

26 June 2013

WM Project Number: 10232

Our Ref: 10232 Batch Plant Extension 260613

Lend Lease (Millers Point) Pty Limited
Level 4, 30 The Bond
30 Hickson Road
Millers Point NSW 2000

RE: BARANGAROO SOUTH

SSD 5967-2013– BARANGAROO TEMPORARY BATCH PLANT - “BARANGAROO STAGE 1 SECTION 75W APPLICATION CONCRETE BATCH PLANT NOISE & VIBRATION ASSESSMENT REPORT NO. 10232-B VERSION E OCTOBER 2012”.

This letter has been prepared by Wilkinson Murray Pty Ltd for Lend Lease (Millers Point) Pty Ltd to support an application that is to be made pursuant to Section 75W of the Environmental Planning and Assessment Act 1979 to modify the approval issued in respect to the Operation of the Temporary Batch Plant at Barangaroo.

To date, Lend Lease has commenced construction on:

- Stage 1A Bulk Excavation and Basement Car Parking - expected completion March 2015
- Commercial Building C3 - expected completion 2016 - subject to tenant being committed
- Commercial Building C4 - expected completion 2015
- Commercial Building C5 - expected completion 2015

In addition, Lend Lease has submitted a Project Application for the first residential stage, Residential Buildings R8 and R9. Subject to obtaining approval, construction is expected to commence on R8 and R9 in the third quarter of 2013 and completed in 2015.

The Lend Lease plan for the remainder of the site will be driven by market demand, and the rate of residential take up. It is anticipated that the indicative project staging for buildings and associated basements will be as follows:

- between 30,000m² – 50,000m² by 2016;
- between 50,000m² – 100,000m² by 2019; and
- between 50,000m² – 100,000m² by 2022.

It is proposed that the existing plant operation be retained until 2018 to facilitate remaining basement structure and buildings.

Wilkinson Murray Pty Ltd has reviewed the proposal with respect to the current DGR's and the previous noise and vibration assessment: The requirements are assessment of noise and vibration in relations to construction and operational noise as follows:

Noise

The application must include an assessment of noise and vibration impacts, including construction, operation (particularly operational noise from pumps, blowers and bag filter cleaning), traffic and cumulative noise (including assessment and control of noise impacts associated with elevated noise sources, including concrete pumped and installed during tower construction). The assessment must also outline proposed noise management, mitigation and monitoring procedures.

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In relation to vibration it is noted that the initial assessment of the Batch Plant determined that Vibration associated with the facility was not a significant issue due to the location of the compound from surrounding received.

Cumulative Construction Noise Impact.

A review and calculation of the potential construction noise impact with the batch plant in operation has been conducted based on the noise predictions contained in the following reports:

- Wilkinson Murray Construction Noise and Vibration Assessment for the Batch Plant, Report 10232-B Version E dated October 2012.
- Wilkinson Murray Construction Noise and Vibration Assessment for Building C5, Report 10232-C5 Version D dated November 2011.
- Renzo Tonin and Associates Construction and Operational Noise and Vibration Assessment for Residential Building R8 and R9, Report TF854-01F02 (REV 4) O&CNVA REPORT dated 19 November 2012

The latter Renzo Tonin report assesses the potential cumulative construction noise impact at surrounding receivers of buildings R8 and R9 in combination with the Basement and commercial buildings C3, C4 and C5. This information has been used to predict the noise contribution of the batch plant to overall cumulative construction noise levels when construction of the aforementioned components of South Barangaroo occurs.

A review of the cumulative noise predictions, as presented in Table 1 attached at the end of this letter indicates that the operation of the batch plant will not result in an increase in cumulative construction noise levels at any commercial or residential receivers with the exception of residences at High Street in Millers Point.

At High Street the cumulative noise levels are predicted to increase by a marginal 1 dBA. This increase is not considered significant in noise terms whereby the overall predicted cumulative levels are still only slightly above the established construction management noise level for this location.

Therefore based on these findings no additional noise management measures are warranted as a result of proposed batch plant operation.

Traffic Noise

In the case of associated traffic generated with the batch plant the maximum truck movements were previously assessed for the mid 2014 construction scenario. A revised traffic report has been prepared by ARUP titled "*Temporary Concrete Batching Plant, Barangaroo (SSD5967-2013)-Transport Assessment*" whereby the greatest average truck traffic generated by the batch plant has been estimated to be 125 trucks movement a day in October 2013.

The revised truck movements are higher than the maximum 98 movements estimated in the initial batch plant traffic noise assessment. However, the new figures are still lower the maximum movements that were estimated for the "no batch plant" case of 150 truck movements. Therefore the conclusion of our initial assessment is still applicable to the current application, being:

"The PA1 assessment of traffic noise and subsequent applications indicated that compliance with relevant traffic noise criteria will occur with projected traffic volumes that were determined without an on-site Concrete Batch Plant. Therefore, any reduction in traffic volumes will also reduce the noise contribution from this source to surrounding receivers."

Conclusion

The findings of the initial assessment determined that;

"No specific noise control measures are considered necessary for Batch Plant operations that are beyond the measures that have not been previously identified in previous assessment".

As a result if this review the above findings is also relevant for this application.

Further a noise and vibration management plan has been prepared and adopted by Lend Lease to manage the environmental issues associated with this project. These recommendations will be incorporated by Lend Lease into an overall Environmental Management Plan.

Yours faithfully

WILKINSON MURRAY

A handwritten signature in cursive script, reading "Brian Clarke". The signature is written in a dark ink and is positioned above the printed name and title.

Brian Clarke

Senior Associate

Table 1: Predicted Cumulative Construction Noise Levels at Receivers around South Barangaroo – L_{Aeq} (15 minutes) dBA

Receiver	R8&R9	Basement C3,C4 & C5	Batch Plant	Cumulative Construction Noise Level		Noise Management Level	Highly Noise Affected Levelk
				<i>Without Batch Plant</i>	<i>With Batch Plant</i>		
High Street, Millers Point	54	56	52	58	59	57	75
38 Hickson Rd, Millers Point	60	73	59	73	73	63	75
Sydney Wharf Apartments	57	58	43	61	61	57	75
Darling Island Apartments	54	57	43	59	59	57	75
Balmain East	48	52	38	54	54	59	75
Merriman Place Millers Point	48	52	39	54	54	56	75
Aon Australia, Napoleon St	60	67	53	68	68	70	
Symantec, Napoleon St	60	68	58	68	68	70	
KPMG Shelley St	67	70	47	72	72	70	
Temporary Cruise Terminal	69	67	46	71	71	70	
30 Hickson St, Millers Point	55	59	45	60	60	70	
Former Grafton Bond Store,	58	64	53	65	65	70	
The Sussex Hotel Sussex St,	61	70	58	70	70	70	