

**MAJOR PROJECT ASSESSMENT  
MAJOR PROJECT APPLICATION M 05\_0060**

**SILO STRENGTHENING WORKS  
LOT 1 SOMMERVILLE ROAD, GLEBE ISLAND**

**DIRECTOR-GENERAL'S  
ENVIRONMENTAL ASSESSMENT REPORT  
SECTION 75I OF THE  
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

**MAY 2006**

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## **1. EXECUTIVE SUMMARY**

- 1.1** The proposed \$800,000 upgrade works will facilitate an increase in the storage capacity of four (4) silos currently being used by Cement Australia for holding bulk (dry) cement.
- 1.2** The Minister for Planning formed the opinion that the proposal was a Major Project and subject to Part 3A of the Environmental Planning and Assessment Act 1979 on 22 November 2005.
- 1.3** The proposal was placed on public exhibition from 23 March 2006 until 27 April 2006. Four (4) submissions were received from public authorities.
- 1.4** The principal issues arising from referral and public exhibition included heritage, environmental impacts, structural matters and traffic generation.
- 1.5** The proponent has addressed these concerns satisfactorily. In addition, appropriate conditions of consent will manage and mitigate potential impacts.
- 1.6** It is recommended the proposed Major Project be approved by the Minister.

## **2. INTRODUCTION**

In October 1991, Australian Cement (former company name) was granted development consent (DA 350/91) by Leichhardt Municipal Council to establish a bulk cement terminal utilising sixteen (16) silos on Glebe Island. Three modifications have been granted approval subsequent to the original DA.

On 1 December 2005, Connell Wagner acting on the behalf of Cement Australia Ltd lodged a Major Project Application under Part 3A of the *Environmental Planning & Assessment Act 1979* (the Act) to undertake strengthening work on four (4) silos currently being used by Cement Australia to increase their holding capacity.

The silos were built in the 1970s for the purpose of storing wheat as part of Glebe Island port operations thus their holding capacity is limited and inadequate for their current purpose. Bulk cement has a greater specific gravity than wheat which means the silos can only be filled up to around one third of their capacity. The intent of the project is to allow one bank of the silos to be strengthened so as to enable them to be filled to approximately two thirds to allow emptying and maintenance of the remaining silos when required.

The silos are identified as Nos 1208; 1209; 1408 and 1409 and are located at Glebe Island. A Site Plan is provided overleaf at **Figure 1**.

The report is submitted for the Minister's consideration under s 75J(2)(a) of the Act and addresses the mandatory matters required to be addressed in a Director-General's report under s 75I of the Act and cl 8B of the Regulation.

It is recommended that approval be granted subject to the conditions noted in **Appendix A**.

### 3. **BACKGROUND**

#### 3.1 **Site Description**

The site is located at the Cement Australia Ltd Bulk Cement Terminal section of the former Glebe Island Grain Silos, Sommerville Road, Glebe Island (Lot 1 DP 776765), approximately 2 kilometres west of the Sydney CBD. The site is located in the Leichhardt LGA and is bound to the north by White Bay, AAT car terminal to the east, Anzac Bridge and western distributor to the south and Victoria Road to the west. The nearest residential properties are located approximately 400 metres to the north.

There are currently thirty (30) silos on site approximately 30 metres high and 11 metres in diameter. Cement Australia Ltd utilises sixteen (16) of the silos for storing bulk (dry) cement. The remaining silos to the east are utilised for storage by Sugar Australia Pty Ltd.



Figure 1: Site Plan (source Connell Wagner 2005)

#### 3.2 **Proposal**

The site is included within Schedule 2 of State Environmental Planning Policy (Major Projects) 2005, namely Clause 7(2) of the Ports and Related Employment Lands (Sydney Harbour).

On 22 November 2005, the Director General, as a delegate of the Minister, formed the opinion that the proposal is a Major Project and that Part 3A of the Act applied. The application seeks the Minister's approval of the project pursuant to Section 75J of the Act.

On 1 December 2005, Cement Australia Ltd submitted the Glebe Island Silo strengthening works proposal. The project involves:

- The construction of new concrete footings within the perimeter of each of the four silos;
- The construction of new columns within the base of each silo;
- The removal of two windows opening from the northern elevation of silo No 1208;
- The removal of two windows opening from the northern elevation of silo No 1209;
- The removal of one window opening from the southern elevation of silo No 1408;
- The removal of one window opening from the southern elevation of silo No 1409; and
- The construction of a new internal concrete wall lining (200mm) within the perimeter of each silo.

The window dimensions are:

- The northern elevation windows (4 off) are 900mm wide by 4400mm high with the bottom 1400mm being in the form of louvres.
- The southern elevation windows (2 off) are 2700mm wide by 4400mm high.

#### **4. PREPARATION AND EXHIBITION OF THE ENVIRONMENTAL ASSESSMENT**

The proponent sought the Director General's Environmental Assessment Requirements (DGRs) on 1 December 2005. In accordance with Section 75F (4) of the Act the Director General requested that agencies provide details on any key issues and assessment requirements which may be included in the DGRs. Agencies invited to comment on the project application were:

- Leichhardt Council
- Roads and Traffic Authority (RTA)
- NSW Maritime Authority
- Sydney Ports Authority
- Sydney Harbour Foreshore Authority

Three (3) agencies, namely Leichhardt Council, Maritime Authority and Sydney Harbour Foreshore Authority provided key issues and assessment requirements which the Department of Planning considered in preparing the DGRs.

On 11 January 2006, the Director General issued environmental assessment requirements (DGRs) pursuant to Section 75F of the EP& A Act (**attached in Appendix C**). Connell Wagner, acting on behalf of Cement Australia Ltd prepared an Environmental Assessment (EA). The EA was accompanied by a Heritage Impact Statement as well as a draft Statement of Commitments which aimed to address and mitigate potential impacts of the proposal on the environment.

The EA was publicly exhibited from Thursday 23 March 2006 until Thursday 27 April 2006. There were no public submissions on the proposal. Four (4) submissions were received from agencies, namely Leichhardt Council, RTA, NSW Maritime and Heritage Council of NSW. A summary of the submissions from the various agencies is detailed in Section 6.

#### **5. STATUTORY CONTEXT**

##### **5.1 Part 3A of the Environmental Planning and Assessment Act 1979**

Part 3A of the Environmental Planning and Assessment Act commenced operation on 1 August 2005. Part 3A consolidates the assessment and approval regime of all major projects

previously considered under Part 4 (Development Assessment) or Part 5 (Environmental Assessment of the EP& A Act.

On 22 November 1005, the Director-General of Planning issued an advice under delegated authority confirming that in the Minister's opinion, the proposal was a Major Project under Part 3A of the Act. Accordingly, the Minister is the approval authority for the project.

## **5.2 State Environmental Planning Policy (Major Projects) 2005**

The site is included within the Ports and Related Employment Lands site of the Sydney Harbour area as identified on Map 6B in Schedule 2 of the SEPP. The cost of works for this proposal is \$800,000 and the development is a type classified in Schedule 2 of the SEPP.

## **5.3 Sydney Regional Environmental Plan No.26 – City West**

The site is within the area identified on Map 1 as 'City West' and is located within the "Bays Precinct". The application is required to be assessed and considered with regard to the following clauses of the SREP:

Clause 11 and Clause 15 of the SREP respectively requires a consent authority to consider the Planning Principles for City West, and the Planning Principles of Regional Significance for Precincts.

The proposed works will facilitate more efficient port operations and compliments the existing use of the site and maintains an aspect of 'working harbour activity' in this location. The proposal would not affect the form and function of the site and would not adversely affect views within or to the site and is in accordance with the relevant planning principles of these clauses. The silos are listed as a heritage item in Schedule 4 of SREP No .26 – City West. The proposal is considered to be consistent with, and compatible to, the heritage significance of the item. The heritage matters for consideration are addressed in Section 6(B)i of the report.

Leichhardt Local Environmental Plan 2000 does not apply to the Glebe Island Silos site. Clause 3 of the LEP states the plan does not apply to any land to which SREP 26 – City West applies.

## **5.4 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

The site is within the 'Foreshores and Waterways Area' defined in the SREP, and in accordance with clause 20 of the SREP the following matters are required to be considered in the assessment of the application:

- Clause 21 - Biodiversity, ecology and environmental protection  
The proposal is not considered to have any adverse impacts on the biodiversity or ecology of the area. Relevant matters with regard to environmental protection during construction are dealt with in the recommended conditions of consent.
- Clause 22 - Public access to, and use of, foreshores and waterways  
The proposed works to the existing silos will not affect public access to or use of the foreshore area.
- Clause 23 - Maintenance of a working harbour  
The proposed works will enhance port operations and facilitate the continuation of a working harbour.

- Clause 24 - Interrelationship of waterway and foreshore uses  
The proposed works to the silos will not affect the interrelationship of waterway and foreshore uses. Indeed it is considered the works will improve the relationship between the waterway and foreshore.
- Clause 25 - Foreshore and waterways scenic quality  
The works to the silos will not impact on the scenic quality of the area.
- Clause 26 - Maintenance, protections and enhancement of views  
The proposed works will not affect views in and around the site.
- Clause 27 – Boat storage facilities  
Not relevant to this application.

#### Foreshores and Waterways Planning and Development Advisory Committee

It is assumed the matters raised with respect to the proposal have already been dealt with by the three agencies on the Committee (Department of Planning, NSW Maritime and Sydney Harbour Foreshore Authority). No concerns or issues were raised by the relevant agencies thus no formal referral to the Committee was required.

#### **5.5 Sydney Harbour Foreshores and Waterways Area- DCP for SREP (Sydney Harbour Catchment) 2005**

As the site is identified in the 'Foreshores and Waterways Area' in SREP (Sydney Harbour Catchment) 2005, the controls of the DCP apply to this application. The DCP includes aims and performance criteria in relation to Ecological Assessment (Part 2) and Landscape Assessment (Part 3), and Design Guidelines for certain developments (Part 4).

##### Ecological assessment

The site is located on the foreshore area and is not identified as having any particular terrestrial ecological communities and therefore is not subject to any performance criteria under Part 2 of the DCP.

##### Landscape assessment

The site is not identified in the DCP as being within any particular Landscape Character area and therefore is not subject to any performance criteria under Part 3 of the DCP.

##### Design guidelines for Water Based & Land /Water Interface Developments

The proposal is classified as water based development and is therefore subject to the water based and land/water interface development design guidelines of Part 4 of the DCP. As the works centre mainly on internal structural changes as well as the removal of six windows, the proposal satisfies the objectives and requirement provisions of the DCP.

##### Design guidelines for Land –Based Developments

The site is not subject to the land based development design guidelines of Part 5 of the DCP.

### Heritage provisions

The site is not the subject of any Heritage Items listed under the SREP (Sydney Harbour Catchment) 2005.

## **6. ASSESSMENT OF ENVIRONMENTAL IMPACTS AND MATTERS FOR MINISTERIAL CONSIDERATION**

The mandatory matters required to be addressed in a Director-General's report under Clause 8B of the Environmental Planning and Assessment *Regulation* ("the Regulation") are considered below:

### **6(a) any advice provided by public authorities on the project**

To fulfil the requirements of Section 75I Clause 2(b) this report includes advice provided by public authorities regarding issues to be addressed by the Proponent in the EA. These issues formed part of the matters raised in the DGRs issued on 11 January 2006 pursuant to Section 75F of the EP& A Act. Advice provided by public authorities on the preparation of the EA, and their submissions lodged during the exhibition period are listed below. The Department is satisfied that the responses provided by the Proponent in their EA are reasonable and adequate.

### **Assessment of the Proponent's response to advice by public authorities**

ISSUE	RAISED BY	PROPONENT'S CONSIDERATION (refer to EA and supporting documentation)	OUR VIEW
1. No objection raised on the proposed development	NSW Maritime – dated 20 December 2005	None required	NSW Maritime raised no objections or issues.
1. No objection raised on the proposed development	NSW Maritime submission as part of public exhibition period – dated 19 April 2006	None required	NSW Maritime raised no objections or issues
1. Daily and peak traffic movements likely to be generated	RTA submission dated 17 February 2006	There will be no increase in daily traffic movements	Noted
2. Impact on surrounding arterial road network and intersections		As there is no increase in traffic movement there will be no corresponding impact on the surrounding arterial road network or intersections	Agreed
3. Consideration for the preparation of a Local Area Management Plan		None required	Noted
4. Impact of truck traffic upon nearby residential areas		There will be no increase in truck traffic	Agreed
5. Details of anticipated		All traffic will be via the	Noted

<p>truck routes</p> <p>6. Increase in toxicity levels of truck loads</p> <p>7. Impact on RTA's assets in the local area</p>		<p>City West Link Road, James Crag Road and Sommerville Road.</p> <p>There will be no increase in truck movements nor will the increase in capacity of the silos for bulk (dry) cement change the materials stored or transported. Construction waste will be transported by licensed waste transporter for disposal at a licensed waste disposal facility</p> <p>None required</p>	<p>Noted</p> <p>Not required in DGRs for EA. Not relevant in light of scope of works.</p>
<p>1. Leichhardt Council's approval under DA 350/91 limits throughput of cement to 500,000 tonnes per annum. Need to confirm this will not be increased or exceeded. If so traffic study is warranted.</p> <p>2. Structural integrity of the heritage item. As originally used for storage of wheat, there should be a statement of commitment for a testing procedure to validate the structural adequacy of the silos.</p> <p>3. Photomontages of the silos from Victoria Rd and other key vantage points should be prepared to ensure infilling of windows does not adversely affect there character.</p>	<p>Sydney Harbour Foreshore Authority – dated 20 December 2005</p>	<p>There will be no increase in the throughput of cement as a consequence of the increased storage capacity of four silos.</p> <p>Works have been designed by structural engineers in accordance with relevant standards and will be certified as such. Testing procedure will include a visual assessment and tests on the material such as the concrete.</p> <p>Photographs have been prepared from these vantage points and reveal the infilling will not affect the character of the silos</p>	<p>No traffic study required</p> <p>Can be addressed through conditions of consent</p> <p>Noted</p>
<p>1. Capacity of the terminal should not be increased.</p> <p>1. Structures should be photographed in accordance with NSW Heritage Office for archival recording</p> <p>2. Blocking of windows is reasonable however delineation of the openings should remain</p>	<p>Leichhardt Council – dated 5 January 2006</p> <p>Leichhardt Council submission as part of public exhibition period – dated 11 April 2006</p>	<p>There will be no increase in the throughput of cement as a consequence of the increased storage capacity of four silos</p> <p>Noted</p> <p>Noted</p>	<p>Noted</p> <p>Agreed and will include as condition of consent.</p> <p>Agreed and will include as condition of consent.</p>



In 1995 the original concrete silos built between 1917 and 1921 were demolished due to their dilapidated condition. The thirty (30) silos built in the 1970s remained allowing the continued use of the site as a wharfage and storage facility for sugar and cement used by Sugar Australia and Cement Australia Ltd respectively.

While the silos built in the 1970s do not have the heritage values of the original silos they are representative of a prominent and significant landmark feature and evidence of Sydney as a major shipping port. They have a high cultural significance.

The proposed internal works and infilling of the windows will not have an impact on the heritage significance of the silos. Issues have been raised with respect to the impacts associated with the proposed works on the heritage significance of the silos, and in particular, the impacts of the proposed infilling of the windows on the appearance and character of the silos. It is noted the windows are non-openable and only provide natural light to the areas under the silos that provide access to silo infrastructure.

Visually, the infilling of the windows 'undertaken in a manner which is complementary to the concrete colour of the base of the silos', will not change the appearance or character of the silos. The silos scale and location, combined with port infrastructure, surrounding road network and topography limits the degree to which infilling will be seen. Nevertheless delineation of the windows after they have been infilled will be required as a marker of their former location as a condition of consent.

The works are aimed at improving the functionality of the silos which is consistent with, and supports the continued use of the site for port operations thus conserving the heritage significance of the site. The Department recognises that because of the minor nature of the works and their corresponding minor impacts on the heritage significance of the silos, alternative options to facilitate an increase in capacity were not warranted.

#### **6b(ii) Plant Capacity and Traffic Generation**

Issues and concerns have been raised with regard to an increase in capacity of the silos facilitating an increase in plant capacity and throughput, and accordingly an increase in traffic generation. Leichhardt Council's DA (350/91) approved the use of the silos for bulk (dry cement). A condition of consent limited the throughput of cement to 500,000 tonnes per annum.

The details provided in the EA reveal that despite the works increasing the storage capacity of the silos there will be no corresponding increase in the throughput of cement nor an increase in traffic generation. This negates concerns associated with complying with previous consent conditions and the potential for traffic related impacts on the surrounding arterial road network and intersections. The Statement of Commitments canvasses traffic management during construction and is accordingly supported.

#### **6(b)iii Site Design & Structural Integrity**

The design of the proposed works aims to merely strengthen four (4) silos to increase their capacity. In order for this to occur the silos must first be emptied and cleaned prior to the works commencing. They then will be prepared and appropriate steel reinforcement and formwork put in place prior to concrete emplacement.

New concrete footings will be created within the internal perimeter of each of the silos. New columns will be added to the base of each silo, and new internal concrete wall linings 200mm thick will be built within the internal perimeter of each silo. A total of six (6) windows,

four (4) 900mm wide by 4400mm high, and two (2) 2700mm wide by 4400mm high will be infilled.

Externally, the only changes visible will be the removal of the windows. All other aspects of the site design are structural internal changes. There has been concern raised with respect to the structural adequacy of the silos to accommodate more cement. The Proponent advised that the structural works will be periodically inspected throughout construction and certified. The Proponent also stated in their Statement of Commitments the following:

- 'A construction certificate will be submitted to the Principal Certifying Authority'
- 'Structural Certificate will be issued certifying that the design complies with the relevant clauses of the BCA; and relevant Statement of Commitments'
- 'Prior to the use of the facilities a Structural Inspection Certificate will be submitted to the satisfaction of the PCA which certifies that the site has been periodically inspected and the certifier is reasonably satisfied that the structural works comply with the final design drawings; and the drawings listed on the Inspection Certificate have been checked with those listed on the final design certificate/s'

The Department believes the proposed Statement of Commitments addresses structural adequacy and mitigates concerns associated with the works. Further, the commitments are considered reasonable and appropriate and will be slightly amended and incorporated into conditions of consent.

#### **6(b)iv Waste Management and Environmental Risk**

The project application relates to structural changes only. It does not seek to change the operational or functional elements of the silos. Hence current environmental procedures at the site will prevail and will not be altered or detrimentally changed by an expansion in storage capacity. It is noted the operation of the silos will still have to be in accordance with their existing development consent (DA350/91) and subsequent modifications.

The Proponent has submitted details in the Statement of Commitments regarding waste removal and construction management and is detailed as follows:

- All waste generated would be reused or recycled if possible
- Waste that cannot be reused or recycled will be transported by a licensed waste transporter for disposal at a licensed waste disposal centre
- Construction contractor staff will be required to dispose general rubbish to on-site bins provided in an appropriate location
- Cement dust as a result of cleaning the silos will be transferred to other operating silos
- Any spillage of cement dust will be contained, treated and disposed to a licensed waste disposal centre
- Plant and equipment associated with the construction works would be regularly inspected to ensure correct operation and no spills/leaks
- Collection and disposal of cement dust will be in accordance with the requirements of the Department of Environment and Conservation (EPA)

The Department believes the proposed actions will mitigate concerns associated with waste and environmental risk. It is recommended conditions consent requiring detailed waste and construction management plans be prepared.

#### **6(c) any aspect of the public interest that the Director-General considers relevant to the project**

It is in the public interest and benefit to maintain the use of the site for port operations. Its history and use provides the foundation for its heritage significance. There is an important historical legacy associated with the site and this is confirmed by its landmark significance. The project will facilitate an increase in capacity without diluting the heritage significance of the silos or the use of the site in general. The project will also enable the functional and operational aspects of the site to continue.

**6(d) the suitability of the site for the project**

There are no constraints posed by the site for the project, and site attributes are conducive to the project. The EA indicates the site is suitable for, and can accommodate, the project. Glebe Island has been used since the early 1900s for the storage and handling of goods and the project will reinforce the role of the silos as a storage facility, and provide much needed upgrades to infrastructure to improve the efficiency of port operations.

**6(e) public submissions**

This has been discussed in earlier sections of the report. The project was advertised and publicly exhibited from Thursday 23 March 2006 until Thursday 27 April 2006. There were no public submissions on the proposal. Four (4) submissions were received from public authorities. A summary of the submissions and the issues raised are found in Section 6(a) of the report.

**7. CONCLUSION**

The project seeks approval for internal structural works and infilling of six windows to four (4) silos on Glebe Island.

The project will facilitate an increase in the capacity of these silos for bulk (dry) cement for use by Cement Australia Ltd. This will not however result in an increase of throughput of cement or an increase in traffic.

The impacts associated with the project are minor with negligible impacts to the heritage significance of the site.

The project has been assessed under Part 3A of the Act having regard to relevant statutory controls, the Proponent's EA, advice by public authorities, and other key issues identified by the Department.

The Proponent has committed (Statement of Commitments) to implementing a range of measures to address and mitigate potential adverse impacts associated with the project. These are outlined in Schedule 3.

It is considered that the project application and its impacts are reasonable and capable of adequate mitigation through conditions of approval in addition to the proposed Statement of Commitments. Accordingly, the project warrants approval subject to the recommended conditions.

**8. RECOMMENDATION**

It is **recommended** that the Minister, pursuant to Part 3A of the *Environmental Planning & Assessment Act 1979 (as amended)*

- (A) Grant **consent** to the project as described in the Proponent's Environmental Assessment including plans and documents and the Statement of Commitments (Schedule 3), subject to the Conditions of Approval (Schedule 2) by signing and dating the Determination of Major Project **tagged "A"**, and
- (B) Authorise the Department to carry out post-determination notification

For Ministerial Approval

Prepared by:

Endorsed by:

**Cameron Sargent**  
**Consultant to the Department of Planning**

## **APPENDIX A – CONDITIONS OF APPROVAL**

## **APPENDIX B – DESIGN PACKAGE**

**APPENDIX C - DIRECTOR-GENERAL'S ENVIRONMENTAL  
ASSESSMENT REQUIREMENTS**

## **APPENDIX D – PROPONENT’S ENVIRONMENTAL ASSESSMENT**

