

## Appendix 6

Material from Historic Cemeteries Conservation Trust of New Zealand (HCCTNZ).

Further information about and by HCCTNZ is on [www.cemeteries.org.nz](http://www.cemeteries.org.nz) .



### **Best Practice in Cemetery Conservation**

Guidance for  
Monumental Masons  
Local Authorities  
Family Members

#### **The problems**

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#### **The principles**

Do as much as necessary, but as little as possible

Understand and respect the existing fabric

Traditional techniques are preferred, but

Proven modern techniques are acceptable

Repairs will be identifiable on close inspection

New work should be readily identifiable

Inexperienced trades-people should not work in cemeteries.

#### **Sources of Principles**

National Trust of Australia NSW – Guidelines for the Conservation of Cemeteries

Sagazio (ed) – Conserving Our Cemeteries

David Young, Heritage Consultant, Canberra, Australia

NZ Master Monumental Masons Association Inc. Cemetery Planning Manual [top of page](#)

## **Leaning Monuments**

Do as much as necessary, but as little as possible

Slight leans are part of the character of old cemeteries – leave them alone

Moderate and severe leans need to be corrected, to prevent damage due to gravity and their attraction to vandals.

The degree of subsidence below the foundation needs to be addressed

The accepted method is to provide a foundation of substance, usually by placing a plug of concrete in the subsided area, replace the stones. Sometimes it will be possible to lever the headstone upright in situ, hold, and plug foundation with concrete, then lower.

## **Broken Monuments** [top of page](#)

Collect all pieces together.

Bore and pin all major pieces.

Use epoxy to hold pins in place.

Use epoxy along line of cracking to join broken faces.

TENAX is a recommended epoxy which has record of satisfactory use over many years.

Existing pins if any should be removed and holes extended in diameter and length if necessary and pins replaced with stainless steel pins.

Replaced elements should be mortared into place

If broken into too many small pieces these can be rearranged and placed on a desk with surround to hold in place.

## **Cleaning Monuments** [top of page](#)

Before cleaning please appreciate:

Variations in appearance can be due to climate.

The appearance of biological growths is not necessarily harmful to the stone.

Staining patterns can be due to water flow down stone and over the lettering

Consider carefully whether there is a real need to clean

The possible need to clean to permit other conservation work to proceed

Removing biological growths

Remove only when:

Monuments are strongly disfigured

Sandstone is severely damaged

Lead lettering is being damaged

Inscriptions are obscured and unreadable

To enable other repairs e.g. repointing

If you MUST clean

Think again – does it really need it?

Is it really dirty or is it just dust adding to the patina of age.

Is the soiling due to dirt or soot?

Or is it biological growths – lichens, algae, fungi, moulds?  
Use only soft bristle brushes with wooden handles and plenty of water.  
A super-clean headstone looks out of place in an historic cemetery

Cleaning agents

For biological growths:

Use only preparations based on quaternary ammonium compounds  
e.g. benzylkonium chloride.

We recommend:

For cleaning – Kemsol “Slik”

For lichens, algae, fungi, moulds – Kemsol “Mosskill”

Both these products are available from: Chemical Solutions Ltd, Box 23071, Hunters Corner, Papatoetoe, telephone 09 276 6414, fax 09 276 6493 or

Local branch of NZTS [top of page](#)

### **NEVER EVER use:**

Steel wool, sanders, or other harsh abrasives

Wire brushes of any sort

Sand-blasting or high pressure water-blasting

Acids (e.g. spirits of salts)

Bleaches and mould removers (sodium hypochlorite or caustic soda)

### **Coating Monuments** [top of page](#)

Do not use products designed to seal or waterproof, as they can do more harm than good. Do not use paint or sealers.

Remember: Do as much as necessary, but as little as possible

Even modern paint coatings can damage by trapping moisture

### **Reading monuments - Lettering** [top of page](#)

Lead lettering erodes because of weathering of the mounting stone.

It is not possible to replace such lead lettering satisfactorily.

In new work, maintain style of existing lettering

The new work will be readily apparent from the dates

Re-leading, re-gilding, re-blackening are OK

Re-cutting of incised lettering is not favoured and is often not possible due to the eroded condition of the stone.

If clients want to have the readable record it is better to provide a new granite or bronze plaque on a desk in front of existing.

### **Adding new monuments** [top of page](#)

New monuments should harmonise with their surroundings. This will be achieved if they vary only by one of the following factors:

Form (shape)

Scale (size)

Material and Colour

Finish (polished, unpolished, rough)

Ensure that new lettering matches original lettering.

The practice of screwing/gluing granite plaques on to existing monuments is discouraged. It is recommended that any new plaques be placed on desks on floor of gravesite in front of the original headstone.

### **Wrought Iron, Cast Iron, and Wire** [top of page](#)

Physical damage, splits, breaks and bends, tree growth

Remember: Do as much as necessary, but as little as possible

Cause of damage should be removed/treated

Broken sections cannot easily be rejoined

Often concrete kerbs and bollards have moved and affected the alignment

of the wrought iron fence and this is very difficult to remedy

Any repair work should be entrusted to a qualified tradesman with experience in wrought and cast iron.

Most wrought iron and cast iron achieves a rusty appearance which is inactive corrosion and does not cause any long-term deterioration and should not be touched.

Where there is clearly active corrosion this needs to be treated with:

Fish Oil Corrosion Protection

Lightly brush away loose corrosion, dirt and dust using soft-bristled brushes (NOT wire brushes)

Flush out crevices with mineral turps

Brush on 50/50 dilution of fish oil (Wattyl Fishoilene) and mineral turps

Apply a second coat

Use drop cloths to protect kerbs

### **Grave Floors** [top of page](#)

Earthen

Remove weeds

Remove and/or poison tree roots.

Cut and lay weedmat

over with sympathetic stones (not road or drainage gravel)

Concrete covered If broken remove all of the cover material.

Fill in and compact cavities with crusher run gravel

Level and fill with 100mm concrete screeded level with fall to drain hole.

Plaster to match

Aim to end up with the shape of the original structure preserved.

### **Trees and Vegetation** [top of page](#)

Trees cause great damage to gravesites (headstones and surrounds) and relatives should be persuaded not to plant on graves.

Roses should also be discouraged. While not as damaging, they need constant maintenance, and their under-storey provides a

nursery environment in which seeds of larger trees thrive.

Oversize family plantings should be pruned or removed.

Wilding trees and rubbish vegetation should be removed.

All trees and vegetation cut at base should be poisoned with "Vigilant" which prevents re-growth.

### **Fences, Gates, Drains** [top of page](#)

Fences, hedges, gates and drains are all integral features of the historic landscape. Any conservation work must include these items.

Fencing is essential where livestock are in adjacent areas. Browsing stock can do major damage to headstones and gravesites.

Maintenance regimes must include hedges and fencing.

Removal or original fences and gates is not an option.

Reinstatement should be as per original. [top of page](#)

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### **More information**

Should you require more information on the Trust or be interested in furthering the work of the Trust please contact:

#### **The Historic Cemeteries Conservation Trust of New Zealand**

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