

CONSULTANTS IN NOISE & VIBRATION

Commercial 1 (Unit 27)

+612 9587 9702

**DELIVERING SOUND ADVICE** 

637-645 Forest Road

Bexley NSW 2207

office@koikasacoustics.com

www.koikasacoustics.com

ABN: 12 058 524 771

# PROPOSED ALTERATIONS AND ADDITIONS TO

## MERIDEN SCHOOL ADJACENT TO

**2 VERNON STREET, STRATHFIELD** 

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

**Prepared For:** Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



## **DOCUMENT CONTROL**

Project title  Project number  Document reference		Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street, Strathfield					
		593					
		R20190819nk2VernonStreet&MeridonSchoolV1					
Document	t path	G:\Shared drive	•	cs 90819nk2VernonStreet&MeridonSchoolV1.docx			
Version	Date	Author	Review	Notes			
V1	20/08/2019	) NK	NK	Report version 1 available for issue			

Approved by	Nick Koikas Director
Client	Giuseppe Pedavoli 2 Vernon Street, Strathfield,
	Attention: opdavo@gmail.com

The information contained herein should not be reproduced except in full. The information provided in this report relates to acoustic matters only. Supplementary advice should be sought for other matters relating to construction, design, structural, fire-rating, waterproofing, and the likes.

koikas acoustics

Date: Monday, 19 August 2019

**File Reference:** R20190819nk2VernonStreet&MeridonSchoolV1

**Prepared For:** Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



# PROPOSED ALTERATIONS AND ADDITIONS TO

#### **MERIDEN SCHOOL ADJACENT TO**

# **2 VERNON STREET, STRATHFIELD**

## Contents

1.	INT	TRODUCTION	4
2.	CU	RRENT NOISE EXPOSURE	12
3.	со	OUNTER ARGUMENTS WITH THE WILKINSON MURRAY REPORT	14
	1.1	CURRENT AND PROPOSED EXPOSURE OF NOISE	14
	1.2	BACKGROUND NOISE LEVELS	14
	1.3	CONSTRUCTION IMPACTS	15
	1.4	OUTDOOR PLAY AREA (4 VERNON STREET)	15
,	co	MCLUSIONS	10

Date: Monday, 19 August 2019

**File Reference:** R20190819nk2VernonStreet&MeridonSchoolV1

**Prepared For:** Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



1. INTRODUCTION

Koikas Acoustics was requested by Mr Pedavoli and Family to prepare a report in response to the proposed

Alterations and Additions adjacent to their property, 2 Vernon Street, Strathfield.

This acoustical report specifically addresses matters discussed in the Wilkinson Murray acoustical report

that affects No. 2 Vernon Street Strathfield:

Report No.

18238 Version C

Dated:

18 June 2019

In order to address the noise impact to the Pedavoli Family, a condensed historical summary is presented

below so that one may understand the noise issues that have arisen between the occupants of 2 Vernon

Street (Pedavoli Family) and Meriden Junior School.

1971 The Pedavoli family moved into this neighbourhood in 1971.

In 1971 Meriden Junior School consisted of a house and small class rooms along the rear of No

4, 6 and 8 Vernon Street, Strathfield. There were very few children enrolled at the school. There

was minimal noise impact to the Pedavoli Family.

Over the years Meriden have acquired many properties for the purpose of expanding their

facilities. This resulted in an increase in the number of students, resulting in an increase of noise.

1976 Condition of Consent for private use of tennis court was granted. At the time, the tennis court

was owned by Dr Bosnic.

1984 In 1984 Meriden bought the property No. 38 Redmyre Road.

1985 In 1985 Council approved the use as the existing tennis court for car parking and for school use.

1994 The use of the tennis court was significantly increased when the senior girls of Meriden High

School began to use the tennis court. The tennis court was also used on Saturdays and Sundays

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



by families whose children attended the school. The use of the tennis court continued to

increase and included net-ball, tunnel-ball, soft-ball and basketball training, coaching and

competitions. Competitions in general generated the greatest source of noise. Pedavolis

attended numerous meetings with Meriden but no changes to the duration or level of noise

occurred.

Council was also approached and asked that they help to resolve the noise issues. The

Pedavoli's requests were ignored. No letters of complaint were provided, but a diary was kept

of discussions and outcomes with Council and Meriden School.

1997 In November 1997 the rebound-board was removed following letters provided by Mr Peter

Colquhon (the Pedavoli's acting solicitor at the time).

It is likely that this was agreed to by Meriden as at the time, as there was no Council approval for the

use of the tennis court in the way that it was being used.

1998 Meriden School applied for a DA, entitled "For General School Uses and Activities Including Pre-

Kindergarten up to Year 12 to Apply to all Buildings and their Surrounds Including Tennis Courts the

Swimming Pool and Playgrounds".

Pedavoli Family objected to this development application on the grounds of the noise that they

were receiving from the use of this outdoor play area.

The Development Application was granted on the 26 May 1998.

In December 1998 Meriden bought property No. 4 Vernon Street, the property next to the Pedavoli

Family, which is part of the subject development application.

1999 On the 17 September 1999, Koikas Acoustics P/L was commissioned by Mr Pedavoli to assess the

impact of noise from children utilising the tennis court to the rear of No. 2 Vernon Street.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



This acoustic report identified that noise emanating from Meriden School's tennis court exceeded background noise by 20 dB. **The nominated criterion adopted by Koikas Acoustics was background + 5 dB** and the noise levels measured exceeded the criterion by 15 dB. *At the time*, background noise levels were taken whilst the school was operating. Background noise levels then were typically higher compared to when the school was not occupied. The noise was nevertheless excessive and exceeded the nominated noise criterion by a significant amount.

A copy of the acoustic report was provided to Strathfield Municipal Council.

Strathfield Council contacted Koikas Acoustics by phone and advised me that the noise criterion used in my assessment of noise emanating from Meriden school was not accepted. The criterion nominated was that recommended by the EPA. The same criteria was considered by many other consultants acting for and against Meriden. Koikas Acoustics requested from the Council Officer that they provide what Council considered an acceptable noise limit or noise criterion for the subject school. No criterion was ever provided by Strathfield Council. It is noted, that Strathfield Council had imposed on Meriden School's Conditions of Consent similar noise criteria for numerous other child care centres, commercial and residential developments, all of which were required to comply, but, Meriden School was not required to comply.

1999 Further letters of complaint were provided to Meriden and Council in relation to noise disturbances emanating from Meriden School where such noise clearly breached the conditions of Consent issued by the Council.

MP John Murphy provided a letter dated 29 June 2000 to Council in relation to Council's inaction with regards to noise nuisance. Nothing was done to minimise noise disturbance.

2001 26 March 2001 <u>Steven Cooper Acoustics</u> prepared a peer review of Koikas Acoustics P/L report (dated 17 Sept 1999) and opinions relating to Council's inaction and recommendations regarding unlawful use of the tennis court. **Mr Cooper considered background + 5 dB as the nominated noise criterion.** 

30 August 2001 MSJ Solicitors prepared a Class 4 Application against Meriden School.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



Court proceedings were undertaken on 26 July 2002. 2002

5 September 2002 Koikas Acoustics P/L provided a 2<sup>nd</sup> report identifying that noise emanating from

Meriden School's tennis court continued to exceed background noise levels by similar order of

magnitude. This report included a statement that the barrier (Colorbond) agreed to in the L&EC

would not provide adequate noise attenuation.

3<sup>rd</sup> April 2003 Koikas Acoustics provided an additional acoustic report. This assessment looked at

how additional noise attenuation could be achieved with alternative noise barriers and the extent

of the noise barriers required along the common boundary with Meriden to achieve a satisfactory

result.

2004

29 May 2003 Koikas Acoustics P/L provided an acoustic report that identified that the air-2003

conditioning unit overlooking the rear of 2 Vernon Street exceeded the environmental noise

criterion by 5 dB. The air-conditioning unit was identified by Mr Challis as being in excess of the

criterion, but Meriden continued to use it without reducing the noise. The criterion nominated by

Mr Challis was background + 5 dB.

Meriden School prepared a DA for the construction of the noise barrier. The barrier was considered

by Council but was objected by the Pedavoli Family on the basis of advice that I had provided that

the barrier proposed would not provide satisfactory noise attenuation.

Mediation between Meriden School and Pedavoli Family in relation to the noise barrier was

directed by the Chief Justice of the L&EC during February 2004.

The first mediation session occurred in April 2004 and was continued on 4 May 2004. The outcome

of these sessions brought no agreement. Meriden was not represented by an acoustic consultant.

Nevertheless, the Court rejected the Koikas Acoustics report and accepted Mr Challis's

recommendations of a Colorbond barrier.

Strathfield provided a notice to Pedavoli that Meriden Junior School had lodged a DA for demolition

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield





and construction of a new two storey building with basement car park and an increase from 300

students to 450 students.

Strathfield Council Officer Tim Keith advised Koikas Acoustics that Council had instructed Meriden

school not to install a noise barrier because Mr Pedavoli would refuse access to the school's

acoustic consultant on his property for the purpose of conducting compliance testing of the noise

barrier.

Mr Pedavoli provided the following explanation. During the attended survey conducted by Mr Challis

prior to the Court Case of 26 July 2002, Mr Challis accused Mr Pedavoli that the noise complaints were

being made so that Mr Pedavoli could be bought out by Meriden School so that he could buy a mansion

at Point Piper. Mr Pedavoli was very upset as this remark by Mr Challis was incorrect. Mr Pedavoli told

Mr Challis not to step on his property ever again.

Mr Pedavoli was under the impression at the time of the mediation that Mr Challis was acting for

Meriden Junior School. It is interesting to note that for some unexplained reason Mr Challis ended

up with no valid measurement data from his monitoring and therefore relied upon material

provided by Koikas and Cooper.

A Notice of Determination of Development Consent No. 0405/080 dated 2 June 2005 with consent

dated 10 May 2005 by Council for Meriden School to demolish the existing administration building,

alterations and additions, removal of trees and the erection of a two storey school building.

Koikas Acoustics prepared a peer review (on behalf of Mr Pedavoli) of Meriden School's acoustic

report prepared by Acoustic Logic. A copy of the Koikas Acoustics report was issued to Strathfield

Council. Council ignored the acoustical report. The Acoustic Logic report discussed noise that was

generated in class rooms. The increase in the number of children in relation to children playing

outdoors was not discussed. No actions were taken by Strathfield Council to investigate the matter

further.

2005

An acoustic assessment was prepared by Koikas Acoustics dated 21 September 2005 in relation to

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



construction noise activities. In this report noise levels breached Council's Conditions of Consent

by up to 30 dB. Council did not stop or request Meriden to reduce noise over the 18 month

construction period even though there was a clear breach of their Conditions of Consent.

2006 Letters were prepared and sent off to Ministers and Authorities describing the noise issues that the

Pedavoli Family was experiencing. Most persons who did respond advised that Council was the

appropriate Authority to deal with this matter under the powers of the POEO Act 1997.

A second report was prepared by Koikas Acoustics in February 2006 regarding construction noise

and found that the activities were now in breach of Council's nominated noise criteria by up to 40

dB. Council was provided with a copy of the Koikas Acoustics report but Council did not respond

nor take any actions to order an investigation and therefore, did not act appropriately on the

information provided at the expense of the Pedavoli Family.

2008 Mr Pedavoli requested that Koikas Acoustics provide and acoustical report in relation to what he

perceived to be an increase in noise following Meriden's expansion of the school.

2009 The abovementioned report entitled Noise Impact Assessment of Meriden School to No. 2 Vernon

Street, Strathfield Between February 2007 and February 2008, our file reference R020408nk593.wpd

dated 25 March 2008 was filed in the Local Court of Burwood. The report contained ambient

measurements and noise measurements from activities occurring at the school.

The Hearing dates were between 19 and 20 February and 23 and 24 April 2009.

Following the Court Proceedings, Orders were issued by Burwood Court, their File Number

79556/08/46, date of order 24 April 2009 by Magistrate/Judge W. Pierce, required that Meriden

School:

- Erect a 5 metres high composite noise barrier from the existing ground level and 1.5 metres

away from the northern boundary of No. 2 Vernon Street (the property) and extending from

the rear of the property to a point in line with the front facade of the dwelling of the property

koikas **acoustics** 

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



- To a height of 5 metres above the existing ground level and along the eastern boundary of the property joining the barrier along the northern running barrier and extending southwards along the common boundary to a point in line with the southern alignment of the common driveway between 2 and 4 Vernon Street, where it then tapes down to a height of 2 metres above the existing ground level over a distance of 3 metres. The barrier was constructed of reinforced concrete up to 3 metres in height and the remaining 2 metres to be constructed from 15 mm slid Plexi-glass in steel or Aluminium framing. All joints in the acoustic barrier to be acoustically sealed using mastic sealer.
- All windows on the northern and eastern facade of the dwelling on the property to be acoustically double glazed by the fitting of a 6.38 mm thick glazed panel to the inside of the glazed dwelling. The doors to be fitted with Raven type acoustic seals.
- The dwelling to be provided with mechanical ventilation designed in accordance with relevant Australian Standard 1668 and As 2107.
- Limit the number of children to 50 on the Jobbling lawn (later changed to 150 children). School band instruments or similar activities to be undertaken on the Jobbling lawn not more than 8 times per year and notified by the School not less than 7 days before these special events.
- Lawn mowers and trimmers are permitted for use but no other plant and equipment including gurneys and blowers.
- The Parties acknowledge and agree that compliance with Clause 1 5 above meet the requirements of the noise criteria in Clause 7 below.
- Noise criterion Leq, 15 minutes not to exceed 50 dB(A) at any point on the Pedavoli property at a height of 1.5 metres above the ground.
- In the event that the school cannot build the noise barrier, the School will take all steps available to ensure compliance with the noise conditions in Clause 7.
- The Shcool is to comply with Orders 2 5 inclusive within 12 weeks.
- The School to make forthwith application to the Council for approval to construct the barrier referred to in Clause 1 above and to complete construction of the barrier not later than 4 months of obtaining Development Consent.

It is noted, that some of the noise attenuation measures imposed by the Local Court were offered

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli



by Meriden on the first day of Court but did not address what would happen if there was noncompliance and did not address the matter of costs incurred by the Pedavoli's to get the

school to comply with conditions of consent.

Despite giving an undertaking at the Local Court that the use of the blowers and gurneys in the

vicinity of the Pedavoli property would cease immediately, Meriden School continued to use the

blowers two weeks after the Court Orders were issued on 24 April 2009. Noise level measurements

of the use of a blower was taken by myself in May 2009 during the afternoons. As a consequence of

Meriden's actions, the Pedavoli Family continue to be affected by excessive noise.

2009 Meriden School appealed the decision before the L&EC. The judgement by Justice Pain was in

favour of Meriden School and was based on:

that the school did not emit "offensive noise". This decision was formed despite the fact that the

noise emitted was at the time 18 dB above the background as determined from the Koikas

Acoustics data and relied upon by both Steven Cooper Acoustics and Renzo Tonin & Associates;

interpretation of planning expectations in regard to suitability of the site development and public

interests as described in Section 79C of the EP&A Act. Although there is no prescriptive acoustic

standard to be met in the EP&A Act, it would appear that Justice Pain preceding over this matter

considered less important the Protection of the Environment Operations Act 1997 (POEO Act) and

the Protection of the Environment Operations (Noise Control) Regulation 2008 (POEO Regulation).

The intent of the POEO Act 2007, which was to protect people from "offensive noise" was therefore

eroded by this Judgement because, since 2009, this judgement has been used by many acoustical

consultants to argue that noise that exceeds the background noise by up to 18 dB was deemed not

offensive in the L&EC of NSW.

The Pedavoli Family received no noise ameliorative treatments to their home, noise barriers were

not erected, but, the Pedavoli Family was ordered by the L&EC of NSW to pay Meriden School a sum

of about \$30,000 for costs as there was acoustical data not accepted by the L&EC during Court

proceedings because only one acoustical consultant from either side was allowed to act for each

party.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



2. CURRENT NOISE EXPOSURE

Since 2009, the Pedavoli Family has been required to endure the excessive noise emanating from Meriden

Junior School during the morning, recess, lunchtime and afternoon from children playing outdoors and

the use of gardening and cleaning plant and equipment. Children playing outdoors continue to shout, and

scream at levels that are alarming, as a consequence, adversely impacting upon the health of the Pedavoli

Family.

The Pedavoli Family often remain indoors with their doors and windows closed in order that they can

experience satisfactory acoustical amenities. As their home is not equipped with mechanical

ventilation/air-conditioning, during the summer, their home becomes stifling hot.

Even with the windows and doors closed, the noise from certain outdoor school activities remains clearly

audible inside their home. The Pedavoli Family consider the noise emanating from Meriden School to be

"offensive". A reasonable person with normal hearing would also consider the subject noise to be offensive.

It would appear that the Wilkinson Murray report also consider that LA90 + 5 dB is a suitable noise criterion

for the assessment of noise emanating from the school. This is consistent with **The Acoustic Group** (Steven

Cooper Acoustics) who consulted for the Pedavoli Family, Acoustic Logic who consulted for Meriden

School, Koikas Acoustics who consults for the Pedavoli Family, for Mr Challis who consulted for Meriden

School, and now Wilkinson Murray who consulted for Meriden School. The adopted criterion by all of the

the above named consultancies was in accordance with the EPA's Industrial Noise Policy (currently known

as Noise Policy for Industry) which also refers to "offensive noise" as defined in the POEO Act 2007.

Offensive noise is applied in both the POEO Act and Noise Control Regulations as being noise:

• that, by reason of its level, nature, character or quality, or the time at which it is made, or any other

circumstances:

(i) Is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is

emitted, or

(ii) Interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield



of a person who is outside the premises from which it is emitted, or

That is a level, nature, character or quality prescribed by the regulations or that is made at a time,

or in other circumstances, prescribed by the regulations.

The nature of noise that is not constant may have additional qualities that cause the assessment of a

measured noise to be modified. Therefore, if the noise is:

• loud either in an absolute sense or relative to other noise in the area;

• or is well above the background noise;

• impulsive,

• tonal,

fluctuates in level,

occurs during a time which unreasonably interferes with comfort or repose,

occurs daily,

adversely affects people's activities such as conversations, reading, studying, watching TV

or sleeping,

then this noise may be considered to be offensive.

The Pedavoli Family have repeatedly stated that all of the bullet points apply to them.

It is the opinion of Koikas Acoustics that this is correct based on measured and subjective evaluation

of the noise emanating from Meriden School.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli



Acoustical Report: Proposed Alterations and Additions to Meriden School Adjacent to 2 Vernon Street Strathfield

3. COUNTER ARGUMENTS WITH THE WILKINSON MURRAY REPORT

The Wilkinson Murray (WM) acoustical report refers to three State Significant Developments (SSD)

being:

Meriden Centre of Music and Drama

Stage 2 Lingwood Campus, and

• Vernon Street Playground Area.

The following counter arguments with the WM acoustical report are specific for the outdoor

playground development at 4 Vernon Street.

1.1 CURRENT AND PROPOSED EXPOSURE OF NOISE

The Pedavoli residence is currently affected by noise emanating from Meriden School outdoor

playing areas along the northern and eastern boundaries.

The proposal will have children also playing on the southern boundary between No 2 Vernon Street.

The Pedavoli Family have two bedrooms with windows fronting Vernon Street being the western

façade of the building, and one bedroom facing south adjacent to 4 Vernon Street. This bedroom

relies on leaving the window open as required for ventilation purposes. As noise will emanate from

the use of the proposed outdoor play area, this will significantly impact the occupants in this

bedroom space.

1.2 BACKGROUND NOISE LEVELS

In regard to the measured background noise levels, WM have adopted for 4 Vernon Street

background noise levels that pertain at the Linwood Site. This site is exposed to traffic noise

emanating from Margaret Street and as such background noise levels may be marginally higher

comparted if the logger was placed on the shielded side (southern side) of 2 Vernon Street.

The results of background noise surveys taken by Koikas Acoustics along the northern boundary of

2 Vernon Street during school holidays was: rated background levels (RBL) around (daytime) 39-41

dB(A) during school holidayts and around (daytime) 40 and 43 dB(A) during normal school days.

Therefore, if a sound level meter data logger had been placed between 4 and 2 Vernon Street,

**Acoustical Report:** Proposed Alterations and Additions to Meriden School



background noise levels would have been significantly lower compared to the adopted background

noise level of 43 dB(A). In our opinion, background noise levels would be less than but not more

than 40 dB(A) for the daytime. This is at least 3 dB lower than what WM used to derive the nominated

noise criteria for children playing adjacent to the southern side of 2 Vernon Street.

1.3 CONSTRUCTION IMPACTS

It is accepted, that construction noise levels will inevitably exceed the criteria. It is expected

however, that reasonable and feasible noise mitigation measures are implemented as

recommended in the EPA's Interim Construction Noise Guidelines during the demolition and

construction phases.

On the basis that the development is approved, these activities are likely to occur during the warmer

periods of the year. As such, the bedroom window facing 4 Vernon Street will need to be kept closed

during construction to:

mitigate construction noise intrusion, and

• prevent air-borne dust contaminates (as identified by the Douglas Partners June

2019 survey and report) from entering the habitable spaces of 2 Vernon Street.

As such, mechanical ventilation will be required to be installed to allow the occupants of 2 Vernon

Street to remain indoors whilst construction activities are being undertaken.

In addition, vibration monitoring should be considered to minimise the potential of cosmetic cracks

to 2 Vernon Street.

1.4 OUTDOOR PLAY AREA (4 VERNON STREET)

In regards to the use of the proposed outdoor playground area (4 Vernon Street), there are several

concerns identified in the WM acoustical report:

Koikas Acoustics agrees with WM's adoption of the EPA's NPfI criterion, being background + 5 dB.

However, it is recommended that the background noise pertaining adjacent to the bedroom

window between No 2 and No 4 Vernon Street be determined by taking noise level measurements

for the purpose of ascertaining the Project Noise Trigger Level as defined by the EPA Noise Policy

for Industry.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School

Having determined correctly the critical RBL level for the daytime period, the height of the noise barrier can be determined in conjunction with knowing the maximum number of children that would be playing outdoors and the associated vocal effort.

There is no mention in the acoustical report as to the maximum number of children that would play in the proposed outdoor play area. The calculated noise level derived by WM along any point on the property boundary of the southern side of 2 Vernon Street would appear to be based on that 10 children are speaking with raised voice.

The conceptual drawing below *Figure 1* show about 30 children playing on the proposed outdoor play area.



Figure 1

In another photo (SEARs Request Drawings Meriden School.pdf) *Figure 2* the conceptual drawing shows between 50 and 60 children occupying the proposed outdoor play area of 4 Vernon Street, Strathfield.

koikas acoustics

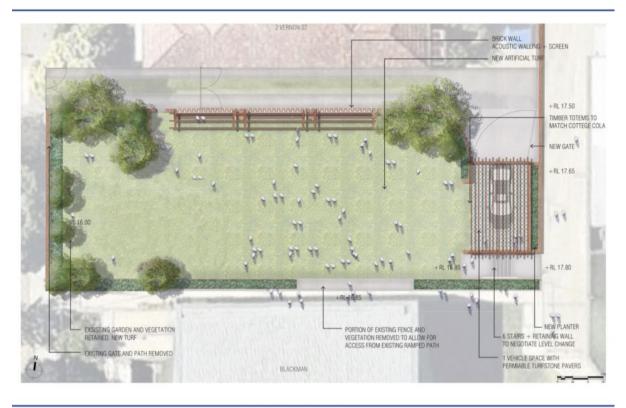
Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School





MERIDEN SCHOOL SEARS - 26 July 2018

4 VERNON STREET - New Playground





Figure 2

It is reasonable to expected that for an area the size of 4 Vernon Street that more than 10 children would occupy the proposed outdoor play area, and if there were more than 10, the other children would be speaking at higher or lower vocal effort. It is also unusual to rely on sound power levels of different vocal efforts when actual noise level measurements of a number of children could have been taken and adjusted for the proposed maximum number of children playing on the subject 4 Vernon Street outdoor play area.

In our professional opinion, the derived height of the noise barrier will not meet WM's noise criterion. A 1.8 metres high noise barrier is inadequate. The barrier would need to be constructed of solid materials and would need to take into consideration the correct background level (RBL) and the correct sound power level based on the maximum number of children playing outdoors.

On the assumption that there are up to 50-60 children playing in the proposed outdoor play area (4 Vernon Street), noise levels would exceed the criterion by an estimated 10 – 15 dB and therefore, the noise barrier would need to be significantly higher than 1.8 metres above the ground relative to 4 Vernon Street playground area.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School



4. CONCLUSIONS

Koikas Acoustics was requested by Mr Pedavoli to undertake a peer review of the Wilkinson Murray

acoustical report (June 2019) for Meriden Junior School and ascertain whether the noise mitigation

works will satisfactorily achieve the nominated noise criteria to the occupants of 2 Vernon Street,

Strathfield.

The school has over the years continued to expand resulting in proportional increase in noise. Based

on the short history presented in Section 1 of this report, noise related issues have been ongoing

between the Pedavoli Family and Meriden Junior School.

The Pedavoli Family have not been provided with any satisfactory noise relief over the years

especially from the use of Meriden Schools outdoor play areas adjacent to the Pedavoli residence

and, from the use of plant and equipment servicing the outdoor grassed areas and concrete paths.

The proposed alterations and additions of the school areas further increase noise exposure to the

Pedavoli Family.

The proposed noise mitigation measures for the subject proposed outdoor play area of 4 Vernon

Street in the form of a 1.8 metres high noise barrier along the full length of the common property

boundary is in our opinion unsubstantiated recommendations based on incorrect background

noise levels and incorrect number of children likely to occupy the outdoor play area.

Based on the above findings, Koikas Acoustics believes that the proposed works will further

exacerbate noise exposure to the Pedavoli Family. The Pedavoli Family feel that this continuing

increase in noise generated by Meriden School is a means to drive the Pedavoli family out of their

home so that Meriden School can acquire their property and achieve their Master Plan objectives to

expand. This claim is substantiated by Meriden's Architects Masterplan drawings by Oculus. See

Figure 3 and Figure 4 below:

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School

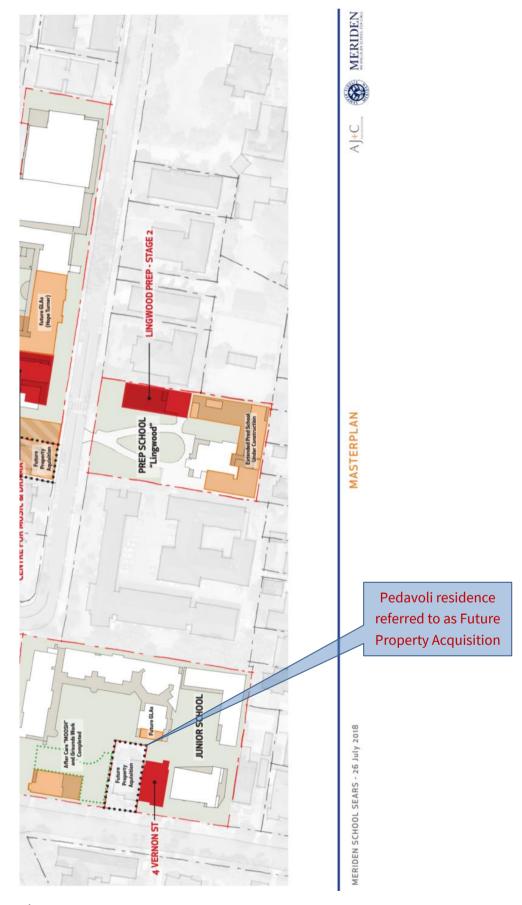


Figure 3

koikas acoustics

Date: Monday, 19 August 2019

**File Reference:** R20190819nk2VernonStreet&MeridonSchoolV1

**Prepared For:** Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School



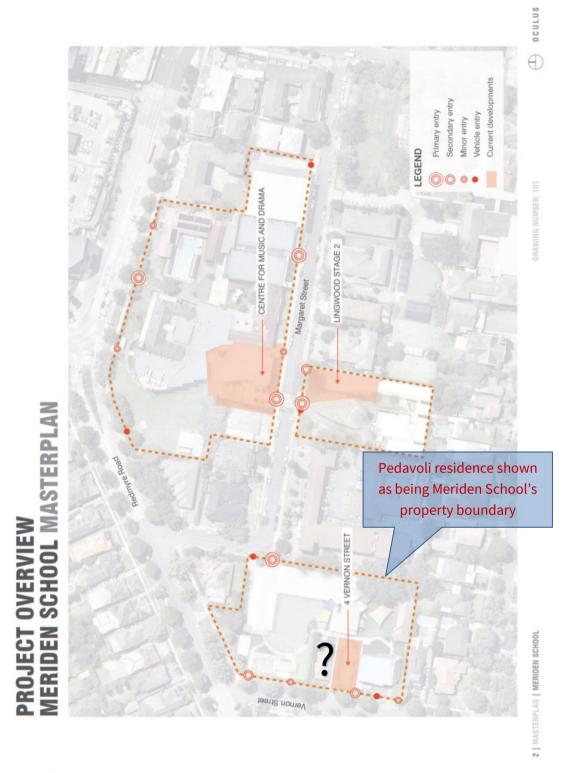


Figure 4

Mr Pedavoli has advised that he has always asked Meriden School to mitigate the progressive increase of noise that emanates from Meriden Junior School. It is the opinion of Koikas Acoustics that the noise barrier proposed by Wilkinson Murray will not achieve their nominated noise criterion. On this basis, the Pedavoli request that the Authorities request a review of this acoustical assessment.

koikas acoustics

Date: Monday, 19 August 2019

File Reference: R20190819nk2VernonStreet&MeridonSchoolV1

Prepared For: Mr Giuseppe Pedavoli

**Acoustical Report:** Proposed Alterations and Additions to Meriden School

