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NOISE IMPACT REVIEW No 2. ORGANIC FOOD MARKETS

22 Jubilee Ave
Warriewood NSW 2102
April 2021

PREPARED FOR: Organic Food Markets
SITE LOCATION: 22 Jubilee Avenue Warriewood NSW 2130

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INTRODUCTION

This Report/Review is a study of the environment in the absence of market activities compared to measurements taken with the markets in operation on the site of the Pittwater Services Club and their noise impact on the nearest sensitive receiver being 185 Warriwood Road.

The operating hours are from 7am to 200pm.

MEASUREMENT LOCATIONS

The attended noise measurements three locations (see image 1) were conducted on 4th April 2021 with no market activity present.

Position 1. being the boundary of 185 Warriwood Road, the nearest sensitive receiver.

Image 1. Sunday 28th Normal Markets Activities



EXISTING ACOUSTIC ENVIRONMENT

The samples for L90, LAeq and L10 tests were taken when the markets were not in operation on Sunday 4th April 2021 and compared to noise data collected on 13th Sept 2020.

See Tables 3 and 4 for noise level difference.

Measurement taken at the Boundary of 185 Warriwood Rd 13th Sept 2020

Table 1. : - Measured Noise Levels Markets in operation.

Location	Time (hrs.) Sundays	L10	L90	LAeq(15minutes)
Nth Boundary of 185 Warriwood Road. Posit 1.	13 th Sept 2020 @ 7:43am	63.3	46.3	57.8
Nth Boundary 185 Warriwood Rd. Posit 1.	13 Sept 2020 @ 8:14am	59.4	43.3	56.3

Table 2.: - Existing Noise Environment on Sunday 4 April 2021 Measured Noise Levels **No Market Activity**.

Location	Time (hrs.) Sundays	L10	L90	LAeq(15minutes)
Boundary of Nearest Sensitive Receiver 185 Warriwood Road	4 April 2021 7:42am No market Activities	60.8	41	57.3
Boundary of Nearest Sensitive Receiver 185 Warriwood Road	4 April 2021 10:15am No Market Activities	63.1	44.2	58.6

MEASUREMENT PERIOD

Measurement samples were taken from 7AM to 10AM on Sunday 13 September Measurement Position 1 at the boundary of 185 Warriwood Road with markets in progress, and again during the same time periods on Sunday 4th April but void of market activities.

MEASUREMENT EQUIPMENT

Attended noise measurements were carried out using a Norsonics 118 class 1 sound analyzer in all tests. The analyzer was calibrated before and after each measurement session using a Norsonics Sound Calibrator type 1251. No significant drift was detected before or after each measurement period. The meter simultaneously measures LAeq, L10 and L90 as well as a raft of other statistical noise data.

NOISE CRITERIA

Two sets of noise criteria are prescribed to meet the environmental noise objectives. The Intrusive Criteria and Amenity Criteria.

The Intrusive Criteria

As defined by the Protection of the Environment Operations Act 1997 and summarized as: **LAeq (15minute) ≤ rated background L90 level plus 5dB.** during the hours 8am to 6pm Sundays (daytime). As well as: **LAeq, 15minute ≤ rated background L90 level plus 0dB.** during the hours **10pm Saturday 8am Sundays (nighttime)**

**The Rated background level (RBL) or L90: is the measured noise level on site in the absence of activity from the proposed development for 90% of the time*

The Amenity Criteria

The LA10 noise level emitted from the use must not exceed the Background noise level (LA90) in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) by more than 5dB between the hours of 8am to 10pm Sundays, and 0dB above background (L90) noise levels from Saturday 10pm to 8am Sunday. (night time)

SUMMARY

Table 3. Night period: Difference between operational and nonoperational Market

Location	Time (hrs.) Sundays 7-8am	L10	L90	LAeq(15minutes)
Nth Boundary of 185 Warriwood Road. Posit 1.	13 th Sept 2020 @ 7:43am Markets operational	59.4.3	43.3	56.3
Nth Boundary 185 Warriwood Rd. Posit 1.	4 th April 2021 @ 7:42am No Market Activity	*63.1	*44.2	*58.6
Differential in noise levels	Markets operational with no Market activity	-3.7dB	-0.9dB	-2.3dB

Note: Between 7&8am on Sundays is stipulated as the nighttime period.

Table 4. Day Period. Difference between operational and nonoperational Market

Location	Time (hrs.) Sundays 8am to 2pm	L10	L90	LAeq(15minutes)
Nth Boundary of 185 Warriwood Road. Posit 1.	13 th Sept 2020 @ 8:14am Markets operational	63.3	46.3	57.8
Nth Boundary 185 Warriwood Rd. Posit 1.	4 th April @ 10:15am No Market activity.	*59.4	*43.3	*56.3
Differential in noise levels	Markets operational with no Market activity	+3.9dB(A)	+3.0dB(A)	+1.5dB(A)

Note: Between 8am and 6pm on Sundays is the daytime period.

Note: The Intrusive and The Amenity Criteria are breached at the site with no Market activity noise impact during the nighttime and daytime period.



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CONCLUSION

The noise data gathered on Sunday the 4th April 2021 minus the markets activities, either in the daytime or nighttime periods, indicates that any noise generated by the operation of the Organic Markets within 22 Jubilee Avenues is imperceivable at the boundary of the nearest sensitive receiver being 185 Warriwood Rd.

Further to this and given the low/ imperceivable + 3dB daytime increases by the markets coupled to a significantly large attenuator in the form of a hedge on the north boundary of 185 Warriwood Rd. at approx. 1 Metre thick and approx. 2.8 Metres high across 80% of the exposed face between the measurement position and the house façade, this noise absorbing structure/barrier would make any noise generated by the Markets imperceivable to the occupants residing within 185 Warriwood Rd. on any given Sunday nighttime or daytime periods.

According to the data gathered on site on Sunday 4th April 2021 any breaches of the Amenity Criteria being Background(L90) + 0dB (nighttime) and +5dB(daytime) and or the Intrusive Criteria being prescribed as LAeq (15minute) ≤ rated background L90 level plus 5dB. (daytime), and plus 0dB(nighttime) are already breached within the environment under study with no activity within the market site..

Thanking You.

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ANNEXURE TO NOISE IMPACT STATEMENT REVIEW No 2. ORGANIC FOOD MARKETS

22 Jubilee Ave
Warriewood NSW 2102
12 April 2021

PREPARED FOR: Organic Food Markets
SITE LOCATION: 22 Jubilee Avenue Warriewood NSW 2130
DATE: 12 April 2021

INTRODUCTION

This annexure to the Noise Impact Review of 7th April 2021 is to address the request by Northern Beaches Council to provide LMax data and address the difference between Position 1 which has been accepted as the nearest sensitive receiver as the northern boundary of 185 Warriwood Road as it is 14M from the entrance to the Food Markets and positions 2&3 along Foley Street mentioned in previous reports which are some 50Metres from the entrance to the markets.

MEASUREMENT LOCATIONS

Position 1. Being 14Metres from the boundary of the nearest sensitive receiver is chosen as the most critical data collection point as it captures the bump-in during the 7-8am period being directly opposite thus favors the complainant not the applicant.

Position 2& 3 are some 50 Metres from position 1 with significant attenuating structures and green canopy overhead and would favor the applicant in a data comparison.

Further to this the gradient along Foley street is significantly steep in comparison to Jubilee therefor given the bus route, as well as through traffic, would have higher peaks and was considered as a comparison (measurements without market activity) not in favor of the main complainant on the corner of 185 Warriwood and Jubilee and is reported in Table 3.

Position 1. The boundary of 185 Warriwood Road, the nearest sensitive receiver.

Image 1. Sunday 4th April no Market activity.



EXISTING ACOUSTIC ENVIRONMENT

The samples for L90, LAeq and L10 tests were taken when the markets were not in operation on Sunday 4th April 2021 and compared to noise data collected on 13th Sept 2020. See Tables 3 and 4 for noise level difference.

Measurement taken at the Boundary of 185 Warriwood Rd 13th Sept 2020

Table 1. : - Measured Noise Levels Markets in operation.

Location	Time (hrs.) Sundays	L10	L90	LAeq(15minutes)	LAmx
Nth Boundary of 185 Warriwood Road. Posit 1.	13 th Sept 2020 @ 7:43am	63.3	46.3	57.8	72.9
Nth Boundary 185 Warriwood Rd. Posit 1.	13 Sept 2020 @ 8:43am	59.4	43.3	56.3	75.5

Table 2.: - Existing Noise Environment on Sunday 4 April 2021 Measured Noise Levels **No Market Activity**.

Location	Time (hrs.) Sundays	L10	L90	LAeq(15minutes)	LAmx
Boundary of Nearest Sensitive Receiver 185 Warriwood Road	4 April 2021 7:42am No market Activities M001	60.8	41	57.3	73.5
Boundary of Nearest Sensitive Receiver 185 Warriwood Road	4 April 2021.11:15am no market Activities M004	63.1	44.2	58.6	73.5

Table 3. Includes Foley Street Pos 2.

Location	Time (hrs.) Sundays	L10	L90	LAeq(15minutes)	LAmx
North Boundary of 185 Warriwood Road. Posit 1.	13 th September 2020 M003 @ 8:14am	59.4	43.3	56.3	74.3
Posit 2. Crossroads of Foley, Vineyard & Warriwood Road	27 th September 2020 M001 @ 8:24am	61.7	48.3	59.1	80.8



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MEASUREMENT PERIOD

Measurement samples were taken from 7AM to 10AM on Sunday's 13 September 2020 Measurement Position 1 at the boundary of 185 Warriewood Road with markets in progress, again during the same time periods on Sunday 4th April but void of market activities. Included is a measurement taken on 27th September 2020 at position 2 on Foley Street as requested.

MEASUREMENT EQUIPMENT

Attended noise measurements were carried out using a Norsonics 118 class 1 sound analyzer in all tests. The analyzer was calibrated before and after each measurement session using a Norsonics Sound Calibrator type 1251. No significant drift was detected before or after each measurement period. The meter simultaneously measures LAeq, L10 and L90 as well as LMax data.

SUMMARY

It is clear from the data represented in table 1 to 3 that the noise environment at the boundary of 185 Warriewood Road is not affected by the activities of the Food Markets during the allocated 7am to 2pm trading times. The LMax comparison of Markets operating and not operating indicate as well this to be the case.

In Table 3 the measurement position 2. Along Foley Street yields a 6dB increase in LMax level at the same time as measured at Position 1. Opposite the entrance to the markets at 22 Jubilee being 7:24 to 7:43 "bump in time".

This reinforces the proposition that Position 2 along Foley Street, being 50Metres from the entrance to the Markets on Jubilee, are in fact significantly affected by through traffic alone whilst at the same time being shielded from the Bump in by a) distance and b) Heavy foliage and a large structure (a house) during the critical 7am to 8am Market Setup time.

CONCLUSION

It is clear from all the collected data over several months that the Markets do not add any perceivable nor measurable lift in level to the existing noise environment under study.

Thanking You.

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