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***Cement Australia Ltd
Silo Strengthening Works
Glebe Island***

***Preliminary Environmental Assessment /
Statement of Environmental Effects***

*27 November 2005
Revision 0*

Document Control

Connell Wagner

Document ID: T:\Graphics\Jobs In\Cement Australia\Silo Strengthening Works_Enviro Assessment_Rev_1.doc

Rev No	Date	Revision Details	Typist	Author	Verifier	Approver
0	27/11/05	Draft	KW	KW	SQ	DB
1	29/11/05	Final	KW	KW	SQ	DB

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1. Executive Summary

Cement Australia Ltd currently operates a bulk cement transfer terminal from sixteen converted wheat silos, at the western end of the 'Glebe Island Silo' block at Sommerville Road, Glebe Island. As these silos were originally built for the purpose of storing wheat, the holding capacity of the silos are limited, and is further restricted during regular maintenance events.

The overall intent of the project is to strengthen four of the existing silos to increase their holding capacity whilst allowing other silos to be emptied to allow routine maintenance. The project does not seek to increase the total storage capacity of the facility, rather it ensures the overall capacity of the facility is not reduced during these maintenance activities.

To achieve this, it is proposed to construct a new 200mm concrete wall lining around the internal perimeter of each silo, and to construct new concrete footings, columns, and base. The project will also comprises the removal and filling up of six lower window openings on the northern and southern elevation of the silo structure.

As the existing silo structures are classified as heritage items in Schedule 4 of Sydney Regional Environmental Plan No. 26 (SREP), and as minor external works are proposed, the project is not considered to be exempt development under SEPP 61 (*Exempt and Complying Development for White Bay and Glebe Island Ports*) and consequently requires consent. The site is within the Port and Related Employment Lands identified in Map 6B – Schedule 2 of SEPP (Major Projects) 2005, and in accordance with Clause 6, Part 3A of the Environmental Planning and Assessment Act 1979 (*EP&A Act*) applies.

This preliminary environmental assessment/statement of environmental effects report demonstrates the project is an acceptable development for the site, as it does not significantly alter the appearance of the silo structure, increase the total storage capacity of the facility, or result in any increase traffic movements. Consequently, the environmental impact of the project would be minimal.

2. Introduction

2.1 Overview

This preliminary environmental assessment has been prepared pursuant to the Department of Planning's (DoP) correspondence dated 25 November 2005, indicating that the proposed development is subject to Part 3A of the EP&A Act. It is submitted on behalf of Cement Australia Ltd, the 'lessee' of the subject site. A letter of consent to lodge this application from the owner (Sydney Ports Corporation) is contained in **Appendix A**

2.2 Cement Australia

Cement Australia Ltd has origins dating back to 1890 and comprises a number of cement companies that have consolidated and expanded through the years, primarily through acquisitions. Cement Australia Ltd previously traded as Australian Cement Holdings Pty Ltd (ACH) before the recent incorporation of Queensland Cement Corporation and the change to the existing trading name.

The scope of Cement Australia operations extends across the eastern seaboard and takes into account markets in Southern and Western Australia, and ranges from the mining of raw materials to the manufacturing, marketing and distribution of a diverse range of high performance cements and cement related products. Specialist subsidiary companies also produce a full range of associated cementitious products such as lime, fly ash and coal.

With plants in Queensland, New South Wales and Tasmania, Cement Australia has a production capacity of over 3 million tonnes annually.

2.3 Background to the Application

In October 1991, Australian Cement (the former company name) was granted development consent (DA 350/91) by Leichhardt Municipal Council to establish a bulk cement terminal in the western section of the former Glebe Island Grain Silos, Sommerville Road, Glebe Island. Since that time, the original development consent, has been modified on three previous occasions. Sydney Harbour Foreshore Authority granted consent to these modifications (refer to **Appendix D**).

These modifications included:

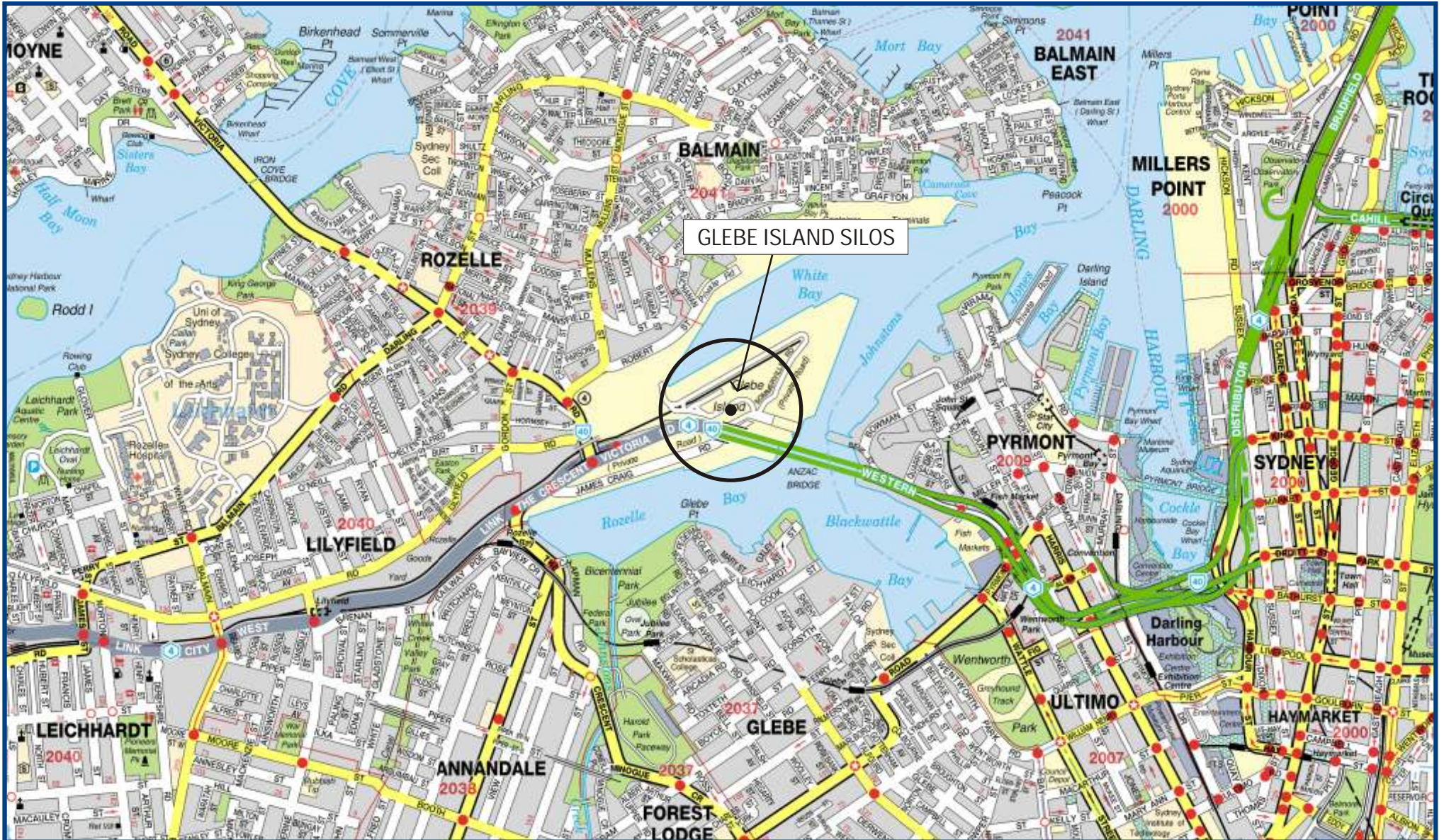
- Improvements to the efficiency of the cement shipping/import, storage and distribution facility
- Improvements to the bulk cement uploading facility by undergrounding the existing overhead delivery system
- Improvements to the bulk cement distribution on the existing silos to allow more efficient distribution of cement once it has left the delivery ship

3. Site Description

The project is located at the Cement Australia Ltd Bulk Cement Terminal section of the former Glebe Island Grain Silos, Sommerville Road, Glebe Island (**Figure 3.1**), and is located within the Leichhardt Local Government Area. The property is known as Lot 1 in DP 776765 and contains a large bank of silos, which are currently used as storage facilities by Cement Australia Ltd and Sugar Australia Pty Ltd.

The Cement Australia Ltd site is located on the western end of the silo block and uses around half (16 concrete silos) of the existing silo complex. The silos comprise 30 metre tall x 11 metre diameter bins and are used for storing bulk (dry) cement. Sugar Australia uses the remaining silos in the complex located to the east. The Cement Australia site is located within the Glebe Island and White Bay port area. This area is utilised by a number of different companies for the import and export of various goods by ship.

Further north east of the site is the AAT car terminal where cars are held for import and distribution to the local market. South of the site is the ANZAC Bridge, which connects the Western Distributor to the City West Link Road. Victoria Road is located to the west. The site is removed from residential land uses, with the nearest residence identified being approximately 400 metres to the north. Major roads in the area include Victoria Road, City West Link Road and The Crescent.



GLEBE ISLAND SILOS



FIGURE 3.1

4. Project Description

4.1 Purpose

The silos were originally built for the purpose of storing wheat, and subsequently can only be filled up to around one third of its capacity with the heavier bulk cement material. The intent of the project is to allow one bank of silos to be filled to approximately two thirds capacity to allow emptying and maintenance of the remaining silos including removal of cement residue build up. This will ensure the overall capacity of the facility is not reduced during these maintenance activities.

To achieve this, it is proposed to strengthen the structure of four of the silos to increase their holding capacity. The proposal does not seek to increase the total throughput of the facility, or result in any increase traffic movements. The overall intent is to introduce a more efficient storage program that utilises the existing structure without creating any additional impacts upon adjoining properties or the locality.

4.2 Description of Project

The project seeks to undertake work upon four of the silos currently being used by Cement Australia, identified as silo No. 1408, 1409, 1208 and 1209 (**Appendix B**)

The proposed development will comprise:

- The construction of new concrete footings within the internal perimeter of each silo;
- 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.

It is also confirmed that the approval sought is confined solely to construction works, and accordingly, the project would have no affect on the existing consents for the operation of the facility.

4.3 Consultation

Consultation was undertaken with Sydney Harbour Foreshore Authority, Leichhardt Municipal Council, and Sydney Ports Corporation in early 2005. No major issues were raised during these preliminary discussions.

5. Environment Assessment

This section evaluates the environmental and urban planning issues against relevant Environmental Planning Instruments, development control plans and policies.

5.1 Environmental Planning Instruments

The following planning controls apply to the subject site.

- State Environmental Planning Policy (Major Projects) 2005
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005
- Sydney Regional Environmental Plan No. 26 – City West
- Glebe Island and White Bay Master Plan

It is noted that Leichhardt Local Environmental Plan 2000 (*LLEP*) does not apply to this site (Clause 3, *LLEP*)

5.1.1 State Environmental Planning Policy (Major Projects) 2005

Glebe Island is within the Port and Related Employment Lands identified in Map 6B – Schedule 2 of SEPP (Major Projects) 2005, and in accordance with Clause 6, Part 3A of the Environmental Planning and Assessment Act 1979 (*EP&A Act*) applies.

It is noted that as the existing silo structures are classified as heritage items in Schedule 4 of Sydney Regional Environmental Plan No. 26 (SREP), and as minor external works are proposed, the project is not considered to be exempt development under SEPP 61 (*Exempt and Complying Development for White Bay and Glebe Island Ports*).

5.1.2 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Glebe Island is located within the Foreshores and Waterways Area identified in SREP (Sydney Harbour Catchment) 2005. The land to which this project is located upon is unzoned under this plan.

The principal aim of SREP (Sydney Harbour Catchment) 2005 is to ensure that the catchment, foreshores, waterways and islands of Sydney harbour are recognised, protected and maintained as an outstanding natural asset and heritage significance for existing and future generations.

Glebe Island does not contain any natural environmental attributes that are significant to the visual amenity of Sydney Harbour, rather it is largely characterised by industrial and port development. The proposal would largely involve internal structural work to the existing silos, with the exception of the removal of six window openings at the base of the four silos. These window openings cannot be directly seen from a public place, as they are obscured by topography or by port structures, and are not considered to be a highly significant feature of the structure. The loss of these window openings would not adversely impact on the aesthetic appearance of the silos, the industrial character of the structure or diminish its landmark status within the landscape.

Considering the proposed development will involve minimal alterations to the silo structure, and no external ground works, it is considered that project is consistent aims and objectives of this plan.

Additionally, in accordance with schedule 4, it is noted that this plan does not identify the 'Glebe Island Silos' as heritage items.

5.1.3 Sydney Harbour Foreshores and Waterways Area Development Control Plan, 2005

Glebe Island is located within the Foreshores and Waterways Area identified in SREP (Sydney Harbour Catchment) 2005 to which this DCP applies.

The project involves structural work to an existing concrete structure, with a large majority of the work to be undertaken internally. As a result it is not considered that the proposal would adversely impact any ecological communities as identified in Part 2, or any existing landscape attributes as identified in Part 3 of this DCP.

As the proposal would not include any physical additions or any significant alterations to the building envelope of the structure, the project is not considered to contribute to any visual impact upon the Sydney Harbour Catchment, and accordingly the project satisfies Part 4 and 5 of the DCP.

5.1.4 Sydney Regional Environmental Plan No. 26 – City West

The site is subject to the provisions of the Sydney Regional Environmental Plan No. 26 – City West (“SREP 26”) and is located within the Port and Employment Zone. The proposed development is also located within the “Bays Precinct”.

Pursuant to clause 11 and 15 of SREP26, the project is consistent with aims of this plan as:

- it will facilitate more efficient port operations
- it will not detrimentally impact the heritage value of the silos
- complements the existing land use associated with the port
- would not impact on the diversity and maritime character of the Precinct
- would not adversely affect the adjoining street systems and built forms, and
- would not significantly impact on views from within the Precinct or to and across the Precinct from other areas.

The proposal is also consistent with the relevant objectives of clause 20(c), as it would facilitate the continuation of commercial port uses and it is an ancillary development directly associated with an existing use that needs to be in close proximity to the Port.

The silos are a heritage item under this plan, and pursuant to clauses 26 and 26a of *SREP 26*, the proposal respects the heritage significance of the structure by incorporating a majority of the works internally, and retains the industrial character and landmark status of the structure within the landscape.

5.1.5 Glebe Island and White Bay Master Plan

The Glebe Island and White Bay Master Plan outlines the significance of the Bays Precinct area and provides an overview of its history, significance in present society and vision for the future.

The Master Plan identifies the Glebe Island Silos as a landmark feature that should have its existing views maintained to reinforce the diverse visual quality of the area. The Master Plan also identifies specific views from Victoria Road and from Anzac Bridge towards the Glebe Island Silos that should be considered in light of any proposed development.

The principles of the Master Plan have been considered in the design of the project. The project would not have any detrimental effects on the landmark features or views of the silos identified in the Master Plan as the works are generally internal or involves work that would not be visible from a public place.

Overall, the project is considered consistent with the objectives of the plan as it involves the maintenance of existing cement silos to allow for improved efficiency.

5.2 Key Issues

5.2.1 Context and Setting

The development site is within the confines of the Glebe Island and White Bay area, with the primary land use surrounding the site being primarily industrial in nature and characterised by large infrastructure associated with the port activities.

The project does not seek to alter the character of this precinct.

5.2.2 Access, Transport and Traffic

The minor modifications proposed for the Glebe Island Silos will not increase the through-put of capacity of the facility, and for this reason, the project will have no effect on access, transport or traffic. Vehicular access and traffic to the site would remain unchanged due to the minor nature of the modifications and the modifications occurring on-site.

5.2.3 Public Domain

The project would not impact on public recreational opportunities in the area, nor would it impact on pedestrian linkages and access between the development and public areas. Views of the project from public areas are discussed in **Section 5.2.6.** of this report.

5.2.4 Utilities

The existing utilities supplied to the site are sufficient for the proposal modifications. The proposal would make modest power demands on the network and no upgrades are required.

5.2.5 Heritage

The Glebe Island Wheat silos are listed as a Heritage Item in Leichhardt Local Environmental Plan 2000 and Sydney Regional Environmental Plan 26, but is not listed on the State Heritage Register.

The heritage value of the silos has been a subject of various studies, including the Leichhardt Heritage Study 1989, White to Blackwattle Bay Central to Everleigh Heritage Study 1990, The Bays Precinct Study 1993, and the Glebe Island Grain Silos Heritage Assessment Report 1994.

Glebe Island is identified in the Leichhardt Heritage Study, 1989. It states that the area is a:

Significant example of early use of reinforced concrete for massive structures – strong association with rail and sea transportation/industry of one of Australia's major export products. Land mark in a strong industrial townscape.

The Glebe Island Wheat Silos are also listed as a Heritage item in the Sydney Regional Environmental Plan 26 (SREP 26). The SREP states the silos are:

A very important prominent landmark feature, the Glebe Island Wheat Silos are evidence of Sydney as a major shipping port.

The significance of the 1970s group of silos is in their landmark status and association with an era that made an important contribution to the economic and social development of Sydney.

An assessment of the silo's was carried by Godden Mackay Logan Pty Ltd in 2003 for a previous proposal on the site. This assessment identified the Glebe Island Silos as being of aesthetic significance due to it being a "Functional, engineering structure" and a "dominant element in the urban landscape", as well as a "well known Sydney landmark".

The project would largely involve internal structural work to the existing silos, with the exception of the infilling six lower window openings at the base of the four silos. These window openings cannot be

directly seen from a public place, as they are obscured by topography or by port structures, and are not considered to be a highly significant feature of the structure.

The loss of these window openings would not adversely impact on the aesthetic appearance of the silos, the industrial character of the structure or diminish its landmark status within the landscape. Considering the proposed development will involve minimal alterations to the silo structure, the project is not considered to adversely impact the heritage significance of the Glebe Island Silos, or the Glebe Island area.

The project would allow long term use of the silos and would therefore contribute to the long term preservation of the heritage item.

5.2.6 Views

The project does not involve any further additions to the existing silo structure, and for this reason the proposal would not result in any significant loss of views or vistas from adjoining properties to predominant features within the landscape.

5.2.7 Noise and Vibration

Operation noise will not significantly increase as a result of the proposed development. The only potential increase in noise levels from the site would be associated with the construction period which would be minor.

5.2.8 Flora and Fauna

The development site is within the confines of a predominantly port-industrial setting and is isolated from any areas of natural environment. The proposed development will therefore have no adverse impact on flora or fauna.

5.2.9 Social and Economic Impact in the Locality

The development site is located within an area of a predominantly port-industrial setting. It is also located away from residential development, community facilities and recreational development; thus it is unlikely that the proposed development will introduce any social changes.

The project would contribute to the maintenance of the Glebe Island Silos, which will ultimately contribute to the efficiency of Cement Australia's operations and would allow the company to continue at this site for the longer term. There would be no adverse economic effects as a result of the proposed development. Indeed, there would be positive economic effects through continued port operations.

5.2.10 Site Design and Internal Design

The overall layout of the site will require no changes to accommodate the proposed development. The site design and internal design is thus appropriate for the proposal.

5.2.11 Construction

The construction period would generate very limited noise. Any noise generated by the proposal would be of short duration and would be in accordance with the relevant guidelines for construction site noise contained with the DEC Environmental Noise Control Manual. The isolation of the site from sensitive receptors and the existing background noise levels from the port and arterial road network would mitigate any noise impacts that might occur.

The construction would comply with the Building Code of Australia and all applicable Australian Standards. Construction activity will meet relevant Environmental Management criteria, including soil and water management and dust control, and waste material generated from the building work will be recyclable where possible. Material that cannot be recycled will be disposed of in a registered waste disposal facility

5.2.12 Cumulative Impacts

The proposed development would not result in changes to transport and traffic, to the public domain, to utilities, to the silos aesthetic value, to flora and fauna and to site and internal design. The construction

period would be in accordance with relevant standards, and with regards to social and economic impact, no change or only positive outcomes are expected.

6. Conclusion

Pursuant to Schedule 2 of SEPP (Major Projects) 2005, the proposed development is a major project application in accordance with Part 3A of the EP&A Act.

The project satisfies the planning principles and general requirements of Sydney Harbour Foreshores and Waterways Area Development Control Plan, 2005, Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, Sydney Regional Environmental Plan No. 26 – City West, and the Glebe Island and White Bay Master Plan.

This preliminary environmental assessment/statement of environmental effects report has demonstrated that the development is an acceptable development for the site, as it does not seek to increase the total storage capacity of the facility, or result in any increase traffic movements. The overall intent of the project is to introduce a more efficient storage program that utilises the existing facility to its maximum potential without creating any additional impacts upon adjoining properties or the locality. The project will have minimal environmental consequences.