

# PORT AUTHORITY OF NSW HERITAGE INVENTORY

## State Heritage Inventory

SHI Number: 4560001		Study Number: 493	
Item Name: Bradleys Head Lighthouse			
Location: Bradleys Head, Mosman			
Address: Bradleys Head		DUAP Region: Sydney North	
Suburb / Nearest Town: Mosman 2088		Historic Region: Sydney	
Local Govt Area: Mosman		Parish: Willoughby	
State: NSW		County: Cumberland	
Other/Former Names: Bradleys Head Light Tower, Bradleys Head Light			
Area/Group/Complex: Category 1 Aid to Navigation - Port Safety Operating Licence (SYD-020)		Group ID: 1	
Aboriginal Area: Booraghee (dual name) / Borogegal people			
Curtilage/Boundary:			
Item Type: Built	Group: Maritime Industry	Category: Lighthouse Tower	
Owner: Port Authority of New South Wales			
Current Use: Aids to navigation under the Port Safety Operating Licence			
Former Uses:			
Assessed Significance: State		Endorsed Significance: State	
Statement of Significance: An important harbour navigation light and a landmark at Ashton Park, Bradleys Head. Of significance as part of a collective group of Lighthouse Towers that enable the safe movement of international shipping through Sydney Harbour. Of historical significance for its association with navigation aids employed during the early 20 <sup>th</sup> century and still in use. Of local architectural and aesthetic significance for its functional maritime design and its contribution to the cultural landscape of Sydney Harbour.			
Historical Notes or Provenance: <p>The Harbour Trust Commissioners had been planning the construction of a lighthouse at Bradleys Head since at least early 1904. It was announced a '[John] Wigham patent' 'dioptric light of the sixth order' would be constructed of 'monu-concrete' at Bradleys Head, with a 'fixed fog bell worked by electricity from Fort Denison' which, in turn, would be connected with the powerhouse at the former Fort Macquarie on Bennelong Point [the site of the Opera House]. A new fog bell was also installed at Fort Denison, both powered by electricity, with each bell providing a different sound so as not to confuse vessels plying the harbour.</p> <p>In January 1905 the Sydney Harbour Trust Office advertised that the new lighthouse at Bradleys Head would exhibit 'one bright light at the masthead and one rest light at the deck level at each end of plant' by night, and 'one red flag at each end of plant' by day. It sat 22 feet above the high-water mark and was illuminated on 22 April 1905. The engineer-in-chief of the Sydney Harbour Trust, Mr Walsh, described it as a 'miniature lighthouse' and the 'strongest on the harbour', second only to the lighthouse at South Head.</p>			

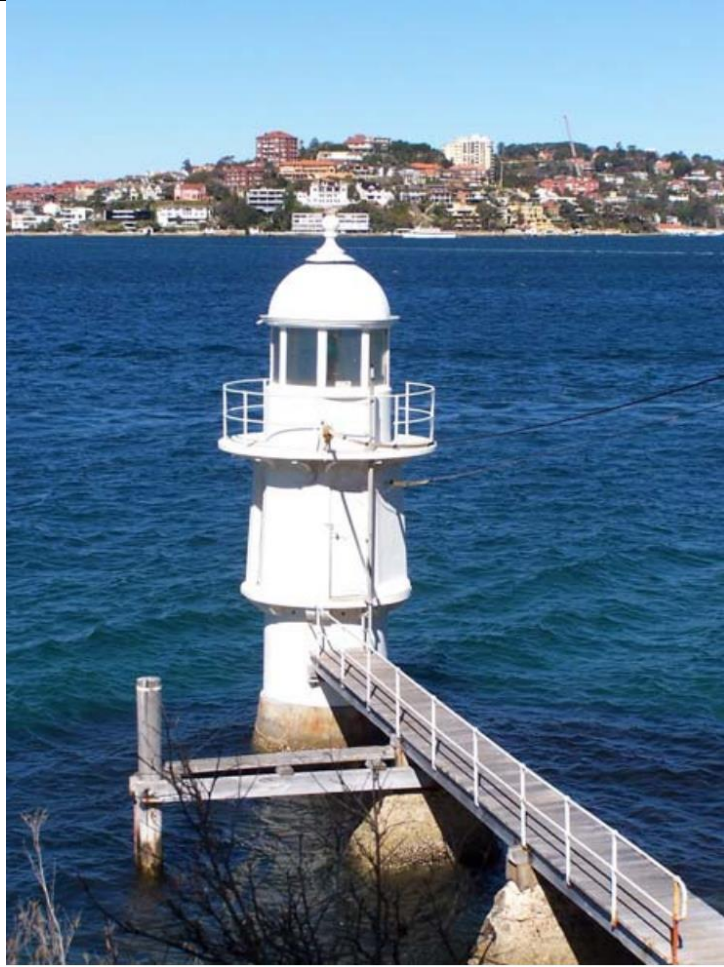
<p>The lighthouse was connected to the mainland by a raised walkway, which was originally powered by submarine cable from the Fort Macquarie Electric light station.</p> <p>Bradleys Head Lighthouse was the first pre-cast concrete lighthouse in Australia. It consists of several sections cast to fit each other on site. It provides a beacon for shipping and has remained in good condition since. It has a matching light at Robertsons Point, Cremorne which was built later.</p> <p>The original light was replaced in 1911 with a dioptric lens and acetylene gas plant to provide a powerful 360deg fixed white light (SHT Commissioners' Report year ended 30<sup>th</sup> June 1912). This was replaced in 1924 with the current green occulting light.</p> <p>On 12 November 1934 the HMAS <i>Sydney</i> memorial mast was unveiled nearby in memory of those who died aboard the ship during its battle with the German cruiser, SMS <i>Emden</i>, in 1914 during World War I.</p>			
Themes:	National Theme: 3. Economy	State Theme: Transport	Local Theme: None
Designer: unknown			
Maker / Builder: Sydney Harbour Trust			
Year Started: 1904	Year Completed: 1905	Circa: No	
<p>Physical Description: Constructed in 1905, this timber and concrete lighthouse tower is located on the point at Bradleys Head and operates as a navigational marker and warning light to ships entering and leaving the Harbour. It is constructed of pre-cast concrete sections, is cylindrical in shape with arched openings at the ground level (infilled on the north side), and a decorative ball finial on top of a domed roof. It is accessed by a short timber bridge from an abutment. The lighthouse design is similar to the design at Robertson's Point (built 1909). It displays an occulting green light every three seconds, 2 on 1 off. It has an electric foghorn that sounds under fog conditions. A fog bell was first installed in 1905.</p>			
Physical Condition: The Bradleys Head Lighthouse is in generally good condition with no observable condition issues present during inspection (October 2022).			
<p>Modification Dates:</p> <p>1905 – Fog Horn added</p> <p>1911 – Acetylene gas plant and dioptric lenses installed.</p> <p>1924 – The original white light was altered to flashing</p> <p>c1936-47 – Concrete infill (encasement) of northern side of the Lighthouse</p> <p>2003 – Major refurbishment of concrete.</p> <p>Currently green light occulting every 3 seconds</p>			
<p>Recommended Management:</p> <p>Retain in situ and conserve</p> <p>Preparation of a Heritage Assessment of Port Authority of NSW Sydney Harbour Aids to Navigation in order to confirm relevance of group listing, assessed State significance and applicability of individual items.</p> <p>Preparation of a Maintenance and Conservation Works Schedule to ensure acceptable condition and assist in long-term conservation.</p>			
Management:			

Statutory Instrument			
Further Comments: Port Authority of NSW Category 1 aid to navigation under the Port Safety Operating Licence [SYD-020]			
Criteria a) Part of a collective group of Lighthouse Towers in Sydney Harbour, prominently located at Bradley's Head. Of historical significance for its association with navigation aids employed during the early 20th century and still in use. (Anglin 1990:3004)			
Criteria b)			
Criteria c) Of architectural and aesthetic significance for its functional maritime design and its contribution to the cultural landscape of Sydney Harbour. (Anglin 1990:304). It is the first example of the use of reinforced concrete in maritime situations and utilises block and precast sections. (SHI)			
Criteria d) The lighthouse is a prominent feature of Sydney Harbour and is evidence of the Harbour's past and present use as a major traffic area. (Travis Partners 1996:11)			
Criteria e)			
Criteria f)			
Criteria g) The Bradleys Head Lighthouse is an integral part of the series of lights that assist Sydney Harbour to function as a world class port. The light tower is representative of the Sydney Harbour Lighthouse Towers. Collectively the lights which are detailed in the Admiralty Sailing Directions (7th Edition 1999) for the information of international shipping are of State significance.			
Integrity / Intactness: Integrity is linked to the 'system' of Lighthouse Towers of which it is an integral part.			
References:	Author:	Title:	Year:
		Sydney Harbour Trust Commissioners Fifth Report	1905
	Bayldon F J	History of the Pilotage Service RAHS Journal Vol 20	1934
	Sydney Harbour Trust	Sydney Harbour Trust Commissioners' Twelfth Report	1912
	The Hydrographer of the Navy	Admiralty Sailing Directions, Australia Pilot Vol 11 - seventh edition	1999
	Woollahra History Library	Woollahra Heritage Briefs #49 Navigating Past Woollahra	
	Monument Australia	H.M.A.S. Sydney I Memorial Mast	2010
	<i>Sydney Morning Herald</i>	New Harbour Lights and Fog Signals	20 April 1905, page 8
	<i>Sydney Morning Herald</i>	Dangers of Harbour Traffic	19 March 1904, page 10
	<i>Evening News</i>	Fog-signalling on Sydney Harbour	8 April 1905, page 5

Studies:	Author:		Title:	Number:	Year:
	Godden Mackay Logan Pty Ltd		Mosman Heritage Study	493	1996
	Susan McIntyre-Tamwoy Heritage Consultants		Sydney Ports Corporation Heritage and Conservation Register	4560001	2004
	Conybeare Morrison Pty Ltd		Cooks River Container Terminal: Heritage Assessment Report	3004	2006
	Travis Partners Pty Ltd Architects, Planners		Mosman Heritage Study	11	1986
	Graham Brookes and Associates Pty Ltd		NPWS of NSW - Lighthouses Draft Conservation Management and Cultural Tourism Plan		1999
	Heritage Unit, Department of Public Works & Services		Marine Ministerial Holding Corporation S170 Register		1999
Parcels:	Parcel Code:	Lot Number:	Section:	Plan Code:	Plan Number:
Latitude: -33.853607			Longitude: 151.24674		
Listings:	Name: Heritage Act – S.170 NSW State agency heritage register		Title: Bradleys Head Lighthouse	Number: 4560001	Date: 2004
	Heritage Act 1977 (NSW): State Heritage Register		Bradleys Head Light Tower	01430	
	Mosman Local Environmental Plan 2012		Bradleys Head Lighthouse	1461	

	National Parks and Wildlife Register			
	Heritage study		11	25/04/1986
	Within a National Trust conservation area	Sydney Harbour Landscape Conservation Area		24/01/1983
Data Entry:	Date First Entered: 19/06/2004	Date Updated: 26/10/2022	Status: Basic	

Image: 1



Caption: Bradleys Head Lighthouse

Copyright: Port Authority of New South Wales

Image By: Susan McIntyre – Tamwoy Heritage Consultants

Image Date:

Image File: 4560001b1.jpg

Image: 2



Caption: Bradleys Head Lighthouse

Copyright: Port Authority of New South Wales

Image By: Nicole Cama - NBRIS

Image Date: 12/10/2022

Image File: 4560001b2.jpg

Image: 3



Caption: Bradleys Head Lighthouse with the HMAS Sydney memorial mast (installed 1934)

Copyright: Port Authority of New South Wales

Image By: Nicole Cama - NBRIS

Image Date: 12/10/2022

Image File: 4560001b3.jpg



Image: 4



Caption: Lighthouse at Bradleys Head, Mosman

Copyright: Out of copyright; State Archives and Records of New South Wales, NRS-9856-2-156-[2]

Image By: Maritime Services Board

Image Date: undated

Image File: 4560001b4.jpg

Image: 5



Caption: Lighthouse at Bradleys Head, Mosman

Copyright: Out of copyright; State Archives and Records of New South Wales, NRS-9856-2-156-[2]

Image By: Maritime Services Board

Image Date: undated

Image File: 4560001b5.jpg

Image: 6



Caption: Bradleys Head Lighthouse

Copyright: Out of copyright; State Archives and Records of New South Wales, NRS-9856-3-18-MSBL532

Image By: Maritime Services Board

Image Date: undated

Image File: 4560001b6.jpg

Image: 7



Caption: Lighthouse at Bradleys Head, Mosman

Copyright: Out of copyright; State Archives and Records of New South Wales, NRS-9856-2-156-[2]

Image By: Maritime Services Board

Image Date: undated

Image File: 4560001b7.jpg

Image: 8



Caption: Spectator boats off Bradleys Head watching HMAS Australia steam up the harbour, Sydney

Copyright: Out of copyright; National Library of Australia, PIC/15611/17604 LOC Cold store PIC/15611

Image By: unknown

Image Date: 4 October 1913

Image File: 4560001b8.jpg

Image: 9



Caption: HMAS Adelaide in Sydney Harbour and Bradleys Head Lighthouse

Copyright: Out of copyright; National Library of Australia, PIC/15611/13811 LOC Cold store PIC/15611

Image By: unknown

Image Date: 1924

Image File: 4560001b9.jpg

Image: 10



Caption: Visit of the American naval fleet being observed by spectators at Bradleys Head

Copyright: Out of copyright; National Library of Australia, PIC/15611/16172 LOC Cold store PIC/15611  
Fairfax archive of glass plate negatives

Image By: unknown

Image Date: 1926

Image File: 4560001b10.jpg

Image: 11



Caption: Bradleys Head and mast of HMAS Sydney

Copyright: Out of copyright; State Archives and Records of New South Wales, NRS-9856-2-31-4352

Image By: Maritime Services Board

Image Date: after 1934

Image File: 4560001b11.jpg



Image: 12



Caption: Maritime Services Board (MSB) harbour survey launch RECORDER at Bradley's Head lighthouse

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Image By: unknown

Image Date: 1980

Image File: 4560001b12.jpg