

PORT AUTHORITY OF NSW HERITAGE INVENTORY

State Heritage Inventory

SHI Number: 4560016		Study Number: N/A	
Item Name: Glebe Island Silos			
Location: Glebe Island			
Address: Solomons Way and Sommersville Rd, Rozelle		DUAP Region: Sydney South	
Suburb / Nearest Town: Rozelle 2039		Historic Region: Sydney	
Local Govt Area: Inner West		Parish: Petersham	
State: NSW		County: Cumberland	
Other/Former Names: Glebe Island Wheat Silos			
Area/Group/Complex:		Group ID:	
Aboriginal Area: Wangal clan			
Curtilage/Boundary:			
Item Type: Built	Group:	Category: Silo	
Owner: Port Authority of New South Wales			
Current Use: Bulk handling and storage of sugar and cement			
Former Uses: Grain Silos			
Assessed Significance: State		Endorsed Significance:	
Statement of Significance:			
<p>Glebe Island Grain Terminal was a seminal site in the development of the bulk wheat storage and export industry in Australia. As such it has a pre-eminent position in the historical development of one of Australia's most important primary industries. It was the first and most important of the port terminals and encompassed technologies that were specific to the industry and influential in the development of that industry throughout the country. The first construction phase, now demolished, was particularly noteworthy because of the circumstances of its wholly imported design and technological expertise.</p> <p>The carefully planned and integrated system, by the 1930s, was considered one of the largest, most efficient and well-planned installations of its type. Due to the demolition of the original and early silos and associated infrastructure, the ability to demonstrate and record the industrial processes that evolved on the site over its history are incomplete. However, the existing 1974 silos are a tangible representation of the site's history and are the most visible and easily interpreted elements of that former use and form a powerful and well known landmark. The site's significance also relates to its current function as storage silos continuing on from its original purpose.</p>			
Historical Notes or Provenance:			
<p>In 1790 Reverend Richard Johnson was granted 160 acres of glebe land (a tract of land belonging to the Church of England), including a 23-acre island west of Sydney Cove, today known as Glebe Island. In 1850-54 the colonial architect, Edmund Blacket, designed sandstone buildings for a public abattoir on the island. It consisted of two parallel ranges of sandstone buildings, each 220 feet in length with one consisting of 12 slaughterhouses for beef and the other 12 slaughterhouses for sheep. Double steam</p>			

punts operated between the island and the western shore of Pyrmont. The Glebe Island Abattoir opened in October 1860. It ceased operations in 1916.

From 1912, further reclamation was undertaken and wharves were built by the Railways Commissioners to facilitate wheat and coal handling. By 1916 the need to replace shipment of wheat in bags with bulk handling was urgent. Plans for a scheme of bulk handling grain involving elevators and storage were prepared by the Canadian firm, John S Metcalfe and Company Ltd, in 1916. There were 143 cylindrical bins (silos), of whom 72 were circular and 71 interspace. The bottom of the bins were cone-shaped which allowed heat to be discharged via a valve to a chute leading to a conveyer belt for shipment. A working house was also constructed, which featured unloading machinery, grain elevators, weighing hoppers, cleaning machinery, drying equipment, a dust collection plant and power station.

The first phase of construction on the Glebe Island silos commenced in late 1918 and was completed in 1921. Under the supervision of Public Works engineer, Robert Kendall, the contract for its construction was awarded to Henry Teesdale Smith, timber merchant, railway builder and former politician. The Sun newspaper called it the 'cubist castle' and 'futurist fortress' towering up to 120 feet with flat roof covering two acres. The Bulletin magazine noted 250,000 bags of Kandos Cement, manufactured by NSW Cement, Lime and Coal Company Ltd were used in its construction.

Between 1921 and 1932 the Glebe Island bulk handling facilities were significantly expanded. By 1925, 63 silos were built as well as associated services including building stock, rail and road links and handling facilities. The depression slowed development although the number of country plants increased to 181 by 1939.

During World War II, Glebe Island was used as a major armament supply depot and troop embarkation area for the United States Army. By the 1950s horizontal storage facilities were replacing vertical ones and the Grain Elevators Board was established. Record wheat harvests and the post war growth led to further expansion in the 1960s and in the 1970s other grains were also handled and capacity was doubled.

The Glebe Island Container Terminal was officially opened by Premier Robert Askin on 22 February 1973. It was constructed on an area of just under 24 acres adjacent to the grain handling facility by the former Maritime Services Board (MSB) at a cost of \$13 million and based on plans prepared in 1970. It quickly drew criticism for its inefficient operations and harbour congestion. This terminal, along with another constructed at White Bay and opened in March 1969, became the focus of cellular container shipping operations in the Port of Sydney until the early 1980s. Glebe Island ceased operation as a grain storage terminal in 1984, when a new facility at Port Kembla became the major grain export site for NSW.

On 9 December 1974, 30 additional grain silos (38.4 metres high) were officially opened by the Governor of New South Wales, Sir Roden Cutler. Each bin had a capacity of 2,400 tonnes and there were also 14 star-shaped inner bins constructed with a capacity of 550 tonnes. The extant silos [item 4560016] doubled the storage capacity for wheat at the island, from 163,000 tonnes to 245,000 tonnes, and cost approximately \$4 million to construct. The chairman of the NSW Grain Elevators Board, Peter Deuce, noted an 'important feature' of the new silos included the 'provision for recirculatory fumigation of the stored grain' to guard against insect infestations.

On 21 May 1992, the then Minister for Planning granted development consent to an Olympic Games 2000 Mural and the addition of sponsor advertising structures and lighting on the Silos. The consent for advertising was originally limited to a 10-year period. A reported 2,000 litres of paint were used to display the Sydney Olympics logo across the façade of the former wheat silos. In 1993, the Sydney Olympic Committee requested a new mural be painted on the 1974 Wheat Silos, with the concept of the mural was to see the painting of the silos to mimic Grecian columns, with different figures on each individual silo representing different sports (GML, 2011).

In 1994 part of the silo complex was modified for cement storage.

A comprehensive development strategy outlined in the Glebe Island /White Bay Master Plan was adopted at the end of the 20th century. In 1999 the NSW Government awarded a \$7 million contract to Metropolitan Demolitions and Recycling to demolish the disused wheat silos at Glebe Island. Work commenced at the end of 1999 and was completed in 2000. Extensive testing had shown that the original block of silos was in poor condition and could not be renovated. More than half the 110,000 tonnes of concrete in the silos buildings was recycled for use as road base in the Port precinct. The rest was sold. The demolition freed approximately three hectares for Port use.

Themes:	National Theme: 7. Economy	State Theme: Agriculture	Local Theme: (none)
	9. Governing	Government and administration	(none)

Designer: John S Metcalfe and Company Ltd (original bins)

Maker / Builder: Henry Teesdale Smith

Year Started: 1918	Year Completed: 1974 (existing silos)	Circa: Yes
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Physical Description:

The original silos were large cylindrical bins capable of handling approx. 6.5 million bushels. The bottoms of the bins were shaped as cones which enabled wheat to be discharged via a valve to a chute which led directly via a conveyor belt for shipment. The original 143 bins were 31.2 feet in diameter 108 feet high and 8 inches thick.

The existing silos on the site were similar to the original silos in design, cylindrical in shape with conical bases, constructed of reinforced concrete, measuring (approx. 38.4m high) and each having a capacity of 2,400 tonnes. The silos are configured in two rows of fifteen individual silos, with rows oriented east-west. The silos have operational enclosures at the ground level surrounding the silos, also of concrete construction. The rooftop area of the silos incorporates advertising structures and associated billboards above the silos obscuring the horizontal conveyor (only from the south and west sides, with the conveyor still visible from the north), part of 1990s changes to the site.

The Anzac Bridge fronting elevation of the silos also features a prominent mural resembling Grecian columns, associated with the build-up for the 2000 Sydney Olympics. A 2011 Heritage Assessment Report for the mural prepared by GML Heritage concludes: *"The Glebe Island Silos Olympic Mural is not linked in any way to the significance of the Silos themselves. However, in its own right it is considered to have historic, social and associational significance, and some rarity value"*. The mural does not form part of the Glebe Island Silos heritage listing (SHI 4560016).

Physical Condition: Generally good

Modification Dates:

1860 – Glebe Island abattoir opened

1916 – Closure of Glebe Island abattoir. Preparation of plans for a bulk handling scheme

1918 – construction commenced on bulk handling scheme at Glebe Island involving 143 silos and working house

1921 – first phase of construction of bulk handling scheme completed

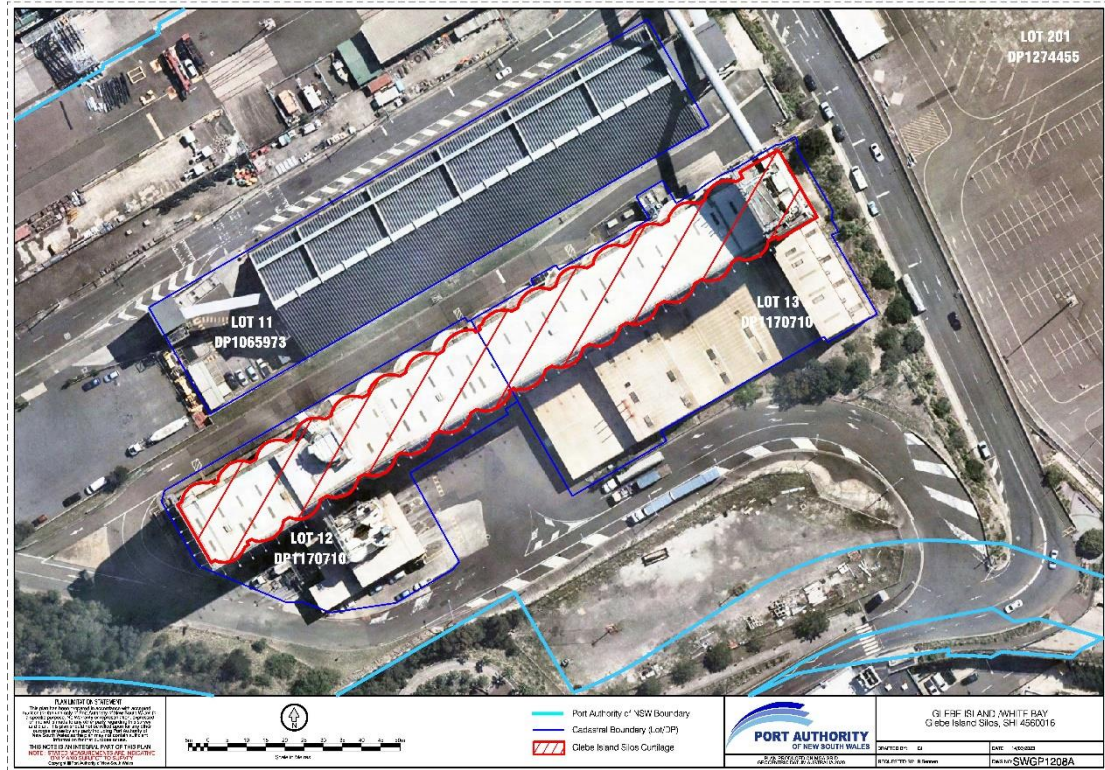
1921-32 – expansion of facilities including addition of 63 silos, wharf extensions, construction of two large sheds with railway lines laid, horizontal conveyers installed

<p>1939-45 – Glebe Island facilities taken over under the National Security Regulations and it became a major armament and engineer’s supply depot for the United States Army</p> <p>1973 – Glebe Island Container Terminal opened</p> <p>1974 – additional grain silos opened (extant, item 4560016)</p> <p>1984 – ceased operation as a grain store</p> <p>1992 - addition of sponsor advertising structures and lighting on the Silos</p> <p>1993 – Addition of Sydney Olympics mural to Anzac Bridge facing elevation</p> <p>1994 – modified for cement storage</p> <p>2000 – grain silos (constructed 1918-25) demolished.</p> <p>2019 – internal strengthening of the 16 silos holding cement</p>			
<p>Recommended Management: Retain in situ and conserve.</p> <p>Prepare a Conservation Management Plan to determine if the item meets the criteria for listing on the State Heritage Register.</p> <p>Preparation of a Maintenance and Conservation Works Schedule to ensure acceptable condition and assist in long-term conservation.</p>			
<p>Management: Statutory Instrument</p>			
<p>Further Comments:</p>			
<p>Criteria a) The Glebe Island Silos and terminal site have significant historical associations with the development of the grain (principally wheat) industry in NSW as well as the history of Commonwealth and State involvement in agriculture. It was the first and most important of the port terminals and encompassed technologies that were specific to the industry and influential in the development of that industry throughout the country. Despite the demolition of the original silos, the extant 1974 silos provide a tangible representation of the history of the site and its substantial role in the economic development of Glebe Island and New South Wales more generally.</p>			
<p>Criteria b)</p>			
<p>Criteria c) The silos while utilitarian in design have a distinctive industrial quality and due to their substantial scale are prominent in the landscape, visible across the Bays Precinct. The silos have a significant presence appreciated from around the bays precinct and are considered to have landmark qualities, particularly as part of a gateway upon entry into the west of the city.</p>			
<p>Criteria d)</p>			
<p>Criteria e)</p>			
<p>Criteria f)</p>			
<p>Criteria g)</p>			
<p>Integrity / Intactness:</p>			
References:	Author:	Title:	Year:
		Port of Sydney Journal May 1975 Vol 12 - 3	1975
		Sydney Ports Corporation Annual Reports	2000

	O'Brien, E H	Wheat Sales and Shipping: a brief description in Port of Sydney Vol 11-14	1975		
	Brotherson, W H	The Development of the NSW Bulk Wheat Berths - Port of Sydney Journal Vol 10 No 3	1971		
		The Bulletin, Vol 40, No 2076, page 43, http://nla.gov.au/nla.obj-677728379	27/11/1919		
		'Cubist Castle', The Sun, page 6, http://nla.gov.au/nla.news-article224138350	9/08/1921		
		'Glebe silo capacity up 50pc, Sydney Morning Herald, page 12	10/12/1974		
	Linda Morris	'Silos will lie low for going against the grain', Sydney Morning Herald, page 4	30/06/1999		
	Wayne McPhee, Wendy Thorp and Ian Stuart	The Glebe Island Grain Silos Archaeological and Heritage Assessment	1994		
	Edna Carew	First port future port: Celebrating 100 years, Sydney Ports Corporation	2002		
	Peter Reynolds	'Glebe Island', The Dictionary of Sydney, https://dictionaryofsydney.org/entry/glebe_island	2008		
Studies:	Author:	Title:	Number:	Year:	
	Weir Phillips Heritage	Glebe Island Silos, Victoria Road, Glebe Island, Heritage Impact Statement		2019	
	Godden Mackay Logan Heritage Consultants	Glebe Island Silos Olympic Mural, Heritage Assessment Report		2011	
	Clive Lucas, Stapleton & Partners Pty. Ltd.	Glebe Island Silos, Glebe Island, Rozelle – Safety Work Upgrade, Statement of Heritage Impact		2007	
	Susan McIntyre-Tamwoy Heritage Consultants	Sydney Ports Corporation World War II Monument Glebe Island: SOHI		2004	
	Mayne -Wilson and Associates	Heritage Impact Assessment. App 5 to REF Roadworks Glebe Island Rozelle		2002	
	W McPhee, W Thorp, I Stuart	The Glebe Island Grain Silos Archaeological and Heritage Study		1994	
Parcels:	Parcel Code:	Lot Number: Part Lot 12	Section:	Plan Code: DP	Plan Number: 1170710
Parcels:	Parcel Code:	Lot Number: Part Lot 13	Section:	Plan Code: DP	Plan Number: 1170710
Latitude:			Longitude:		

Listings:	Name: Heritage Act – S.170 NSW State agency heritage register	Title: Glebe Island Silos	Number: 4560016	Date: 2004
	State Environmental Planning Policy (Precincts—Eastern Harbour City) 2021 (Schedule 4)	Glebe Island wheat silos (components A, B and C as identified on Map 4)	1	2021
Data Entry:	Date First Entered: 29/06/2004	Date Updated: 9/01/2023		Status: Basic

Image: 1



Caption: Glebe Island Silos Curtilage Plan

Copyright: Port Authority of New South Wales

Image By: Port Authority of New South Wales

Image Date: 14/03/2023

Image File: SWGP1208_Final

Image: 2



Caption: Glebe Island Silos

Copyright: Port Authority of New South Wales

Image By: Susan McIntyre-Tamwoy Heritage Consultants

Image Date:

Image File: 4560016b1.jpg

Image: 3



Caption: Glebe Island Silos southern elevation

Copyright: Port Authority of New South Wales

Image By: Zach Nix – NBRS

Image Date: 05.10.2022

Image File: 4560016b2.jpg

Image: 4



Caption: Glebe Island Silos northern elevation

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Image Date: 05.10.2022

Image File: 4560016b3.jpg

Image: 5



Caption: Glebe Island Silos eastern elevation

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Image File: 4560016b4.jpg

Image: 6



Caption: Top of Glebe Island Silos, looking northwest

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Image By: Zach Nix – NBRS

Image Date: 05.10.2022

Image File: 4560016b5.jpg

Image: 7



Caption: Inside of horizontal conveyor enclosure, Glebe Island Silos

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Image: 8



Caption: Glebe Island Silos, Sydney Olympic Mural

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Image Date: 05.10.2022

Image File: 4560016b7.jpg

Image: 9



Caption: Container crane at Glebe Island

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Image By: Graeme Andrews

Image Date: 1976

Image File: 4560016b8.jpg

Image: 10



Caption: View from Glebe Island to Pyrmont to Sydney CBD

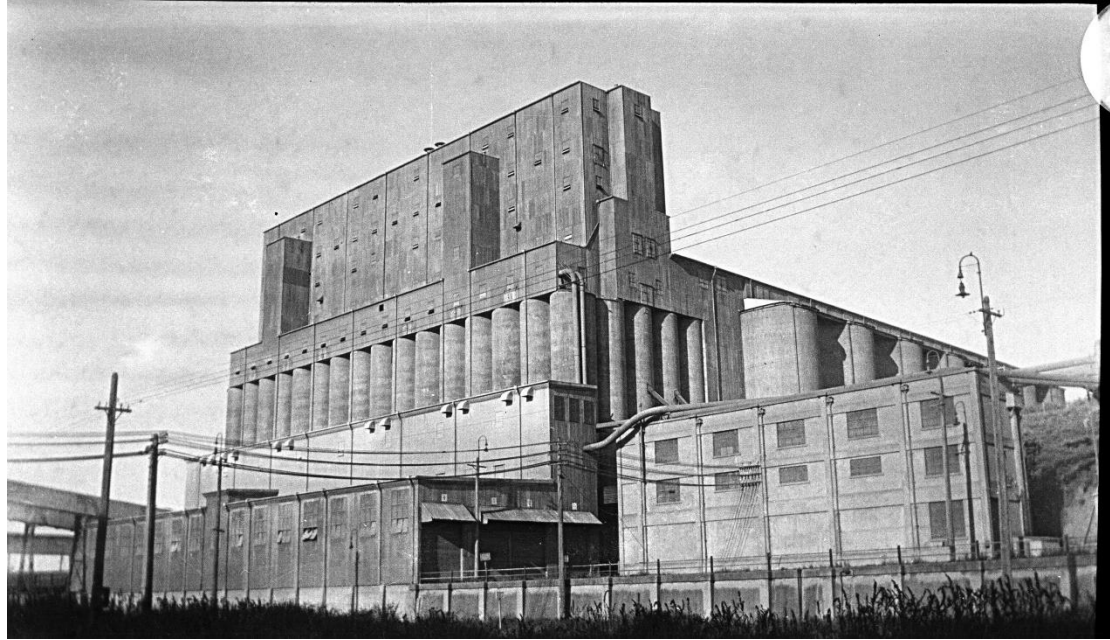
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Image By:

Image Date: c1960s

Image File: 4560016b9.jpg

Image: 11



Caption: Glebe Island Wheat Silos (demolished in 2000)

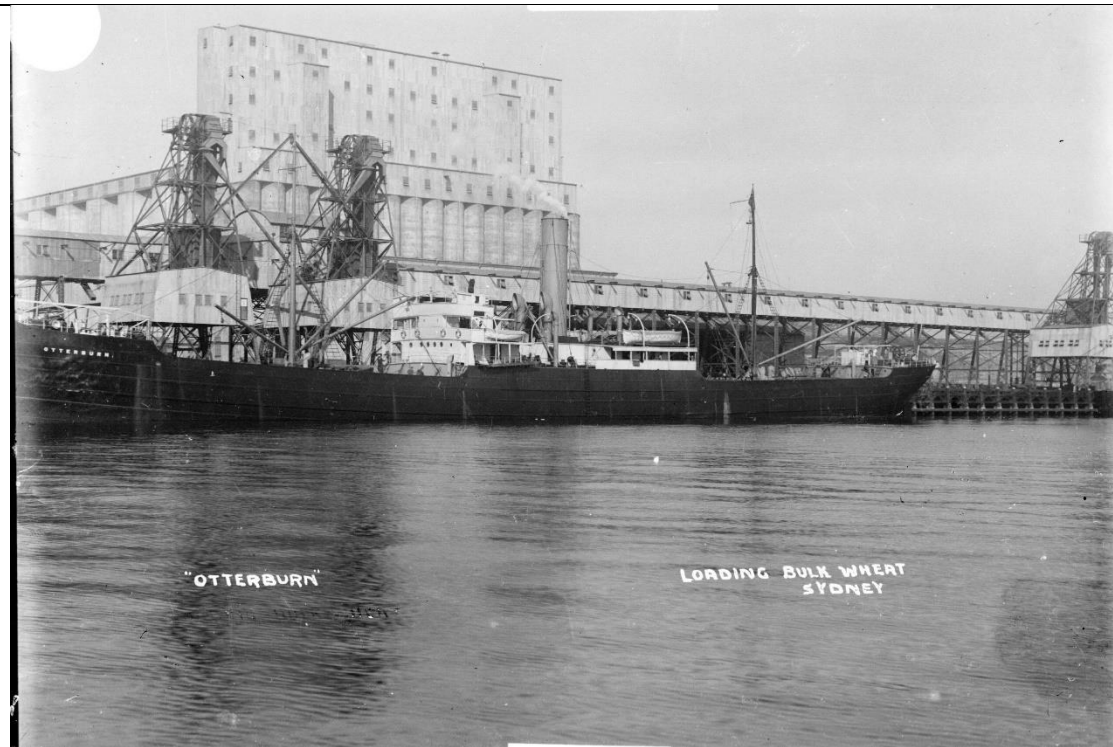
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Image By: Graeme Andrews

Image Date: 1939

Image File: 4560016b10.jpg

Image: 12



Caption: Bulk carrier 'Otterburn' at Glebe Island wheat silos

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Image By: Graeme Andrews

Image Date: 1928

Image File: 4560016b11.jpg

Image: 13



Caption: Glebe Island Bridge with the opening span opened to allow a vessel to pass alongside the wheat silos [demolished in 2000]

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Image By: John Ward

Image Date: 1/12/1995

Image File: 4560016b12.jpg

Image: 14



Caption: Silo construction, Glebe Island

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Image By: Arthur G Foster

Image Date: 1920

Image File: 4560016b13.jpg

Image: 15



Caption: Silo construction, Glebe Island

Copyright: Out of copyright, courtesy of National Library of Australia, PIC Row 12/8/3 #PIC/P860/276

Image By: Arthur G Foster

Image Date: 28/04/1921

Image File: 4560016b14.jpg

Image: 16



Caption: Silo construction, Glebe Island

Copyright: Out of copyright, courtesy of National Library of Australia, PIC Row 12/8/3 #PIC/P860/277

Image By: Arthur G Foster

Image Date: 1921

Image File: 4560016b15.jpg

Image: 17



Caption: Silo construction, Glebe Island

Copyright: Out of copyright, courtesy of National Library of Australia, PIC Row 12/8/2 #PIC/P860/51

Image By: Arthur G Foster

Image Date: 1920-21

Image File: 4560016b16.jpg