

Section 4

Environmental Setting, Consultation and Planning Issues

4.1 INTRODUCTION

A number of the issues relating to the Proposal relate to features of the local environmental setting. This section reviews these features which are in turn discussed and/or relied upon in Section 5 of this document.

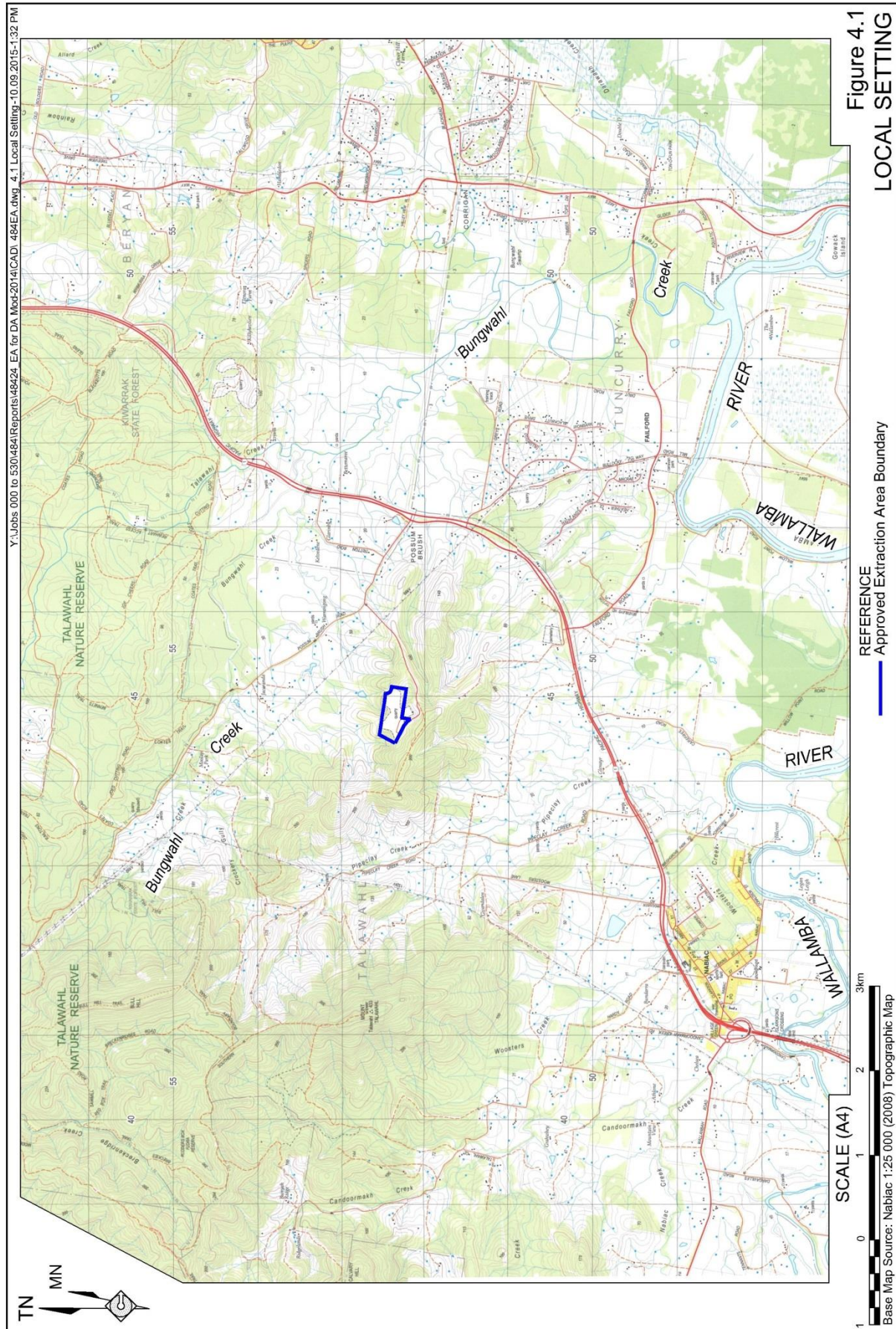
In order to undertake the required level of assessment for the Proposal, appropriate emphasis needs to be placed on those issues likely to be of greatest significance to the local environment, neighbouring landowners and/or the wider community. In order to ensure this is achieved, a program of community and government consultation and a review of previous environmental documentation relating to the Quarry was undertaken to identify relevant environmental issues.

4.2 ENVIRONMENTAL SETTING

Possum Brush Quarry is located in an elevated and hilly area west of the Pacific Highway in an area surrounded by remnant or rehabilitated native vegetation on all sides of the Quarry (**Figure 4.1**) most of which occurs on the land owned by PBM.

As shown on **Figure 4.1**, the Quarry is located on the northern side of an elevated ridge between 105m AHD and 165m AHD, with the administration office and the highest section of the Quarry Access Road situated on the elevated section on the southern side of the Quarry at approximately 175m AHD. Access to Possum Brush Road from the Quarry is provided by a cut into the side of a ridge, extending from 175m AHD at its highest point (near the site office) to 40m AHD at its intersection with Possum Brush Road.

Beyond the Quarry and surrounding remnant vegetation boundary, the local setting incorporates more vegetated land, a number of rural-residential life-style blocks and small scale agriculture on the flatter, broad plains associated with Bungwahl Creek to the north of the Quarry. Significant areas of native remnant vegetation exist to the north, east and west of the Quarry. The vegetation on the northern side of the approved extraction area shields the extraction areas although small sections of the southern faces behind the asphalt plant and processing area are visible from one residence and short sections of Possum Brush Road.



4.2.1 Meteorology

4.2.1.1 Source of Data

The meteorological data presented in this section has been sourced from the Bureau of Meteorology Taree (Patanga CI, Station No. 060030) 18km north of the Quarry Site. The available meteorological data is presented in **Table 4.1**.

Table 4.1
Mean Monthly Meteorological Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
TEMPERATURE (°C) (87 years of records)													
Mean Maximum	29.0	28.6	27.3	24.7	21.5	19.1	18.5	19.9	22.7	24.9	26.7	28.4	24.3
Mean Minimum	17.6	17.6	16.0	13.0	9.8	7.3	5.9	6.4	8.6	11.5	14.1	16.4	12.0
Rainfall (mm) (127 years of records)													
Mean (105 yrs)	120.5	140.3	150.4	116.7	95.7	101.3	73.0	61.6	60.1	74.5	88.1	99.2	1184.2
Mean number of days of rain ≥ 1mm	8.6	8.9	9.8	8.2	7.1	6.8	5.7	5.6	5.6	7.1	7.9	8.3	89.6
Highest	768.1	789.7	710.0	489.1	406.6	495.2	333.6	652.6	272.3	330.6	302.8	471.0	2410.3
Lowest	8.4	1.5	2.7	1.1	5.2	2.2	0.0	0.0	0.0	4.7	1.8	9.4	555.5
RELATIVE HUMIDITY (%) (41 & 34 years of records)													
Mean 9:00am	76	80	80	77	78	78	76	71	67	66	68	70	74
Mean 3:00pm	61	62	63	60	60	59	54	51	51	58	57	59	58
WINDS (km/h) (39 & 36 years of records)													
Mean 9am Wind Speed	5.3	4.6	5.6	6.3	7.3	7.9	8.1	8.0	7.5	7.0	6.0	5.9	6.6
Mean 3pm Wind Speed	14.9	13.5	12.3	10.8	9.2	9.5	10.2	12.7	14.6	14.9	15.2	15.4	12.8
Source: Bureau of Meteorology Taree (Patanga CI) Station (No. 060030)													

The seasonal and diurnal wind regime for the Quarry has been generated from a computer-generated data set, assessed by Ramboll Environ to be comparable to data collected at Taree.

4.2.1.2 Temperature

The hottest months of the year are December, January and February, with mean daily maximum temperatures of 28.4°C, 29.0°C and 28.6°C, and with mean daily minimum temperatures of 16.4°C, 17.6°C and 17.6°C. The coldest month of the year is July with a mean daily maximum of 18.5°C and mean daily minimum temperature of 5.9°C.

4.2.1.3 Rainfall

The average annual rainfall for Taree is 1184mm. March is statistically the wettest month of the year receiving an average of 150.4mm over 9.8 rain days while September is the driest month receiving an average of 60.1mm of rain over 5.6 days. On average, there are 89.6 rain days per year with 1mm of rainfall or more.

4.2.1.4 Temperature Inversions

Temperature inversions are significant noise enhancing phenomena which invariably occur of an evening/overnight with clear skies and when wind speeds are low or calm conditions prevail. They invariably occur in winter months when temperatures are low and/or fogs are present. The noise assessment (**Appendix 6**) has assumed a temperature gradient of 3°C/100m is present during the winter months for >30% of that period.

4.2.1.5 Wind

The wind data (**Figure 4.2**) set reveals that the westerly component is most dominant during autumn, winter and spring months. During summer, winds blow predominantly from the east-northeast and northwest.

The meteorological data set shows the westerly component is most defined between 6:00pm and 11:00am before the east-northeasterly air flow becomes dominant between midday and 6:00pm. Wind speeds increase progressively during the daylight hours.

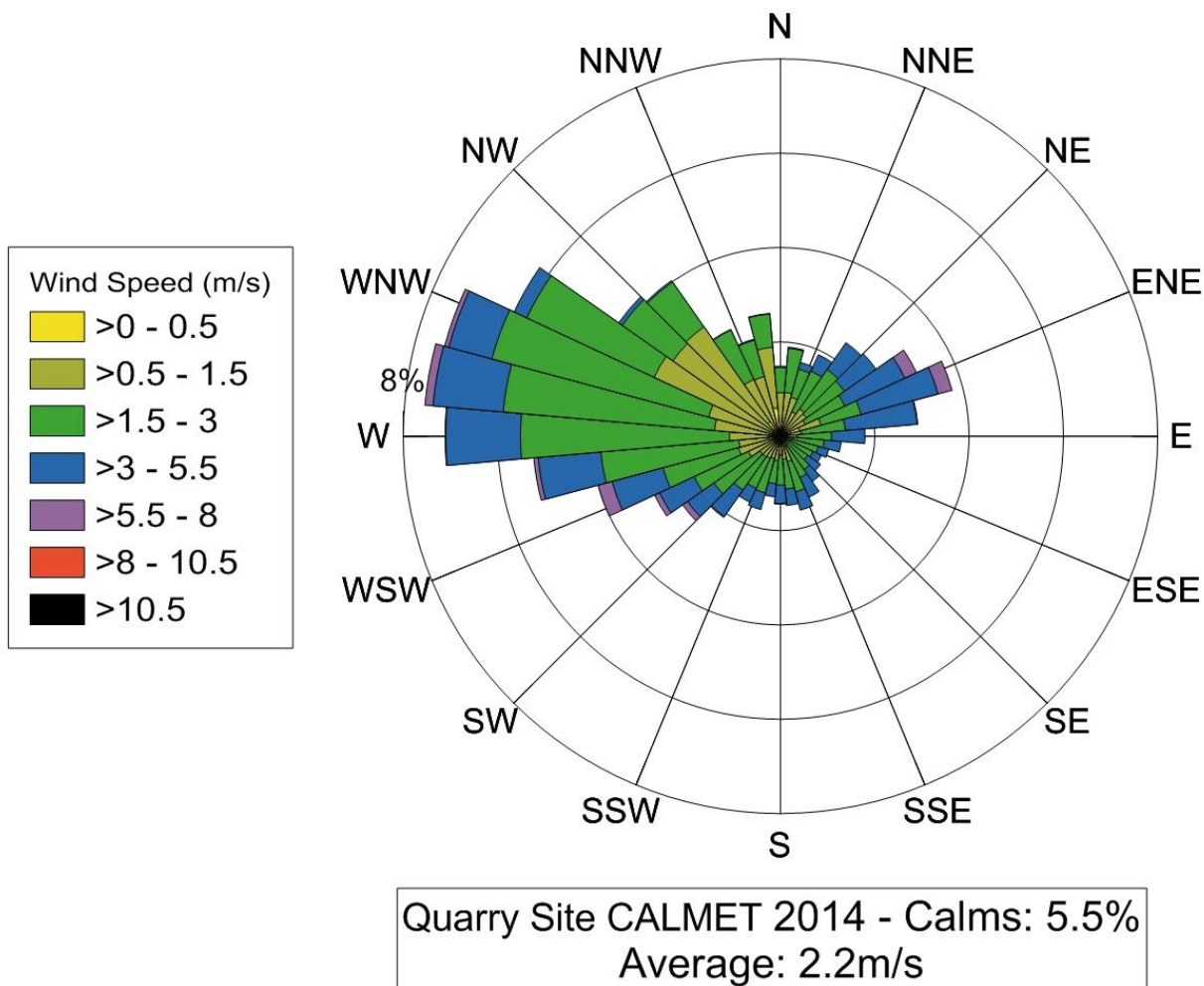


Figure 4.2
ANNUAL AVERAGE WIND ROSE

Source: Ramboll Environ (2015) – Figure 5

4.2.2 Land Ownership

Figure 4.3 displays the ownership of land surrounding the Possum Brush Quarry. It is noted that the bulk of the properties are between 5ha and 40ha in area and are essentially rural-residential lifestyle blocks – see **Figure 4.4**.

4.3 CONSULTATION

4.3.1 Introduction

Identification of environmental issues relevant to the Proposal involved a combination of consultation and background investigations and research. This included:

- consultation with surrounding landowners, local community representatives and government agencies (Section 4.3.2 and 4.3.3); and
- a review of relevant Commonwealth, NSW, regional and local environmental planning requirements (Section 4.);

4.3.2 Consultation with the Community

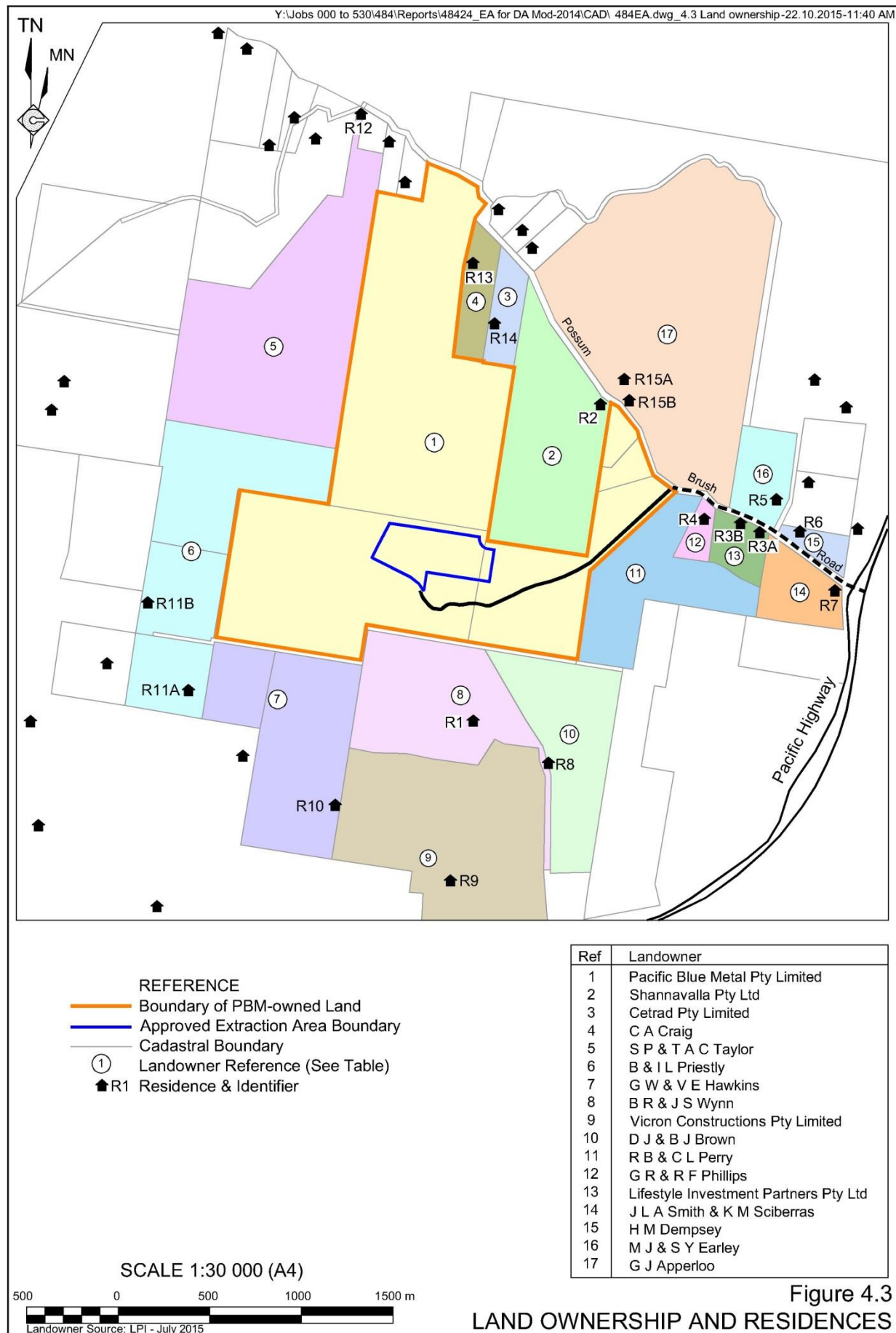
Consultation with the community has been undertaken either through direct consultation with landowners as well as being discussed during the latest Community Consultative Committee (CCC) meeting, held on 19 November 2014. PBM's plans to lodge an application to modify DA 283/97 was tabled during the November CCC meeting with no objections tabled at that time.

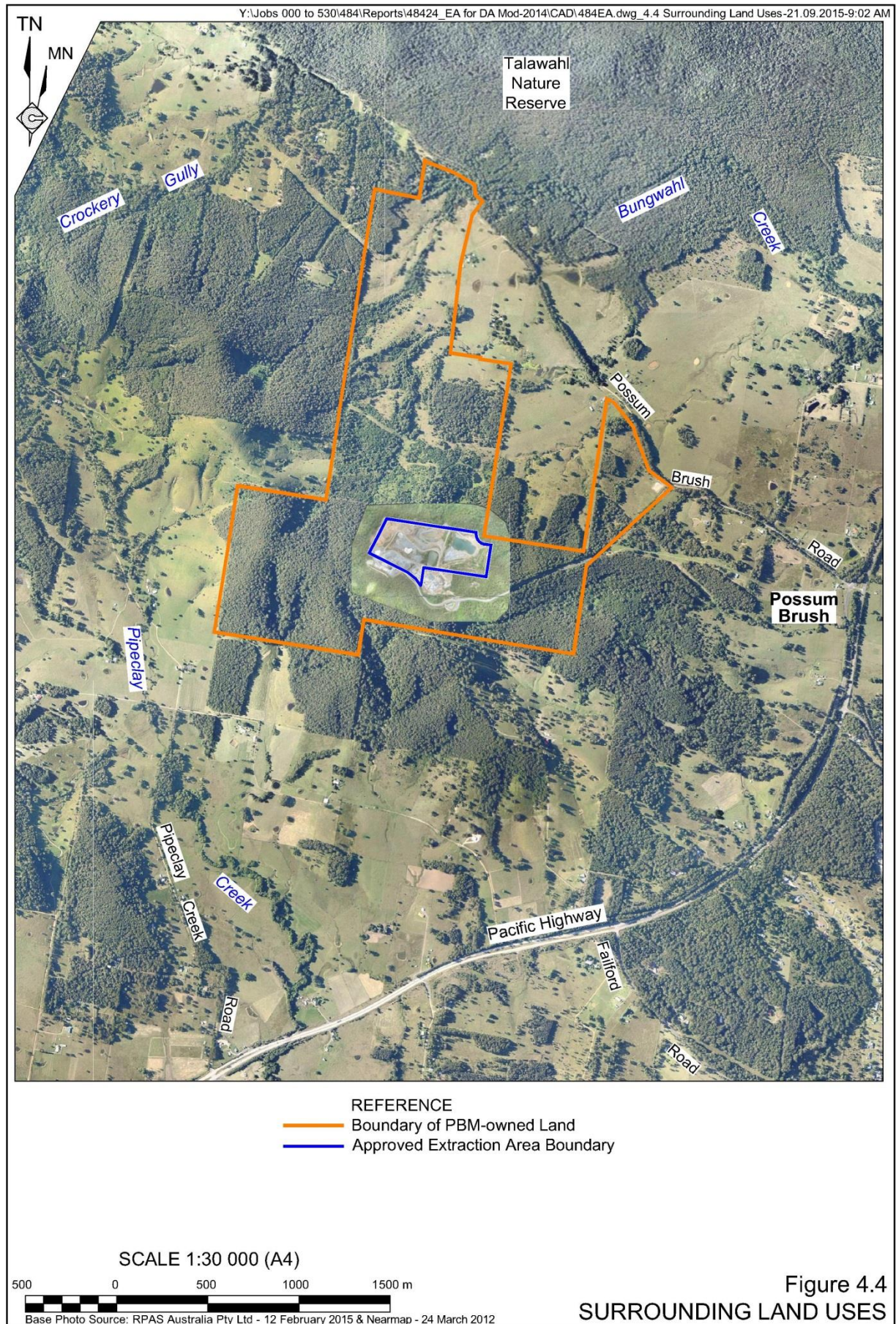
PBM held an open day for its neighbours on 29 August 2015. A total of 28 neighbours inspected the Quarry and asked numerous questions about its operations. The general consensus of those present was that the open day was highly informative, particularly given the bulk of the operations are not visible from any public vantage point. Mr Kennett informed those present about the Company's plans for the second stage of the Quarry.

4.3.3 Government Agency Consultation

The following Government Agencies were consulted during the preparation of the Environmental Assessment and requested to provide their requirements to be addressed in the document.

1. Department of Planning and Environment.
2. Department of Primary Industry – Water.
3. Environment Protection Authority.
4. Roads and Maritime Services.
5. Greater Taree City Council.





The requirements provided by the government agencies have been addressed to the extent necessary within Section 5 of this document, with **Appendix 2** reproducing a copy of the correspondence from each agency.

Department of Planning and Environment

DPE provided their informal assessment requirements on 02 July 2015, requiring the following to be addressed within the Environmental Assessment.

1. A Noise and Blasting / Vibration assessment in accordance with the Industrial Noise Policy (INP) and Road Noise Policy (RNP). This assessment should also need to include an assessment against activities operating within the shoulder period and ensure that noise from quarry-related traffic is also assessed in areas surrounding the Quarry and on Possum Brush Road.
2. A Traffic Impact Assessment in accordance with the relevant Roads and Maritime Services' (RMS) guidelines including road condition, traffic volumes and road safety issues. The assessment should address worst-case truck movements, accounting for movements associated with the receipt of materials to be blended on site, the operation of the asphalt plant and despatch of quarry products.
3. An Air Quality Impact Assessment in accordance with the Environment Protection Authority's guidelines.
4. An economic impact assessment of the Proposal
5. An appropriate level of assessment regarding visual impacts, surface water impacts, groundwater impacts, proposed rehabilitation.
6. Consultation with surrounding residents and those close to the haulage route, as well as EPA, Greater Taree City Council, RMS, and DPI - Water.

Department of Primary Industries – Water

DPI - Water provided their assessment requirements on 20 July 2015, requiring the following to be addressed within the Environmental Assessment.

1. A detailed site water balance, including current water uses and proposed source of water.
2. A detailed assessment against the NSW Aquifer Interference Policy (2012) using the NSW Office of Water's assessment framework if groundwater is expected to be intercepted.
3. Assessment of impacts of the quarry and proposed modification on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
4. Current and proposed surface and groundwater monitoring activities and methodologies.

5. Current and proposed management and disposal of produced or incidental water, if applicable.
6. Details surrounding the final landform of the site including rehabilitation measures.
7. Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.
8. Consideration of relevant policies and guidelines.

Environment Protection Authority

1. Noise and vibration impacts associated with the operations including noise from all vehicles on the haul road and public roads, blasting and crusher activities and impacts on sensitive receivers. An adequate assessment of noise is essential. The EPA has raised noise issues with the proponent a number of times and this proposal presents an opportunity to assess and address noise from the premises in a holistic fashion;
2. Air quality impacts and management including a description of all emissions and a specific description of proposed dust management strategies;
3. Water management onsite including sedimentation ponds, potential for discharge and the sensitivity of the receiving environment;
4. Any implication for waste storage and recovery activities undertaken at the premises;
5. A proposed monitoring plan to assess the impact on the environment and surrounding receivers over time;
6. An assessment of the cumulative impacts associated with the proposal and other quarry operations in the local area; and
7. Actions that will be taken to avoid or mitigate impacts or compensate for unavoidable impacts associated with proposed quarry operations.

Roads and Maritime Services

1. Identification of the relevant vehicular traffic routes and intersections for access to/from the subject site.
2. Current traffic counts for the above traffic routes and intersections.
3. The Anticipated additional vehicular traffic generated (both light and heavy vehicles) from the construction and operational stages.
4. Consideration of the traffic impacts on the existing intersections and the capacity of the local and classified road network together with the cumulative traffic impacts of other proposed and approved developments in the area.
5. Traffic analysis of any major / relevant intersections, using SIDRA or similar traffic model.

6. Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.
7. Details of any measures proposed to manage and / or mitigate impacts as a result of the proposal identified in traffic and transport study.

Greater Taree City Council

Council did not provide any specific requirements. Rather, they indicated they would review the Proposal and make comment once the *Environmental Assessment* is finalised.

4.4 REVIEW OF PLANNING ISSUES

4.4.1 Introduction

A number of NSW state regional and local planning instruments or policies apply to the Proposal. A brief summary of each relevant planning instrument is provided in the following sections with the environmental aspects requiring consideration in the EA identified.

4.4.2 State Planning Issues

4.4.2.1 Introduction

The only NSW State legislation that is applicable to the modification is the *Environmental Planning and Assessment Act 1979* and the applicability of Project as a transitional Part 3A Project, in which Part 3A of the Act continues to apply irrespective of the repeal of that Part on 8 April 2011 and the repeal of Section 91AB of the same Act.

Condition 3 of DA 283/97 specifies that “In accordance with section 91AB(2) of the EP&A Act, a further consent shall be obtained for Stage 2 of the development. Stage 2 comprises the subsequent 29 years of quarrying activity on the site”. Given the repeal of this section of the Act, the Applicant sought legal advice to ensure that the Proposal could be modified under Section 75W of the Act, with the minister (or his/her delegate) to be able to determine the application for the modification.

Marsdens Law Group provided the Applicant with legal advice that was also provided to DPE during the consultation stage of the Proposal, with the following advice confirming the applicability that the application for the Proposal can be made under Section 75W.

“It is clear that the proposed modification is one that involves a change to a condition of the development consent i.e. condition 47. It would also seem that the environmental consequences of the proposed change, beyond those which have already been the subject of assessment, would be limited to additional truck movements (and noise associated with the trucks) given that:

- the areas of extraction would remain the same as those originally approved;
- the hours of operation would not be changed;
- the total tonnage of material to be processed and transported over the life of the quarry would not change; and
- the controls relating to noise and environmental management would remain in place.

It is also noted by the Court of Appeal (*Barrick Australia Limited v Williams* (2009) NSW CA 275) that the purpose of conferring the modification power on the Minister may be to permit the decision-making authority to have regard to matters such as State and regional planning significance, *"being matters which stand above and beyond developments having limited local impact or insignificant impact at a regional or State level"*. Accordingly, it seems that it would be open to the Minister to have regard to the State and regional planning significance of Possum Brush Quarry as proposed to be modified in considering what might constitute an acceptable modification of the approval.

...The development would also be limited to processing and transporting the same total tonnage of material that was subject of the EIS referred to in condition 1 of the development consent. However, it remains for the proponent to demonstrate that the environmental impacts relating to traffic, noise and dust would satisfy all current environmental standards at the increased production levels. This information should appropriately be included with the request to modify the Development Consent DA 283/97.

...We note that the development consent was granted only to Stage 1 of the development proposed in the development application and that the development consent for Stage 1 specifically acknowledges that a further consent shall be obtained for Stage 2 of the development without the need for a further development application to be made.

It seems to us that the repeal of Section 91AB as referred to in the conditions 2 and 3 of the development consent for Stage 1 does not deprive the Minister of the power to grant development consent to Stage 2 without the need for a further development application to be made. In that regard, it would seem that the development application is still pending in respect of Stage 2 and that the savings provision enacted upon the repeal of Section 91AB by the Environmental Planning and Assessment Amendment Act 1997 would apply. The savings provision relevantly states:

"18 General saving

(1) If anything done or commenced under a provision of this or any other Act that is amended or repealed by the Environmental Planning and Assessment Amendment Act 1997 has effect or is not completed immediately before the amendment or repeal of the provision and could have been done or commenced under a provision of such an Act if the provision had been in force when the thing was done or commenced:

(a) the thing continues to have effect, or

(b) the thing commenced may be completed.

(2) This clause is subject to any express provision of this Act or the regulations on the matter."

Accordingly, a request could be made of the Minister now for development consent to be granted for Stage 2 of the development that is subject of the development application. The request would need to be accompanied by a report or reports prepared to the satisfaction of the Director-General on the environmental performance of Stage 1 of the development and additional information relating to proposed Stage 2 operations.

In any development consent granted for Stage 2 of the development a condition in identical terms to the proposed modified version of condition 47 could be imposed so as to ensure that the annual and total tonnage of material produced and transported is consistent and does not impose unreasonable environmental impacts in the locality.

In summary, we are of the opinion that Pacific Blue Metal Pty Ltd can request the Minister for Planning to modify condition 47 of the development as proposed and concurrently request the Minister (through the Director-General (now Secretary) of the Department of Planning and Environment) to grant development consent for stage 2 of the development...as provided for in Condition 4 of the development consent.

A copy of the complete Marsdens Law Group correspondence was originally provided to DPE on 21 November 2014, and confirmed by DPE via return correspondence on 2 July 2015 that “The Department has reviewed these documents and considers that it is appropriate for PBM to lodge a modification application under section 75W of the *Environmental Planning And Assessment Act 1979*, (EP&A Act) for Stage 2 of the Possum Brush Quarry”.

Other State legislation and planning policies are addressed as follows.

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

This SEPP (“the Mining SEPP”) was gazetted in recognition of the importance to New South Wales of mining, petroleum production and extractive industries and to provide proper management and orderly and economic use and development of land containing mineral, petroleum and extractive material resources and to establish appropriate planning controls to encourage ecologically sustainable development through environmental assessment, and sustainable management.

The SEPP specifies matters requiring consideration in the assessment of any mining, petroleum production and extractive industry development, as defined in NSW legislation. A summary of the matters that the consent authority needs to consider when assessing a new or modified proposal and where these have been addressed in this document is provided in **Table 4.2**.

Table 4.2
Application of SEPP (Mining, Petroleum Production and Extractive Industries) 2007

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Relevant SEPP Clause	Description	EIS Section
12: Compatibility with other land uses	Consideration is given to:	
	• the existing uses and approved uses of land in the vicinity of the development;	2.2, 4.2
	• the potential impact on the preferred land uses (as considered by the consent authority) in the vicinity of the development; and	5.3.5, 5.4.5, 5.5.5, 5.6.4 5.7.3
	• any ways in which the development may be incompatible with any of those existing, approved or preferred land uses.	5.12
	The respective public benefits of the development and the existing, approved or preferred land uses are evaluated and compared.	5.10, 6.2.3
	Measures proposed to avoid or minimise any incompatibility are considered.	2.2
12AB: Non-discretionary development standards for mining	Consideration is given to development standards that, if complied with, prevents the consent authority from requiring more onerous standards for those matters as follows.	
	• Noise	5.4
	• Air Quality	5.3
	• Airblast Overpressure	5.5
	• Ground Vibration	5.5
	• Aquifer Interference	5.7

Table 4.2 (Cont'd)

Application of SEPP (Mining, Petroleum Production and Extractive Industries) 2007

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Relevant SEPP Clause	Description	EIS Section
13: Compatibility with mining, petroleum production or extractive industry	Consideration is given to whether the development is likely to have a significant impact on current or future mining, petroleum production or extractive industry and ways in which the development may be incompatible.	N/A
	Measures taken by the Applicant to avoid or minimise any incompatibility are considered.	2.2
	The public benefits of the development and any existing or approved mining, petroleum production or extractive industry must be evaluated and compared.	5.10, 6.2.3
14: Natural resource and environmental management	Consideration is given to ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure:	
	<ul style="list-style-type: none"> impacts on significant water resources, including surface and groundwater resources, are avoided or minimised; 	5.6
	<ul style="list-style-type: none"> impacts on threatened species and biodiversity are avoided or minimised; and 	5.8
	<ul style="list-style-type: none"> greenhouse gas emissions are minimised and an assessment of the greenhouse gas emissions (including downstream emissions) of the development is provided. 	5.3.4, 5.3.5
15: Resource recovery	The efficiency of resource recovery, including the reuse or recycling of material and minimisation of the creation of waste, is considered.	3.7
16: Transportation	The following transport-related issues are considered.	
	<ul style="list-style-type: none"> The transport of some or all of the materials from the Project Site by means other than public road. 	N/A
	<ul style="list-style-type: none"> Limitation of the number of truck movements that occur on roads within residential areas or roads near to schools. 	5.2.5
	<ul style="list-style-type: none"> The preparation of a code of conduct for the transportation of materials on public roads. 	5.2.4
17: Rehabilitation	The rehabilitation of the land affected by the development is considered including:	2.1.5, 3.13
	<ul style="list-style-type: none"> the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated; 	3.13
	<ul style="list-style-type: none"> the appropriate management of development generated waste; 	3.7
	<ul style="list-style-type: none"> remediation of any soil contaminated by the development; and 	N/A
	<ul style="list-style-type: none"> the steps to be taken to ensure that the state of the land does not jeopardize public safety, while being rehabilitated or at the completion of rehabilitation. 	3.13.1

N/A = Not Applicable

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)

Hazardous and offensive industries, and potentially hazardous and offensive industries, relate to industries that, without the implementation of appropriate impact minimisation measures, would, or potentially would, pose a significant risk in relation to the locality, to human health, life or property, or to the biophysical environment. As the only hazardous substances materials to be stored at the Quarry would be restricted to well managed diesel fuel and other hydrocarbon products, the Proposal is not classified as potentially hazardous industry.

State Environmental Planning Policy No 44 – Koala Habitat Protection

SEPP 44 aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline. Greater Taree City Council is identified in Schedule 1 of the SEPP as one of the local government areas to which considerations of koala habitat apply.

The Proposed Modification would not result, however, in disturbance of any additional areas of vegetation or habitat suitable for Koala. As a result, no further consideration of SEPP 44 is required.

State Environmental Planning Policy (Rural Lands) 2008

The aims of the ‘Rural Lands SEPP’ are to facilitate development on rural land that is orderly and economic, promotes the social economic and environmental welfare of the state and avoids land use conflicts with existing agriculture. It also allows government authorities to identify State significant agricultural land and ensure the ongoing viability of agriculture in the State.

Specifically, and as described in Clause 12, the objectives of the Rural Lands SEPP are to provide for the protection of agricultural land:

- that is of State or regional agricultural significance, and
- that may be subject to demand for uses that are not compatible with agriculture, and
- if the protection will result in a public benefit.

The Proposal is considered with respect to these aims.

- The land that would be affected by the Proposal has not been identified as State or regionally significant agricultural land by Schedule 2 of the Rural Lands SEPP.
- The Proposal would not impact on any additional land currently managed for agriculture. As demonstrated at numerous other quarry sites where agricultural activities are undertaken concurrently within extractive industry, the Proposal would not be incompatible with continued agricultural land use surrounding the Site.
- The protection of the land that is the subject of the Proposal would not provide any public benefit. In fact, the employment and local economic stimulus that would be generated by the Proposal is considered to be of wider public benefit.

As a result, the Rural Lands SEPP is not considered further in this document.

4.4.3 Regional and Local Planning Issues**4.4.3.1 Greater Taree Local Environment Plan 2010**

The current Greater Taree Local Environmental Plan (LEP) was gazetted in 2010 and guides development in the local government area by encouraging the proper management, development and conservation of natural resources and the built environment. The Site is located on land zoned Rural RU1 Primary Production under the LEP. The relevant objectives of this zone and where these are addressed in the EIS are included in **Table 4.3**.

Table 4.3
Objectives of Rural RU1 Primary Production Land Use of the Greater Taree LEP

Objective	EIS Section
• To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.	6.1
• To encourage diversity in primary industry enterprises and systems appropriate for the area.	N/A
• To minimise the fragmentation and alienation of resource lands.	N/A
• To minimise conflict between land uses within the zone and land uses within adjoining zones.	2.3, 4.3
• To maintain the rural landscape character of the land.	2.2, 3.13
• To protect and enhance the native flora, fauna and biodiversity links.	2.1.5, 6.1

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