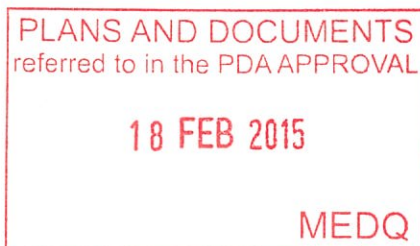


29 Jan 2015

Reference: 2015031 L01 Hamilton Childcare preliminary acoustic assessment.doc

Bruce Loxton  
Graystone  
2 Westlink Court  
BTP Westlink Green  
10 Station Ave  
Darra QLD 4076



Dear Bruce,

RE: Unit 8, Lot 801 SP210924 - Macarthur Ave Hamilton Childcare  
Site preliminary acoustic assessment  
Ref: DEV2014/619

---

We provide the following advice regarding the proposed site at Unit 8, Lot 801 SP210924 Macarthur Ave Hamilton, in response to the letter from EDQ Development Assessment dated 9th January 2015.

Note that this assessment is for preliminary investigation purposes only. A full acoustic assessment would be necessary for submission of development application to Council.

This assessment relates to acoustic issues only. Information should be sought from appropriately qualified consultants regarding issues concerning town planning, civil and other disciplines.

### Hours of operation

For the purposes of preliminary assessment we have assumed hours of operation for childcare services between 6am and 7pm Monday to Friday.

### Number of children

For the purposes of assessment it is assumed that the proposed centre will have capacity for up to approximately 116 children catering for ages from 0 to 6 years old.

### Location of outdoor play area(s)

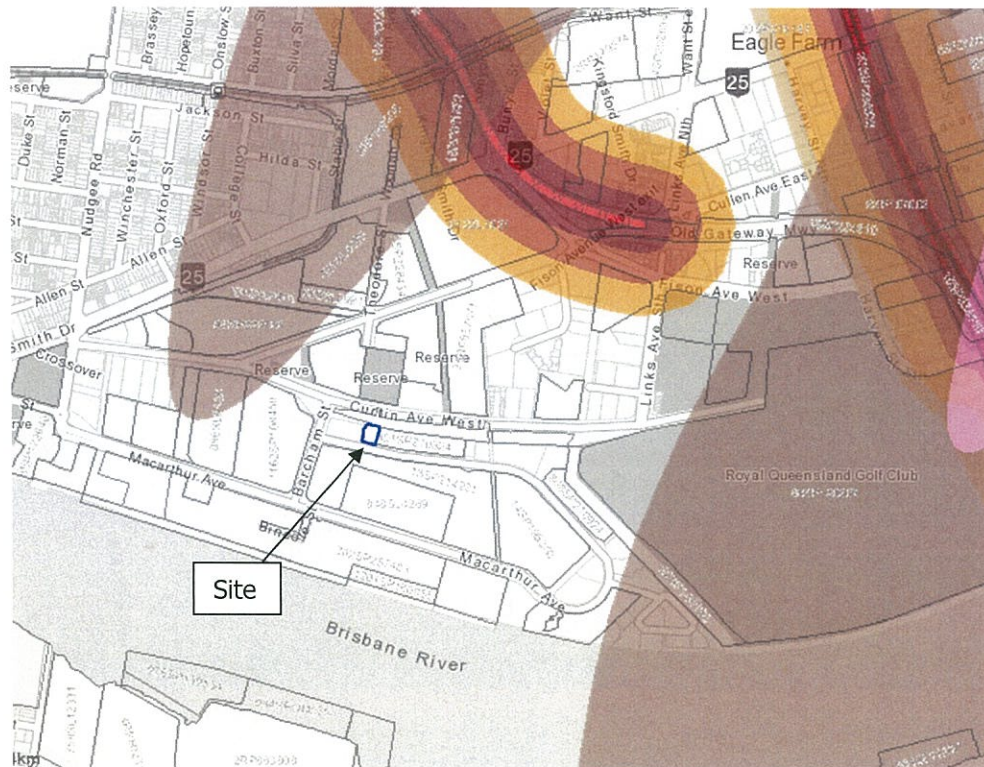
The position of outdoor play areas will be on ground and first floor to the western side of the building.



## Transportation noise overlays

Searches on the Queensland SPP Interactive Mapping System have been carried out in order to determine whether the site is impacted by transport noise corridors and/or airport environs.

Figure 1: Site location and transport overlays



The search indicates that the site is outside of the overlay areas, therefore not technically requiring assessment of road traffic noise or aircraft noise.





## Noise criteria

The Brisbane City Council CityPlan 2014 includes reference to use codes, including 9.3.4 Child Care Centre Code applying to material change of use. The relevant criteria from the code are as follows;

Table 1: BCC City Plan 2014 Child Care Centre Code criteria

<p><b>PO10</b> Development is of a nature and scale which does not result in noise emissions that exceed the following criteria:</p> <p>(a) <math>L_{Aeq,adj,T}</math> emitted from the development is not greater than the rating background level plus 3 at the sensitive use.</p> <p>Where T is:</p> <p>(a) Day (7am to 6pm): 11 hr; (b) Evening (6pm to 10pm): 4 hr; (c) Night (10pm to 7am): 9hr.</p> <p>Where <math>L_{Aeq,adj,T}</math> is the A-weighted equivalent continuous sound pressure level during measurement time T, adjusted for tonal and impulsive noise characteristics, determined in accordance with the methodology described in the <a href="#">Noise impact assessment planning scheme policy</a>.</p> <p>Note—Rating background level is to be determined in accordance with the methodology described in the <a href="#">Noise impact assessment planning scheme policy</a>.</p> <p>Note—A noise impact assessment report prepared in accordance with the methodology described in the <a href="#">Noise impact assessment planning scheme policy</a> can assist in demonstrating achievement of this performance outcome.</p>	<p><b>AO10.1</b> Development provides a 2m high <a href="#">acoustic fence</a> and a minimum 2m wide landscaped buffer along any boundary adjoining land in a zone in the Residential zones category.</p> <p><b>AO10.2</b> Development ensures mechanical plant or equipment is <a href="#">acoustically screened</a> from adjoining sensitive uses. Note—Mechanical plant includes generators, motors, compressors and pumps, for example air-conditioning, refrigeration or coldroom motors.</p> <p><b>AO10.3</b> Development does not operate before 7am or after 7pm.</p>
---	---

Comments regarding acceptable outcomes;

AO10.1 - The site boundary does not immediately adjoin land in a Residential zones category

AO10.2 - The site does not adjoin land with noise sensitive uses

AO10.3 - It is assumed that the preferred operating hours are from 6am. As the development is not located in a noise-sensitive area, use of the development from 6am is not expected to be problematic, including outdoor play areas if desired.

## Attended noise measurements

Noise monitoring of existing impacts was carried out at the site by way of by attended noise measurements on Wednesday 28th January 2015 in order to determine the existing noise levels in the locality.

The measured existing noise level between 10.30am and 11am was found to be 60dB(A) Leq. The noise was predominantly due to truck movements and other local traffic noise. Noise from the Boral concrete batching plant in Curtin Ave west was also intermittently audible between truck movements.



## Assessment

### Noise from the site to receivers

Based on the acquired information, noise emissions from the site are not expected to be of significance. More specifically, there are no noise sensitive receivers located in proximity to the site.

### Existing noise impacts onto the site

The survey shows that detailed acoustic assessment of existing noise impacts would be recommended.

The impact noise level of 60dB(A) Leq will require acoustic design of the building façade in order to ensure noise levels comply with relevant criteria.

However as the level is moderate, the construction requirements are not expected to be onerous or restrictive. Noise impacts are expected to be satisfied with the inclusion of relatively minor acoustic treatments to the building.

Note that as previously mentioned, a full acoustic assessment would be required prior to submission of development application to Council.

We trust this information meets with your current requirements. Should you have any queries please do not hesitate to contact AcousticWorks.

Yours faithfully,



MARK ENERSEN B.Sc MAAS  
Director

acousticworks)))

