

Dismantling of the Archway at St Margaret's Hope, North Queensferry, Fife

Archaeological Watching Brief

February 2011

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Figure 1 – St Margaret's Hope Archway – Location Plan (bound at rear)

1**Summary**

An archaeological watching brief was maintained during the dismantling of the Category B stone archway on the roadway to St Margaret's Hope, North Queensferry in January 2011. The stone archway was dismantled as part of the advance works for the Forth Replacement Crossing.

The works were completed under Building Warrant and Listed Building Consent, and followed the requirements of a Method Statement which was submitted to Historic Scotland and Fife Council in support of the Listed Building Consent application.

The purpose of the watching brief was to monitor and record the safe recovery of two medieval marriage pediments and associated filial prior to their delivery to the Huntley House Museum, Royal Mile, Edinburgh.

2**Background****2.1 Introduction**

As part of the advance works for the Forth Replacement Crossing (FRC) and in accordance with the 'Approved Listed Building Consent 10/02808/LBC' (Fife Council 2010) and the 'Method statement for the dismantling of the stone archway at St Margaret's Hope, North Queensferry' (Jacobs Arup 2010a) an archaeological watching brief was maintained during the recovery of two medieval marriage pediments and an associated filial from the stone archway at St Margaret's Hope, North Queensferry (NGR: NT 12308 81105, HB number 6405). Figure 1 shows the location of the archway.

The removal of the archway was required to facilitate access for vehicles involved in the construction of a proposed radar station, to be completed in advance of works for the FRC (anticipated to commence in 2011). It should be noted that archway removal would also be required for construction of the FRC and during subsequent operation (for emergency and maintenance vehicle access). The removal of the arch was assessed and reported in the FRC Environmental Statement (Jacobs Arup, 2009) as an impact of slight significance, subject to historic building recording being undertaken prior to relocation or dismantling to record the features and setting of the archway. The structure was recorded in March 2010 (Jacobs Arup 2010b).

2.2 Desk Based Research

The archway is part of a Category B group listing that includes Admiralty House, St Margaret's Hope boundary walls and walled garden.

The archway contains two fine examples of red sandstone Marriage Pediments dated 1376 and 1570. Documentary research has established that the latter commemorates the marriage of William Napier and Eliza Park and contains the Latin inscription "WN EP DITAT SERVATA FIDES 1570" [Faith preserved maketh rich]. The former is inscribed "WN IF SICVT OLIVA FRVCTIFERA 1376" [Fruitful as an olive] and it is possible that this stone relates to William Napier of 'Wrychtishousis', Constable of the Castle of Edinburgh in 1390. Both are known to have been part of the fabric of the 'Wrychtshouse' formerly situated at Bruntsfield, Edinburgh, which was demolished in 1800 to make way for Gillespie's Hospital. The 'Wrychtshouse' was well known for the quality and quantity of its carvings. On its demolition many of the carvings were incorporated into the walls of Gillespie's Hospital and the surrounding park (subsequently rescued when the hospital was demolished in 1976), and also into a folly in the grounds of Woodhouselee, Glencorse Parish, Midlothian.

Despite extensive research no records have been forthcoming as to the date of the construction of the archway. However following a Level 2 (English Heritage specification, followed by Historic Scotland) Historic Building Survey conducted by Jacobs Arup in March 2010 (Jacobs Arup 2010b), it has been established that the archway is a composite folly that may be dated to the period following the acquisition of St Margaret's Hope by the Royal Navy in 1916 and its use as the base of the Commander in Chief, Coast of Scotland in 1916, at which time St Margaret's Hope was subject to extensive alterations by Ernest Newton, a major English Arts and Crafts architect.

2.3 Architectural Construction

Four distinct phases of construction have been identified relating to the gate structure including the archway:

- The first phase was the construction of stand alone gate piers of randomly coursed whinstones bonded by lime mortar.
- The second phase of construction is evidenced by the landscaping to the east of the southern gate pier that comprised of the building of an embankment and steps, and an unmortared retaining wall to provide a platform for and access to the battlements and archway.
- The third phase comprised the construction of the battlements and archway.
- The fourth phase was a reconstruction of the archway evidenced by the use of 8 concrete blocks as voussoirs in the archway and the use of Portland cement as bonding.

3**Aims and Objectives****3.1 General**

Jacobs Arup JV undertook an archaeological watching brief between the 24th and 25th of January 2011 in compliance with Approved Listed Building Consent 10/02808/LBC (Fife Council, 2010) and Method statement for the dismantling of the stone archway at St Margaret's Hope, North Queensferry (Jacobs Arup 2010a). All work was undertaken according to the Code of Conduct, Standards and Guidance of the Institute of Archaeologists (2008).

3.2 Objective

The objective of the watching brief was to monitor and record the safe recovery of two medieval marriage pediments and associated filial from the stone archway, St Margaret's Hope, North Queensferry, Fife, prior to their delivery to the Huntley House Museum, Royal Mile, Edinburgh.

4**Results****4.1 Overview**

A team from W. Gallagher Stone Masons & Builders; William Gallagher (Stone Mason), Ian Williamson (Stone Mason), Paul Robinson (Stone Mason) and Terry Calvert (Stone Mason) successfully completed the works reported in this watching brief, and were able to recover the pediments and filial undamaged.

W. Gallagher Stone Masons & Builders were commissioned by Graham Construction, and undertook the works under the archaeological supervision of Jacobs Arup as representatives of Transport Scotland.

The works set out below are supported by a photographic record provided by Plates 1-23 (Appendix A). The Discovery and Excavation in Scotland entry is provided in Appendix B.

4.2 Preparatory Works

In accordance with the Method statement for 'Dismantling of the stone archway at St Margaret's Hope, North Queensferry' (Jacobs Arup 2010a) prior to dismantling works commencing the security light was isolated and removed from the northern gate pier and the control box was removed from the southern gate pier.

4.3 Removal of Cope Stones

The cope stones were then removed from the southern half of the top of the archway and stored with a view to possible later reuse (see Plate 1). During this phase of the works the contractor noted that the bonding material used during the phase 4 rebuilding of the archway was like 'iron' and that it was likely that a 1:1 mix of Portland cement and sand had been utilised (see Plate 2).

4.4 Recovery of Filial

Upon removal of the cope stones work began to separate the filial from its backing stones and the cope stone abutting it to the north (see Plate 3). The contractor noted that this was proving more problematic than envisaged due to the nature of the bonding material and as a consequence the works would take longer than anticipated.

The filial was eventually separated and due to its small size was manhandled to the storage point for cleaning prior to delivery to the Huntley House Museum. No mason's marks were noted on the filial (see Plates 4 to 6).

4.5 Recovery of Pediments

Following the removal of the filial, work continued to remove the backing stones and the facing stones surrounding the pediments and to clean the residual cement from the newly exposed surfaces of the pediments (see Plates 7 and 8), with work concentrating on the eastern pediment which was to be recovered first. The contractor noted a further problem as a result of the phase 4 works, that during the rebuild, on completion of being laid on bed, the pediments had then been pointed to the bottom fillets with the same 1:1 mix (see Plate 9 for close up).

As a result of the phase 4 pointing the contractor was obliged to use a level to inscribe a basal line as a guide to facilitate the use of a grinder in the first instance and then a Schtill saw to separate the pediment from the archway (see Plates 10 and 11). Final separation was achieved by hand and the pediment was then lifted and rested on chocks of wood to facilitate the securing of the pediment in a sling for lowering by block and tackle to the ground (see Plates 12 to 14). Plates 15 and 16 are close ups of the base of the pediment to illustrate the concrete like nature of the bonding material that was used during the phase 4 rebuild as bedding material and for pointing. Again no mason's marks were noted on the eastern pediment. Once recovered the eastern pediment was moved to the storage point for cleaning prior to its delivery to Huntley House Museum.

The recovery of the eastern pediment allowed the opportunity to record the archway core that consisted of randomly coursed rubble and cement (see Plates 17 and 18).

The recovery of the western pediment was achieved in the same manner as had been employed during the recovery of the eastern pediment (see Plates 19 to 22). As before no mason's marks were noted on the western pediment.

4.6 Recovery and Storage

Once the pediments had been recovered and moved to the storage point for cleaning the opportunity was taken for a closer inspection. Mr Ian Williamson (Stone Mason) noted that both pediments had been carved from 'red sandstone' which indicated that the stone had been quarried at Craigmiller Quarry, Midlothian. Records of quarrying activity date back to the fourteenth century (see link www.bgs.ac.uk/downloads/start.cfm?id=1345). Mr Williamson was also able to point out an ancient repair to a finger on the western pediment and stated that the repair would have been affected with a glue rather than mortar (*Ian Williamson pers comm.*) (see Plate 23).

In compliance with the request of the Curator of Archaeology at the city of Edinburgh (Edinburgh Museums) the pediments were subjected to basic cleaning of Portland cement prior to their packing in suitable containers for transportation to the Huntley House Museum, Royal Mile, Edinburgh. The pediments were safely delivered, to the satisfaction of John Lawson (Curator of Archaeology, Archaeology Service, City of Edinburgh Council), on the 31st of January 2011.

5**References**

Jacobs Arup (2009). *Forth Replacement Crossing Environmental Statement*. Prepared on behalf of Transport Scotland 2009.

Jacobs Arup (2010a). *Forth Replacement Crossing. Method Statement for the Dismantling of the stone archway at St Margaret's Hope, North Queensferry*. Unpublished Client Report.

Jacobs Arup (2010b). *Forth Replacement Crossing, St Margaret's Hope Archway, Standing Building Survey Report*. Unpublished Client Report.

Institute for Archaeologists (2008). *Standard and Guidance for an archaeological watching brief*.

Fife Council (2010). *10/02808/LBC Listed building consent for demolition of decorative archway*.

Appendix A Photographic Plates



Plate 1 Cope stone removal



Plate 2 Close up of mortar used in Phase 4 rebuild



Plate 3 Separating the filial



Plate 4 The separated filial



Plate 5 The separated filial



Plate 6 Obverse of the separated filial



Plate 7 Separating the pediments from the backing stones



Plate 8 Separating the pediments from the backing stones



Plate 9 Detail of pointing on western Pediment

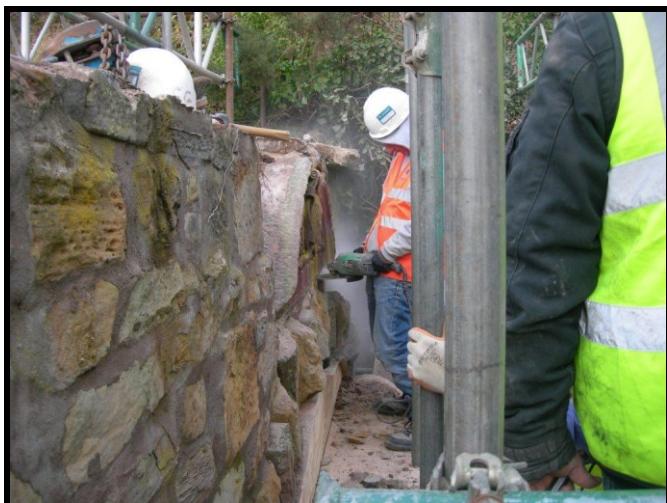


Plate 10 Separating the eastern Pediment



Plate 11 Separating the eastern Pediment



Plate 12 Securing the eastern Pediment in sling



Plate 13 Lowering the eastern Pediment



Plate 14 Lowering the eastern Pediment



Plate 15 Close up of the eastern Pediment base showing Phase 4 bonding material



Plate 16 Close up of the eastern Pediment base showing Phase 4 bonding material



Plate 17 Arch core



Plate 18 Arch core



Plate 19 Recovery of the western Pediment



Plate 20 Recovery of the western Pediment



Plate 21 Recovery of the western Pediment



Plate 22 Recovery of the western Pediment



Plate 23 Detail of ancient repair to finger on western Pediment

Appendix B DES Entry

LOCAL AUTHORITY:	Fife Council
PROJECT TITLE/SITE NAME:	St. Margaret's Hope Archway; Demolition Watching Brief
PROJECT CODE:	B0900011
PARISH:	Inverkeithing
NAME OF CONTRIBUTOR:	Alisdair Curtis
NAME OF ORGANISATION:	Jacobs Engineering UK (as part of Jacobs Arup joint venture)
TYPE(S) OF PROJECT:	Archaeological Watching Brief
NMRS NO(S):	NT 18 SW 217.03
SITE/MONUMENT TYPE(S):	Archway
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 8 or 10 figures)	NT 12308 81105
START DATE (this season)	January 2011
END DATE (this season)	January 2011
PREVIOUS WORK (incl. DES ref.)	<p>Forth Replacement Crossing, Environmental Statement (Jacobs Arup JV 2009).</p> <p>Forth Replacement Crossing, Method Statement for the Demolition of the stone archway at St Margaret's Hope, North Queensferry (Jacobs Arup JV 2010a).</p> <p>Forth Replacement Crossing, St Margaret's Hope Archway, Standing Building Survey Report (Jacobs Arup JV 2010b).</p>
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Jacobs Arup was commissioned by Transport Scotland to carry out an archaeological watching brief during the demolition of and recovery of two medieval marriage pediments and associated filial from the archway within the grounds of St. Margaret's Hope (NGR: NT 12308 81105, HB number 6405). The archway is a Category B-Listed structure and although there is no record noting its construction a Building Survey (Jacobs Arup 2010b) has shown it to be a composite folly that may be contemporary with the extensive renovations and extensions conducted in 1916 by the renowned English Arts and Crafts Architect Ernest Newton. Within its recent history the archway has been demolished and subsequently re-erected, as is evidenced by the inappropriate use of modern materials i.e. concrete blocks and Portland cement. The recovery operation was a success and the marriage pediments and filial were deposited with the Huntley House Museum, Royal Mile, Edinburgh.
PROPOSED FUTURE WORK:	N/A
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Transport Scotland
ADDRESS OF MAIN CONTRIBUTOR:	<p>Jacobs UK 160 Dundee Street Edinburgh EH11 1DQ</p>
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ARCHIVE LOCATION	NMRS