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Blacktown Workers Sports Club, 170 Reservoir Road, Blacktown

Site Compatibility Certificate - Acoustic Assessment

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3	26/02/2018	20151615.1/2602A/R3/JL	JL		GW

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1 INTRODUCTION

This report presents our study of acoustic impacts associated with the proposed senior living apartments and residential aged care facility for the Site Compatibility Certificate of Blacktown Workers Sports Club at 170 Reservoir Road, Blacktown.

In this report we will:

- Conduct an external noise impact assessment on the proposed senior living apartments, residential aged care facility (primarily traffic noise and noise impacts from sporting facilities) and recommend indicative acoustic treatments to ensure that a reasonable level of amenity is achieved within the project site for future occupants.

- Identify potential noise sources generated by the site, and determine noise emission goals and any required acoustic treatments/management controls for the development to meet Council and NSW EPA acoustic requirements and ensure that nearby developments are not adversely impacted.

The analysis will be undertaken with reference to the architectural drawing set provided by Allen Jack & Cottier Architects, project number 15029 and dated 22/02/2018.

2 SITE DESCRIPTION

The site is located at 170 Reservoir Road, Blacktown. The proposed development will involve the following:

- Construction of 11 buildings of seniors living apartments ranging from 4 to 14 storeys high, and a 4 storey residential aged care facility (RACF) along the south-eastern boundary of the site;

Existing development on site includes a sports club, lawn bowls club, baseball field, tennis courts, motel and car parking facilities, which are all located towards the north-eastern boundary of the site.

Roadways in the vicinity of the site are as follows:

- Reservoir Road to the immediate east of the site, which carries medium to high volumes of traffic;
- Penny Place to the immediate south of the site, which carries low volumes of traffic but does have regular heavy vehicle (i.e. truck) movements;
- Holbeche Road to the immediate north of the site, which carries medium to high volumes of traffic;
- Walters Road to the immediate west of the site, which carries low to medium volumes of traffic;
- In addition, the Great Western Highway is located approximately 110m south of the site, and carries high volumes of traffic.

Surrounding existing development in the vicinity of the site are as follows:

- Residential development to the east of the site across Reservoir Road;
- Commercial development to the immediate north, west and south of the site.

Future development for the site are as follows:

- Construction of two full sized soccer fields, two rugby fields and two grandstands towards the north-western boundary of the site.

- Construction of two new car parks located towards the north-western boundary of the site.

In particular, an existing loading dock belonging to Thermal Mark Transport Refrigeration is located near the south-western boundary of the site. Refrigeration trailers are brought to this loading dock for maintenance work. The operating hours of the Thermal Mark Transport Refrigeration are 8am-4pm.

An aerial photograph is of the site is shown in figure 1 below;

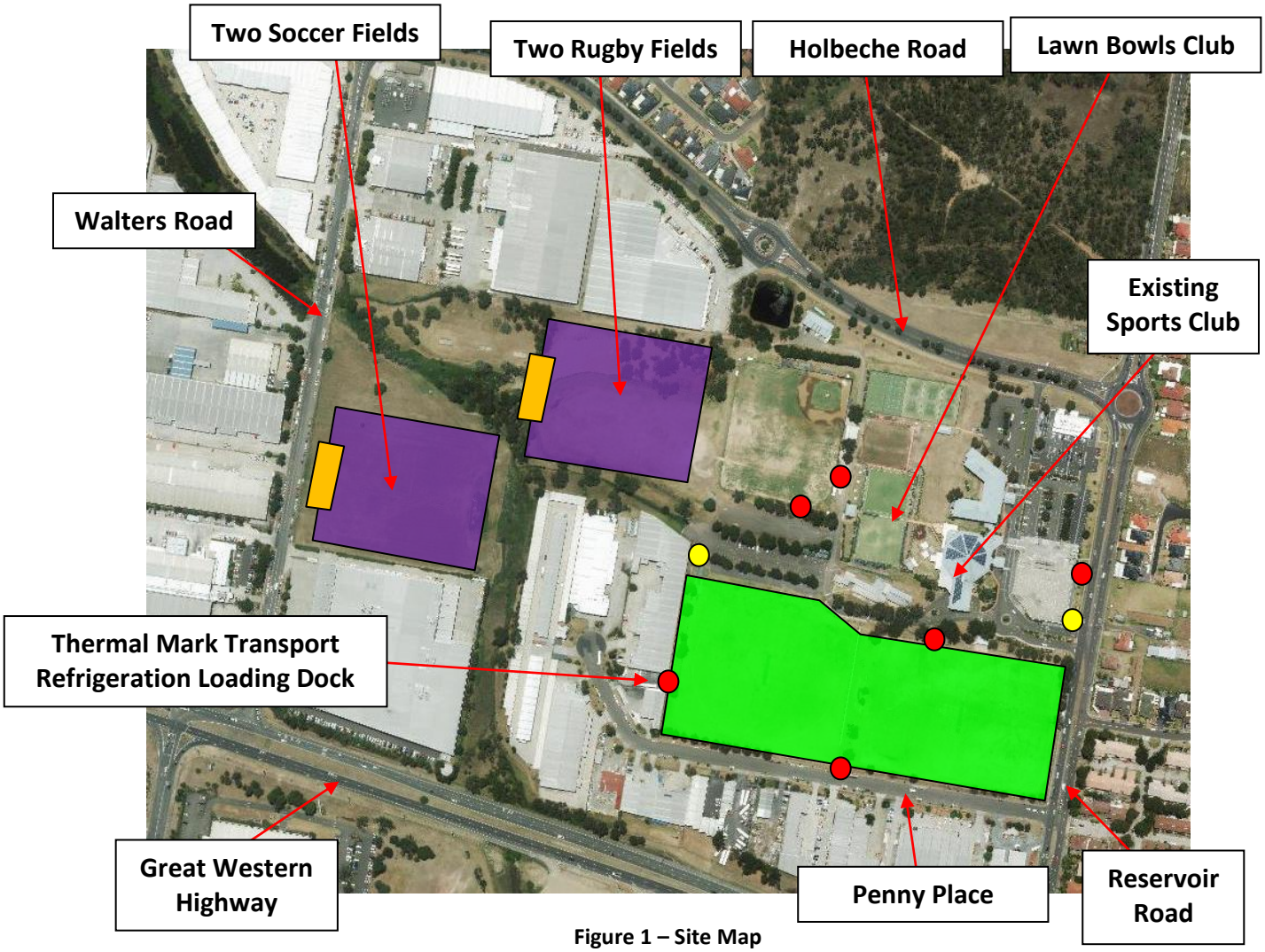


Figure 1 – Site Map

3 MAJOR NOISE ISSUES

Site investigation indicates that the majors noise issues related to the proposed Senior Living Apartments and RACF are below:

- Traffic noise intrusion into the proposed Senior Living Apartments.
- Noise from the existing sports club onto the proposed Senior Living Apartments/ RACF.
- Noise from surrounding commercial development impacting the proposed Senior Living Apartments/ RACF
- Noise emission from mechanical plant servicing the project site.

4 NOISE DESCRIPTORS

Traffic noise constantly varies in level, due to fluctuations in traffic speed, vehicle types, road conditions and traffic densities. Accordingly, it is not possible to accurately determine prevailing traffic noise conditions by measuring a single, instantaneous noise level. To accurately determine the effects of traffic noise a 15-20 minute measurement interval is utilised. Over this period, noise levels are monitored on a continuous basis and statistical and integrating techniques are used to determine noise description parameters. These parameters are used to measure how much annoyance would be caused by a particular noise source.

In the case of environmental noise, three principle measurement parameters are used, namely L_{10}, L_{90} and L_{eq}.

The L_{10} and L_{90} measurement parameters are statistical levels that represent the average maximum and average minimum noise levels respectively, over the measurement intervals.

The L_{10} parameter is commonly used to measure noise produced by a particular intrusive noise source since it represents the average of the loudest noise levels produced at the source.

Conversely, the L_{90} level (which is commonly referred to as the background noise level) represents the noise level heard in the quieter periods during a measurement interval. The L_{90} parameter is used to set the allowable noise level for new, potentially intrusive noise sources since the disturbance caused by the new source will depend on how audible it is above the pre-existing noise environment, particularly during quiet periods, as represented by the L_{90} level.

The L_{eq} parameter represents the average noise energy during a measurement period. This parameter is derived by integrating the noise levels measured over the measurement period. L_{eq} is important in the assessment of traffic noise impact as it closely corresponds with human perception of a changing noise environment; such is the character of traffic noise.

Current practice favours the L_{eq} parameter as a means of measuring traffic noise, whereas the L_{10} parameter has been used in the past and is still incorporated in some codes. For the reasons outlined above, the L_{90} parameter is not used to assess traffic noise intrusion.

L_1 describes the noise level exceeded for 1% of the measurement period.

5 EXTERNAL NOISE INTRUSION ASSESSMENT

The major external noise sources are traffic noise along neighbouring streets, noise from the operation of the existing commercial facilities adjacent to the project site and the proposed sports activities at project site.

5.1 EXTERNAL NOISE INTRUSION CRITERIA

5.1.1 To Seniors Living Apartments and RACF

External noise impacts on the proposed seniors living apartments and residential aged care facility (RACF) will be assessed against the requirements outlined in the Blacktown Council DCP, NSW Department of Planning's *Development Near Rail Corridors and Busy Roads (Interim Guideline)* and Australian Standard AS2107:2000.

5.1.1.1 Blacktown City Council DCP 2015

There are no specific noise intrusion requirements set within the Blacktown DCP 2015.

As such, traffic noise impacts on the seniors living apartments and RACF development will be assessed against the requirements of the NSW Department of Planning's *Development Near Rail Corridors and Busy Roads (Interim Guideline).*

5.1.1.2 NSW Department of Planning's 'Development Near Rail Corridors and Busy Roads (Interim Guideline)'

Section 3.5 of the NSW Department of Planning's 'Development Near Rail Corridors and Busy Roads (Interim Guideline)' states:

"The following provides an overall summary of the assessment procedure to meet the requirements of clauses 87 and 102 of the Infrastructure SEPP. The procedure covers noise at developments for both Road and Rail.

- *If the development is for the purpose of a building for residential use, the consent authority must be satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:*
    - *in any bedroom in the building: 35dB(A) at any time 10pm-7am*
    - *anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dB(A) at any time."*

5.1.1.3 Noise Intrusion Criteria for Other External Noise Sources

Noise impacts on the seniors living apartments and RACF development from the the existing and proposed sporting fields, mechanical noise from the sports club, and noise from the Thermal Mark Transport Refrigeration loading dock will be assessed against the requirements of Australian Standard AS2107:2000.

5.1.1.3.1 Australian Standard AS2107:2000

The internal noise criteria AS2107:2000 to be adopted for the seniors living apartments and RACF development with respect to the noise sources outlined in sections 5.2.2, 5.2.3 & 5.2.4 are presented in the table below. This internal noise criteria are to be achieved with windows closed.

Table 1 – AS2107 Acoustic Criteria (Development Near Minor Roads)

Room Type	Internal Noise Criteria
Bedroom	35 dB(A) $L_{eq,\ night}$
Living Areas	40 dB(A) $L_{eq,\ day}$

5.1.1.4 Summarised Internal Noise Criteria for Senior Living Apartments/RACF

The summarised internal noise criteria for the proposed senior living apartments and RACF are presented in the table below:

Table 2 – Summarised Internal Noise Criteria for Senior Living Apartments & RACF

Room Type	Time Period	Internal Noise Criteria
Bedroom	Night time (10pm-7am)	35 dB(A) $L_{eq\ (9\ hour)}$
Living Areas	Day time (7am-10pm)	40 dB(A) $L_{eq\ (15\ hour)}$

5.2 EXTERNAL NOISE SOURCE

5.2.1 Existing Traffic Noise Levels

The main source of traffic noise impacting the site is Reservoir Road to the immediate east of the site and Great Western Highway, located approximately 110m south of the site. Existing traffic noise levels from these roadways were determined by means of attended and unattended noise measurements.

5.2.1.1 Traffic Noise from Reservoir Road

5.2.1.1.1 Unattended Noise Measurements

The long term monitoring was conducted using an Acoustic Research Laboratories Pty Ltd noise logger. The logger was set to A-weighted fast response and was programmed to store 15-minute statistical noise levels throughout the monitoring period. The monitor was calibrated at the start and end of the monitoring period using a Rion NC-73 calibrator. No significant drift was noted.

The noise monitor was located approximately 9m from the Reservoir Road kerb and was on site from the 26th November to the 7th December 2015. Refer to Figure 1 for monitor location, and Appendix 1 for the associated noise data.

5.2.1.1.2 Attended Noise Measurements

Attended noise measurements were undertaken to compliment the long term traffic noise monitoring on the 7th December 2015 between 4:00pm and 5:00pm. Measurements were undertaken using a Norsonics Type 140 precision sound level analyser, set to A-weighted fast response. The precision sound level analyser was calibrated before and after the measurements using a Norsonics 1251 sound level calibrator. No significant drift was recorded. See figure 1 above for location.

5.2.1.1.3 Measurement Results

The measured/ predicted traffic noise levels for day/night periods from Reservoir Road are presented below.

Table 3 – Predicted External Noise Level (Traffic Noise along Reservoir Road)

Location	Time Period	Traffic Noise Level dB(A)
Eastern Façade of Roadside Dwellings (facing Reservoir Road)	Day (7am – 10pm)	66dB(A) $L_{Aeq(15\ hour)}$
	Night (10pm – 7am)	63dB(A) $L_{Aeq(9\ hour)}$

5.2.1.2 Traffic Noise from Great Western Highway

5.2.1.2.1 Unattended Noise Measurements

The long term monitoring of Great Western Highway has previously been conducted by this office at a nearby location using an Acoustic Research Laboratories Pty Ltd noise logger. The logger was set to A-weighted fast response and was programmed to store 15-minute statistical noise levels throughout the monitoring period. The monitor was calibrated at the start and end of the monitoring period using a Rion NC-73 calibrator. No significant drift was noted.

The noise monitor was located approximately 9m from the Reservoir Road kerb and was on site from the 7th to the 15th June 2012.

5.2.1.2.2 Attended Noise Measurements

Attended noise measurements were undertaken to compliment the long term traffic noise along the Great Western Highway monitoring on the 15th June 2012 between 7:00am and 8:00am. Measurements were undertaken using a Norsonics Type 140 precision sound level analyser, set to A-weighted fast response. The precision sound level analyser was calibrated before and after the measurements using a Norsonics 1251 sound level calibrator. No significant drift was recorded. See figure 1 above for location.

5.2.1.2.3 Measurement Results

The measured/ predicted traffic noise levels for day/night periods from Great Western Highway are presented below.

Table 4 – Predicted External Noise Level (Traffic Noise Along Great Western Highway)

Location	Time Period	Traffic Noise Level dB(A)
Upper Levels of Southern Façade of Southern Towers (facing Great Western Highway)	Day (7am – 10pm)	63dB(A) $L_{Aeq(15\ hour)}$
	Night (10pm – 7am)	60dB(A) $L_{Aeq(9\ hour)}$

5.2.2 Surrounding Commercial/Industrial Noise Measurements

Industrial noise sources surrounding the site are as follows:

- Loading/maintenance dock of the Thermal Mark Transport Refrigeration located near the south-western boundary of the site;
- Mechanical plant noise from the existing sports club located to the north of the proposed senior living apartments.

The measured results for the above sources are:

- Loading/maintenance dock of the Thermal Mark Transport Refrigeration: noise measurements were carried out between 3:30pm and 4:30pm on the 7th December 2015. Noise generated by operation of one semi-trailer type Thermal Mark Transport Refrigeration at the loading dock at the south western boundary of the site was recorded. The typical noise level 62dB(A)L_{eq} at proposed western façade of worst affected residential tower when refrigeration unit is operating in loading dock.
- Mechanical plant noise from existing sports club: Noise measurements were carried out on the 7th December 2015 between 3:30pm and 4:30pm of mechanical noise levels from the exisintg sports club to the north of the proposed senior living apartments. The measured noise levels 52dB(A)L_{eq} at proposed northern façade of worst affected residential tower.

5.2.3 Heavy Vehicle Movements along Penny Place

Due to the commercial development to the south of the site, there are regular heavy vehicle movements along Penny Place (to the immediate south of the site). Noise impacts on the senior living apartments and RACF from heavy vehicle movements along Penny Place will be predicted using the following assumptions:

- Sound power level of 105dB(A)L_{eq} for a semi-trailer truck (based on measurements conducted by this office);
- Truck travelling along Penny Place at a speed of 10km/hr;
- 8 semi-trailer truck movements along Penny Place during peak hour use.

Based on these assumptions, predicted noise impacts on the proposed senior living apartments and RACF are presented in the table below. The predicted noise level factors in losses due to distance attenuation.

Table 5 – Predicted Noise Level from Truck Movements along Penny Place

Noise Source	Worst Noise Impacted Location	Predicted Noise Level
Semi-trailer Truck at 10km/hr	Southern Façade of Southern Residential Towers	59dB(A)L_{eq}

5.2.4 Noise Impacts from Sporting Fields

This office has been advised that the sports activities that will have the potential to generate the most noise (due to spectator numbers) are baseball, soccer and rugby.

In addition, this office has been advised that the general operating hours of the sporting fields are 7am to 10pm Mondays to Fridays and 7am to 7pm on Saturdays and Sundays.

There are two proposed new grandstands for the proposed sporting fields (refer to figure 1). Each grandstand will have a capacity of 350 spectators, and so the combined spectator capacity of the grandstands will be 700 spectators.

In addition, this office has been advised that the baseball field can have up to 200 spectators.

5.2.4.1 Spectator Noise Measurements

Noise measurements were conducted by this office of spectator noise during a baseball game at the site. Measurements were conducted on the 12th December 2015 between 9am and 11am using a Norsonics Type 140 precision sound level analyser, set to A-weighted fast response. The precision sound level analyser was calibrated before and after the measurements using a Norsonics 1251 sound level calibrator. No significant drift was recorded.

The measured spectator noise level is presented below. The measurement was conducted over a 15 minute period with active, consistent cheering from the spectators throughout the measurement.

Table 6 – Measured Spectator Noise Level

Noise Source	Measured Noise Level
8 Spectators Measured at 8m Distance	68dB(A)$L_{eq\ (15min)}$

5.2.4.2 Predicted Spectator Noise Level from Sport Fields

Using the measured spectator noise levels presented in table 6 and assuming that both grandstands are filled to capacity (350 spectators in each grandstand) and 200 spectators at the baseball field, noise impacts on the senior living apartments and RACF from the sports fields can be predicted.

The predicted noise level from the sports fields (assuming all are operating at capacity) at the nearest residential tower is presented in the table below. The predicted noise level factors in losses due to distance attenuation.

Table 7 – Predicted Noise Level from Sports Fields

Noise Source	Assessment Location	Predicted Noise Level
Spectator Noise from Sporting Field Grandstands and Baseball Field	North-Western Most Residential Tower	60dB(A)L_{eq}

5.3 ANALYSIS

External noise impacts on the proposed senior living apartments/RACF from the noise sources outlined in section 5.2 can be adequately controlled to ensure compliance with the internal noise criteria presented in section 5.1.

The internal noise criteria can be achieved through acoustic design of the external façade; namely glazing and external wall and roof/ceiling construction.

The façade treatments required to achieve the internal noise levels of section 5.1 will be addressed at DA stage.

6 EXTERNAL NOISE EMISSION ASSESSMENT

This section of the report will address noise impacts from the proposed development to all surrounding existing development within the site and to surrounding development outside of the site. The main noise generating activities to be addressed are:

- Noise from mechanical plant servicing the entire development.

6.1 NOISE EMISSION CRITERIA

Noise emission criteria for the development will be based on the following documents

- The EPA Industrial Noise Policy
- The Protection of the Environment Operations Regulation Act 2000;

6.1.1 Background Noise Monitoring

Measured background noise levels are presented below. Refer to Appendix 1 for noise logging data.

Table 8 – Measured Background Noise Levels

Location	Period/Time	Background Noise Level dB(A) L_{90}
170 Reservoir Road, Blacktown (along Reservoir Road)	Day (7am-6pm)	53
	Evening(6pm-10pm)	50
	Night(10pm-7am)	43
170 Reservoir Road, Blacktown (middle of site)	Day (7am-6pm)	44
	Evening(6pm-10pm)	42
	Night(10pm-7am)	40

6.1.2 Requirements by NSW EPA Industrial Noise Policy

The EPA Industrial Noise Policy has two criteria which need to be satisfied namely Intrusiveness and Amenity. These are described below:

- *Intrusiveness Criteria* - This guideline is intended to limit the audibility of noise emissions at residential receivers and requires that noise emissions measured using the L_{eq} descriptor not exceed the background noise level by more than 5 dB(A). Where applicable, the intrusive noise level should be penalised (increased) to account for any annoying characteristics such as tonality.

- *Amenity Criteria* - This guideline is intended to limit the absolute noise level from all "industrial" noise sources such as mechanical plant to a level that is consistent with the general environment.

The EPA's Industrial Noise Policy sets out acceptable noise levels for various localities. Table 2.1 on page 16 of the policy indicates 4 categories to distinguish different residential areas. They are rural, suburban, urban and urban/industrial interface.

Noise levels are to be assessed at the property boundary or nearby dwelling, or at the balcony or façade of an apartment.

6.1.2.1 Intrusiveness Criterion

The guideline is intended to limit the audibility of noise emissions at residential receivers and requires that noise emissions measured using the L_{eq} descriptor do not exceed the background noise level by more than 5dB(A). Where applicable, the intrusive noise level should be penalised (increased) to account for any annoying characteristics such as tonality.

Background noise levels adopted are presented in Section 6.1.1. Noise emissions from the site should comply with the noise levels presented below when measured at nearby property boundary.

Table 9 – Intrusiveness Noise Emission Criteria

Location	Period/Time	Background Noise Level dB(A) L_{90}	Intrusiveness Noise Emission Goal dB(A) $L_{eq(15min)}$ Background + 5dB
Property Boundary of Residential Receivers along Reservoir Rd	Day (7am-6pm)	53	58
	Evening(6pm-10pm)	50	55
	Night(10pm-7am)	43	48
Property Boundary of Senior Living Apartments/ RACF	Day (7am-6pm)	44	49
	Evening(6pm-10pm)	42	47
	Night(10pm-7am)	40	45

6.1.2.2 Amenity Criterion

The guideline is intended to limit the absolute noise level from all noise sources to a level that is consistent with the general environment.

The EPA Industrial noise policy sets out acceptable noise levels for various localities. Table 2.1 on page 16 of the policy indicates 4 categories to distinguish different residential areas. They are rural, suburban, urban and urban/industrial interface. This site is categorised by surrounding receivers as urban.

For the purposes of this condition:

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;
- Evening is defined as the period from 6pm to 10pm.
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and public holidays.

Table 10 - Amenity Noise Emission Goals

Location	Period/Time	Amenity Noise Emission Goal dB(A) $L_{eq(Period)}$
Nearby Residences – Suburban	Day (7am-6pm)	55
	Evening(6pm-10pm)	45
	Night(10pm-7am)	40

6.1.3 Residential Air Conditioning Condenser Noise (Protection of the Environmental Operation Act Regulation 2000)

Protection of the Environmental Operations regulation limits the noise levels associated within the operation of domestic air conditioning criteria during night time periods which is presented below:

Protection of the Environmental Operations (Noise Control) Regulation 2000-Sect 52

52 Air Conditioners

(1) A person must not cause or permit an air conditioner to be used on residential premises in such a manner that it emits noise that can be heard within a habitable room in any other residential premises (regardless of whether any door or window to that room is open):

(a) before 8 am or after 10 pm on any Saturday, Sunday or public holiday, or
(b) before 7 am or after 10 pm on any other day.

6.1.4 Summarised Noise Emission Criteria

The summarised noise emission criteria are presented in the tables below.

Table 11 – INP Intrusiveness Noise Emission Criteria

Location	**Period/Time**	**Background Noise Level dB(A) L_{90}**	**Intrusiveness Noise Emission Goal dB(A) $L_{eq(15min)}$ Background + 5dB**
Property Boundary of Residential Receivers along Reservoir Rd	Day (7am-6pm)	53	58
	Evening(6pm-10pm)	50	55
	Night(10pm-7am)	43	48
Property Boundary of Senior Living Apartments/ RACF	Day (7am-6pm)	44	49
	Evening(6pm-10pm)	42	47
	Night(10pm-7am)	40	45

Table 12 - INP Amenity Noise Emission Goals

Location	Period/Time	Amenity Noise Emission Goal dB(A) $L_{eq(Period)}$
Nearby Residences – Suburban	Day (7am-6pm)	55
	Evening(6pm-10pm)	45
	Night(10pm-7am)	40

In addition, residential air-conditioning condenser units are to be inaudible during the following times as per the requirements of the Protection of the Environmental Operations (Noise Control) Regulation 2000-Sect 52:

(a) before 8 am or after 10 pm on any Saturday, Sunday or public holiday, or
(b) before 7 am or after 10 pm on any other day.

6.2 ASSESSMENT OF NOISE EMISSIONS

The major noise emission sources are mechanical plant servicing the entire development. Details are below.

6.2.1 Mechanical Plant

A detailed design for the services plant is not available at this stage. Noise emissions from all services plant to any adjacent properties should be designed to comply with the requirements outlined in sections 6.1.2.1 and 6.1.2.2.

6.3 NOISE EMISSION ANALYSIS

Noise emission from the project site indicates:

- Plant noise emission can be acoustically designed to comply with the criteria in Section 6.1.2.1 & 6.1.2.2. Detailed design will be determined at CC stage.

7 CONCLUSION

A noise assessment has been carried out for the senior living apartments and residential aged care facility for the Site Compatibility Certificate of the Blacktown Workers Sports Club at 170 Reservoir Road, Blacktown. The findings are below:

- External noise impacts on the proposed Senior Living Apartments/ RACF can be adequately controlled satisfy the internal noise requirements of the Department of Planning's *Development Near Rail Corridors and Busy Roads (Interim Guideline)* and Australian Standard AS2107:2000, as outlined in section 5.1. Detailed acoustic treatments will be determined at DA stage.

- Noise emission criteria for the proposed Senior Living Apartments/ RACF have been established in section 6.1 based on the requirements of the NSW EPA Industrial Noise Policy and the Protection of the Environment Operations Regulation Act 2000 (to address primarily mechanical plant noise).

Noise emissions from mechanical plant servicing the Senior Living Apartments/ RACF can be adequately controlled to ensure compliance with the criteria in section 6.1. This should be addressed during CC stage.

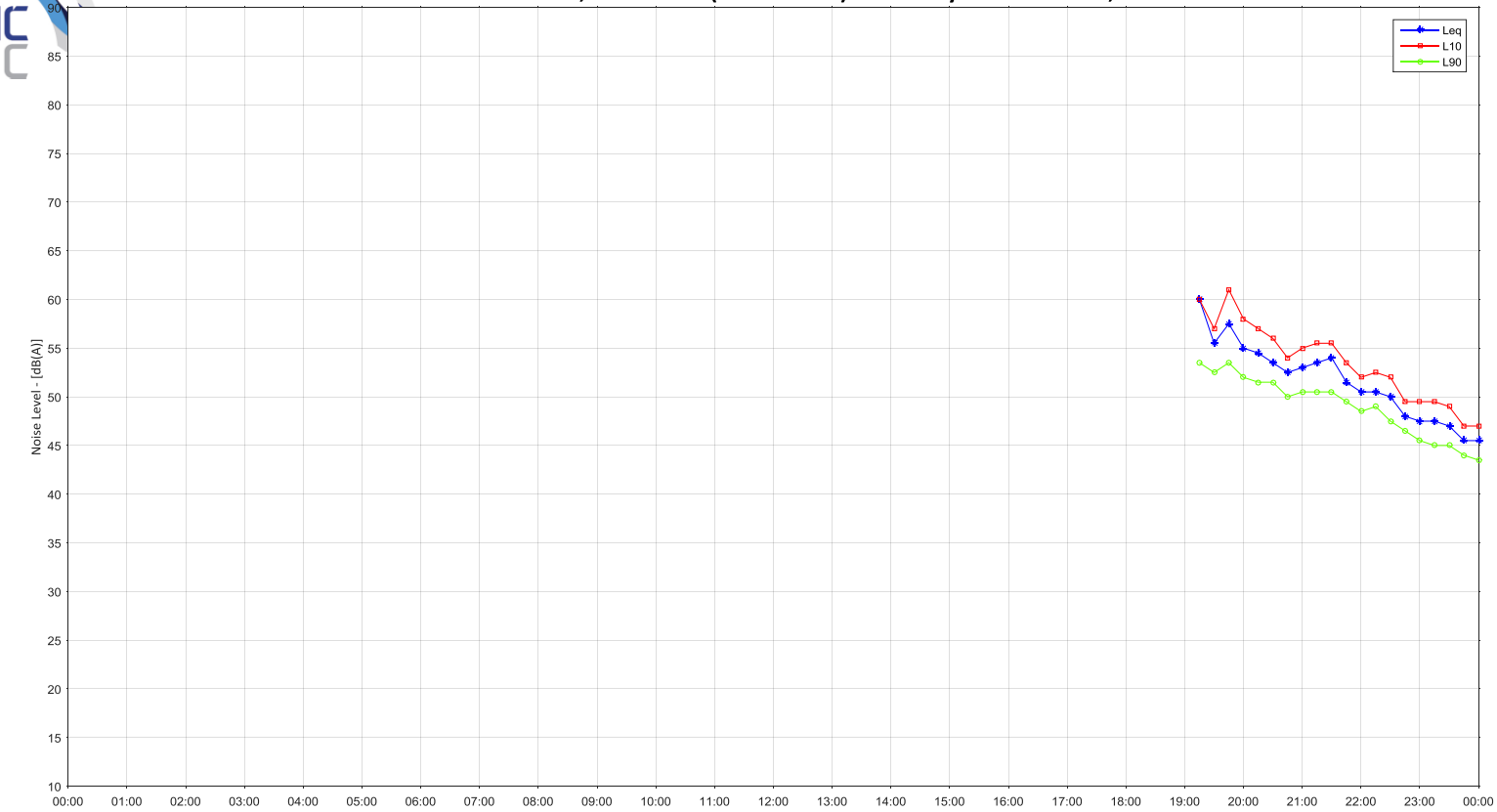
We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,

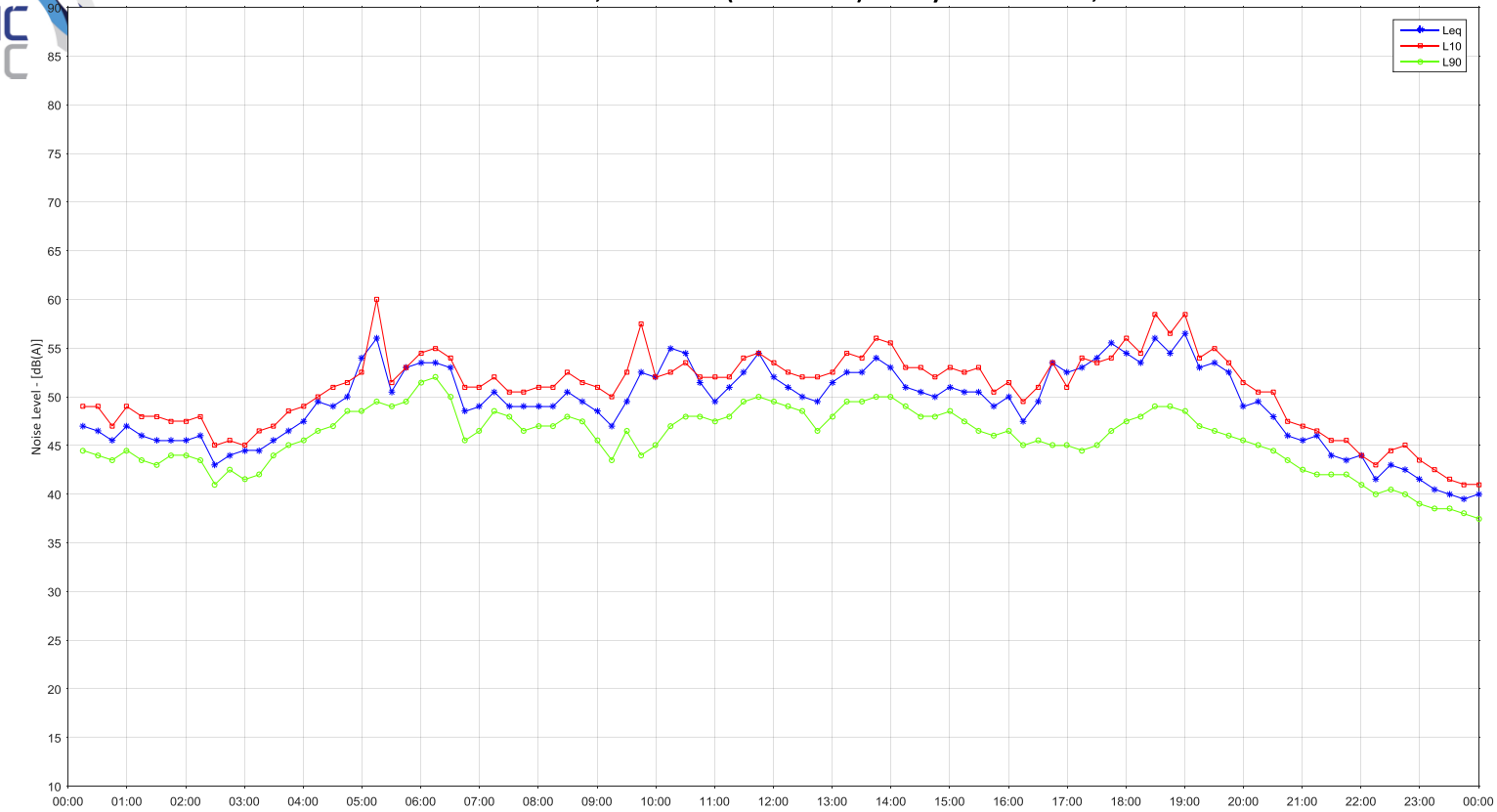
Acoustic Logic Consultancy Pty Ltd
Justin Leong

APPENDIX 1 – UNATTENDED NOISE MONITORING DATA

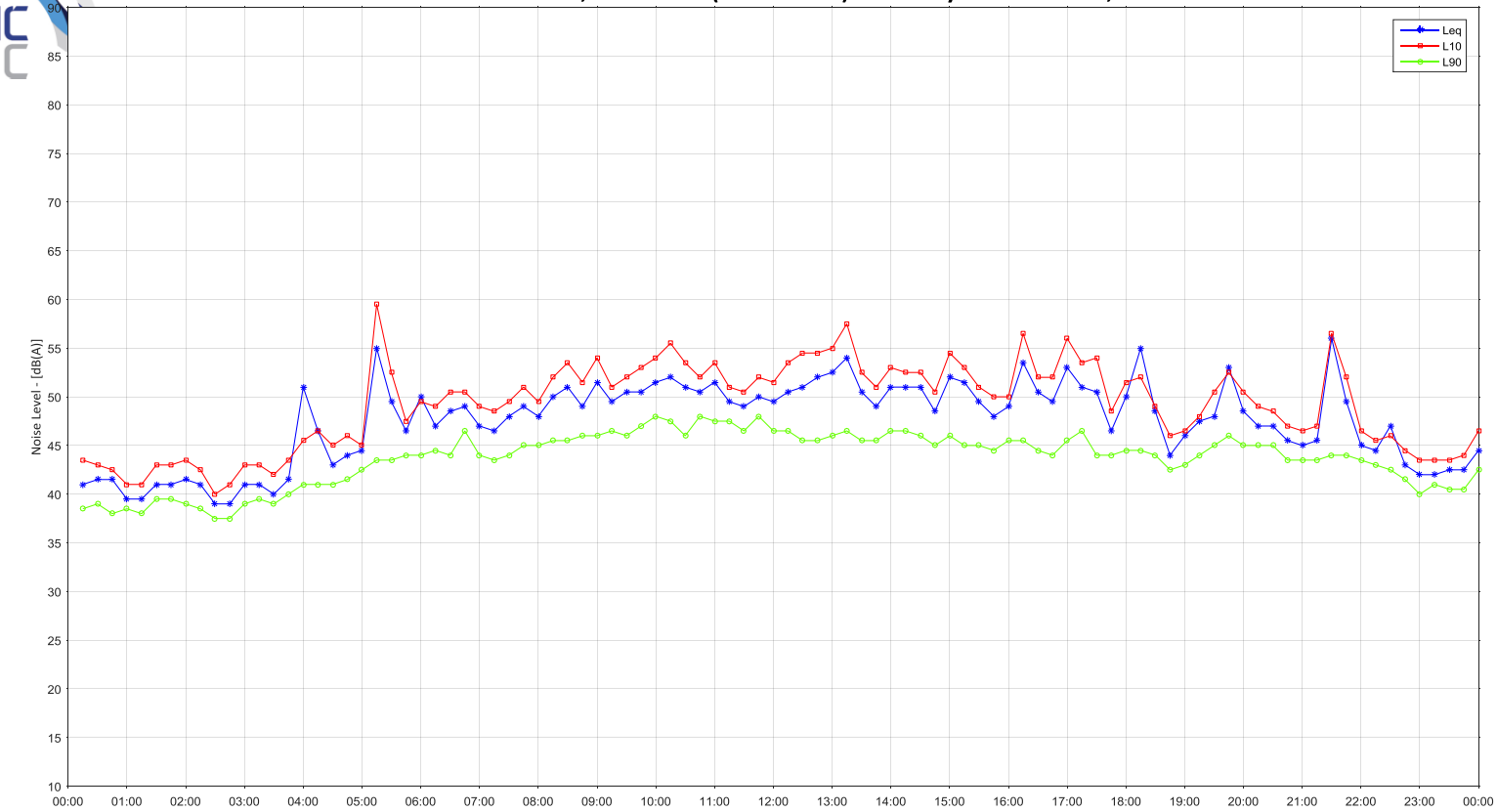
170 Reservoir Road, Blacktown (Rear of Site): Thursday 26 November, 2015



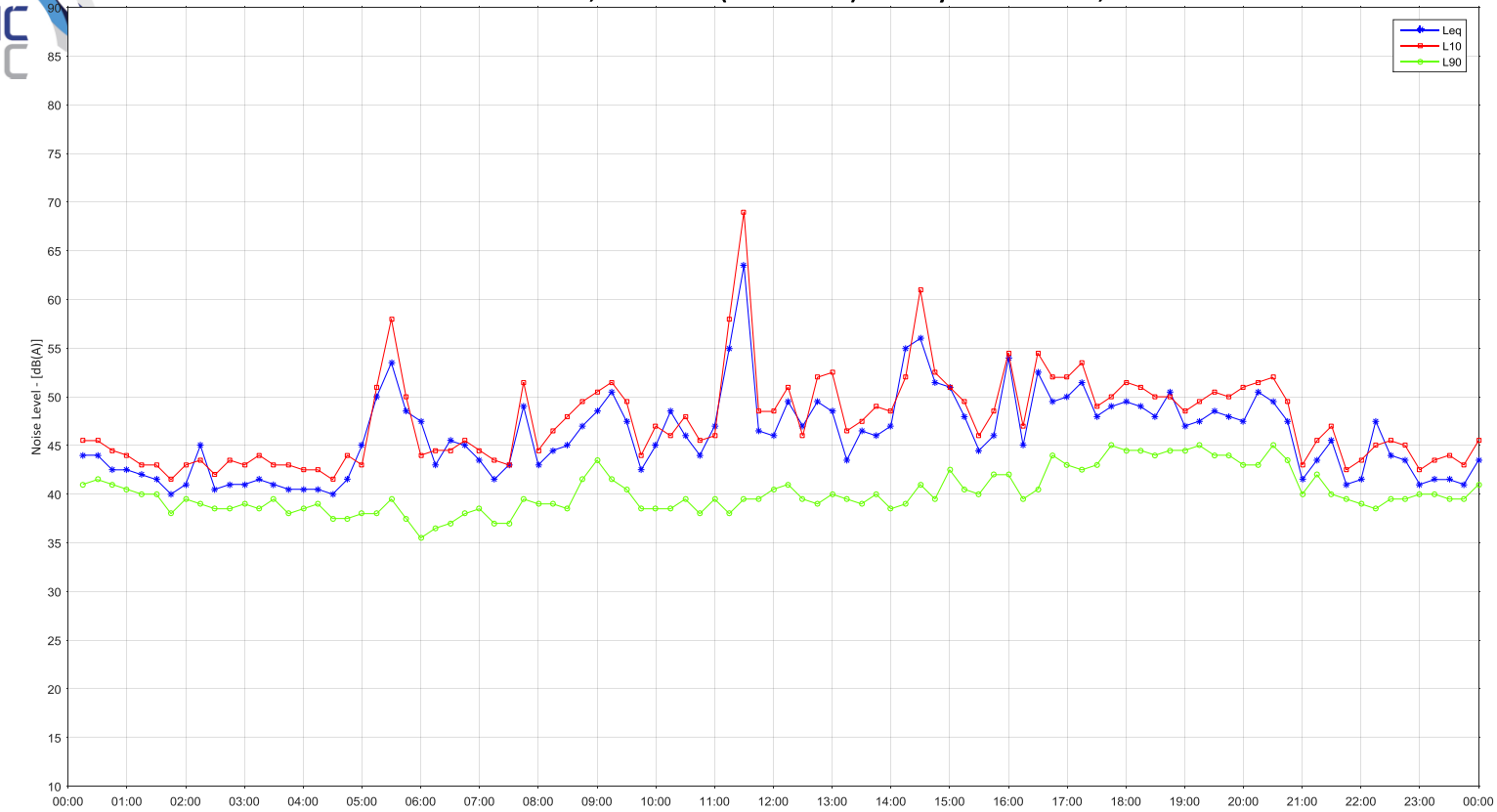
170 Reservoir Road, Blacktown (Rear of Site): Friday 27 November, 2015



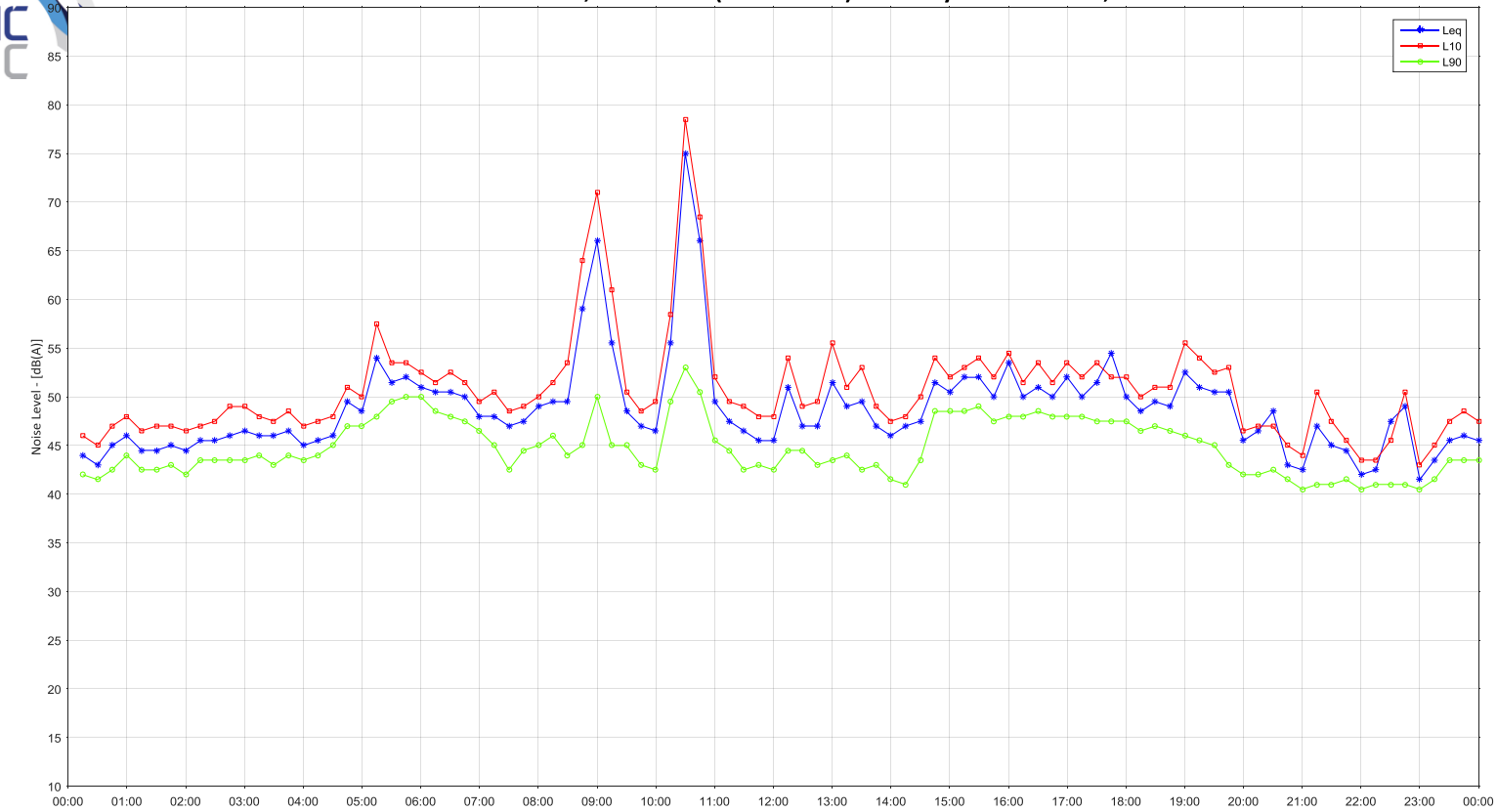
170 Reservoir Road, Blacktown (Rear of Site): Saturday 28 November, 2015



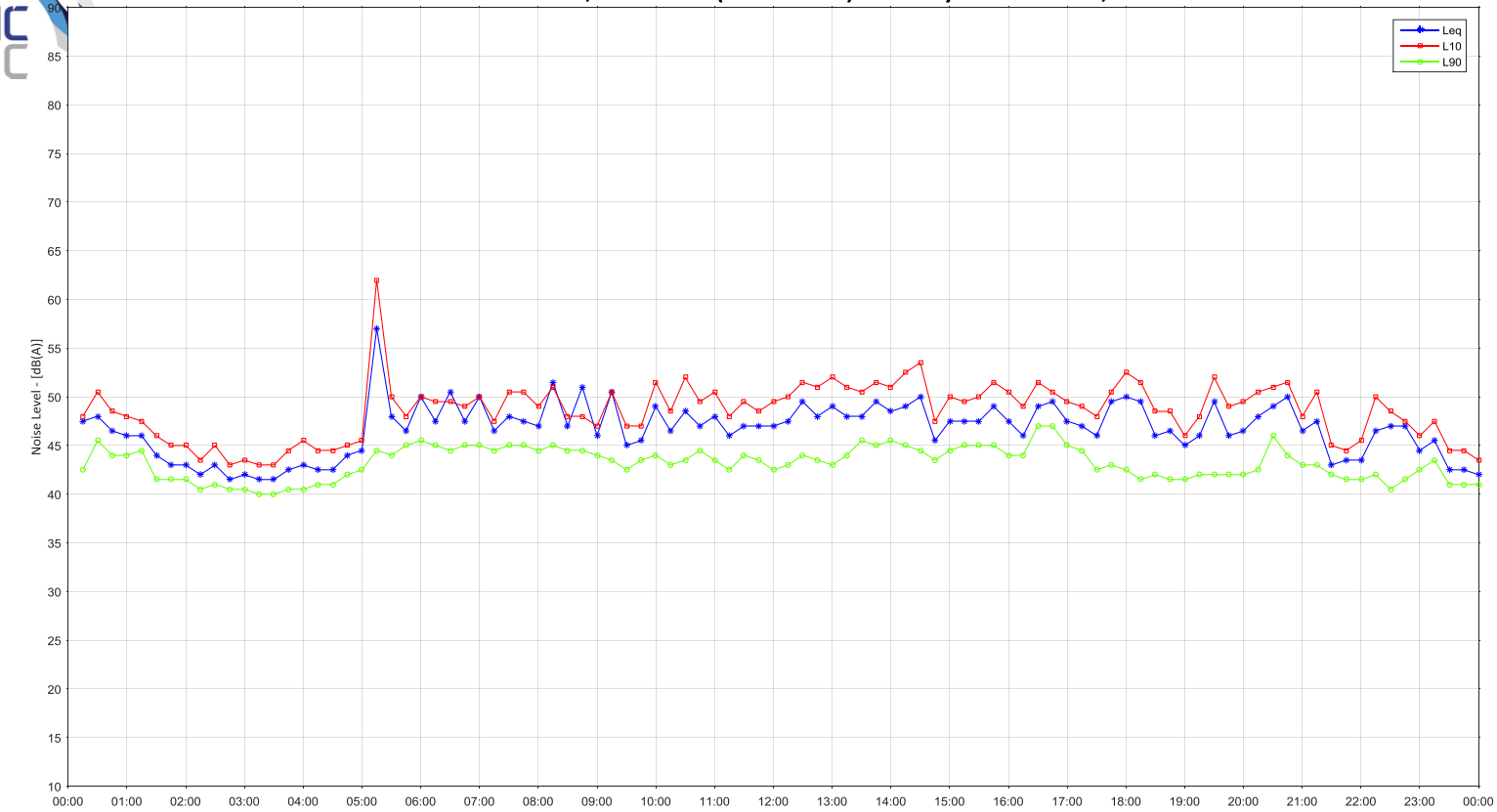
170 Reservoir Road, Blacktown (Rear of Site): Sunday 29 November, 2015



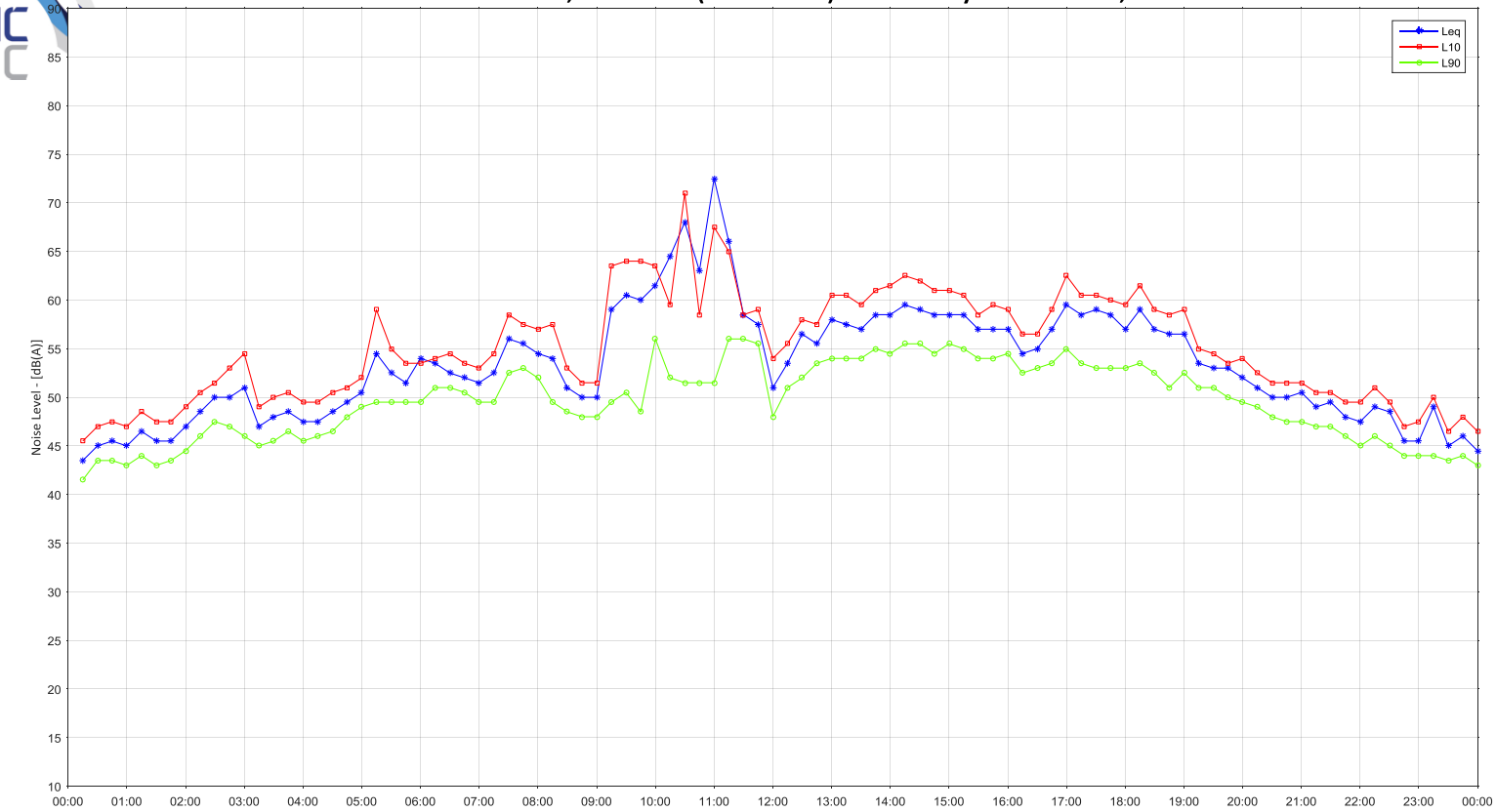
170 Reservoir Road, Blacktown (Rear of Site): Monday 30 November, 2015



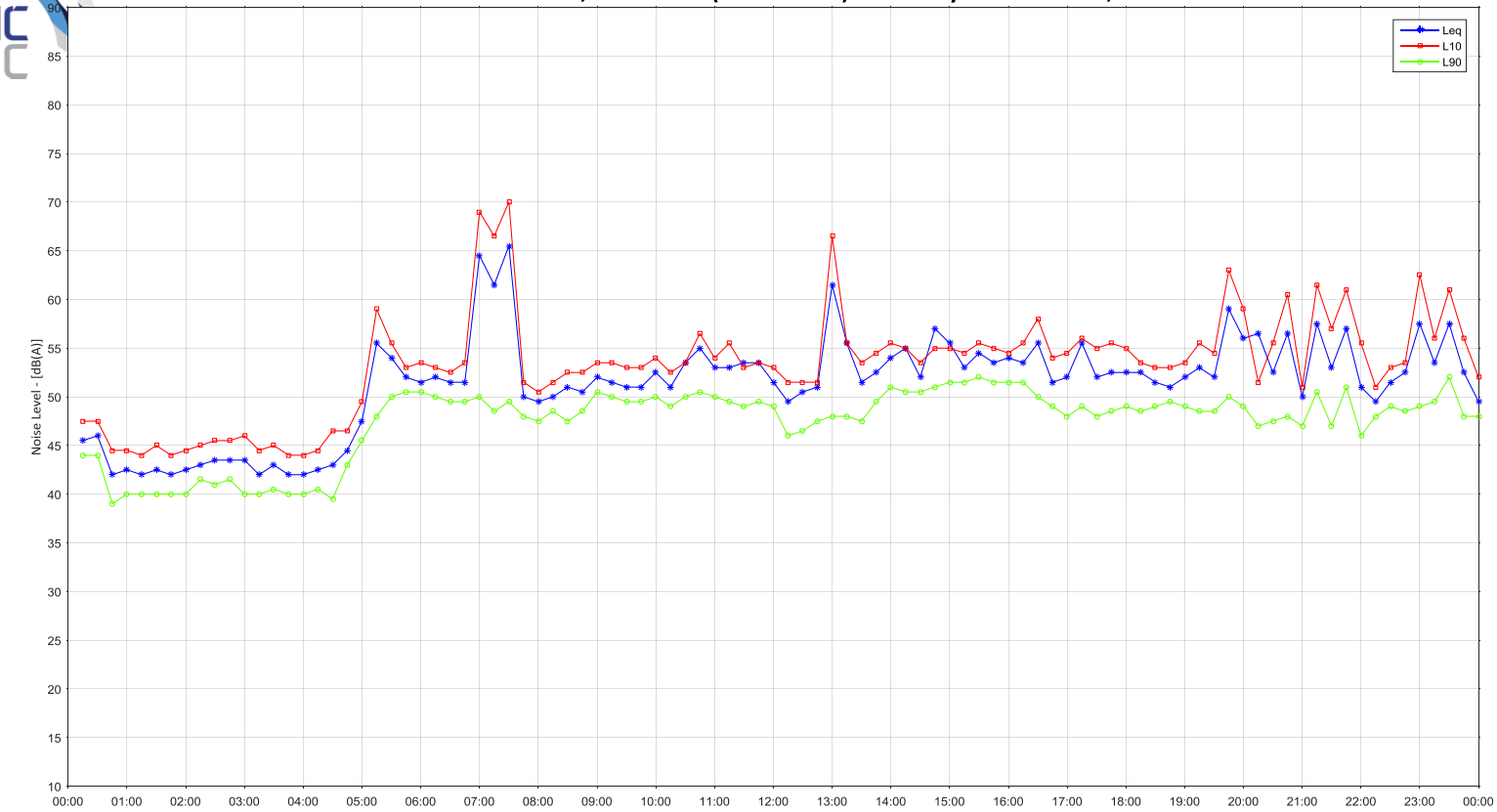
170 Reservoir Road, Blacktown (Rear of Site): Tuesday 01 December, 2015



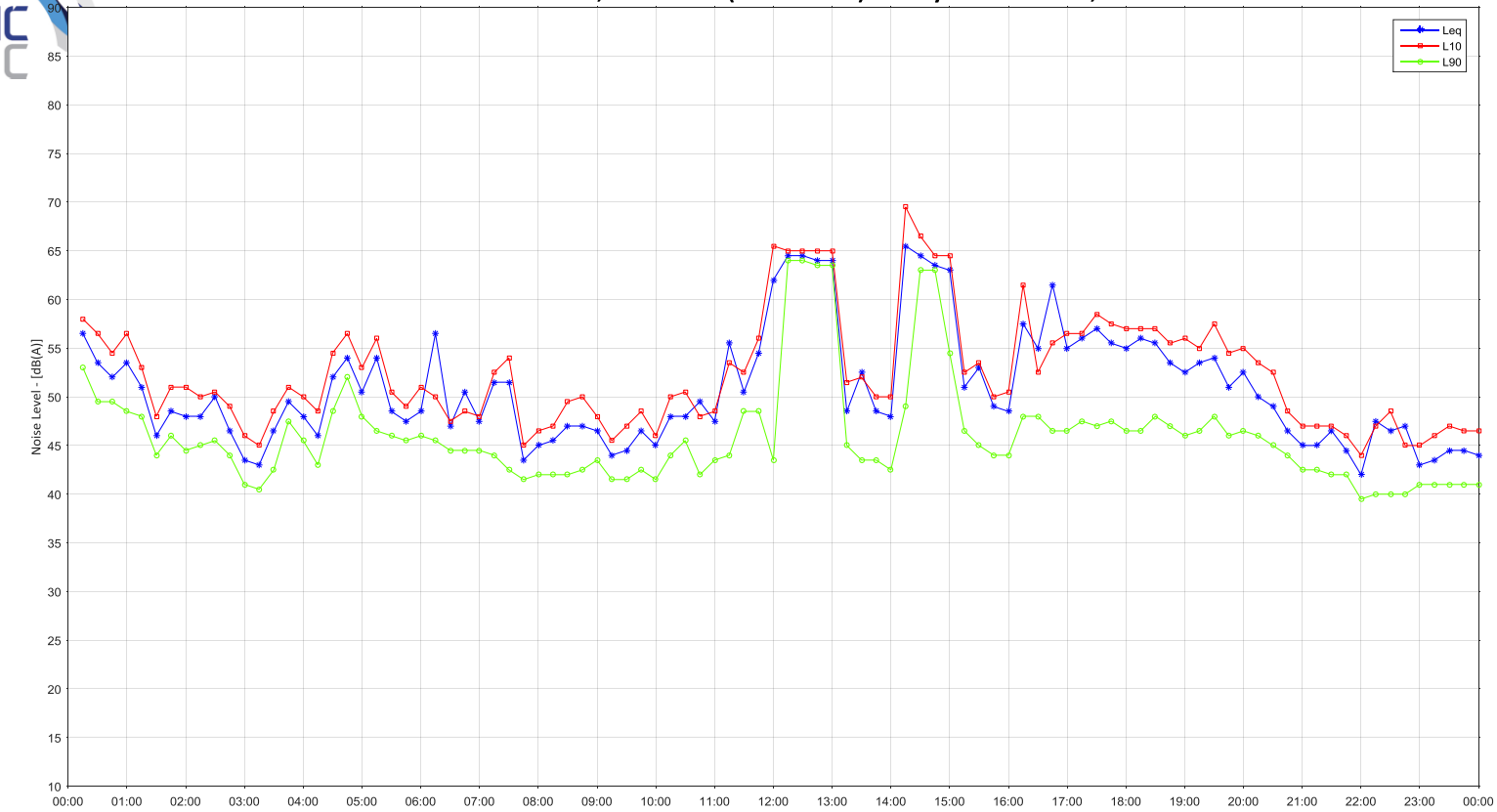
170 Reservoir Road, Blacktown (Rear of Site): Wednesday 02 December, 2015



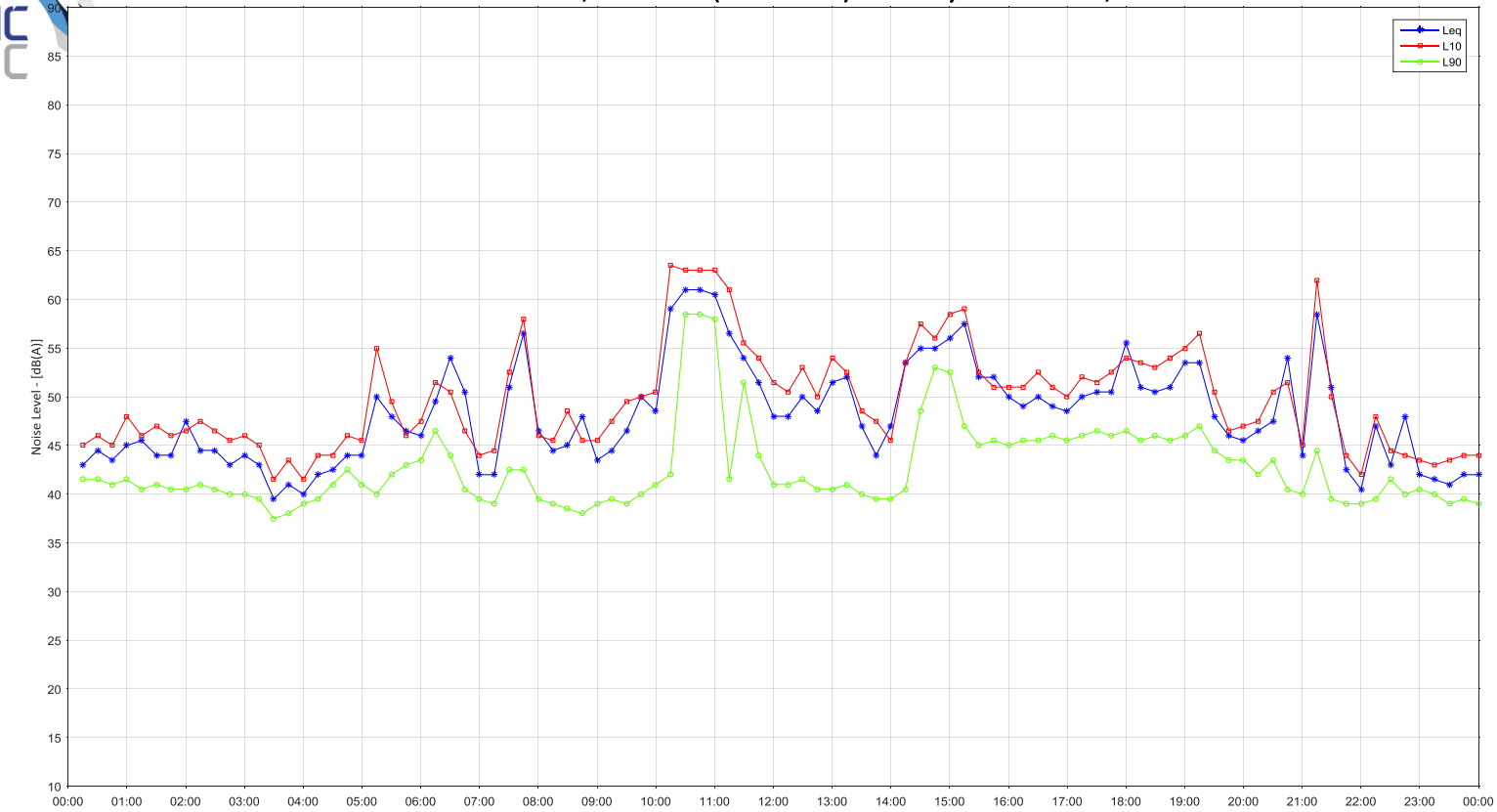
170 Reservoir Road, Blacktown (Rear of Site): Thursday 03 December, 2015



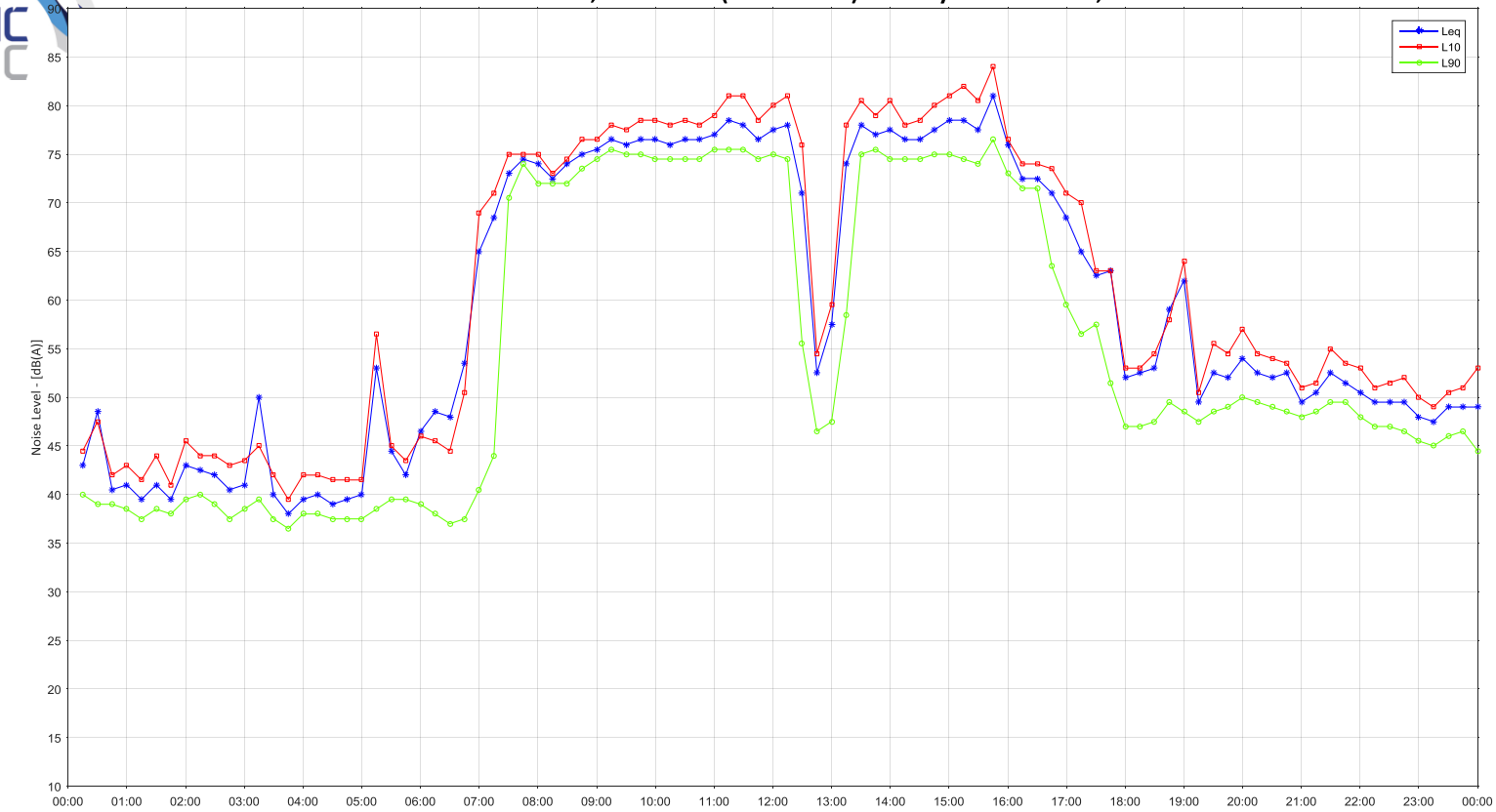
170 Reservoir Road, Blacktown (Rear of Site): Friday 04 December, 2015

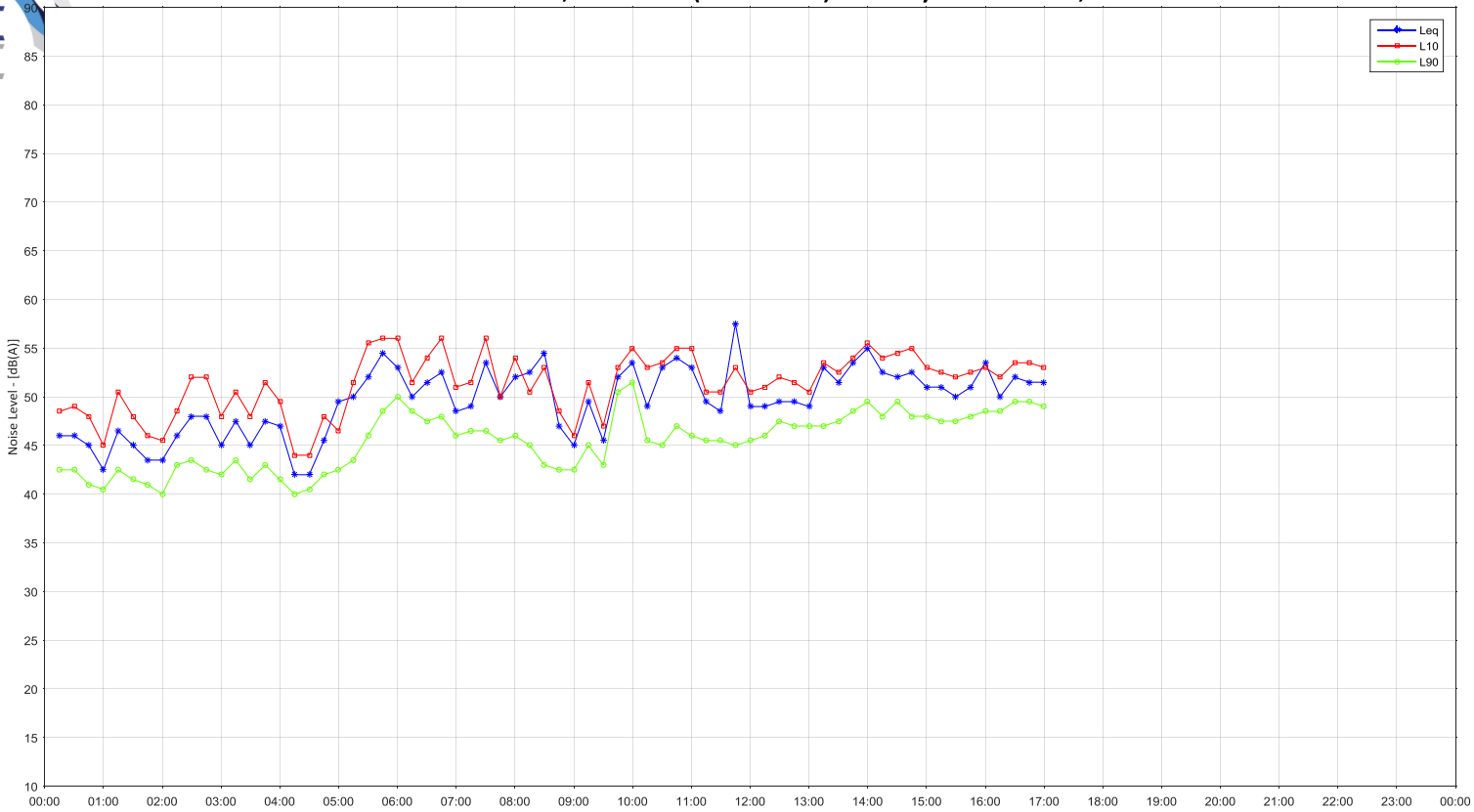


170 Reservoir Road, Blacktown (Rear of Site): Saturday 05 December, 2015



170 Reservoir Road, Blacktown (Rear of Site): Sunday 06 December, 2015




170 Reservoir Road, Blacktown (Rear of Site): Monday 07 December, 2015
Noise Level - [dB(A)]
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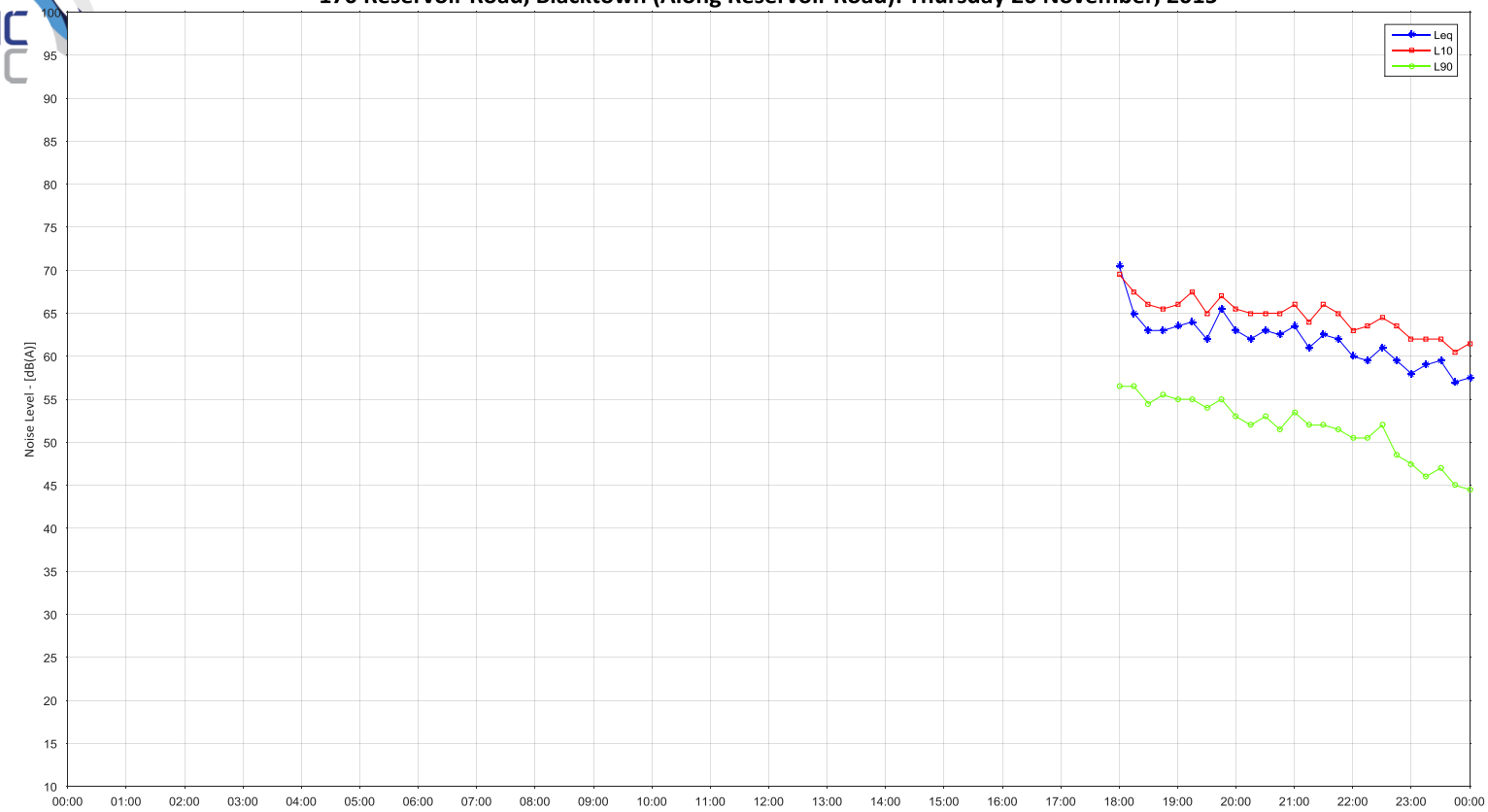
170 Reservoir Road, Blacktown (Along Reservoir Road): Thursday 26 November, 2015
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Noise Level - [dB(A)]
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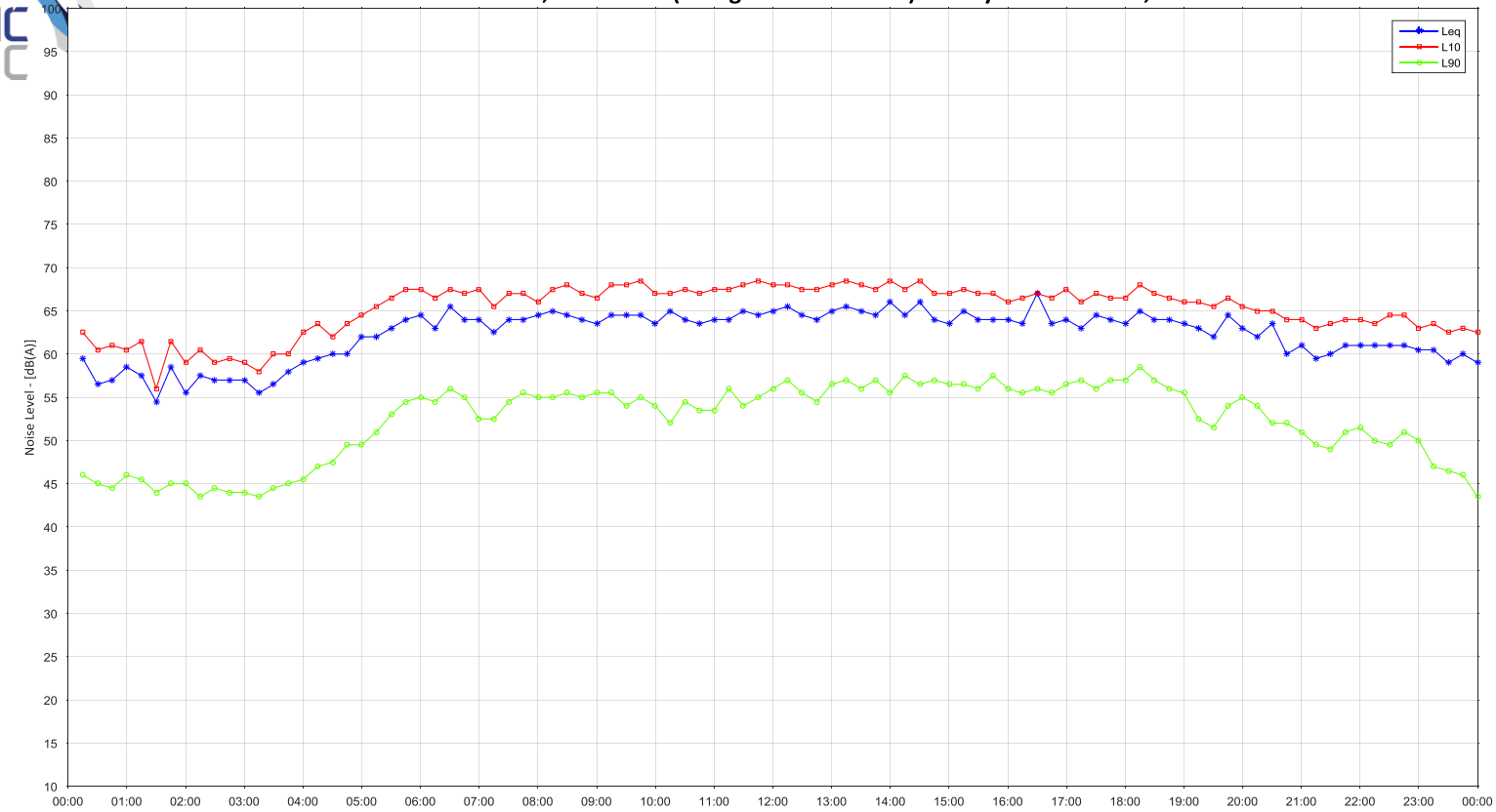
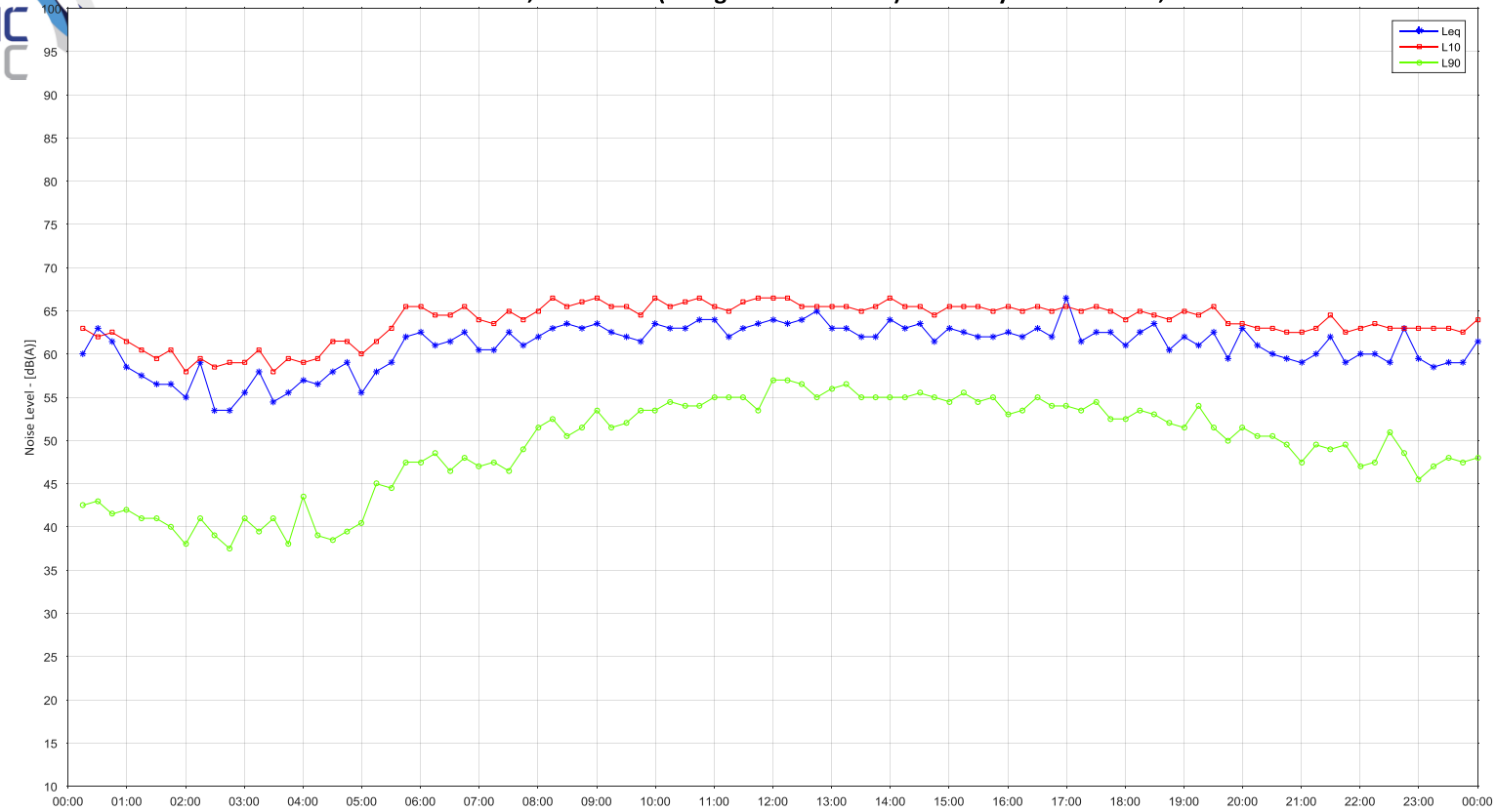
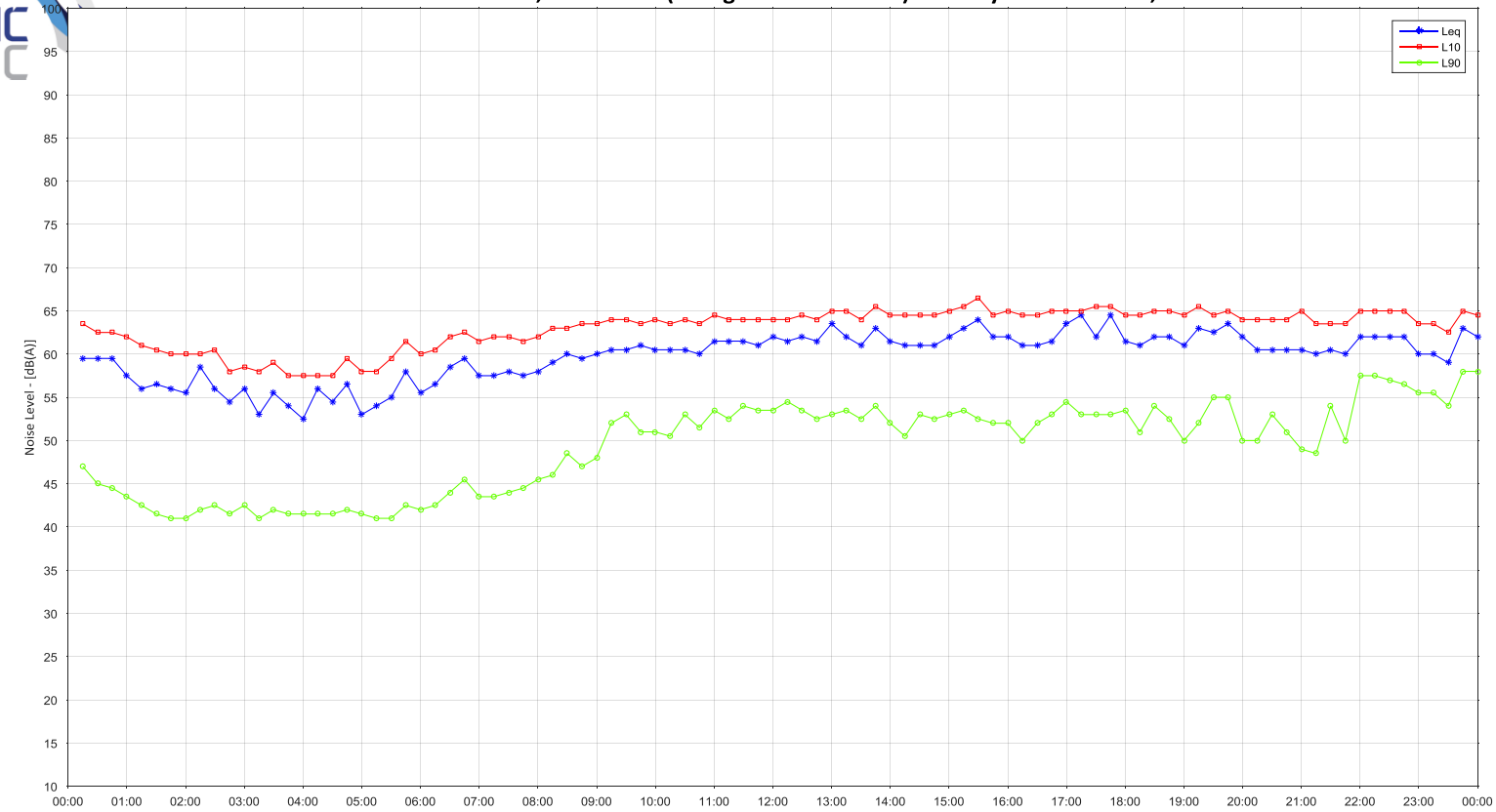
170 Reservoir Road, Blacktown (Along Reservoir Road): Friday 27 November, 2015



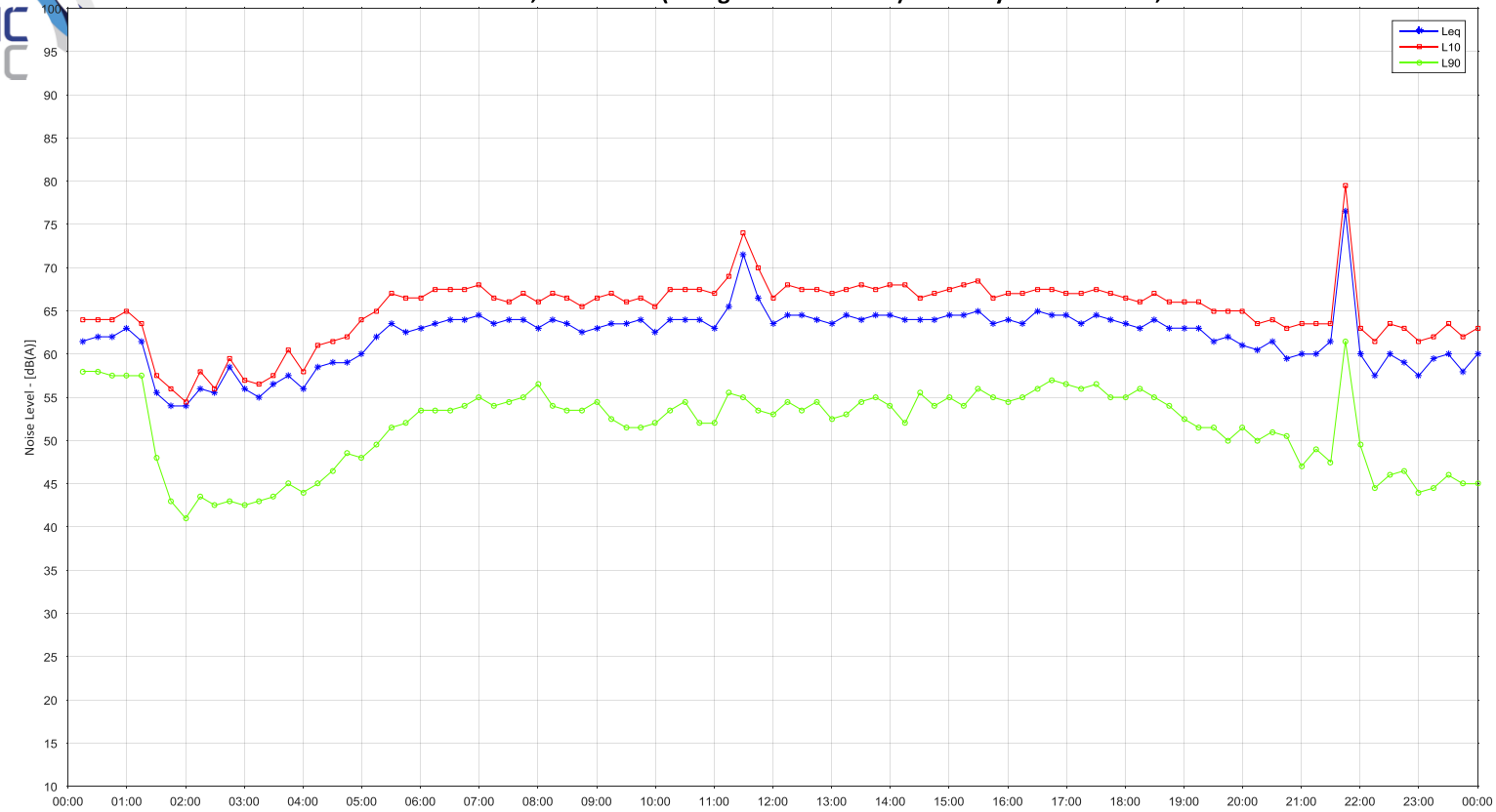
170 Reservoir Road, Blacktown (Along Reservoir Road): Saturday 28 November, 2015



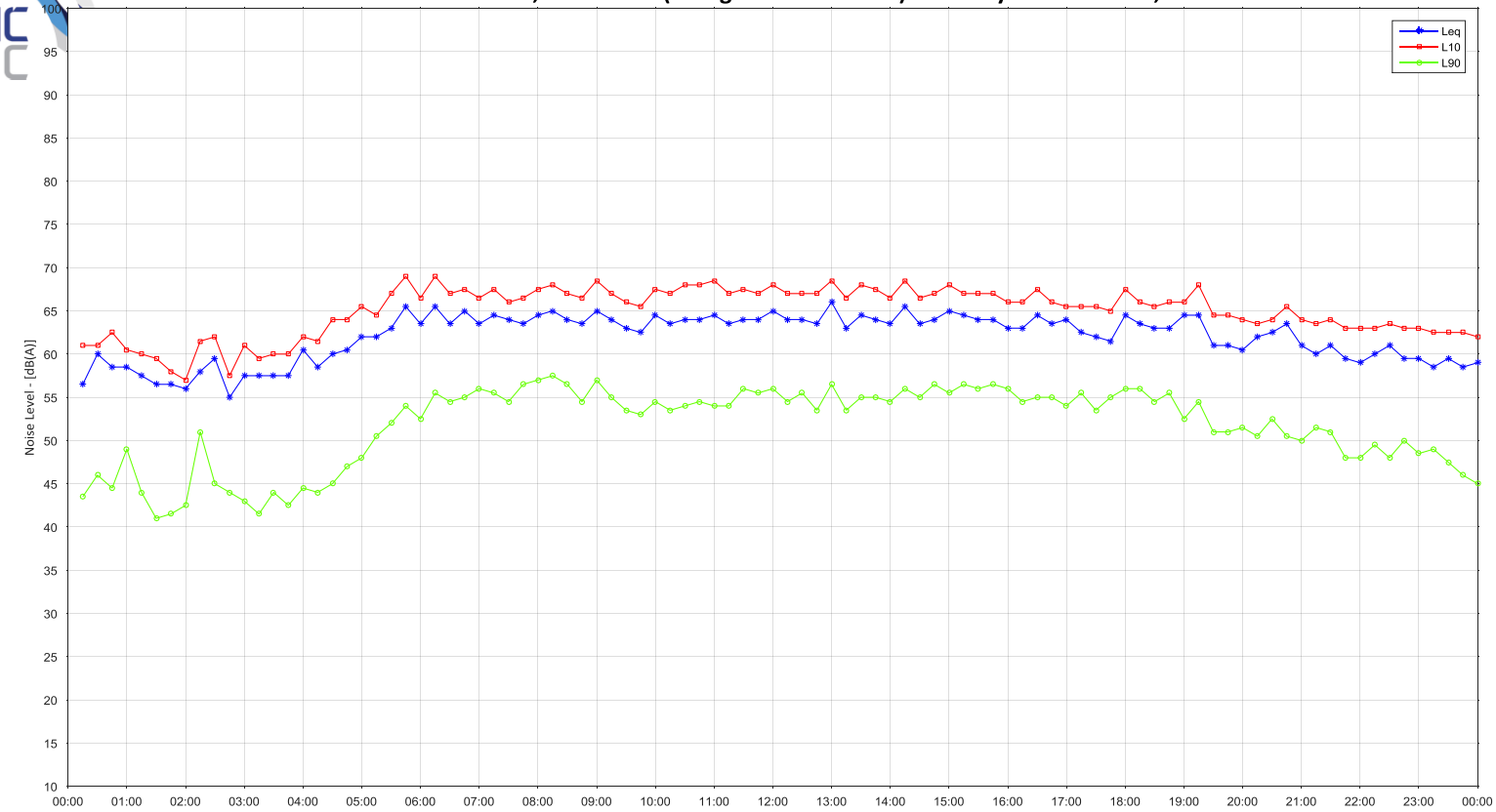
170 Reservoir Road, Blacktown (Along Reservoir Road): Sunday 29 November, 2015



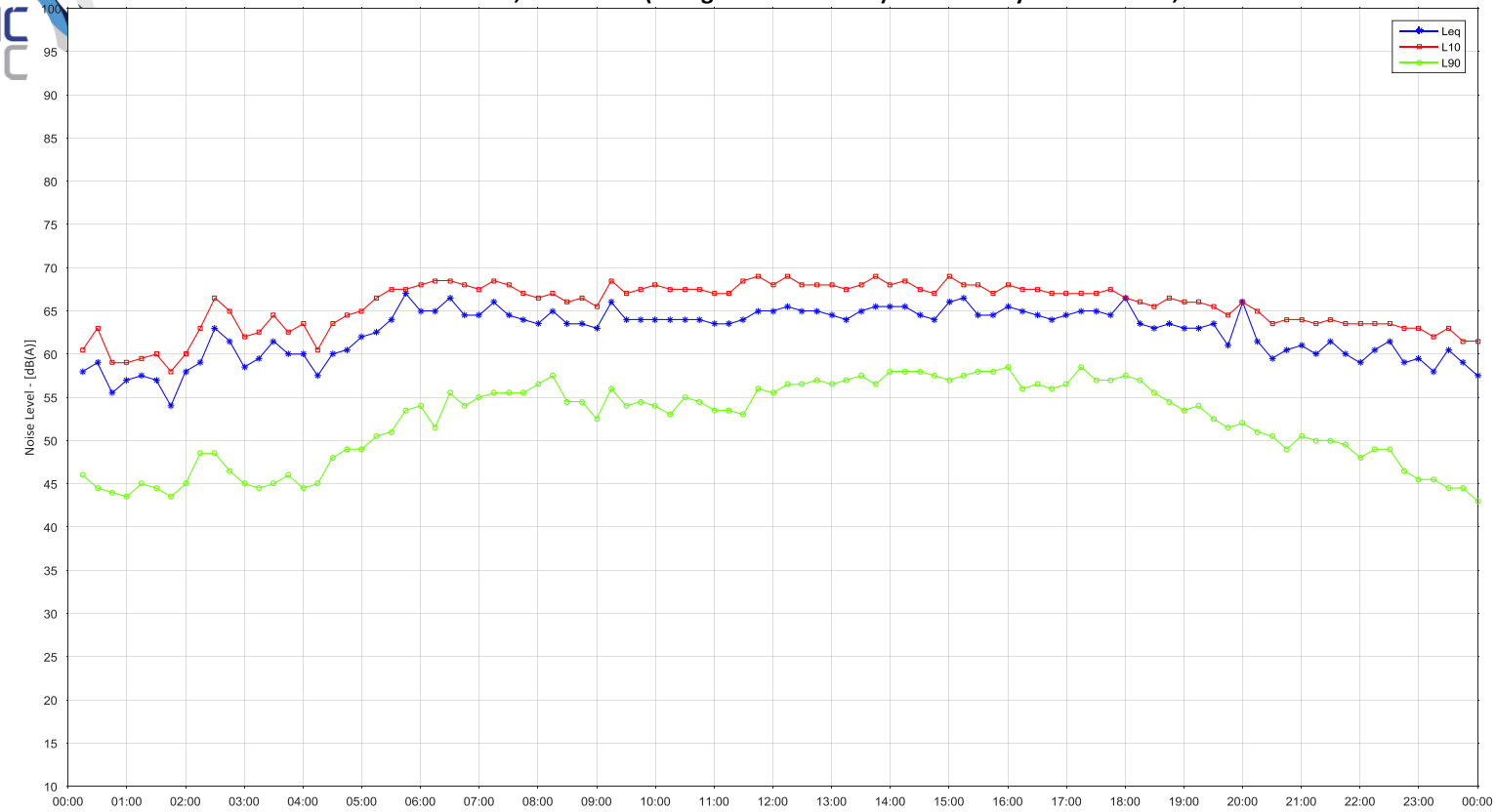
170 Reservoir Road, Blacktown (Along Reservoir Road): Monday 30 November, 2015



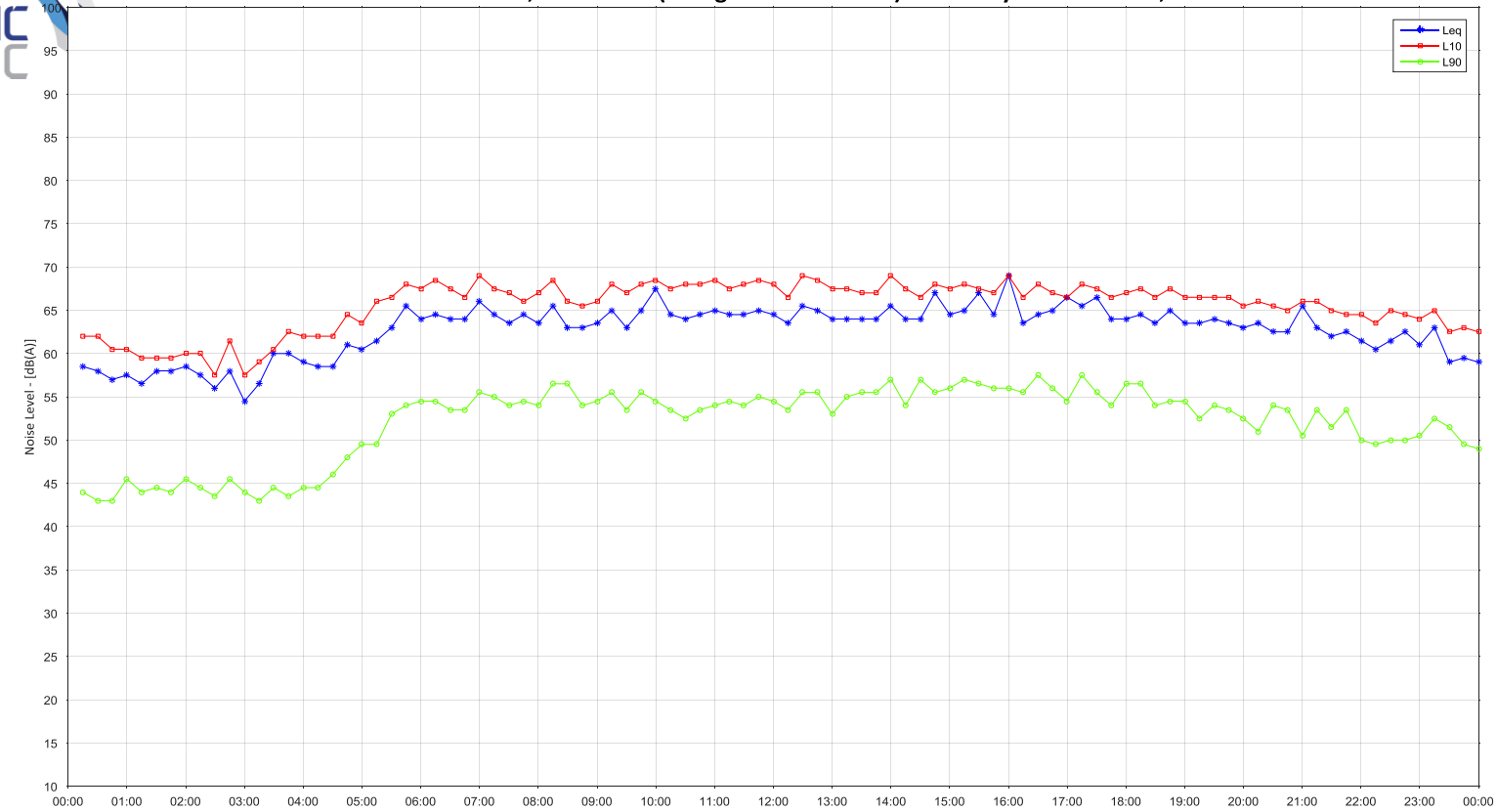
170 Reservoir Road, Blacktown (Along Reservoir Road): Tuesday 01 December, 2015



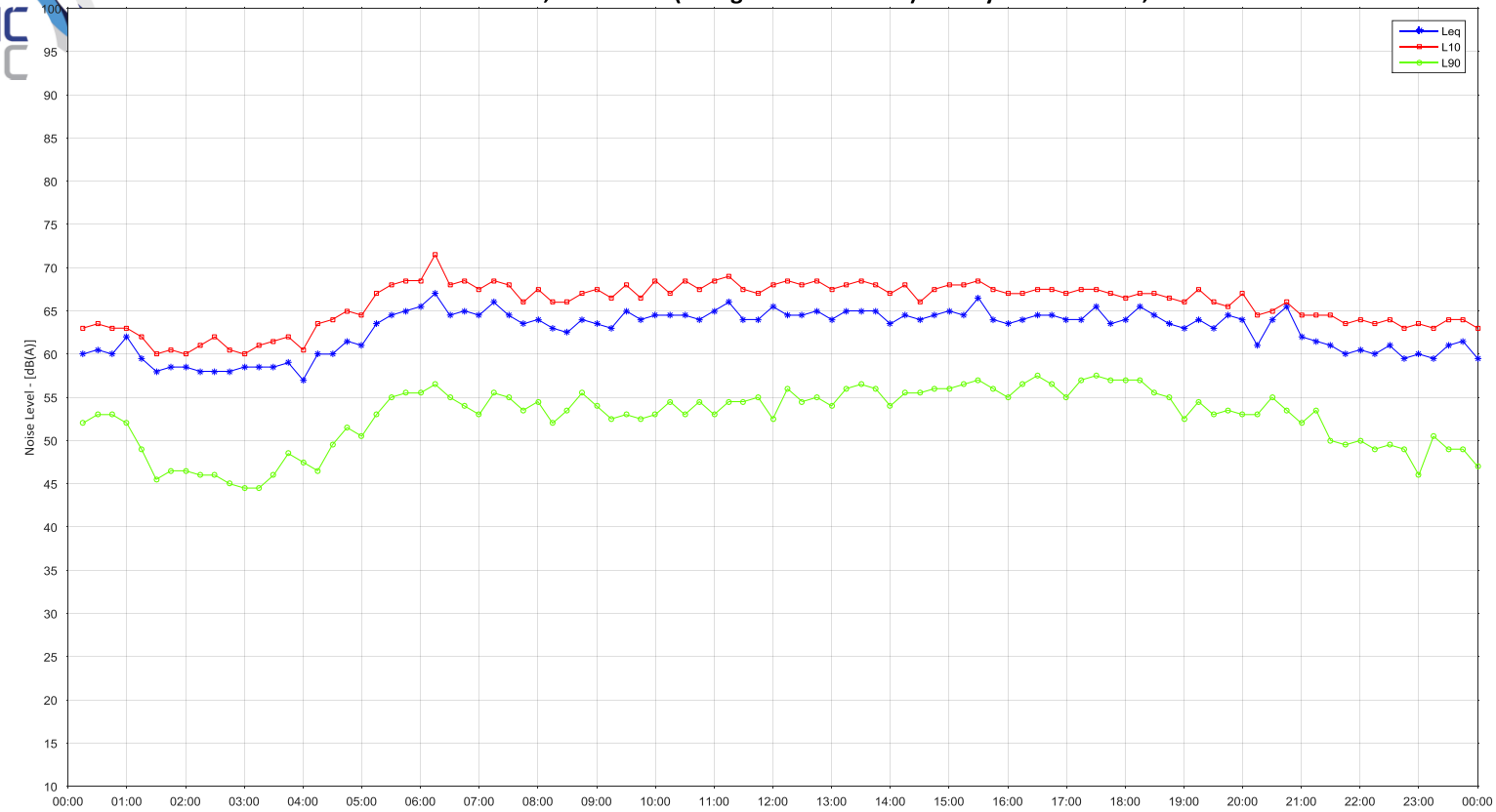
170 Reservoir Road, Blacktown (Along Reservoir Road): Wednesday 02 December, 2015

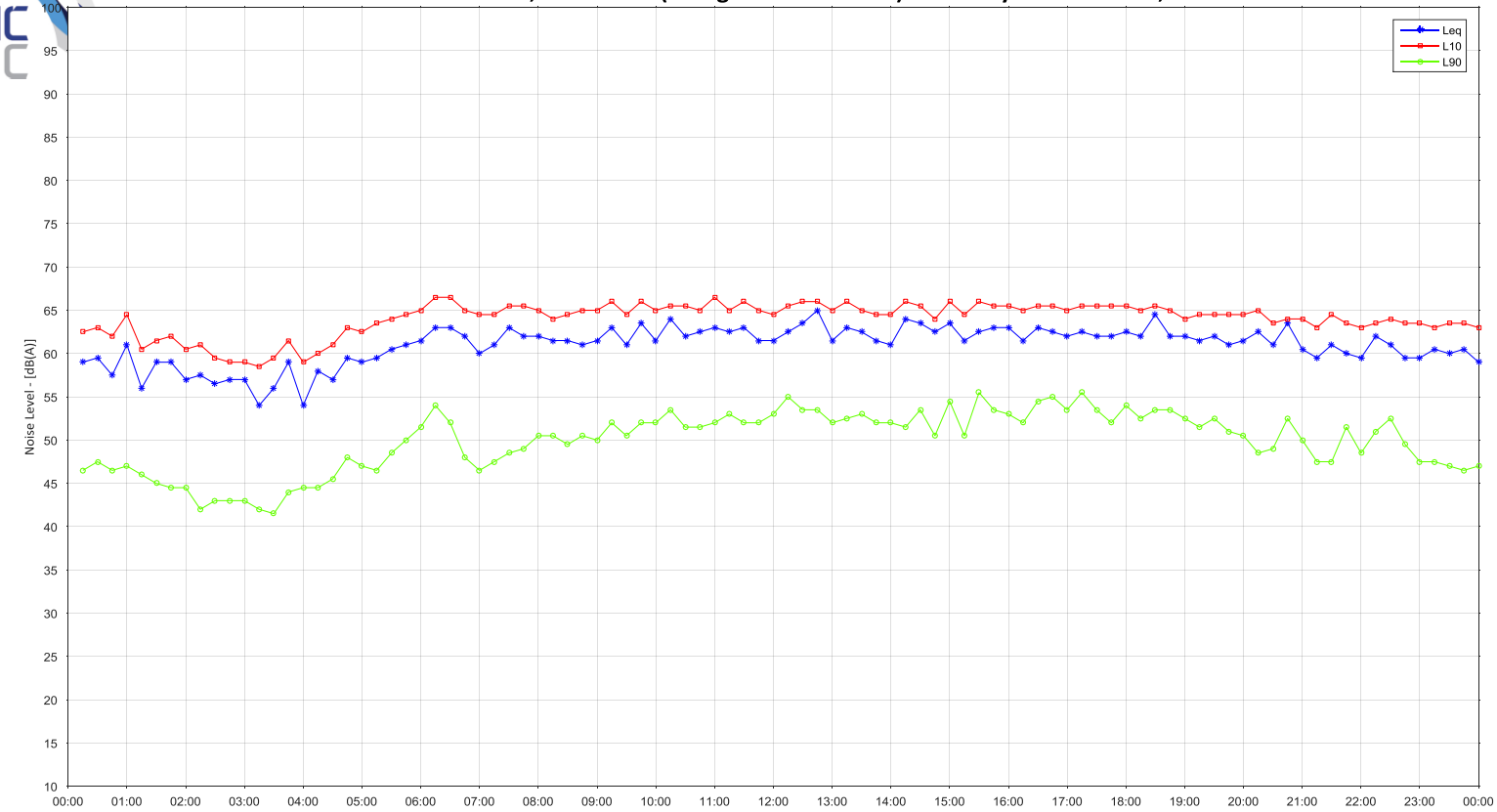


170 Reservoir Road, Blacktown (Along Reservoir Road): Thursday 03 December, 2015



170 Reservoir Road, Blacktown (Along Reservoir Road): Friday 04 December, 2015




170 Reservoir Road, Blacktown (Along Reservoir Road): Saturday 05 December, 2015
Noise Level - [dB(A)]
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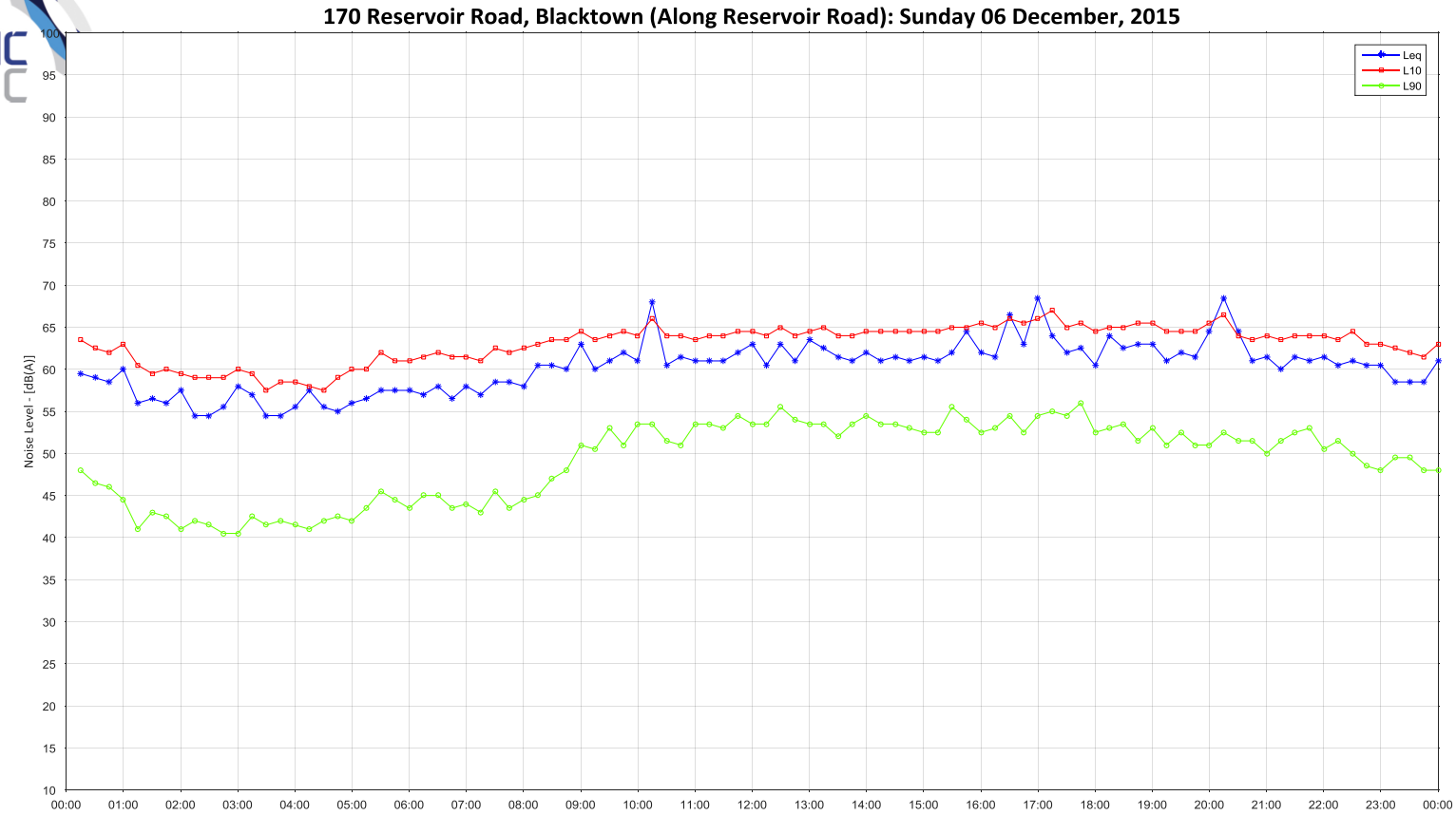
170 Reservoir Road, Blacktown (Along Reservoir Road): Sunday 06 December, 2015
Noise Level - [dB(A)]
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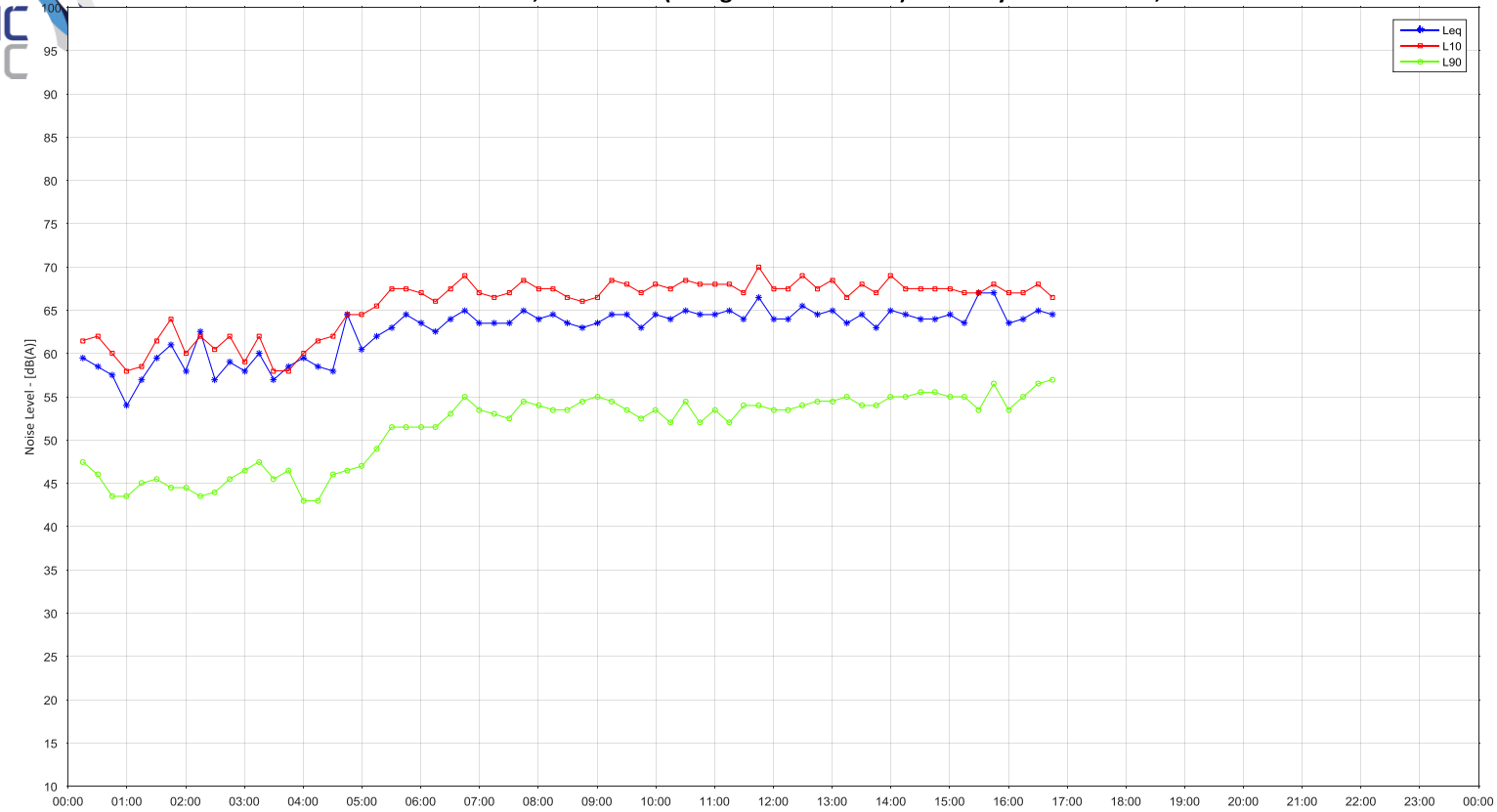
170 Reservoir Road, Blacktown (Along Reservoir Road): Monday 07 December, 2015
Noise Level - [dB(A)]
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