

PRE-DESIGN OPTIONS REPORT
for
WALTHAM WAR MEMORIAL
at
WALTHAM PARK

Prepared for
Greenspace Unit
Christchurch City Council

by
City Solutions

June 2006

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Executive Summary

The Christchurch City Council (CCC) is responsible for Waltham Park of which the Waltham War Memorial Gates and Wall is part. This report provides the Pre-Design Options and Recommendations for the War Memorial Structure Maintenance and Structural rebuilding.

1.1 Recommendations

It is recommended that **Option 4 Critical Maintenance** be carried out in the next financial year 2006/2007 and that drawings and specifications be prepared for **Option 3 Full Restoration of the Memorial Gates** to enable the work to be programmed to be carried out with-in the next 5 years.

2 Introduction

Waltham War Memorial Gates are located at the entrance to the Waltham swimming pool.

on the South boundary of Waltham Park at the intersection of Waltham Road, Wilsons Road and Fifield Terrace opposite the Heathcote River.

The gates consist of a concrete stone clad wall topped by a wrought iron balustrade and centrally located gates supported by eight columns. There are seven bays to the gates and fence. The columns are of concrete construction with stone veneer cladding, consisting of a concrete footing, stone column and concrete capping. The central vehicle gate columns are topped by a cast iron lighting standard from which the glass light fitting is missing. Several of the columns have a slight lean towards the pool side of the wall. The wall and gates are in reasonable condition but long term do require maintenance and structural strengthening.

2.1 Overview

The purpose of this document is to report on design options and costs, and recommend a preferred option so that a developed design can be progressed

2.2 Background

The Christchurch City Council (CCC) Greenspace Unit is responsible for the maintenance and upkeep of the Waltham War Memorial Gates.

City Solutions have been engaged to prepare reports, costs and detail drawings for the maintenance and structural strengthening of the Waltham War Memorial Gates.

City Solutions have also prepared a landscape design for the area around the War Memorial Gates which is separate to this report.

3 Options

3.1 Design Options

3.1.1 General

The general design objectives are to conserve the heritage fabric of the Waltham War Memorial in keeping with recognised relevant New Zealand and international conservation standards, in particular the ICOMOS New Zealand Charter:

Note. Any work carried out should only be done in the best trade practice by suitably qualified and experienced craftspeople and tradespeople, and to the conservation principles contained within the ICOMOS New Zealand Charter for the conservation of places of cultural or heritage value.

WALTHAM WORLD WAR I MEMORIAL GATES Options

OPTIONS

1. Do Nothing.

Doing nothing will result in further deterioration of the metalwork, stonework, and foundations. Obviously less is more, more deterioration of the heritage fabric leading to more cost to maintain and conserve long term. The cheapest option at this point in time.

Not Recommended

2. Relocation of the gates within the park.

Requires full dismantling and rebuilding at another location within the park. Will require public consultation. Not a conservation option as it entails loss of heritage value in moving from historic original position and possible loss of heritage fabric during relocation. This is the most expensive option.

Not Recommended.

3. Full Restoration of the Memorial Gates.

3.1. New foundations to support the columns and wall.

3.2. Straighten existing columns and walls

3.3. Repair and re-pointing of all stonework.

3.4. Blasting and re-painting wrought iron balustrade.

3.5. Replace missing lighting to gate columns.

Requires full dismantling and rebuilding and considerable earthworks and propping. May require public consultation. This is the 2nd most expensive option.

Recommended.

4. Critical Maintenance Work.

4.1. Moss and Lichen removal

4.2. Repair and re-pointing of damaged stonework only.

The most cost effective pro-active option.

Recommended in the short term.

Timing of Work

4. Critical Maintenance Work.

Needs to be done in the next financial year.

3. Full Restoration of the Memorial Gates.

Needs to be done in the next five years

Malcolm Kitt

Architectural Designer/Building Conservator (City Solutions CCC)

4 Pre-Design Cost Estimates

Table 8.1 gives the Waltham War Memorial Pre-Design budget estimate as at 23 June 2006.

Note that the estimate in the report attached is an estimate only and does not include any additional costs for further problems which may be found on site during construction such as ground instability and possible deterioration of the concrete wall and stone veneer. The estimate also does not allow for any changes to the design scope allowed for in the estimate.

It is not uncommon for heritage projects to go over estimate because of further repairs and /or problems found during construction that were not able to ascertained at the time of estimate and design. The accuracy of the estimate is + 50% - 10% generally.

BUDGET VALIDATION NEEDS TO BE DONE ON THE COMPLETION OF WORKING DRAWINGS AND SPECIFICATIONS

**Table 8.1
Budget Estimate**

Item	Description	Base Estimate (\$)	Recommended Budget (\$)
1	Do nothing	0.00	0.00
2	Relocation of gates within Waltham Park	100,000.00	150,000.00
3	Full Restoration of Memorial Gates	45,000.00	100,000.00
4	Critical Maintenance Work	3,700.00	3,700.00

- Notes: (i) GST is excluded.
(ii) No allowance has been made for escalation or inflation.

4.1 Recommendations

4.1.1 Recommendations

It is recommended that **Option 4 Critical Maintenance** be carried out in the next financial year 2006/2007 and that drawings and specifications be prepared for **Option 3 Full Restoration of the Memorial Gates** to enable the work to be programmed to be carried out with-in the next 5 years.

Appendix A

Preliminary Report

WALTHAM WORLD WAR I MEMORIAL GATES

Location

Waltham War Memorial Gates are located on the South boundary of Waltham Park at the intersection of Waltham Road, Wilsons Road and Fifield Terrace opposite the Heathcote River. The Waltham War Memorial Gates are also the entrance to the Waltham swimming pool. The legal description of the site is PT Lot 1 DP 8016

Description

The gates consist of a concrete stone clad wall topped by a wrought iron balustrade and centrally located gates supported by eight columns. At the two larger columns about the gates there are inset stone plaques commemorating the Waltham men who lost their lives in the First World War. The left hand plaque is topped by the words *“In grateful memory of those of this district who made the supreme sacrifice in the Great War 1914-1918”* and then an alphabetic list of names. The right hand plaque is topped by a carved laurel wreath and then the continuation of the list of names, then finally the quotation *“Greater love hath no man than this”*. There are forty-three (43) names in total.

There are five bays to the gates and fence. The bays are laid out as follows; one central bay with double wrought iron vehicle gates (4500 centre to centre) and a pedestrian gate bay with wrought iron gate to either side of the vehicle gate bay (left 1850 centre to centre, right 1950 centre to centre), then one straight bay and a final curved bay to each side (left 6400 centre to centre straight, 6600 centre to centre curved, right 6450 centre to centre straight, 6600 centre curved).

The columns appear to be of concrete construction with stone veneer cladding, consisting of a concrete footing, stone column and concrete capping. There are two sizes of column 800x800x2320 to the vehicle gates and six columns 620x620x2220 to the pedestrian gates and fence. The central vehicle bay columns are topped by a cast iron lighting standard 1545 high. The round glass light fittings are missing from the light standards.

Three of the columns about the central gates have a lean back towards the pool building.

There is localised cracking to the stone work at various points along the walls and on the columns. There is damage to the top of the concrete capping on some columns.

The wrought iron balustrade needs blasting and re-painting.

The gates are in the direct path of any water moving through ground from Waltham Park to the Heathcote River.

Discussion

The following work is required to repair the Waltham War Memorial Gates:

1. New foundations to support the columns and wall.
2. Straighten existing columns and walls
3. Repair and re-pointing of all stonework.
4. Blasting and re-painting wrought iron balustrade.

Costs

Estimated costs for this project:

Preliminaries

Hoardings, fences and canopies

hire rate 2.1m high galv mesh fencing per m/wk \$0.75 total length 200m for 12 weeks $0.75 \times 200 \times 12 =$ **\$1800**

Excavation

Excavation

Excavate pad or bases not exceeding 1.5m deep \$18.75 per cubic metre $35.7 \times 2.0 \times 0.5 = 35.7$ cubic metres **\$670.00**

Disposal

Concrete Work

Reinforced Concrete 20mpa

Foundation beams 150/300mm thick \$240 per cubic metre $35.7 \times 2.0 \times 0.5 = 35.7$ cubic metres **\$8568.00**

Damp proof courses Moistop 737 \$8.40 per sq metre $35.7 \times 2.0 = 71.4$ sq metres **\$600.00**

Straighten existing wall allow sum of **\$5,000.00**

Formwork

Strip Foundation F1 finish \$59.00 per sq metre 71.4 sq metres **\$4215.00**

Reinforcing Steel

Reinforcing Steel by lengths 16mm diameter per 6m length \$42.00 supply and fix Total lengths 32 **\$1344.00**

Masonry

Repairs to Stone veneer \$120.00 per metre square allow 50 sq metres **\$6000.00**

Re-pointing to full wall allow **\$5,000.00**

Balustrades

Sand blast & paint existing metal railings **\$5,000.00**

Lighting

Allow to repair and replace as necessary the existing column mounted lighting standards.

\$10,000.00

Sub total \$44024.15 say \$45,000.00

Contingency Sum say \$10,000.00

Total \$55,000.00

Note that this is an estimate only and does not include any additional costs for further problems which may be found on site during construction such as ground instability and possible deterioration of the concrete wall and stone veneer. This estimate also does not allow for any changes to the design scope allowed for in the estimate.

I have allowed a larger than normal Contingency Sum for this reason. It is not uncommon for heritage projects to go over estimate because of further repairs and /or problems found during construction that were not able to ascertained at the time of estimate and design.

Recommendations

1. Budget for work to be carried out.
2. Prepare working drawings and contract documents and tender the new foundation construction and repair work and receive prices from selected civil engineering firms and selected stone masons.
3. Carry out construction of new foundations and repairs.

Malcolm Kitt

Architectural Designer/Building Conservator (City Solutions CCC)

Appendix B

PHOTOGRAPHS



Appendix C

ICOMOS NEW ZEALAND CHARTER FOR THE CONSERVATION OF PLACES OF CULTURAL HERITAGE VALUE

PREAMBLE

New Zealand retains a unique assemblage of places of cultural heritage value relating to its indigenous and its more recent peoples. These areas, landscapes and features, buildings, structures and gardens, archaeological and traditional sites, and sacred places and monuments are treasures of distinctive value. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage for present and future generations. More specifically, New Zealand peoples have particular ways of perceiving, conserving and relating to their cultural heritage.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter 1966), this charter sets out principles to guide the conservation of places of cultural heritage value in New Zealand. It is intended as a frame of reference for all those who, as owners, territorial authorities, tradespeople or professionals, are involved in the different aspects of such work. It aims to provide guidelines for community leaders, organisations and individuals concerned with conservation issues. It is a statement of professional practice for members of ICOMOS New Zealand.

Each section of the charter should be read in the light of all the others. Definitions of terms used are provided in section 22.

Accordingly this charter has been adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its meeting on 7 March 1993.

1. THE PURPOSE OF CONSERVATION

The purpose of conservation is to care for places of cultural heritage value, their structures, materials and cultural meaning. In general, such places:

- (i) have lasting values and can be appreciated in their own right;
- (ii) teach us about the past and the culture of those who came before us;
- (iii) provide the context for community identity whereby people relate to the land and to those who have gone before;
- (iv) provide variety and contrast in the modern world and a measure against which we can compare the achievements of today; and
- (v) provide visible evidence of the continuity between past, present and future.

2. INDIGENOUS CULTURAL HERITAGE

The indigenous heritage of Maori and Moriori relates to family, hapu and tribal groups and associations. It is inseparable from identity and well-being and has particular cultural meanings. The Treaty of Waitangi is the founding document of our nation and is the basis for indigenous guardianship. It recognises the indigenous people as exercising responsibility for their treasures, monuments and sacred places. This interest extends beyond current legal ownership wherever such heritage exists. Particular knowledge of heritage values is entrusted to chosen guardians. The conservation of places of indigenous cultural heritage value therefore is conditional on decisions made in the indigenous community, and should proceed only in this context. Indigenous conservation precepts are fluid and take account of the continuity of life and the needs of the present as well as the responsibilities of guardianship and association with those who have gone before. In particular, protocols of access, authority and ritual are handled at a local level. General principles of ethics and social respect affirm that such protocols should be observed.

3. CONSERVATION PRACTICE

Appropriate conservation professionals should be involved in all aspects of conservation work. Indigenous methodologies should be applied as appropriate and may vary from place to place. Conservation results should be in keeping with their cultural content. All necessary consents and permits should be obtained.

Conservation projects should include the following:

- (i) definition of the cultural heritage value of the place, which requires prior researching of any documentary and oral history, a detailed examination of the place, and the recording of its physical condition;
- (ii) community consultation, continuing throughout a project as appropriate;
- (iii) preparation of a plan which meets the conservation principles of this charter;
- (iv) the implementation of any planned work; and
- (v) the documentation of any research, recording and conservation work, as it proceeds.

GENERAL PRINCIPLES

4. CONSERVATION METHOD

Conservation should:

- (i) make use of all relevant conservation values, knowledge, disciplines, arts and crafts;
- (ii) show the greatest respect for, and involve the least possible loss of, material of cultural heritage value;
- (iii) involve the least degree of intervention consistent with long term care and the principles of this charter;
- (iv) take into account the needs, abilities and resources of the particular communities; and
- (v) be fully documented and recorded.

5. RESPECT FOR EXISTING EVIDENCE

The evidence of time and the contributions of all periods should be respected in conservation. The material of a particular period may be obscured or removed if assessment shows that this would not diminish the cultural heritage value of the place. In these circumstances such material should be documented before it is obscured or removed.

6. SETTING

The historical setting of a place should be conserved with the place itself. If the historical setting no longer exists, construction of a setting based on physical and documentary evidence should be the aim. The extent of the appropriate setting may be affected by constraints other than heritage value.

7. RISK MITIGATION

All places of cultural heritage value should be assessed as to their potential risk from any natural process or event. Where a significant risk is determined, appropriate action to minimise the risk should be undertaken. Where appropriate, a risk mitigation plan should be prepared.

8. RELOCATION

The site of an historic structure is usually an integral part of its cultural heritage value. Relocation, however, can be a legitimate part of the conservation process where assessment shows that:

- (i) the site is not of associated value (an exceptional circumstance); or
- (ii) relocation is the only means of saving the structure; or
- (iii) relocation provides continuity of cultural heritage value.

A new site should provide a setting compatible with cultural heritage value.

9. INVASIVE INVESTIGATION

Invasive investigation of a place can provide knowledge that is not likely to be gained from any other source. Archaeological or structural investigation can be justified where such evidence is about to be lost, or where knowledge may be significantly extended, or where it is necessary to establish the existence of material of cultural heritage value, or where it is necessary for conservation work.

The examination should be carried out according to accepted scientific standards. Such investigation should leave the maximum amount of material undisturbed for study by future generations.

10. CONTENTS

Where the contents of a place contribute to its cultural heritage value, they should be regarded as an integral part of the place and be conserved with it.

11. WORKS OF ART AND SPECIAL FABRIC

Carving, painting, weaving, stained glass and other arts associated with a place should be considered integral with a place. Where it is necessary to carry out maintenance and repair of any such material, specialist conservation advice appropriate to the material should be sought.

12. RECORDS

Records of the research and conservation of places of cultural heritage value should be placed in an appropriate archive and made available to all affected people. Some knowledge of places of indigenous heritage value is not a matter of public record, but is entrusted to guardians within the indigenous community.

CONSERVATION PROCESSES

13. DEGREES OF INTERVENTION

Conservation may involve, in increasing extent of intervention: non-intervention, maintenance, stabilisation, repair, restoration, reconstruction or adaptation. Where appropriate, conservation processes may be applied to parts or components of a structure or site.

Re-creation, meaning the conjectural reconstruction of a place, and replication, meaning to make a copy of an existing place, are outside the scope of this charter.

14. NON-INTERVENTION

In some circumstances, assessment may show that any intervention is undesirable. In particular, undisturbed constancy of spiritual association may be more important than the physical aspects of some places of indigenous heritage value.

15. MAINTENANCE

A place of cultural heritage value should be maintained regularly and according to a plan, except in circumstances where it is appropriate for places to remain without intervention.

16. STABILISATION

Places of cultural heritage value should be protected from processes of decay, except where decay is appropriate to their value. Although deterioration cannot be totally prevented, it should be slowed by providing stabilisation or support.

17. REPAIR

Repair of material or of a site should be with original or similar materials. Repair of a technically higher standard than the original workmanship or materials may be justified where the life expectancy of the site or material is increased, the new material is compatible with the old and the cultural heritage value is not diminished. New material should be identifiable.

18. RESTORATION

Restoration should be based on respect for existing material and on the logical interpretation of all available evidence, so that the place is consistent with its earlier form and meaning. It should only be carried out if the cultural heritage value of the place is recovered or revealed by the process. The restoration process typically involves reassembly and reinstatement and may involve the removal of accretions.

19. RECONSTRUCTION

Reconstruction is distinguished from restoration by the introduction of additional materials where loss has occurred. Reconstruction may be appropriate if it is essential to the function or understanding of a place, if sufficient physical and documentary evidence exists to minimise conjecture, and if surviving heritage values are preserved. Reconstruction should not normally constitute the majority of a place. Generalised representations of typical features or structures should be avoided.

20. ADAPTATION

The conservation of a place of cultural heritage value is usually facilitated by it serving a socially, culturally or economically useful purpose. In some cases, alterations and additions may be acceptable where they are essential to continued use, or where they are culturally desirable, or where the conservation of the place cannot otherwise be achieved. Any change, however, should be the minimum necessary and should not detract from the cultural heritage value of the place. Any additions and alterations should be compatible with original fabric but should be sufficiently distinct that they can be read as new work.

21. INTERPRETATION

Interpretation of a place may be appropriate if enhancement of public understanding is required. Relevant protocol should be complied with. Any interpretation should not compromise the values, appearance, structure or materials of a place, or intrude upon the experience of the place.

22. DEFINITIONS

For the purposes of this charter:

adaptation means modifying a place to suit it to a compatible use, involving the least possible loss of cultural heritage value

conservation means the processes of caring for a place so as to safeguard its cultural heritage value

cultural heritage value means possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, traditional or other special cultural significance, associated with human activity

maintenance means the protective care of a place

material means physical matter which is the product of human activity or has been modified by human activity

place means any land, including land covered by water, and the airspace forming the spatial context to such land, including any landscape, traditional site or sacred place, and anything fixed to the land including any archaeological site, garden, building or structure, and any body of water, whether fresh or seawater, that forms part of the historical and cultural heritage of New Zealand

preservation means maintaining a place with as little change as possible

reassembly (anastylosis) means putting existing but dismembered parts back together

reconstruction means to build again in the original form using old or new material

reinstatement means putting components of earlier material back in position

repair means making good decayed or damaged material

restoration means returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/ or the removal of extraneous additions

stabilisation means the arrest of the processes of decay

structure means any building, equipment, device or other facility made by people and which is fixed to the land

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