Commencement Column Monument

Heritage Management Plan

Volume 2—Conservation Works, Treatment Recommendations and Maintenance Works Schedule

Report prepared for the National Capital Authority

June 2016

Sydney Office Level 6372 Elizabeth Street Surry Hills NSW Australia 2010 T +61 2 9319 4811
Canberra Office 2A Mugga Way Red Hill ACT Australia 2603 T +61 2 6273 7540
GML Heritage Pty Ltd ABN 60 001 179 362
www.gml.com.au

Report Register

The following report register documents the development and issue of the report entitled Commencement Column Monument—Heritage Management Plan, undertaken by GML Heritage Pty Ltd in accordance with its quality management system.

Job No.	Issue No.	Notes/Description	Issue Date
14-0330	1	Volume 2—Draft HMP	5 November 2014
14-0330	2	Volume 2—Draft HMP	19 January 2015
14-0330	3	Volume 2—Final Draft HMP	25 August 2015
14-0330	4	Volume 2—Final HMP	20 June 2016

Quality Assurance

GML Heritage Pty Ltd operates under a quality management system which has been certified as complying with the Australian/New Zealand Standard for quality management systems AS/NZS ISO 9001:2008.

The report has been reviewed and approved for issue in accordance with the GML quality assurance policy and procedures.

Project Manager:	Bethany Lance	**Project Director & Reviewer:**	Rachel Jackson
Issue No.	4	**Issue No.**	4
Signature		**Signature**	
Position:	Consultant	**Position:**	Senior Associate
Date:	20 June 2016	**Date:**	20 June 2016

Contents Page

1.0 Introduction

The National Capital Authority (NCA) commissioned GML Heritage (GML) in September 2014 to prepare a Heritage Management Plan (HMP) for the Commencement Column Monument (Monument).

The HMP complies with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and its regulations; and Schedule 7A management plans for Commonwealth Heritage places.

Volume 1 of the HMP functions as a management planning document for the Monument and Volume 2 provides clear direction for its conservation, protection, repair and maintenance. The works program complements the heritage values identified in Volume 1: Section 4.0 and provides the implementation strategy for policies included in Volume 1: Section 6.0—Policies 8.1 and 8.2.

The condition of the Monument's fabric is discussed in detail in this Volume (Volume 2: Section 5.0). Required remedial and preventive works to the Monument are identified and prioritised. Recommendations for immediate and short-term works are sufficiently detailed to be used as a basis for project briefs and specifications. General costings are also provided to assist the NCA in budget planning.

A prioritised works program and cyclical maintenance schedule is included in Volume 2: Sections 7.0 and 8.0 and presented in a tabular format to facilitate ease of use.

Volume 2 has been prepared by Gillian Mitchell, Conservator of Conservation Works and GML's project team (refer to the authorship section in Volume 1: Section 1.0).

2.0 Method

A site visit was undertaken by GML subconsultant Gillian Mitchell of Conservation Works on 2 October 2014. A visual inspection of the monument was made and a comprehensive set of condition images were taken. The full high resolution condition images have been supplied separately to this report. A summary of condition images is found in Section 5.2—Detailed Condition Findings.

Documentation held on file by the NCA was reviewed. This consisted of previous condition reports and a brief summary of recent treatments completed.

Historical documentation available online via the National Library of Australia and newspaper archives was searched to understand the construction history of the monument.

3.0 Description

3.1 Overview

The Commencement Column Monument houses three foundation stones, set in a hexagonal base with stepped sides and a polished sloping top. The foundation stones have incised inscriptions. Below each foundation stone is a face-mounted bronze plaque.

The Monument is illustrated in Figure 3.1 below. The nomenclature used in the illustration is to describe its various parts. The illustration also clarifies the dates of installation of each component.

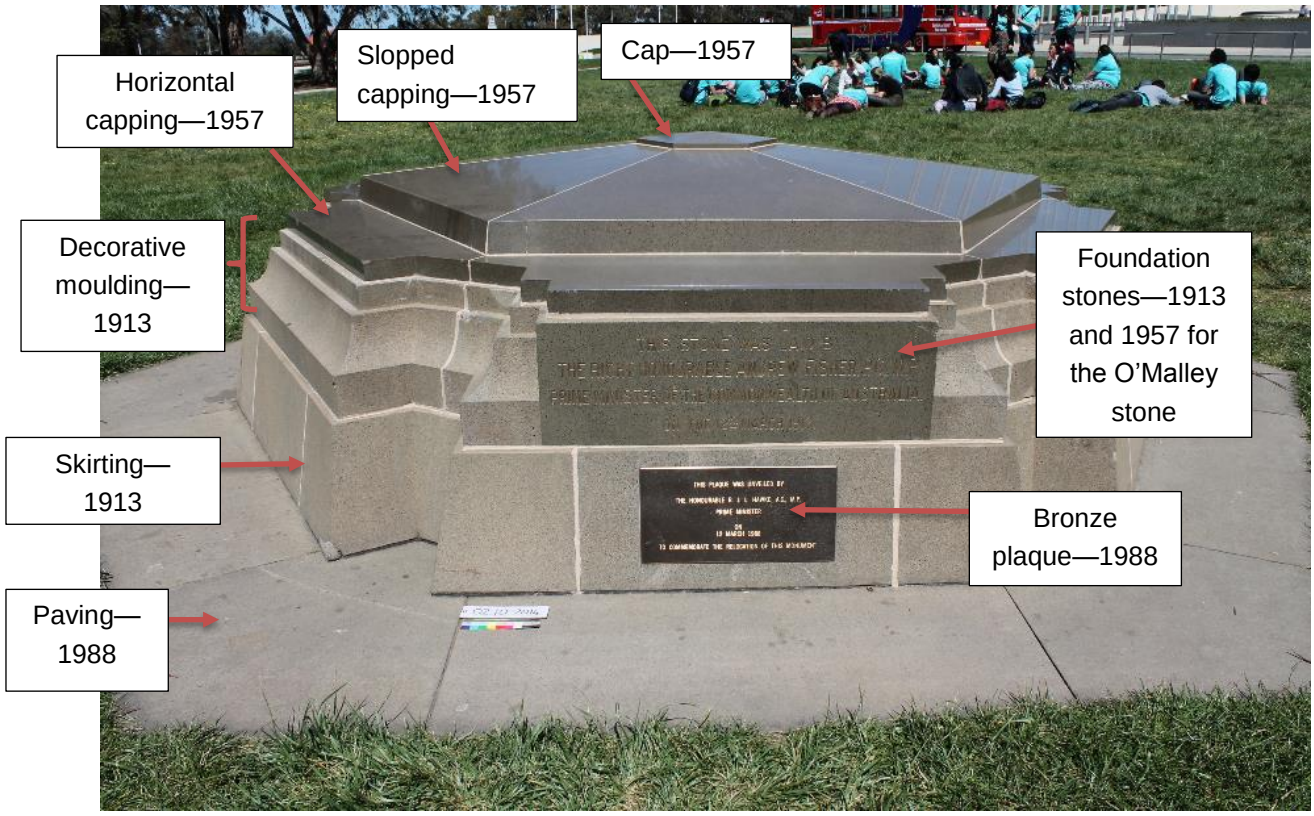

Figure 3.1 Overall view of the monument from the northwest outlining the nomenclature for various parts of the monument and the construction dates.

3.2 Materials of Construction

3.2.1 Stone

The stone is Mount Gibraltar Microsyenite, otherwise known as Bowral Trachyte. The paving, skirting, decorative moulding, foundation stones and capping stone are all Bowral Trachyte. The different colour between the side and capping stone is due to the level of polish that the surface has been finished with. Previous documentation incorrectly describes some portions as 'concrete' and 'various polished stones'. Images of all parts of the monument were sent to Dr Peter Mitchell, a geologist, who confirmed all elements to be Bowral Trachyte.

3.2.2 Jointing

All joints in the monument are finished with Sikaflex polyurethane sealant. This was applied in 2013. The original 1913 installation would not have used a flexible sealant—more likely a lime putty mortar.

The joints between the pavers finished with a cemetacious mortar.

It is not known when the flexible sealant replaced a more traditional mortar. It could have been as early as 1957 or as late as the 1990's. The 1996 condition report supplied by the NCA states 'The mastic grouting in the top of the memorial has failed'.

3.2.3 Bronze Plaques

The bronze plaques are coated with a dark brown epoxy background coating. The plaques are sealed against the stone with a black flexible sealant.

3.2.4 Gold Detail in Lettering

The lettering in the foundation stones has been detailed with both gold leaf and metallic pigment paint.

3.3 Dates of Installation of Different Elements

As outlined in more detail in Volume 1—Section 2.0, a general construction timeline for the Monument is below:

1913: Installation of the three foundation stones, skirting and decorative moulding on Capital Hill (in a different location to its present position).[1]

1913–1956: The Monument remained unfinished with reports of a galvanised iron cover/wood cover protecting it for some period.[2]

1957: The foundation stone laid by King O'Malley was removed and a replica installed (due to vandalism of the original). A capping was placed on top of the three stones. An access road was built and a notice board appeared.[3]

[1] *The Sydney Morning Herald*, 12 March 1913, p 9.
[2] *The Canberra Times*, March 1953, p 4.
[3] Holt S, 'Two cheers for our centenary' in *The Sydney Morning Herald*, 18 January 2013. Viewed 4 November 2014 <http://www.smh.com.au/federal-politics/two-cheers-for-our-centenary-20130117-2cvu3.html>.

1980: The entire monument was removed from its location on Capital Hill and placed in storage until the completion of Parliament House.[4]

1988: The monument was installed in its current location. Three new bronze plaques marking the event were placed on the monument and new flat paving was installed surrounding it.[5]

2013: Joints were re-grouted with Sikalfex polyurethane sealant.[6]

3.4 Summary Condition

Element	Summary Condition
1913 Stonework	Good with minor losses and surface damage
1957 Stonework	Good with minor losses and surface damage
1988 Stonework	Good with minor losses and surface damage
1988 Bronze Panels	Excellent
Gold detail in incised lettering	Fair – the gold is generally well adhered but the pigment paints have tarnished leaving the lettering looking flat and mottled.
2013 Synthetic jointing (*Sikalfex*) between stones	Excellent condition although the colour match and workmanship is lacking.

[4] NAA: A431,1973/4421, p 121.
[5] *The Canberra Times*, 13 March 1988.
[6] National Capital Authority Memorials Maintenance Record for the Commencement Column.

4.0 Previous Conservation Work

Records supplied by the NCA were used to assess the extent of previous treatment. This work is summarised below.

1996: The monument had its condition assessed and treatments were recommended including water deflection, stone fills, grouting replacement and efflorescence removal.

The NCA Memorials Maintenance Record sheet details the following previous work:

2013: Regrout joints with Sikaflex.

2013: Inspect and pressure wash.

2014: Inspect and hand wash.

Aside from the grout replacement it is not possible to determine how many of the other 1996 treatment recommendations were completed.

Inspection of the monument also shows that extensive stone repair has been carried out before the period of the NCA's records.

The top edges of two foundation stones have been cut down, presumably to remove significant chips. There is also a corner repair to the top sloping capping stone on the northwestern side. Examples of these repairs can be found in Figure 5.7 and 5.13 in Section 5.2—Detailed Condition Findings.

Similarly, there are a range of mortar based fills that do not match the surrounding stone very well. Examples of these can be seen in Figure 5.12 and 5.32 in Section 5.2—Detailed Condition Findings.

5.0 Condition Assessment

The condition was assessed during an onsite inspection in October 2014 and each element was photographed in detail at this time. The following section provides a summary of the condition issues for the Commencement Column Monument overall. Section 5.2 illustrates separate condition issues in detail.

5.1 Summary of Condition Issues

5.1.1 Sealant

The Sikaflex sealant is doing a functional job of sealing the joints between the stones and preventing water intrusion. There is one small hole in the sealant on the northeast capping stone where water is able to enter.

The colour of the sealant used is quite stark and the workmanship is slightly lacking with some of the sealant runs appearing quite messy.

The sealant has chalked slightly and has caused light cream runoff stains that are especially noticeable on the sloping capping.

5.1.2 Stains

There are numerous stains of different origins on many stones. The black staining on the southern and southeastern faces is algae. There are many other oily and sticky stains which are most likely food and drink related. On the day of inspection it was clear that a group of people had used the monument as a picnic table for their lunch as it was covered in sticky drink spills and food crumbs.

5.1.3 Biological Damage

Additional to the algae staining there is a small patch of lichen growing on the southeastern face. There are also small pieces of grass rooting in between the paving stones.

5.1.4 Chips and Losses to Stonework

Many stones have suffered chips and losses. Some of these have been filled with a range of cement-based mortar fills that do not match the surrounding stone very well. In some instances the fills are more unattractive than the damage they are supposed to be repairing. Aesthetics aside the fills, chips and losses are stable.

5.1.5 Graffiti

There is only one obvious piece of graffiti on the monument at present—the letters ‘N. Wilson’ incised into the paving stone on the northwestern side. This is old damage as it is noted in the 1996 Condition Report (Peter Maxwell and Mark Durr) provided by the NCA.

5.1.6 Minor Scratching

Minor scratching on the polished capping stones is evident. This is consistent with people climbing and sitting on the Monument.

The scratches on the skirting stones that have become more obvious due to iron staining have been caused by lawnmower decks dragging against the stone when the lawn is being cut.

5.1.7 Accretions

There are a range of surface accretions including some grey/silver paint and chewing gum and melted candle wax.

5.1.8 Gold detail in lettering

There are extensive losses and some discolouration to the gold detailing of the incised lettering on the foundation stones. The metallic pigment paint that has been used at some point in the past has tarnished. The losses and tarnishing has resulted in a dull mottled appearance to the letters.

5.1.9 Bronze plaques

The bronze elements are in good condition. The faint white marks on the surface of the panels is old maintenance wax wearing off. The seal between the panels and the stone walls has split slightly in some locations.

5.1.10 Calcium deposits

There is a small amount of calcium staining on the southeastern horizontal surfaces. This area will be the slowest to dry after rain or sprinklers and has resulted in a small amount of calcium or salt deposition. This small area of calcium deposits is the only indication that there may still be some dampness and or drainage issues as was highlighted in the 1996 condition report (Maxwell and Durr).

5.2 Detailed Condition Findings

Figure 5.1 Overall view north side

Figure 5.2 Detail stain on north face skirting

Figure 5.3 Details chips on north face horizontal capping

Figure 5.4 Detail chips and stains on north face horizontal capping

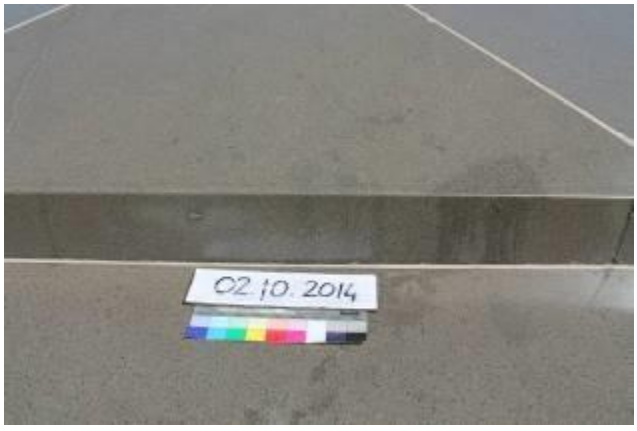

Figure 5.5 Detail stains on north face sloping capping

Figure 5.6 Detail of run stains from sealant on north face sloping capping

Figure 5.7 Detail stain and replacement corner on north face sloping capping

Figure 5.8 Overall view NW face

Figure 5.9 Detail bronze plaque, NW face. Plaque has a sprayed epoxy finish on it. The slight white discolouration is blanching of a maintenance wax coat that has been applied on top of the epoxy.

Figure 5.10 Detail incised foundation stone (Fisher) on NW face. Loss and tarnishing of gold detail is evident.

Figure 5.11 Iron stain on the skirting stone from contact with a lawn mower (NW face).

Figure 5.12 Detail of three fills all completed in poorly matching stone replacements. The green dot is chewing gum (NW face).

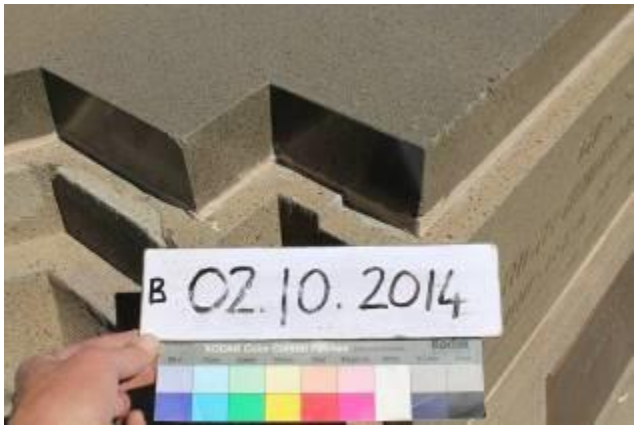

Figure 5.13 Note small step in the top surface of the decorative moulding, it has been deliberately cut lower as a means of repairing some past damage (NW face).

Figure 5.14 Corner repair on sloping cap (NW face).

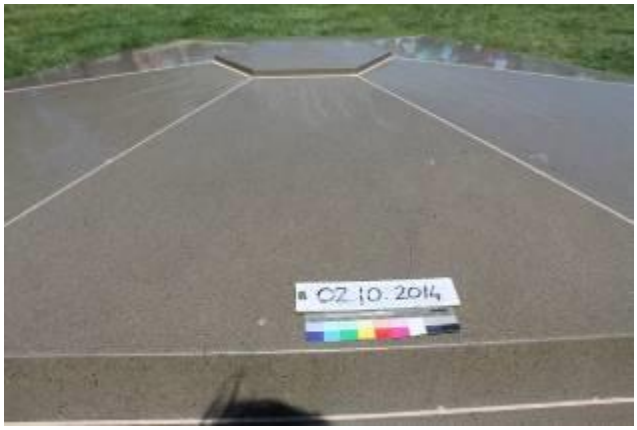

Figure 5.15 Chalky run marks from the sealant on the sloping capping (NW face).

Figure 5.16 Small step in the top surface of the decorative moulding, it has been deliberately cut lower. The height of the foundation stone has been reduced right across the front (NW face).

Figure 5.17 Overall view (SW face).

Figure 5.18 Detail of iron staining from lawn mower damage (SW face).

Figure 5.19 Detail of natural vein in rock – typical of Trachyte (SW face).

Figure 5.20 Detail of calcium deposits on the horizontal surface of the decorative moulding (SW face).

Figure 5.21 Detail of paint like accretion on the horizontal capping (SW face).

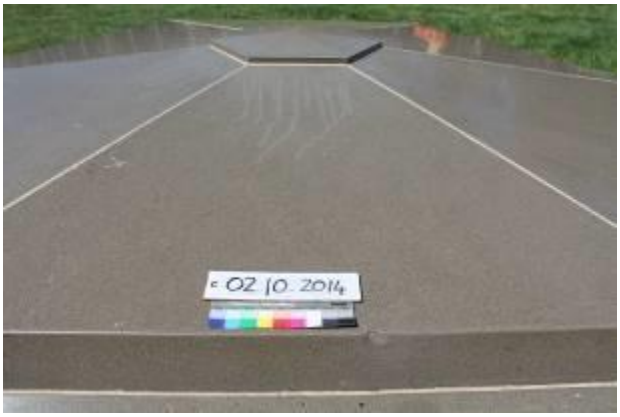

Figure 5.22 Detail of sealant run marks (SW face).

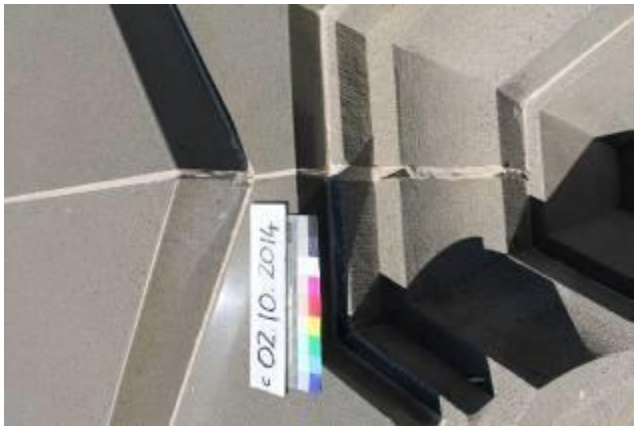

Figure 5.23 Detail of vertical sealant joints – note poor colour match, the light colour stands out more than necessary (SW face).

Figure 5.24 Detail of sealant joints – note poor workmanship (SW face).

Figure 5.25 Overall view (S face).

Figure 5.26 Detail bronze plaque (S face).

Figure 5.27 Detail O'Malley Foundation stone (S face).

Figure 5.28 Detail gold infill, note remnant gold leaf and gold paint (S face).

Figure 5.29 Detail black flexible sealant joining bronze plaques to stone wall (S face). There is minor failure of the sealant against the metal plaque.

Figure 5.30 Detail horizontal capping (S face)

Figure 5.31 Detail sloping capping (S face).

Figure 5.32 Detail poorly matched stone fill decorative moulding (S face).

Figure 5.33 Detail algae staining (S face).

Figure 5.34 Overall and detail algae and other biological staining (SE face).

Figure 5.35 Detail algae and other staining (SE face).

Figure 5.36 Detail algae and lichen growths (SE face).

Figure 5.37 Detail top capping (SE face).

Figure 5.38 Fine scratching on sloping capping (SE face).

Figure 5.39 Detail algae staining (SE face).

Figure 5.40 Overall (NE face).

Figure 5.41 Detail bronze plaque (NE face).

Figure 5.42 Detail candle wax on stone and bronze (NE face).

Figure 5.43 Detail foundation stone Denman (NE face).

Figure 5.44 Detail staining and calcium deposits (NE face).

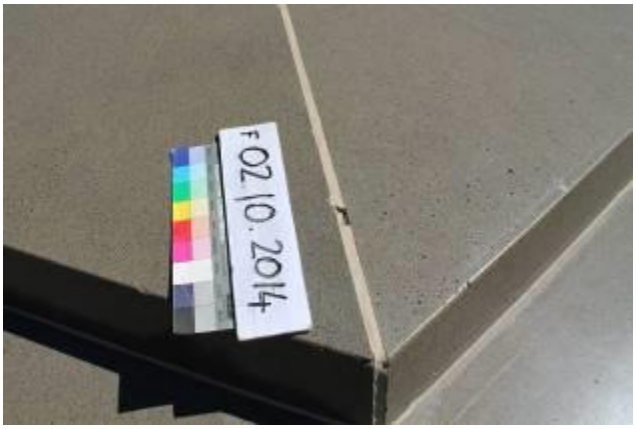

Figure 5.45 Detail hole in sealant (NE face).

Figure 5.46 Detail corner – accretions (NE face).

Figure 5.47 Detail cracked corner on skirting stone (NE face).

Figure 5.48 Detail of joint in paving (NW face).

6.0 Treatment Recommendations

6.1.1 Sealant

While the sealant is functional it is visually displeasing. As funding allows the current colour should be replaced with a darker colour and the work should be carried out by a stone mason experienced in getting a high quality finish. Sikaflex polyurethane sealant is an appropriate product. While the Sikaflex is not what would have been used originally there is now such a history of different joint materials that adhesion of traditional jointing compounds is likely to be highly compromised due to migration of oils into the surface of the stone. Consequently continuing with the same system, which is performing its function well, is the only sensible option.

The cementacious jointing between paving stones could be replaced at the same time as it has cracked in a few locations.

6.1.2 Stains

Most of the stains are temporary and food based. Natural weathering will reduce their visual impact. Regular washing as part of the maintenance program will also help alleviate this problem.

6.1.3 Biological Damage

The small amount of biological growth can be treated by a single application of the biocide Wet and Forget. It need only be applied to the skirting and decorative moulding stone on the south and east sides.

6.1.4 Chips and Losses to Stonework

While visually displeasing the chips, losses and fills are stable. They could be replaced with a polyester resin fill tinted to match the surrounding stone if desired.

6.1.5 Graffiti

The current graffiti does not need any treatment as it is not immediately apparent. Protection against graffiti could be considered in the form of the starch based anti-graffiti coating PSS 20. While these starch based coatings are effective they are an ongoing cost that needs to be budgeted for. The relative risk of graffiti occurrence versus the costs should be weighed up.

6.1.6 Minor Scratching

Scratching from people climbing and sitting on the monument is insignificant and does not require treatment or management.

The lawn mower damage could perhaps be reduced by offering a briefing to the maintenance staff about the significance and history of the monument. This may encourage greater care while mowing.

6.1.7 Accretions

The surface accretions including some grey/silver paint, chewing gum and melted candle wax should be removed by a conservator using a combination of solvent and mechanical removal.

6.1.8 Gold Detail in Lettering

Any loose existing gold detailing should be removed with blades and ultra-fine scourer pads. The lettering should be re-gilt in 23 carat gold leaf, applied with an oil size.

6.1.9 Bronze Plaques

The old blanched wax should be cleaned off with white spirits and a new coat of microcrystalline wax be applied to the panels. The wax will slow any tarnishing of the letters but also act as an anti-graffiti coating.

6.1.10 Calcium Deposits

The small amount of calcium deposition could be removed with an EDTA poultice and mechanical action. This is an aesthetic treatment only.

7.0 Prioritised Work Program

7.1 Introduction

Overall the monument is in good, stable condition. The first five treatments listed below are the highest priority as they will have the biggest visual impact and will offer some protection to the monument in the event of graffiti damage. All the subsequent treatments are not time critical and can be completed funding allows.

7.2 Recommended work program

7.2.1 Tasks to be completed within one year

Task	Method	Estimated Cost Inc GST
Biological growth control	Apply a single application of *Wet and Forget* to the south and east side faces only. This work should be completed by a conservator.	**$200**
General clean and removal of accretions	Wash all surfaces at least one month after the biocide application using tap water and non-ionic detergent. Remove accretions with solvent and mechanical action. This work should be completed by a conservator.	**$600**
Fill small hole in Sikaflex sealant on the NE capping stone	Fill the small hole with a polyurethane sealant in a matching colour. This can be completed by a conservator, stone mason or maintenance staff as long as it is done carefully.	**$200**
Re-gilding of lettering	Any loose existing gold detailing should be removed with blades and ultra-fine scourer pads. The lettering should be re-gilt in 23 carat gold leaf, applied with an oil size. This work should be completed by a conservator or stone mason.	**$2000**
Wax bronze panels	The old blanched wax should be cleaned off with white spirits and a new coat of microcrystalline wax be applied to the panels. This work should be completed by a conservator.	**$300**
Apply a starch based anti-graffiti coating	Apply a starch based anti-graffiti coating such as PSS 20. This work should be carried out after the initial cleaning and gilding jobs listed above. It should be completed by an anti-graffiti contractor with the appropriate equipment. It should not be applied to the bronze plaques.	**$1000**

7.2.2 Tasks to be completed as funding allows

Task	Method	Estimated Cost Inc GST
Remove all existing sealant and replace with a darker colour	Cut out all existing sealant and re-seal the joints with a *Sikaflex* polyurethane sealant in a darker colour. This work should be completed by a stone mason with experience in elastomeric jointing.	**$3000**
Chips and losses	Removal all unattractive fills and replace them with tinted resin fills to better match the surrounding stone. This work can be completed by a conservator or stone mason.	**$3000**
Calcium removal	Remove the calcium deposits with an EDTA poultice and mechanical action. This work should be completed by a conservator	**$400**
Training	Brief the maintenance staff in the history of the Monument and its significance. Encourage them to be careful. This work can be completed by the National Capital Authority.	**$NA**

8.0 Cyclical Maintenance Schedule

8.1 Introduction

Regular cleaning of this monument is important due to its high profile location.

8.2 Tasks

Task	Method	Regularity
Hand wash monument	• Brush off all loose dirt and dust with a large soft nylon broom. • Wash any new food and drink stains with tap water applied with a soft bristle nylon scrubbing brush. • Rinse whole monument with tap water applied with a sponge and wipe excess water from the top polished stones with a microfiber cloth to prevent streaking. • This work should be completed by the regular maintenance crew. • Approximate cost—one hour of time	Fortnightly
Re-apply anti-graffiti coating	• Reapply the starch based anti-graffiti coating at the interval recommended by the manufacturer. • Residues of the old coating must be removed with a hot water pressure wash before application of the new coating. The washer should be set at as low a pressure as gives an effective result (ideally no higher then 600 psi). Special care should be taken when washing the gilt lettering, it should not be pressure washed but carefully washed with a soft nylon bristle brush and hot water. • This work should be completed by an anti-graffiti contractor. • Approximate cost—$2000	Every 2–3 years
Re-apply wax coating to bronze	• Reapply the protective wax coating to the bronze plaques. • This work should be completed by a conservator. • Approximate cost—$400	Every two years

References

Holt S, ‘Two Cheers for our Centenary’, *The Canberra Times* (online), 18 January 2013.

Maxwell P and Durr M, *Condition Report Commencement Column* 1996, National Capital Authority.

National Capital Authority, *Condition Report Commencement Column* ID150.

National Capital Authority, *Memorials Maintenance Record 2013*, Commencement Column.

NSW Department of Environment and Heritage, *Mount Gibraltar Trachyte Quarries Complex*, http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.

The Canberra Times, *A tumble into yesteryear*, 13 March 1988, p 1.

The Canberra Times, *Anniversary of Naming Day*, 12 March 1953, p 4.

‘Building Australia’s Capital City—Scene of Today’s Historic Ceremony’, *The Sydney Morning Herald*, 12 March 1913, p 9.