

REF 8876-401.1 Hermitage Road Pokolbin

Acoustic Assessment For

Proposed Rezoning of

Lot 5

DP823737

Prepared For:

Belford Land Corporation

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1. INTRODUCTION

A planning proposal has been submitted to Singleton Council to rezone an area of land fronting Hermitage Road and Old North Road at Pokolbin. The Planning Proposal seeks to rezone 304.9 hectares of land described as Lot 5 in DP823737 into an Environmental Living Zone.

The land has been identified as being within the CAL 115 zone associated with the Singleton Military Area (SMA) and is, therefore, classified as being affected by sound and vibration from the SMA.

Hunter Acoustics has been engaged by Belford Land Corporation, to evaluate the impacts from activities associated with the Singleton Military Area on the subject land. This report details the results of measurements taken at various locations around the potentially affected lot that represent the impacts of aerial bombing, artillery fire and explosive testing within the SMA. The report also examines noise impacts from military aircraft over flights of the land while FA18 Hornets were conducting pitch and approach aerial bombing at the SMA with the low level approach path over the northern portion of the land.

2. ACOUSTIC ISSUES

The proposed rezoning of the land potentially brings residential premises into an area that may be affected by blast overpressure from explosive events within the SMA and by sound and from military aircraft over flight as the aircraft approach the bombing range to release weapons.

2.1 DESCRIPTION OF THE DEVELOPMENT

The land proposed for rezoning is Lot 5 in DP 823737 comprising 304.9 hectares of land into an Environmental Living Zone. The rezoning would allow for a rural subdivision of the subject land into about 50 lots ranging from a 4 hectare minimum lot area up to approximately 12 hectares.

The location of the land and its relationship to the SMA is shown in Figure 1 and a proposed lot layout is shown in Figure 2.

2.2 CHARACTER OF THE AREA

The area is defined as rural in accordance with the NSW Industrial Noise Policy (INP) and the acoustic climate of the area is typical of a rural environment and is generally controlled by natural sounds with some traffic noise from Hermitage Road.

Figure 1 Location of the Land with Respect to the SMA



Figure 2 Proposed Lot Layout

DRAFT

2.3 SINGLETON MILITARY AREA

The Singleton Military Area (SMA) is located to the west of the proposed development with its closest boundary approximately 2.3 kilometres from the site. Activities conducted within the Singleton Military Area that may impact upon the land include firing of heavy artillery and mortars, aerial bombing and strafing and small arms fire. Military aircraft frequently conduct flight exercises over the Singleton Military Area with non specific flight paths and so the dwellings may also be affected by aircraft noise from military jets as they approach their target zones.

2.4 TRANSPORT NOISE

The planning proposal is to rezone the land and includes only an indicative lot layout with a possible number of lots. A future subdivision and residential development of the land would be likely to generate additional traffic on Hermitage Road but this cannot be assessed at this time and will be the subject of a future study.

2.5 EQUIPMENT

The items of equipment used for measuring sound and vibration levels are described in Table 1. For the measurement of sound in accordance with AS 1055 all cases, the sound level meters were calibrated with an acoustic calibrator, in accordance with AS 1055, before and after the taking of measurements. In all cases the requirement for less than 0.5 dB difference was met.

Table 1 Equipment

Make/Model	Serial Number	Last Calibrated
01dB SLS 95	30422	8/11/2010
Svan 948	6536	17/2/2011
Texcel ATM	5104	20/4/2011
Texcel ATM	5002	11/11/2010
Texcel umx	158	11/5/2010
Texcel umx	623	30/9/2010
Texcel umx	721	21/11/2011

3. ASSESSMENT CRITERIA

3.1 SINGLETON MILITARY AREA

3.1.1 Noise and Vibration from Bombing and Artillery

The Australian and New Zealand Environment Conservation Council (ANZECC) "Technical Basis for Guidelines to Minimize Annoyance due to Blasting Overpressure and Ground Vibration", published in September 1990, states in Section 2.1 that the recommended maximum level for air blast overpressure is 115 dB (Linear Peak) which may be exceeded on up to 5% of the total number of blasts over a period of 12 months. However, the level should not exceed 120 dB (Linear Peak) at any time.

Section 2.2 states that the maximum level for ground vibration is 5mm/second (Peak Particle Velocity), which may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level should not exceed 10 mm/second (PPV) at any time. However, it is recommended that a level of 2 mm/second (PPV) be considered as the long term regulatory goal for the control of ground vibration.

3.1.2 Aircraft Noise Levels

AS 2021 -2000 Acoustics Aircraft Noise Intrusion Building Sighting and Construction Table 3.3 recommends a maximum design sound level of 50 dB(A) for sleeping areas, 55 dB(A) for normal domestic areas, and 60 dB(A) for non habitable spaces. The criteria in AS 2021 - 2000 are for areas that surround urban airports and are intended for continuous or semi continuous aircraft activity with well defined flight tracks. The SMA does not have either continuous or semi-continuous aircraft activity but rather has intermittent blocks of activity and flight tracks vary considerably with pilot skill level and the training activity being undertaken. "Pitch and Approach" bombing activities involve a low level approach to the SMA followed by a climb to attain an altitude from which the weapons delivery approach can be made. Pitch and approach bombing activities generate the highest aircraft sound levels on the ground at nearby areas.

Based on the requirements of AS 2021 the design of noise control elements for future residential buildings is to be based on external sound level which are the higher of either:-

- the arithmetic average of at least 10 over flights of the specific aircraft type,

or

- Data published for military over flights in Air Services Australia Report number DOD01-001 Amended Nov 2001.

4. METHOD OF ASSESSMENT

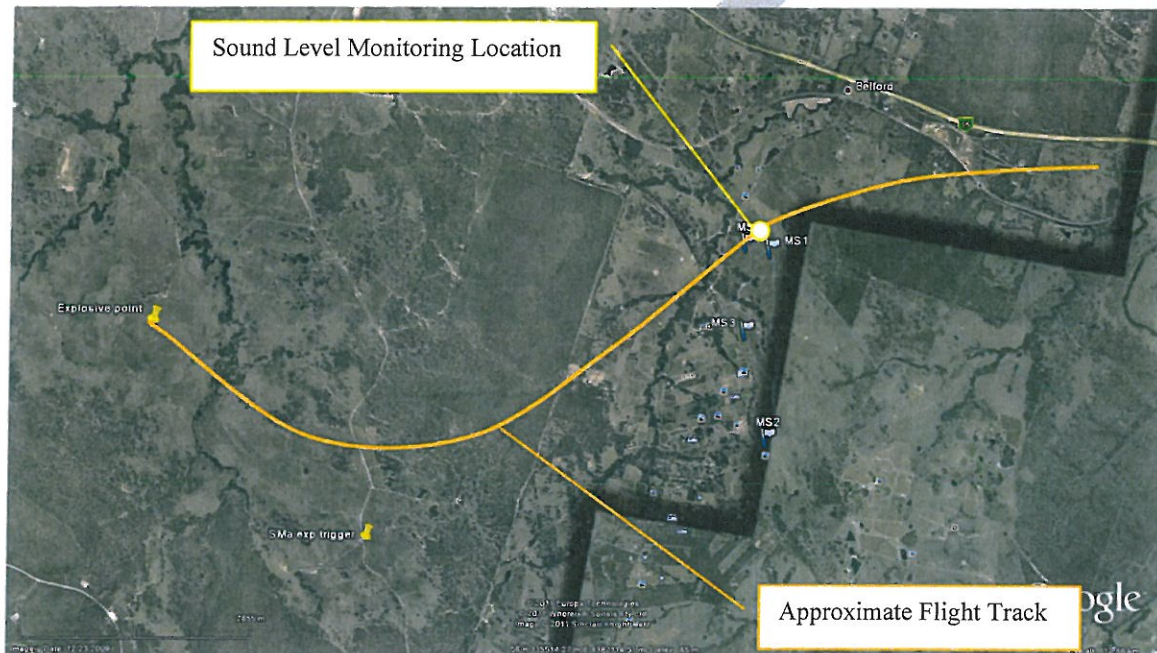
The Range Controller for the SMA was consulted to co-ordinate the measurement of the noise and vibration impacts on the land with military activities, including aerial bombing with 500lb bombs, artillery fire and testing of explosives on the surface. These are considered to be the activities of the SMA which have the largest potential for adverse impact on nearby properties because they involve low level aircraft flight, and detonation of large unconfined explosive charges either at or slightly above the surface of the ground. Explosive detonations are limited to specific areas in the central part of the SMA for operations and safety reasons and so the study is considered representative of most of the significant impacts

on surrounding properties.

Four monitoring sites were selected across the property on elevated locations to ensure that worst case impacts were measured. The four sites (MS1-MS4) are shown in Figure 1 above.

Incoming aircraft were observed for a period to locate the flight tracks that were being used on the day the measurements were taken. Once the flight track of the aircraft that were over flying the property on their approach to the bombing range was identified, a location that was suitable for measuring aircraft sound levels was chosen that was directly under the identified flight track. The approximate flight track and the sound level monitoring location is shown in Figure 3 with aircraft passing both to the north and to the south of the nominated track.

Figure 3 Approximate Aircraft Flight Track and Sound Level Monitoring Location



A study of the impact of aerial bombing and artillery fire in other areas surrounding the SMA was also undertaken by Hunter Acoustics in 2009 and the data from that study was used to validate the outcomes of this work and to ensure that a comprehensive assessment has been conducted.

4.1 NOISE IMPACTS FROM MILITARY AIRCRAFT

An evaluation and assessment of the impacts of noise from military aircraft over the land has been made in accordance with AS 2021 using information for military aircraft published by Department of Defence and on site measurements of sound levels from low level military aircraft over flight.

The property is approximately 7500 metres from the target bombing area and in order to make an assessment for the worst case aircraft noise impacts it is assumed to have a side distance of 0 metres. The site is lower than the land at the Singleton Military Area but the aircraft do not land at or take off from the SMA and, therefore, the land height differential of -40 meters is not applied to this site. The external design noise level for F18 military aircraft conducting circuit training was determined from Tables for circuit training published in Air Services Australia Report number DOD-01-001 Amended Nov 2001.

Sound level meters were set up at locations MS 4 and MS 3 which were determined to be representative sites for aircraft over flight after observing the approach paths taken by the aircraft.

4.2 NOISE IMPACTS FROM EXPLOSIVE MILITARY ACTIVITIES

The locations on the site for measuring the impacts from explosive activities within the SMA were determined after consultation with the Range Controller to establish the location of explosive detonations within the SMA range area. The monitoring sites were selected as those that were closest to the detonation points and also the most exposed to explosive overpressure. In general the four explosive monitoring sites were located on the highest areas of ground along the western part of the site. To ensure that valid results were captured at the monitoring sites, the four on site monitors were operated as “slave monitors” to a “master unit” that was located close to the detonation point. In the monitoring configuration used the master unit detects the blast event at level well above wind and other spurious events (about 130dB) and relays a signal that causes the slave unit to record the event. Extended sampling periods and an appropriate time delay allowance is included in the system to ensure that the blast wave has sufficient time to reach the remote site and is accurately recorded.

In the case of aerial bombing and artillery fire the Master Unit was located on Baldwin’s Hill (the observation point). In the case of above ground explosive testing the Master Unit was located about 1000 meters to the North East of the detonation point. The use of the Master/Slave configuration not only ensures that only actual blast data is captured at the monitoring sites but also provides near field and far field information that allows analysis of the propagation behaviour of the blast wave to be conducted if anomalies are identified. This system is well proven and has been used extensively by Hunter Acoustics in recording the impacts of mine blasting as well as in previous studies at the SMA.

5. RESULTS

5.1 NOISE IMPACTS FROM MILITARY AIRCRAFT

On site measurements of sound levels were conducted for military aircraft over flight between 14:00 hours and 17:00 hours on the 27th of October 2011. Five bombing runs with two aircraft in formation were measured over that time and the sound levels from, direct over flight, reconnaissance operations and observation circuits were measured as part of the testing.

It was observed that the approach path for the F18 Hornets conducting pitch and approach bombing runs was such that part of the low level approach path was across the northern part of the property on the test day. Aircraft conducting flight exercises over the Singleton Military Area may approach from any angle with respect to the target zone within the Singleton Military Area.

The sound levels from F18 Hornets conducting pitch and approach bombing profiles with a low level approach over the northern part of the subject land were measured on site over a period of approximately 3 hours. The aircraft were observed to conduct a higher level reconnaissance approach, followed a low level bombing approach. After deploying the weapons the aircraft would fly a low speed circuit in the general area while the outcome of the weapons deployment was determined and relayed back to flight operations personnel for evaluation.

The external design noise level determined from the DOD Tables for circuit training operations was found to be 61dB(A) L_{Amax} and this was consistent with the levels measured for observation circuits during the survey. Sound levels measured from direct over flights during pitch and approach bombing runs ranged from 70 dB L_{Amax} to 101 dB L_{Amax} with an arithmetic average level of 83 dB L_{Amax} not including the sound levels measured during observation circuits which were not considered to be direct over flights. The measurements were made at two fixed locations and the wide range of sound levels from over flight are due to the variation in flight path and approach height used by pilots on different approaches and it is our view that the that the measured results are representative of the impacts on the site under normal military training operations.

5.2 AIRCRAFT NOISE IMPACTS AND TREATMENT OF BUILDINGS

5.2.1 Determination of Building Element Performance and Configuration

The external design sound level of 83dB(A) was used to determine typical building element ANAc requirements in accordance with Appendix F of AS 2021 (2000) and the results are summarised in Table 2 below.

In order to meet the overall building design ANAc values specified in Table 2 appropriate construction material configurations have been selected and specified based on manufacturers one third octave band test data, field performance data measured by Hunter Acoustics, and aircraft noise spectral data.

Spectral data for military aircraft flyovers are taken from on site measurements and our data base library using measurements taken by Hunter Acoustics in the areas surrounding the Williamtown RAAF base.

In each case the building element performance has been calculated in accordance with Appendix G of AS 2021 (2000) using octave band test data over the range 64Hz to 4000 Hz to determine a maximum internal noise level that will meet the appropriate RC spectral distribution curves which has been determined to be least offensive to humans.

Table 2 Design Maximum Internal Noise Levels and Building Element ANAc Values.

Room	Maximum Internal Aircraft Noise Level dB(A) AS2021 (2000)	Building Element ANAc Required As per AS2021 (2000)
Sleeping Areas	50 dB(A)	33
Work and Recreational Areas	55 dB(A)	28
Other	60 dB(A)	23

5.2.2 Building Construction Requirements to Control Aircraft Noise Impacts.

The building construction required to achieve the ANAc values set out in Table 2 above is typical of project home type construction, being brick veneer walls with either an insulated metal or concrete tile roof. However, standard window glazing will not be adequate and glazing will need to be upgraded to be minimum 6.38 laminated glass to control internal impacts from aircraft over flight.

No special construction techniques or methods are required to provide adequate control of internal sound levels.

There will be times when low flying aircraft will exceed the desirable internal sound levels and this may give temporary L_{Amax} sound levels inside the dwellings of up to 68dB(A). This is expected to be infrequent since the conditions for this only occurred once during our survey which was conducted over a three hour period when F18 Hornet aircraft were continuously operating over and around the site.

5.3 NOISE IMPACTS FROM EXPLOSIVE MILITARY ACTIVITIES

Artillery fire (including mortars etc) has effectively two explosive events for each firing of the weapon. The first event launches the shell from the weapon and the second is the detonation of the shell at the target point.

The launch of the shell from the weapon has a highly directional parabolic sound distribution which is predominantly in the direction of fire. The detonation of the shell at the target point is an above ground uni-directional explosion with little directionality.

Weapons fired at the SMA are fired towards the centre of the range from nominated "Firing Points" at the perimeter of the weapons range area. Sound from the launch of artillery fire is generally directed away from residential areas. Therefore, the majority of the sound energy from launching artillery shells is directed towards the centre of the range. The sound from shell detonation is uni-directional at various locations within the target area and is more distant from the residential areas than the firing points.

Table 2 below shows the results of the measurement of the impacts of artillery fire and aerial bombing measured at the most affected points on the land that is the subject to the planning proposal application.

Table 2 Explosive Impact Results Lot 5 DP 823737 Old North Rd, Pokolbin

Date /Time	Activity Type	Near Field		MS1		MS2		MS3		MS4	
		VS	O/P	VS	O/P	VS	O/P	VS	OP	VS	O/P
27Oct											
13:49:51	500 lb bomb	0.41	133.3	NM	NM	NM	NM	0.019	100.6	NM	NM
14:36:49	500 lb bomb	0.46	133	0.026	103.1	0.08	102.7	0.019	102.1	NM	NM
15:02:24	500 lb bomb	0.36	132.1	0.032	104	0.08	107.1	0.019	106.4	0.08	101
15:14:38	Strafing	0.2	117.8	0.013	102	0.08	109.6	0.019	100.3	0.08	100
15:17:11	Strafing	0.15	117.2	0.039	104.9	0.15	110.5	0.026	108.1	0.08	102.4
15:45:49	500 lb bomb	0.36	130.9	0.039	98.8	0.08	100	0.019	106.3	0.08	99
15:58:18	Target Smoke	0.1	116.3	0.032	90.1	0.08	111.9	0.019	107.1	0.08	94
16:04:18	Cluster bomb	0.15	119.6	0.013	95.8	0.08	106.7	0.019	102.7	0.08	94
16:06:37	Cluster bomb	0.2	119.7	0.032	100.8	0.18	115.2	0.045	107.1	0.08	99.7
16:07:53	Cluster bomb	0.1	115.8	0.013	98.6	0.08	106.6	0.019	97.4	NM	NM
16:10:38	500 lb bomb	0.2	126.5	0.019	94.4	0.08	102.9	0.019	98.8	0.08	97.8
16:19:00	Strafing	0.15	115.1	0.026	97.8	0.08	112.1	NM	NM	0.08	99.4
16:39:58	Target Smoke	0.1	117.6	0.032	95.2	0.08	104	0.019	105.7	0.08	92.6
14 Nov											
15:37:09	Explosive testing		131.4		104.5*		108.9*		99		97.3*

Note * Wind Affected Results

Some of the measured results were artificially elevated by wind on the microphone and these are marked in Table 2.

None of the explosive events measured exceeded the 115dB limit for the ANZECC guide and, therefore, the area is not considered to be at risk of high levels of impacts from explosive activities at the SMA. Blast waves from bombing will be audible to individuals and may occasionally be perceived as visible or audible window movement. There is no risk of building damage from the measured blast pressures; however, there will be times when blast pressures may be observed that will startle people who are new to the area.

6. DISCUSSION

In general the property is not considered to be at risk of significant impacts from military activities within the SMA.

Potential occupiers of properties need to be made aware that the explosive activities occur at the SMA that will be audible and will occasionally cause window movements and other building responses that may be audibly detected. These effects will be due to air blast overpressure pulses and not ground vibration although people may misinterpret the effects as being due to ground vibration.

There will be no detectable effects from ground vibration coming from the SMA because the ground vibration measured from events at the SMA remained well below the human detection threshold of about 0.5mm/s PPV and below the detection threshold of the instruments used which was 0.02mm/s.

Low level over flights by military aircraft will occasionally cause high sound levels at some parts of the property depending on the particular flight track taken by the trainee pilots.

Potential occupiers of properties need to be made aware of the presence of military aircraft that may cause occasional high sound levels. The sound levels do not represent a health risk to the occupants but Military aircraft are not readily observable during their approach because the sound signature is behind the aircraft. Therefore, the arrival of the aircraft can startle an unprepared individual who is not aware of its impending arrival.

7. RECOMMENDATIONS

To ensure that the normal operations of the SMA do not become a source of complaint from people who may choose to reside in the area, I recommend that appropriate notations be made on the planning certificates for any approved rezoning.

The notations should specify the following:-

1. Building walls for any dwelling to be constructed within to be from masonry construction(brick veneer or similar),
2. External glazing for any dwelling to be constructed within the rezoning area to be minimum 6.38 laminated glass.
3. A notation should be made on the planning instrument that the area is subject to audible sound from explosive activities and,
4. A further notation should be made that the area is subject to high sound level from low flying military aircraft.

5. Contact details for the SMA Range Controller should be made readily available to any occupier in the area.

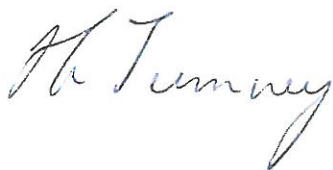
8. CONCLUSION

The effects on the site are limited to explosive events being audible and occasional high sound level from military aircraft.

However, the impacts from the SMA are not to such a level as to warrant sterilising the area for the purposes of residential development, provided that those who intend to invest and take up residence in the area are adequately informed of the presence and activities of the SMA and the minimum recommended glazing standards are implemented.

Thank you for the opportunity to provide this assessment. Please do not hesitate to contact the undersigned if you have any questions regarding this any other acoustic or environmental matter.

Yours Sincerely
Hunter Acoustics



*Ray Tumney BEng(Mech), MEnv Stud, MAAS, MIEAust, MSEE,
Principle Consultant*

Date

13 December 2011

9. TERMS AND DEFINITIONS

dB(A)	Unit of sound pressure level, modified by the A-weighting network to represent the sensitivity of the human ear.
SPL.....	The incremental variation of sound pressure from the reference pressure level expressed in decibels.
SWL (L_W)	Sound Power Level of a noise sources per unit time expressed in decibels from reference level W_O .
L_x	Statistical noise descriptor. Where (x) represents the percentage of the time for which the specified noise level is exceeded.
L_{eq}	Equivalent continuous noise level averaged over time on an equivalent energy basis.
L_1	Average Peak Noise Level in a measurement period.
L_{10}	Average Maximum Noise Level in a measurement period.
L_{90}	Average Minimum Noise Level in a measurement period.
L_{max}	Maximum Noise Level in a measurement period.
Background Noise Level.....	Noise level determined for planning purposes as the one tenth percentile of the ambient L_{A90} noise levels.
P_O	Reference Sound Pressure for the calculation of SPL in decibels.
W_O	Reference Sound Power for the calculation of SWL in decibels.

Anthony Medich

From: Daniel Golenia - BLC <Golenia@bigpond.com>
Sent: Wednesday, 9 February 2011 10:59 AM
To: 'Horner, Ken'
Cc: 'Ihle, Mark'
Subject: RE: Planning Proposal for Old North Road Pokolbin property
Attachments: Comment Submission on Draft ~ under section 62 of the Environmental Planning and Assessment Act 1979.pdf; SMA 115CAL map showing Old North Rd PP area.pdf

Hi Ken

Thank you for your response.

As just discussed by phone with you, I suspect that you have misread the Defence letter (as attached).

Their reference to the 120 ha minimum lot size is that they request that the proposed Singleton LEP rezone all SMA land into SP2-Defence with no minimum lot size although if required they then ask that it be set at 120 ha.

The penultimate paragraph makes reference to Defence requesting that minimum lot sizes for rural residential land within the CAL115 area remain at 8000 m².

It is interesting to note that The L&E Court recently approved a subdivision of land within Cal115 into 8000 m² lots.

Also of interest is that a noise and vibration assessment carried out in co-operation with Defence for the proposed Caravan Park in Hermitage Road (which is proposed to house close to a thousand permanent residents in permanent dwellings at a location very close to the SMA) resulted in a positive outcome.

I attach the Defence Map upon which I have inserted our Old North Road property which is the subject of the PP.

I note your advice that we should withdraw our PP pending further discussion with Defence.

I also note your advice that once we proceed with the PP it would need to proceed together with a review of the SLUS which may then coincide with Council's formal Strategy review process.

I'll obtain instructions from the company directors and advise you.

As discussed, there is a great market demand for this type of land within Singleton LGA due to the abolition of concessional lots under the RL SEPP 2008 and more recently Council's Housekeeping Planning Proposal N° 75 which will remove any ability for subdivision of tourist facilities. Cessnock Council have made provision for meeting such demand as is evident in The Vintage and other similar developments. It would be to Singleton's economic detriment if this demand was to remain left unsatisfied.

regards, *Daniel*

Daniel Golenia
Development Manager
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From: Horner, Ken [<mailto:khorner@singleton.nsw.gov.au>]
Sent: Tuesday, 8 February 2011 16:22
To: Golenia@bigpond.com
Cc: Ihlein, Mark
Subject: RE: Planning Proposal for Old North Road Pokolbin property
Importance: High

Hi Daniel

I've read through your draft Planning Proposal in detail. Whilst being sympathetic to many of the points you raise in regard to the intension of reflecting a similar subdivision pattern to the southern side of Old North Road, and the potential to extend similar tourist development to the northern side of the road, I have major concerns regarding potential for impact from the Singleton Military Area (SMA). I'll attach a copy of the Department of Defence (Defence) response to Section 62 Consultation on Council's draft Standard Instrument LEP for your information.

Defence is requesting a minimum lot size of 120 hectares in areas currently zoned 1(a) Rural. It is difficult to see how it would support a subdivision with a 6.1 hectare average lot size as proposed. I would suggest you liaise directly with Defence in this regard, since Council would not be able to progress a proposal in direct opposition to a State or Commonwealth Department.

Alternatively, Council is currently seeking funding to carry out an early review of the Singleton Land Use Strategy. You may wish to make a submission to this proposed review rather than trying to lodge a rezoning request which may not be able to be supported.

Please contact me if you wish to discuss this further.

Regards

Ken Horner

B. Urban & Regional Planning, BA (Maths & Science)
Coordinator Strategic Land Use Planning

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Australian Government

Department of Defence
Defence Support Group



2004/1094776/2
LPSI/OUT/2008/121

General Manager
Singleton City Council
PO Box 314
SINGLETON NSW 2330

Attention: Robyn Hawes

Dear Sir/Madam

**RE: DRAFT SINGLETON LOCAL ENVIRONMENT PLAN 2009 CONSULTATION
UNDER SECTION 62 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT 1979**

Thank you for referring the abovementioned preliminary local environment plan (LEP) to the Department of Defence (Defence) for comment. Defence appreciates the importance of converting the current Singleton LEP1996 into the LEP standard instrument.

The SMA is a significant Defence asset that supports the training of Australian Defence Force personnel and units. A wide range of activities are conducted by day and night within the SMA including training in small arms weapons and large calibre indirect fire weapon systems. The SMA is also designed, managed and operated to support fast jets that conduct air to ground bombing exercises around the SMA area on a regular basis. As such, the facility is heavily booked and is utilised in excess of 300 days per year for training activities.

Defence is duly concerned to ensure that the long-term viability of SMA is not compromised through inappropriate development on surrounding land and that the assessment of development proposals in the vicinity of the SMA adequately consider and address the presence and impact of Defence activities.

Singleton LEP 2009 – CAL 115 requirement

It is understood that the endorsed Settlement Strategy is intended to inform the preparation of the new LEP through the identification of Strategic Actions. Defence wishes to reiterate its position on Council's Settlement Strategy as outlined in a response sent to Council on 26 November 2007 (See Attachment A). As such, Defence considers it desirable to incorporate the Community Annoyance Level 115 (CAL115) into the LEP 2009 as a map overlay for consideration when reviewing future development proposals situated near Singleton Military Area.

As mentioned in previous submissions to the Council, CAL 115 is an acoustic measure developed for Defence by the National Acoustics Library which is designed to prevent 10% (or greater) of the community near Defence facilities being *seriously affected by range noise and vibration*. For your information, Defence understands that the Cessnock City Council are including the CAL 115 overlay into their latest LEP standard instrument. Should future

development in the Singleton LGA proceed to occur in the CAL 115, community members will experience annoyance and disruption at regular intervals. Therefore, the CAL 115 should be a requirement when assessing development proposals situated near the Singleton Military Area.

Zoning of Defence Land

As you are aware, the NSW Department of Planning is currently preparing a practice note which will inform Councils that the zoning of Defence land will should be 'SP2 – Defence'. Defence requests that the Singleton LEP 2009 is amended to identify Defence land with this zoning.

Defence understand that land within the CAL 115 is currently zoned 1(a) rural, 1(b) rural/hobby farm and 1(d) rural small holdings and will be converted in the Singleton LEP 2009 to RU1 primary production, RU2 rural landscape, E2 environment conservation, E3 environment management and R5 large lot residential. Defence commend the Council for recommending these zones as one of the key objectives is to *'minimise conflict between land uses within the zone and land uses within adjoining zones.'* Therefore, there is an enduring requirement for Defence and the Council to prevent land use conflict occurring as a result of inappropriate development proceeding near the Singleton Military Area.

It is understood that the Council will be progressing with a number of site-specific LEP amendments during the course of Section 62 consultation. Defence requests that all rezoning proposals situated near the Singleton Military Area and in the CAL 115 area are sent to Defence for assessment.

Minimum Lot Sizes

While Defence recognises that minimum lot sizes are a compulsory requirement under the standard LEP template, Defence requests that Defence land to be zoned 'SP2-Defence' does not include minimum lot sizes. If this is not possible, Defence recommends that the minimum lot sizes be 120 hectares.

It is understood that the Singleton LEP 1996 allows the Council to *'consent to the subdivision of land in order to create an allotment of land less than 40 Ha in areas if the Council is satisfied that the allotment is intended to be used for a permissible land use for which consent is given'* ie. tourist accommodation. Defence has found in the past that development approvals for (or that lead to) an increase in tourist accommodation have generated community complaints. As a result there has on occasion been an expectation for Defence to alter its training requirements in response to the concerns held by surrounding residents, tourists and tourist operators. This has an adverse impact on Defence capability and places undue restriction on future use of Defence training areas and facilities. Defence requests that this clause is not included in the Singleton LEP 2009.

Defence welcomes the Strategic Action to increase minimum lot sizes to 150Ha in Rural Lands (land currently zoned 1(a) and 1(b) in the Singleton LEP 1996) as this assists Defence to reduce the impacts of training area noise and vibration impacting on an increased number of residents living nearby Singleton Military. However, Defence is concerned about the proposed increased density of rural residential lots (currently zoned 1(d) in the Singleton LEP 1996) to 2000m². This could lead to an increase in complaints by the community. As such,

Defence requests that the minimum lot size remain at 8000m2 in areas within the CAL 115 area.

Should you wish to discuss the content of this submission further please contact Sally Kirkland, Land Use Planning, on telephone number (02) 6266 8539 or by e-mail on Sally-ann.Kirkland@defence.gov.au.

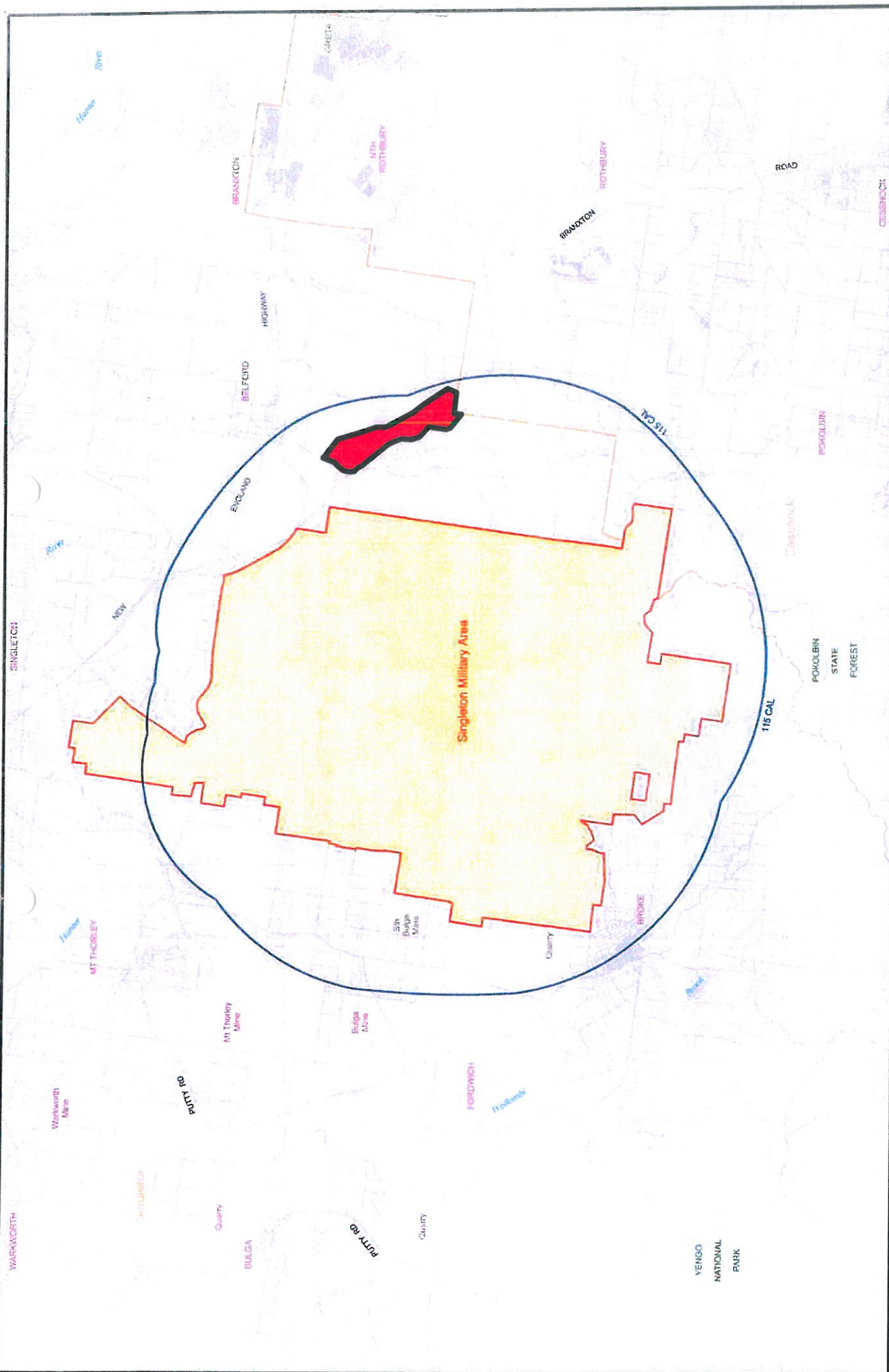
Yours sincerely



John Kerwan
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18 September 2008

cc RM DS – CNNSW
Base Services Manager, SMA
NSW Department of Planning



LEGEND:  Department of Defence Property
 Local Government Authorities Boundaries



**SINGLETON MILITARY AREA
CONSTRAINTS**