SUBMISSION TO THE NSW DEPARTMENT OF PLANNING AND ENVIRONMENT RE THE ENVIRONMENTAL IMPACT STATEMENT IN RESPECT OF METRO CITY

By

10-12 CLARKE ST, CROWS NEST SP62905 OWNERS CORPORATION

BACKGROUND

Lawson House, 10-12 Clarke St, Crows Nest, is situated on the corner of Clarke and Hume Streets in Crows Nest. It is directly across the road from the proposed Southern entrance to the Crows Nest Metro Station.

Lawson House is a six storey strata building with five retail shops on the ground floor fronting Hume and Clarke Streets and 22 commercial suites in the five stories above. In all, there are 23 lot owners in the strata scheme, comprising the Owners Corporation (OC).

SUPPORT

The OC supports the development of the Metro City line and, in particular, the creation of a Metro Station at Crows Nest, and agrees with the benefits of the project outlined in Chapter 3 of the Environmental Impact Statement (EIS).

The OC, however, has a number of concerns about the construction phase of the project and the anticipated impact on Lawson House, its owners and tenants. These concerns are outlined below.

Please also note that one of the owners, Labsonics Australia Pty Ltd, has lodged has lodged its own separate submission outlining its special sensitivity to noise and vibration and its specific concerns.

CONCERNS

Features of Lawson House

The location of Lawson House so close to the Metro Station means that it will be "sensitive receiver" – ie the impact of the disruption, airborne noise, ground-borne noise and vibration associated with construction phase will be at the highest level.

Although a commercial building, the nature of some of the businesses operating in the building will require mitigation strategies equivalent to or greater than those of a residential building. Of particular note:

- Two of the businesses are sound recording / post production studios which require a silent, vibration-free environment in which to operate. Each business has invested very substantial sums in modifying their business spaces to achieve that environment. The noise and vibration associated with tunnel-boring machines, blasting, roadheaders, rock breakers, pile drivers, vibratory rollers, excavators and heavy vehicles will have an adverse impact on these businesses – as recognised in section 10.2.2 of the EIS.
- The EIS assumption for assessing impacts of the project on commercial buildings is that they operate only during the daytime (7am – 6pm), whereas for residential buildings, the impacts are assessed for day (7am – 6pm), evening (6pm – 10pm), night (10pm- 7am) and daytime out of hours (i.e Saturdays 1pm to 6pm and Sundays 7am to 6pm). However, a survey of

Lawson House businesses has shown that a number of them typically operate from 8am until as late as 11pm Monday to Friday, and from 8am to 8pm Saturdays and Sundays. These include a dance instruction studio and a professional training business. Some businesses, because of their project-related work, require access to the building at all hours. Accordingly, mitigation measures will be required to protect those businesses during those extended hours.

Our comments on specific sections of the EIS follow:

Chapter 8: Construction Traffic & Transport

8.4.8: Crows Nest Station Vehicle movement forecasts and routes

We understand that the temporary closure of Hume St for six months will affect the section between the Pacific Highway and Clarke Lane. Lawson House has two carparks – a lower (ground level) carpark with entry and exit on Hume St between Clarke Lane and Clarke St; and an upper (first floor) carpark with entry and exit from Clarke Lane. ***Please confirm*** that the use of these carparks will not be impeded by the road closure.

For the period when Hume St is *not* closed, ***please provide details*** of the traffic control measures that will be in place (eg Stop / Slow signage etc).

Noise & Dust mitigation: Three Lawson House retail business front Hume St. We understand that that part of Hume St will not be closed at any point of the construction phase. However, these businesses will be directly exposed to noise from the demolition, construction and heavy vehicle movements and to the risk of dust from the site. Similarly, the lower and upper carparks (the latter with partially open brick walls), and the cars within them, will be exposed to the risk of dust from the site. ***Please provide details*** of proposed sound mitigation at ground level and dust mitigation at ground and first floor levels.

Chapter 10 Construction Noise & Vibration

10.2.1 Construction noise metrics

This section describes the approach for assessing the Rating Background Level (RBL) and Noise Management Level (NML), but only for *residential* receivers. Given the presence of two sound recording / post production studios in the building, and the fact that two other businesses, (the dance instruction studio and the professional training business), have clients on premises until 11pm weeknights and over the weekend, we consider that similar RBL and NML assessments should be conducted for Lawson House. ***Please confirm*** that this will occur.

10.2.2 Sensitive receivers

We note that the EIS confirms that "recording studios are *more sensitive to vibration and ground-borne noise than residential premises*" and that recording studios are in the "special sensitive" category. This confirms the need for RBL and NML assessments as requested above.

10.2.3 Construction noise management levels

Airborne construction noise

We note that the EIS provides:

"The Interim Construction Noise Guideline (ICNG) (Department of Environment and Climate Change, 2009a) sets out ways to deal with the impacts of construction noise on residential receivers *and other sensitive land uses* by presenting assessment approaches that are tailored to the scale of construction projects. The ICNG sets out a quantitative assessment method involving predicting noise levels at sensitive receivers and comparing them with the proposal specific NMLs established for noise affected receivers. *In the event that construction noise levels are predicted to be above the NMLs, all feasible and reasonable mitigation and work practices are required to be investigated to minimise noise emissions.*"

"Other noise-sensitive businesses require separate project specific noise goals. The Interim Construction Noise Guidelines recommends that the internal construction noise levels at these premises are determined based on the 'maximum' internal levels presented in AS 2107. These recommended 'maximum' internal noise levels are provided in Table 10-4."

Table 10-4 provides that the Recommended 'Maximum' Internal LAeq for recording studios when in use is 25dBA.

Please confirm that this assessment will be made in respect of the two sound recording / post production studios in Lawson House.

Ground-borne construction noise

This discussion in the EIS deals only with residential receivers. ***Please provide details*** of the assessment and mitigation processes for commercial sensitive receivers, particularly those with operating hours extending into the evening and night periods, and with businesses (such as recording studios) that are more sensitive that residential receivers – in particular, Lawson House.

10.2.4 Construction ground-borne vibration

Please confirm how the "conservative vibration damage screening level" is assessed for Lawson House, what mitigation measures will be in place to guarantee that level is not exceeded and what the consequences will be if it transpires that, during construction, the level is exceeded, viz. will an assessment of Lawson House's existing structural elements be implemented to determine the vibration criteria ('g' force - m/sec^2), above which irreversible/catastrophic damage will occur to the existing Lawson House structural elements?

10.2.5 Blasting

We note that the EIS sets upper limits of vibration and overpressure states that these limits "are intended to target the protection of building structures from cosmetic damage rather than human comfort criteria as construction works are considered short-term." This suggests that there is no particular attention given to the effect of blasting on businesses operations (whether retail, commercial office or particularly sensitive businesses such as sound studios). ***Please confirm*** that that is the case. ***Please confirm*** whether there is an option to schedule blasting (perhaps by reference to particular hours or days) to avoid or minimise the impact on these businesses.

10.4 Potential impacts

We note that the EIS proposes:

- Standard attenuation acoustic sheds at the Crows Nest Station site and noise barriers (indicatively three metres high) around all construction sites

- The same noise outcome may be achieved through alternative measures, such as acoustic panels over the station excavations.
- The specific noise mitigation measures would be determined during detailed construction planning taking into account construction program, construction working hours and construction traffic management in accordance with the Construction Noise and Vibration Strategy
- The predicted noise level exceedances at the nearest sensitive receivers (ie area D including Lawson House) of:
    - Demolition & site establishment - Day: NML exceedance of > 20dB (ie highest exceedance rating)
    - Earthworks – Day: NML exceedance of > 20dB (ie highest exceedance rating)
    - Acoustic shed construction – Day: NML exceedance of < 10dB (ie minor exceedances)
    - Excavation & structural works Day: NML compliance

      DOOH: NML compliance

      Evening: NML compliance

      Night: NML compliance

      Sleep: NML compliance
    - Building Construction – Day: NML exceedance of between 10 & 20 dB (ie moderate exceedances)

The two sound recording / post production studios are on the fifth floor of Lawson House. One faces Clarke St but the other faces Clarke Lane, immediately adjacent to site stretching South along the Pacific Highway from Hume St. This exposes the studio to otherwise unimpeded noise from that site. Given the high expected exceedances, ***please confirm*** that acoustic sheds will be erected over that site and also along all of the site on Hume St from the Pacific Highway to Clarke St.

Ground-borne noise

- During the daytime period seven buildings (four commercial buildings located to the east of the site, one residential building located to the east of the site and two residential buildings located to the south of the site) are predicted to have ground-borne noise levels potentially higher than 75 dBA for several floors in each building. ***Please confirm*** that this includes Lawson House and, if so, the mediation measures to be put in place.

Blasting

We note the proposal to use blasting with a medium rock breaker reduces the number of days above the NML to eight (compared to 67 using only blasting or 27 using blasting with a large rock breaker). We assume that this implies that the overall number of days for the construction would be larger (because of the use of less intrusive / noisy equipment) but, on balance, we prefer this to a shorter overall construction time but with a much higher number of days above the NML (ie 27 or 67).

Ground-borne vibration

- During excavation, vibration levels are anticipated to exceed the cosmetic damage vibration screening criteria at three buildings adjacent to the site (one building

located to the east on Clarke Street and two building located to the south of the Pacific Highway). A more detailed assessment of the structure and attended vibration monitoring would be carried out to ensure vibration levels remain below appropriate limits for those structures.

Please confirm that this includes Lawson House***.*** Refer also to vibration criteria comments in clause 10.2.4.

Please confirm that the Vibration Control Strategies set out at 7.1.6 of Appendix E to the EIS will be applied to Lawson House – specifically, attended vibration measurements at the commencement of vibration generating activities to confirm that the generated vibration levels are below the vibration damage criteria for Lawson House and that continuous vibration monitoring with audible and visible alarms (to effect cessation of vibration generation) whenever vibration generating activities need to take place inside the calculated safe-working distances.

Construction traffic noise

We note that the EIS states that "No sensitive receivers are located on the sections of … Hume Street proposed to be used as haul routes." If, however, the haul route were to change to include the section of Hume St between Clarke Lane and Clarke St, businesses in Lawson House will be adversely affected, particularly the three retail businesses fronting Hume St at ground level.

10.4.13 Tunnel excavation

Ground-borne noise

We note that the EIS states that "Ground-borne noise from tunnel excavation during the daytime is expected to be well below background noise levels. As such, the assessment considers the evening and night-time periods." ***Please confirm*** that this assertion applies equally to sound recording / post production studios in Lawson House.

The EIS also states that "it is anticipated that this worst-case ground-borne noise impact would only be apparent for a relatively short period of time (ie a few days for each tunnel burning machine) whilst the tunnelling works are directly beneath a particular receiver." ***Please confirm*** the amount of advance notice that will be given to Lawson House owners of the commencement of tunnel boring in the vicinity of the building. (Advance notice may provide the opportunity for businesses to schedule work around the period of worst disruption.)

Ground-borne vibration

The EIS states that "During main tunnelling works, it is anticipated that ground-borne vibration would be lower than the 7.5 mm/s screening level (the threshold at which cosmetic damage may occur) at all locations. Vibration levels may, however be noticeable within surface buildings located close to the main tunnel alignment. The impact at these locations would only be apparent for a relatively short period of time (one or two days) as the tunnel boring machines pass by a particular location."

This implies that Lawson House will be adversely affected by ground-borne vibration. ***Please confirm*** the amount of advance notice that will be given to Lawson House owners of the commencement of tunnel boring in the vicinity of the building. Refer also to vibration criteria comments in clauses 10.2.4 + 10.4.

Asbestos

One final concern relates to the potential for asbestos contamination during the demolition of existing buildings, particularly the current Post Office which is the closest building to Lawson House. ***Please advise*** us of the strategies to assess and mitigate this potential risk.