

## Response to Submissions

SSD 8544 Glebe Island Concrete Batching  
Plant and Aggregate Storage Facility

Submitted to Department of Planning and  
Environment on behalf of Hanson Construction  
Materials Pty Ltd

11 December 2019 | 17142



---

#### CONTACT

Tim Ward	Director	Tward@ethosurban.com	9956 6962
----------	----------	----------------------	-----------

Reproduction of this document or any part thereof is not permitted without prior written permission of Ethos Urban Pty Ltd.

This document has been prepared by:

This document has been reviewed by:



Harry Quartermain / Jolina Mathew

11/12/18

Tim Ward

11/12/18

Reproduction of this document or any part thereof is not permitted without written permission of Ethos Urban Pty Ltd. Ethos Urban operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed, it is a preliminary draft.

VERSION NO.	DATE OF ISSUE	REVISION BY	APPROVED BY
1	09/10/18	HQ	TW
2	22/02/19	JM	TW
3	14/05/19	JM	TW
4	11/12/19	JM	TW

Ethos Urban Pty Ltd  
ABN 13 615 087 931.  
www.ethosurban.com  
173 Sussex Street, Sydney  
NSW 2000 t 61 2 9956 6952

---

# Contents

1.0	Introduction	3
2.0	Summary of Submissions	4
3.0	Amendments to the Proposed Development	6
3.1	Vehicle Access	6
3.2	Vehicle Operation	6
3.3	Operational Capacity	6
3.4	Site Plan and Elevation Plans	6
4.0	Summary of Submission Topics and Proponent Responses	8
4.1	Acoustic Impacts	8
4.2	Air Quality Impacts	11
4.3	Traffic Impacts	12
4.4	Visual Impacts	16
4.5	Heritage Impacts	18
4.6	Statutory and Strategic Planning Considerations	19
4.7	Cumulative Impacts	26
4.8	Other Impacts and Considerations	27
4.9	Assessment of Revised Site Layout	30
5.0	Final Mitigation Measures	32
6.0	Conclusion	34

## Figures

Figure 1	Amended Site Plan	7
Figure 2	Existing Secure Area	16
Figure 3	SREP 26 Map	25

## Tables

Table 1	Submission Topic Summary Table	5
Table 2	DP&E Information Request Response – Acoustic	9
Table 3	DP&E Information Request Response – Air Quality	12
Table 4	DP&E Information Request Response – Traffic	13
Table 5	DP&E Information Request Response – Heritage	18
Table 6	Principles and Objectives of the <i>Bays Precinct Transformation Plan for Glebe Island</i> (2015)	20
Table 7	Consistency of the proposed development with the Masterplan	22
Table 8	DP&E Information Request Response – Other Issues	29
Table 9	Consideration of Impacts Associated with the New Site Arrangements	30
Table 10	Mitigation Measures	32

# Contents

## Appendices

- A** Response to Agency Submissions  
*Ethos Urban*
- B** Summary of Public Submissions  
*Ethos Urban*
- C** Supplementary Acoustic Report  
*SLR Consulting*
- D** Supplementary Air Quality Report  
*ERM*
- E** Supplementary Traffic Report  
*AECOM*
- F** Supplementary Visual and Lighting Report  
*AECOM*
- G** Updated Heritage Impact Statement  
*AECOM*
- H** Land Owners' Consent (under separate cover)  
*Port Authority NSW*
- I** Detailed Lighting Strategy (under separate cover)  
*AECOM*
- J** Maritime Traffic, Navigation, and Safety Statement  
*Hanson*
- K** Amended Site Plan and Elevation Plans  
*Hanson*

## 1.0 Introduction

A State Significant Development Application (SSDA) and accompanying Environmental Impact Statement (EIS) was lodged on 11 April 2018, and publicly exhibited for a period of thirty-five (35) days inclusive between 11 April 2018 and 15 May 2018. Within the proposed SSDA, the applicant (Hanson Construction Materials Pty Ltd (Hanson)), seeks to develop a new aggregate handling facility and concrete batching plant (the 'proposed development') at Glebe Island, including the construction of:

- a concrete batching plant with the capacity to produce up to 1 million cubic metres of concrete per annum; and
- a new aggregate handling facility with a shipping terminal at GLB1 that will receive and handle aggregates delivered by ship.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 8 June 2017 and the SEARs for the proposed development were issued on 7 July 2017. The exhibited EIS was prepared in accordance with the project SEARs and with the Department's guidelines for SSD applications lodged under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Development with a Capital Investment Value (CIV) in excess of \$10 million on land identified under Schedule 2 as 'Bays Precinct Site' is State Significant Development (SSD) for the purposes of the EP&A Act by way clause (8) of the State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD). The CIV for the proposed development exceeds this threshold and so it is SSD.

The Site is owned by the Ports Authority of NSW (Port Authority).

This report summarises the matters raised during the exhibition of the EIS and provides a detailed and considered response to each topic. This report is accompanied by amended plans, which are submitted to DP&E in accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* and has annexed to it written particulars sufficient to indicate and assess the nature of the amended development.

## 2.0 Summary of Submissions

The EIS in support of the State Significant Development Application (SSDA 8554) was publicly exhibited for a period of thirty-five (35) days inclusive between 11 April 2018 and 15 May 2018. Public exhibition occurred in accordance with the requirements of the EP&A Act. This section of the report provides a summary of the matters raised by DP&E, other government agencies and authorities, and by the public, during the public exhibition of the SSDA. A complete discussion of the matters raised within the submissions is provided in Section 5.0 along with any supplementary environmental assessment that may be required.

Two hundred and forty four (244) submissions were received in response to the public exhibition of the EIS, including submissions made by government authorities and agencies, and the public, as follows:

- 232 submissions from members of the public, including:
  - 23 submissions of support;
  - 15 general comment; and
  - 194 submissions in objection.

It is noted that a number of the above submissions were duplicates where a submission had been uploaded more than once and therefore received two individual submissions numbers. There were also seven (instances) where a submission referred to an attachment that did not exist. A summary of the content of the public submissions is provided in **Appendix B**.

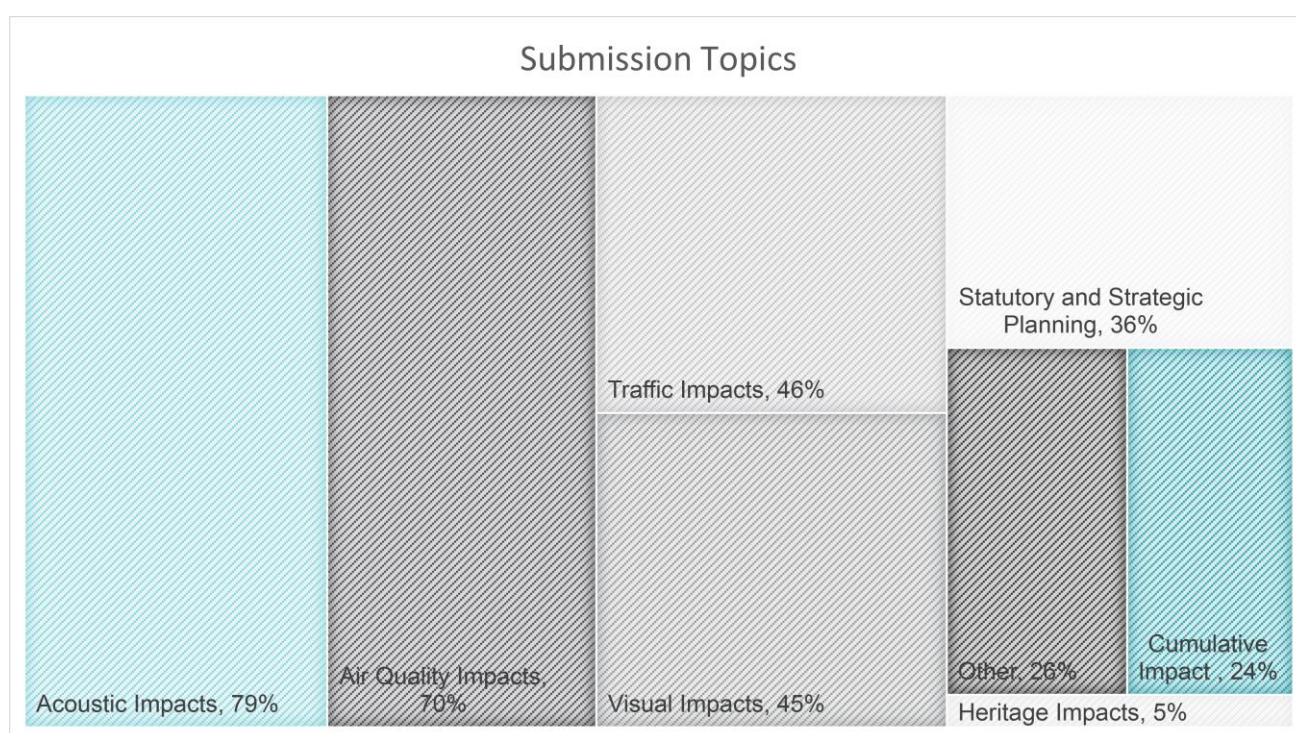
- Twelve (12) submissions were received from government, agencies, and organisations in response to the exhibition of the EIS. Specifically, responses were received from:
  - Roads and Maritime Services (262322);
  - The Glebe Society Inc (260905);
  - BIKESydney (262388);
  - Pyrmont Action Group (260119);
  - Inner West Council (260895);
  - Save Our Bays Glebe (260877);
  - Hanson (260409);
  - Bays Community Coalition (262396);
  - White Bay Stratas (260856);
  - Bike Leichhardt (260979);
  - Gunlake Concrete (260964); and
  - evolve\* Strata Committee, Pyrmont, NSW (258886).

A response to each of these submissions has been prepared and provided in **Appendix A**.

The key matters raised in the submissions can be broadly grouped into eight (8) categories. These categories are listed below in **Table 1**, along with a reference to where further discussion in relation to this topic can be found within this document. A visual representation of the frequency that each of these issues was raised within the submissions of objection, and therefore the relative importance of the issue to the objectors, is provided as **Figure 1**. A considered and detailed response to submissions has been provided in the accompanying documentation, with the key matters outlined above expanded on in Section 4.0 and **Appendix A**. As shown below, issues raised within the public submissions primarily focussed on amenity impacts, including air quality, visual and traffic impacts for local residents.

**Table 1 Submission Topic Summary Table**

Topic Category	Times raised in public submissions	Percentage of public submissions	Discussion Reference
Acoustic Impacts	153	78%	Section 4.1
Air Quality Impacts	136	69%	Section 4.2
Traffic Impacts	89	45%	Section 4.3
Visual Impacts	88	45%	Section 4.4
Heritage Impacts	9	5%	Section 4.4
Statutory and Strategic Planning	70	36%	Section 4.7
Cumulative Impacts	46	23%	Section 4.8
Other Impacts and Considerations	50	26%	Section 4.9



### 3.0 Amendments to the Proposed Development

Since the exhibition of the proposed development a number of minor amendments have been proposed. These amendments, which now form part of the proposed development, are outlined below.

#### 3.1 Vehicle Access

Minor amendments have been made to the heavy vehicle access routes for access and egress in consultation with surrounding users, particularly Port Authority. The interaction of heavy vehicles associated with the proposed development, and those associated with Port Authority's Multi-User Facility, will be managed in a coordinated manner, and minor amendments to the access arrangements to the site were necessary to accommodate this. A revised site layout plan is provided at Appendix K. This is further described in **Section 4.3** of this report.

#### 3.2 Vehicle Operation

Acoustic exceedances are predicted due to the operation of the pneumatic brakes on trucks operating within the site.

Hanson have subsequently investigated and confirmed the fitting of air release silencers to concrete trucks that will use the site. The silencers are commercially available and can be retrofitted to existing trucks to introduce an estimated minimum noise reduction of 6 dBA to the anticipated noise level. This is further discussed in **Section 4.1**.

The site layout has also been amended to reduce the number of staff parking spaces. 67 members of staff will be employed at the site, the total number of parking spaces for staff on the site has now been reduced from 59 spaces to 47 spaces, with an additional four (4) spaces provided for visitors.

#### 3.3 Operational Capacity

If approved, the proposed development when operating at full capacity, may create up to 372 heavy vehicle movements per hour (186 in, 186 out). The road network surrounding the facility is currently being significantly revised through the construction of the Westconnex Motorway, which is forecast to become operational in 2023. Although the facility would commence operation in 2020 it is not anticipated to reach maximum operational capacity until after 2023. Because it is not possible to undertake an impact assessment of the proposed development on the Levels of Service on WestConnex until it becomes operational, it is proposed to temporarily restrict the operational capacity of the facility to 182 truck movements per hour (91 in, 91 out) until 2023.

This amendment to the proposed development does not reduce the total operational capacity of the facility for which development consent is sought, rather it proposes to delay the full adoption of that capacity to allow the traffic impacts to be staged to align with the increasing capacity of the surrounding road network. A condition of consent could allow the proposed temporary restriction of capacity to be removed following the submission, and approval by the Secretary, or a supplementary traffic impact assessment to be conducted once WestConnex becomes operational.

#### 3.4 Site Plan and Elevation Plans

A revised site plan has been prepared by Hanson in consultation with Port Authority and is provided at **Appendix K**. The revised plan is proposed to supersede the original site plan submitted with the EIS. An excerpt of the amended site plan is provided at **Figure 1**. Elevation Plans are also provided at **Appendix K**. Key changes are summarised below:

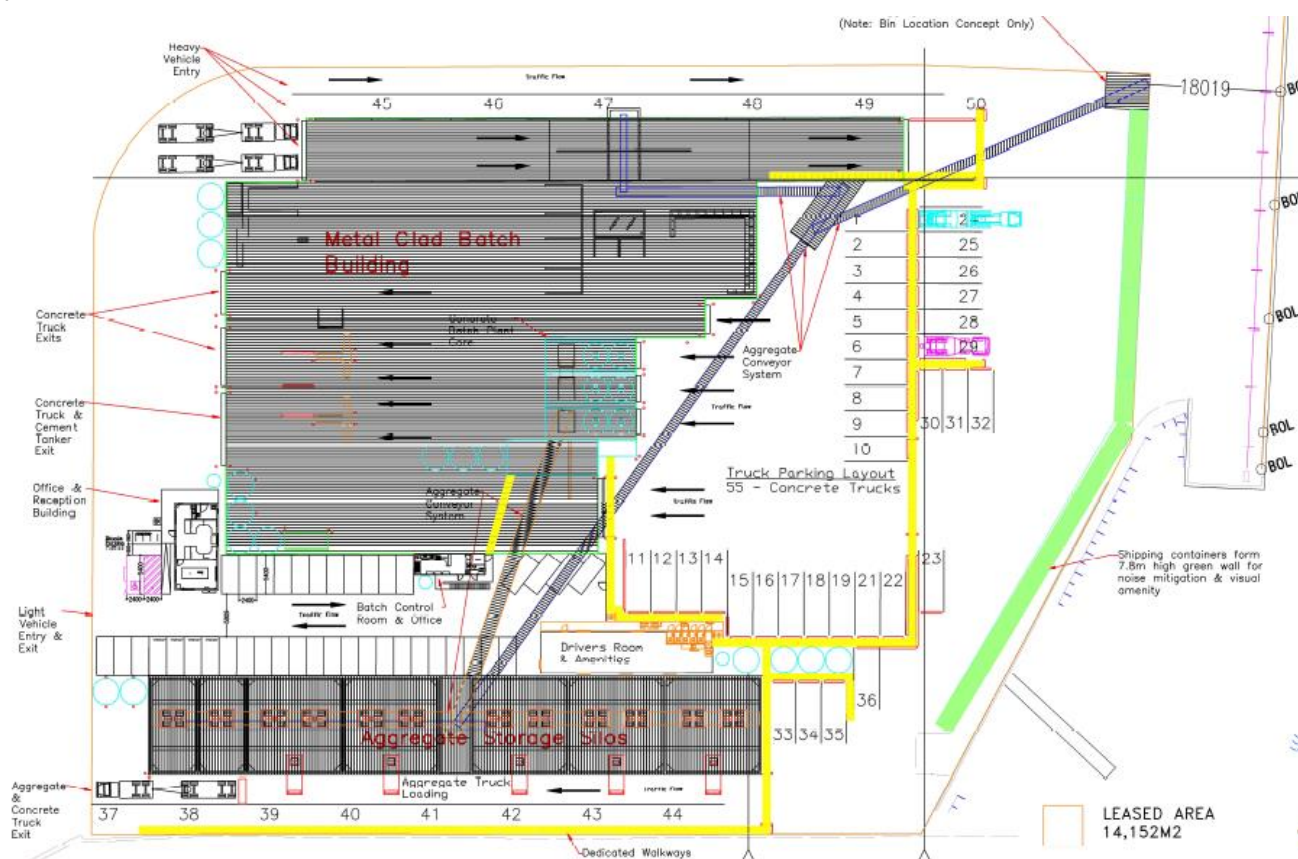
- A reduction in the overall footprint of the facility and the site / lease area by 2,042m<sup>2</sup> (13%);
- Increased setback of the lease area from the southern edge, from approximately 10m to 18m from the berth edge;
- Increased setback of the ship aggregate receival bin, now relocated to be within the lease area;
- Realignment of container wall to account for increased setback from berth edge;
- A reduction in the overall footprint of the aggregate storage silos;



- Repositioning of the aggregate conveyor system to be more central within the site to respond to design refinements for the receival bin and the aggregate silos;
- Nominal redesign of the building shed structure to be approximately 255 m<sup>2</sup> smaller (6% reduction in floor space), but on the same general footprint and same height;
- Relocation of the parking area within the site and a reduction in parking spaces as follows:
  - Reduction in the number of truck parking spaces from 59 to 50 spaces;
  - Reduction in the overall number of general employee parking, from 59 to 35 spaces;
- Increased number of water storage tanks (two by 4kL tanks for collection of water from batch-room roof and the office roof) to optimise reuse opportunities; and
- Associated design refinements to driver amenities, batch room control office, and internal arrangement of concrete batching components within the shed.

No change proposed to the number of visitor parking spaces (4 spaces), accessible parking (1 space), bicycle parking (7 spaces).

The overall changes proposed to the site layout and arrangement of the facility is minor in nature. Associated impacts are considered further at **Section 4.9** below.



**Figure 1 Amended Site Plan**

## 4.0 Summary of Submission Topics and Proponent Responses

A detailed summary of each government, agency, and organisation submissions received has been provided in **Appendix A** along with a response to each submission. A detailed summary of each public submission received has been provided in **Appendix B**, along with a response to each issue raised within these submissions. The summary below provides extracts of the key issues raised and the proponent's response.

### 4.1 Acoustic Impacts

#### 4.1.1 Topics Raised in Submissions

Acoustic impacts were raised in 78% of public submissions. Submissions included the following considerations:

- Operational noise impacts, including those associated with the proposed 24 hour operations;
- Construction noise impacts;
- Cumulative impacts (refer to Section 4.7); and
- Impact and assessment of noise emanating from ships docked at GIB1.

Specifically, submissions requested clarification regarding the anticipated acoustic impact of the proposed development on the neighbouring residential properties, including the extent to which the proposed development is reliant on existing acoustic attenuation at residential properties.

The submission received from the Environment Protection Authority (EPA) recommended that the proponent:

- propose mitigation actions for during construction that align with the ICNG specific actions;
- present detailed information on feasible and reasonable mitigation to manage construction noise from the proposal, and also cumulative construction noise impacts from the neighbouring Glebe Island Multi-User Facility;
- present further specific detail on how the proposed noise management precinct will function in accordance with Section 2.8 of the Noise Policy for Industry (NPfI);
- carry out a detailed assessment of maximum noise level events as required by and in accordance with Section 2.5 of the NPfI;
- provide detailed information on feasible and reasonable mitigation measures to address any predicted exceedance of the sleep disturbance noise level at Pyrmont;
- provide an assessment of shipping noise associated with the proposed development against the requirements of the NPfI, including:
  - provide information on sound power levels from potential vessels and other types of equipment to be used for loading/unloading of ships; and
  - make clear whether the modelled noise sources from loading/unloading include noise from the vessel, or just the loading/unloading activities, and
  - clarify the modelled scenarios by providing noise contour maps of all scenarios in the NIA clearly showing the location of noise sources, buildings, structures, terrain, and receivers.

Submissions received from members of the public included the following:

- “For all these years we have been complaining about sundry and uncompliant ships berthing at the White Bay docks, running multiple noisy generators, belching diesel exhaust smoke and fumes into the prevailing wind with the noise and diesel dust seriously contaminating the residential apartments that were approved and built along and set back from the foreshore.”
- “These [noise] levels should be regularly monitored by the Port Authority, with punitive remedies able to be enforced on the operator of the facility, the vessels involved and the trucking companies involved...”

- “I ask that the Port Authority rigorously polices a “2 strikes and you are out” policy in regard to ships that break the allowable noise levels. This request relates to bad experiences with ships unloading at Glebe Island over the 9 nearly 10 years I have lived here”

A full summary of the public submissions can be found in **Appendix B**. To summarise the above, an information request letter was received from DP&E, which included the requirement to provide additional information in relation to a range of areas. This request, and the corresponding response, is provided in **Table 2**.

#### 4.1.2 Response

A summary response to these submissions is provided below and is supported by a technical response, prepared by SLR, which is provided as **Appendix C**. The acoustic impact assessment undertaken by SLR for the proposed development includes an assessment of the impact of the development against the requirements of the ICNG (for construction noise) and the NPfI (for operational noise, including shipping noise). A response to the specific issues raised by DP&E is provided in **Table 2**.

**Table 2 DP&E Information Request Response – Acoustic**

Information Request	Response
Assess noise impacts from vessels at berth in accordance with the requirements of the Noise Policy for Industry (NPfI), and provide information on sound power levels from potential vessels to be used for loading/unloading, and other types of loading/unloading equipment, e.g. crane and bucket, other than the CSL Rhine.	An assessment of the noise impacts from vessels has been provided within the Supplementary Acoustic Report documents, which is provided as <b>Appendix C</b> .
Clarify whether the modelled noise sources from loading/unloading include noise from the vessel, or just the loading/unloading activities.	As presented in NIA Section 6.2.1, NIA Table 13 (and Table 13A above) already describes the in service operating condition of the CSL Rhine, where the SWL (typical 106 dBA) is inclusive of significant noise sources based on 12,000 tonnes vessel capacity (ie engine, ventilation and the like) and the ship bow is orientated south, with the discharge conveyor feeding the hopper.
Consideration must be given to the cumulative noise impacts of all activities in the surrounding area, including the proposed Port Authority's multi-user facility adjacent to the site. These include, but are not limited to ships docking and ship's engines running during port time.	NIA Section 7.2.1 presents the cumulative construction noise impacts with the Multi-user Facility. NIA Section 7.2.2 presents the cumulative construction noise impacts with the Westconnex M4-M5 Link Rozelle site.
Confirm the ambient and existing noise levels measured for affected residential receivers in the NIA are current and accurate.	The ambient noise environment has been established based on a review of the historical data collected since 1990, as well as recently surveyed noise levels as noted within <i>Report 610.11854 Interim Exhibition Facility Glebe Island White Bay &amp; Wharves 4 &amp; 5 Noise Impact Assessment</i> (SLR, November 2012) and <i>Report 610-04309-R51 Glebe Island Wharves 1 &amp; 2 Proposed Multi User Facility</i> (SLR, May 2013).  SLR have advised that road traffic has been the dominant feature of the historic ambient acoustic environment. Therefore ambient noise levels are highly unlikely to have decreased since the most recent recorded level in 2013.
Provide further specific detail on how the proposed noise management precinct will function and carry out a detailed assessment of maximum noise level events as required by and in accordance with the NPfI.	Refer to Section: 'Shipping Noise' below.
Provide detailed information on feasible and reasonable mitigation measures to address the predicted 2 dB exceedance of the sleep disturbance noise level at Pyrmont.	In accordance with Section 2.5 of the NPfI, it is noted that the SDNL $L_{max}$ 62 dBA is a screening noise level that triggers further investigation of the potential for sleep disturbance. The predicted maximum noise levels (NIA Table 19) potentially result from short term effects such as truck start-up, and parking brake with compressed air release. Of these events the SDNL $L_{max}$ 62 dBA was only exceeded by the parking brake compressed air release events. Hanson have subsequently investigated and confirmed the fitting of air release silencers to concrete trucks that will be used at the

Information Request	Response
	Facility. The silencers are commercially available and can be retrofitted with an estimated minimum noise reduction of 6 dBA to the $LA_{max}$ noise level. This will remove the exceedance of the SDNL $L_{max}$ 62 dBA screening noise level, negating the requirement to conduct a detailed assessment of maximum noise level events.
Derive project noise trigger levels in accordance with the NPfL.	The applicable $LA_{eq(10min)}$ precinct amenity and project amenity noise levels are presented in Table 7 of the NIA provided as Appendix D of the EIS.
Provide detailed information regarding the assumed mitigation measures and provide evidence to support the claim that no corrections are required for annoying noise characteristics.	The supplementary acoustic report in <b>Appendix C</b> provides some additional justification in relation to tonal noise, low frequency noise, and intermittent noise. In summary, no modifying factor is applicable to any of these characteristics.
State whether the source sound power levels (SWLs) and assumptions on the number of deliveries/volume of concrete represent the maximum capacity of the proposal. If not, predictions must consider future growth of the project.	Section 2.3 of the NIA in Appendix D of the exhibited EIS describes the maximum operating capacity of the proposed development, NIA Table 13 (refer EIS Appendix D) and Table 13A of the Supplementary Acoustic report (refer <b>Appendix C</b> ) present the major plant and equipment operating sound power levels associated with the proposed development.
Further consideration shall be given to the provision of enclosures to the silos to reduce potential noise impacts on surrounding residents and covering the batching plant side of the shipping containers with noise absorption material.	The silos are essentially passive buildings and not considered to be a major noise source. As shown in the supplementary acoustic assessment provided as <b>Appendix C</b> , conveyors and drives (located external to buildings, silos and silo to ship hopper) are of low-noise specification with full enclosure.
Clarify the modelled scenarios by providing noise contour maps of all scenarios in the NIA.	The predicted operating intrusive $LA_{eq}(15min)$ noise levels from the three operating scenarios of the proposed development are present in Table 18 of the exhibited acoustic assessment, the associated noise contours for daytime, evening and night-time are attached to that report as Appendices A, B and C respectively.
Propose mitigation actions for the construction phase that align with the Interim Construction Noise Guideline (ICNG). This should include consideration of cumulative construction noise impacts from the neighbouring Glebe Island Multi-User Facility.	Additional mitigation measures have been included in Section 5.
Clarify how the NSW Ports Authority management plan for ship deliveries has been considered and to what extent this will protect surrounding residents from unacceptable noise impacts.	Refer to Section 'Shipping Noise' below.
Further consideration should be given to the provision of shore to ship power in partnership with the Port Authority NSW, including the use of solar power and a battery storage facility; to generate sufficient power to enable shore to ship energy supply at both facilities.	Hanson has considered the concept of providing shore to ship (solar) power at the Facility. However, as none of the potential vessels to be used for loading/unloading are capable of connecting to such a power supply, the concept is not technically feasible or practically reasonable.

## Shipping Noise

Hanson understand that the Port Authority is currently developing a noise guideline to manage noisy ships at Glebe Island and White Bay in consultation with the EPA and DP&E. This policy recognises that managing noise from a vehicle such as a ship is more complex due to its transient nature, and draws from industry best practice approaches in managing ship noise for port activities, essentially establishing a noise standard for vessels. Where noise levels by a vessel exceeds the standard, a vessel specific management plan would be adopted specifying actions and mitigation measures to reduce noise levels to the standard or quieter. If exceedances remain after three vessel visits and the vessel cannot demonstrate improvements to achieve the noise standard, then night-time berthing and/or unloading activities may be restricted.

It is understood that the Port Authority 'Noisy Ship Policy' will be officially adopted prior to the operation of the proposed development. Compliance with the Port Authority's 'Noisy Ship Policy' will be enforced by way of the Lease Agreement between Port Authority and Hanson for use of GLB1, and can be reinforced by way of suitable conditions of consent by the consent authority.

In the interim, Hanson will develop an operating procedure that aligns with the forthcoming Noisy Ships Policy. This procedure will apply to ships visiting the Hanson facility via GLB1 and ensure that all shipping activity is subject to a management strategy to control ship noise within the port. The Hanson ship noise procedure involves coordinating with the ship operator(s) to ensure the main ship berth noise sources (e.g. ship's engine, raw material unloading conveyor mechanism and associated ventilation systems) are minimised where feasible and reasonable to do so. The interim adoption of the Hanson ship noise procedure (i.e. until such time as the Port Authority 'Noisy Ship Policy' comes into effect) has been specified in the final mitigation measures at Section 5.

## Compliance with NPfI

The NSW *Noise Policy for Industry* does not provide noise 'limits', instead setting 'trigger levels'. As noted in the NPfI:

*The project noise trigger level provides a benchmark or objective for assessing a proposal or site. It is not intended for use as a mandatory requirement. The project noise trigger level is a level that, if exceeded, would indicate a potential noise impact on the community, and so 'trigger' a management response; for example, further investigation of mitigation measures.*

The acoustic assessment undertaken by SLR (Appendix D of the exhibited EIS) has been supplemented by the additional information provided within **Appendix C** of this report. This assessment is consistent with the requirements of the NPfI and demonstrates that, when all reasonable and feasible mitigation measures are considered, the proposed development complies with the requirements of the relevant policy.

Further, Hanson has been advised that Port Authority is planning on establishing a 'noise management precinct' in accordance with the NPfI, in consultation with the DP&E and EPA. Once established, the 'noise management precinct' will result in the management of noise by the Port Authority across the entire noise precinct, enabling more efficient implementation of reasonable and feasible noise mitigation measures, and minimisation of noise impacts from the port as a whole. It is understood that the Port Authority 'noise management precinct' will be officially adopted prior to the operation of the proposed development. Compliance with the 'noise management precinct' will be enforced by way of the Lease Agreement between Port Authority and Hanson for use of GLB1, and can be reinforced by way of suitable conditions of consent by the consent authority. In the interim, Hanson proposes to manage noise impacts as set out under the acoustic assessment prepared by SLR (Appendix D of the exhibited EIS and as amended by the Supplementary Acoustic Report at **Appendix C** of this RTS).

## 4.2 Air Quality Impacts

### 4.2.1 Topics Raised in Submissions

Air quality or dust impacts were raised in 69% of submissions. Submissions received from members of the public included the following:

- "Ships manoeuvring into and when berthed GB1 & 2 and trucks servicing the facility will give rise to an increase in exhaust emissions. The handling of cement sand and fine aggregate will produce dust level over and above to those that presently exists".

The submissions from the EPA included the following considerations:

- Assumptions and conclusions in relation to construction and operation impacts were generally accepted by the EPA;
- The EPA recommended that Hanson commit to a requirement for ships berthing at the Concrete Batching Plant to use low sulfur fuel oil;
- Vehicles should be required to meet the highest emissions standards;
- Bulk transit and storage of aggregate and other bulk materials should be covered to ensure particulate impacts are reduced;
- Additional air quality monitoring stations should be installed on the corner of Bowman Street and Bank Street



- Emissions from ship engines continuously burning crude diesel - together with fine dust particles from bulk materials on vessels coming from countries with low emission-reduction standards - will severely impact air quality.

A full summary of the public submissions can be found in **Appendix B**. To summarise the above, an information request letter was received from DP&E, which included the requirement to provide additional information in relation to a range of areas. This request, and the corresponding response, is provided in **Table 3**.

#### 4.2.2 Response

A summary response to these submissions is provided below and is supported by a technical response, prepared by Pacific Environment, which is provided as **Appendix D**. A response to the specific issues raised by DP&E is provided in **Table 3**.

**Table 3 DP&E Information Request Response – Air Quality**

Information Request	Response
Address the recommendations of the attached peer review by Todoroski Air Sciences of the Air Quality Assessment by Pacific Environment dated 15 March 2018 (AQA), in order to ensure the AQA to allow a full assessment of air quality impacts to be made.	A response to the Todoroski Air Sciences peer review as been provided within <b>Appendix D</b> .
Further consideration should be given to undertaking noise and dust monitoring at the head of Blackwattle Bay, and in Pyrmont at the closest building to the site, to support the modelling used in the AQA.	Hanson agree that air quality mitigation measures and ongoing monitoring of facility performance should be included as conditions of approval.
Further consideration should be given to applying the new standards foreshadowed by the Australian Maritime Standards regulatory body for the maximum allowable sulphur content in fuel to all ships delivering raw materials to the site.	Hanson has committed to the use of low sulphur fuels (<0.5% sulphur) for all water vessels servicing the facility under their operational control.

It is noted that the Air Quality Impact Assessment undertaken as part of the exhibited EIS has been reviewed by the EPA and found to be adequate. It has also been reviewed by an independent consultant and (where necessary) responses to this review have been provided. The assessment concludes that potential air quality impacts associated with the proposed development will be below ambient air quality impact assessment criteria. Further, an assessment of cumulative air quality impacts indicates that the cumulative impact of the development and those surrounding it would not be anticipated to result in any additional exceedances of the impact assessment criteria.

The proposed development will utilise the best available technology to minimise air quality impacts associated with the concrete batching and aggregate dispatch process. Measures proposed to reduce emissions include:

- Receival bins located inside enclosed building to minimise exposure to wind;
- Enclosed conveyors and transfer points to move aggregate to holding hoppers; and
- Fully enclosed holding hoppers.

Further, vehicles associated with the operation of the development, including ships, will be modern and will run on low-emission fuel, therefore limiting the potential for vehicle emissions from this source. Overall, the EIS and its supporting studies has demonstrated that the proposed development is able to satisfy the relevant air quality criteria.

Measures proposed to assist with management of air quality are outlined in Section 5.

### 4.3 Traffic Impacts

#### 4.3.1 Topics Raised in Submissions

Traffic impacts were raised in 45% of public submissions. Submissions included the following considerations:

- Issues raised by Councils and government agencies are addressed in detail in **Appendix A**.

- Submissions from members of the public included the following recommendations:
  - “The proposal does not sufficiently address its impact on existing and future regional cycling links. To this end, the proposal should be conditioned to extend the existing grade-separated cycleway on the northern side of James Craig Road”.
  - “Provide a plan to replace road transport diesel fuel with electricity, or with a cleaner fuel such as LPG, LNG or hydrogen if a transition to EVs will be delayed”.
  - “Even if importing to Glebe Island reduces the number of truck movements, even a fraction of the 140,000 truck movements would have major traffic consequences for the precinct”

A full summary of the public submissions can be found in **Appendix B**. To summarise the above, an information request letter was received from DP&E, which included the requirement to provide additional information in relation to a range of areas. This request, and the corresponding response, is provided in **Table 4**.

#### 4.3.2 Response

A summary response to these submissions is provided below and is supported by a technical response, prepared by AECOM, which is provided as **Appendix E**. A response to the specific issues raised by DP&E is provided in **Table 4**.

**Table 4 DP&E Information Request Response – Traffic**

Information Request	Response
Consideration must be given to the cumulative transport impacts of all activities in the surrounding area, including the proposed Port Authority's multi-user facility adjacent to the site, WestConnex, Western Harbour Tunnel and M4-M5 link, and construction of elements of the renewal of the Bays Precinct. This should be undertaken in consultation with the Sydney Coordination Office within TfNSW.	The TIA provided as Appendix H of the exhibited EIS has provided a cumulative impact assessment with other known projects for which information is available in and around the Bays Precinct. The cumulative impact assessment includes the multi-user facility, WestConnex (M4-M5 link), western harbour tunnel, Sydney metro west, Hymix concrete batching site in Pyrmont and potential future development at the Bays Precinct. The Supplementary Traffic Report provided at <b>Appendix E</b> also contains a further assessment of cumulative impacts including Sydney Metro and White Bay civil site. Consultation with the Sydney Coordination Office has been undertaken and is documented within the Supplementary Traffic Report provided at <b>Appendix E</b> .
Clarify and provide justification for the proposed maximum number of truck movements per day to and from the site. This should include clarification of the number of morning and afternoon hourly peak truck movements as there are disparities in the application documentation.	<p>The TIA provided in Appendix H of the exhibited EIS specifies that during the AM network peak (7:30 – 8:30) the proposed development will create 182 truck movements (91 in, 91 out). This is consistent with the truck movements specified in Table 14 of the EIS, however Table 14 of the EIS also adds in light vehicles associated with employee traffic for total traffic movements.</p> <p>Outside of this network peak, when operating at full capacity, the proposed development may create up to 286 truck movements (186 in, 186 out) per hour.</p> <p>If approved, the proposed development would commence operation in mid 2022 at a capacity below the maximum assessed within the exhibited EIS. The capacity of the proposed development would increase over time; however, it is not anticipated to reach maximum operational capacity until after the WestConnex motorway becomes operational. It is not possible to undertake an impact assessment of the Levels of Service impact on WestConnex affected intersections until it becomes operational. As the proposed development is not anticipated to be required to operate at full capacity until after WestConnex becomes operational, it is proposed to cap the operational capacity to a maximum of 182 truck movements per hour (i.e. 91 in, 91 out) until mid 2022. At this point a supplementary assessment of the impact of the increased</p>

Information Request	Response
	capacity on the operation of WestConnex affected intersections will be able to be conducted.
Provide a swept path assessment of cement, aggregate and concrete trucks that are proposed to turn right at the intersection of The Crescent/James Craig Road, in order to assess whether there would be a reduction in the capacity of the intersection and consideration of this in traffic modelling	This has been provided within the Supplementary Traffic Report provided as <b>Appendix E</b> .
Provide further information in relation to the road-only scenario, whereby aggregates are not able to be delivered by ship. This should include: a. the estimated frequency of road only operation expected in a year b. number of daily and peak hour heavy vehicle movements to and from the site c. assessment of traffic impacts on the road network.	In the event that aggregate deliveries were unable to be made by ship, truck movements associated with aggregate delivery would have to arrive at the facility loaded and either depart empty, or depart with a load of different raw material depending on stock levels in the aggregate silos. As such, the two-way truck movements provided in the TIA will still be the same, however instead of arriving empty and depart loaded, they will arrive loaded and depart either empty, or loaded with a different material. As such, there are no additional movements associated with this operational scenario and all truck movements are already considered in the forecast trip generation.
Give further consideration to the proposed parking provision, including consideration of the measures proposed in the Traffic Impact Assessment to promote alternatives to private vehicle modes of travel, the principles of which are supported by TfNSW.	As outlined in Section 3.4, Hanson has amended the site layout to reduce the number of staff parking spaces and truck parking spaces. Truck parking spaces have been reduced from 59 spaces to 50 spaces. With 67 members of staff employed at the site, the total number of parking spaces for staff on the site has now been reduced from 59 spaces to 35 spaces, with an additional four (4) spaces provided for visitors retained as per the traffic impact assessment. A green travel plan will be provided to all employees notifying them of the alternative transport options for them as discussed in the traffic impact assessment.
Further consideration should be given to bringing forward the investigation of the pipeline to transport cement from the silos operated by Cement Australia at Glebe Island to the proposed silos, to align with the timing of the construction of this facility	The use of a direct piped connection between the proposed development and the Cement Australia facility will be the subject to a separate commercial discussion between Hanson and Cement Australia. If a commercial arrangement can be reached, the local traffic impact would be likely to be slightly reduced as the requirement for cement deliveries would be removed. As noted in the exhibited TIA (Appendix H of the EIS) cement deliveries make up between 1.3% and 9% of the total truck movement count and therefore, although their removal would reduce the overall traffic impact, this reduction would not be significant. The assessment undertaken in support of the proposed development cannot account for the impact of this arrangement as commercial terms have not been reached.
Investigate the use of barges to transport concrete from Glebe Island to construction sites within the delivery catchment of the site	The use of barges to transport pre-mixed concrete is feasible if the intended delivery site has direct foreshore access. In other situations, the time taken to load a laden concrete agitator truck onto barge, transport the barge to receiving berth, unload the concrete agitator truck, and then travel to the receiving site and dispense the concrete, will exceed the 45 minute target duration from concrete dispatch to delivery and will therefore not be a feasible method of concrete delivery.



Information Request	Response
Provide a Workplace Travel Plan to encourage workers to use public transport to travel to and from the site, including the use of Glebe Island Bridge and foreshore public access	A green travel plan will be provided to all employees notifying them of the alternative transport options for them as discussed in the traffic impact assessment.

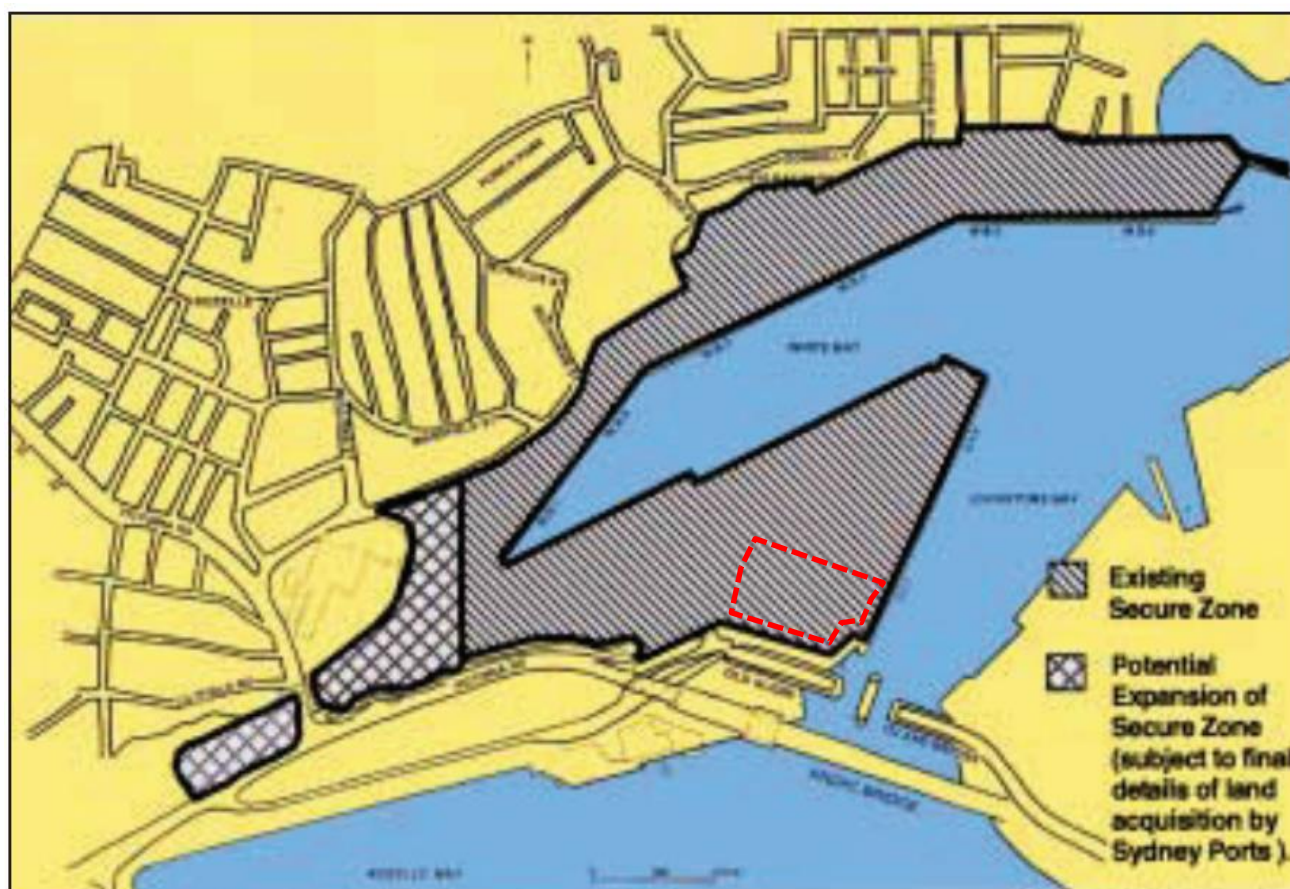
## Cycling Links

A number of public submissions raised concerns about the impact of the proposed development on existing and future cycling links around the site. As noted within the *Glebe Island and White Bay Masterplan 2000* the site is located within a Secure Area (refer to **Figure 2**), as such, no public access (including cycling) is permitted around the site.

It is acknowledged that the Glebe Island Bridge may be considered as a dedicated cycle route in the future. The western landing of Glebe Island Bridge connects to Sommerville Road via an overpass of James Craig Road. Trucks exiting the site would exit via James Craig Road. It is recognised that, in the event that this cycle route materialises, the interface of cyclists and truck movements associated with all activities on Glebe Island (including the proposed development) would need to be appropriately managed.

Access to Glebe Island Bridge is currently restricted, with public access to each bridge landing prevented. In the event that improvements to Glebe Island Bridge (and the surrounding cycle infrastructure) are introduced to the extent that Glebe Island Bridge is integrated into the cycle network, Hanson would liaise with the relevant authority at the time to ensure that the safety of cyclists is a priority.

Hanson generally supports any initiative that would improve active transportation to the site and provide alternative transport options for its employees and this includes the introduction of a separated cycleway across Glebe Island Bridge. Although this improvement is not proposed as part of this development and is therefore beyond the scope of this assessment, Hanson would be supportive of any initiative that aligns with the future objectives of the future Green Travel Plan for the proposed development.



## Figure 2 Existing Secure Area

Source: Glebe Island and White Bay Masterplan 2000

### 4.4 Visual Impacts

#### 4.4.1 Topics Raised in Submissions

Visual impacts were raised in 45% of public submissions. Submissions included the following considerations:

- “A requirement to include landscaping and public art strategies”.
- “The potential for excessive light pollution affecting nearby residents”.
- “The development will block the view of the three bridges -the Sydney Harbour Bridge, the Anzac Bridge and the old Glebe Island Bridge”.
- “This development with its 34-metre-high silos would obstruct views of the highly-acclaimed Anzac Bridge from various vantage points which is in complete contrast to the vision for future developments in the Bays Precinct”.
- “The proposal has not been located so as to minimise the impact on the surrounding area, but rather located simply for ease of loading and unloading”.
- “The proposed facility will blight the entrance to Rozelle and Blackwattle Bays (and, by extension, the Sydney Fish Markets). Suggested mitigation measures and/or public art in an attempt to reduce perceptions of size and/or ugliness, are simply “lipstick on the pig” and as such are an affront. They are in fact a recognition of just how inappropriate this structure would be, in this setting”.
- “perhaps neither proponent or assessors quite understand the significance of the relatively unfettered view of the three bridges (Anzac, Glebe Island and Sydney Harbour) which greets the viewer arriving from the northern end of Glebe Point Road. Many first-time viewers are utterly transfixed by the sight. Other “receivers” include tourist groups, bridge aficionados, painters, many amateur and serious photographers, picnickers, film crews and those simply seeking solace.”

A full summary of the public submissions can be found in **Appendix B**. In addition to the above, an information request letter was received from DP&E, which included the requirement to provide a Detailed Lighting Strategy:

- *Provide a detailed lighting strategy which will inform the requirements and specifications of the detailed lighting design. The strategy is to describe areas of the site that would require exterior lighting, and the performance requirements that would apply. The lighting strategy is to ensure that the lighting in each area of the proposed development is compliant with the performance requirements of relevant standards and guidance; including the control of obtrusive light which could affect potential sensitive residential and ecological receptors*
- *This strategy must include consideration of the cumulative impacts of all activities in the surrounding area, including the proposed Port Authority's multi-user facility adjacent to the site, and the effect on roads in the vicinity of the site, including the ANZAC Bridge. Details of impacts should be provided, with mitigating measures identified to prevent possible distraction and/or hazardous glare experienced as a result of lighting.*

#### 4.4.2 Response

A summary response to these submissions is provided below and is supported by a technical response, prepared by AECOM, which is provided as **Appendix F**. A Detailed Lighting Strategy has been prepared by AECOM in relation to the lighting requirements of the proposed development and this is provided as **Appendix I**.

As noted in the Landscape and Visual Impact Assessment provided as Appendix E of the exhibited EIS, the design of the proposed development has been developed to minimise, as far as possible, visual impacts from surrounding vantage points. Landscaping plan and a public art plan can be developed to further ameliorate the visual impact of the proposed development prior to construction, if required. Additional assessment, including an assessment of the anticipated impact on views of the ‘three bridges’ has been provided within the supplementary Visual and Lighting Report in **Appendix F**. This assessment concludes that, although silos associated with the proposed development would be visible, the change is considered appropriate due to the following:

- The bulk of the silos would be offset by the visual bulk of the apartment buildings at Jacksons Landing to the east, and the existing concrete silos on Glebe Island to the west;

- The character of the development as a whole, including the silos, is visually in keeping with the industrial maritime character of Glebe Island as a working industrial wharf;
- The view from this observer location is not a recognised view associated with the heritage listing of any individual or collective group of bridges;
- The Project is not impeding any recognised views associated with heritage items; and
- Recognised views associated with Glebe Island Bridge heritage listing have been assessed within the Heritage report for this Project.

The *Glebe Island and White Bay Masterplan 2000* includes some additional principles relating to view loss and these are discussed below.

***Maintain the general view of the Pyrmont skyline and Anzac Bridge as seen from the Balmain residential area.***

Views from Balmain residential area have been assessed in the LVIA that was included as Appendix E of the exhibited EIS, summarised in Observer Locations 1, 2 and 3. From the easternmost point (Peacock Point, Observer Location 1) moving south west, the proposed development becomes more visually prominent within the view as the receptor moves closer to the proposed development. The proposed silos are the most prominent element within the development, viewed stacked against the western approach to the ANZAC Bridge. While the silos do screen views to the western end of the deck of the ANZAC Bridge, the overall view of the bridge and the Pyrmont skyline are retained, with the character of the proposed development considered appropriate given the overall character of the working industrial wharf.

***Maintain the general view of the Pyrmont skyline and Anzac Bridge as seen from White Bay Park.***

This viewpoint has been assessed in the LVIA that was included as Appendix E of the exhibited EIS (Observer Location 2) with the change to views rated High to Moderate. This rating has been generated due to the high sensitivity of the receptors and the bulk of the silos viewed against the western end of the ANZAC Bridge. However, the view to the Pyrmont Skyline remains unchanged, and the silos, while seen against the ANZAC bridge, do not screen or block views to the most prominent element of the structure; the suspension cables or central bridge deck.

***Maintain existing views to landmarks to reinforce the diverse visual quality of the area.***

The Masterplan notes the following landmarks, to which views should be protected, these are:

- The White Bay Powerstation;
- Glebe Island Silos;
- Old Glebe Island Bridge; and
- Anzac Bridge.

In addition to this, the Masterplan notes the significance of the Balmain and Pyrmont skylines

The proposed silos, which are the most significant element of the proposed development are positioned adjacent to two of the listed landmarks: the Glebe Island Bridge and the ANZAC Bridge, however, they only partially screen views to the western most ends of these bridges when seen from areas to the north of Glebe Island. Overall, views to these landmarks are typically maintained from most of the surrounding areas.

The proposed silos within the development would visually complement the existing silos on Glebe Island, and their scale and bulk are visually comparable to the existing silos and the built form situated at Pyrmont on the eastern side of Johnsons Bay.

***Ensure that the approach to the Old Glebe Island Bridge is upgraded to contribute to the quality of the public domain.***

This principle is not applicable to the proposed development

***Maintain and protect vistas where practicable along streets which terminate at the water.***

All vistas terminating in water shown in Figure 7 are maintained and protected.

***Provide flexibility for locating port facilities including buildings and silos.***

This principle is not applicable to the proposed development

Overall, while the proposed silos of the development would encroach on some views to the ANZAC Bridge and Glebe Island Bridge, typically views to these structures are maintained due to the elevated viewing locations of Balmain and Pyrmont / Jacksons Landing. The stacking of the proposed silos against the bulk of the ANZAC Bridge is considered the most appropriate placement as it would minimise the visual bulk of these structures on the site, positioning them away from the centre of Glebe Island. Further, the character of the proposal is considered to be visually in keeping with the industrial maritime character of Glebe Island.

**Lighting Strategy**

A Detailed Lighting Strategy has been prepared by AECOM in relation to the lighting requirements of the proposed development and this is provided as **Appendix I**.

**4.5 Heritage Impacts****4.5.1 Topics Raised in Submissions**

Heritage issues were raised in 5% of public submissions (a total of 9 times). Submissions included the following considerations:

- “A requirement to identify and describe the impacts on the remaining elements of the first Glebe Island Bridge, its embankments and potential archaeological evidence”;
- “It is recommended that this proposal should be supported by an assessment which addresses impact to potential maritime heritage sites”

A full summary of the public submissions can be found in **Appendix B**. In addition to the above, an information request letter was received from DP&E, which included the requirement to provide additional information in relation to a range of areas. This request, and the corresponding response, is provided in **Table 6**.

**4.5.2 Response**

An updated Statement of Heritage Impact has been provided by AECOM and is provided as **Appendix G**. This confirms that there is the potential for historical archaeological remains associated with the first Glebe Island Bridge to be present along its former alignment under the location of the silos proposed for the concrete batching plant. It is anticipated that any excavation below the current hardstand in the vicinity of the current proposed silo area has the potential to expose timber pile and other structural remains associated with the first bridge that were not removed prior to the reclamation works. The report recommends that a historical archaeological monitoring program be undertaken concurrently with any excavation works below the existing hardstand in the vicinity of the proposed silos.

As the proposed development is a State Significant Development no permit from the Heritage Division is required, however, a Research Design and Methodology has been produced and is provided as Appendix B of **Appendix G**.

**Table 5 DP&E Information Request Response – Heritage**

Information Request	Response
Provide a detailed Archaeological Research Design and Methodology. The Department will refer this to the Heritage Council for review.	A detailed Archaeological Research Design and Methodology has been provided as Appendix B within <b>Appendix G</b> .
Provide additional information to identify and address any impacts on potential maritime heritage sites. This is to include the results of a search of the maritime heritage database.	No works below the Mean High Water Mark are proposed as part of the development, physical works are limited to on-shore works within the existing Glebe Island concrete slab. As such, impacts on maritime heritage sites are not anticipated.
Further consideration should be given to expanding the Heritage Impact Statement to examine the impacts on the first Glebe Island Bridge and its embankments. This should include a plan showing the proposed new structures in relation to existing stage significant items.	An updated Heritage Impact Statement has been provided as <b>Appendix G</b> .



Information Request	Response
All fabric of state heritage significance associated with the former and current Glebe Island Bridge should be conserved and opportunities should be explored for erection of heritage interpretation.	All fabric associated with the current Glebe Island Bridge will not be impacted and will remain in its current condition. Archaeological remains associated with the former Glebe Island Bridge, if present, are likely to be under the footprint of the silos associated with the development and may not be able to be relocated in the development area. If archaeological remains are found and recorded as part of the development, a heritage interpretation plan will be recommended to be undertaken as part of the final archaeological reporting for the site

## 4.6 Statutory and Strategic Planning Considerations

### 4.6.1 Topics Raised in Submissions

Statutory and strategic planning issues were raised in 36% of public submissions. Submissions including matters related to a range of statutory and strategic planning considerations relating to the proposed development raised a range of issues which broadly aligned with the extracts below:

- “A Master Plan for the whole of Bays Precinct, which protects residential amenity, should be completed before any additional development takes place”.
- “Many community members are of the view that the proposal is incompatible with the relatively recent, large scale residential development to the east of the site”.
- “Any business running 24 hours per day/ 7 days per week should be located well away from residential precincts”.
- “It is 10 years since the Glebe Island operated as a 24 hour working port and in that time Pyrmont has become the most densely populated suburb in Australia”.
- “The proposal by Hanson and the MUF [Multi User Facility] proposal being considered by the Ports Authority ought to be subject to a single assessment process. The fact that the Hanson proposal is subject to Part 4 of the Environmental Planning and Assessment Act (EPA Act) and that the MUF proposal is to be assessed under Part 5, when both projects are thoroughly intertwined, demonstrates a lack of coordinated planning”
- “Glebe Island has had numerous uses proposed by Government(s) through the past decade (recreational, technological, residential). There seems to be a lack of a coherent long-term vision for this asset. This proposal re-introduces heavy industry (materials handling and concrete manufacture) into a precinct with Australia's highest population density”.
- “This investment is inconsistent with the announced and agreed NSW State Government Bays Precinct Transformation Plan in 2015 and will negatively impact on 20,000 people who live locally”.
- “The objectives and the visions for the Glebe Island Destination in the Bays Precinct Transformation Plan are overlooked in this statement. The proposed facility is clearly not compatible with these plans for Glebe Island, especially when the scale of the concrete plant is considered. It is also not compatible with many of the principles and provisions in the *Glebe Island and White Bay Master Plan 2000*”.
- “In order that there is a level playing field I respectfully request that Minister for Planning call in the Port Authority's proposed MUF in order that the same assessment can be applied to the MUF as the Hanson Concrete Plant”

A full summary of the public submissions can be found in **Appendix B**. In addition to the above, the request for information received from DP&E required the provision of an assessment of compliance with the provisions of:

- the Glebe Island and *White Bay Master Plan 2000*, which is to be read in conjunction with *Sydney Regional Environmental Plan No. 26 City West*, and
- the strategic plans applying to the site, including the *Bays Precinct Transformation Plan for Glebe Island*.

#### 4.6.2 Response

A list of all applicable statutory plans and policies was provided in Table 4 of the exhibited EIS. This table included a commentary on the applicability of the *Bays Precinct Transformation Plan for Glebe Island* (2015). The following sections of this response to submissions provide a fulsome assessment of the proposed development against the provisions and objective of the *Bays Precinct Transformation Plan for Glebe Island* (2015) and also the *Glebe Island and White Bay Masterplan 2000*, along with an overview of the effect of these documents on the planning controls relevant to the development proposed in this location.

#### ***Bays Precinct Transformation Plan for Glebe Island***

The Exhibited EIS notes that: *the Bays Precinct Transformation Plan identifies Glebe Island as a working port with the intention to retain important features of the port. While the details of what this means for the area are not yet publicly available, the proposed development is consistent with the overall staging programme outlined under the Transformation Plan which identifies Glebe Island redevelopment as a long term priority (10 - 15 years).*

The Transformation Plan sets out 20 Principles and nine Objectives for the transformation of the Bays Precinct. These Objectives, along with commentary relating these Objectives to the proposed development, is provided in **Table 6**.

**Table 6 Principles and Objectives of the *Bays Precinct Transformation Plan for Glebe Island* (2015)**

Principle/Objective	Comment
<b>Principles</b>	
Build on the unique history of The Bays Precinct.	The proposed development will building on the history of The Bays Precinct by allowing an existing port facility to remain in use until such time as the broader precinct is redeveloped for other purposes.
Establish a powerful and enduring governance model based on whole-of- government collaboration that fearlessly pursues public benefit.	This principle is not relevant to any specific development application.
Be transparent and communicate the issues and challenges we face and the investments needed to realise the Precinct's potential.	This principle is not relevant to any specific development application.
Allow the time to invest in genuine and early engagement with, and broad acceptance of our plans from, all categories of the public, government and industry.	The proposed development is consistent with this principle as it will allow the site to be utilised on an interim basis until the Government determines that the site should no longer be zoned for industrial purposes and the future use of the area is determined.
Unlock public access to the Harbour's edge and waterways along the entire coastline.	Although the proposed development will prevent public access to this part of the foreshore, this is consistent with both the existing situation, and other working harbours.
Develop an overall Bays Precinct Transformation Program to prioritise major projects and define the staging for integrated development and land use.	This principle is not relevant to any specific development application.
Establish a whole-of-precinct transport infrastructure plan early, based on connectivity, accessibility and active transport.	This principle is not relevant to any specific development application.
Prioritise planning for public spaces, White Bay Power Station and Sydney Fish Market.	The proposed development is not inconsistent with this principle.
Generate optimal housing supply outcomes based on a model of diverse housing options, the highest design principles and activated public spaces.	The proposed development does not address this principle, but it does not prevent other applications from addressing housing.
Ensure the land use and associated development is diverse, beautifully designed and creates 'great places and great spaces'.	The proposed development is for an industrial use, which is consistent with the historic use of the site and with the zoning of the land. It is acknowledged that the site will be redeveloped in future to create an integrated urban renewal outcome including a port..

Principle/Objective	Comment
Build the capacity for The Bays Precinct to be a place that contributes to healthy, prosperous and resilient lifestyles.	The proposed development will support the NSW economy thereby contributing to healthy prosperous and resilient lifestyles.
Support economic development and growth that can drive a strong, digitally connected, innovative and diverse knowledge economy.	The proposed development will deliver an orderly and economic use of a vacant site, which will support the NSW economy until such time that the precinct will be rezoned and redeveloped for alternate uses.
Plan for future generations by being open to new ideas and embracing emerging trends.	This principle is not relevant to any specific development application.
Adopt world-class energy generation systems that maximise efficiency and establish The Bays Precinct as the exemplar for 'big city' energy provision.	As the development is for an interim use, extensive energy generation systems are not possible at this time.
Introduce environmental and ecological systems to improve water quality, address ongoing sources of water pollution and encourage public recreation.	The proposed development will not reduce local water quality.
Support the economic activities of maritime industries and celebrate the authenticity of the working harbour.	The proposed development is for a use that is reliant on the existing port uses of the site and will support the economic activities of maritime industries and celebrate the authenticity of the working harbour.
Provide the platform for investment from Australia and abroad, and from public and private sectors.	The proposed development will support investment in Australia by ensuring that there is an adequate supply of concrete.
Incorporate a strong funding and financial strategy to enable innovative, leading-edge and productive investment vehicles that promote investor appetite.	This principle is not relevant to any specific development application.
Seek broad sources of funding for urban transformation across a range of investors, including superannuation and pension funds, and philanthropy.	This principle is not relevant to any specific development application.
Employ an ethical procurement process that optimises value for government and taxpayers while being attractive to investors.	This principle is not relevant to any specific development application.
<b>Objectives</b>	
To deliver a hub of export-oriented knowledge-intensive jobs that can increase Sydney's global competitiveness..	The proposed development will support the existing use of the site for port-related activities, which will ensure that the site is appropriately occupied until such time as alternative uses can be delivered.
To deliver enduring, socially inclusive and great places to benefit Sydneysiders and national and international communities.	The proposed development will support the existing use of the site for port-related activities, which will ensure that the site is appropriately occupied until such time as alternative uses can be delivered.
To deliver housing choices, including affordable housing options, through design, finance and construction excellence.	The proposed development does not address this principle, but it does not prevent other applications from addressing housing excellence.
To deliver a world-class mass and active transit solution that unlocks the economic and human potential of The Bays Precinct and demonstrates a model of environmental excellence.	The proposed development does not address this principle, but it does not prevent other applications from addressing mass transit.
To achieve building design excellence and quality urban design in all Destinations.	The proposed development will support the existing use of the site for port-related activities, which will ensure that the site is appropriately occupied until such time as alternative uses can be delivered.
To provide ecological and marine water quality improvements to enable abundant biodiversity.	The proposed development will ensure that the existing port infrastructure is used in manner that does not detract from the marine water quality.
To deliver integrated utilities solutions that enable advanced energy generation and technologies.	As the development is for an interim use, extensive energy generation systems are not possible at this time.
To apply integrated planning within a land and water context that considers strategic policy decisions and the	The proposed development will support the existing use of the site for port-related activities, which will ensure that the site is

Principle/Objective	Comment
interrelationships between biophysical, social and economic aspects.	appropriately occupied until such time as alternative uses can be delivered.
To celebrate heritage and culture by creating new experiences throughout The Bays Precinct	The proposed development will support the existing use of the site for port-related activities, which will ensure that the site is appropriately occupied until such time as alternative uses can be delivered.

It is considered that the proposed development is consistent with the objectives of the Bays Precinct Transformation Plan for Glebe Island as an interim use of the site. This plan sets out the long-term land use objectives for the precinct (over 10- 15 years). The proposed development is intended to occupy the site of the existing Glebe Island port, which has been underutilised since 2008, until such time as the long term objectives outlined within the Transformation Plan can be realised. As an interim use of the site, the proposed development is appropriate provided that the environmental impacts associated with the operation can, and their impact on the neighbouring residential interface, can be appropriately managed.

### ***Glebe Island and White Bay Masterplan 2000***

The *Glebe Island and White Bay Masterplan 2000* was developed to accompany *Sydney Regional Environmental Plan number 26 – (City West)* (SREP 26). The Masterplan contains a consideration of the following matters, which are considered below:

### **Vision**

The planning and urban design vision for Glebe Island and White Bay follows the objectives in SREP 26. An assessment of the consistency of the proposed development with this vision is provided in **Table 8**.

**Table 7 Consistency of the proposed development with the Masterplan**

Vision	Comment
Upgrade existing infrastructure to allow for growth and to improve efficiency;	The proposed development will utilise existing infrastructure and will not prevent future growth to allow for improvements in efficiency.
Provide guidelines for all port development;	The proposed development will utilise the existing port development.
Improve the public presentation of the port;	The proposed development will redevelop an underutilised part of the port and therefore revitalise the presentation of the port.
Ensure new development is of a high standard of urban design;	A visual impact assessment of the proposed development was included within the exhibited EIS as Appendix E.
Improve management of noise, light spill and traffic;	Assessment, and proposed management of noise, traffic, and light spill is included within this document and the preceding EIS.
Provide a framework to resolve potential conflicts between Port operations and adjoining land uses; and,	This is not relevant to the proposed development.
Improve ESD (Ecologically Sustainable Development) practices to minimise the impacts of current and proposed development and activities.	An assessment of the ESD impacts associated with the proposed development was included within the exhibited EIS.

### **Land Use**

The Masterplan provides the following Principles that apply to the Glebe Island area:

- Recognise the continued role of White Bay/Glebe Island as the significant commercial port facility in Sydney Harbour and facilitate continued use.



- Provide for improved port efficiency and competitiveness.
- Provide for enhanced environmental performance.
- Define a set of development standards for future development activities within the Port to improve the appearance of the port.
- Accommodate forecast trade growth

The proposed development is wholly consistent with these principles.

### **Road and Rail Infrastructure**

This section of the Masterplan sets objectives for the NSW Government to improve the road and rail infrastructure within the Port area, as such this section of the Masterplan is not relevant to the proposed development.

### **Views, Building Heights and Building Zones**

Commentary in response to the Principles provided by this section of the Masterplan is provided in Section 4.4 of this report. The Masterplan establishes a height limit for the precinct, which sets a limit of between 12m and 25m to the site of the proposed development. It is noted that the Masterplan specifically excluded silos from the measurement of building height. The enclosed building associated with the proposed development have a height of up to 15m and the vast majority of this building will be located within the area of the site that is subject to the 25m height limit and so will comply with his height recommendation.

### **Built Quality**

This section of the Masterplan includes the following Principles:

- Improve the overall appearance of the port.
- Improve the level of information, signage and graphics for visitors to the Port and the public passing by the port.
- Provide a framework to ensure that development within the Port achieves a high standard of urban design.
- Allow for flexibility in operating the Port to the best international standards.
- Provide urban design principles which recognise the location of the Port adjacent to residential areas with particular attention to the physical provision of noise control measures.

The proposed development is consistent with these principles in that it improves the appearance of the Port through the activation of an otherwise underutilised part of the port. The LVIA report provided within the exhibited EIS as Appendix E provides an assessment of this visual impact. The proposed development also allows the Port to operate to the best international standards by allowing the development of a new aggregate handling facility and concrete batching plant, which incorporates measures to mitigate the impact of the port on surrounding residential areas.

### **Advertising**

No advertising is proposed as part of the proposed development and therefore this section of the Masterplan is not relevant.

### **Landscaping**

The proposed development is located within the existing concrete slab and will not adversely affect the ability of the precinct to achieve the principles, provisions, and actions relating to landscaping that are outlined in the Masterplan.

### **Pedestrian and Cycle Links**

The proposed development is located within Port Authority' secure area and as such, no pedestrian or cycle access is possible through the site. As such, the proposed development will not adversely affect the ability of the precinct to achieve the principles, provisions, and actions relating to pedestrian and cycle links that are outlined in the Masterplan.

### **Heritage Conservation**

A Heritage Impact Assessment was provided within the exhibited EIS as Appendix C. This assessment confirms that the proposed development will not adversely affect the ability of the precinct to achieve the principles, provisions, and actions relating to Heritage that are outlined in the Masterplan

## Environment

The Masterplan contains guidance in relation to the assessment of impacts for:

- Marine Environment and Stormwater;
- Noise;
- Light Spill;
- Risk; and
- ESD.

A thorough assessment of environmental impacts, including (where relevant) those listed within the Masterplan, was included within the exhibited EIS with supplementary assessment and commentary provided within this document.

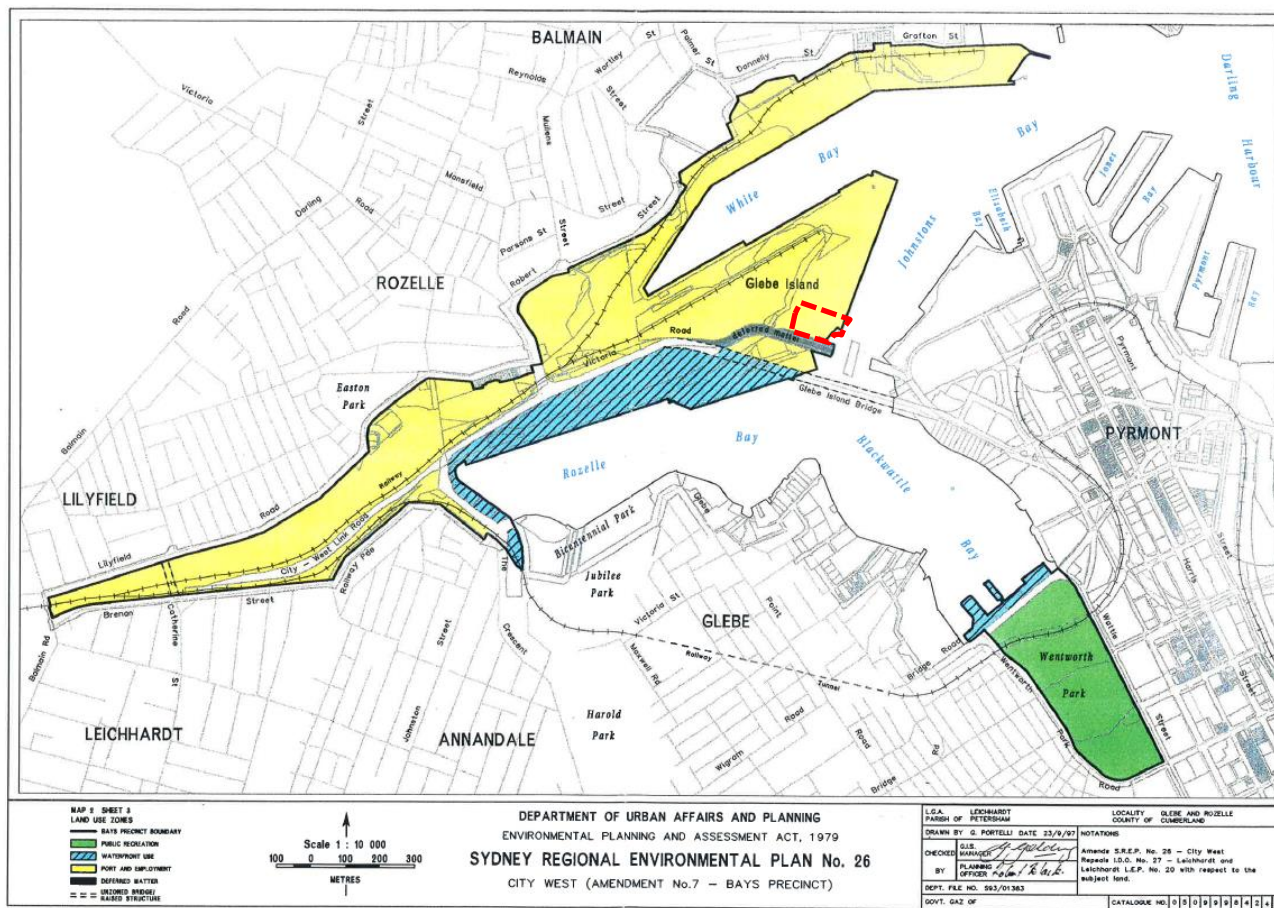
Many of the standards and management practices listed in the Masterplan in relation to these areas of environmental assessment have been superseded in the 18 years since the drafting of the Masterplan and so are no longer relevant. The assessment within the EIS was undertaken in accordance with the most recent legislation regulations, and the SEARs.

## Public Consultation Procedures

The Masterplan includes provisions to outline the minimum consultation requirements when a development application is required. The public exhibition of the EIS in support of the proposed development was undertaken in accordance with the provisions of the EP&A Act and the EP&A Regs.

## Summary

As noted in the exhibited EIS, the primary planning provisions that apply to the site are provided by the SREP 26. As shown below in **Figure 3**, under the provisions of Division 4 within this instrument the site is zoned for Port and Employment uses.



**Figure 3 SREP 26 Map**

Division 4 Clause 20C of the SREP 26 notes that: ‘Only uses which the consent authority is satisfied are generally consistent with one or more of the zone objectives are permissible within this zone.’ The objectives of the zone are as follows:

- to facilitate the continuation of commercial port uses, and
- to allow a range of commercial port facilities (such as buildings, structures, activities or operations and uses ancillary to these, associated with carrying goods from one port to another and associated with storage and handling and access to the port), and
- to encourage development on Glebe Island and land adjoining White Bay which requires close proximity to the port, and
- to encourage a mix of land uses which generate employment opportunities, particularly in relation to port and maritime uses, and
- to allow a mix of uses which generate employment opportunities in the White Bay Power Station site, and
- to provide for the ongoing rail access to the port and related activities, and
- to provide pedestrian and cyclist links with surrounding public access networks, and
- to encourage port-related uses which optimise use of existing rail facilities, and
- to provide road and rail access to port activities.

The proposed development is consistent with the objectives of the zone to facilitate continuation of commercial port uses at Glebe Island. It proposes a use compatible with the existing Port uses and will introduce employment generating land use opportunities.

The *Glebe Island and White Bay Masterplan 2000* was drafted to support port-related uses to be developed on the site. The supplementary assessment demonstrated that the proposed development is consistent with the provisions of this Masterplan. The *Bays Precinct Transformation Plan for Glebe Island* sets out a broad vision for the medium and long-term future of the precinct and may be used by the NSW Government to alter the core planning provisions as they apply to the site.

It is apparent that many of the authors of the public submissions believed that the site would be developed for a mixed-use precinct, including residential development and open space. Until such time as the planning controls within the *Sydney Regional Environmental Plan Number 26 (City West)* are repealed or amended it would not be possible to redevelop the site to deliver residential development or open space as these uses are not permissible.

The proposed development is for a concrete batching facility (an industrial development) and an aggregate import and dispatch facility (a port-related development). As such it is consistent with the provision of the 2000 Masterplan permissible on the site under the provisions of the SREP 26.

## 4.7 Cumulative Impacts

### 4.7.1 Topics Raised in Submissions

Cumulative impacts were specifically raised within 23% of the public submissions, however, it is noted that a larger proportion of the submissions noted combined impact of the proposed development with Port Authority' Multi User Facility in the context of submissions focussing on noise, air quality and traffic impacts. Specifically, submissions requested additional clarification regarding:

- Cumulative air quality impacts of the proposed development, the Multi-User Facility, and of shipping activities associated with both activities;
- Cumulative acoustic impacts including the requirement to establish the ambient noise levels at receiver locations and then model the noise impact of the proposed development alongside cumulative acoustic effects from the Multi-User Facility and all associated shipping;
- The cumulative impact of traffic noise;
- Cumulative traffic impacts at the intersection of Victoria Road/Roberts Sts, Harris Street/Pymont Bridge Road, and Pymont Bridge Road/Bank Street intersections, taking into account the foreshadowed large increase in traffic associated with the new Sydney Fish Market and redevelopment of current Sydney Fish Market site.
- The extent to which the cumulative visual impact of the proposed development, the Multi-User Facility, and of ships berthed adjacent to both facilities, have been considered.

A full summary of the public submissions can be found in **Appendix B**.

### Response

A summary response to these submissions is provided below and is supported by a technical input from AECOM in relation to traffic impacts (**Appendix E**), SLR in relation to acoustic impacts (**Appendix C**), and ERM in relation to air quality impacts (**Appendix D**).

As noted in the exhibited EIS, an assessment of cumulative impact is a receptor led assessment, i.e. in order to have a cumulative impact, two projects or impacts need to affect the same receptor. Projects that may affect similar receptors must be identified, and their impacts quantified. Other relevant projects that may have a cumulative impact with the proposed development have been identified using the following assessment parameters:

- Spatial parameter – The spatial parameter will depend on the characteristics of the environmental impact and the likely distance that any residual impact would travel. For example, an air quality impact would potentially affect a wider area than a noise impact and would therefore affect different human or environmental receptors in different ways.
- Temporal Parameter - Developments that are on exhibition, have completed exhibition but are not yet determined, have gained development approval, or have gained development approval but are not yet operational have been considered. Developments that are operational have been considered as part of the baseline for the assessment. Developments that are not on exhibition do not contain enough detail on residual effects or final design to allow a robust cumulative assessment to take place.

The exhibited EIS contained a thorough cumulative assessment of the proposed development alongside the following other developments:

- Hymix Concrete Batching Plant, Pyrmont;
- The Bays Transformation;
- WestConnex and Iron Cove Link;
- The Western Harbour Tunnel;
- West Metro; and
- Ports Authority of NSW Multi User Facility.

It is only possible to undertake a quantitative assessment of cumulative impacts for developments that have had their own impacts assessed. This means that, for the above projects, a cumulative impact assessment is only possible for:

- WestConnex and Iron Cove Link; and
- Port Authority' Multi User Facility

This assessment was provided within the exhibited EIS. Additional commentary has been provided within the Supplementary Traffic Impact Assessment (**Appendix E**) to include an assessment of the cumulative impacts of:

- The White Bay Truck Marshalling and Logistics Facility, which will be used to marshal up to 21 trucks; and
- The White Bay Civil Site, used for marshalling around 40 heavy vehicles.

The heavy vehicles predicted to be associated with these additional facilities have been accounted for within AECOM's traffic assessment and have informed the proposed restriction on traffic numbers outlined in Section 3.3.

In relation to noise and air quality impacts, it is noted that the proposed development will be operated by Hanson under a lease agreement with Port Authority and that Port Authority will undertake a 'precinct-based' approach to monitoring and managing noise associated with the precinct's operation. This approach is outlined within the exhibited EIS and supplemented within Section 4.1 for acoustic impacts.

## 4.8 Other Impacts and Considerations

### 4.8.1 Topics Raised in Submissions

Issues other than those previously discussed in this report were included in 26% of submissions. These issues included submissions relating to marine safety, water quality, residential amenity, 24 hour operation, and the classification of the development as a temporary or interim use. It is noted that many of the issues inherent within the submissions relating to amenity and operation overlap to some degree with the acoustic and air quality issues discussed in Section 4.1 and Section 4.2 respectively of this report. A selection of extracts is provided below. A full summary of the public submissions can be found in **Appendix B**:

- "The port's history has been acknowledged. However, the reality is that Glebe Island has not operated as a port on a 24/7 basis since they stopped offloading car-carriers in 2008, and since then residential towers for thousands of people have been constructed".
- "There is considerable boat traffic on the area around Glebe Island from dragon boats, kayaks, pleasure craft, party boats and fishing boats. With an increase in the movement of large ships in the area there is significant chance of collisions. A near miss between a cruiser and a tanker was witnessed just recently."
- "Port Botany and Newcastle are established ship yards that are capable of dealing with additional ship movements. I do not believe that there would actually be any time savings in having the facility on Glebe Island."
- "It is of grave concern that the Hanson Project would not be viable without the direct benefit of the Port Authority's project to establish the MUF at the adjacent berth. The MUF proposal is not subject to the same scrutiny as the concurrent application by Hanson to establish a Concrete Batching Plant"



- “The assumption underpinning the Acoustic Report is that the port has been operating as a 24/7 operation from GIB 1 and 2. In the seven years that I have lived at Sugar Dock, this has never been the case”
- “The existing Hanson facilities operating at Bank Street (Hymix) and at Blackwattle Bay (Hanson) do so with a 6:00am to 6:00pm restriction. The notion that transferring these operations to Glebe Island automatically confers a 24/7 licence suggests a commercially driven decision which pays no regard to the needs of nearby residents of Glebe, Rozelle, Balmain and Pyrmont, to have uninterrupted night time sleep. i.e. peace and quiet!”
- “The claims made in the EIS that this project is appropriately located is founded on claims that do not stand up to critical analysis. The existing heavy rail network could be used for the bulk of supplies of cement, fly ash, aggregate and sand.”
- “A further option would be for the batching plant to be located at other ports including Port Botany or Port Kembla. The Port Botany location would provide good access to the inner-city area for delivery of concrete within the 45-minute time frame specified in the EIS.”
- “Hanson’s EIS indicates that the maximum time required for materials discharge will be 12 hours, and the loading of concrete tankers will be infrequent late at night. I therefore propose that the operators take every step to ensure that unloading of ships occurs during the hours of 7am to 7pm, avoiding late night operations.”

An information request letter was received from DP&E, which included the requirement to provide additional information in relation to a range of areas. This request, and the corresponding response, is provided in **Table 8**.

#### 4.8.2 Response

The following sections provide a general response to the issues raised within the public submissions and within the request for information provided by the DP&E.

#### Maritime Traffic and Safety

The proposed development does not include any new maritime infrastructure. All physical works associated with the development are proposed to be land-based, on the existing GLB1 berth and on the existing Glebe Island slab. The existing (and historical) use of Glebe Island for port related and industrial uses includes the use of the waterways surrounding the site for maritime activities.

The proposed development is entirely consistent with the existing and historical uses of the site. Notwithstanding, Hanson (with input from Port Authority) has prepared a preliminary Navigation Impact Statement (refer to **Appendix J**), which outlines the general processes and guidelines in place for marine traffic flow within the context of the site at GLB1, Glebe Island and Sydney Harbour. Port Authority has agreed that a comprehensive marine traffic, navigation and safety plan be prepared at detailed design stage when specific information (e.g. vessel type and other operational specifics) becomes available. On this basis, a more detailed Navigation Assessment Report will be prepared and submitted to Port Authority for review, comment and approval prior to operations commencing on the site.

#### 24 Hour Operation, Residential Amenity

As described in the exhibited EIS: *The facility is proposed to have the capacity to operate 24 hours a day, seven days a week. The majority of the concrete agitator trucks associated with the proposed development will be parked on the Site overnight, day shift drivers will arrive to the Site in the morning typically between 5am and 8am to start the shift, leaving the Site between 3pm and 6pm in the evening. Night shift workers will arrive to the Site in the afternoon as required by demand. It is not anticipated that a regular night shift will be required by the operation of the Site. The operation of the facility during the night will generally be driven by market demand.*

As noted above, although consent is sought for 24-hour operation, the uptake of this operation will be driven by market demand. Particularly in light of the restriction in production capacity proposed within this response (note Section 3.3), 24-operation may not be required on a regular basis within the first five years (up to 2023). Even after this time, assuming that a full operational capacity is approved, the requirement for 24 hour operation will be unlikely to occur every day, rather in response to specific market demands and to accommodate (and expedite) maritime unloading activities.

Further, it is noteworthy that the Glebe Island and White Bay ports are already operational 24/7, including the existing dry bulk tenants (Cement Australia, Gypsum Resources Australia and Sugar Australia) at Glebe Island.

To this end, as noted within the acoustic assessment that accompanies the exhibited EIS (Appendix D) and this response to submissions (**Appendix C**), the impact of the 24 hour operation on the residential amenity of the surrounding areas will be managed in coordination with Port Authority, with particular emphasis on preventing noisy ships from accessing the port.

## Water Quality

The exhibited EIS included an assessment of the proposed development's impact on water quality. Mitigation measures have been suggested within this section, which can be adopted as part of any development consent.

## Duration of Operations

As noted in the exhibited EIS: *the Site and its surrounding area is in a state of flux and the character of the surrounding area will change as the NSW Government redevelops the Bays Precinct over the next 10-15 years. The design and operation of the proposed development has been prepared with this changing context in mind. It is anticipated that the facility would be modified in future to allow the operations to co-exist with future land uses in the surrounding area as they are determined and delivered.*

*As the Site is owned by the NSW Government, who are also responsible for overseeing and delivering the redevelopment of the Bays Precinct, it is anticipated that the tenure of the Hanson operation on the Site can be controlled via the leasing arrangements that will be in place between Hanson and the Ports Authority of NSW. Contractual arrangements, built into the lease between the NSW Government and Hanson, can control the future operation of the proposed development, including future amendments to operational parameters, as and when they are required.*

*This ongoing control over the tenure of the proposed development, which is not usually available when development consent is sought on land that is not owned by the NSW Government, means that placing an expiration date on any development consent associated with this application is not necessary in this instance.*

The proposed development is consistent with the objectives of the zone in which it is located. Within the *Bays Precinct Transformation Plan for Glebe Island*, the NSW government has set out a broad vision for the medium and long-term future of the precinct, which may be used to alter the core planning provisions as they apply to the site in the future.

As the envisaged uses of the area change over time, the NSW Government will be able to amend or terminate Hanson's operation through their commercial lease. It is therefore possible to permit this development to proceed without preventing or perverting the natural and planned evolution of the broader precinct.

A response to the information request letter received from DP&E is provided in **Table 8**.

**Table 8 DP&E Information Request Response – Other Issues**

Information Request	Response
<i>Hours of Operation</i>	
Provide additional information and justification to support the need for 24 hours, seven days a week operation.	Additional commentary is provided above.
Provide details of the proposed ships and their capacity, in order to determine any implications for the number of ship movements.	This information has been provided within the <i>Maritime Traffic, Navigation, and Safety Statement</i> in <b>Appendix J</b> .
<i>Maritime Traffic Navigation and Safety</i>	
Provide a Marine Traffic, Navigation and Safety Impact Assessment, which outlines all potential maritime impacts and safety issues and measures to minimise and mitigate identified impacts on users of Glebe Island and the surrounding area. This should include consideration of cumulative impacts associated with the Port Authority's proposed multi-user facility and recreational vessel users, and shall examine vessel visibility, manoeuvrability, travel paths etc. associated with the site's location. The assessment	As discussed in <b>Section 4.8.2</b> of this report, a preliminary Navigation Impact Statement, which outlines the general processes and guidelines in place for marine traffic flow within the context of the site at GLB1, Glebe Island and Sydney Harbour is provided at <b>Appendix J</b> . A more detailed Navigation Assessment Report will be prepared and submitted to Port Authority for review, comment and approval prior to operations commencing on the site.

Information Request	Response
should address all navigation and safety issues raised in submissions.	
In the preparation of the Navigation and Safety Impact Assessment consultation is required with RMS, the Ports Authority and recreational vessel users. The outcomes of this consultation shall be included in the assessment report.	
Infrastructure	
Give consideration to the 11kv high Voltage cable identified by Sydney Trains running in close proximity to the site and Ausgrid's comments regarding existing Ausgrid underground transmission cables adjacent to the southern boundary of the site	Consideration has been given to this asset, which will be managed through the detailed design of the development.

#### 4.9 Assessment of Revised Site Layout

Overall changes proposed to the arrangement and layout of the facility are minor, and are not of a scale or nature that can result in any new impacts or a significant increase in any previously assessed impacts. All potential impacts associated with the changes are considered further in **Table 9** below.

**Table 9 Consideration of Impacts Associated with the New Site Arrangements**

Changes	Consideration of Impacts
<ul style="list-style-type: none"> <li>A reduction in the overall footprint of the facility and the site / lease area by 2,042m<sup>2</sup> (13%)</li> </ul>	No new impact and no increase in any previously assessed impacts. The change in footprint does not affect the type or intensity of activities proposed to be carried out at the site.
<ul style="list-style-type: none"> <li>Increased setback of the lease area from approximately 10m to 18m from the berth edge;</li> </ul>	No new impact and no increase in any previously assessed impacts. Increased setback from the berth edge will result in a slight increase in separation distances between the facility and the sensitive receivers in Pyrmont.
<ul style="list-style-type: none"> <li>Increased setback of the ship aggregate receival bin, now relocated to be within the lease area</li> </ul>	No significant change to visual or noise impacts. Setback of the aggregate receival bin further from the edge of the berth will either have no significant impact or a positive impact as separation distances between the facility and the sensitive receivers in Pyrmont are increased.
<ul style="list-style-type: none"> <li>Realignment of container wall to account for increased setback from berth edge</li> </ul>	No significant change to visual or noise impacts. Setback of the container wall directly responds to the change in the site layout. The setback from the edge of the berth increases separation distances between the facility and the sensitive receivers in Pyrmont.
<ul style="list-style-type: none"> <li>A reduction in the overall footprint and shape of the aggregate storage silos;</li> </ul>	No significant change in visual impacts as the silos were originally assessed as essentially a wall of silos. The amended design occupies a slightly reduced footprint relative to that originally proposed and assessed, but there is no overall change in the height, bulk and scale of the silos.
<ul style="list-style-type: none"> <li>Minor repositioning of the aggregate conveyor system to be more central within the site to respond to design refinements for the receival bin and the aggregate silos;</li> </ul>	No significant change to visual or noise impacts. The aggregate conveyor system still connects the receival bin and the aggregate silos, however both of the connection points (i.e. the receiver bin and the aggregate silos) have moved slightly further to the west, away from the residential receivers in Pyrmont, meaning that they may result in marginal reduction in noise and visual impacts.
<ul style="list-style-type: none"> <li>Nominal redesign of the building shed structure with a slightly reduced footprint but on the same general footprint and same height;</li> </ul>	No new impact and no increase in any previously assessed impacts. The amended design occupies a slightly reduced footprint relative to that originally proposed and assessed, but there is no overall change in the height, bulk and scale of the building.
<ul style="list-style-type: none"> <li>Relocation of the parking area within the site and a reduction in truck and general employee parking spaces</li> </ul>	No new impact and no increase in any previously assessed impact. Refer to <b>Section 4.3</b> and <b>Appendix E</b> . Sufficient car parking is still available at the site and alternative forms of travel will be promoted.



Changes	Consideration of Impacts
<ul style="list-style-type: none"><li>Increased number of water storage tanks to optimise reuse opportunities;</li></ul>	No new impact and no increase in any previously assessed impacts. Improved environmental outcomes will be achieved through increased water reuse opportunities.
<ul style="list-style-type: none"><li>Associated design refinements to driver amenities, batch room control office, and internal arrangement of concrete batching components within the shed</li></ul>	No new impact and no increase in any previously assessed impacts as design refinements are minor and will not be noticeable from off-site.

## 5.0 Final Mitigation Measures

In light of the additional assessment and commentary provided within this response to submissions, the final mitigation measures proposed for the development are outlined below in **Table 9**. Additional mitigation measures are denoted in ***bold italics***.

**Table 10 Mitigation Measures**

Mitigation Measures
<p><b>Construction and Operational Noise</b></p> <ul style="list-style-type: none"> <li>Construction Noise and Vibration Management measures will be developed and implemented to manage noise during the construction phase. Noise from road traffic is proposed to be managed by staging site access and deliveries.</li> <li>Hanson will comply with the new 'noise management precinct' being prepared by Port Authority, which will ensure that all noise within the precinct is subject to a consistent management strategy. Compliance with the 'noise management precinct' requirements by Port Authority will be enforced through the Lease Agreement between Port Authority and Hanson for use of GLB1. In the interim, operating noise management measures prepared in accordance with Noise Policy for Industry requirements will apply, with particular reference to the 9 hour night time noise contribution criteria of 47 dBA at Pyrmont and 45 dBA elsewhere, as well as the noise mitigation measures proposed under the Noise Impact Assessment (Table 13 of <b>Appendix D of the EIS</b>), including operator-attended noise monitoring.</li> <li>Road Traffic Management measures will be prepared in accordance with the requirements of the Traffic Impact Assessment and any associated project approval conditions to manage noise levels.</li> <li>Hanson will comply with 'Noisy Ship Policy' that is currently being prepared by Port Authority. Compliance with the Policy will be enforced through the Lease Agreement between Port Authority and Hanson for use of GLB1. In the interim, Hanson will develop and adopt an operating procedure that aligns with the forthcoming Port Authority Policy to minimise ship noise where feasible and reasonable to do so. Hanson's operating procedure will also identify ships that are noisier than typical vessels and define collaborative actions to manage noise which may result in punitive measures if noise reductions are not implemented.</li> <li><b><i>Maritime Operations associated with the proposed development will be managed in accordance with Hanson's Noisy Ship Policy until such time as Port Authority adopts a suitable precinct-wide policy to supersede this policy.</i></b></li> <li><b><i>In all cases, Hanson will implement best practice construction noise mitigation measures including:</i></b> <ul style="list-style-type: none"> <li><b><i>all construction works to be conducted within standard construction hours;</i></b></li> <li><b><i>schedule noisier activities during less sensitive times when possible;</i></b></li> <li><b><i>prioritise contactors utilising broadband reversing alarms when possible;</i></b></li> <li><b><i>stand-down construction plant and equipment when not in use;</i></b></li> <li><b><i>utilise equipment with the indicative SWLs presented in the NIA Appendix C;</i></b></li> <li><b><i>identify construction noise minimisation during contactor site inductions;</i></b></li> <li><b><i>implement an effective community information and notification regime; and</i></b></li> <li><b><i>respond to community concerns in a prompt and effective manner.</i></b></li> </ul> </li> </ul>
<p><b>Traffic and Parking</b></p> <ul style="list-style-type: none"> <li>Management measures as outlined under Traffic Impact Assessment report will be exercised on site including the preparation of a Construction Traffic Management Measures, Green Travel Plan and Site Parking Management Plan</li> <li><b><i>Silencers must be fitted to air brake releases of heavy vehicles accessing the site wherever possible.</i></b></li> </ul>
<p><b>Water Quality Impact</b></p> <ul style="list-style-type: none"> <li>Regular monitoring, carried out as per the process outlined under Section 8 of the Water Cycle Management Plan, will ensure high water quality standards;</li> <li>Implement and manage sediment and erosion control measures during construction of the Site;</li> <li>The enclosed design of the batching facility will reduce instances of stormwater run-off coming in contact with cementitious material and varying the pH quality of run-off; and</li> <li>Regular inspection and maintenance of vehicles and accessibility to spill prevention and response equipment will mitigate increased hydrocarbons in run off.</li> </ul>
<p><b>Visual Impact</b></p> <ul style="list-style-type: none"> <li>Modify the proposed 'gable roof' design above the aggregate storage silos to reduce visual bulk and prominence.</li> <li>Preparation of an urban design and landscape masterplan that addresses all key elements of the site, including issues such as the nature of any screening and finishes to structures.</li> <li>Preparation of a Public Art Strategy to improve presentation and aesthetics of industrial structures on site.</li> </ul>
<p><b>Air Quality Impact</b></p> <ul style="list-style-type: none"> <li>The Air Quality Assessment Report includes a list of recommendations to manage potential particulate and dust emissions. These will be adopted into the site management plan and CEMP.</li> </ul>

## Mitigation Measures

### Construction and Environmental Management Plan

- The management plan protocols and associated sub-plans should be implemented during the construction phase of the development.

### Heritage – Archaeological

- A historical archaeological monitoring program should be undertaken concurrently with any excavation works below the existing hardstand in the vicinity of the proposed silo.
- Prepare a Research Design and Methodology Report to guide the archaeological excavation process

### Operation

- ***The operational capacity of the facility will be restricted to 182 truck movements per hour (91 in, 91 out) until WestConnex becomes operational and a supplementary traffic impact assessment is prepared and submitted to the Secretary for approval to demonstrate that the impact of proposed development when operating at full capacity is acceptable.***

## 6.0 Conclusion

Hanson is a leading manufacturer of concrete and, as such, adopts best practice in the manufacture and distribution of product throughout Sydney. The exhibited EIS outlines how the anticipated environmental impacts associated with the proposed development can be managed to the extent that ensures that the development is appropriate for the site and could be approved.

During the exhibition of the EIS 244 submissions were received, including 194 submissions from members of the public in objection to the development. This response to submissions has examined these submissions, and where relevant, introduced amendments and suggested temporary restrictions on the development to further ameliorate the anticipated impact.

The proposed development has been specifically designed to mitigate and ameliorate potential impacts that may be associated with developments of this type, including visual impacts, air quality impacts, traffic impacts, and noise impacts. Within the proposed development, the concrete batching facility (with the exception of the aggregate storage silos, the on-site office building and site parking area) is largely enclosed in a warehouse structure to further address the above impacts. As demonstrated by this EIS, the location of the Site will also offer several advantages to the various development projects proposed around Sydney CBD and inner west to further address and minimise impacts.