

Pre-Construction Minor Works Approval Form

Minor Works are defined as any low impact activities that are undertaken prior to the commencement of 'construction' as defined in the project's applicable planning approval. However if Minor Works affect or potentially affect heritage items, threatened species, populations or endangered ecological communities, these works are defined as 'construction' unless otherwise determined by the applicable planning authority.

Minor Works approvals do not remove any obligation to comply with the project's applicable planning approval conditions (including requirements prior to 'any works' commencing) or obtain any other applicable permits, licenses or approvals as necessary.

This application and all supporting information must be submitted to TfNSW/the Environmental Representative as one (1) PDF file at least 10 business days prior to the commencement of the proposed Minor Works.

Part 1: Application	
Contractor:	RPS Pty Ltd
Project:	Sydney Metro – Utility investigations
Application Title: (e.g. Smith St trenching works)	Slit trenching at Mowbray Road, Chatswood 2067
Application Number:	2
Application Date:	01/02/2017
Planning Approval:	Sydney Metro City & Southwest - Chatswood to Sydenham (SSI 15_7400)
Minor Works Categories: <ul style="list-style-type: none"> Highlight as applicable. If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative. 	<ol style="list-style-type: none"> Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation). Treatment of contaminated sites. Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities. Operation of ancillary facilities that have minimal impact on the environment and community. Minor clearing and relocation of vegetation (including native). Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments. Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties. Utility relocation and connections. Maintenance of existing buildings and structures. Archaeological testing under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010) or archaeological monitoring undertaken in association with other Minor Works to ensure there is no impact on heritage items. Any other activities that have minimal environmental impact, including construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.
Planning Authority Determination: Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological communities?	No. Slit trenching will not occur within the curtilage of the locally heritage listed items in the vicinity of works.

Part 2: Details

<p>Describe the proposed Minor Works: Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).</p>	<p>Methodology <u>Subsurface detection / survey</u></p> <ul style="list-style-type: none"> • Commencement of utility location survey with 2 teams (2 people in each team) • Survey of all located assets via: <ul style="list-style-type: none"> ○ Electromagnetic Detection Tracing - 'electromatic wand' to allow for detection of all power and conducting lines, such as copper communication cables and cast iron water and gas mains ○ Small-scale Ground Penetrating Radar - 'In the field' resolution of nonconducting services such as PVC ducting, optic fibre, asbestos pipes ○ Large-Scale 3D Ground Penetrating Radar —to allow large scale blanket coverage of area. • Compilation and processing of all required data. • Confirmation of status of all DBYD located information. • Production of initial service plans based on located assets in CAD and other formats. <p><u>Exposure detection</u></p> <ul style="list-style-type: none"> • Confirmation of all locations for slit trenching. • Review and finalisation of all approvals and work plans related to slit trenching. • Final program submitted and implemented • Commencement of slit trenching works as follows: <ul style="list-style-type: none"> ○ Traffic control — set up ○ Service locate and mark up (via EMI/GPR and water soluble marking paint or chalk) ○ Concrete cut/asphalt cut if required. Two process options: <ul style="list-style-type: none"> - Use a wheel saw mounted on a high flow Bobcat: This process is suitable for trenches up to 200mm wide and 600 mm deep. With the saw operating over this width and grinding the trench with increments as small as 10mm the operator will often feel the change in material that allows the vac truck to investigate; or - Concrete cutting and breaking out: The concrete is cut using a concrete saw until the subbase is exposed allowing it to be broken and removed. A jack hammer is used cautiously to break the concrete into smaller sections. Once this breaking of concrete is complete the concrete is removed. ○ Removal of surface material ○ Excavate using 1 hydro vacuum excavation truck — (maximum pressure of 2000 PSI as per DBYD recommended pressure) to the following dimensions (Width 200mm, Length 5m and Depth 2m) ○ Field verification of existing infrastructure and services ○ Mark out exposed service positions measure and catalogue findings ○ Backfill to approved specification —with a 6 tonne jumping jack pneumatic compactor and vibration wacker plate will be used to ensure compaction ○ Re-instate surface using premium cold mix product (EZ Street or similar) ○ Ensure the work site is clean ○ Traffic control — pack up ○ Soil disposal will take place offsite at an appropriate licences facility and will be fully contained from site to disposal. • RPS team leader for utility surveys seconded to Vac Group to work with Works Manager to confirm and re-confirm or relocate utilities for slit trenching as well as be on site to confirm, attribute and assist in survey of exposed assets. • RPS Surveyor to attend site as required to survey exposed assets.
<p>Planned Commencement Date:</p>	<p>5th - 10th February inclusive (9:00pm to 5:00am).</p>
<p>Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors.</p>	<p>The proposed slit trenches along Mowbray Road, Chatswood (generally between Pacific Highway and the rail corridor) are predominately surrounded by commercial and residential receives. Nearest receivers to the proposed works are listed below:</p> <ul style="list-style-type: none"> • Residential apartment blocks at 342 and 344-346 Mowbray Road, Chatswood • Infrastructure (Ausgrid substation) at 348 Mowbray Road, Chatswood • Commercial (various shops) at 569 – 589 Pacific Highway, Chatswood • Commercial (various offices) at 337-355 Mowbray Rd, Chatswood.

(Uncontrolled when printed)

	Refer to attached environmental control map Appendix 1.
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Part 3: Environmental Risk Assessment and Management

Prepare an Environmental Risk Assessment (in accordance with the *Sydney Metro Risk Management Standard*) and an Environmental Control Map for the proposed Minor Works and attach as Appendix 1.

If an Environmental Risk Assessment and/or an Environmental Control Map for the proposed Minor Works is/are already contained in existing documentation, attach the relevant section(s) as Appendix 1.

Documentation: List any existing documents (including those referenced above) that the proposed Minor Works will be undertaken in accordance with and attach as Appendix 2 (e.g. plans, procedures, procedures, etc.).	Refer to attached environmental control map Appendix 1. Refer to SOHI Appendix 2. Subject to DPE approval, mitigation measures as outlined in the CEMP (for the Utility Investigation Works) are to be complied with.
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Part 4: Workforce Notification

How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce?	<ul style="list-style-type: none"> • Site induction • Pre-start meeting • Toolbox talks
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Part 5: Community Consultation

What community consultation has been undertaken already?	An Out of Hours Application (OOH) form has been approved for the proposed works. Refer to Attachment 3. A condition of the OOH is that the Sydney Metro communications team is to notify surrounding residential receivers, 7 days in advance. Notification is to be in the form of letter box drops or door knocking. This consultation has been undertaken.
What community consultation is planned to be undertaken?	Nil.
If drafted already, attach applicable Community Notification as Appendix 3.	


Part 6: Contact Details

Nominate contractor's project manager, environmental and communications contact(s).

Name:	Stanley Tan	Position:	Project Manager and communications contact	Phone:	0400 839 369
	Gareth Thomas		Environment contact		0414 228 613

Part 7: Signature

This signature acknowledges that the proposed Minor Works will be undertaken in accordance with this application, have minimal environmental impact and are not defined as 'construction' in accordance with the applicable planning approval.



Name:	Gareth Thomas		
Signature:		Date:	03/02/2017

Determination Page

(TfNSW/Environmental Representative Use Only)

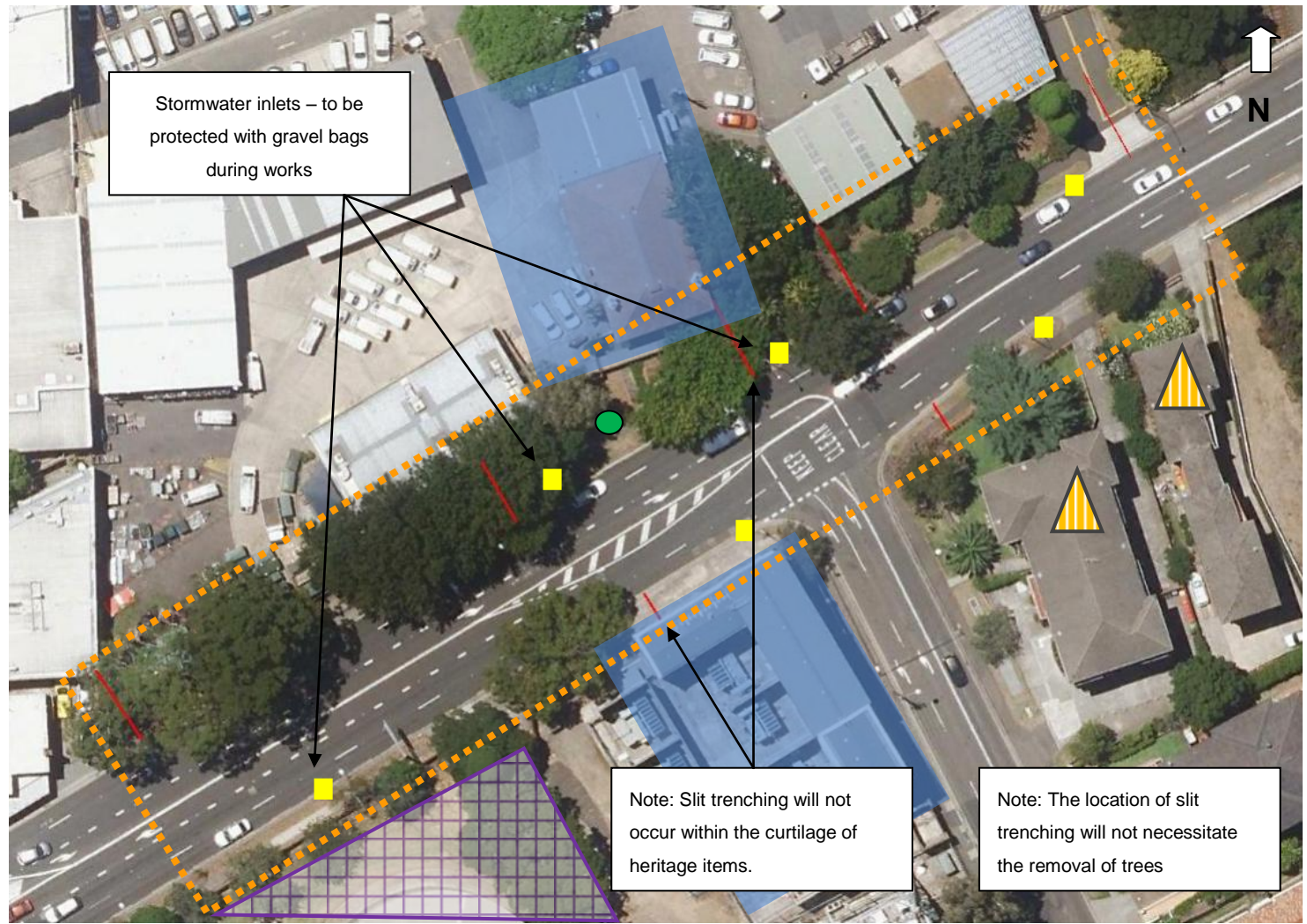
12. Endorsement/Approval

These signatures represent formal endorsement/approval for the proposed Minor Works to commence in accordance with this application and the applicable planning approval requirements (subject to any determination from the applicable planning authority as may be required by the planning approval conditions).

	TfNSW Principal Manager, Communication & Engagement – Endorsement (required for all applications)	TfNSW Principal Manager, Sustainability, Environment & Planning – Approval (required for all applications)	Environmental Representative – Endorsement (required as necessary in accordance with the applicable planning approval, optional for all other circumstances)
Signature:			
Name:	ROBIN BAIRD	FIL CELONE	
Date:	3/2/17	3/2/17	
Comments:	N/A		Supporting letter attached as Appendix 4 if necessary.
Conditions:	N/A	*RPS to ensure no slit trenching to be undertaken within the heritage curtilage of either Mowbray House or the electricity sub-station.	Supporting letter attached as Appendix 4 if necessary.
<input checked="" type="checkbox"/> Approved (by TfNSW)			
<input type="checkbox"/> Endorsed (by Environmental Representative)			
<input type="checkbox"/> Rejected			

Appendix 1: Environmental Control Map

ENVIRONMENTAL CONTROL MAP
 SITE NAME: MOWBRAY ROAD, CHATSWOOD



General Construction Notes

- This control plan is to be read together with the relevant project environmental documentation i.e. CEMP.
- Vehicles to use designated access points outlined in the Traffic Control Plans (TCPs).
- Spill kits to be stored at designated points within the site that are readily accessible to the construction team.
- Ensure measures/materials are ready to mitigate for unforeseen erosion during heavy rainfall

Legend

	Slit trenches
	Sensitive receivers (residential)
	Site boundary (to be determined by TCP)
	Local heritage item (LEP)
	State heritage item
	Spill kit

Prepared by:	Gareth Thomas	Reviewed & approved by:	
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STOP WORK REQUIRMENTS	
Aspect	Requirements
Unexpected heritage find	Stop all work in vicinity immediately. Contact Project Environmental Manager. Project Environmental Manager to contact TfNSW Environmental Manager.
Water discharge	Do not proceed without prior approval from Environmental Manager. The TfNSW form <i>Approval to discharge or reuse water 9TP-FT-160</i> is to be completed for all off site dewatering.
Contamination / Hazardous Materials – Suspected contamination material discovered	Stop all work in vicinity immediately. Contact Project Environmental Manager. Contact TfNSW Environmental Manager. Contact the Project ER.
Environmental Incident – Hydrocarbon / Chemical Spill, Contaminated Material Release or Turbid Run-off to Surface Water	Contact the Project Environmental Manager immediately and without delay. Follow incident response guidelines in the CEMP.

CONTACT INFORMATION		
Project Manager	Stanley Tan	0400 839 369
Environmental Manager	Gareth Thomas	0414 228 613
WHS Manager	Stanley Tan	0400 839 369
TfNSW Response Line		1800 775 465
Transport Project Line		1800 684 490
EPA Environmental Line		131 555
Fire and Rescue		000
City of Sydney Council		02 9265 9333
WorkCover		13 10 50
Ministry of Health		(02) 9391 9000
WIRES		1300 094 737

HOURS OF WORK
Out-of-hours works approved hours for these works- 10pm to 5am ROs specify works between the hours 10:00pm and 5:00am

Appendix 2: Statement of Heritage Impact



Sydney Metro Subsurface Utilities Location

Statement of Health Impact -

Prepared by:

RPS AUSTRALIA EAST PTY LTD

Level 13, 255 Pitt Street,
Sydney, New South Wales 2000

T: 02 9249 9800
E: sydney@rpsgroup.com.au

Prepared by: Deborah Farina
Reviewed: Erin Williams
Approved: Deborah Farina
Project No.: PR132497-2
Version: 1.0
Date: December, 2016

Prepared for:

TRANSPORT FOR NEW SOUTH WALES

COMMERCIAL IN CONFIDENCE

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DOCUMENT STATUS

1.0	Heritage Impact Assessment at Mowbray Road, Artarmon ahead of slit trenching for Sydney Metro	Deborah Farina	Erin Williams	13/12/2016

APPROVAL FOR ISSUE

Deborah Farina		13/12/2016

Executive Summary

R S was engaged by Transport of New South Wales to prepare a Statement of Heritage Impact as part of the geotechnical works associated with the Sydney Metro project. The geotechnical works comprise pot-holing and slit trenching in areas of impact of the proposed rail link infrastructure. The purpose of the geotechnical works is in order to locate underground utility services.

The Sydney Metro project is a new standalone rail network with two core components:

- The construction of an underground rail line between Chatswood Station and Sydenham station;
- The upgrade the existing rail line between Sydenham station and Bankstown station.

As part of the Chatswood – Sydenham portion of the Sydney metro project, R S has been engaged to undertake slit trenching to locate subsurface utility services. According to earlier studies (Artefact ty Ltd 2016) three areas where the slit trenching is to occur have heritage items in the vicinity. These three areas are:

- Regent Street, Chippendale
- Mowbray Street, Chatswood
- Hickson Road, Barangaroo.

R S has been engaged to undertake heritage assessments at these three locations. R S heritage staff will also monitor the slit trenching to ensure that no subsurface items or significant archaeological deposits are impacted.

The study area for this assessment is located along **Mowbray Road, Chatswood**. The study area is wholly within the Willoughby local government area and is located along the northern kerb of Mowbray Road, to the east of Pacific Highway, Artarmon (see Figure 1).

Seven geotechnical trenches are proposed for the study area, five on the northern footpath/road corridor and two on the southern side. The trenches are proposed to be approximately 200 millimetres wide, five metres in length and two metres in depth. As these trenches are for geotechnical purposes, they are considered to be exempt development and no permits are therefore required as long as there is no significant impact on heritage items.

One trench is proposed to be located within the curtilage of the local heritage listed Mowbray House. A significance and impact assessment (at Sections 6 and 7 below), however, conclude that the trench will not detrimentally impact the fabric, setting or significance of Mowbray House. As the purpose of this assessment is to investigate whether the proposed works poses an environmental risk, the proposed trenching therefore falls within the definition of an exempt development (see below).

Subsequent to this assessment, the following mitigation and management recommendations are made:

Recommendation 1 – Heritage Induction

It is recommended that a heritage induction exercise be carried out in advance of the proposed works. All relevant staff, contractors and subcontractors will be made aware of their statutory obligations for heritage under the *Heritage Act 1977*, through the site induction and toolbox talks.

Recommendation 2 – Archaeological Monitoring

It is recommended that as one trench is proposed to be located within the curtilage of Mowbray House that the excavation of that trench be monitored by a qualified archaeologist.

Recommendation 3 – Unexpected Finds

If, during the course of development works, suspected archaeological relics, as defined by the *Heritage Act 1977* (as amended), are uncovered, work should cease in that area immediately and the Transport for New South Wales *Unexpected Finds* protocol be followed. A copy of that document should be kept on site for the duration of the works.

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1 Introduction

R S was engaged by Transport of New South Wales to prepare a Statement of Heritage Impact as part of the geotechnical works associated with the Sydney Metro project. The geotechnical works comprise pot-holing and slit trenching in areas of impact of the proposed rail link infrastructure. The purpose of the geotechnical works is in order to locate underground utility services.

Geotechnical works in disturbed areas are generally considered to be exempt development under the *Environmental Planning & Assessment Act 1979* (E &A). One of the provisos of this is that the proposed works poses minimal environmental impact. As one trench is located within the curtilage of the locally significant heritage item known as Mowbray House, this assessment is to investigate whether the geotechnical works fall within the ambit of “minimal environmental impact”.

1.1 Study area

The study area for this assessment is located along **Mowbray Road, Chatswood**. The study area is wholly within the Willoughby local government area and is located along the northern kerb of Mowbray Road, to the east of Pacific Highway, Artarmon (see Figure 1).

1.2 Proposal

It is proposed that seven trenches will be excavated measuring approximately 200 millimetres wide, five metres in length and two metres in depth. As the purpose of these trenches is to locate underground utility services the dimensions of the trenches are approximate to allow for accurate identification. For this reason an area of approximately 70 metres x 20 metres around the proposed location of the trenches is being assessed. Trenching will not take place outside of this area without additional assessment.

In order to minimise disruption to pedestrian and vehicle traffic, the trenches are planned to be excavated after hours.

1.3 Methodology

This Statement of Heritage Impact has been prepared in accordance with *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)* (2013) and associated Guidelines as well as best practice standards set by the NSW Heritage Branch. Best practice guidance followed in this report includes *Assessing Heritage Significance* (Heritage Officer (former), 2001) and *Statements of Heritage Impact* (Heritage Office and Department of Urban Affairs & Planning (former), 1996, revised 2002).

1.4 Authorship and acknowledgements

This report has been prepared by R S Heritage Manager Sydney, Deborah Farina with the assistance of Claire Rayner. A technical review was undertaken by R S Senior Executive – Environment and Heritage, Erin Williams.

The assistance in the preparation of this report by the following people and organisations is also gratefully acknowledged.

Table 1 : Acknowledgements

Stanley Tan	RPS Spatial, Visual and Subsurface Consultant
Sofia Romic	RPS
Nicole Williams	Transport for New South Wales

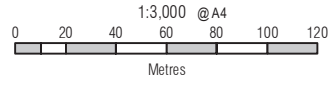


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No.	Date	Revision Details	INI

PREPARED FOR:

CHECKED BY/DATE:	HAK/12-12-2016	CO-ORDS:	MGA
APPROVED BY/DATE:	DF/12-12-2016	DATUM:	N/A
GIS REF:	132497 Figure 1-A A4 20161212		
JOB REF:	SPA	DATE OF PLAN:	12-12-2016



2 Heritage Significance Assessment Framework

The following section provides an overview of the legislative framework relating to the protection and management of historic heritage. This overview is provided solely as information for the client rather than as legal advice. The findings from a review of national, state and local statutory heritage registers are provided in Section 2.2 below. The relevant planning requirements as set out in current statutory planning instruments prepared by the Council of the City of Sydney are described in Section 2.3.

Heritage Act 1977 and the NSW Heritage Branch

Historical archaeological relics, buildings, structures, archaeological deposits and features are protected under the *Heritage Act 1977* (and subsequent amendments) and may be identified on the State Heritage Register (SHR) or by an active Interim Heritage Order.

The Heritage Council of NSW, constituted under the *Heritage Act 1977*, is appointed by the Minister and is responsible for heritage in NSW. The Council reflects a cross-section of community, government and conservation expertise with the NSW Heritage Branch being the operational arm of the Council. The work of the NSW Heritage Branch includes:

- Working with communities to help them identify their important places and objects;
- Providing guidance on how to look after heritage items;
- Supporting community heritage projects through funding and advice; and
- Maintaining the NSW Heritage Database, an online list of all statutory heritage items in NSW

The 1996 NSW Heritage Manual, published by the NSW Heritage Branch and the then Department of Urban Affairs and Planning, provides guidelines for conducting assessments of heritage significance. The Manual includes specific criteria for addressing the significance of an item and this assessment has been completed in accordance with those guidelines. These criteria are addressed more fully in Section 7 of this report.

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (E & A Act) regulates a system of environmental planning and assessment for NSW. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage. Assessment documents prepared to meet the requirements of the E & A Act including Reviews of Environmental Factors, Environmental Impact Statements and Environmental Impact Assessments, should address cultural heritage where relevant. Statutory planning documents such as Local Environment Plans and State Environmental Planning Policies typically contain provisions for heritage.

The Burra Charter : ICOMOS Charter for Places of Cultural Significance 2013

The *Burra Charter* is a set of best practice principles and procedures for heritage conservation. It was developed by Australia ICOMOS (International Council for Monuments and Sites), the Australian group of the international professional organisation for conservation. Although without statutory weight, the *Burra Charter* underpins heritage management in New South Wales and Australia. The policies and guidelines of the Heritage Council of NSW and the NSW Heritage Office are consistent with and guided by the *Burra Charter*.

2.2 NSW Heritage Registers Review

Acknowledged heritage items and places are recorded in statutory and non-statutory registers held at the Federal, State and local level depending on their level of significance. Internationally significant sites of 'outstanding universal value' are inscribed in the World Heritage List (WHL) and in turn, such sites are usually recognised through their inclusion on Federal and state-level registers.

Federal designations include the National Heritage List (NHL) and the Commonwealth Heritage List (CHL) created by the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Both registers are maintained by the Commonwealth Department of the Environment and are available to view on an online database, the Australian Heritage Database. The NHL includes natural, historic and Indigenous places that are of outstanding national heritage value to the Australian nation. The CHL protects natural, Indigenous and historic heritage places on land owned or leased by the Commonwealth or a Commonwealth Authority. To reach the threshold for the NHL, a place must have 'outstanding' heritage value to the nation whereas to be entered on the CHL, a place must have 'significant' heritage value.

Heritage places of state significance are included on the State Heritage Register (SHR) maintained by the Heritage Branch. Places included on the SHR are available on an online database, the NSW Heritage Inventory database; however, it should be noted that the inventory includes items of state and local significance in NSW, it may not necessarily be comprehensive and inclusion on the inventory does not carry statutory weight in its own right. In order to reach the threshold for inclusion in the SHR, a place needs to meet one of more of the heritage criteria identified by the Heritage Council of NSW. The ultimate decision on whether a place is included on the State Heritage Register is made by the Minister for Heritage.

Places of local significance are included in heritage schedules in Local Environmental Plans (LEPs).

2.3 World Heritage

There are **no World Heritage sites** ('WHS') located within the study area.

2.4 National and Commonwealth Heritage

A search of the Australian Heritage Database was undertaken on 9 November 2016 which indicates that there are **no items within the study area included on the NHL or CHL**.

2.5 State Heritage

A search of the State Heritage Inventory database on 9 November 2016 found two items included on the SHR and no items subject to an interim, or authorised interim heritage order.

Table 2 : Items of State Significance on the State Heritage Register (SHR)

Chatswood Reservoirs No. 1 and No. 2	559 Pacific Highway, Artarmon	01321
Chatswood South Uniting Church and Cemetery	518 Pacific Highway, Lane Cove North	00694

2.6 Section 170 Registers

Section 170 of the *Heritage Act 1977* requires State Government Agencies to keep records of heritage items owned or operated by it. These registers can be found on the NSW Heritage Inventory. A search of this inventory was carried out on 9 November 2016 and no items were identified as being located within the study area.

2.7 Local Heritage

A search of Schedule 5 of the Council of the City of Sydney Local Environmental Plan 2012 identified three local heritage items within the study area.

Table 3 : Local heritage items within study area


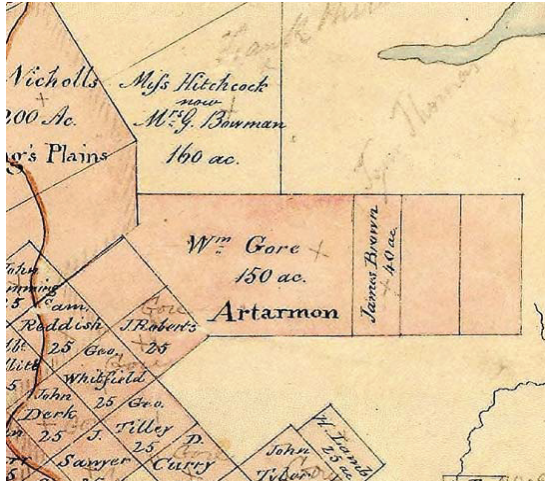
Chatswood Zone substation No. 80 (building only)	Mowbray Road, Artarmon	Local
Great Northern Hotel (including original interiors)	522 Pacific Highway, Chatswood	Local
Mowbray House and 10 metre curtilage	339 Mowbray Road, Artarmon	Local

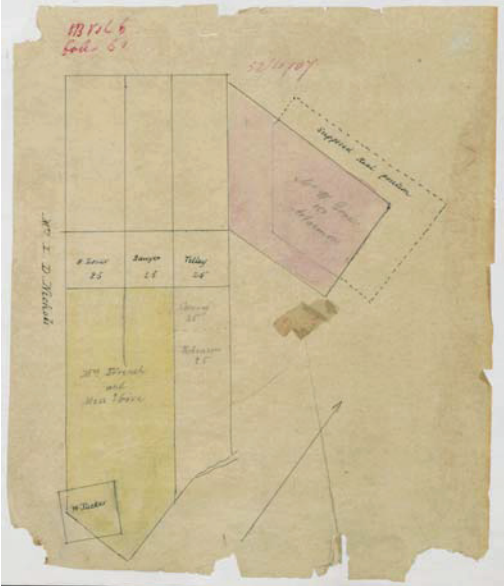


3 Historical context


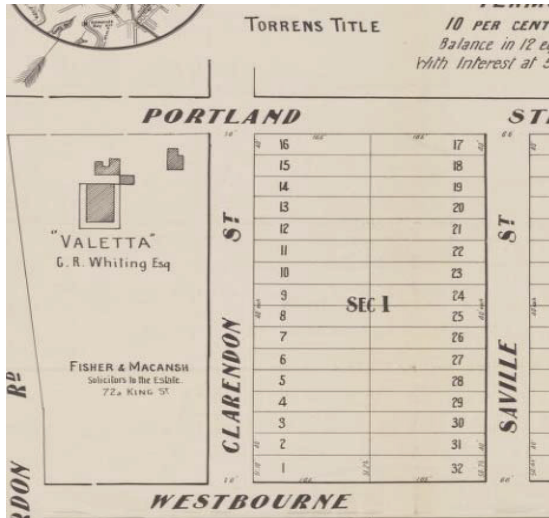
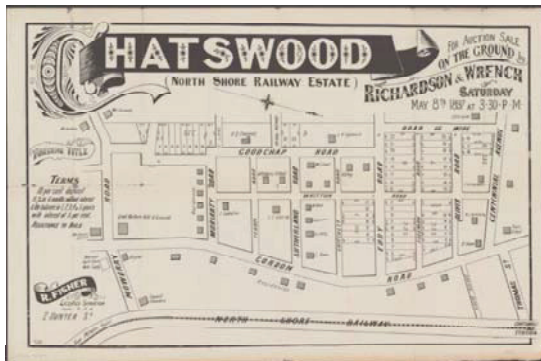
This historical context sets out the development of historical land use in the study area. This is included in order to provide a context for remaining heritage items as well as allow some predictions of potential archaeological remains.

3.1 Broad Historical Context

Table 4 : Timeline of general area

<p>Pre 1810</p>	<p>Traditional use by the Cammeraygal people, who occupied the lower north shore of Sydney Harbour. Image Courtesy of Aboriginal Heritage Office.</p>	
<p>1810</p>	<p>Land granted to William Gore, Provost-Marshal of New South Wales (Courtesy LPI – Parish Map Preservation Project)</p>	

<p>1818</p>	<p>Cottage built, named "Artarmon House", likely to have been named after "Ardtarmon" in Ireland, near Sligo (Courtesy State Archives of New South Wales)</p>	 <p>A hand-drawn site plan on aged paper. It shows a rectangular plot divided into several sections. One section is shaded in pink and labeled 'Artarmon House'. Other sections are labeled with dimensions: '25', '25', '25', '25', '25', '25', '25', '25'. There are also handwritten notes in red ink at the top: '1872/6' and 'Sub. 61'. The plan includes a north-south orientation and a scale bar.</p>
<p>1845</p>	<p>Death of William Gore, sale of land to entrepreneur Richard Harnett (Courtesy Willoughby District Historical Society Inc.)</p>	 <p>A black and white photograph showing a horse-drawn carriage. Two horses are harnessed to the carriage, which is being driven by a person. The scene is outdoors, possibly on a dirt road or field.</p>
<p>1869</p>	<p>Demolition of original Artarmon House, construction by Harnett of a new Artarmon House, brick stables and a staff residence (Courtesy Willoughby District Historical Society Inc.)</p>	 <p>LATE RICHARD HARNETT, First Commodore of the P.A.Y.C.</p> <p>An oval-shaped black and white portrait of an elderly man with a full white beard and mustache. He is wearing a dark suit jacket over a white shirt and a dark bow tie. The portrait is set against a light background.</p>

<p>1876</p>	<p>House bought by Richard Seldon (Courtesy Willoughby District Historical Society Inc.)</p>	 <p>Richard Seldon, Mayor of Willoughby 1876-1880.</p>
<p>1880</p>	<p>Purchase of 100 acres of the Artarmon estate by George Robert Whiting, including the new Artarmon House. House is renovated in the Grand Victorian style and renamed it "Valetta". Gardens, a tennis court and bowling green is added. Became known locally as "the Big House". Subdivision of the estate begins (Courtesy State Library of NSW)</p>	 <p>TORRENS TITLE 10 PER CENT Balance in 12 a with Interest at 5</p> <p>PORTLAND ST</p> <p>VALETTA G. R. Whiting Esq</p> <p>FISHER & MACANSH Solicitors to the Estate 72, KING ST</p> <p>CLARENDON ST</p> <p>SAVILLE ST</p> <p>WESTBOURNE</p>
<p>1897</p>	<p>North Shore Railway precipitates subdivisions of remaining estates (Courtesy State Library of New South Wales)</p>	 <p>HATSWOOD (NORTH SHORE RAILWAY ESTATE)</p> <p>FOR AUCTION SALE ON THE GROUND BY RICHARDSON & WRENCH SATURDAY MAY 27 1897 AT 3.30 P.M.</p>
<p>1890s-1950s</p>	<p>Brick-making enterprises become the dominant industry and by 1889 were the largest brickworks in NSW.</p>	

1920s-1930s	Following the North Shore railway and establishment of industry the interwar period saw a rapid establishment of residential properties.	

i | background to Study Area

William Gore arrived in the colony in 1806 with Governor William Bligh, having been appointed as Provost-Marshal of New South Wales. Gore was not well liked in the colony, largely due to his carrying out the duties assigned to him by Bligh, and referred to as “the odious Gore”. Following the deposition of Governor Bligh, Gore was arrested and charged with perjury but refused to recognise the legitimacy of the Court and so refused to plead. After languishing in prison for two months without trial he was sentenced to transportation with hard labour to Coal River (Newcastle).

Following the arrival of Lachlan Macquarie, Gore was restored to his office as Provost-Marshal and granted 150 acres, which he named Artarmon. He continued to buy adjoining grants and by 1815 owned most of the land bounded by Mowbray Road, Elizabeth Street to Artarmon Road (Warne 2005:18). Unfortunately Gore defaulted on his mortgages and lost all but the land upon which Artarmon House was built. He died on his property in 1845 (Willoughby City Library Services 2013).

The original commercial centre of the suburb that became Chatswood was at the intersection of the current Pacific Highway (then known as Lane Cove Road, or Gordon Road) and Mowbray Road on land bought by John Bryson, who had migrated from Ireland in the 1840 with his wife Ann. By 1864 a bush chapel was constructed on the south western corner of the intersection, and John Bryson built his house, named “Bryson” on the north eastern corner. The Great Northern Hotel (Plate 1), briefly named the Artarmon Hotel, was constructed on the north western corner, and the first gas lamp in the area was lit at the junction of Mowbray Road and Pacific Highway on 31 December 1896 (Willoughby District Historical Society Inc. und).



Plate 1 : Great Northern Hotel, c 1900 (Courtesy Willoughby Museum).

Chambers for the local council were originally in the School of Arts building, also on Bryson’s land, to the east of the Pacific Highway (see Plate 2) This building was used as the council chambers until 1903, before

the construction of Mowbray House School in 1906 (see Plate 3), after which the School of Arts building became the Chapel for the school (see Plate 4 below). One of its notable students was former Prime Minister, Gough Whitlam, who attended the school in the 1920s before starting at Knox Grammar.

The school continued until 1954, when it was acquired by the Sydney County Council as their main depot and administrative centre in the northern suburbs. The chapel was dismantled in 1957 and reconstructed as the Mowbray Chapel of the Holy Trinity Mowbray on the corner of Beaconsfield Road and Dalrymple Avenue, Chatswood. The school building remains standing and is listed as a locally significant heritage item.



Plate 2 : Mowbray Road, 1912 (Courtesy Chatswood West Ward Progress Association).



Plate 3 : Mowbray House, c.1950 (Courtesy Chatswood West Ward Progress Association).



Plate 4 : Mowbray School Chapel, c 1950 (Courtesy Chatswood West Progress Association).

4 Visual Inspection

In keeping with best heritage practice, a visual inspection of the Project Area was made on 12 December 2016. The following paragraphs include a discussion of the general physical context of the study area, and more detailed analyses of the heritage items:

- Adjoining the Project Area; and
- In the vicinity of the Project Area.

The locations of identified heritage items are shown in Figure 2.

4.1 Physical Context

The study area is an urban streetscape bordered mostly by utility buildings. Mowbray Road is a major arterial road linking the suburbs of Willoughby, Castlecrag and Northbridge in the east to Epping Road and the suburbs of Lane Cove, North Ryde and East Ryde in the west. The study area is approximately halfway along the alignment of Mowbray Road to the west of the main northern railway line and to the east of the intersection with the Pacific Highway.

The landscape is highly modified however it would appear that Mowbray Road follows an east-west trending ridge approximately 100 metres above sea level.

The northern side of the study area is mostly taken up with an Ausgrid site, which includes the local heritage listed Mowbray House. The southern side of Mowbray Road is also taken up with utility services, with the State Heritage listed Chatswood 1 and 2 Reservoirs and the Electricity Substation No. 80, which is an item on Ausgrid's s.170 heritage register.

All trenches are to be excavated within the area occupied by a pedestrian path and the road corridor.

Mowbray House

This Federation era two storey brick and tile building is part of the Ausgrid complex on the northern side of Mowbray Road between the Pacific Highway and the main north rail corridor (late 5). The lower storey comprises brick with an arched entry while the upper storey comprises painted render. The lower windows and entrance doors are covered with security screens, however the windows throughout appear to be of original construction. Dense vegetation separates the southern elevation of the building and the property boundary.

There is approximately eight metres' clearance between the southern elevation and the property boundary fence.



Plate 5 : Mowbray House, looking north east (R S, 2016).

Chatswood Zone Substation No. 80 (building only)

This building is located on the southern side of Mowbray Road (Plate 6). It is described as an “interwar free style electricity substation”. It was constructed in 1923 as part of the expansion of electricity supply to the northern suburbs.



Plate 6 : Chatswood Zone Substation No. 80, looking south east (R S, 2016).

Chatswood Reservoirs 1 and 2

Both of these Reservoirs are located on the south east corner of Mowbray Road and the Pacific Highway and are listed on the State Heritage Register (Plate 7).

Constructed in 1888, these reservoirs are made of riveted steel and were built as part of the Upper Nepean scheme, which supplied water to Sydney from the Upper Nepean via Prospect Reservoir and the Ryde pumping station (Plate 7). These reservoirs were a key component in the supply of water to the Chatswood area (Heritage Division 2005).



Plate 7 : Chatswood Reservoir, looking south (R S, 2016).



Great Northern Hotel

There has been a hotel on this site since 1878. The current structure is an interwar two storey hotel, with the v-shaped facade addressing the intersection of Mowbray Road and the Pacific Highway. The original hotel was constructed between 1870 and 1878 by Henry Russell (see Plate 1 above), then demolished after Tooth & Co acquired the site in 1927. The current structure was built sometime before 1930 (Plate 8 below) (Heritage Division 2013).



Plate 8 : Great Northern Hotel, looking west (R S, 2016).

Its of i l i

It was confirmed during the visual inspection that the proposed trenches as per Figure 1 are to be located either on the footpaths or the road corridor. This poses no risk of impact to either the Chatswood Reservoirs No. 1 and No. 2, or the Chatswood Zone Substation No. 80.

In relation to Mowbray House, although the trenches are proposed to be located outside of the property boundary, it is noted that the curtilage of the heritage item extends 10 metres from the walls of Mowbray House. It was estimated that the distance between the southern elevation and the property boundary was approximately eight metres. It is therefore likely that the proposed trench in front of Mowbray House will be within the heritage curtilage.



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APPROVED BY/DATE:		DF/12-12-2016	DATUM:	N/A			
JOB REF:		SPA	GIS REF:	132497 Figure 2-A A4 20161212	DATE OF PLAN:		12-12-2016
No.		Date	Revision Details		INI		

5 Heritage Significance Assessment

In line with the *Burra Charter*, before making decisions about the future of a heritage item it is first necessary to understand its heritage significance and the values it embodies. As noted in Section 4 above, there are three items within the study area, however impact is only possible to one, being Mowbray House, with Chatswood Reservoirs No. 1 and No. 2 and the Substation both outside the area of impact.

The following section therefore contains an assessment of the heritage significance of Mowbray House only, using the NSW state significance heritage criteria as explained in *Assessing Heritage Significance* (Heritage Office (former), 2001). Consideration is also given to its integrity and intactness.

The findings of the following significance assessment are summarised in a Statement of Significance contained within Section 5.3.

Historical Themes

National and state-level patterns of historical development are useful in determining the historical value of a site. Nine historical themes have been developed and adopted by NSW Heritage Council. They are derived from the Australian historical themes prepared by the Australian Heritage Commission. The following table notes the NSW historical themes considered to be in evidence at Mowbray House.

Table 5 HSW Historical Themes Considered to be in Evidence

Settlement – Building settlements, towns and cities	Utilities – Activities associated with the provision of services, especially on a communal basis	Electricity
Educating - educating	Education – activities associated with teaching and learning by children and adults, formally and informally	Schools

Assessment

The following assessment uses the NSW State Significance Criteria as set out in ‘Assessing Heritage Significance’ ((former) Heritage Office, 2001). With reference to the SHR citation Mowbray House is assessed as follows:

Table 6 : Significance assessment of Mowbray House

Historical significance – (SHR Criteria A – An item is important in the course, or pattern, of NSW’s cultural history (or the cultural or natural history of the local area)	Mowbray House was constructed in 1906 as Chatswood Preparatory School by Lancelot Bevan. It provided boarding and day independent education for boys. It therefore fulfils this criterion.
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<p>Associative Significance (SHR Criteria B – An item has strong or special association with the life or works of a person, or a group of persons, of importance in NSW’s cultural or natural history)</p>	<p>Mowbray House was the former school of former Prime Minister, Gough Whitlam and therefore fulfils this criterion.</p>
<p>Aesthetic Significance (SHR Criteria C – An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement)</p>	<p>Although the building has been modified periodically, it retains many of its original features. The State Heritage Inventory states that it is “still a recognisable example of a good quality Federation Arts and Crafts school building”. The building therefore fulfils this criterion to a high local level.</p>
<p>Social Significance (SHR Criteria D – An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons)</p>	<p>It may hold social significance for former students of the school, however the social heritage significance of this would require additional quantitative research.</p>
<p>Research Potential (SHR Criteria E – An item has potential to yield information that will contribute to an understanding of NSW’s cultural or natural history)</p>	<p>The school was constructed adjacent to the site of the former School of Arts, which was also used as Council chambers from 1878 to 1903. The School of Arts building was dismantled and reconstructed in 1957 as the Holy Trinity Anglican Church at the corner of Beaconsfield Road and Dalrymple Road, Chatswood, was used as the chapel for the school. Both the school and the chapel were built on the former “Bryson” estate, which was also the early mercantile and residential hub of Chatswood. Given the long history of the site, some archaeological potential exists in the surrounds of the Mowbray House building. It therefore fulfils this criterion.</p>
<p>Rarity (SHR Criteria F – An item possesses uncommon, rare or endangered aspects of NSW’s cultural or natural history (or the cultural or natural history of the local area))</p>	<p>It is one of the last remaining buildings on the site associated with the school. It therefore fulfils this criterion.</p>
<p>Representativeness (SHR Criteria G – An item is important in demonstrating the principal characteristics of a class of NSW’s (or the local area’s) cultural or natural places; or cultural or natural environments)</p>	<p>The building is representative of a Federation Arts and Crafts school building. It therefore fulfils this criterion.</p>

Integrity and intactness

Only the exterior of the building was assessed as part of this assessment. The fabric appears to be mostly original and the overall facade is still recognisably of a Federation age. The State Heritage Inventory notes several phases of modification – a first floor extension was undertaken in 1957 and additional modifications were made internally in the 1960s. The inventory sheet notes, however, that the modifications are recoverable.

5.3 Statement of Heritage Significance

Mowbray House is a recognisable example of the Federation Arts and Crafts style. It is significant on the basis of its historical, associative and aesthetic heritage significance, as well as its rarity, research potential and representativeness.

6 Statement of Heritage Impact

The following section assesses the likely heritage impacts of the proposed development on the heritage significance of Mowbray House. Consideration is also given to the likely impact of the proposal on the

6.1 Summary of Proposed Changes

It is proposed that seven trenches will be excavated measuring approximately twenty centimetres wide, five metres in length and two metres deep. As the purpose of these trenches is to locate underground utility services the dimensions of the trenches are approximate to allow for accurate identification. For this reason an area of approximately 70 metres x 20 metres around the proposed location of the trenches is being assessed. Trenching will not take place outside of this area without additional assessment.

In order to minimise disruption to pedestrian and vehicle traffic, the trenches are planned to be excavated after hours.

6.2 Impact of Development Proposal on Physical Fabric, Attributes, and Setting

As the works are subsurface and on the footpath to the south of the item, approximately eight to ten metres from Mowbray House, there is no potential for the proposal to affect the physical fabric, attributes and/or setting of the item. It is, however, considered to be within the curtilage of the item, which is set at ten metres surrounding Mowbray House.

The archaeological potential of the vicinity was considered by the Statement of Heritage Impact (Artefact Pty Ltd 2016) and Historical Archaeological Management Plan and Preliminary Scope (Artefact Pty Ltd 2016:2). Those investigations identified Mowbray House as being of low archaeological potential. It is further noted that the area in which the proposed trench is to be excavated is outside of the property boundary and has been heavily disturbed by the construction of fencing, footpaths and other services.

However, it is noted that the trench is predicted to be two metres deep. Archaeological deposits may therefore still exist below the existing disturbances. As the proposed trench is to be located within the curtilage of Mowbray House, it is considered prudent that an archaeologist be on hand to monitor the excavation of this trench.

Further, as this geotechnical work is considered to be part of an exempt development, **no permit will be required** for the trenching.

6.3 Summary of Heritage Impact

One trench will be located within the curtilage of a locally listed heritage item, namely, Mowbray House, which has a 10 metre buffer listed as part of that curtilage. It is not anticipated that the trenching will cause any detrimental impact to the fabric, setting or significance of Mowbray House. As a precautionary measure, a qualified archaeologist should monitor the excavation of this trench to ensure any archaeological deposits are not disturbed.

7 Conclusion and Recommendations

7.1 Conclusion

This report has considered the significance of the study area and the nature and scale of likely heritage impacts as a result of the development proposal. It is concluded that one trench of the proposed trenching program will be excavated within the curtilage of Mowbray House, however outside of the cadastral boundary. However, as the trench is proposed to be excavated in the footpath or road corridor, it is concluded further that there is no potential for impacting the fabric, setting or significance of Mowbray House.

7.2 Recommendations

The following management recommendations and mitigation measures have been formulated with consideration of all available information in accordance with relevant legislation:

Recommendation 1 – Heritage Induction

It is recommended that a heritage induction exercise be carried out in advance of the proposed works. All relevant staff, contractors and subcontractors will be made aware of their statutory obligations for heritage under the *Heritage Act 1977*, through the site induction and toolbox talks.

Recommendation 2 – Archaeological Monitoring

It is recommended that as one trench is proposed to be located within the curtilage of Mowbray House that the excavation of that trench be monitored by a qualified archaeologist.

Recommendation 3 – Unexpected Finds

If, during the course of development works, suspected archaeological relics, as defined by the *Heritage Act 1977* (as amended), are uncovered, work should cease in that area immediately and the Transport for New South Wales *Unexpected Finds* protocol be followed. A copy of that document should be kept on site for the duration of the works.

Appendix 3: Out of Hours Application Approval



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12.11.2023

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A quantitative noise assessment for the proposed OOH works is to be carried out in accordance with the *International Commission on Occupational Health (ICOH) Guidelines for the Assessment and Control of Noise in the Environment (ICNG)* and the *Sydney Metro Construction Noise & Vibration Strategy (CNVS)*. This section allows applicants to document these requirements through the following steps:

- 1) Establishing Rating Background Levels (RBLs) and Noise Management Levels (NMLs).
- 2) Predicting the anticipated noise levels using a quantitative noise assessment:
 - a. Works that are not likely to generate high noise impacts for a significant duration may use a preliminary quantitative noise assessment (facilitated within this form). This ensures that all applications, as a minimum, include a preliminary quantitative noise assessment in accordance with the ICNG.
 - b. Works that are likely to generate high noise impacts for a significant duration require a detailed quantitative noise assessment to be undertaken.
 - c. Works that are likely to generate ground-borne or structure-borne vibration and/or noise require specialist advice and assessment.
- 3) Comparing predicted noise levels against NMLs and applying standard mitigation measures as appropriate.
- 4) Considering additional mitigation when predicted noise levels exceed NMLs.

A detailed quantitative noise assessment is required when the predicted noise levels are anticipated to:

- Exceed an RBL at a residential receiver or an NML at a non-residential receiver by more than 10dBA, **AND**
- Affect the same receiver on 10 or more **occasions**. An occasion is considered to be anytime works are carried out between:
 - 6pm on a weekday and the start of standard hours the next day, **OR**
 - 1pm on a Saturday and 8am on a Sunday, **OR**
 - 8am on a Sunday or public holiday and the next morning (7am for weekdays and 8am for weekends and public holidays).

A detailed quantitative noise assessment must include:

- Derivation of RBLs for residential receivers based on noise monitoring at representative locations and/or derivation of NMLs for non-residential receivers based on sensitivities.
- Detailed prediction of noise levels for daytime, evening and night time OOH periods (as applicable) in accordance with Section 4.5 of the ICNG (including a clear outline of timing, duration and predicted noise levels during each OOH period).
- For night works, a prediction of maximum noise levels and a review of potential sleep disturbance impacts in accordance with Section 4.3 of the ICNG.

Please complete Steps 1 to 4 on the following page.

<p>Step 1 – RBLs / NMLs</p>	<p>If RBLs for residential receivers or NMLs for non-residential receivers have already been established, enter into Table 3. If no RBLs / NMLs have been established, use Table 1 to determine Ls / NMLs and enter into Table 3.</p>
<p>Step 2 – Predicted Anticipated Noise Levels</p>	<p>If a detailed quantitative noise assessment has been undertaken for these proposed OOH works, enter the predicted anticipated noise levels into Table 3 and attach assessment as Appendix 2. If no detailed quantitative noise assessment has been undertaken for these proposed OOH works, use Table 2 to determine anticipated noise aspects for the noisiest plant or equipment and enter into Table 3. In Table 3, use these values to calculate the anticipated predicted noise levels.</p>
<p>Step 3 – Exceedances & Mitigation Measures</p>	<p>Compare the anticipated predicted noise levels to the applicable Ls / NMLs, calculate the exceedances and enter into Table 3. Provide a description of the mitigation measures that are planned to be implemented in order to mitigate the noise impacts (refer to Section 7 of the CNVS).</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • No idling of vehicles • No reversing beepers. Non tonal reversing beepers are to be implemented (i.e. quackers) • Workers are to minimise talking loudly, no swearing and unnecessary shouting, or loud stereo/radios • Completion of noisy works concrete cutting and vacuum truck prior to 10 pm wherever possible.
<p>Step 4 – Consideration of Additional Mitigation Measures</p>	<p>Use Table 4 and the exceedances in Table 3 to determine the applicable Additional Mitigation Measures for consideration. Use Table 5 to indicate which of these measures are applicable, which will be implemented and provide justification for any applicable measures that will not be implemented.</p>

Table 1 - Estimated RBLs for Residential Receivers and NMLs for Non-Residential Receivers

Receiver Category		Estimated BL (dBA)		
		Daytime OOH	Evening OOH	Night Time OOH
Residential	Urban or near busy road or near industrial activity	55	50	45
	Suburban	45	40	35
	Quiet, rural or isolated	40	35	30
		INDUSTRIAL NML (dBA)		
Industrial activities		75 (when in use)		
Office or retail		70 (when in use)		
Health and educational facilities		55 (when in use)		

Table 2 - Preliminary Quantitative Noise Assessment for Predicted Noise Levels

Noise Aspect	If not undertaking a detailed quantitative noise assessment, select the most applicable value for each noise aspect category below and enter these values into Table 3.	dBA Value
plant noise level at 10 metres (refer to Appendix B)	Hand-held tamper, impact sheet piling rig	105
	Rail grinding, ballast regulator, concrete / rock saw, excavator hammer, jackhammer, rock-breaker	95
	airline tamping machine, pin puller, dynamic track stabiliser, large bulldozer, chainsaw, work	85



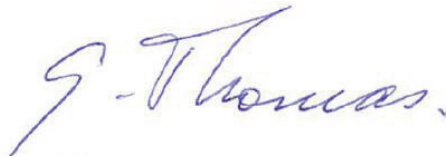


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(Uncontrolled when printed)

What community consultation has been undertaken already	The community is aware of the Sydney Metro EIS project to which these investigations are for. Substantial community consultation has been undertaken as part of the EIS.
What community consultation is planned to be undertaken?	The Sydney Metro communications team is to notify surrounding residential receivers, 7 days in advance as identified in Appendix 1. Notification is to be in the form of letter box drops or door knocking.
If drafted already, attach applicable Community Notification as Appendix 3.	

Contractor's Signature:	
Name:	Garth Thomas
Title:	Environment Manager
Contact Number:	0414 228 61
Date:	22 December 2016

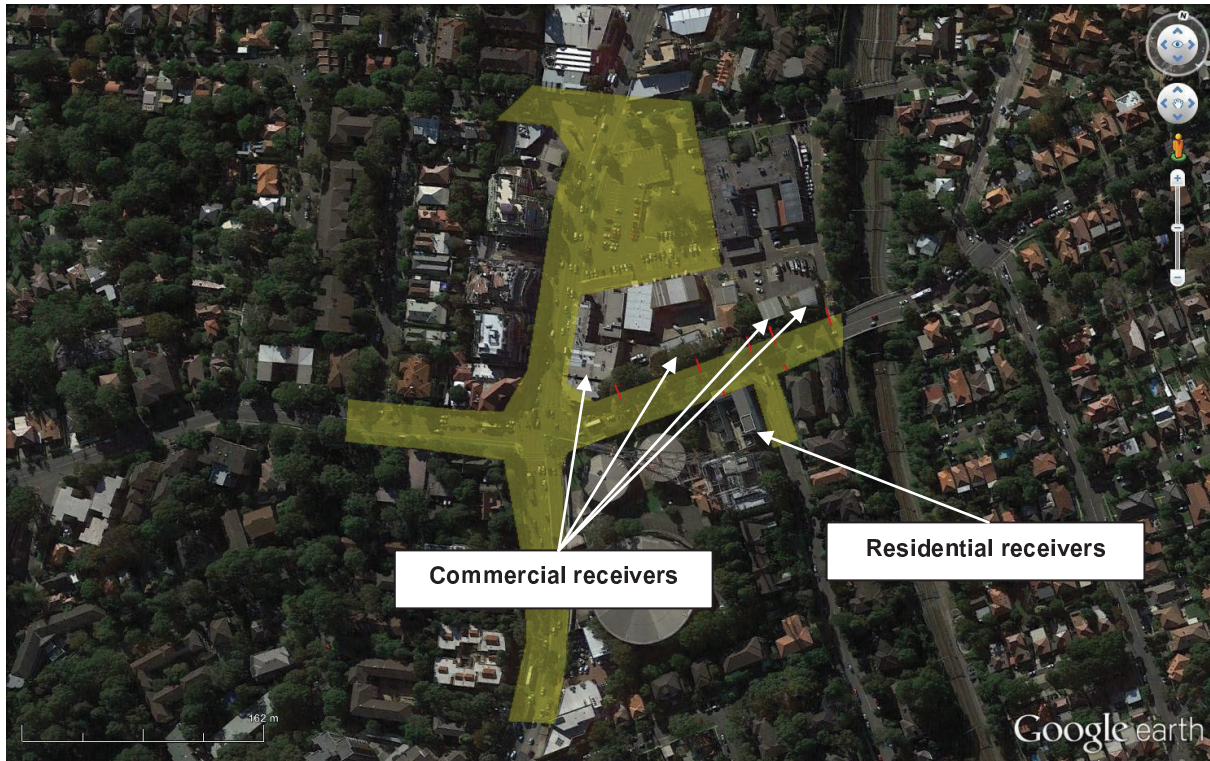
Contractor personnel	Name	Mobile
Manager Environment	Garth Thomas	0414 228 61
Manager Communications	/A - Proponent	
Contractor's Representative	Stanley Tan	04 7 348 346
Contractor's 24-hour contact person	Stanley Tan	04 7 348 346

M

N/A

Ap :

Map



*Blue highlight denotes utility location area. Red lines denote silt trenching locations

Out-of-hours Works Notification

27 January, 2017

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro City & Southwest will deliver 30 kilometres of metro rail between Chatswood and Bankstown, including a new crossing beneath Sydney Harbour, new railway stations in the lower North Shore and CBD, and the upgrade and conversion of the current line between Sydenham and Bankstown.

The Chatswood to Sydenham section of the project received planning approval in early January, 2017 with construction planned to start in the coming months.

Service Location Works - Mowbray Road, Artarmon (East)

Service location works will be undertaken along Mowbray Road (see map overleaf) from **Sunday 5 to Sunday 12 February, 2017** (weather and site conditions permitting).

These works will involve:

- Excavating seven narrow trenches in the footpath, kerb and road
- Using a vacuum truck to expose underground services such as water and electricity
- Reinstating affected areas.

Work hours

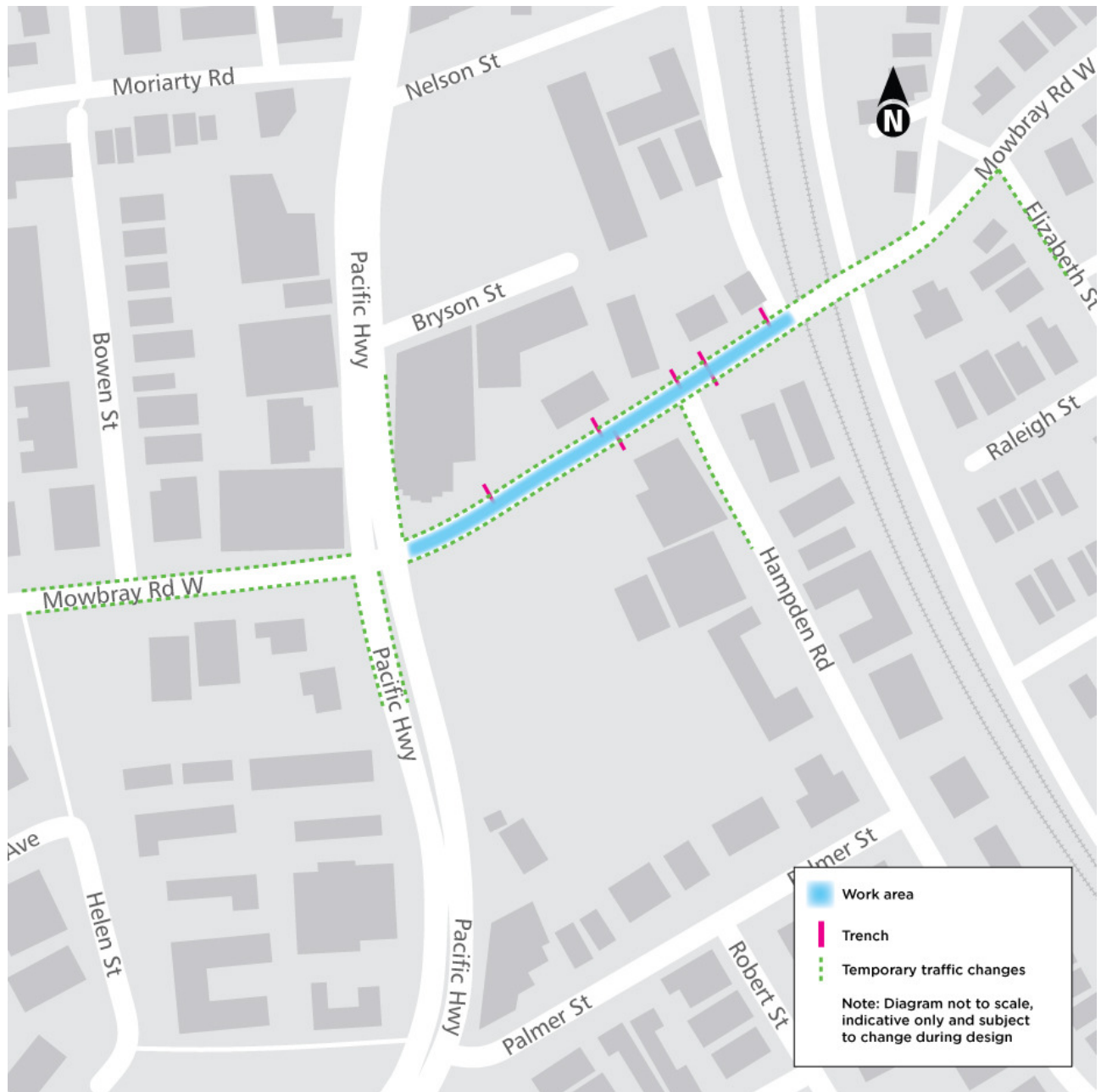
Due to high daytime traffic volumes on Mowbray Road, these works will need to be completed outside of standard construction hours. Works will be undertaken between **9pm and 5am**.

What you can expect

- Due to the nature of the work, some of these activities will be noisy. The project team will limit these impacts by scheduling the noisiest activities before midnight, wherever possible.
- Non-tonal reversing beepers will be used and workforce will be instructed to keep noise to a minimum.
- Temporary traffic and pedestrian changes will be required including lane and footpath closures along the Pacific Highway, Mowbray Road, Hampden Road and Elizabeth Street. These traffic changes are temporary and will be undertaken progressively. Traffic control and directional signage will be in place for the safety of workers and the community
- Access to buildings and driveways will be maintained at all times.
- When the works are finished affected areas will be restored.

Thank you for your cooperation during these essential works.

Service Location Works Mowbray Road (East)



Community information

To register for email updates,
obtain more information

or

to make a complaint,
please contact the project team

Phone: 1800 171 386

Email: sydneymetro@transport.nsw.gov.au

Website: sydneymetro.info



If you require the services of an interpreter, please contact the **Translating and Interpreting Service** on 131 450 and ask them to call **Sydney Metro** on 1800 171 386. The interpreter will then assist you with translation.



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