

GUARD 519.9: Eilean and Castle Tioram, Moidart, Inverness-shire

Project Design:
Archaeological Monitoring of Emergency Stabilisation Works to the North-West Curtain Wall

1.0 Summary

Glasgow University Archaeological Research Division (GUARD) has been asked by ARP Lorimer (Architects & Quantity Surveyors) to provide an archaeological project design for the monitoring of repairs to the north-west curtain wall of Castle Tioram. This document includes methodologies for this work and a likely timescale.

2.0 Introduction

As part of a wider programme of archaeological service provision, GUARD has been asked by Anta Estates, through ARP Lorimer (Architects & Quantity Surveyors), to develop and implement a scheme, in conjunction with the project architect, for the archaeological monitoring of proposed repairs to the north-west curtain wall of the castle, as specified in preliminary sections *A34-A35*, CAWS sections *C10* (downtaking), *C53* (removal of vegetation), *F20* (natural rubble stonemasonry) *F31* (accessories) and *Z21* (mortars), and drawings 5439/42, 43, 46 and 47. References in italics in this document refer to these clauses and sections.

The principal focus of this work is what, in 1997, was a small hole located towards the base of the north-west curtain wall of the castle, DD008 (see plans 5439/42, 43 and 46). When observed in January 2000, the hole was found to have become significantly enlarged due to the effects of the winter weather and water penetration from above. It now seems likely to join up with a collapse higher up in the wall. In addition, facing stones have fallen out on the seaward side of the curtain wall and the inner core is either loose or already collapsed. Consequently, the stability of the north-west curtain wall is considered to be under imminent threat of further collapse. Emergency repair works are proposed, and both archaeological recording of the more recent damage and archaeological monitoring of the repair works form the principal component of this proposed programme of work.

3.0 Aims of the Project

The project aims are to:

- advise on the issue of protection of the archaeological remains and deposits prior to the erection of scaffolding, including consideration of appropriate access routes and storage areas.
- record the current condition of the affected areas in the north-west curtain wall, with particular regard to any interpretative masonry features likely to be affected.
- record the position of any collapsed or fallen masonry prior to the erection of scaffolding and the salvaging of stone.

4.0 Methodology

4.1 Site Protection

† In connection with *Clause A34 sections 451 & 452*, the archaeologist will be on site for consultation with the Consultant Architect, prior to commencement of the works, over the protection of

archaeologically sensitive existing ground surfaces. This will include agreeing access routes across the island, as well as appropriate measures for protection of the courtyard works area and courtyard surfaces.

In connection with *Clause A34 section 453* the archaeologist will examine the *solum* for any fallen masonry or artefacts, and if found will photograph and record them (by written and hand measurements) prior to numbering and removal by the Main Contractor.

4.2 Scaffold Erection

4.2.1 Interior

The ground surfaces within the *solum* will require protection prior to the erection of the scaffolding. The archaeologist will be present prior to the commencement of the works to ensure the *solum* is adequately protected from the scaffolding. Although details of the *solum* protection are specified in *Clause A34 section 453* it will be important for the archaeologist and the Main Contractor to look in detail at the ground surface area(s) to be affected.

4.2.2 Exterior

Sensitive archaeological remains lie below the external face of the curtain wall (see ARP Lorimer: Eilean & Castle Tioram, Moidart Consultation Project - Drawing 5439/42, Elevation DD). The archaeologist will inform the Main Contractor of the location of those deposits prior to the erection of scaffolding, to ensure that they are not disturbed.

All loose stone found adjacent to the void DD008 in the curtain wall will be fully recorded by drawing and photography, where it may be affected by the works (see *Clause C10 section 810*).

All survey details of the above ground level which will be affected by the repair works will be checked and amended by the archaeologist and the Consultant Architect following the erection of the scaffolding and before commencement of the repair and conservation works.

4.3 Recording the fabric of DD008 prior to the work (see proposed sequence in *A34, C10*).

After erection of the scaffolding, but prior to the start of the repair works, the archaeologist will identify 'landmarks' on the *in situ* masonry to allow it to be tied into the existing GUARD survey framework (*Building Analysis and Interpretation* and *The Survey Products*, GUARD 1998).

In addition, the archaeologists will, in consultation with the Consultant Architect (see *Clause C10 Section 612*) and prior to any dountaking of masonry,

- prepare 1:10 scale drawings of the area of the wall to be repaired to record the masonry characteristics etc.
- identify any (interpretative) features including their exact location and relationship
- tie this work into GUARD's previous standing building surveys of the castle.
- take both black and white print and colour slide photographs of all surfaces and relevant details of the wall faces and the wall core.
- take additional colour print photography to allow the Main Contractor to have a photographic record so that interpretative masonry features for dountaking can be marked, thereby providing detailed information to allow accurate reinstatement of the masonry.
- prepare a written description of the work undertaken including observations on the mortars.

- take representative samples of the different mortars encountered for analysis, and subsequently from the core and the facework.

As part of the recording products and as a guide for reinstatement, the archaeologist will provide

- copies of inked scale drawings for the Main Contractor
- a full set of colour prints of the original masonry for use by the Main Contractor.

4.4 *Downtaking*

As specified in Section 4.3 and in conjunction with *Clause C10 section 637* the archaeologist will record all features and masonry elements prior to any downtaking of the masonry by the Main Contractor.

The archaeologist will also monitor the downtaking of masonry and record any archaeologically and historically significant features as required.

4.5 *Recording, Removal and Salvaging of Collapsed Material*

As stated in Section 4.2.2 and in conjunction with *Clause C10 section 800 and section 805* the archaeologist will, by written documentation, drawings and photographs, record any masonry for salvage prior to its removal from the immediate area requiring repair.

5.0 *Sequence of Work*

As stated in *Clause A35 Section 130*, the archaeologist will examine both standing and collapsed masonry in the area of the works in conjunction with the site contractor prior to work commencing on the site. Included in this assessment will be access routes, storage areas and areas of possible dislodgement. This examination will include the *solum* floor and the areas designated for the placing of the scaffolding.

Following this initial examination, the archaeologist will record the masonry as specified in Section 4.0.

6.0 *Reporting*

A written report, augmented as appropriate by plans, drawings and photographs, will be the product of this work. The report will deal with the archaeological aspects of the repair and conservation works to the curtain wall. It will include lists of the recording products (plans and photographs).

GUARD will undertake to supply a report within one month of the completion of the monitoring of the emergency repair works. The report will include:

- a full description of standing and collapsed masonry and any significant archaeological or historical features located.
- plans and photographs of the standing and collapsed masonry
- any relevant section drawings
- lists of all records and of any artefacts recovered, including any relevant diagrams

Copies of the report will be lodged with Historic Scotland; Highland Council, the National Monuments record for Scotland and the client. Should further institutions or individuals be required to receive report copies as a condition of scheduled monument consent, this will be undertaken as instructed.

A brief summary of the results will be sent for inclusion in *Discovery and Excavation in Scotland* along with a fee of £30. If the archaeological result merit further publication, a short report could be submitted to a relevant period journal.

7.0 *Human Remains, Finds Disposal and Archive Arrangements*

Although it is not anticipated as likely, should any human remains be encountered during the course of the work, GUARD will follow standard archaeological and legal procedures set out in Historical Scotland's *Operational Policy Paper 5* and the Institute of Field Archaeologists *Technical Papers Number 11 and 13*. The remains would initially be left *in situ* and WoSAS, the Client and the local police notified at once. Their removal will be a matter of discussion with the WoSAS and will comply with the provisions of Scots Law.

GUARD will undertake to report any finds made during the project to the Treasure Trove Advisory Panel, and the Client, and on subsequent notification transfer those finds to the designated repository, in keeping with Scottish legal requirements.

8.0 *Timescale and Personnel*

Archaeological presence on the site will be determined by the work programme of the Main Contractor. GUARD will arrange to have an archaeologist present both prior to, and during, all repair work, subject to the provision of appropriate notice. For the avoidance of doubt, a minimum of five working days notice of requirement to attend the site will be required.

It is anticipated that Keith Speller, an archaeological project officer with GUARD, who undertook the initial building recording, will conduct the archaeological tasks on site, subject to clarification of field dates for the emergency repair work. A detailed CV for Mr Speller can be supplied if required. Dr Stephen Driscoll will provide consultancy advice for all archaeological work, while the archaeological elements of the project will be managed by Dr Alan Leslie, the Director of GUARD.

9.0 *Other Information*

As with other work at Eilean Tioram, a project risk assessment exercise will be carried out by GUARD, giving rise to a project safety plan for the archaeological fieldwork. In addition, GUARD will observe any health and safety requirements put in place as part of the main programme of emergency repair works. A copy of the GUARD fieldwork health and safety policy document and of its insurance cover arrangements can be supplied if required.

A copy of the Standard University of Glasgow Terms and Conditions for the provision of services document is enclosed with this project design.