

Reference: 18.618r02v02

6 December 2022

Cement Australia  
Highgate Street  
AUBURN NSW 2144

Attention: Travis Van Den Berg

**Re: Cement Facility Glebe Island – Lot 12 Sommerville Road, Rozelle  
Proposed Glebe Island Silos Throughput Capacity Increase (DA-188611)  
Response to TfNSW, DPE and Council**

Dear Travis,

We refer to the subject property and proposed throughput capacity increase for the Glebe Island Silos at Lot 12 Sommerville Road, Rozelle. TRAFFIX has been forwarded comments from the following relevant authorities:

- TfNSW as contained in the letter dated 28 March 2022 (TfNSW reference: SYD22/00258/01);
- DPE as contained in the letter dated 8 April 2022 (DPE reference: DA-188611); and
- Inner West Council as contained in the letter dated 11 April 2022 (Council reference: DA-188611).

TRAFFIX has reviewed all relevant comments and has responded to each item below. This statement should be read with reference to the Traffic Impact Assessment (TIA) report (Reference: 18.618r01v04, dated 27 September 2021).

## ➤ Transport for NSW

### Comment

#### *SIDRA Network Modelling*

- The City West Link and Victoria Road are major arterial roads, which carries a high volume of traffic and delay and queues have been observed to be excessive at times.
- The setup parameters in the base model are not in accordance with the SCATS data, for example the cycle length should be 140 seconds. The Applicant can obtain further information can be obtained regarding key input parameters by email to [development.sydney@transport.nsw.gov.au](mailto:development.sydney@transport.nsw.gov.au).
- The model is predominantly using defaults, where some examples include not using actual lane widths, grades, pedestrian walk and clearance times, minimum times are too

*short, no pedestrian volumes, or consideration of the Peak Flow Factor and an absence of Late Start time settings.*

- *A defined route has been set for offset calculations for the AM existing model only. This should be included for all models in the appropriate direction of coordination.*
- *Cycle times should be 140 seconds which predominantly occurs during the peak periods. The applicant has an 'optimised' setting of 85 second cycle length in the PM and 145 seconds for the AM, where both are non-typical.*
- *The left turn from The Crescent has been omitted from B phase at City West / The Crescent intersection.*
- *TfNSW has also noted that the effective left turn storage length into James Craig is less than what is coded. The development's large vehicles are to be setup with the correct vehicle length and queue space. Further consideration should be given to lowering the intersection approach truck speeds.*
- *The calibration of the base model must be undertaken, and the methodology and difference between observed and calculated data is to be tabulated in a supplementary report. This is to ensure that all intersections are being modelled accurately. The calibration method is to follow that described in the SIDRA User Guide Section 2.6.2 – 2.6.4 in conjunction with TfNSW's Guide to Traffic Modelling.*

#### TRAFFIX Response

In reference to the TIA report (Reference: 18.618r01v04, dated 27 September 2021), the SIDRA 9 model utilised the existing AECOM model for the Hanson Construction Materials Pty Ltd Concrete Batching Plant at Glebe Island. This model has been approved by both Council and TfNSW. The base model for the proposed development included the following:

- The surveys conducted in 2017 prior to COVID-19 restrictions and were undertaken during a typical Thursday between 7:00am to 9:00am and 4:00pm to 6:00pm. These surveys are considered applicable given that the permanent TfNSW counter on the Western Distributor (Anzac Bridge, Station ID: 20001) identified comparable traffic volumes with 136,837 vehicles in 2017, 135,860 vehicles in 2018 and 136,756 vehicles in 2019;
- The road layout of the model was updated and based on the road layout at the time, noting that these key intersections are subject to layout changes due to ongoing construction of the WestConnex M4-M5 Link Rozelle Interchange; and
- The traffic volumes of the Hanson Concrete Batching Plant were incorporated within the 'base case' scenario SIDRA 9 model for the proposed development.

With the above in mind, the SIDRA 9 model prepared for the proposed development was based on the model prepared by AECOM and updated based on the road layout at the time. Accordingly, recalibration of the model is not considered necessary, given that TfNSW has already utilised it for a previous assessment and subsequent approval.

In addition to the above, it should be emphasised that the proposed throughput capacity increase for the Glebe Island Silos would result in minimal additional traffic volumes, noting the following:

- The net traffic generation of the proposed development is anticipated to be:
  - 8 vehicles per hour during the morning peak period; and
  - 5 vehicles per hour during the evening peak period.

The above net traffic generation would therefore equate to a single additional vehicle every 7-12 minutes, which is considered minor and would have minimal impacts on the surrounding intersections.

- For the purposes of a sensitivity test, the SIDRA 9 model for the proposed development was based on a 'worst case' scenario of 12 vehicles per hour (24 veh/hr), which is the maximum trip generation due to the limitations of the existing weighbridges. This sensitivity test resulted in minor increases in average intersection delay, with the following aspects noteworthy:
  - The Victoria Road / The Crescent intersection experienced a minor net increase of 0.2 seconds in average intersection delay (LoS B to LoS C) during the evening peak period;
  - The Crescent / City-West Link Road intersection experienced a minor net increase of 1.7 seconds in average intersection delay (LoS B to LoS C) during the morning peak period; and
  - No changes to level of service for any other scenario.

It can be seen from the above that even in a 'worst case' scenario, the proposed development would result in minor net increases in average intersection delay. As such, the surrounding key intersections are able to accommodate the maximum trip generation associated with the proposed development, regardless of any proposed uplift in capacity.

- The subject site is within proximity of various infrastructure projects such as the WestConnex (WCX), and Western Harbour Tunnel (WHT). These infrastructure projects are anticipated to significantly improve the performances of these intersections, with future traffic volumes envisaged to be distributed onto the WCX and WHT upon completion. Accordingly, the surrounding road network would readily be able to accommodate the traffic generation of the proposed development.

## **NSW Government Department of Planning**

### Comment

#### *Traffic and Transport*

- *Table 3 in Section 8.1 of the TIA notes the development would incur an additional 8 vehicle movements during the AM peak period and 5 vehicles movements during the PM peak period. However, the TIA also notes the development has an operational capacity of 12 trucks per hour. The Department requests clarification on the maximum vehicle movements of the site per hour.*
- *The Department notes the increase in throughput capacity would result in an increase in vehicle movement distribution throughout the day. The Department requests more information on the distribution of vehicles throughout the day.*

### TRAFFIX Response

In order to determine the traffic generation of the proposal, the vehicle distribution profile of the existing development was utilised. Based on the 95<sup>th</sup> percentile demand level, the traffic generation of the proposal was anticipated to be:

- 8 vehicles per hour during the morning peak period; and
- 5 vehicles per hour during the evening peak period.

This anticipated traffic generation would equate to a single additional vehicle every 7-12 minutes, which is considered minor and would have minimal impacts to the surrounding road network. However, the facility will have a maximum throughput of 12 truck arrivals per hour or 24 vehicle movements per hour. As such, a maximum traffic generation of 12 vehicles per hour (maximum permissible by the weighbridges) was incorporated within the SIDRA 9 model, resulting in minor increases in average intersection delay. As such, the surrounding road network is readily able to accommodate the potential maximum volume of the existing weighbridges, regardless of any proposed uplift in capacity.

With regard to the vehicle distribution throughout the day the following has been confirmed by the client for the current operations:

- 1% of the one-hour intervals have the maximum 12 truck deliveries;
- 12% of the one-hour intervals exceed eight (8) truck deliveries
- 90% of the above peak hours occur between 7:00am and 4:00pm
- The period between 7:00am and 4:00pm accounts for 60% of truck movements

The proposed development will result in the following changes to the above distributions:

- 2% of the one-hour intervals have the maximum 12 truck deliveries; (+1%)
- 24% of the one-hour intervals exceed eight (8) truck deliveries; (+12%)
- 90% of the above peak hours occur between 7:00am and 4:00pm; and, (no change)
- The period between 7:00am and 4:00pm accounts for 60% of truck movements (no change)

In light of the above, any increase in traffic volumes throughout the day as a result of the proposal is envisaged to have minor impacts, given the reduced traffic volumes within the surrounding road network outside the morning and evening peak periods.

## ➤ Inner West Council

### Comment

*In Council's response back to DPIE on a letter dated 3 August 2020, a number of traffic and transport issues were raised. The Traffic Impact Assessment (TIA) dated September 2021 by Traffix, for the proposed development does not appear to have addressed most, if not key items raised. Specifically:*

*Truck haulage routes indicate access to and from the development proposed remain unchanged, that is, through James Craig Road and City West Link Road. The 'Glebe Island Traffic Management Map' in Appendix E of the TIA also provides alternate routes that appear to link to the White Bay Cruise Terminal and/or Robert Street. Under no circumstances truck access through Glebe Island's internal roads exiting onto Robert Street will be supported.*

*The SIDRA analysis appear to have incorporated the additional generation anticipated from Multi-use facility, White Bay Cruise Terminal, New Sydney Fish market, and Hanson Concrete Batch Plant. Although these are included in the assessment, impacts from the construction and operational stages of the WestConnex Rozelle Interchange does not appear to have been included in the 2017 survey and traffic modelling as WestConnex construction commenced in 2019.*

*Intersection modelling on three (3) intersections have been provided in the TIA report. The SIDRA modelling layout appears to be based on the existing layout at the time of the report, and not reflecting on the final layout when Rozelle Interchange will be complete. It is noted that the modelling has not included a Saturday midday peak as originally suggested in Council's earlier comments.*

*A Traffic Management Plan for the Glebe Island Terminal does not appear to address the items raised previously by Council, such as:*

- *Reinstatement of Glebe Island Bridge for active and public transport*
- *Establishment of Bays Precinct, Sydney: The Transformation Strategy proposed foreshore public access area*
- *Development of future light rail links to White bay*

### TRAFFIX Response

The truck haulage routes are proposed to remain unchanged, being entry and egress onto James Craig Road via Sommerville Road. It is understood that no truck haulage movements are permitted to or from Robert Street.

The ongoing construction of the WCX Rozelle Interchange is envisaged to generate moderate construction vehicle traffic volumes, however it is emphasised that these vehicle movements pertain to construction activities (i.e. temporary) and upon completion, would not adversely impact the ongoing operations of the proposed development. Rather, the infrastructure projects within the vicinity of the site are anticipated to significantly improve the performances of these intersections, with future traffic envisaged to be distributed onto the WCX and WHT once operational.

Nevertheless, as previously mentioned, the proposal involves an anticipated traffic generation of eight (8) vehicles and five (5) vehicles per hour during the morning and evening peak periods, respectively. These traffic volumes represent an additional single vehicle every 7-12 minutes, which is considered minor, and in any event, well within typical fluctuations in background traffic volumes. Accordingly, updating the SIDRA model to include the Saturday midday and new road layout is considered unnecessary and onerous, noting that the road layout is continually changing due to ongoing construction of the WCX.

In relation to Council's request for a Traffic Management Plan to include active and public transport for the Glebe Island Terminal, this item is considered onerous and unnecessary noting that the development is highly automated and involves no increase to the existing three (3) staff numbers. Users to the site are mainly trucks with loading and unloading conducted wholly within the site. It is also noted that the Glebe Island Bridge is not under the control of Cement Australia, and is outside Cement Australia's lease. As such, Cement Australia has no ability to influence access to or the use of the Glebe Island Bridge, and it is considered beyond the scope of this assessment.

### ➤ **Conclusion**

On the basis of the above, the proposed throughput capacity increase for the Glebe Island Silos at Lot 12 Sommerville Road, Rozelle in our view is considered supportable.

We trust the above is of assistance and request that you contact the undersigned should you have any queries or require any further information.

Yours faithfully,

**Traffix**



Vince Doan  
**Director**