNCIL
DEVELOPMENT CONSENT**
This document forms part of
Council's Notice of Determination

DA 96/2017
Approval Date: 15/11/2017

Delegated Officer: Donna Watson

Wild Quarries, Proposed Concrete Batching Plant - Noise Impact Assessment December 2016

Page 5



Figure 1.3: Aerial Photo Showing Plant Locations

MUSWELLBROOK SHIRE COUNCIL**DEVELOPMENT CONSENT**This document forms part of
Council's Notice of Determination

DA 96/2017

Approval Date: 15/11/2017

Delegated Officer: Donna Watson

Global Acoustics Pty Ltd | PO Box 3115 | Thornton NSW 2322

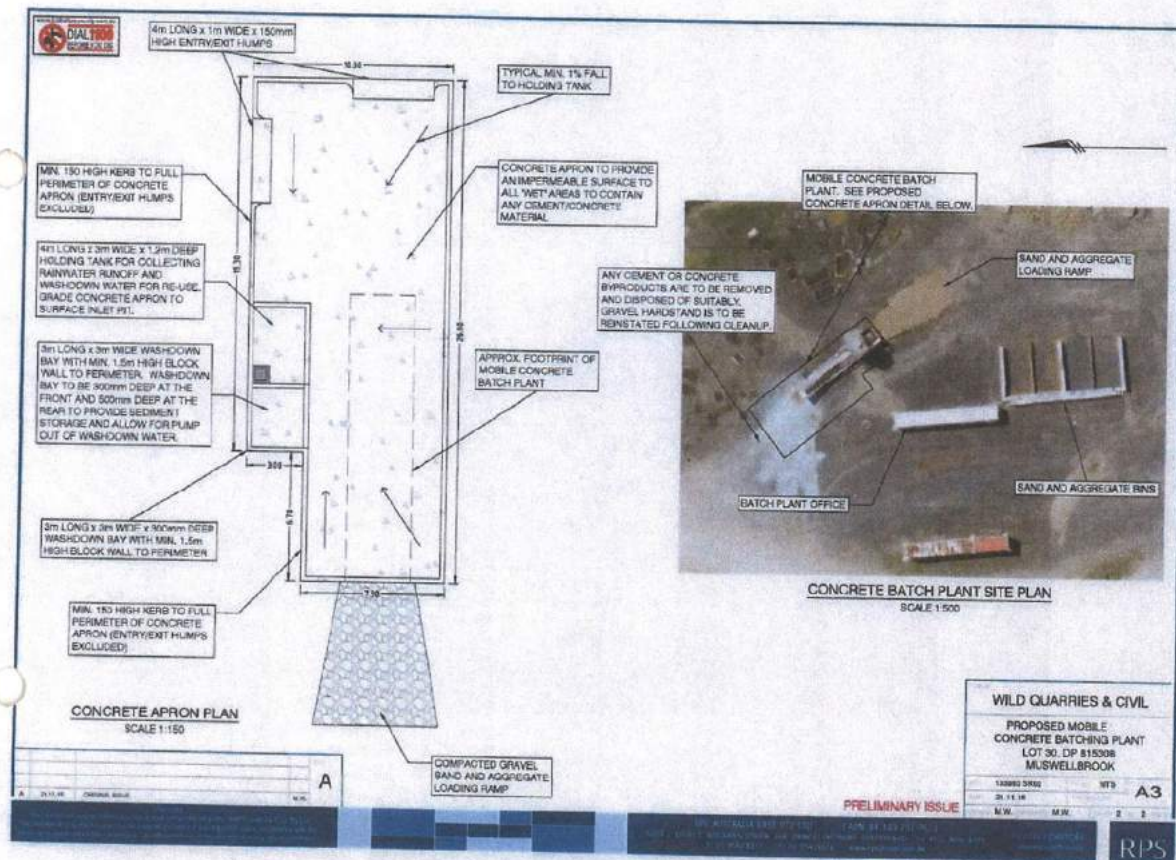
Telephone +61 2 4966 4333 | Email global@globalacoustics.com.au

ABN 94 094 985 734

**MUSWELLBROOK SHIRE COUNCIL
DEVELOPMENT CONSENT**
This document forms part of
Council's Notice of Determination

DA 96/2017
Approval Date: 15/11/2017

Delegated Officer: Donna Watson





CR2019/000358
SF2016/184880
KML

22 February 2019

General Manager
Muswellbrook Shire Council
PO Box 122
MUSWELLBROOK NSW 2333

Attention: Hamish McTaggart

NEW ENGLAND HIGHWAY (HW9): DA 342/2002, S4.55(2) EXTENSION OF QUARRY AND CONCRETE BATCHING PLANT LIFE, LOT: 30 DP: 815308, 8440 NEW ENGLAND HIGHWAY MUSWELLBROOK

Reference is made to Council's email dated 10 December 2018, regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment.

Roads and Maritime understands the proposal to be for the extension of the Wilds Quarry and concrete batching plant life for an additional 20 years to 2044. The maximum tonnage and truck movements for each site will remain at the approved maximum of:

- Quarry - 100,000tpa of gravel and 20 truck movements per day
- Concrete Batching Plant - 30,000tpa of concrete batch plant activities and 60 truck movements per day.

It is also noted that the site currently operates under 2 separate approvals (DA 342/2002 and DA 96/2017) and 2 sets of conditions, and therefore as part of this application the existing approvals will be consolidated into 1.

Roads and Maritime Response & Requirements

Transport for NSW and Roads and Maritime's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Roads and Maritime has reviewed the information provided and raises no objection to or requirements for the proposed development.

Advice to Council

Roads and Maritime recommends that the following matters should be considered by Council in determining this development:

- The property has a common boundary with the New England Highway (HW9) which has been declared as Controlled Access Road by notification in Government Gazette No 139 of 26/09/1980 Folio 4961. Direct access across this boundary is restricted. Access with Consent has been provided (9.14m wide) at the location of the existing driveway.

On Council's determination of this matter, please forward a copy of the Notice of Determination to Roads and Maritime for record and / or action purposes. Should you require further information please contact Kate Leonard, Development Assessment Officer, on 4908 7688 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely



Peter Marler
Manager Land Use Assessment
Hunter Region

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

The General Manager
Muswellbrook Shire Council
PO Box 122
NSW 2333

Attention: Hamish McTaggart

Notice Number 1574483
Date 20-Feb-2019

Re: Development Application DA342/2002 Wild Quarry consent amalgamation**Issued pursuant to Section 4.46 Environmental Planning and Assessment Act 1979**

I refer to the development application and accompanying information received by the Environment Protection Authority (EPA) on 7 January 2019 for the consolidation of existing development consents for a concrete batching plant and a gravel quarry at 8440 New England Highway Muswellbrook NSW (**the Premises**) into one consent. The application also seeks to extend the life of the quarry by an additional 20 years.

Environment protection licence 12301 (EPL) is currently held by Wild Quarries and Civil Pty Ltd for the scheduled activities of crushing, grinding and separating and Extractive activities at the Premises.

The EPA has reviewed the information provided and has determined that it is able to licence the proposal, under the *Protection of the Environment Operations Act 1997* (the POEO Act) subject to a number of conditions. The applicant will need to make a separate application to EPA to vary their licence.

General Terms of Approval

If Muswellbrook Shire Council grants development consent for this proposal, the following general terms of approval that must be incorporated into the consent:

1. Activities at the premises, must only be carried out between the hours of 7.00am and 5.00pm Monday to Friday, and 7.00am and 1.00pm Saturday, and at no time on Sundays and Public Holidays.
2. The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at

Page 1

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

3. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.
4. Offensive blast fume must not be emitted from the premises.
5. All above ground tanks containing a material that is likely to cause environmental harm must be bunded or have an alternative spill containment system.
6. Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:
 - the development application 342/2002 submitted to Muswellbrook Shire Council on 28 February 2018;
 - Statement of Environmental Effects titled *Wild Quarries and Civil - Continued Quarry and Concrete Batching Operations and Consent Amalgamation* relating to the development; and
 - Wild Quarries, Proposed Concrete Batching Plant Noise Impact Assessment prepared for Wild Quarries and Civil Pty Ltd by Global Acoustics, reference number 16356-R01 dated 20 December 2016

These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with the EPA about the changes before the consent is issued. This will enable EPA to determine whether its general terms need to be modified in light of the changes.

The EPA also notes that the proposal intends to capture all surface water generated onsite and reuse it for dust suppression and production water. As such, the EPA proposes not to licence any discharges from the Premises. In the event of a discharge the proponent must meet section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of water, including the prescribed matter for the definition of water pollution at schedule 5 of the *Protection of the Environment Operations (General) Regulation 2009*. Any failure to meet these may result in regulatory action.

Licensing Conditions

I also draw to your attention Attachment A and Attachment B, which do not need to be included in the consent but are conditions which the EPA intends to include in the environment protection licence for this proposal.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Attachment A includes licence conditions specific to this activity and Attachment B includes mandatory conditions for all environment protection licences.

If you have any questions, or wish to discuss this matter further please contact Jenny Lange on 02 4908 6891.

Yours sincerely

A handwritten signature in black ink, appearing to read 'MB', followed by a horizontal line.

.....
Mitchell Bennett
Head Regional Operations Unit
North - Hunter
(by Delegation)

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Administrative conditions

A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application 342/2002 submitted to Muswellbrook Shire Council on 28 February 2018; and
- Statement of Environmental Effects titled *Wild Quarries and Civil - Continued Quarry and Concrete Batching Operations and Consent Amalgamation* relating to the development;

A2. Fit and Proper Person

A2.1 The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.

Limit conditions

L1. Pollution of waters

L1.1 Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

L2. Waste

L2.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

L2.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

L3. Noise limits

L3.1 Noise from the premises must not exceed the limits in table 1:

Location	Time Period	Measurement parameter	Noise level dB(A)

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

R01	Day	Day-LAeq (15 minute)	43
R02	Day	Day- LAeq (15 minute)	43
R03	Day	Day-LAeq (15 minute)	43
R04	Day	Day-LAeq (15 minute)	43
R05	Day	Day-LAeq (15 minute)	43
R06	Day	Day-LAeq (15 minute)	43
R07	Day	Day-LAeq (15 minute)	43
R08	Day	Day-LAeq (15 minute)	36

Table 1

Note: Noise measurement

For the purpose of Condition L3.1:

Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.

L3.2 The noise emission limits identified in **L3.1** apply for prevailing meteorological conditions except for the following

- a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
- b) Stability category F temperature inversion conditions and wind speed greater than 2 metres/second at 10 metres above ground level; or
- c) Stability category G temperature inversion conditions

Note: For the purpose of condition L3.2

- a) Data recorded by the meteorological station identified at condition P1.2 must be used to determine meteorological conditions; and
- b) Temperature inversion conditions (stability category) are to be determined by the sigma theta method referred to in Fact Sheet D of the Noise Policy for Industry.

L3.3 To determine compliance with the Laeq(15min) noise limits specified in condition L3.1, the licensee must locate noise monitoring equipment:

- a) within 30 metres of a dwelling facade (but not closer than 3 metres) where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises;
- b) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises;
- c) at the most affected point at a location where there is no dwelling at the location; and
- d) within 50 metres of the boundary of a national park or nature reserve.

L3.4 For the purpose of determining noise generated at the premises the modification factors in Fact Sheet C of the Noise Policy for Industry must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

L3.5 For the purpose of determining the noise generated at the premises the licensee must use a Class 1 or Class 2 noise monitoring device as defined by AS IEC61672.1 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing.

Hours of operation

L3.6 Activities at the premises, must only be carried out between the hours of 7.00am and 5.00pm Monday to Friday, and 7.00am and 1.00pm Saturday, and at no time on Sundays and Public Holidays.

L3.7 This condition does not apply to the delivery of material outside the hours of operation permitted by condition L3.6, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L4. Blasting

Overpressure

L4.1 The airblast overpressure level from blasting operations in or on the premises must not exceed:

- a) 115dB (Lin Peak) for more than 5% of the total number of blasts over a period of 12 months; and
- b) 120dB (Lin Peak) at any time,

The airblast overpressure values stated above apply when the measurements are performed with equipment having a lower cut-off frequency of 2Hz or less. If the instrumentation has a higher cut off frequency then a correction of 5dB should be added to the measured value. Equipment with a lower cut-off frequency exceeding 10Hz should not be used for the purpose of measuring airblast overpressure.

Ground vibration (ppv)

L4.2 Ground vibration peak particle velocity from the blasting operations carried out in or on the premises must not exceed:

- a) 5mm/s for more than 5% of the total number of blasts over a period of 12 months; and
- b) 10mm/s at any time,

when measured at any point within 1 metre off any affected residential boundary or other noise sensitive location such as a school or hospital.

Time of blasting

L4.3 Blasting in or on the premises may only take place between 9am and 5pm Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.

L4.4 The hours of operation for blasting operations specified in this condition may be varied if the EPA, having regard to the effect that the proposed variation would have on the amenity of the residents in the locality, gives written consent to the variation.

Blast Fumes

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

L4.5 Offensive blast fume must not be emitted from the premises.

Definition:

Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:

- 1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or*
- 2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.*

Operating conditions

O1. Dust

O1.1 Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

O1.2 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

O2. Other operating conditions

O2.1 All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in-place.

O2.2 A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of sewage effluent and other wastewater.

Monitoring and recording conditions

M1. Monitoring records

M1.1 The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions M1.2 and M1.3.

M1.2 All records required to be kept by the licence must be:

in a legible form, or in a form that can readily be reduced to a legible form;

kept for at least 4 years after the monitoring or event to which they relate took place; and

produced in a legible form to any authorised officer of the EPA who asks to see them.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

M1.3 The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;

the time(s) at which the sample was collected;

the point at which the sample was taken; and

the name of the person who collected the sample.

M2. Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/ discharge point or utilisation area specified below (by a point number), the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

Points 2 & 3 - Points are to be upwind and downwind determined at licence variation.

Air

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	every 6 days	AM-18

M3. Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with: any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or

if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or

if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The Clean Air (Plant and Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".)

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

M4. Weather monitoring

M4.1 At a point to be determined between the licensee and the EPA, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4, and 5.

Parameter	Sampling Method	Units of Measure	Averaging period	Frequency
Temperature at 10 metres	AM-4	degrees Celsius	1 hour	Continuous
Temperature at 2 metres	AM-4	degrees Celsius	1 hour	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	15 minutes	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Sigma Theta	AM-2 & AM-4	Degrees	15 minutes	Continuous
Rainfall	AM-4	millimetres	15 minutes	Continuous
Relative humidity	AM-4	percent	1 hour	Continuous

M5. Blast Monitoring

M5.1 For the purpose of blast monitoring, the ground vibration or the overpressure must be measured at to be provided to the EPA by the licensee and approved by the EPA at licence variation stage

M5.2 To determine compliance with conditions L4.1 and L4.2:

- a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points <to be determined> for the parameters specified in Column 1 of the table below; and

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

- b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	Decibels (Linear Peak)	All blasts	Australian Standard AS 2187.2-2006
Ground Vibration Peak Particle Velocity	millimetres/second		Australian Standard AS 2187.2-2006

M6. Noise Monitoring

M6.1 To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment	Minimum number of assessment period
Day	Yearly	15 minutes	1 operation day

R1. Reporting conditions

R1.1 The applicant must provide an annual return to the EPA in relation to the development as required by any licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Attachment – Mandatory Conditions for all EPA licences

Administrative conditions

Other activities

This licence applies to all other activities carried on at the premises, including:

- Sewage treatment

Operating conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

This includes:

- a. the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b. the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity:

- a. must be maintained in a proper and efficient condition; and
- b. must be operated in a proper and efficient manner.

Monitoring and recording conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made.

The record must be produced to any authorised officer of the EPA who asks to see them.

Telephone complaints line

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after this condition takes effect.

Reporting conditions

Annual Return documents

What documents must an Annual Return contain?

The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- a. Statement of Compliance; and
- b. Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

An Annual Return must be prepared in respect of each reporting, except as provided below

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

Where this licence is transferred from the licensee to a new licensee,

- a. the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b. the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on

- a. in relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or
- b. in relation to the revocation of the licence – the date from which notice revoking the licence operates.

Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Notification where actual load can not be calculated

(Licences with assessable pollutants)

Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date.

The notification must specify:

- a. the assessable pollutants for which the actual load could not be calculated; and
- the relevant circumstances that were beyond the control of the licensee.

Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a. the licence holder; or
- b. by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Protection of the Environment Operations Act 1997

General Terms of Approval - Issued



Notice No: 1574483

Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- a. where this licence applies to premises, an event has occurred at the premises; or
- b. where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- a. the cause, time and duration of the event;
- b. the type, volume and concentration of every pollutant discharged as a result of the event;
- c. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- d. the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- e. action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- f. details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;

any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

Copy of licence kept at the premises or on the vehicle or mobile plant

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

Hamish McTaggart

From: [REDACTED]
Sent: Tuesday, 8 January 2019 3:16 PM
To: Hamish McTaggart
Subject: RE: Doc 943123 RE: DA 342/2002 S96 Modification

Hamish,

We have decided to make only one request at this time as follows:-

That it is made an additional condition of consent that

"Exhaust brakes NOT be used by any vehicle while on the property of 8440 New England Highway."

Reason: Exhaust brakes on vehicles operating on the property of 8440 New England Highway are clearly audible inside our residence and the noise they make is extremely annoying. While the actual noise may or may not exceed specified limits, the affect is such that it is interfering with us even inside our residence.

We will wait and see if any of the changed conditions affect us.

Thank You for your time in this matter and the extended opportunity to make a submission.

From: [Hamish McTaggart](#)
Sent: Monday, 7 January 2019 4:00 PM
To: [REDACTED]
Subject: FW: Doc 943123 RE: DA 342/2002 S96 Modification

[REDACTED]

The extended timeframe for submissions regarding DA 342/2002 has concluded and I have not yet received a submission from yourselves.

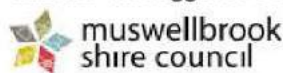
As such I wanted to confirm that it was still your intention to make a submission and that you had not lodged a submission that has not yet reached my desk or possibly got lost in the Christmas mail.

Could you please confirm whether you have or are intending to make a submission and if so provide me with a copy ASAP either by email or lodging it at the Council building.

This would be much appreciated, as if I don't receive anything from you in the coming days Council will need to continue to progress the assessment of the application.

Regards,

Hamish McTaggart | Senior Development Planner



T: 02 6549 3860 | E: hamish.mctaggart@muswellbrook.nsw.gov.au | W: www.muswellbrook.nsw.gov.au

From: Hamish McTaggart
Sent: Wednesday, 12 December 2018 5:29 PM
To: [REDACTED]
Subject: Doc 943123 RE: DA 342/2002 S96 Modification



Council will be closed for the Christmas period between 22 December 2018 and 2 January 2018. Noting your request, the level of information submitted with the applications and given Council will not be open to progress the assessment of the development application through the Christmas closure period I agree to your request for additional time to review the application and consider making a submission until the close of business Friday 4 January 2018.

Feel free to contact me if you have any questions in relation to the information accompanying the application.

Regards,

Hamish McTaggart | Senior Development Planner



T: 02 6549 3860 | E: hamish.mctaggart@muswellbrook.nsw.gov.au | W: www.muswellbrook.nsw.gov.au

From: [REDACTED]
Sent: Wednesday, 12 December 2018 4:54 PM
To: Hamish McTaggart
Cc: [REDACTED]
Subject: DA 342/2002 S96 Modification

Hamish,
Re: Extension of time

This email is to request an extension of time to review the proposed development and to provide a submission.

I could get the submission to you by 27/12/18 if there is no additional information needed. If this is too long please let me know when you require my submission.

Please reply as confirmation you have received this email.



Sent from [Mail](#) for Windows 10

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit
<https://clicktime.symantec.com/3QEsLX3A2eAFW4X619oEPHS7Vc?u=http%3A%2F%2Fwww.symanteccloud.com>

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

Hamish McTaggart

From: [REDACTED]
Sent: Saturday, 26 January 2019 5:53 PM
To: Muswellbrook Shire Council
Cc: [REDACTED]
Subject: RE: DA 342/2002 – S96 OBJECTION IN CONFIDENCE

Dear Kelly,

Thank you for supplying us with the information in regards to DA 342/2002 – S96

I am very disappointed that council has not informed us of the proposed DA even though we are directly impacted as adjoining residents whom use the ROW on a daily base passing Wild Quarries daily dealings.

Currently we have the residential house rented out where we are there every weekend in our caravan, on numerous occasions the tenants complained about bullying tactics with large machinery forcing locals off the road. At the moment Wild Quarries is illegally using this ROW for the cement trucks and creating chaos and this needs to stop.

If there is an incident we are holding council responsible as I have heard this has previously been reported.

The ROW has no traffic signs or road rules and is up to the strongest has right of way which needs to be discussed as part of this application.

A resent non reported incident (under the mine legislation) was reported to the police and WorkCover by myself and is under investigation therefore another reason to put on hold until further investigations are completed.

In the report the statement is made 3.2.5 Truck movement for a 6 day work week of 30,000ton with 10t load is 3000 loads = 150/week is 20/day which will be shared with residential traffic on a dirt road. (These are extra movements) report forgot to mention supply of other materials such as asphalt, fly ash, cement etc. as this forms part of the proposed batch and in addition what are the plans with the returned concrete and washing out concrete trucks on return?

At the moment we get water from the dam when this overflows but additional water will have an adverse impact on the Dam levels which will prevent overflow preventing water to reach our main dam.

In this report Point 2.1.4 transport and Access is to my understanding is the asphalt section where the batching plant is after this section

Exiting to the Highway there is a no right turn policy (STon Limit) but is continuously breached which clearly shows a lack of authority.

In the report at section 5.1.4 "Although no trucks will use Grasstree ridge rd". It is to my understanding the turnoff from New England Hwy into the property is where Grasstree ridge rd starts and this is the access to the quarry. The batching plant is accessible on the dirt rd only a bit further along the ROW which is a dirt rd and as mentioned shared with all residents.

This is very concerning for us and is a matter of time where lives will be lost and the resent incident was such a case. If a council meeting is required please advise but this will need to be addressed as a matter of urgency.

Regards,

[REDACTED]



[Click here to report this email as spam.]
Fulton Hogan email is protected by Forcepoint.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

Hamish McTaggart

From: [REDACTED]
Sent: Thursday, 31 January 2019 8:01 AM
To: Records
Cc: rowimajo@gmail.com
Subject: Wild Quarry ROW
Attachments: RE: DA 342/2002 – S96 OBJECTION IN CONFIDENCE

Hi Hamish and thank you for your response,

I assume email will be an adequate method to raise my concerns and if not please advise.

Currently Wild Quarry have an asphalted section where they have access to the quarry but in the last few months it was noticed by myself, neighbours and my tenant's that there are increased truck movements on the ROW that we share with a number of people, I have attached a google view and is the intersection both yellow and blue. The complaints from our tenants are that the trucks coming or going to the batching plant give no way at this intersection and due to the surface finish (5-10mm gravel) and the angle of the driveway it is usually a close encounter with moving plant. In addition to this the quarry has put up cones that pushes incoming trucks to the far left to make a right turn into this road which doesn't give outgoing residential traffic that is going straight ahead time to break for the slow trucks turning.

I did read in the provided environment impact report and noticed in the report at section 5.1.4 "Although no trucks will use Grasstree ridge rd". which is not the case and Wild Quarry are using the Grasstree ridge rd.

Further issues I have is the Dam water which lies in front of our main dam where we get water when this overflows but it seems this water will be used for additional activities and fear we will only receive water when we get 1:100 year floods. Wild Quarry have a few horses and no further cattle as we currently have 20 cows but levels are diminishing quickly.

I have also attached my previous email sent to Kelly on Saturday 26-1-19.

Please advise what we need to do from here.

Regards,

[REDACTED]

From: Records [mailto:Records@muswellbrook.nsw.gov.au]
Sent: Wednesday, 30 January 2019 12:30 PM
To: WIEKENS, Ronald
Subject: Wild Quarry

[REDACTED]

The Wild's Quarry site referenced in your email has lodged development applications and obtained development consent for the operation of both a quarry and concrete batching plant.

The applications that relate to these approvals were

DA 342/2002 – quarry

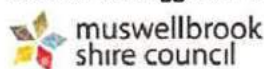
DA 85/2016 concrete batching plant

An application to modify the development consent for DA 342/2002 has also been lodged with Council and remains under assessment by Council Officers. The notification period for this application has concluded, however if you provide correspondence outlining any matters which you may want Council to consider in its assessment of the application Council may take this correspondence as a late submission in relation to the application and consider it in its development assessment. It is requested that any correspondence is provided by no later than 5 February 2019, any correspondence received after that date will not be considered through the DA Assessment.

I also note the concerns you have raised in relation to a Council inspection of the right of way and the occupation of the dwelling. I will endeavour to review these matters, carry out further investigation and undertake follow up action as appropriate.

Regards,

Hamish McTaggart | Senior Development Planner



W: www.muswellbrook.nsw.gov.au

From: [REDACTED]
Sent: Friday, 25 January 2019 12:50 PM
To: Muswellbrook Shire Council
Subject: Mailing list RD Wiekens

To Whom it may concern.

Attention Planning:

Dear Council,

We have recently purchased property 233 Grasstree Ridge ROW Muswellbrook 2333 Lot 2 DP: 1027484 which is behind Wild Quarry 8440 New England Hwy.

It is to our understanding that the this company has approvals to carryout mining of quarry materials only but there seems to be quite a bit of movement with concrete trucks where we heard through some locals they are running a concrete batching plant.

Can planning please advise what the quarries approvals are and if any applications are with council we would like to know, if we are affected what these applications are as we share this ROW and there is quite a bit of truck movement happening.

I also understand that the ROW has been amended quite dangerously where the council has done a site visit but not 100% sure if this is correct, if this is the case we would like to be involved with the issues that have been brought forward and if not how far does council interact with these roads.

Last we also heard that the Wild Quarry has no private house on this property as a condition of their agreement but there is a family with children living on these premises which I more fear for the children's safety as we see them occasionally running around the mine vehicles.

I have also attached the cert title of our property

As we are not permanent at this property our Sydney address is 21 Cowrang Ave, Terrey Hills 2084 NSW where also the rates notices are mailed too.

Regards,

This email message and any attachments are confidential and may be privileged in which case neither is intended to be waived. This email is for use only by the intended recipient. If you are not the intended recipient you have received this email in error and any use, circulation, forwarding, printing or copying whatsoever by you is strictly prohibited. If you have received this message in error, please inform us immediately and delete this email and any attachments. While Fulton Hogan Pty Ltd employs Anti-Virus Software, we cannot guarantee that this email is free from viruses and we recommend that the email and any attachments be tested before opening.

Fulton Hogan may collect, use and disclose personal information about you so we can perform our business activities and functions and provide quality customer services.

You can view our Privacy Statement at

https://clicktime.symantec.com/3FvgMLLC2dAg5pPN5DtYvJZ7Vc?u=http%3A%2F%2Fwww.fultonhogan.com%2FPrivacy-Statement---Australia-and-New-Zealand%2FPrivacy_Statement_Australia%2F

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

[Click here to report this email as spam]
Fulton Hogan email is protected by Forcepoint.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>



Newcastle Office
Unit 2A, 45 Fitzroy Street, Carrington NSW 2294
PO Box 120, Carrington NSW 2294
T +61 2 4940 4200
D +61 2 4940 4226

RPS Australia East Pty Ltd
A member of the RPS Group Plc

4 February 2019

Attn: Hamish McTaggart
Senior Development Planner
Muswellbrook Shire Council
PO Box 122
MUSWELLBROK NSW 2333

Our ref: 142135
Via: Email

Dear Hamish,

RE: Wild Quarries and Civil – Consolidation of DA342/2002 & DA85/2016 – Response to Submission

I make reference to Council's email dated 4 February 2019 which provides details of a second submission made in relation to the consolidation of consents DA 342/2002 and DA 85/2016 on Lot 30 DP815308. Upon review of the submission it has been identified that the key matters raised by the stakeholder relate to traffic and access, surface water, and an existing residential dwelling. The contents of this letter seek to clarify the planning and environmental matters raised in the submission from the stakeholder. Any other civil grievances detailed in the submission have not been addressed and are considered irrelevant to this application.

Traffic and Access

With regard to truck movements, the Traffic Impact Assessment provided to Council on 18 January states the following:

"As is detailed in the original quarry EIS and its subsequent approval, the maximum predicted truck movements from the site peak at 60 movements per day (60 inbound and 60 outbound) at full extraction capacity of 100,000 tpa. Over the 14 years that the quarry has been operating the site has only produced, on average, 50,000 tpa due to changing RMS standards and specifications for road base resulting in a reduced market for the material produced by the quarry and as such the peak truck movements have never been achieved.

The concrete batch plant operations produce in order of 20 truck movements per day based on plant capacity (based on a campaign demand) typically the total number per day is between 4 and 5 deliveries.

It is anticipated that there will be no increase to the predicted traffic movements to and from the development in fact the total vehicle movements will be significantly less than these and are more likely to be around 40 vehicles per day on average."

The above truck movements include the delivery of any raw materials etc as required to undertake the batching activities. Total truck movements for both operations are anticipated to be less than that approved under DA342/2002.

With regard to traffic signs and road rules, Conditions 15 and 18 of DA342/2002 require Wild Quarries and Civil to install appropriate signage. These conditions state:

rpsgroup.com.au

Australia Asia Pacific | Europe, Middle East & Africa | North America



"15. The Applicant shall install and maintain truck warning signs on both approaches to the haul road on Grasstree Ridge Road. Truck warning signs are also to be installed and maintained on the southern bound lane of the New England Highway."

"18. The Applicant is to erect a stop sign on the haul road at its intersection with the Grasstree Ridge Road. Grasstree Ridge Road is to remain as the priority road."

The above signs have been installed and have been in place at the site since the quarry was developed in 2003. The signs were required to be installed prior to the granting of an occupation certificate for the quarry.

With regard to right-hand turns onto the New England Highway from Grasstree Ridge Road, light vehicles and vehicles up to 5 tonnes are permitted to turn right at this intersection. All trucks over 5 tonnes turn left and access Muswellbrook via Thomas Mitchell Drive.

Grasstree Ridge Road commences at its intersection with the New England Highway. Trucks and light vehicles access the quarry from the New England Highway, via Grasstree Ridge Road. The quarry has been operating in this manner since 2003 and as approved by Muswellbrook Shire Council. Grasstree Ridge Road, beyond the access point into the quarry (ie. the ROW), is not used as a haul road to and from the quarry by any trucks or plant.

Surface Water

The stakeholder makes reference in their submission to the restriction to surface flows entering their main dam. Upstream of this dam is a stock dam on Lot 3 DP1027484 which is owned by Mr Patrick Wild, owner of Wild Quarries and Civil. Mr Wild's dam does not form part of the surface water management system for the quarry or concrete batching operations subject of this application. This dam is utilised for the watering of cattle and horses across the larger property, and for general agricultural use.

While the stakeholder may have concerns over the restriction of surface flows to their dam, Mr Wild's dam is existing, has been legally constructed, and does not form part of the quarry and concrete batching operations.

Residential Dwelling

Prior to the development of the subject site as a hard rock quarry and batching plant the property was utilised as a freight and trucking business. Attached to the business was a residential home that is also located on Lot 30 DP815308. This residence has continued to be occupied since its purchase in 2001 by Mr Patrick Wild, Managing Director of Wild Quarries and Civil and no restriction exists on DA342/2002 which prohibits its continued use as a residential dwelling.

I trust that the information provided in this correspondence is sufficient to address the matters raised in the subject submission, however should you need any further clarification please contact Shaun Smith, Principal Environmental Planner, on 4940 4226.

Yours sincerely

RPS

A handwritten signature in black ink, appearing to read 'Shaun Smith'.

Shaun Smith
Principal Environmental Planner

cc: Patrick Wild, Wild Quarries and Civil

Hamish McTaggart

From: Kevin Cross <kevin.karen.cross@gmail.com>
Sent: Tuesday, 8 January 2019 3:16 PM
To: Hamish McTaggart
Subject: RE: Doc 943123 RE: DA 342/2002 S96 Modification

Hamish,

We have decided to make only one request at this time as follows:-

That it is made an additional condition of consent that

"Exhaust brakes NOT be used by any vehicle while on the property of 8440 New England Highway."

Reason: Exhaust brakes on vehicles operating on the property of 8440 New England Highway are clearly audible inside our residence and the noise they make is extremely annoying. While the actual noise may or may not exceed specified limits, the affect is such that it is interfering with us even inside our residence.

We will wait and see if any of the changed conditions affect us.

Thank You for your time in this matter and the extended opportunity to make a submission.

From: Hamish McTaggart
Sent: Monday, 7 January 2019 4:00 PM
To: Kevin Cross (kevin.karen.cross@gmail.com)
Subject: FW: Doc 943123 RE: DA 342/2002 S96 Modification

Hi Kevin and Karen,

The extended timeframe for submissions regarding DA 342/2002 has concluded and I have not yet received a submission from yourselves.

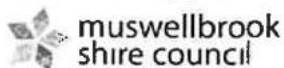
As such I wanted to confirm that it was still your intention to make a submission and that you had not lodged a submission that has not yet reached my desk or possibly got lost in the Christmas mail.

Could you please confirm whether you have or are intending to make a submission and if so provide me with a copy ASAP either by email or lodging it at the Council building.

This would be much appreciated, as if I don't receive anything from you in the coming days Council will need to continue to progress the assessment of the application.

Regards,

Hamish McTaggart | Senior Development Planner



T: 02 6549 3860 | **E:** hamish.mctaggart@muswellbrook.nsw.gov.au | **W:** www.muswellbrook.nsw.gov.au

From: Hamish McTaggart
Sent: Wednesday, 12 December 2018 5:29 PM
To: 'Kevin Cross'
Subject: Doc 943123 RE: DA 342/2002 S96 Modification

Hi Kevin,

Council will be closed for the Christmas period between 22 December 2018 and 2 January 2018. Noting your request, the level of information submitted with the applications and given Council will not be open to progress the assessment of the development application through the Christmas closure period I agree to your request for additional time to review the application and consider making a submission until the close of business Friday 4 January 2018.

Feel free to contact me if you have any questions in relation to the information accompanying the application.

Regards,

Hamish McTaggart | Senior Development Planner



muswellbrook
shire council

T: 02 6549 3860 | E: hamish.mctaggart@muswellbrook.nsw.gov.au | W: www.muswellbrook.nsw.gov.au

From: Kevin Cross [<mailto:kevin.karen.cross@gmail.com>]

Sent: Wednesday, 12 December 2018 4:54 PM

To: Hamish McTaggart

Cc: karen.kevin.cross@gmail.com

Subject: DA 342/2002 S96 Modification

Hamish,

Re: Extension of time

This email is to request an extension of time to review the proposed development and to provide a submission.

I could get the submission to you by 27/12/18 if there is no additional information needed. If this is too long please let me know when you require my submission.

Please reply as confirmation you have received this email.

Kevin & Karen Cross
8438 New England Highway
Muswellbrook 2333

Sent from Mail for Windows 10

This email has been scanned by the Symantec Email Security.cloud service.

For more information please visit

<https://clicktime.symantec.com/3QEsLX3A2eAFW4X619oEPHS7Vc?u=http%3A%2F%2Fwww.symanteccloud.com>

This email has been scanned by the Symantec Email Security.cloud service.

For more information please visit <http://www.symanteccloud.com>

6.4 OUTSTANDING DEVELOPMENT APPLICATIONS

Attachments:	A. Outstanding Development Applications 19 September 2019
Responsible Officer:	Sharon Pope - Assistant Director - Environment & Community Services
Author:	Michelle Reichert - Administration Officer
Community Plan Issue:	<i>A Council that is well managed, efficient and properly resourced and that is responsive to its communities and stakeholders</i>
Community Plan Goal:	<i>Maintain a strong focus on financial discipline to enable Council to properly respond to the needs of the communities it serves.</i>
Community Plan Strategy:	<i>Facilitate the inspection of all development sites subject to Development Application / Construction Certificate in accordance with statutory requirements.</i>

PURPOSE**OFFICER'S RECOMMENDATION**

The Committee note the undetermined Development Applications listed in Attachment A and the status of their assessment.

Moved: _____ Seconded: _____

STATUTORY IMPLICATIONS

Under the provisions of the Environmental Planning and Assessment Regulation 2000 Council has a statutory obligation to assess:

General development applications within 40 days (excluding stop the clock days) of their receipt; and

The following types of development applications within 60 days (excluding stop the clock days) of their receipt:

- (i) Designated development,
- (ii) Integrated development,
- (iii) Development for which the concurrence of a concurrence authority is required, and
- (iv) A development application accompanied by a biodiversity development assessment.

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000083.001	Ancillary Development - Shed	82 Bell ST DENMAN LOT: 22 DP: 876528	Mr G J Barry	\$18,430	17/09/2019	2	DA Acknowledgement
005.2019.00000082.001	Hay Shed	284 Bureen RD DENMAN LOT: 53 DP: 753771	Mr A J Davies	\$173,000	16/09/2019	3	DA Acknowledgement
005.2019.00000081.001	Dwelling Alterations and Additions	15 Clendinning ST MUSWELLBROOK LOT: 4 DP: 952978	Mr A Hobbs	\$80,000	13/09/2019	6	Notify Adjoining Owners
005.2019.00000080.001	Strata Subdivision One (1) Lot into Two (2) Lots	4 Dixon CCT MUSWELLBROOK LOT: 1110 DP: 1129000	Mm Hyndes Bailey & Co	\$6,000	12/09/2019	7	Notify Adjoining Owners
005.2019.00000079.001	Rural Workers Dwelling - Caretakers Residence	3367 Golden HWY JERRYS PLAINS LOT: 1 DP: 540570	GJ Gardner Homes Hunter Valley	\$467,285	12/09/2019	7	Advertisement - Proposal
005.2019.00000078.001	Ancillary Development - Garage	4 Wollombi RD MUSWELLBROOK LOT: 2 DP: 261812	Mrs N F Moller	\$8,542	6/09/2019	13	Notify Adjoining Owners
005.2019.00000077.001	Three (3) Rural Workers Dwellings and Machinery Shed	420 Dalswinton RD DALSWINTON LOT: 129 ALT: DP: 752441	Adenzie Developments Pty Ltd	\$380,000	6/09/2019	13	Notify Adjoining Owners
005.2019.00000076.001	Ancillary Development - Storage Shed	33 Forbes ST MUSWELLBROOK LOT: 14 DP: 36426	Mr S Stevens	\$21,696	6/09/2019	13	Notify Adjoining Owners
005.2019.00000075.001	Ancillary Development - Garage	9 Forbes ST MUSWELLBROOK LOT: 8 DP: 22107	Ms S R Newlove	\$24,825	4/09/2019	15	Notify Adjoining Owners
005.2019.00000074.001	Deck with Roof	6 Koombahla ST MUSWELLBROOK LOT: 2 SEC: 2 DP: 32583	Mr E Collett	\$19,965	2/09/2019	17	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2018.00000078.002	S4.55 (2) Modification - Food Outlet Building to be Decreased to 120m ²	147/151 Bridge ST MUSWELLBROOK LOT: 1 DP: 159620 147 Bridge ST MUSWELLBROOK LOT: 1 DP: 161784 147 Bridge ST MUSWELLBROOK LOT: 1 DP: 784361 153 Bridge ST MUSWELLBROOK LOT: 1 DP: 794803	Inland Building and Construction	\$0	2/09/2019	17	Notify Adjoining Owners
005.2019.00000073.001	Relocation of Existing Dwelling, New Dwelling, Ancillary	Bylong Valley Wy BAERAMI LOT: 31 DP: 755437	Mrs P Beak	\$800,000	29/08/2019	21	Notify Adjoining Owners
005.2019.00000072.001	Subdivision of One (1) Lot into Two (2) Lots	43 Paxton ST DENMAN LOT: 104 DP: 1170018	Mr S D Givney	\$10,000	21/08/2019	29	Additional Info Required
005.2019.00000071.001	Installation of Relocated Dwelling	25 Osborn AVE MUSWELLBROOK LOT: 4 DP: 239686	Ms S A McMinn	\$89,000	20/08/2019	30	Notify Adjoining Owners
005.2019.00000070.001	Roof Cover between Two Existing Industrial Buildings	30 Glen Munro RD MUSWELLBROOK LOT: 11 DP: 1131270	Jetsaw Pty Ltd	\$16,354	20/08/2019	30	DA Acknowledgement
005.2019.00000069.001	Ancillary Development - Carport	26 Queen ST MUSWELLBROOK LOT: 12 DP: 514181	Mr D B Smith	\$18,900	16/08/2019	34	Refer to Mine Subsidence Bo
005.2019.00000068.001	Convert Part of Existing Garage into an Additional Bedroom	9 Manning ST MUSWELLBROOK LOT: 27 DP: 38140 9 Manning ST MUSWELLBROOK LOT: 28 DP: 38140	Mr S J Scott	\$19,886	14/08/2019	36	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000067.001	Extension to existing Recreational Hall	420 Wybong P O RD MUSWELLBROOK LOT: 100 DP: 1111213 REF: HALL	Wybong Public Hall	\$129,096	12/08/2019	38	Notify Adjoining Owners
005.2019.00000066.001	Ancillary Development - Carport	7 Calgaroo AVE MUSWELLBROOK LOT: 2032 DP: 263131	Complete Planning Solutions	\$6,400	8/08/2019	42	Notify Adjoining Owners
005.2019.00000065.001	Industrial Storage Shed	15 Strathmore RD MUSWELLBROOK LOT: 92 DP: 261835	Mr R H Gordon	\$22,000	6/08/2019	44	Notify Adjoining Owners
005.2019.00000064.001	Demolition of a Shed	21 Paxton ST DENMAN Lot: 1 DP:203777	Muswellbrook Shire Council	\$15,000	6/08/2019	44	Notify Adjoining Owners
005.2019.00000063.001	Dwelling Additions	1 Foley ST MUSWELLBROOK LOT: 3 DP: 20053	T & K Partnership	\$23,000	2/08/2019	48	CC Application Received
005.2019.00000062.001	New Single Storey Dwelling	96 Ironbark RD MUSWELLBROOK LOT: 202 DP: 1165467	Kurmond Homes	\$652,541	31/07/2019	50	Notify Adjoining Owners
005.2019.00000061.001	New Single Storey Dwelling	119 Ironbark RD MUSWELLBROOK LOT: 213 DP: 1165467	Newcastle Quality Constructions P/L	\$465,380	30/07/2019	51	Notify Adjoining Owners
005.2019.00000059.001	Boundary Adjustment	4 Sheppard AVE MUSWELLBROOK LOT: 10 ALT: DP: 1111854 REF: 6 Sheppard AVE MUSWELLBROOK LOT: 11 ALT: DP: 1111854 REF:	Mm Hyndes Bailey & Co	\$10,000	25/07/2019	56	DA Acknowledgement
005.2019.00000058.001	Ancillary Development - Stable Building	1472 Martindale Rd MARTINDALE LOT: 57 DP: 706479	Mr J Robinson	\$100,000	15/07/2019	66	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000057.001	Demolition of Existing Shed and Replace with New Shed	36 Hunter TCE MUSWELLBROOK LOT: 11 DP: 836622	Mr D Simpson	\$42,985	15/07/2019	66	Notify Adjoining Owners
005.2019.00000054.001	Subdivision One (1) Lot into Three (3) Lots	52 Palace ST DENMAN LOT: 345 DP: 576669	Casson Planning and Development Services	\$10,000	28/06/2019	83	Additional Info Required
005.2019.00000053.001	Subdivision of Two (2) Lots into Seventy Five (75) Lots	9027 New England HWY MUSWELLBROOK LOT: 12 DP: 1162012 Day ST MUSWELLBROOK LOT: 8 DP: 1181346	WZ Capital Holdings Pty Ltd	\$4,875,600	27/06/2019	84	Notify Adjoining Owners
005.2019.00000052.001	New Dwelling - Installation of a Manufactured Home	Giants Creek RD SANDY HOLLOW LOT: 17 DP: 750963	Taylor Made Buildings Pty Ltd	\$255,099	27/06/2019	84	Notify Adjoining Owners
005.2019.00000051.001	Ancillary Development - Shed	27 Palace ST DENMAN LOT: 2110 ALT: DP: 864033	Mr D J Collins	\$17,035	24/06/2019	87	Notify Adjoining Owners
005.2019.00000050.001	Industrial Development - Asphalt Plant	LOT: 14 ALT: DP: 1119843 REF:	Newpave Asphalt	\$415,800	21/06/2019	90	Notify Adjoining Owners
005.2019.00000047.001	School - Early Education Centre	111 Skellatar Stock RTE MUSWELLBROOK LOT: 1 DP: 1070178	Trustee of the Roman Catholic Church for Diocese o	\$2,895,187	18/06/2019	93	Additional Info Required
005.2019.00000044.001	New Recreational Building Comprising Two Squash Courts and Amenities and a Golf Pro Shop	Bell ST MUSWELLBROOK LOT: 265 DP: 1030447 REF: GOLF	Muswellbrook Golf Club Ltd	\$633,815	11/06/2019	100	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000041.001	Subdivision - Nine (9) Lots into Six (6) Lots	Castlerock RD MUSWELLBROOK LOT: 1 DP: 136249 Castlerock RD MUSWELLBROOK LOT: 2 DP: 136249 Castlerock RD MUSWELLBROOK LOT: 5 DP: 750926 Castlerock RD MUSWELLBROOK LOT: 61 DP: 750926 Castlerock RD MUSWELLBROOK LOT: 62 DP: 750926 Castlerock RD MUSWELLBROOK LOT: 63 DP: 750926 Ellis PH COUNTY BRISBANE LOT: 4 DP: 21335 Castlerock RD MUSWELLBROOK LOT: 2 DP: 1102585 Castlerock RD MUSWELLBROOK LOT: 1 DP: 1102585	Mm Hyndes Bailey & Co	\$10,000	9/05/2019	133	Notify Adjoining Owners
005.2019.00000039.001	Boundary Adjustment	211 Kayuga RD MUSWELLBROOK LOT: 51 DP: 811580 207 Kayuga RD MUSWELLBROOK LOT: 52 DP: 811580	Perception Planning	\$0	1/05/2019	141	Notify Adjoining Owners
005.2019.00000037.001	Construction of Pipes and Pump Infrastructure to Return Seepage Water from Lake Liddell Dam Wall to Lake Liddell	New England HWY MUSWELLBROOK LOT: 102 DP: 1053098 New England HWY MUSWELLBROOK LOT: 14 DP: 1193430	AGL Macquarie Pty Ltd	\$250,000	16/04/2019	156	Advertisement - Proposal

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000036.001	Installation of a 120m Tall Wind Monitoring Mast	Sandy Creek RD MCCULLYS GAP LOT: 197 DP: 752444 Sandy Creek RD MCCULLYS GAP LOT: 199 DP: 752444	Epuron Projects Pty Ltd	\$150,000	16/04/2019	156	Additional Info Required
005.2019.00000033.001	Dwelling Alterations and Additions - Outdoor Kitchen and Barbecue Area	28 Turner ST DENMAN LOT: 1 DP: 112315 28 Turner ST DENMAN LOT: 2 DP: 112315	Mr D Moore	\$25,000	8/04/2019	164	Additional Info Required
005.2019.00000030.001	Demolition of Existing Dwelling and Sheds, Construction of Additional Motel Units, Extension of Restaurant and Consolidation of Titles	26 Maitland ST MUSWELLBROOK LOT: 2 DP: 6758 LOT: 100 DP: 1193814	Repinski Pty Ltd	\$1,700,000	2/04/2019	170	Additional Info Required
005.2019.00000025.001	Dwelling Alterations and Additions (Living Extension, Verandah, Deck and Shed)	58 Palace ST DENMAN LOT: 1 DP: 782847 58 Palace ST DENMAN LOT: 2 ALT: DP: 782847	Mr J N Buckley	\$146,500	11/03/2019	192	Refer to Heritage Advisor
005.2019.00000016.001	Information and Education Facility (Museum)	Turner ST DENMAN PRT: 231 DP: 729996 REF: FIELD	Denman & District Heritage Village Inc.	\$265,000	15/02/2019	216	Additional Info Required
005.2019.00000013.001		8911 New England HWY MUSWELLBROOK LOT: 1300 DP: 1164893	Raj & Jai Construction Pty Ltd	\$5,142,236	14/02/2019	217	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2019.00000011.001	Alterations and Additions to Muswellbrook Aquatic and Leisure Centre	Haydon ST MUSWELLBROOK LOT: 1 DP: 364120 Sydney ST MUSWELLBROOK LOT: 11 DP: 1058170 3 Wilkinson AVE MUSWELLBROOK LOT: 7010 DP: 93327 RES: 570025 1 Wilkinson AVE MUSWELLBROOK LOT: 1 DP: 903839 RES: 570025	Facility Design Group Pty Ltd	\$4,990,670	8/02/2019	223	Advertisement - Proposal
005.2019.00000002.001	The construction of multi dwelling housing comprising a total of Sixte	19 John Howe CCT MUSWELLBROOK LOT: 514 DP: 1089307	Raj & Jai Construction Pty Ltd	\$4,414,300	14/01/2019	248	Notify Adjoining Owners
005.2018.00000117.001	Commercial Alterations and Additions (Expansion of Bottle Shop)	36 Sydney ST MUSWELLBROOK LOT: 1 DP: 80963	Mr N Sakno	\$500,000	21/12/2018	272	Additional Info Required
005.2015.00000087.002	S4.55(1A) Modification - Subdivision of One (1) Lot into Nine (9) Lots Modification to carry out the Development in Two (2) Stages	Merriwa RD SANDY HOLLOW LOT: 31 DP: 1156452	Mr A P Thrift	\$0	17/12/2018	276	Notify Adjoining Owners

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2018.00000054.001	Demolition of a Commercial Building and the Construction of a Two (2)	142 Bridge ST MUSWELLBROOK LOT: 1 DP: 11221 140 Bridge ST MUSWELLBROOK LOT: 2 DP: 11221 126 Bridge ST MUSWELLBROOK LOT: 7 DP: 71755 REF: LIBRARY 126 Bridge ST MUSWELLBROOK PT: 8 ALT: A SEC: 6 DP: 758740 REF: LIBRARY Bridge ST MUSWELLBROOK Lot: 400 DP:816923 Bridge ST MUSWELLBROOK Lot: 562 DP:747012 30 Brook ST MUSWELLBROOK LOT: 1 DP: 219503 30 Brook ST MUSWELLBROOK LOT: 6 DP: 219503 30 Brook ST MUSWELLBROOK LOT: 1 DP: 76058 83 Hill ST MUSWELLBROOK LOT: 5 DP: 11221 REF: TERTIARY ED* 85 Hill ST MUSWELLBROOK LOT: 4 DP: 11221 87 Hill ST MUSWELLBROOK LOT: 3 DP: 11221 Bridge ST MUSWELLBROOK PT: 8 ALT: B SEC: 6 DP: 758740 REF: WEIDMAN 83 Hill ST MUSWELLBROOK LOT: 5 DP: 11221 REF: CARPARK	Muswellbrook Shire Council	\$3,556,300	15/06/2018	461	Additional Info Required

Development Assessment Committee - Outstanding DAs as at 19/09/2019

<u>Account</u>		<u>Property</u>	<u>Applicant</u>	<u>Value</u>	<u>Received</u>	<u>Days</u>	<u>Current Status</u>
005.2002.00000342.005	S96(2) Modification - Consolidate Two Consent Documents into One with Modified Conditions Where Applicable	8440 New England HWY MUSWELLBROOK LOT: 30 ALT: DP: 815308	RPS Group	\$0	28/02/2018	568	Signed Linen Released
005.2017.00000058.002	S96 (1A) Modification - Modify Condition 8	Jerdan ST DENMAN LOT: 1 DP: 151236	Ms M J Melville	\$0	19/02/2018	577	Advertisement - Proposal
005.2017.00000060.001	Change of Use - Building Materials Recycling Depot	7 Glen Munro RD MUSWELLBROOK LOT: 5 DP: 1018378	Mr L McWhirter	\$0	23/06/2017	818	Additional Info Required
005.2000.00000212.006	S96(1a) Modification - Extension of timeframe of Operations & Extraction Area, Site Plan, Removal of Conditions	Denman PH COUNTY BRISBANE LOT: 1 DP: 221400 2449 Denman RD MUSWELLBROOK LOT: 12 DP: 1027580	Cardno (NSW/ACT) Pty Ltd	\$0	29/05/2017	843	Advertisement - Proposal
005.2016.00000032.001	Placement of Fill	110 Merriwa RD DENMAN LOT: 402 DP: 1175263 Merriwa RD DENMAN LOT: 403 DP: 1175263	Casson Planning and Development Services	\$5,000	12/04/2016	1255	Additional Info Required
DAs Outstanding:	53						

7 DATE OF NEXT MEETING

7 October 2019

8 CLOSURE