		ITEM DETAILS	
Name of Item	Electricity Su	bstation No.94	
Former name	#94 'Dover Road' Substation		
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation		
Address	Number 73A	Street Dover Road	Suburb Rose Bay
Property description	Lot 1		DP 121861
Owner	Name Ausgrid		•
Use	Current Electricity Su	bstation	Former Electricity Substation
Statement of significance	The Dover Road substation is one of the earliest electrical substations built in Woollahra. It is a rare and representative example of a purpose designed Inter-War substation building that has features of the Californian Bungalow style evident in the dominating gable roof and timber battened eaves. It was built in 1917 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.94 is of historic, aesthetic, rarity and representative significance at a local level.		
Level of significance Heritage listings	State: NO Local: YES Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430453, Listing Date 1/11/1994. DESCRIPTION		
Designer	Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1917		
Physical Description	The Dover Road substation is a single storey tuck pointed face brick structure with a gabled roof designed in the Inter-War California Bungalow style. The symmetrical facade is dominated by the gable roof line and timber battened detailing applied to the rendered wall area. A central plant access door is flanked by two multi paned windows and surmounted by a rendered lintel cornice. Other elements include rendered brick buttresses to the street façade and a raised ventilation turret and 'chimney'. The Dover Road substation is constructed using load bearing face brick and incorporates a hipped roof and cement rendered lintel cornice. Internal equipment, including transformers, were upgraded Feb 2007.		
Physical condition	Excellent (ext		, were upgraded red 2007.
Modification and Dates	replaced. Doo Council Electr	rs replaced. Lettering above tric Light Substation No.94" h	
Archaeological potential	sensitive land		l. Identified as being on potentially sensitivity mapping. Unexpected Council policies.

Draft Woollahra 2022: Heritage inventory sheet

Based on the NSW Heritage Office State Heritage Inventory sheet

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them.

The arrival of European settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.94

The Dover Road substation is a purposed designed and built structure constructed c1917 on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830. In 1917, the land was owned by the Sydney Municipal Council (Vol 5039 Fol 128), who obtained approval from Council to build a substation the same year (BA156/1917). Additions to the substations were undertaken in 1925 (BA41/1925) and 1952 (BA97/1952). Part of the land was sold to a private owner (possibly a neighbor) around 1926 and part to Woollahra Municipal Council in 1939 (Vol 2270 Fol 160).

The electricity substation No.94 was built by the Municipal Council of Sydney during the early period of expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

This substation building was erected around late 1917. The original plan shows that the front half of the building was allocated for accommodation of substation apparatus, while the rear half seems to have been designed as office and/or storage space.

Alterations to the building were carried out in 1924. As far as I have been able to ascertain, these consisted of converting the rear half of the interior into additional space for substation apparatus.

The portion of the site occupied by the substation building amounted to less than 35%. Once it was decided that the building would be adequate for future requirements, attempts were made to sell the surplus land. The first of these was made in 1925, but it was not until the end of 1938 that the surplus land was finally sold. The substation is still in service, having recently been re-equipped.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Dover Road substation is historically significant as one of the earliest electrical substations in Woollahra, an example of the infrastructure built in 1917 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Dover Road substation is a rare example of a purpose designed Inter-War substation building that has features of the Californian Bungalow style evident in the dominating gable roof and timber battened eaves.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Dover Road substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	The Dover Road substation is a rare example of a substation building influenced by the Inter-War Californian Bungalow style.
Representativeness SHR criteria (g)	The Dover Road substation is a representative example of an electrical substation building and is typical in form, scale and technical arrangement of distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

	RECOMMENDATIONS
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014. Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

	INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		

		INFORMATION SOURCES		
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

IMAGES





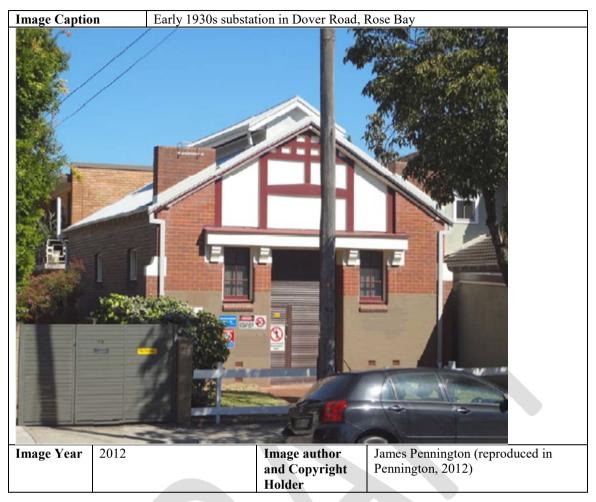




Image Caption Current view of the		subject site		
Image Year	24 Janua	ry 2022	Image author	Flavia Scardamaglia - Woollahra
			and Copyright	Municipal Council
			Holder	-

AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022



		ITEM I	DETAIL	S	
Name of Item	Electricity S	ubstation No.			
Former name	#99 "Wyuna Road"				
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation				
Address	Number	Street Wyuna Roa	ıd		Suburb Point Piper
Property description	Lot Within the r Road and W	oad reserve be		Vunulla	DP
Owner	Name Ausgrid	•			Address
Use	Current Electricity S	ubstation			Former Electricity Substation
Statement of significance	Electricity Substation No.99 (Wyuna Road) is an unusual, rare, and unusually finely detailed example of a Modernist substation building with a curved front constructed in rough dressed sandstone block work. The building was built by the Sydney County Council during the later phases of suburban expansion of the electricity network. The fine detailing is indicative of the Council's policy of placing quality buildings in what it considered to be the "high class" suburbs of Sydney. It contributes to the local character of Point Piper. Electrical Substation No.99 is of historical, aesthetic, rarity and representative significance at a local level.				
Level of significance	State: NO	1	Local:	YES	
Heritage listings		Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430547, Listing Dated 1 May 2007.			
	DESCRIPTION				
Designer	Sydney County Council				
Builder	Sydney Coun	nty Council			
Construction years	1937				
Physical Description	A curved sandstone-clad single storey building with a flat roof concrete slab roof integrated with the natural rock outcrops and a pedestrian access stairway between Wyuna and Wunulla Road. The substation features decorative vents in the sandstone on the Wunulla Road frontage and cast concrete vents to the northern elevation. Accessed via a central roller door and a personnel door is located in the right front "tower" of the façade. A set of stairs leading up the embankment is adjacent and a viewing platform with bench has been established on the substation roof. There is a metal handrail located around the edge of the flat roof. The building is located in the public road reserve.				
Physical condition	Good (extern	ally). Some cra	cking to	surroundi	ng retaining walls evident (2022)
Modification and Dates					eel handrail and bench added. crete lintel. New personnel door.

Draft Woollahra 2022: Heritage inventory sheet

Based on the NSW Heritage Office State Heritage Inventory sheet

Archaeological	No known historic archaeological potential. Identified as being on potentially
potential	sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected
	findings protocol apply in addition to other Council policies.

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.99

The Wyuna Road substation is a purpose designed and built structure constructed in 1937 (BA267/1936) on part of 190 acres originally granted to John Piper on 10 February 1820. The building for this substation was completed by Sydney County Council in May 1937 and the installation was put into service in July of that year.

Built by the newly-established Sydney County Council during the later phases of suburban expansion of the electricity network, the fine detailing is indicative of the Council's policy of placing quality buildings in what it considered to be the "high class" suburbs of Sydney.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

The building for this substation was completed in May 1937 and the installation was put into service in July of that year. By 2008 The roof has now been arranged as a viewing platform.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Wyuna Road substation is of historical significance as a substations building built by the Sydney County Council during the later phases of suburban expansion of the electricity network. The fine detailing is indicative of Council's policy of placing quality buildings in what it considered to be the "high class" suburbs of Sydney.

Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Wyuna Road substation is of aesthetic significance as a small but an unusually finely detailed building with a curved front and clad in sandstone. It contributes to the local character of Point Piper.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Wyuna Road substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	The Wyuna Road substation is an unusual and locally rare example of a Modernist substation constructed in rough dressed sandstone blockwork using a curved design.
Representativeness SHR criteria (g)	The Wyuna Road substation is typical in scale and technical arrangement to distribution substations constructed throughout Sydney. It features design elements and materials representative of Modernist buildings including curved elements in rough dressed sandstone blockwork.
Integrity	In good structural condition externally.

RECOMMENDATIONS					
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014. Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the				
	original building. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, are to be considered as part of a future project if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.				
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.				

INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository

	1		T	
Written	James Pennington	Electricity Substations of	2012	
		the Sydney Municipal		
		Council and other local		
		authorities		
Written	James Pennington	The Sydney Electricity	2011	
		Supply System &		
		Switchgear – The first 50		
		years		
Written	Wilkenfeld and	Electrifying Sydney	2004	
	Spearitt			
Written	MacLaren North	EnergyAustralia Heritage	2007	
		Register Review		
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a
				u



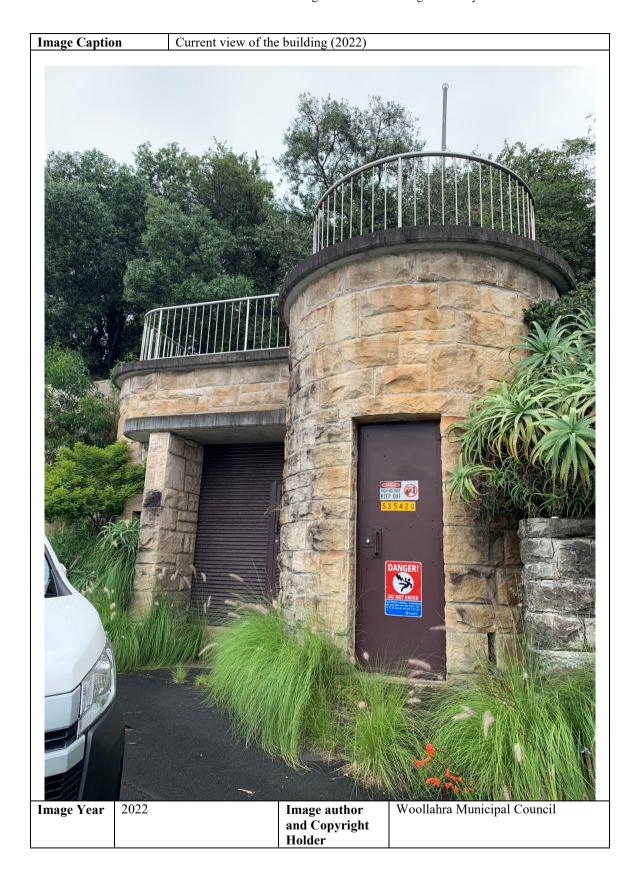
IMAGES



Image Caption Early view of the building (undated) Image Year Undated Ausgrid (reproduced in Pennington, Image author and Copyright 2012)

Holder





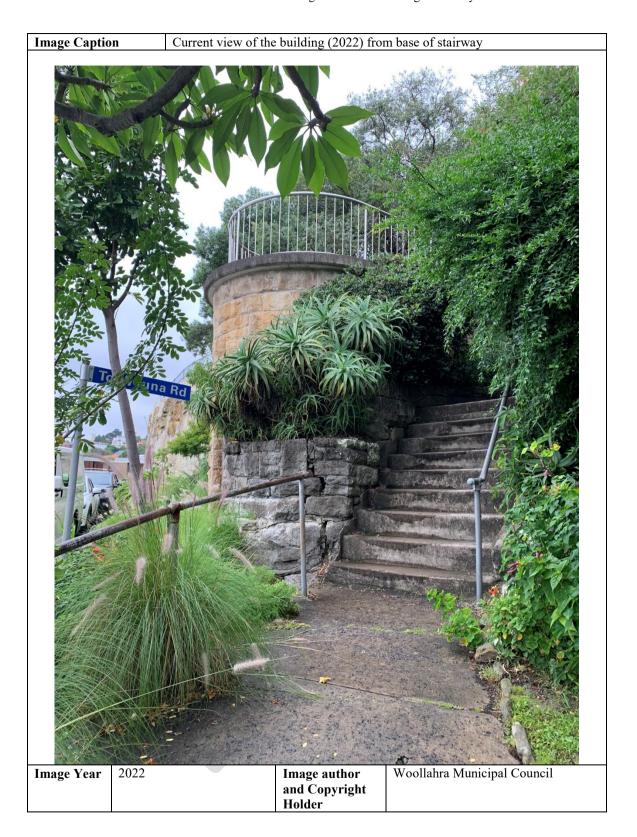




Image Caption	Cast concrete vents detail
Image Caption	Cast concrete vents detail
Image Year 2022	Image author and Copyright Holder Woollahra Municipal Council

AUTHOR OF THIS REPORT		
AUTHOR OF THIS REPORT		
Flavia Scardamaglia - Woollahra Municipal Council	2022	

		ITEM DETAILS		
Name of Item	Electricity S	ubstation No.135		
Former name	#135 "William New" Substation ; 'S.M.C. Electricity Sub-station No. 135'			
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation			
Address	Number 65	Street William Street	Suburb Double Bay	
Property description	Lot DP 172768			
Owner	Name Ausgrid			
Use	Current Electricity S	ubstation	Former Electricity Substation	
Statement of significance	Electricity Substation No.135 (William New) is a purpose designed and built Interwar structure with Art Deco detail that forms part of and compliments the Interwar streetscape of Double Bay. It was built by the Municipal Council of Sydney in 1922 during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.135 holds historic, aesthetic and representative significance at a local level.			
Level of significance	State: NO Local: YES			
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430467, Listing Date 9/10/2006.			
Designer	DESCRIPTION Sydney Municipal Council			
Builder	Sydney Municipal Council			
Construction years	1922			
Physical Description Physical condition	The "William New" substation is a single storey tuck pointed face brick structure designed in the Interwar period. The façade is symmetrical with a central entrance flanked by two window openings and surmounted by a large rendered identity plaque. It features some Art Deco detailing evidenced by the use of a stepped raised parapet with a contrasting painted horizontal render band below. The William New substation is constructed using load bearing face brick with sections of the façade cement rendered. The building has multi paneled windows and a steel roller shutter door. Good (externally)			
	,			
Modification and Dates	In 1966 a new Roller door r overpainted.	w exit door opened to the eplaced. Recent brick wa	lowered due to changes to the street level. rear yard. Gutters and downpipes replaced. Il to transformer yard. Brickwork	
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply. HISTORY			
Early historical note	s			

Draft Woollahra 2022: Heritage inventory sheet

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.135

The William New substation is a purpose designed built structure dating from 1922 on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830. In 1922, the land was owned by the Sydney Municipal Council (Vol 3393 Fol 230), who obtained approval from Woollahra Council to build a substation during the same year (BA46/1923).

The electricity substation No.135 was built by the Municipal Council of Sydney during the early period of expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

Land for this substation was obtained in late 1922, adjacent to an existing rainwater culvert. The building was erected during the first few months of 1923 and the completed installation was put into service around August that year.

In 1926, the level of William St was altered, such that the floor of the substation was then below the level of the footpath. Modifications to the roller shutter opening were necessary to prevent rainwater from entering the switch room. These modifications involved building up the base of the opening and providing a set of concrete steps down to the switch room floor. The roller shutter itself was shortened accordingly. Since Woollahra Municipal Council was responsible for the alteration in street level, that authority agreed to accept a debit for the cost of the modifications.

In order to improve the appearance of the building, low-voltage conductors leaving the substation via the leading-in block in the façade were replaced by underground cables in 1928. In 1966, an escape door was provided in the rear wall of the switch room.

With the impending construction of the Double Bay zone substation, the name of Substation No.135 was changed to William New in 1969.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and cities	Utilities	Distribution of electricity

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	Electricity substation no.135 is historically significant as an example of the infrastructure built by the Municipal Council of Sydney in 1922 during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The "William New" substation is of aesthetic significance as a purpose designed and built Interwar structure that forms part of and compliments the Interwar streetscape of Double Bay.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The "William New" substation may have technical/research significance, however, further investigation, including examination of the interiors, fittings, fixture and moveable content is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The "William New" substation is a representative example of its type, typical in form, scale and technical arrangement of distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

	RECOMMENDATIONS				
Recommendations	It is recommended that the building, be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, are to be considered as part of a future project if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.				
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.				
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.				

INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository

Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a



IMAGES



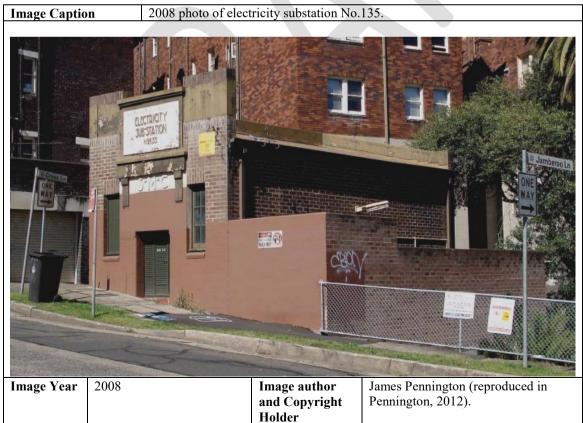
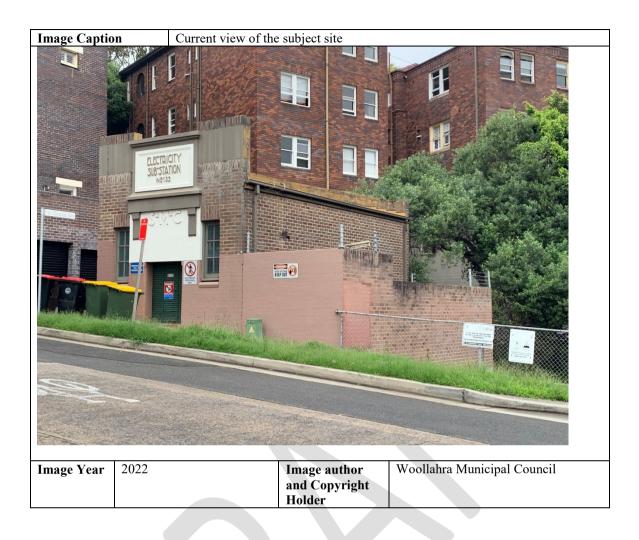


Image Year 2008 Image author and Copyright Holder Pennington, 2012).	Image Caption	2008 photo of the i	nternal steps showing	g evidence of the original street level
Image Year 2008 Image author and Copyright James Pennington (reproduced in Pennington, 2012).		which was modified	d in 1926.	
and Copyright Pennington, 2012).				
	Image Year 20	008	and Copyright	James Pennington (reproduced in Pennington, 2012).







AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

		ITEM DETAILS	
Name of Item	Electricity Substation No.160		
Former name	#160 "James Street"		
Item type	Built / Utilit	ies – Electricity / Electricity T	ransformer-Substation
Address	Number	Street James Street	Suburb Woollahra
Property description	Lot 1		DP 587872
Owner	Name Ausgrid		
Use	Current Electricity S	Substation	Former Electricity Substation
Statement of significance	Electricity Substation No.160 (James Street) is a grand and representative example of a well detailed Inter-War Art Nouveau substation structure. It was built in 1925-6 by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. Electrical Substation No.160 holds historic, aesthetic, rarity and representative significance at a local level.		
Level of significance	State: NO Local: YES		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430456, Listing Date 1/11/1994.		
Designer	DESCRIPTION Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1925-6		
Physical Description	The James Street substation is a grandly decorated two storey structure with Interwar Art Nouveau styling evidenced by an elaborate arrangement of cornice, pediment and window positioned centrally on the upper façade. A central plant access door is flanked on both sides by multi pane windows and surmounted by the pediment. The lower storey is tuck pointed face brickwork and the upper storey and pediment are finished in smooth render.		
	The James Street substation is constructed using load bearing face brick. The upper storey is cement rendered, windows are multi paned with vision obscure glass and the main plant access door is a steel roller shutter.		
Physical condition	Good (extern	• •	
Modification and Dates	Roof replaced. Gutters and downpipes replaced. Arch bars replaced. Doors replaced. Original copper panels were replaced following theft. Render signage missing. Equipment including transformers upgraded in 2007. Lettering 'SMC Electricity Substation No.160" above the main door has been removed.		
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply.		

Draft Woollahra 2022: Heritage inventory sheet

Based on the NSW Heritage Office State Heritage Inventory sheet

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.160

The James Street substation is a purpose designed structure constructed in 1925 soon after the purchase of the land by Sydney Municipal Council (Vol 3697 Fol 52). It is located on part of 190 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830. Further additions were undertaken in 1949 by the Sydney County Council (BA57/1949).

It was built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

This substation was intended to replace the existing James St pole transformer. In mid 1924, when construction of the building was about to begin, it became apparent that the site lay directly on the proposed route of the Eastern Suburbs Railway. After correspondence between the SMC and the NSWGR&T, the latter authority offered another site, on the opposite side of James St, in exchange for the SMC's land.

The original design of the substation building was easily adapted to the new site and construction was eventually completed in October 1925. The installation was put into service in January 1926. The nearby pole transformer was taken out of service as soon as the substation had been connected to the network.

During the Second World War, additional apparatus was installed to provide an emergency interconnection facility between the Paddington 5.5kV zone network and the Waverley 11kV zone network. This facility was created to enable supply to be maintained using old previously out-of-service cables, in the event of damage to the network as a result of enemy action. A 5.5/11kV transformer was installed on an outdoor plinth behind the substation building. This interconnector transformer remained in use until the Paddington zone network was converted to 11kV during the 1960s. It was removed sometime during 1969. The portion of the site previously occupied by this transformer was sold to one of the adjoining property owners in 1977.

HISTORICAL THEMES		
Australian Theme	NSW Theme	Local Theme

Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	Electricity Substation No.160 (James Street) is of historic significance as a substation building built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The James Street substation is of aesthetic significance as a grand and representative example of a well detailed Interwar Art Nouveau substation structure.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The James Street substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	The James Street substation is a locally rare example of an Interwar Art Nouveau substation building.
Representativeness SHR criteria (g)	The James Street substation is a representative example of a substation building built in the Art nouveau style and is typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally. Substation identification lettering has been removed from above the entry.

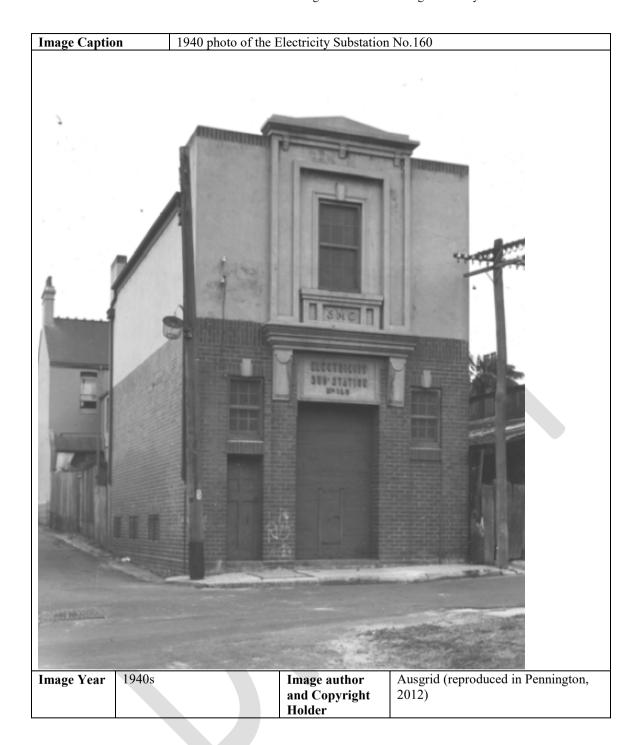
	RECOMMENDATIONS
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

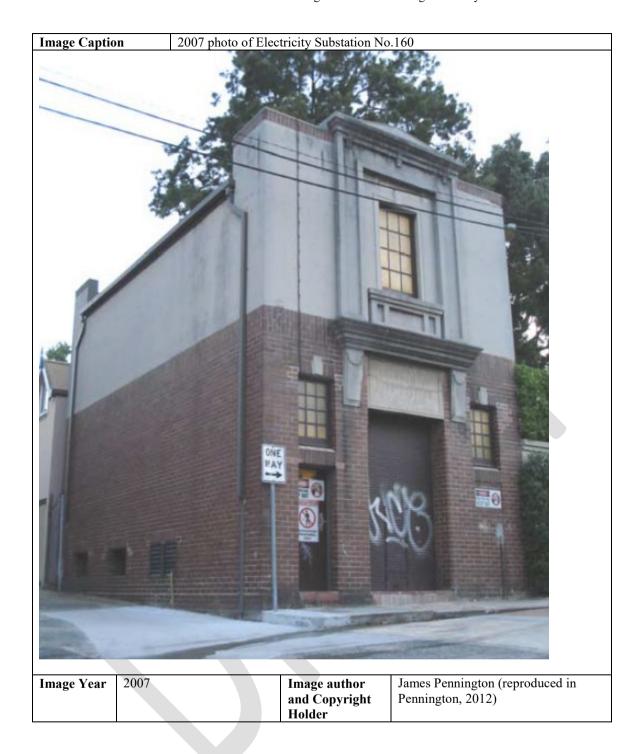
INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository

Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

IMAGES

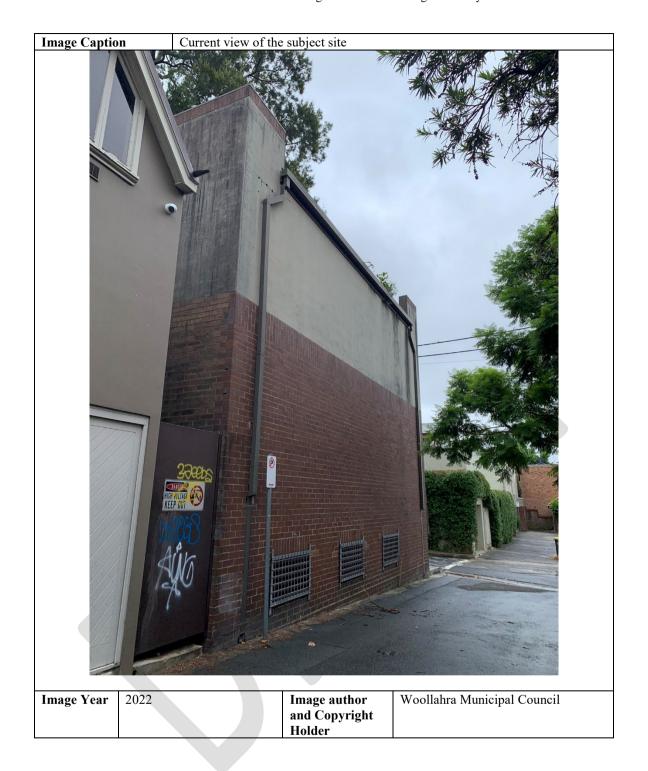


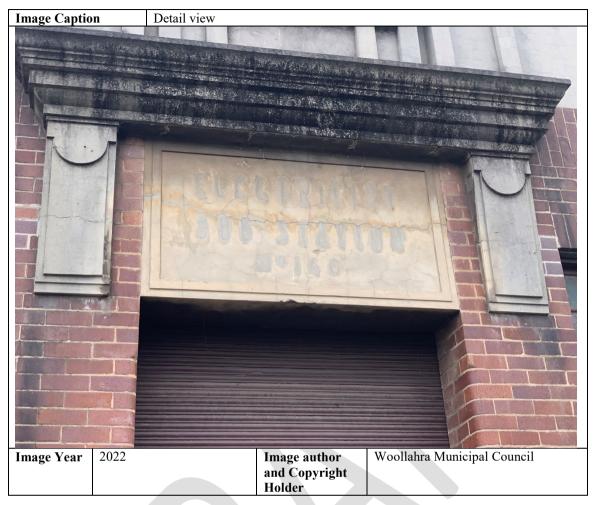












	AUTHOR OF THIS REPORT	
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		ITEM DETAILS	
Name of Item	Electricity Substation No.173		
Former name	#173 'Wolseley Road' Substation		
Item type	Built / Utiliti	es – Electricity / Electricity	Transformer-Substation
Address	Number 582	Street New South Head Road	Suburb Point Piper
Property description	Lot 1	1	DP 1103924
Owner	Name Ausgrid		1100/21
Use	Current Electricity S	ubstation	Former Electricity Substation
Statement of significance	Electricity Substation No.173 (Wolseley Road) is an interesting and well detailed representative example of the purpose designed substation infrastructure built by Sydney Municipal Council in the Interwar Stripped Classical style during the period of rapid expansion of the electricity network to the suburbs. Built by resumption, it was approved in 1926 and completed in 1927 following a long negotiation with private owners and Woollahra Municipal Council over the appearance of the building and contribution to the local character and is externally intact.		
	Electrical Substation No.173 holds historic, aesthetic and representative significance at a local level.		
Level of significance	State: NO Local: YES		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430457, Listing Date 1/11/1994.		
Designer	DESCRIPTION Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1926		
Physical Description	Electricity Substation No.173 (Wolseley Road) is a single storey tuck-pointed face brick structure with a symmetrical façade with Interwar Stripped Classical detailing, curving to follow the street corner location. The Stripped Classical detailing is also evident in the balanced grouping of two main entrance doors which are both flanked on each side with elongated windows. The multi panelled windows and doors appear to be original features of the building. Decorative elements include the use of header bricks and cut bricks around the door and window architraves, unusual parapet brickwork, diagonal door and window mullions, and security grilles. The Wolseley Road substation is constructed using load bearing face brick and features a decorative brick parapet, and unusual panelled steel doors. The roof of the substation is accessed via a gate from Wolseley Road. A vent shaft tower protrudes through the flat roof.		
Physical condition	Good.		

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Based on the NSW Heritage Office State Heritage Inventory sheet

Modification and Dates	Addition of steel security grills to windows. Gutters and downpipes replaced.
Archaeological	No known historic archaeological potential. Identified as being on potentially
potential	sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected
	findings protocol apply in addition to other Council policies.

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.173

The Wolseley Road substation is a purposed designed and built structure constructed c1926 (BA305/1926) on part of 1130 acres originally granted to John Piper on 12 February 1820. In 1941, the land entered into possession of the Sydney County Council, however the substation had already been built (Vol 2687 Fol 5). It was built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

Taken from James Pennington, 2012

The need to acquire a site for a substation in this area was identified towards the end of 1924. The existing pole transformer in Wunulla Rd near New South Head Rd (erected in 1914) was nearly fully loaded and new arrangements were required to reinforce electricity supplies to the whole of Point Piper, as well as parts of Bellevue Hill and Rose Bay.

After about three months, six prospective sites had been investigated. Of these six sites, two were judged unsuitable. In the case of each of the remaining four, the property owner was unwilling to sell.

As a result of the difficulty experienced in purchasing a site, the SMC approved of acquiring a site by resumption. However, the whole of the property on which the preferred substation site was located was advertised for sale. The owner soon accepted the offer of George Johnson, a leather merchant and importer, to purchase the property. Johnson contacted the SMC and offered to sell part of the site, on the corner of New South Head Rd and Wolseley Rd, for erection of the substation. As a result, the proposed resumption was cancelled. However, it seems that when the property owner discovered this, the asking price was immediately increased by £500! As Johnson had obtained only a verbal agreement from the owner, and was unwilling to pay the extra money, he withdrew from the purchase.

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Based on the NSW Heritage Office State Heritage Inventory sheet

In view of these events, approval was again obtained to acquire the site by resumption. When the application to resume the site was submitted, an objection was received from Woollahra Municipal Council, on the grounds that the presence of a substation building would be detrimental to the neighbourhood. In reply, the SMC contended that the proposed substation building would be designed by a competent architect, resulting in a pleasing design which would harmonise with surrounding buildings. The Woollahra Council eventually agreed to withdraw its objection, provided that a low-level building was erected, set back from the corner, with additional ornamentation provided in the form of a grass plot, garden beds or similar. It was further stipulated that no sign, other than the SMC's monogram, should appear on the building.

ED Deputy General Manager Silas Maling was of the opinion that Woollahra Council had exceeded its authority in imposing conditions on the withdrawal of its objection. He contended that the ED had never refused to erect an ornamental building and that the resumption should proceed without further ado. Whatever arrangement was made regarding Woollahra Council's objection, notice of the resumption was eventually published towards the end of November 1925.

Consideration of the final design of the substation building was postponed until the resumption had been finalised. In February 1926, the SMC's City Building Constructor estimated that it would cost about £4000 to erect a building based on the City Architect's preliminary design. Such a cost was considered excessive by ED officers. They stated that a building satisfying the requirements of Woollahra Council could be erected for less than half of that amount. A subsequent design, estimated to cost about £1900, was approved in June of that year. After slight modifications to the design of the vent shaft tower, the design also met with the approval of Woollahra Council.

Construction of the building began in September 1926 and was practically completed by the end of that year. The equipped substation was put into service in April 1927.

Other than the vent shaft tower, the substation's flat roof formerly accommodated a garden. The roof area is vacant nowadays and the substation building no longer appears as prominent as it once did, due to the growth of trees along the side of the road.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	Electricity Substation No. 173 (Wolseley Road) has historic significance as an example of the substation infrastructure built by the Sydney Municipal Council during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Wolseley Road substation has aesthetic significance as an interesting and well-detailed, intact example of a substation building that was purpose designed and built in the Interwar Stripped Classical style.
Social significance SHR criteria (d)	

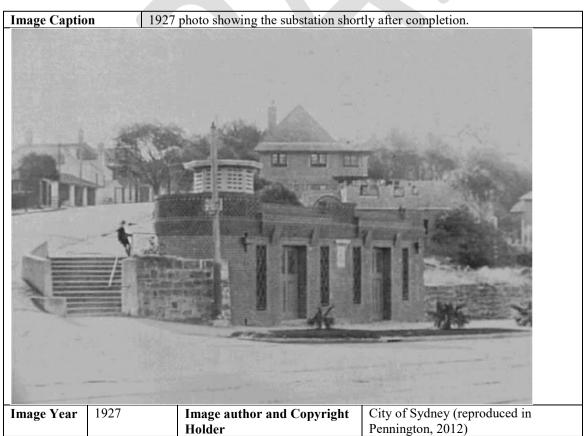
Technical/ Research significance SHR criteria (e)	The Wolseley Road substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Wolseley Road substation is a representative example of a substation building in the Interwar stripped classical style and is typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

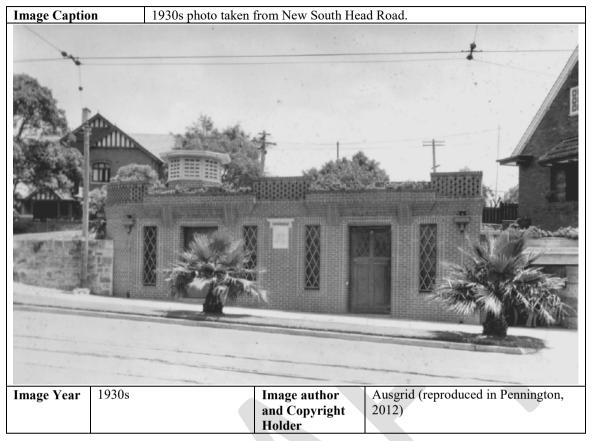
recommended that the building be listed as a heritage item in the Woollahra al Environmental Plan 2014. It is recommended that the interiors of the tation, including any fittings, fixtures, or moveable content therein, be
ssed against the significance criteria as part of a future project for possible re inclusion in the listing if and when internal access to the electricity tation is granted, or information regarding the interiors is able to be provided ouncil for assessment.
ginal details should be maintained including doors, windows and original age. New materials should be sympathetic to the nature and character of the inal building. The event of major proposed changes, prepare a Heritage Impact Statement and certake an archival recording. Wherever possible, changes should be restricted
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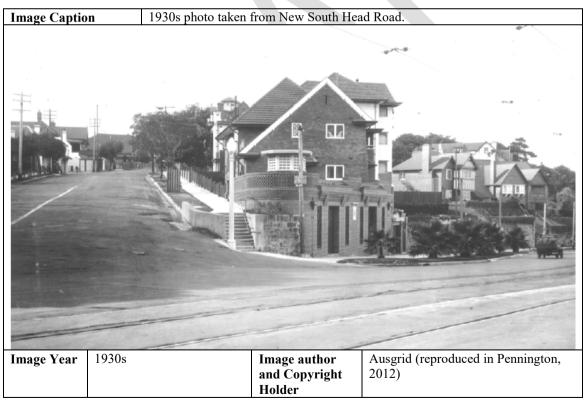
INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a u

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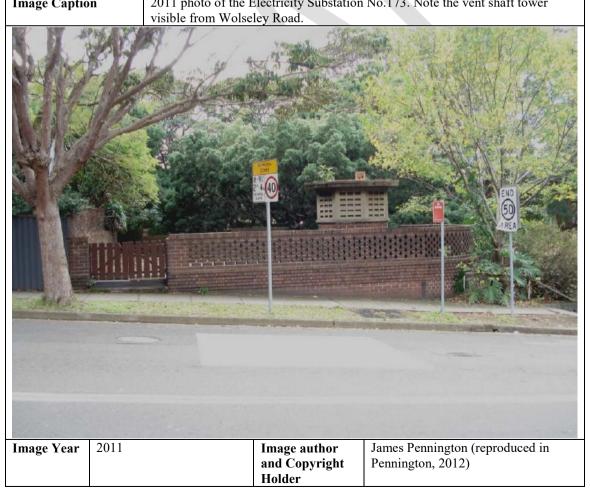




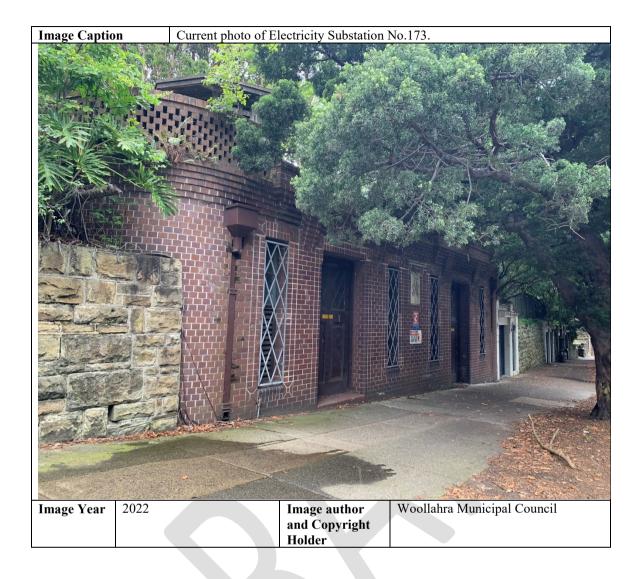












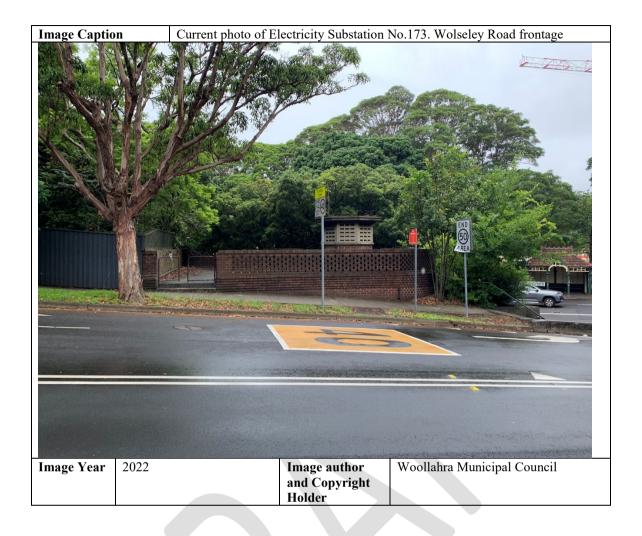






Image Year 2022 Image author Woollahra Municipal Council	Image Caption	Current photo of E	lectricity Substation 1	No.173. detailing to New South Head
Image Year 2022 Image author Woollahra Municipal Council	Image Caption	Road	DANGER! DANGER! DANGER! HIGH VOLTAGE	No.173. detailing to New South Head
and Copyright			Image author and Copyright	

AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

		ITEM DETAILS	
Name of Item	Electricity Substation No.185, including brick fence		
Former name	#185 'Birriga Road' Substation, 'Electricity Sub-station No. 185'		
Item type	Built / Utiliti	es – Electricity / Electricity T	ransformer-Substation
Address	Number 116	Street Birriga Road	Suburb Bellevue Hill
Property description	Lot Y	J 80 -000	DP 415489
Owner	Name Ausgrid		
Use	Current Electricity So	ubstation	Former Electricity Substation
Statement of significance	Electricity Substation No.185 is an externally intact and well maintained Inter-War Georgian Revival style substation building built to mimic a residence. The style is evidenced by a classically styled entrance portico, entablature over main door and multi-paned windows It was built in 1926 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.185 is of historic, aesthetic and representative significance at a local level.		
Level of significance	State: NO Local: YES		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430455, Listing Date 1/11/1994.		
		DESCRIPTION	
Designer	DESCRIPTION Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1926		
Physical Description	The Birriga Road substation is a single storey cement rendered brick structure with a domestic appearance designed in the Inter-War Georgian Revival style evidenced by a classically styled entrance portico, entablature over main door and multi-paned windows located under a projecting hipped roof. Other stylistic elements include brick fence, multi-paneled windows and classical order in the front portico. The Birriga Road substation is constructed using cement rendered load bearing brickwork. The roof is ceramic tiled and doors and windows are timber.		
Physical condition	Good (externally). Graffiti to be removed. Some cleaning of the masonry is necessary. Minor loss to render signage.		
Modification and Dates	Roof tiles replaced. Gutters and downpipes replaced.		
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies. HISTORY		

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting

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Based on the NSW Heritage Office State Heritage Inventory sheet

the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.185

The Birriga Road substation is a purposed designed and built structure constructed c1926 on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830 (Vol 8002 Fol 115). In 1926, the land was owned by the Sydney Municipal Council (Vol 3851 Fol 115), who obtained approval from Council to build a substation the same year (BA441/1926).

The electricity substation No.185 was built by the Municipal Council of Sydney during the early period of expansion of the electricity network to the suburbs. Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

The rear portion of a site on the corner of O'Sullivan and Birriga Roads was purchased for this substation at the beginning of 1926.

As the site was located in a residential area, special attention was paid to the design of the building, such that it would harmonise with adjoining houses and those in the immediate surroundings.

It seems that much time was lost in the preparation of the plan and specification, as building work did not commence until November or December of 1926. Progress of construction was slow and the building was not completed until August 1927. The installation was connected to the network in October or November of that year.

Midway through 1928, the remainder of the land from which the substation site had been taken was built on by its owner. A complex consisting of a motor garage and shop, with residential apartments above, was constructed.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	Substation No.185 (Birriga Road) is historically significant as an example of the substation infrastructure built in 1926 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	

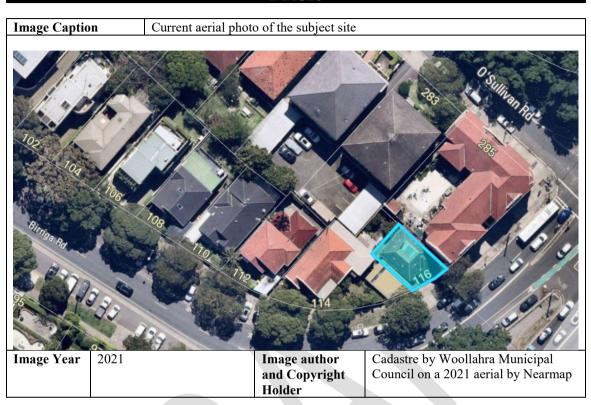
Aesthetic significance SHR criteria (c)	The Birriga Road substation is of aesthetic significance as an externally intact and well maintained Inter-War Georgian Revival styled substation building built to mimic a residence. Style is evidenced by a classically styled entrance portico, entablature over main door and multi-paned windows.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Birriga Road substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Birriga Road substation is a representative example of the electricity substations built in the Inter-war Georgian revival style. It is typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

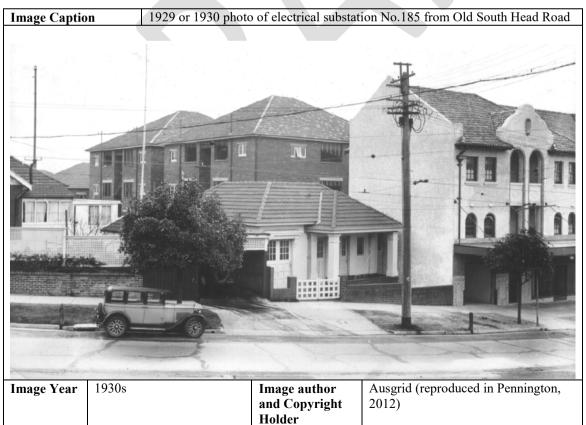
	RECOMMENDATIONS
Recommendations	It is recommended that the building, including its interiors, be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

INFORMATION SOURCES					
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011		
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004		
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007		

Website	Heritage NSW	State Heritage Inventory	hms.heritage.nsw.gov.a
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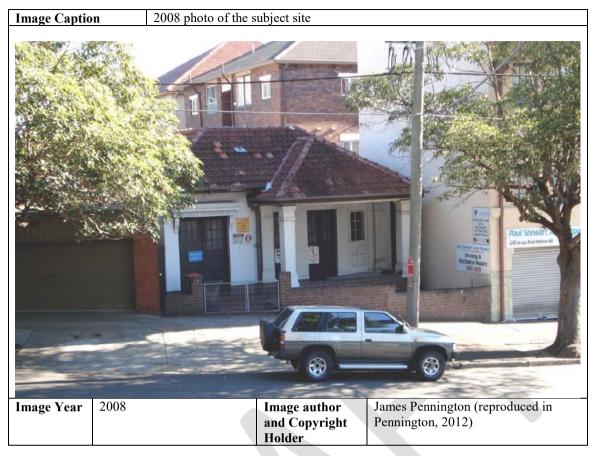




Image Caption	Detail of the origin substation.	al front door with en	tablature above and name of the
HIGH VOLTAGE KEEP OUT	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTRICITY SUB-STATION	ENTRACE OF THE PROPERTY OF THE
Image Year 24 Janua	ary 2022	Image author	Flavia Scardamaglia - Woollahra
		and Copyright Holder	Municipal Council

AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

		ITEM DETAILS		
Name of Item	Flactricity S	ITEM DETAILS ubstation No.189		
Name of Item	Electricity Substation No.107			
Former name	#189 'Hoddle Street', 'Sydney County Council Electric Substation No. 189'			
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation			
Address	Number 33	Street Hoddle Street	Suburb Paddington	
Property	Lot	Houdie Street	DP	
description	1		187153	
Owner	Name			
	Ausgrid			
Use	Current		Former	
	Electricity S	ubstation	Electricity Substation	
Statement of significance	Electricity Substation No.189 is a rare and representative example of a substation building in the Inter-War Functionalist style. The Hoddle Street substation is purpose designed and built structure that features an unusual curved face brick wall. The substation represents a transitional style between the more decorative Municipal Council of Sydney substations and the simpler, more functionally modern Sydney County Council Substations. It was built at the end of the phase of rapid expansion of the electricity network to the suburbs.			
	Electrical Substation No.189 holds historical, aesthetic and representative significance at a local level.			
Level of significance	State: NO Local: YES			
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430464, Listing Date 1/11/1994.			
		DESCRIPTION		
Designer	Sydney Muni	Sydney Municipal Council		
Builder	Sydney Municipal Council			
Construction years	1936			
Physical Description	The Hoddle Street substation is a small face brick structure designed in the Inter-War Functionalist style. The building is unusual in that is abuts a terrace on one side face while the other features a curved wall constructed out of face brickwork. A small projection to the front of the building contains the personnel entrance door. The Hoddle Street substation is located within the Paddington Urban Conservation Area as listed by the National Trust. The Hoddle Street substation is constructed using load bearing face bricks. The entrances are a steel roller shutter and a timber door. A metal identity plaque reads "SYDNEY COUNTY COUNCIL ELECTRIC SUBSTATION No. 189".			
Physical condition	Good (externa	ally)		
Modification and Dates	Downpipes discharge to ground surface. Replaced asphalt roof. Gutters and downpipes replaced. New arch bars. Replaced roller door. Graffiti. The side elevation has been unsympathetically painted black with espalier wire attached.			
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply.			

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Based on the NSW Heritage Office State Heritage Inventory sheet

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.189

The Hoddle Street substation is a purposed designed and built structure constructed 1936 on part of 1130 acres originally granted to Robert Hoddle on 14 August 1833. In 1937, the land was purchased by the Sydney County Council (Vol 4757 Fol 177).

The electricity substation No.189 was built at the time of the transition from the Municipal Council of Sydney to the Sydney County Council in 1935. Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville), operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

HISTORICAL THEMES				
Australian Theme	NSW Theme	Local Theme		
Building settlements, towns and cities	Utilities	Distribution of electricity		

HERITAGE SIGNIFICANCE ASSESSMENT			
Historical significance SHR criteria (a)	The Hoddle Street substation is historically significant as an example of a transitional style of infrastructure between the more decorative Municipal Council of Sydney substations and the simpler, more functionally modern Sydney County Council Substations. It was built at the end of the phase of rapid expansion of the electricity network to the suburbs.		
Historical association significance SHR criteria (b)			
Aesthetic significance SHR criteria (c)	The Hoddle Street substation is of aesthetic significance as an unusual Interwar Functionalist purpose designed and built substation structure that features a curved face brick wall.		

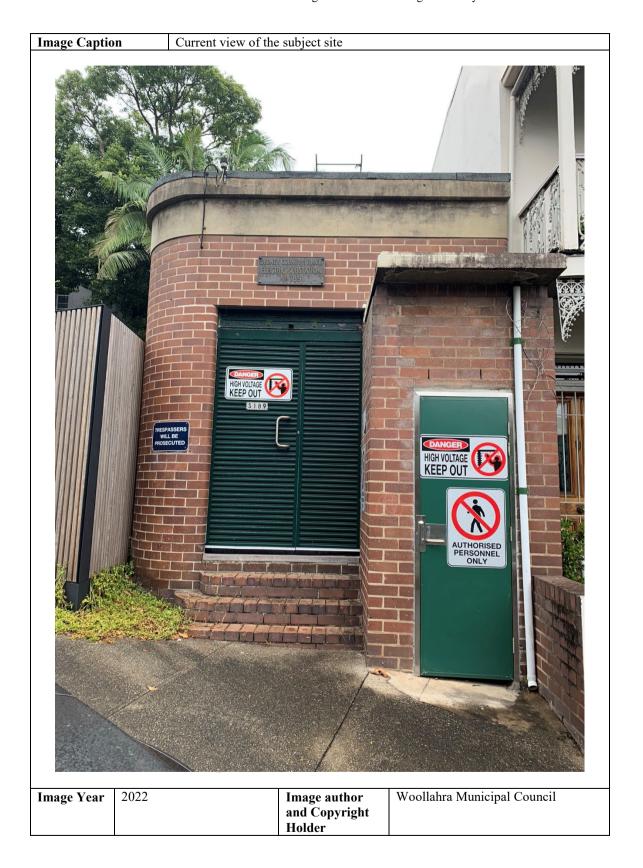
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Hoddle Street substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	The Hoddle Street substation features an unusual curved design reflecting Inter- War Functionalist style and is locally rare.
Representativeness SHR criteria (g)	The Hoddle Street substation is a representative example of purposed built substation structure built by the Sydney Municipal Council in the Inter-War Functionalist style
Integrity	In good structural condition externally.

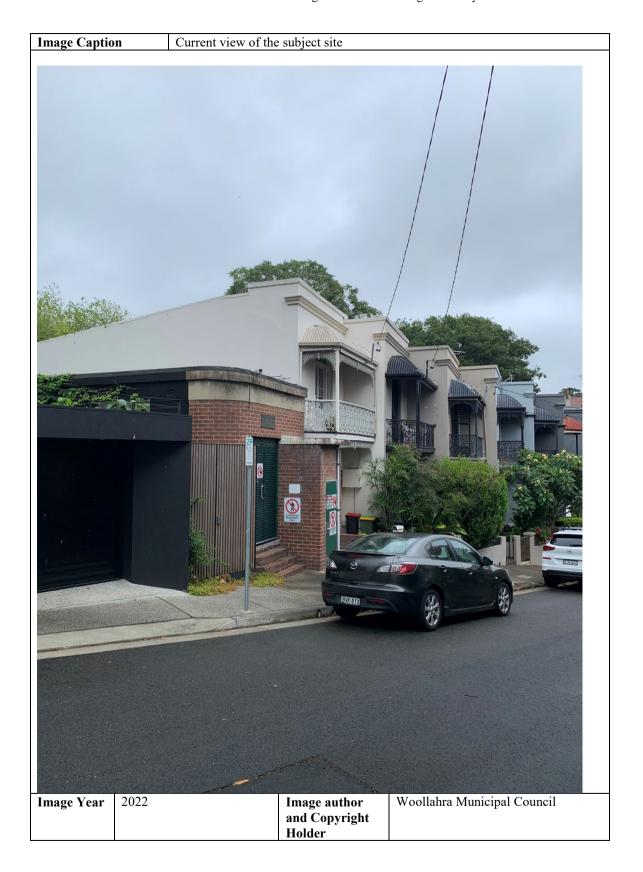
	RECOMMENDATIONS				
Recommendations	It is recommended that the building, including its interiors, be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.				
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.				
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.				

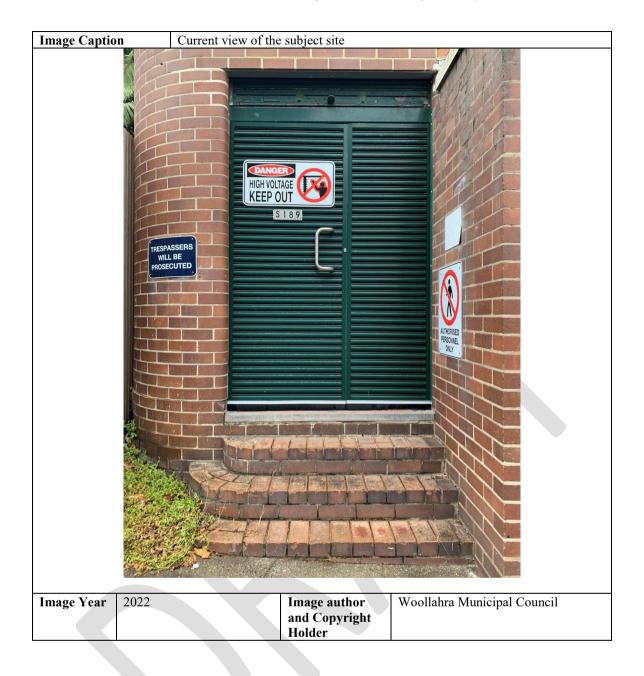
INFORMATION SOURCES					
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011		
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004		
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007		
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a	

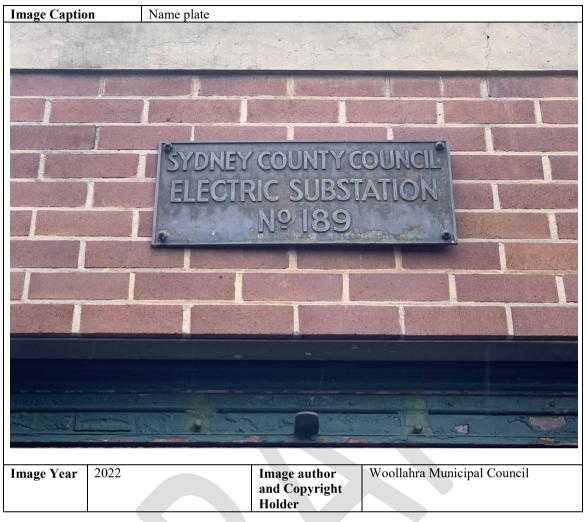
IMAGES











AUTHOR OF THIS REPORT
ACTION OF THIS REPORT
Flavia Scardamaglia - Woollahra Municipal Council 2022



		ITEM DETAII	LS	
Name of Item	Electricity Substation No.193			
Former name	#193 'Olphert Avenue' Substation			
Item type	Built / Utilities - Electricity / Electricity Transformer-Substation			
Address	Number	Street Olphert Avenue		uburb aucluse
Property description	Lot DP 666593			
Owner	Name Ausgrid			
Use	Current Electricity Su	bstation		ormer lectricity Substation
Statement of significance	Electricity Substation No.193 is a representative example of an Inter-War Free Classical designed substation featuring a dominating stepped parapet and rendered mouldings around the main entrance door. The Olphert Avenue substation was built in 1926-7 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.193 holds historic, aesthetic and representative significance at a local level.			
Level of significance Heritage listings Heritage Act - s.170 NSW State agency heritage register, Ausgri		e register, Ausgrid Heritage		
	Register, No. 3430461, Listing Date 1/11/1994.			
Designer	DESCRIPTION Sydney Municipal Council			
Builder	Sydney Municipal Council			
Construction years	1926-7			
Physical Description	The Olphert Avenue substation is a simple single storey monumental rendered brick structure with a symmetrical façade designed in the Inter-War Free Classical style. The building is dominated by a stepped parapet which originally carried the identity of the substation. It is set back from the street with a large central plant access door which features decorative rendered moulded architrave framing, flanked on both sides by personnel doors. The Olphert Avenue substation is constructed using cement rendered load bearing brickwork. The plant access doors are double hung steel clad.			
Physical condition	Good (externally)			
Modification and Dates	Identification removed from entablature, louvre and glazed doors replaced. Brick fence and gates replaced. Gutters and downpipes replaced.			
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies. HISTORY			
Early historical note	s			

Draft Woollahra 2022: Heritage inventory sheet

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.193

The Olphert Avenue substation is a purposed designed and built structure constructed c1927 (BA51/1927) on part of 370 acres originally granted to William Charles Wentworth on 5 July 1838.

The Olphert Avenue substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1927 (Vol 3973 Fol 117).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

Research into the acquisition of a suitable site for this substation began towards the end of 1925. Ten prospective sites in the vicinity of the intersection of Village High Rd, Kings Rd and Olphert Ave were investigated. After prolonged negotiations with the owner of the site judged most suitable, and after obtaining approval-in-principle from Vaucluse Municipal Council for subdivision, a price was agreed for the purchase of the rear portion of the site in question. However, in order to nullify a potentially restrictive covenant on the land, it was decided instead to acquire the portion of land by resumption.

Vaucluse Council objected to the resumption, but stated that its objection would be withdrawn if the SMC would agree to certain restrictions in height of the substation building. These restrictions were duly agreed to and the site was eventually acquired in mid December 1926.

Further delays occurred in preparation of the plan and specification for the building and construction did not start until April 1927. The building was completed six months later.

Records are somewhat contradictory regarding the point in time at which the installation was actually put into service. The official commissioning date in May 1929 would suggest that it was brought into service using temporary equipment - the permanent high-voltage switchgear was not installed and ready for service until September of that year. An absence of records from 1928 leaves no clue as to the reason why the apparently complete substation building lay vacant for over eighteen months. It is possible that a shortage of switchgear was responsible for the delay.

From around the end of 1930 until at least the end of 1933, considerable trouble was experienced with the waterproof covering of the reinforced concrete roof. The entire membrane was replaced at least once and much remedial work was carried out on the replacement membrane, due to subsequent blistering and cracking. Additional lead flashings were fitted to the parapet walls in an attempt to prevent water from finding its way under the edges of the membrane.

At some point in time, the "MC of S Electricity Department Substation No.193" lettering was removed from the façade above the doorway. Otherwise, apart from the replacement of doors and other fittings, it appears that the building has not been altered from its original form.

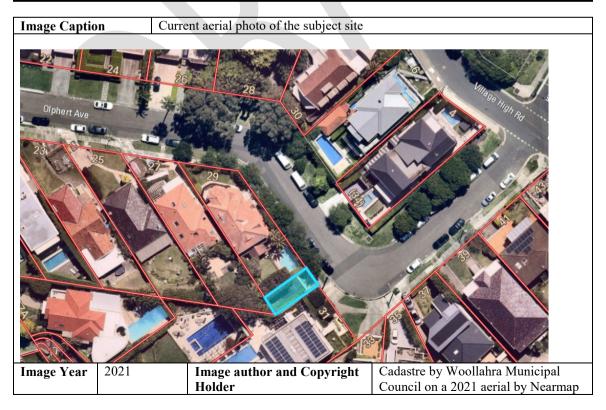
HISTORICAL THEMES		
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

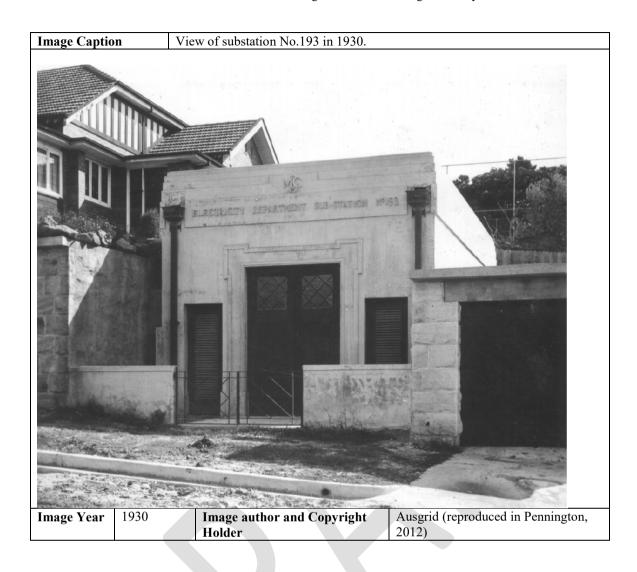
	HERITAGE SIGNIFICANCE ASSESSMENT	
Historical significance SHR criteria (a)	The Olphert Street substation is of historic significance as a substation building, built in 1927-8 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.	
Historical association significance SHR criteria (b)		
Aesthetic significance SHR criteria (c)	The Olphert Avenue substation is of aesthetic significance as an unusual example of an Inter-War Free Classical designed substation that features a dominating stepped parapet and rendered mouldings around the main entrance door.	
Social significance SHR criteria (d)		
Technical/ Research significance SHR criteria (e)	The Olphert Avenue substation may have technical/research significance, however, further investigation, including examination of the interiors, is required.	
Rarity SHR criteria (f)		
Representativeness SHR criteria (g)		
Integrity	In good structural condition externally.	

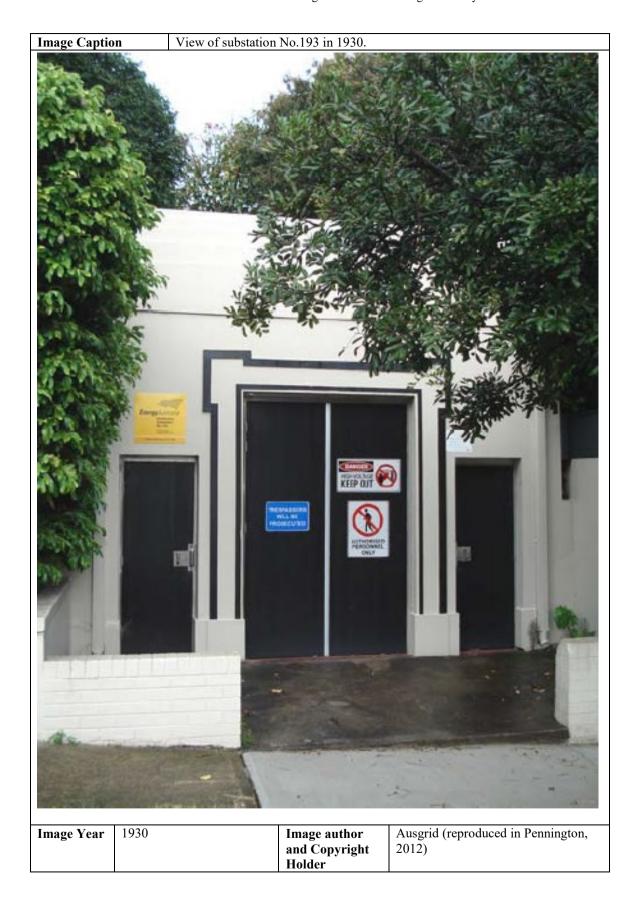
RECOMMENDATIONS		
Recommendations It is recommended that the building be listed as a heritage item in the Woollal Local Environmental Plan 2014.		
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.	
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.	

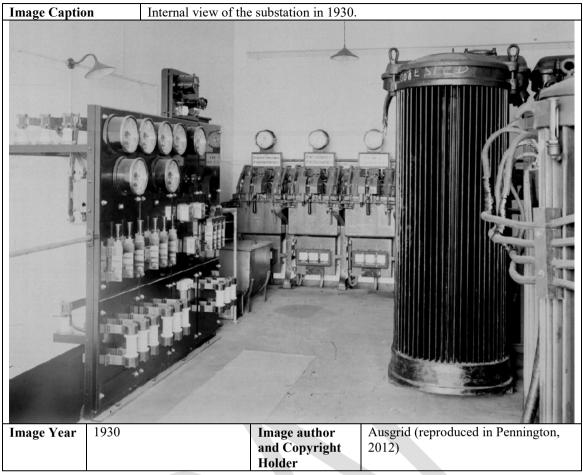
INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

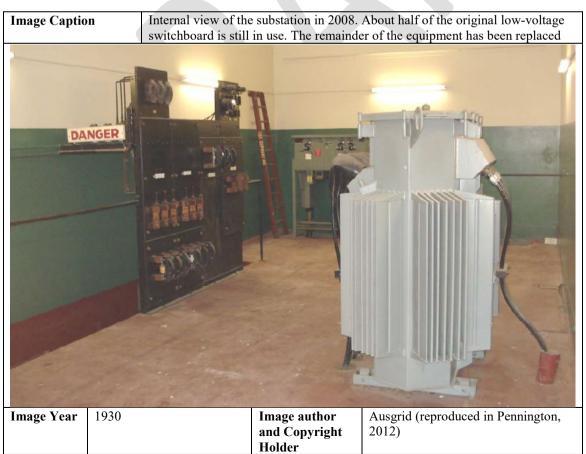
IMAGES













AUTHOR OF THIS REPORT
AUTHOR OF THIS RELORI
Flavia Scardamaglia - Woollahra Municipal Council 2022

		ITEM DETAILS		
Name of Item	Electricity Su	ubstation No.199		
Former name	#199 'Marathon Road' Substation			
Item type	Built / Utiliti	Built / Utilities – Electricity / Electricity Transformer-Substation		
Address	Number	Street	Suburb	
		Marathon Road	Darling Point	
Property	Lot		DP	
description	1 A		315729 415567	
Owner	Name		413307	
o when	Ausgrid			
Use	Current		Former	
	Electricity St	ubstation	Electricity Substation	
Statement of		bstation No.199 is an externally	•	
significance			styled front façade. The Marathon	
			Iunicipal Council of Sydney during	
	the period of	rapid expansion of the electricit	y network to the suburbs.	
	El	1		
		Electricity Substation No.199 holds historic, aesthetic and representative significance at a local level.		
Level of	State: NO Local: YES			
significance	State: 110	Escai. TES		
Heritage listings	Heritage Act	- s.170 NSW State agency her	ritage register, Ausgrid Heritage	
3 3		3430468, Listing Date 1/11/19		
		DESCRIPTION		
Designer	Sydney Muni			
Builder	Sydney Muni	cipal Council		
Construction years	1926-7			
Physical	The Marathan	n Road substation is a single s	torey brick structure designed in the	
Description Description				
Description	Interwar Stripped Classical style. It has simple block massing, with a symmetrical façade, corbelled parapet and central plant access doorway surmounted by a			
		ered cornice and flanked by a si		
	771 3.6 .1		1 . 1 . 1	
	The Marathon Road substation is constructed using load bearing face brick with cement rendered decorative details and steel roller shutter doors.			
Physical condition	Good (externa		Toner shaker doors.	
J				
Modification and	Roof replaced	l. Gutters and downpipes replac	ed. Doors replaced.	
Dates				
Archaeological	No known his	storic archaeological potential. I	dentified as being on land with no	
potential	Aboriginal se	nsitivity on the Woollahra Abor		
		indings protocol apply.		
		HISTORY		

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area

Based on the NSW Heritage Office State Heritage Inventory sheet

provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.199

The Marathon Road substation is a purposed designed and built structure constructed c1927 (BA117/1927) on part of 13 acres originally granted to William Macdonald on 28 November 1833.

The Marathon Road substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1926 (Vol 3940 Fol 76).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

It seems likely that this substation was intended to replace an existing pole transformer, located somewhere along Darling Point Rd, near Branch Rd. The site acquired for the substation in mid 1926 consisted of the end garage in a row of three on the corner of Branch Rd and Adelaide St. During the design process, it was found that portions of the existing garage walls could be used in construction of the substation building, providing some saving on materials.

The building was erected during the first few months of 1927 and the installation was put into service May of that year. In July, it was noticed that the ornamental brickwork along the top edge of the western wall overhung the adjacent garage. Although the encroachment was only a little more than 100mm, it was estimated that the cost to modify the brickwork would be less than that of entering into an agreement with the adjoining owner to allow the encroachment to remain. Four courses of brickwork were rearranged in August 1927 to provide a plain vertical western wall.

At the beginning of 1931, the name of the substation was changed from Branch Rd to Marathon Rd, in accordance with the renaming of the road itself. Also, at some later point in time, Adelaide St became known as Mount Adelaide St.

In the mid to late 1950s, it was planned to increase the rating of the substation by installing larger transformers. However, the space available inside the building and the arrangements for ventilation were somewhat inadequate. The portion of the property immediately behind the substation building consisted of small patch of vacant land and it was decided to acquire this ground for the construction of an outdoor yard for the new transformers. The ground, having an area of about $12m^2$, was acquired in September 1959. The outdoor yard was established the following year and the new transformers installed. The existing transformers were removed from inside the building.

Around the beginning of the 1970s, the existing buildings on the property surrounding the substation were demolished and a high-rise apartment block erected.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme

Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Marathon Road substation is historically significant as an example of the infrastructure built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Marathon Road substation is of aesthetic significance as an externally intact example of a substation building with detailed front facade in the Interwar Stripped Classical style.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Marathon Road substation may have technical/research significance, however further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Marathon Road substation is a representative example of a purpose-built substation building with Inter-war stripped classical detailing, typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

	RECOMMENDATIONS
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

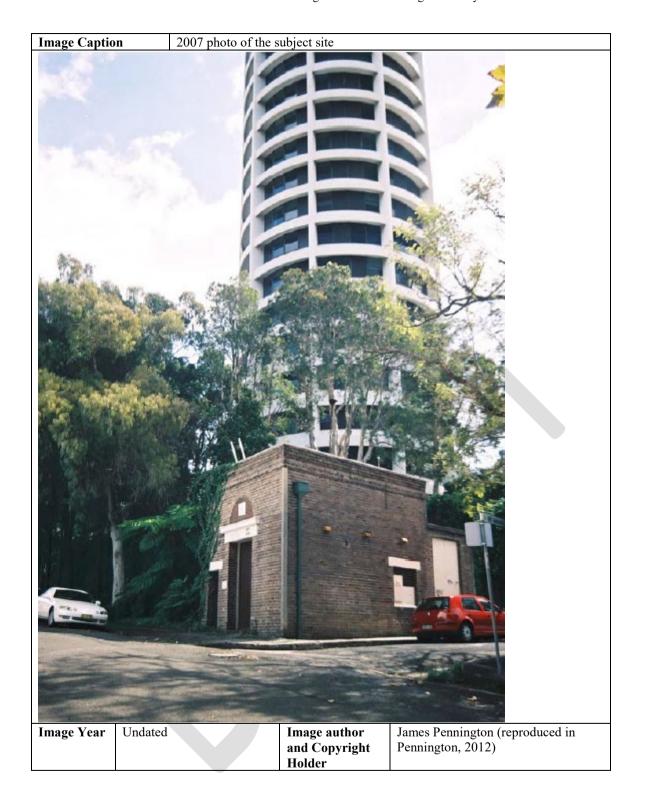
	INFORMATION SOURCES			
Type	Author/Client	Title	Year	Repository

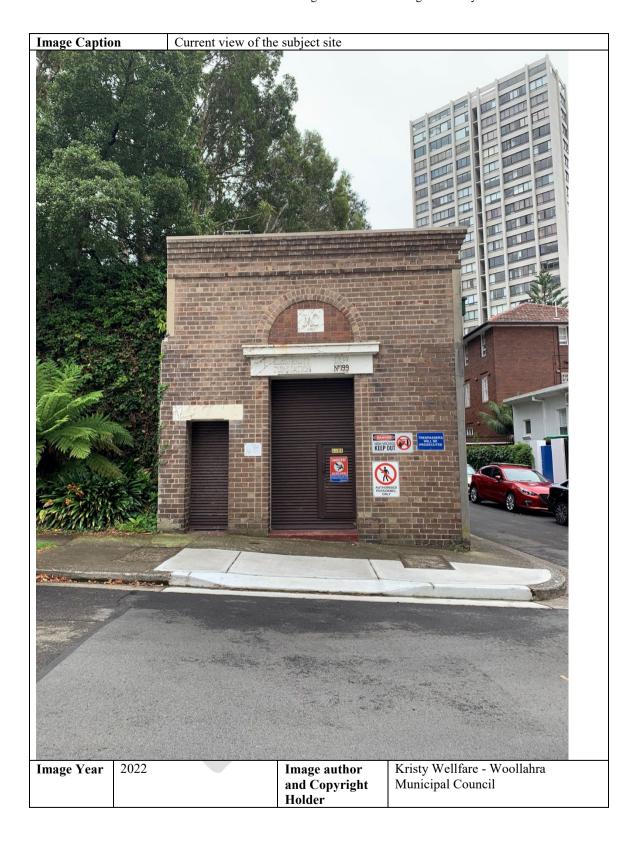
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

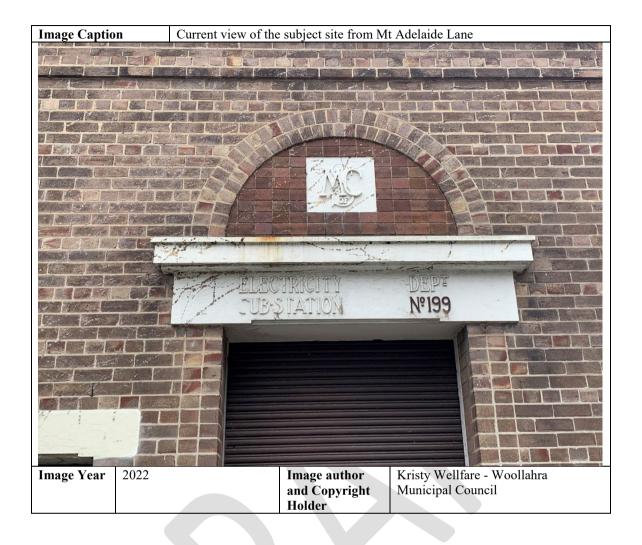
IMAGES

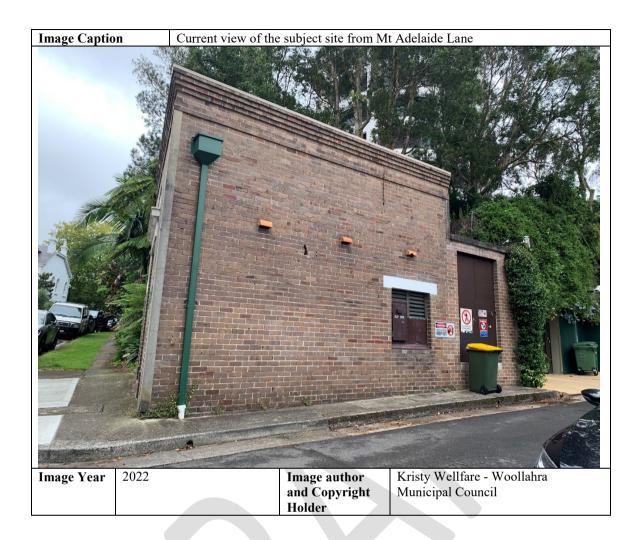


Image Year undated		Image author and Copyright Holder	Ausgrid (reproduced in Pennington, 2012)
		Image author	Ausgrid (reproduced in Pennington,
	demolition of adjac	ent buildings.	
Image Caption			No.199 showing the site prior to the









	AUTHOR OF	THIS REF	PORT		
Flavia Scardamaglia	- Woollahra Mur	icinal Cou	ıncil	2022	

Name of Item				
	Electricity Su	ıbstation No.299, includir	ng brick fence	
Former name	#299 'Bundarra Road' Substation, 'M.C. of S. Electricity Sub-station No. 299'			
Item type		es – Electricity / Electricit	ty Transformer-Substation	
Address	Number	Street Drumalbyn Road	Suburb Bellevue Hill	
Property description	Lot A		DP 320729	
Owner	Name Ausgrid			
Use	Current	uhstation	Former Electricity Substation	
Statement of significance	Electricity Substation Electricity Substation No. 299 is a representative example of a small and externally intact Inter-War Stripped Classical building that retains the original panelled entrance doors and is finished with a dominating ogee eaves moulding. The Bundarra Road substation was built in 1928 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.299 holds historic, aesthetic and representative			
Level of	significance at State: NO	Local: YE	S	
significance				
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430452, Listing Date 1/11/1994.			
Designer	Sydney Munic	DESCRIPTION cipal Council		
Builder	Sydney Municipal Council			
Construction years	1928			
Physical Description	The Bundarra Road substation is a simple single storey face brick structure with a symmetrical façade designed in the Inter-War Stripped Classical style. It has a classically styled central entrance retaining a pair of panelled entrance doors with painted rendered lintel cornice over, and corresponding dominating ogee eaves moulding. Front fence is also made of similar bricks. The Bundarra Road substation is constructed using load bearing face bricks and incorporates an unusually-designed reinforced concrete slab roof with integral soffit ventilation. A metal identity plaque reads "M.C. of S. ELECTRICITY SUB STATION No. 299"			
Physical condition	Good (externa			
Modification and Dates	Gutters and do	ownpipes replaced. Brickw	ork and vents at side have been re	built.
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply.			
		HISTORY		

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.299

Drumalbyn Road was officially proclaimed a public road under the Public Roads Act, 1902 on 10 January 1930, hence this substation took its first name from adjacent Bundarra Road.

The Bundarra Road substation is a purposed designed and built structure constructed c1928 (BA14/1929) on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830.

The Bundarra Road substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1928 (Vol 4175 Fol 249).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

In September 1927, the SMC was offered a site for a substation at the corner of Victoria and Drumalbyn Rds, opposite the intersection with Bundarra Rd. The site offered was adjacent to the existing Bundarra Rd pole transformer.

It seems that the land had at one stage been part of a quarry. The owner was keen to sell, although he had some difficulty in convincing the SMC to agree to his price.

Although ED General Manager Hugh Forbes-Mackay had recommended to the SMC in December 1927 that the site be purchased, it was not until May 1928 that official approval was given. The transfer of the site to SMC ownership was completed at the beginning of September 1928.

A contract for erection of the building was about to be awarded at the end of October. However, for some reason which is not apparent, it was decided to disregard all tenders submitted and invite fresh tenders for the work. As a result, the contract was not actually awarded until the last week in December. The builder was instructed to start work on the last day of 1928.

Despite the order to commence, work was not started on site until the second week of January 1929. Woollahra Municipal Council had already approved the design of the building in principle yet, when the builder submitted the plan officially, consent was refused. The local authority required the provision of a tiled roof, or a roof of reinforced concrete. As the cost of a tiled roof with steel framework was considered prohibitive, it was decided to amend the design to allow for a concrete roof. Although the new design was approved by Woollahra Council at the end of January 1929, it withdrew its approval two weeks later, stating that approval had been given in error. It insisted on further modifications to the

Based on the NSW Heritage Office State Heritage Inventory sheet

design of the concrete roof and the provision of double steel doors in lieu of the roller shutter originally allowed for. Final approval of the building plan was obtained during the last week in April.

When the project had first been started, the substation was named Drumalbyn Rd. In May 1929, its name was changed to Bundarra Rd, due to the planned establishment of another substation, further north along Drumalbyn Rd (No.318).

Work had been temporarily suspended during the dispute with Woollahra Council and although activity recommenced soon after final approval of the plan, progress was slow. Excavations for the building required cutting into the cliff face at the rear of the site. The local authority had forbidden the use of explosives and this part of the work took about four weeks to complete. It had also been impossible to carry out any work on the foundations of the building during excavation of the cliff face, as the site was continually littered with rock and other debris from the excavations being carried out above. Further delay was caused when it was deemed necessary to construct a retaining wall to shore up the footpath on Victoria Rd and prevent rock and loose spoil from falling onto the substation building. Work on the retaining wall began in late November and took about three weeks to complete.

By the end of January 1930, the building's brickwork had been completed and the concrete slab roof poured. However, after removal of the formwork for the roof, it seems that no further work was done on the building for another three weeks. During the first half of 1930, ED management continually complained to the SMC's City Engineer of periods of inactivity on the site. The contract building work was finally completed in the first week of June 1930.

Equipping and cable work were carried out during the period June to September. The installation was put into service at the end of September and I believe that the existing pole transformer was dismantled prior to the end of 1930.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical	The Bundarra Road substation is historically significant as an example of the
significance SHR criteria (a)	infrastructure built by the Municipal Council of Sydney in 1928 during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Bundarra Road substation is a representative example of a small and externally intact Inter-War Stripped Classical building that retains the original panelled entrance doors and is finished with a dominating ogee eaves moulding.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Bundarra Road substation may have technical/research significance, however further investigation, including examination of the interiors, is required.

Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	Typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally

	RECOMMENDATIONS
Recommendations	It is recommended that the building, including its interiors, be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment. Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building. In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

	INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011		
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004		
Written	MacLaren North	Energy Australia Heritage Register Review	2007		
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a	

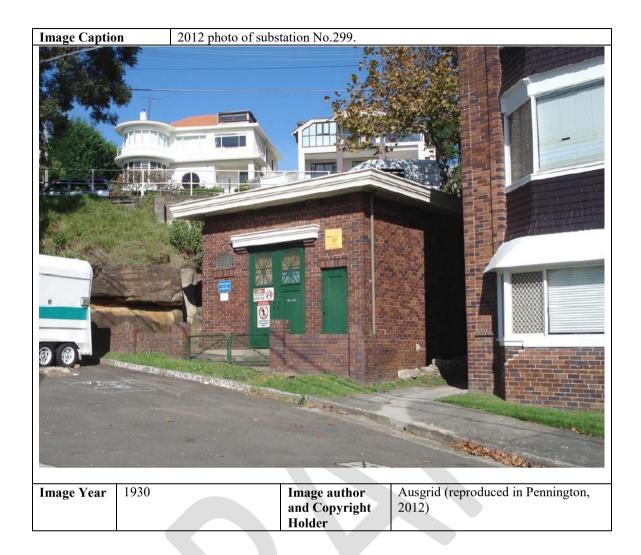
IMAGES Current aerial photo of the subject site **Image Caption**

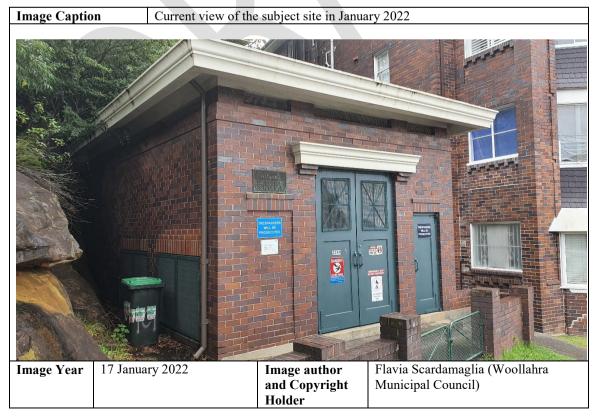
Image Year

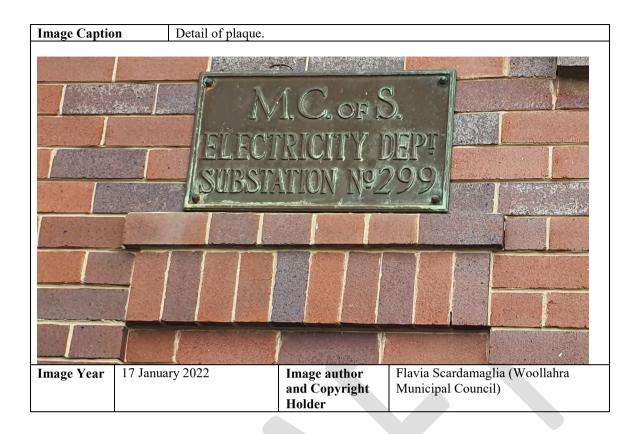
2021

Image author and Copyright Holder Cadastre by Woollahra Municipal Council on a 2021 aerial by Nearmap

Image Caption	1930 photo of substation No.299 ne	ext to the pole transformer which was to be
	removed in 1930.	
Image Year 1930	Image author	Ausgrid (reproduced in Pennington,







AUTHOR OF THIS REPORT
AUTHOR OF THIS REPORT
Flavia Scardamaglia - Woollahra Municipal Council 2022

		ITEM DETAILS	
Name of Item	Electricity Su	ubstation No.314, inclu	
Former name	#314 'Black Street' Substation		
Item type	Built / Utilities - Electricity / Electricity Transformer-Substation		
Address	Number	Street	Suburb
Audiess	1	Dalley Avenue	Vaucluse
Property	Lot	, ,	DP
description	35		1108999
Owner	Name		
Use	Ausgrid Current		Former
USC	Electricity Su	ıbstation	Electricity Substation
Statement of significance	Electricity substation No.314 is a representative example of a purpose designed and built substation in the Inter-War Mediterranean style. The Black Street substation was built by the Municipal Council of Sydney in 1930 during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.314 is of historic, aesthetic and representative		
	organica a	t a local level.	
Level of significance	State: NO Local: YES		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430462, Listing Date 1/11/1994.		
	register, 100	o too toz, Eisting Date	171117211
		DESCRIPTION	
Designer	Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1930		
Physical Description	Electrical substation No.314 substation is a modest single storey structure designed in the Inter-War Mediterranean style evidenced by the use of rendered brick and hipped roof clad with Spanish roof tiles. Stylistic elements include a central arched main entrance surmounted by a decoratively edged raised parapet, chimney and mouldings. Front door has been replaced. Electrical substation No.314 is constructed using bearing face brick and incorporates a ceramic tiles hipped roof.		
Physical condition	Good (externally)		
Modification and Dates			
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies.		
		HISTORY	
Early historical note	s		

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.314

The electrical substation No.314 is a purposed designed and built structure constructed c1930 (BA25/1930) on part of 370 acres originally granted to William Charles Wentworth on 5 July 1838.

This substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1930 (Vol 4392 Fol 115).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From James Pennington, 2012

This substation was intended to replace an existing pole transformer in Black St, near Towns Rd. The site initially proposed for the substation in January 1929 fronted Hay St, being the rear portion of a property on the corner of Black and Hay Sts. The owners of this property were unwilling to sell any part of it to the SMC, so further investigations in the vicinity were carried out. Part of another property in Hay St was offered, but was judged unsuitable.

A suitable site was found in the rear portion of the property fronting Black St, on the north-western corner of Dalley Ave, in February. The trustees of the property proved willing to sell the land required for the substation, but legal difficulties prevented them from doing so. They thus agreed to the resumption of the site by the SMC.

In March 1929, it was realised that temporary means would be necessary for meeting the demand for electricity during the coming winter. The process of acquiring the land by resumption had already been started, but it would be some time before the site could be transferred to SMC ownership. Arrangements were made with the trustees of the property for the lease of a small area of the site (about $13m^2$), on which a temporary substation could be established.

The position of the temporary substation was chosen so as not to interfere with the erection of the permanent substation building at a later date. A standard type of ground transformer installation, surrounded by a wooden fence, was put into service on the south-eastern corner of the site in July 1929.

The site for the permanent substation (including the portion on which the temporary substation had been erected) became SMC property in January 1930. Tenders for erection of the permanent building were invited and the contract for the work was awarded in late March. Work was programmed to start at the end of that month and to be complete within thirteen weeks.

Based on the NSW Heritage Office State Heritage Inventory sheet

The majority of the building work had been completed by early September 1930. In order to finish the forecourt area, it was necessary to remove the temporary substation. As the existing pole transformer was capable of meeting local demand for electricity in spring and summer, taking the temporary substation out of service did not present any difficulty. The temporary apparatus and its enclosure were removed during the third week of September.

The permanent building was ready for equipping in October and the installation was put into service in January 1931. When connections to the existing low-voltage networks had been completed, the existing pole transformer was dismantled.

It had originally been planned for the substation to act as a simple replacement for the pole transformer. However, amendments to the layout of high-voltage cables in the Vaucluse area meant that the substation also became an important high-voltage switching centre.

A small area of vacant land had been left at the rear of the substation building. This area amounted to only about $11m^2$, but could not be sold due to the presence of earthing conductors. However, the small area proved to be of use to an adjoining resident, to whom the area was let at nominal rental in 1947.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Black Street substation is historically significant as an example of the infrastructure built by the Sydney Municipal Council during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Black Street substation has aesthetic significance as a modest example of a purpose designed and built substation in the Inter-War Mediterranean style.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Black Street substation may have technical/research significance, however further investigation, including examination of the interiors, is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Black Street substation is a representative example of a purpose built substation building and is typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.

Based on the NSW Heritage Office State Heritage Inventory sheet

Integrity	In good structural condition externally.
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RECOMMENDATIONS

Recommendations

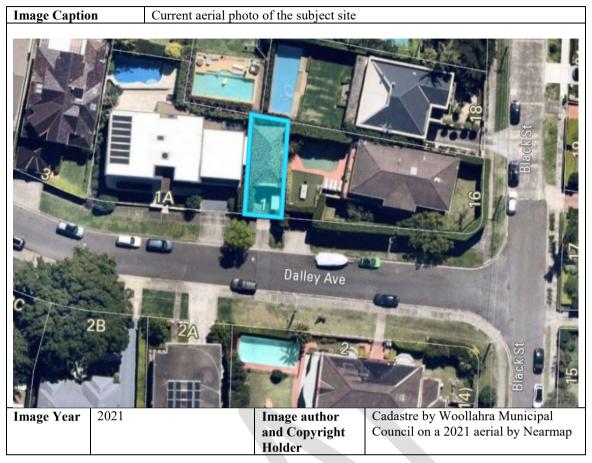
It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.

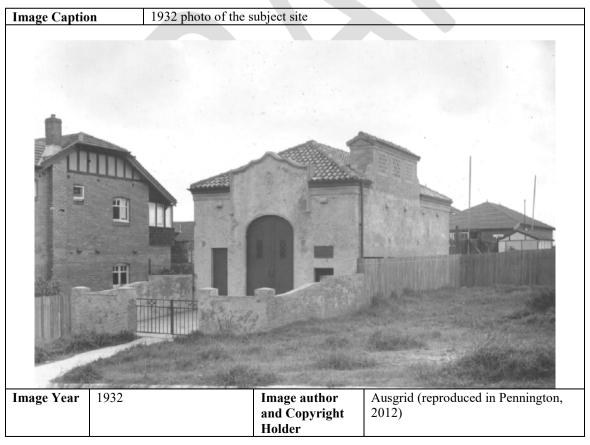
Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.

In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a u

IMAGES









AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022



		ITEM DETAILS	
Name of Item			
Former name	#315 'Plumer Road' Substation		
Item type	Built / Utilitie	es – Electricity / Electricity Tr	ansformer-Substation
Address	Number 7	Street Plumer Road	Suburb Rose Bay
Property	Lot	1	DP
description	1		1079372
Owner	Name Ausgrid		
Use	Current Electricity Su	ıbstation	Former Electricity Substation
Statement of significance	Electricity Substation No. 315 is a modest example of a purpose designed and built substation building in the Inter-War Georgian Revival style. The Plumer Road substation was built by the Municipal Council of Sydney in 1929, during the period of rapid expansion of the electricity network to the suburbs.		
	Electrical Substation No.315 is of historic, aesthetic and representative significance at a local level.		
Level of significance	State: NO Local: YES		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430463, Listing Date 1/11/1994.		
Designer	DESCRIPTION Sydney Municipal Council		
Builder	Sydney Municipal Council		
Construction years	1929		
Physical Description	The Plumer Road substation is a modest single storey structure designed in the Inter-War Georgian Revival style. Stylistic elements include a symmetrical façade, hipped roof and two flattened arch entrance doorways with decorative brickwork. The Plumer Road substation is constructed using load bearing face brick and incorporates brick arches and ceramic tiled roof.		
Physical condition	Good (externally)		
Modification and Dates	Roof tiles replaced. Doors and fanlights removed and replaced with metal doors. Gutters and downpipes replaced. Evidence of past minor structural repairs. Rebuilt front brick fence with later lattice atop.		
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply. HISTORY		

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response

Based on the NSW Heritage Office State Heritage Inventory sheet

to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.315

The Plumer Road substation is a purposed designed and built structure constructed c1930 (BA54/1930) on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830.

The Plumer Road substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1930 (Vol 4382 Fol 163).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

When enquiries were made into the purchase of the preferred site for this substation at the end of 1928, the owners' asking price was almost five times the amount considered reasonable by the SMC's City Assessor. While negotiations continued and alternative sites were investigated, the SMC obtained the owners' permission to install a temporary substation on the site (on the northern side of Plumer Rd, between Salisbury and Balfour Rds), in order to reinforce electricity supply from the existing Plumer Rd pole transformer during the coming winter. The temporary ground transformer installation was put into service in May 1929.

In July 1929, a more suitable site for the permanent substation had been decided on. This new site also fronted the northern side of Plumer Rd, but was located further east, between Balfour and O'Sullivan Rds. The site was eventually acquired by resumption in December of that year.

Although the lease for the site of the temporary substation contained an option for renewal, it was considered necessary to press on with erection of the permanent substation building. Tenders for the construction work were invited only a few days after the permanent site came under SMC ownership and the contract was awarded to a local builder in March 1930.

By the beginning of December 1930, the permanent substation had been built, equipped and put into service. The temporary substation was dismantled and removed during the second week of that same month.

In 1935, a complex of apartments and shops was built on Plumer Rd, between the substation and O'Sullivan Rd. The construction work resulted in the paved courtyard at the front of the substation being undermined. By arrangement with the SMC, the damage was repaired by the builders already engaged on the construction work.

HISTORICAL THEMES				
Australian Theme	NSW Theme	Local Theme		
Building settlements, towns and	Utilities	Distribution of electricity		
cities				

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Plumer Road substation is historically significant as an example of the infrastructure built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Plumer Road substation is of aesthetic significance as a representative example of a small and externally intact Inter-War Georgian Revival style substation.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Plumer Road substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Plumer Road substation is a representative example of an interwar substation building, typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally

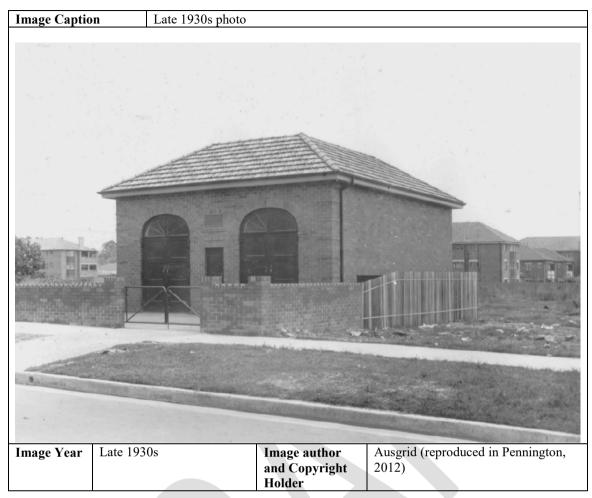
DE COMMENT ATTOMS					
RECOMMENDATIONS					
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, also be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment. Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building. In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.				

INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository

Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

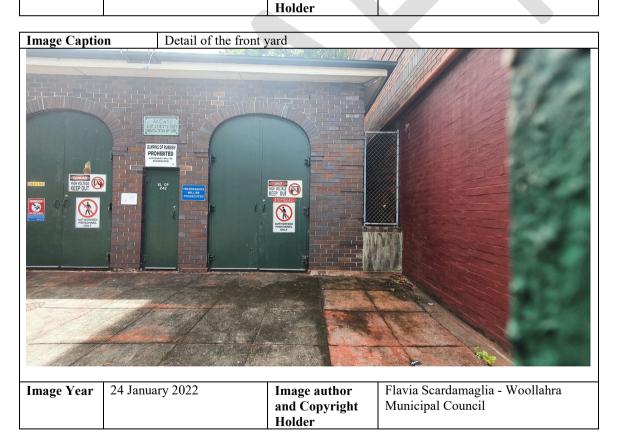
IMAGES











AUTHOR OF THIS REPORT	
AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

		ITEM DETAILS		
Name of Item	Electricity S	ubstation No.318		
Former name	#318 'Drumalbyn Road' Substation			
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation			
Address	Number Street Suburb			
	13	Drumalbyn Road	Bellevue Hill	
Property	Lot		DP	
description	1		328329	
Owner	Name			
TT	Ausgrid		F	
Use	Current Electricity S	uhetatian	Former Electricity Substation	
Statement of	·		·	
significance	Electricity Substation No.318 is an unusual and rare example of a substation building constructed in the Modernist style. It is an unusually finely detailed building with a curved front constructed in rough dressed sandstone block work and slit windows. The Drumalbyn Road substation is demonstrative of the Sydney County Council's policy of placing finely designed buildings in what it considered to be "high class" suburbs. The substation was built in 1947-8 by the Sydney County Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.			
I work of	significance a	at a local level.	c, aesthetic, rarity and representative	
Level of significance	State: NO	Local: YE		
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430454, Listing Date 1/11/1994.			
		DECCRIPTION		
Designer	DESCRIPTION Sydney County Council			
Builder	Sydney County Council			
Construction years	1948-9			
Physical Description	The Drumalbyn Road substation is an unusual structure with curved walls which have been constructed in rough dressed sandstone blockwork. Designed in the Post-War period, it has a symmetrical façade with a central entrance.			
	The Drumalbyn Road substation is constructed using rough sandstone block walling. The entrance doors are double hung diagonal - timber clad.			
Physical condition	Good externally, stonework needs cleaning			
Modification and Dates	Asphalt roof replaced. Gutters and downpipes replaced. Sandstone repointed.			
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies.			
	HISTORY			
Early historical note	s			

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.318

The Drumalbyn Road substation is a purposed designed and built structure constructed c1948 (BA113/1948) on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830.

The Drumalbyn Road substation was built by the Sydney County Council o during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Sydney County Council in 1932 (Vol 4558 Fol 76 and Vol 3202 Fol 134).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

The most suitable site for this substation was chosen around August 1929, immediately adjacent to the existing Drumalbyn Rd pole transformer. Although replacement of the pole transformer was not urgent, it was considered better to acquire a site for the substation earlier rather than later, due to the likelihood of property values increasing.

The owner of the property was willing to sell the just over $140m^2$ area required for the substation, but no agreement could be reached on price. A recommendation was made in February 1930 that the land be resumed. Although the site became SMC property in September 1930, records reveal that another site, about 30m away from the pole transformer, was being considered in January 1932. It seems that when enquiries had been made in 1929, only one property owner in the vicinity was willing to sell. In 1931, another willing property owner was found.

When negotiations for the second site were commenced, it was reckoned that the substation would be required for service before the winter of 1934. In March 1932, plans were made to return the first site to its owner, but this was postponed until definite progress had been made towards acquiring the second site. The following month, approval was given for return of the first site to its owner.

A covenant existed on the second site, requiring any buildings to be less than 5.5m height above street level and to be built of brick or stone, with roofs of tile or slate. It was judged that this covenant would not prevent the establishment of a substation, so acquisition of the second site was proceeded with. The new site became SMC property sometime in 1933.

No further action towards establishment of the substation was taken until mid 1947. It was initially proposed to provide a ground transformer or kiosk-type substation. It was subsequently suggested that a transformer yard be built first and a switch room added at a later date. However, it was decided early in

Based on the NSW Heritage Office State Heritage Inventory sheet

1948 to construct a complete permanent substation building on the site already acquired. A new architectural plan was prepared later that year, the appearance of the building being completely different to that originally put forward. Although it had been proposed that work on the site be started as early as April 1948, it seems that little was done until early in 1949. After the basic shell of the building was complete around May of that year, the SCC arranged with Woollahra Municipal Council for one of the local authority's stonemasons to complete the stone facing of the building. It seems that the stonework had been started by one of the SCC's own bricklayers but, after this particular bricklayer suffered an accident, the SCC had no other suitably skilled personnel to complete the work.

The building work was completed in July 1949 and the equipped installation was put into service in October. The existing pole transformer was removed.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and cities	Utilities	Distribution of electricity

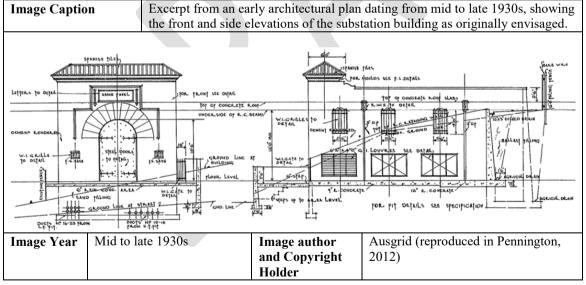
Historical significance SHR criteria (a)	The Drumalbyn Road substation is historically significant as a purpose design and built substation, built in 1948-9 by the Sydney County Council during the period of rapid expansion of the electricity network to the suburbs. It is demonstrative of the Council's policy of placing finely designed buildings in what it considered to be "high class" suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Drumalbyn Road substation is of aesthetic significance as an unusual example of a substation built in the Modernist style, and is an unusually finely detailed building with a curved front constructed in rough dressed sandstone block work and narrow slit openings. It contributes to the local character of Bellevue Hill.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Drumalbyn Road substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	The Drumalbyn Road substation is an unusual and locally rare example of a Modernist style substation constructed in rough dressed sandstone blockwork using a curved design.
Representativeness SHR criteria (g)	The Drumalbyn Road is a representative example of a substation building, typical in scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

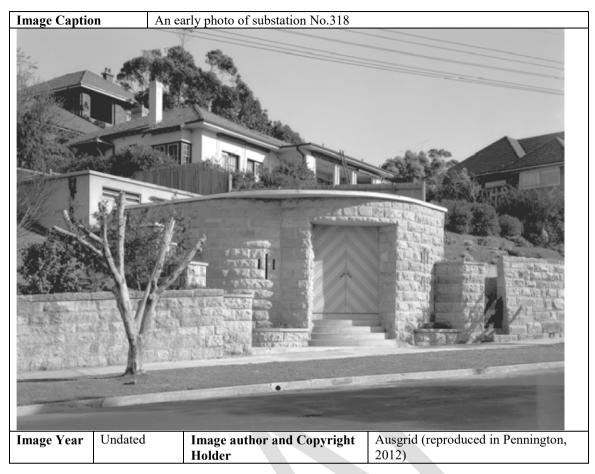
RECOMMENDATIONS				
Recommendations It is recommended that the building be listed as a heritage item in the Local Environmental Plan 2014.				
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.			
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.			

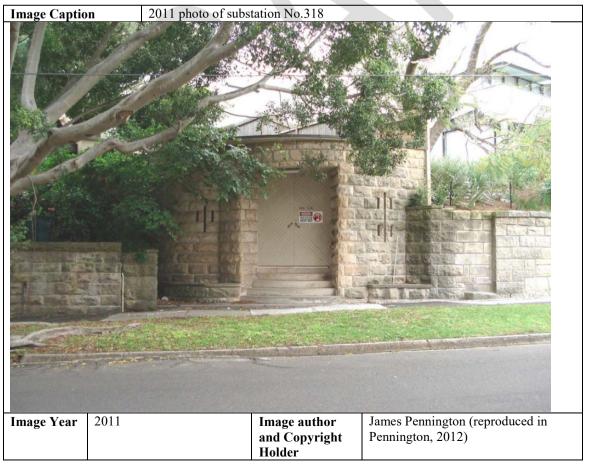
INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

IMAGES









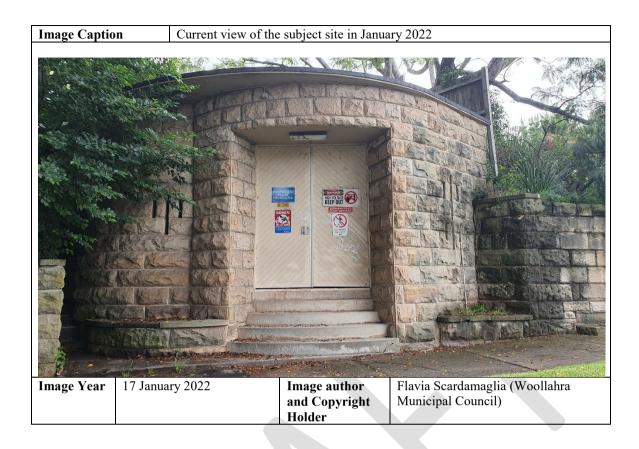


Image Caption	Detail of slit windo	w to the front elevati	on
Image Year 17 Ja	nuary 2022	Image author and Copyright Holder	Flavia Scardamaglia (Woollahra Municipal Council)

Image Caption	Detail of side entra	nce.	
	ENGRETARIA PER CONT. AUTHORISTO PROCONIL. OKI.		
Image Year 17 Ja	nuary 2022	Image author and Copyright Holder	Flavia Scardamaglia (Woollahra Municipal Council)

AUTHOR OF THIS REPORT		
Flavia Scardamaglia - Woollahra Municipal Council	2022	

		ITEM DETAILS		
Name of Item	Electricity Substation No.357, including front and side stone walls			
Former name	#357 'March Street' Substation			
Item type	Built / Utiliti	es – Electricity / Electr	city Transformer-Substatio	n
Address	Number	Street March Street	Suburb Bellevue Hill	
Property description	Lot 1		DP 607315	
Owner	Name Ausgrid			
Use	Current Electricity Si	ubstation	Former Electricity Substat	tion
Statement of significance	Electricity Substation No.357 is an Inter-War electrical substation building featuring Modernist stylistic influences with a rough sandstone block street wall and columns. The March Street substation was built in 1933-34 by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.357 is of historic, aesthetic and representative significance at a local level.			
Level of significance Heritage listings	State: NO Local: YES Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage			
	Register, No.	Register, No. 3430470, Listing Date 1/11/1994.		
		DESCRIPTION		
Designer	Sydney Municipal Council			
Builder	Sydney Municipal Council			
Construction years	1933-4			
Physical Description	The March Street substation is a single storey cement rendered Modernist structure which features a sandstone block entrance area and compound perimeter walls, and a portico supported on sandstone block columns. The March Street substation is constructed using rendered masonry, with rough sandstone block columns and fences. Reinforced concrete forms a projecting awning over the main entrance doorway.			
Physical condition	Good (externally)			
Modification and Dates				
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies.			
	HISTORY			
Early historical note	s			

Based on the NSW Heritage Office State Heritage Inventory sheet

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.357

The March Street substation is a purposed designed and built structure constructed c1933 (BA53/1933) on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830. The March Street substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

The most suitable site for this substation was chosen towards the end of 1929 and was part of a property owned by the Congregational Union of NSW at the end of March St, also fronting Bellevue Rd. The Union had originally planned to erect a church on the land, but had later changed its plans. In January 1930, the Union stated that it would prefer the SMC to acquire the entire 970m² property. However, likely due to the prevailing financial situation and the relatively high value of land in the locality, the ED's Acting General Manager Roger Vine-Hall informed the Union that only the approximate 120m² area for the substation could be acquired. In mid March 1930, the Union agreed to sell only the required part of its property.

Towards the end of March 1930, Woollahra Municipal Council agreed to the establishment of this substation and also the one in nearby Rupertswood Ave (No.364), but placed a condition on its approval that its wishes be met in all matters relating to details of design of the buildings. The SMC replied that this condition could not be agreed to, although conceded that the buildings would be designed to harmonise with their surroundings and that they would be set back from the respective building lines by the required distances.

Woollahra Council eventually relented and gave its approval, still subject to co-operation between its own officer and the SMC's architectural staff on the design of the two buildings. The March St site became SMC property in January 1931. At that stage, there did not seem to be any urgency in establishing the substation as no work on preparation of the plan and specification was done until May of that year.

The ED's original layout sketch allowed for a substation building of standard arrangement, with an indoor area for the transformers. When submitting the architectural design to ED officers in July 1931, the SMC's City Engineer suggested a reduction in height of the switch room and the provision of an outdoor yard for the transformers. The savings obtained from this form of construction were intended to offset the additional cost of a reinforced concrete retaining wall along the north-eastern side of the building.

Based on the NSW Heritage Office State Heritage Inventory sheet

Due to the need to allocate available funds for more important work, consideration of the matter was deferred until March 1933. At that stage, electricity supply to the surrounding area was being given from a pole transformer on Bellevue Rd, although I am not sure of its exact location. The pole transformer had been heavily overloaded during the winter of 1932 and it was proposed to establish a temporary ground transformer on the site of the permanent substation, pending the availability of the building.

Despite the planning, I have not found any evidence to suggest that the temporary installation was ever provided. The contract for erection of the permanent building was let in June 1933. Work on the site commenced around the middle of July and the building was completed sometime during the final quarter of that year. One record suggests that installation of the equipment had not begun by mid March 1934, although it is recorded that the installation was put into service in May of that year.

HISTORICAL THEMES		
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

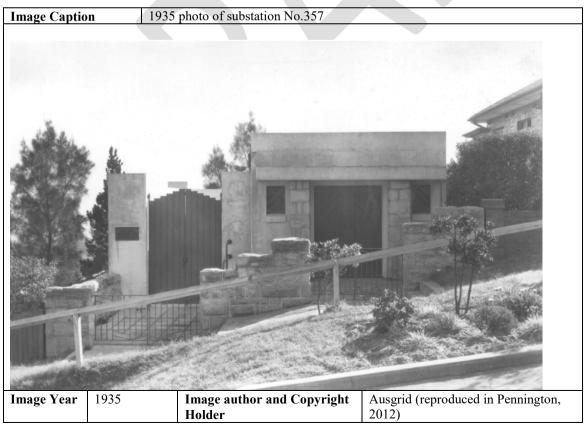
	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The March Street substation is historically significant as an example of the infrastructure built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The March Street substation is of aesthetic significance as an example of a modest Inter-War substation building showing Modernist stylistic influences featuring a rough sandstone block street wall and columns.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The March Street substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The March Street substation is representative example of a purpose built substation, typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

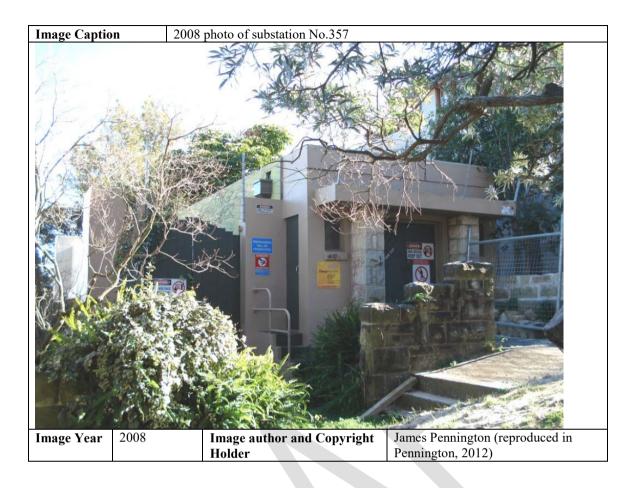
	RECOMMENDATIONS		
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.		
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.		
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.		

	INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011		
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004		
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007		
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a	

IMAGES







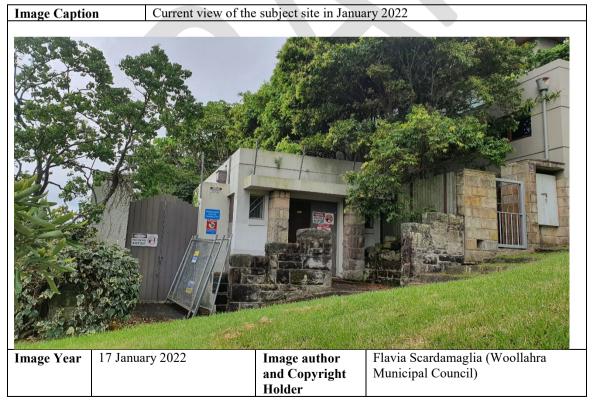


Image Caption	Detail of window		
		HIGH	VOLTAGE EP OUT
Image Year 17 Ja	anuary 2022	Image author and Copyright Holder	Flavia Scardamaglia (Woollahra Municipal Council)

AUTHOR OF THIS REPORT		
Flavia Scardamaglia - Woollahra Municipal Council	2022	

		ITEM DETAIL		
Name of Item	Electricity Substation No.361, including front fence and side stone wall			
Former name	#361 "Boronia Road"			
Item type	Built / Utili	ities – Electricity / Electr	ricity Transformer-Substation	
Address	Number	Street Boronia Road	Suburb Bellevue Hill	
Property description	Lot O		DP 17114	
Owner	Name Ausgrid		·	
Use	Current Electricity	Substation	Former Electricity Substation	
significance	Functionali was clearly and is demo designed bu The Boroni during the l	st substation incorporating designed to be sympathet onstrative of the Sydney Cuildings in what it conside a Road substation was bu ater phases of suburban e	nusual example of a finely detailed guncommon materials such as sands ic to the character of the surrounding county Council's policy of placing fixed to be "high class" suburbs. The suburbs of the electricity network of the electricity network of the class of the electricity network.	g area nely
Level of significance	State: NO	Local:	YES	
Heritage listings		No. 3430565, Listing Date		ritage
Designer	DESCRIPTION Sydney County Council			
Builder	Sydney Cor	unty Council		
Construction years	1949-52			
Physical Description	A single storey rendered brick building with a flat concrete roof. The right side is clad in sandstone blocks and extends slightly higher than the main roof, creating the effect of an offset stone tower, with a narrow slit opening for a downpipe.			
Physical condition	Entry is via double metal doors with Art Deco decoration. Good externally			
Modification and Dates				
Archaeological potential	No known historic archaeological potential. Identified as being on potentially sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies.			

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the

Based on the NSW Heritage Office State Heritage Inventory sheet

Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.361

The Boronia Road substation is a purposed designed and built structure constructed c1949 (BA44/1949) on part of 1130 acres originally granted to Daniel Cooper and Solomon Levey on 22 March 1830.

The Boronia Road substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1931, then transferred to the Sydney County Council in May 1937 (Vol 4501 Fol 164).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

The site for this substation was purchased around early to mid 1931, with the intention of erecting a substation to replace an existing pole transformer in nearby Bunyula Rd. It was originally intended for the design of the building to be similar to that of the Black St substation (see No.314). However, no further action towards establishing the substation was taken - the pole transformer remained in service and the substation site remained vacant.

The substation project was resurrected late in 1946, but was then deferred for another year. Although approval to proceed was given at the beginning of 1948, the contract for construction of the building was not awarded until almost the end of 1950. By that stage, it had been decided to construct the building to an amended design; only the switch room would be built initially, to house a single transformer and rudimentary switchgear. It was envisaged that when demand in the district required it, a transformer room or yard would be established and complete high-voltage and low-voltage switchboards would be installed in the switch room.

From an aesthetic point of view, the new design for the building was not as decorative as that originally planned. However, some attempt was made to enable the building to harmonise with its surroundings; the external walls were a combination of stone and cement-rendered brick. As a condition of its approval, Woollahra Municipal Council insisted that the substation be provided with a concrete roof.

Although it seems that construction of the substation building began in January 1951, the installation was not put into service until December 1952.

HISTORICAL THEMES			
Australian Theme	NSW Theme	Local Theme	
Building settlements, towns and	Utilities	Distribution of electricity	
cities			

	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Boronia Road substation is historically significant as an example of the substations built in the later phase of expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Boronia Road substation is of aesthetic significance as an unusual example of a finely detailed Inter war Functionalist style substation incorporating uncommon materials such as sandstone. It is reflective of the adjacent P&O Style houses and was clearly designed to be sympathetic to the character of the surrounding area in a manner consistent with the Sydney County Council's policy of placing finely designed buildings in what it considered to be "high class" suburbs.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Boronia Road substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Boronia Road substation is a representative example of an electricity substation built in the Inter war Functionalist style. It is typical in form, scale and technical arrangement to other distribution substations built throughout Sydney.
Integrity	In good structural condition externally.

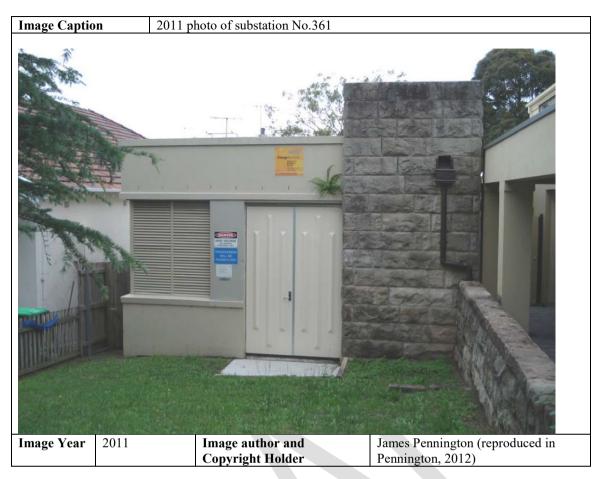
	RECOMMENDATIONS
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.

INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository

Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012	
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a u

IMAGES





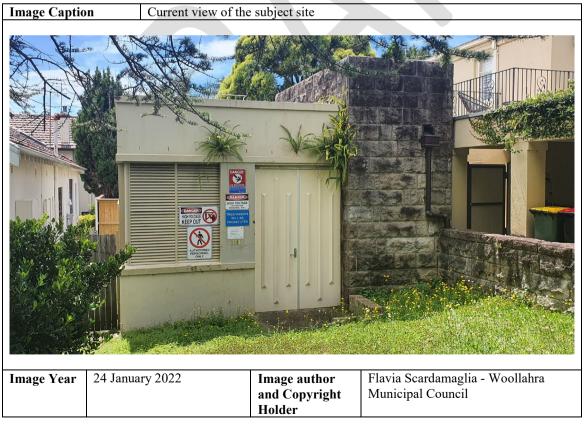


Image Caption	Current view of the subject site	
Image Year 24 Janua	ary 2022 Image autl and Copyr Holder	hor Flavia Scardamaglia - Woollahra Municipal Council

AUTHOR OF THIS REPORT
AUTHOR OF THIS RELOKT
Flavia Scardamaglia - Woollahra Municipal Council 2022

		TTRM	DETAILS			
Name of Item	Electricity Substation No.364					
Former name	#364 'Rupertswood Avenue' Substation					
Item type	Built / Utiliti	es – Electric	ity / Electrici	ty Tran	sforme	er-Substation
Address	Number 1A	Street Runertsw	ood Avenue	1 7	Suburb Bellevi	ue Hill
Property	Lot	1 1		-	DP	
description	1			1	184315	5
Owner	Name Ausgrid					
Use	Current]	Former	•
	Electricity St	ubstation]	Electri	city Substation
Statement of						
	substation designed in the Inter-War Mediterranean style. The main façade has a central, arched voussoir and arched entrance flanked by two small windows and surmounted by richly ornamented swag modelled in plaster. Other stylistic elements include the use of rounded roof tiles and decorative grill openings. The original door remains. The Rupertswood Avenue substation was built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs. Electrical Substation No.364 holds historic, aesthetic and representative significance at a local level.					
Level of significance	State: NO	170 NOV	Local: YE			
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430458, Listing Date 1/11/1994.					
			CRIPTION			
Designer	Sydney Muni	cipal Counci	1			
Builder	Sydney Muni	cipal Counci	1			
Construction years	1931					
Physical Description	The Rupertswood Avenue substation is an elaborately decorated single storey rendered brick structure designed in the Inter-War Mediterranean style. The main façade has a central, arched voussoir arched entrance flanked by two small windows and surmounted by richly ornamented swag modelled in plaster. Other stylistic elements include the use of rounded roof tiles and decorative grill openings. Still incorporating its original door. The Rupertswood Avenue substation is constructed using load bearing rendered brickwork and incorporates a brick arched entrance and a hipped roof with rounded ceramic roof tiles.					
Physical condition	Good (externa	ally)				
Modification and Dates	Later clerestory. Gutters and downpipes replaced using appropriate profile. Wrought iron gate is a reproduction. All rendered masonry painted.					

Based on the NSW Heritage Office State Heritage Inventory sheet

Archaeological	No known historic archaeological potential. Identified as being on potentially	
potential	sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected	
	findings protocol apply in addition to other Council policies.	

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.364

The Rupertswood Avenue substation is a purposed designed and built structure constructed c1931 (BA73/1933) on part of 190 acres originally granted to John Piper on 10 February 1820.

The Rupertswood Avenue substation was built by the Municipal Council of Sydney during the period of early expansion of the electricity network to the suburbs. The land was transferred to the Municipal Council of Sydney in 1931 (Vol 4477 Fol 153).

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

Land for a substation in the vicinity of the junction of Ginahgulla and Kambala Rds was sought from around the end of 1929. Several prospective sites were investigated and the preferred site in Rupertswood Ave was chosen in February 1930.

Woollahra Municipal Council approved of the SMC's intended subdivision in March of that year, but placed certain conditions on its approval. These also applied to the substation in nearby March St (see No.357), which was being planned concurrently.

Approval for establishment of the substation was eventually obtained, but the owners of the site were unwilling to sell. It was thus decided to acquire the site by resumption and it became SMC property at the end of January 1931.

As for the case of the substation in March St, it was proposed at the end of 1932 to establish a temporary ground transformer on the substation site. This would reinforce electricity supply from the existing pole transformer in nearby Trahlee Rd during the winter of 1933. However, in similar fashion to the proposed temporary installation planned for March St, it seems that the one for Rupertswood Ave was also never established.

The plan and specification for the permanent substation building were prepared through April and May 1933. The contract for erection of the building was awarded in mid August, with the work programmed

Based on the NSW Heritage Office State Heritage Inventory sheet

to start that same month and to be complete within eighteen weeks. The building was finished and handed over to the ED for equipping in March 1934. The installation was put into service in May of that year.

Soon after the substation was put into service, the builder was further engaged to insert an extra dampcourse and carry out additional work to the vent tower, in order to make the building watertight.

In 1936, the SCC received a notice from Woollahra Council, stating that residents in the vicinity had complained of the substation's appearance, it being particularly described as "an eyesore to the locality". It was suggested that creeping vines be planted to improve the building's appearance.

In 1949, the owner of the property at the rear of the substation asked to make use of the small portion of the SCC's remaining vacant land behind the building. Although it was initially recommended to accede to this request, it was eventually decided that the SCC's rights over the land may be unduly prejudiced and the adjoining owner was informed that his request could not be agreed to.

In 1987, interest was expressed by an adjoining owner in purchasing the substation property. Although it was considered technically feasible to replace the existing substation by a kiosk-type installation (and also possible if the prospective purchaser agreed to bear the cost), the proposal was vetoed. It was judged that Woollahra Council and other residents would likely object to the presence of a kiosk on the footpath and, besides, it was contrary to SCC policy at that time to re-arrange substation assets simply to make land available for sale. A similar approach was made in 1991, but was rejected for similar reasons.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

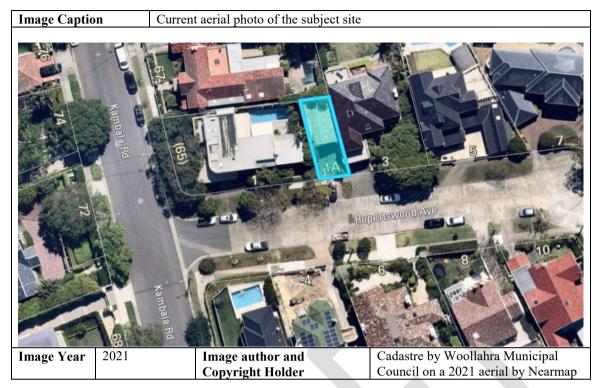
	HERITAGE SIGNIFICANCE ASSESSMENT
Historical significance SHR criteria (a)	The Rupertswood Avenue substation is of historic significance as an example of the infrastructure built by the Municipal Council of Sydney during the period of rapid expansion of the electricity network to the suburbs.
Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Rupertswood Avenue substation is of aesthetic significance as a well-detailed example of a substation designed in 1931 in the Inter-War Mediterranean style to better suit its surroundings.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Rupertswood Avenue substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	

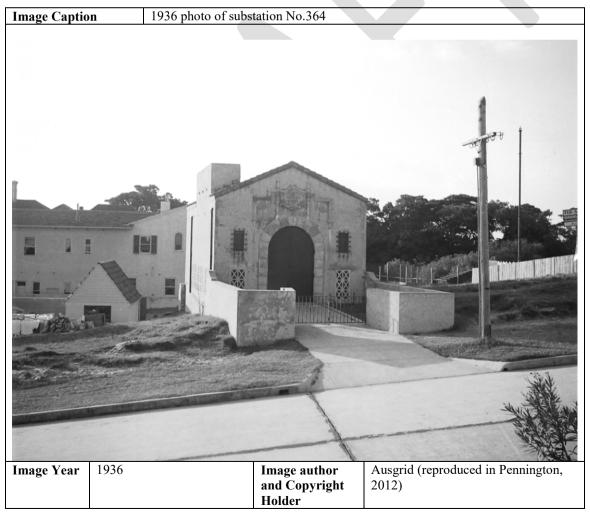
Representativeness SHR criteria (g)	The Rupertswood Avenue substation is a representative example of a purpose designed substation designed in response to its setting. It is typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

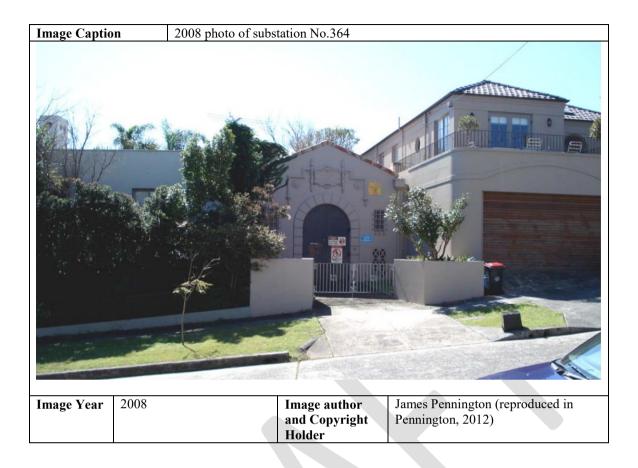
	RECOMMENDATIONS	
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.	
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.	
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.	

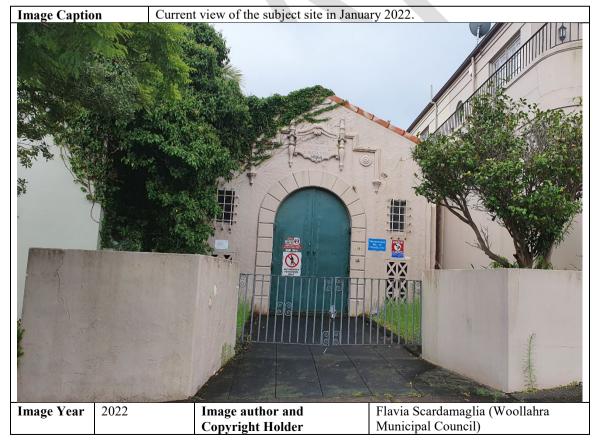
	INFORMATION SOURCES					
Type	Author/Client	Title	Year	Repository		
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012			
Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011			
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004			
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007			
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a		

IMAGES









AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

		ITEM	DETAILS		
Name of Item	Electricity S				
Former name	#592 'Dunbar Street' Substation				
Item type	Built / Utilities – Electricity / Electricity Transformer-Substation				
Address	Number Street Suburb 14 Robertson Place Watsons Bay				
Property description	Lot 1			DP 231	114
Owner	Name Ausgrid			1	
Use	Current Electricity St	ubstation		For Ele	mer ctricity Substation
Statement of significance	Electricity Substation No.592 is a representative example of a simple purpose designed Inter-War substation building, built in in the Inter war Mediterranean style. The Dunbar Street substation is of aesthetic significance as an unusually well detailed example of a substation built by the Sydney County Council in 1954 during the later phases of suburban expansion of the electricity network. The building retains its rough cast rendered finish and some significant architectural detailing evident of the Inter war Mediterranean style including geometric concrete block work and stylized wrought iron grilles. Electrical Substation No.592 is of historic, aesthetic and representative significance at a local level.				
Level of significance	State: NO Local: YES				
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430460, Listing Date 1/11/1994.				
		DEG/			
Designer	DESCRIPTION Sydney County Council				
Builder	Sydney Coun	ty Council			
Construction years	1939-54				
Physical Description	The Dunbar Street substation is a single storey gable roofed structure. It is designed in the Inter-War Mediterranean style, evidenced by the white painted rough cast rendered brickwork, pair of the central access doors and use of ceramic roof tiles. Decorative elements on the symmetrical façade include a round tiled gable vent, door surround moulding, cast concrete block geometric infill panels and Mediterranean styled wrought iron door grilles which are an important decorative detail of the Inter-War period. The Dunbar Street substation is a gables roof structure constructed using load				
Physical condition	bearing cement rendered brickwork. The roof is clad with ceramic tiles. Good externally				
Modification and Dates	Roof tiles replaced. Gutters and downpipes replaced.				

Based on the NSW Heritage Office State Heritage Inventory sheet

Archaeological	No known historic archaeological potential. Identified as being on potentially
potential	sensitive land on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply in addition to other Council policies.
	intaings protected appry in addition to other country pointies.

HISTORY

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.592

The Dunbar Street substation is a purposed designed and built structure constructed c1952 (BA263/1950 and BA211/1952) on part of land originally granted to Michael Kelly, Patrick Lewis Coonan, Michael Fitzpatrick, Frederick Dunne and George Avelor on 11 August 1914. The Dunbar Street substation was built by the Sydney County Council during the period of rapid expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

From Pennington, 2012

The site for this substation was acquired in 1939 to allow replacement of the existing Dunbar St pole transformer. However, the substation building was not erected until 1954.

The design of the building is particularly ornate, when compared to other contemporary SCC substations. This was done to appease Woollahra Municipal Council, which had by that stage taken over the area formerly administered by Vaucluse Municipal Council.

	HISTORICAL THEMES	
Australian Theme	NSW Theme	Local Theme
Building settlements, towns and	Utilities	Distribution of electricity
cities		

HERITAGE SIGNIFICANCE ASSESSMENT				
Historical significance SHR criteria (a)	The Dunbar Street substation is of historic significance as an unusually well detailed example of a substation built by the Sydney County Council during the later phases of suburban expansion of the electricity network.			

Historical association significance SHR criteria (b)	
Aesthetic significance SHR criteria (c)	The Dunbar Street substation is of aesthetic significance as an unusually well detailed example of a purpose designed substation building in Inter-War Mediterranean style and finished in rough cast rendered brickwork. It retains significant Inter-War period architectural detailing including geometric concrete blockwork and stylized wrought iron grilles.
Social significance SHR criteria (d)	
Technical/ Research significance SHR criteria (e)	The Dunbar Street substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	The Dunbar Street substation is of representative significance as an example of an electricity substation building, typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	In good structural condition externally.

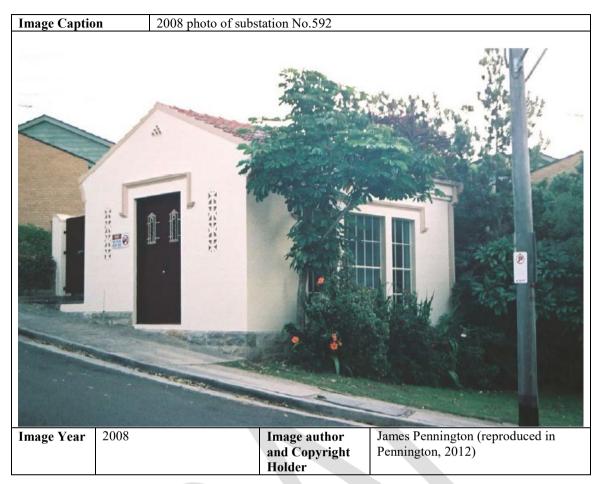
RECOMMENDATIONS					
Recommendations	It is recommended that the building, including its movable content, be listed as a heritage item in the Woollahra Local Environmental Plan 2014. It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, also be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and				
	when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment. Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the				
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.				

INFORMATION SOURCES					
Type	Author/Client	Title	Year	Repository	
Written	James Pennington	Electricity Substations of the Sydney Municipal Council and other local authorities	2012		

Written	James Pennington	The Sydney Electricity Supply System & Switchgear – The first 50 years	2011	
Written	Wilkenfeld and Spearitt	Electrifying Sydney	2004	
Written	MacLaren North	EnergyAustralia Heritage Register Review	2007	
Website	Heritage NSW	State Heritage Inventory		hms.heritage.nsw.gov.a

IMAGES





Current view of the subject site **Image Caption** 24 January 2022 Flavia Scardamaglia - Woollahra

AUTHOR OF THIS REPORT	
Flavia Scardamaglia - Woollahra Municipal Council	2022

Image author and Copyright

Holder

Municipal Council

Image Year

		ITEM DETAILS		
Name of Item	Electricity Substation No.622			
Former name	#622 'Comber Street' Substation			
Item type	Built / Utilities - Electricity / Electricity Transformer-Substation			
Address	Number 148	Street Boundary Street	Suburb Paddington	
Property	Lot	Dountary Street	DP	
description	1		219492	
Owner	Name Ausgrid			
Use	Current Electricity Si	ubstation	Former Electricity Substation	
Statement of significance	The Comber Street substation is of historic and aesthetic significance as a simple but well-proportioned example of a 1940s Functionalist substation. It was built by the Sydney County Council during the late phases of the suburban expansion of the electricity network into the suburbs and is a representative example of its type. Electrical Substation No.622 is of historic, aesthetic and representative significance at a local level.			
Level of	State: NO	Local: YES		
significance				
Heritage listings	Heritage Act - s.170 NSW State agency heritage register, Ausgrid Heritage Register, No. 3430466, Listing Date 1/11/1994.			
	Register, 140.	3430400, Listing Date 1/11/17	74.	
	DESCRIPTION			
Designer	Sydney Council			
Builder	Sydney County Council			
Construction years	1944			
Physical Description	The Comber Street substation is a single storey face brick structure of Interwar functionalist styling evidenced by an asymmetrical façade and the use of a concrete slab roof. The building is constructed using load bearing face brick and incorporated reinforced concrete slab rooves and features high level regularly spaced vertical slit vents on the external walls. All entrance doors are timber framed.			
Physical condition	Good externally			
Modification and Dates	Repalced asphalt roof. Front brick garden walls rebuilt. Gates missing.			
Archaeological potential	No known historic archaeological potential. Identified as being on land with no Aboriginal sensitivity on the Woollahra Aboriginal sensitivity mapping. Unexpected findings protocol apply.			
		HISTORY		
T 1 1 1 4 4 1 4				

Early historical notes

The coastal regions of Sydney between Port Jackson and Botany Bay are the ancestral territories of the Eora people. The traditional owners of the land now within the Woollahra Council area were the Cadigal (Gadigal) and the Birrabirragal people. In common with other tribes living by Sydney Harbour, the Gadigal lived in harmony with the natural resources within their country, fishing from canoes or hunting the animals that lived in surroundings. The tribe appears to have moved within their territory in response

Based on the NSW Heritage Office State Heritage Inventory sheet

to the seasons and family connections. Shell middens and other archaeological remains in the area provide material evidence of many centuries of sustained connection to the land that also sustained them. The arrival of white settlers caused the wholesale disruption of traditional life and the cultural practices of the Eora people generally. Despite enormous challenges, today many Indigenous people identify as Eora and maintain cultural practices and a connection to Country.

Electricity Substation No.622

The Boundary Street substation is a purposed designed and built structure constructed c1944 on part of 71 acres originally granted to Thomas West on 30 May 1844.

The Boundary Street substation was built by the Sydney County Council during the period of rapid expansion of the electricity network to the suburbs.

Following representations from the Municipal Council over some years, the New South Wales Parliament passed the Municipal Council of Sydney Electric Lighting Bill on 16th October 1896 and the Bill was signed on 27th October 1896. This Bill gave the Sydney Council the right to provide a public electricity supply to the City of Sydney and surrounding areas from 1904. The Electricity Department of the Sydney Municipal Council built and operated two power stations, one at Pyrmont from 1904, the second at Bunnerong (present-day Matraville) operating from 1929. These power stations supplied a large number of substations via networks of underground and overhead feeders. Through its substations, the SMC supplied electricity to various areas of Sydney.

In 1935, the Gas & Electricity Act established the Sydney County Council as an independent entity from the Sydney Municipal Council Electricity Department. From 1952, the Electricity Commission of New South Wales assumed control of the Sydney County Council infrastructure. In 1991, it was corporatized as Sydney Electricity, then rebranded as Energy Australia in 1996 and Ausgrid in 2011.

HISTORICAL THEMES					
Australian Theme	NSW Theme	Local Theme			
Building settlements, towns and	Utilities	Distribution of electricity			
cities					

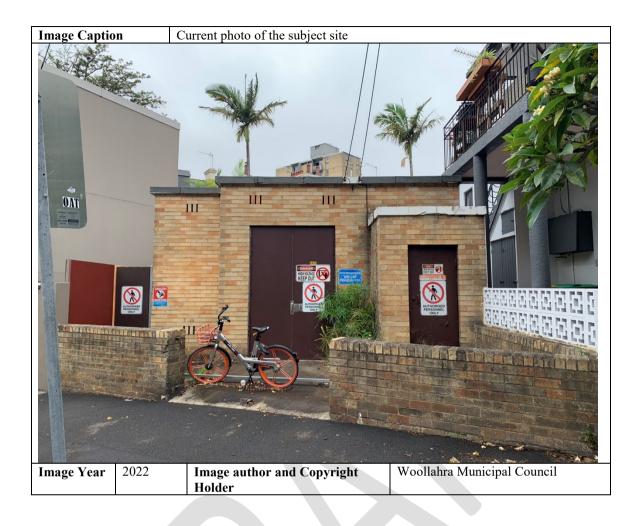
HERITAGE SIGNIFICANCE ASSESSMENT				
Historical significance SHR criteria (a)	The Comber Street substation is of historical significance as a typical example of the infrastructure built by the Sydney County Council during the late phases of the suburban expansion of the electricity network into the suburbs.			
Historical association significance SHR criteria (b)				
Aesthetic significance SHR criteria (c)	The Comber Street substation is of aesthetic significance as a simple but well-proportioned example of a 1940s Functionalist industrial building and demonstrates the shift in design approach away from the highly decorated examples found elsewhere in the Woollahra Municipality.			
Social significance SHR criteria (d)				

Technical/ Research significance SHR criteria (e)	The Comber Street substation may have technical/research significance, however further investigation including examination of the interiors is required.
Rarity SHR criteria (f)	
Representativeness SHR criteria (g)	Typical in form, scale and technical arrangement to distribution substations constructed throughout Sydney.
Integrity	

DECOMMEND ATIONS				
	RECOMMENDATIONS			
Recommendations	It is recommended that the building be listed as a heritage item in the Woollahra Local Environmental Plan 2014.			
	It is recommended that the interiors of the substation, including any fittings, fixtures, or moveable content therein, also be assessed against the significance criteria as part of a future project for possible future inclusion in the listing if and when internal access to the electricity substation is granted, or information regarding the interiors is able to be provided to Council for assessment.			
	Original details should be maintained including doors, windows and original signage. New materials should be sympathetic to the nature and character of the original building.			
	In the event of major proposed changes, prepare a Heritage Impact Statement and undertake an archival recording. Wherever possible, changes should be restricted to the interior of the building.			

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