LOCAL AUTHODITY	Otivitie a
LOCAL AUTHORITY:	Stirling
PROJECT TITLE/SITE NAME:	Stirling Castle: Douglas Gardens
PROJECT CODE:	HSCO-90291-2016-01 & HSCO-90291-2016-02
PARISH:	Stirling
NAME OF CONTRIBUTOR:	Paul Fox
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Watching brief
NMRS NO(S):	NS79SE 6
SITE/MONUMENT TYPE(S):	Castle
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 7898 9411
START DATE (this season)	9 May 2016
END DATE (this season)	26 May 2016
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was maintained during minor excavations to allow the installation of footings for a new handrail upright serving the wall-walk stairs in the north-east portion of the Douglas Gardens. The first excavation (9 May 2016) revealed <i>in situ</i> sandstone masonry steps and as it was not thought possible to install new concrete footings without disturbing existing structures and potentially archaeologically sensitive deposits, so work was postponed and a further excavation was carried out on 26 May 2016 to excavate a small trench which avoided the <i>in situ</i> masonry.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Historic Environment Scotland
ADDRESS OF MAIN CONTRIBUTOR:	4 Western Terrace, Edinburgh EH12 5QF
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ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with Historic Environment Scotland

# HISTORIC ENVIRONEMNT SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2016/2017

### Stirling Castle • Monitoring • May 2016

### HS PIC Index Number: 90291

SITE:	Stirling Castle, Stirling.
N.G.R.:	NS 7898 9411
DESCRIPTION:	Archaeological watching brief during the excavation of a relocated trench to install the footing for a handrail upright serving the wall-walk stairs in the north-east portion of the Douglas Gardens.
PROJECT CODE:	HSCO-90291-2016-01
CONTENTS:	Introduction 1   Description 2   Conclusions 4   List of Contexts 5   List of Drawings 5   List of Digital Photographs 5

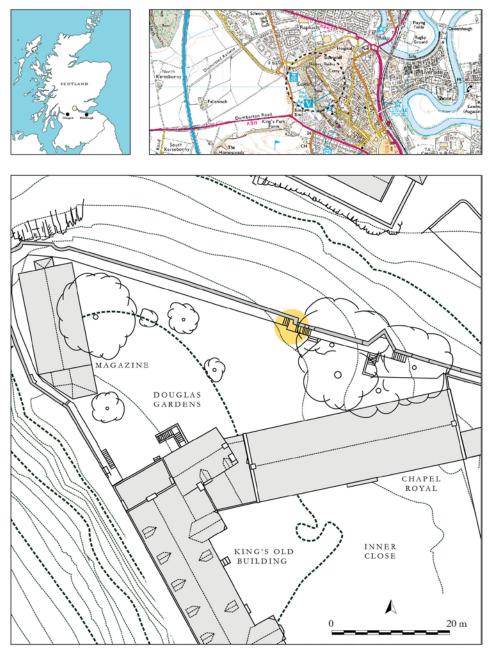


4 Western Terrace, Murrayfield, Edinburgh EH12 5QF

MAY 2016

### INTRODUCTION

Under the terms of its PIC call-off contract with Historic Environment Scotland, Kirkdale Archaeology was asked to carry out an archaeological watching brief at Stirling Castle during the excavation of a trench to house a concrete footing for a handrail upright in the Douglas Gardens (Fig. 1).



**Figure 1**: Plan showing the general location of Trench 2 (for a detailed location plan, see Figures 2). Inset No. 2 © Crown copyright. All rights reserved 2016. Licence number 100036933.

A wall-walk runs over the bastion wall around the Douglas Gardens and there are two stair accesses, one to the south-west (near to the King's Old Building) and one to the north-east (opposite the north wall of the Chapel Royal). Both stairs were to be fitted with new handrails. An archaeological watching brief was previously undertaken in November/December 2014<sup>1</sup>. Trench 1 to the south-west was excavated to the required depth while Trench 2 to the north-east was found to contain historic fabric in the form of a sandstone step with rounded edges, which appeared to relate to an earlier configuration of the wall-walk. This prevented the emplacement of the foundation and required the trench to be relocated 0.3m to the west. The current watching brief was therefore monitoring this extension to the original Trench 2.

The area of the Douglas Gardens has been subject to historic levelling over the undulating bedrock summit on which it is situated. From the west, the rampart wall can be seen to be built directly onto the bedrock. To the north it is likely that a natural bedrock terrace has been 'faced up' with a rampart wall separating it from the falling ground to the Nether Bailey. To the south, the extent of the garden is demarcated by the King's Old Building and Chapel Royal. The Powder Magazine occupies the northwest portion of the gardens which currently consist of grass lawns and trees with paths formed by grass bars. This is the latest configuration of a layout which can be seen to have changed many times since the early 18<sup>th</sup> century (and doubtless prior to that).

The trench was excavated manually by the MCU under archaeological supervision, and the work was carried out on the 9<sup>th</sup> May, 2016.

### DESCRIPTION

Trench 2 was relocated to flank the west side of the re-set steps leading to the north wall-walk (approximately 0.35m west of the trench as originally intended). The trench was intended to measure c.0.8m N/S x 0.35m E/W x 0.325m deep.

After an initial cleaning, it was clear that there was a portion of *in-situ* angular sandstone masonry **206** bonded in lime mortar at ground level within an area 0.35m E/W x 0.35m N/S in the northern portion of the relocated trench sitting against the southern side of the rampart wall-walk. This appeared to be a bedding layer for an earlier configuration of wall-walk steps. This immediately meant that the trench as initially planned could not be excavated. Having consulted with Historic Environment Scotland it was decided that the original buried sandstone step **203** (now sealed by slabs and covered by grass bars) would be located and the area to the south of it would be cleared in order to establish if a trench could be excavated in this position in order to locate the foundation for the handrail upright. Three of the grass bars on the south side of the wall-walk steps and two portions of the threshold slabs were removed, revealing a cement bed **207** (emplaced in 2014). An area *c*0.70m E/W x 0.4m N/S of the cement bed was cut back in order to be able to examine the area to the south of the original sandstone step **203**.

<sup>&</sup>lt;sup>1</sup> See HSCO-90291-2015-01.

Below this was a layer of compact pinkish/grey gravelly gritty soil **205** flecked with charcoal. At this point, it was decided that the southern portion of the trench (as set out at the start of the works) would be excavated to the stipulated depth of 0.325m from the tread of the lower sandstone step. This created a trench 0.45m N/S x 0.35m E/W and provided a possible solution to the problem of locating the foundation trench. The trench was fully cut through layer **205** but no artefacts were recovered which could help to date it. Having excavated this portion of the trench to the required depth, and having exposed the layer **205** abutting the south face of the sandstone step **203**, the trench was left for inspection by the project architect. The western face of **203** was exposed showing it's depth to be at least 25cm. The masonry layer **207** was shown to be 0.1m thick and bedded onto layer **205**.

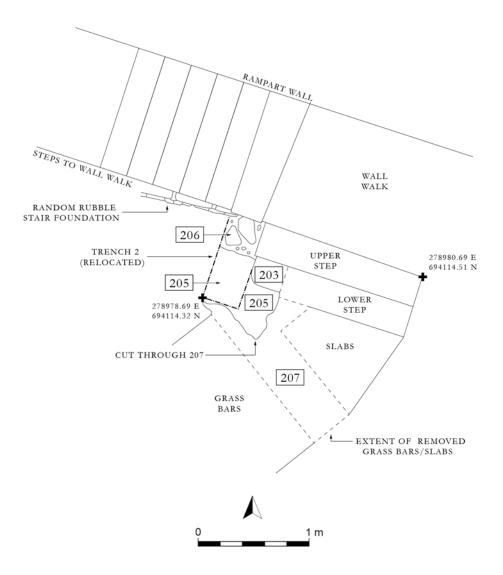


Figure 2: Trench 2 (as repositioned), post-excavation plan.



Plate 1: Trench 2, post-excavation.

### CONCLUSIONS

The excavations have again shown that the area within the Douglas Gardens is of high archaeological potential. It presently remains to be seen whether the reduced size of the trench as excavated is large enough to accommodate an appropriate foundation for the handrail upright. If not, there is the possibility that an L-shaped trench could be formed if the trench was extended around the southern face of the historic sandstone step **203**. It is recommended that if such work is undertaken, it is similarly accompanied by an archaeological watching brief.

### LIST OF CONTEXTS

Context	Description
201	Mixed silt, gravel and sandstone rubble bedding for modern concrete slabs.
202	Layer of sandstone rubble below 201.
203	Sandstone threshold slab.
204	Concrete patches on 203.
205	Layer of compact pinkish grey gravelly gritty soil flecked with charcoal lapping up against 203.
206	Portion of <i>in-situ</i> angular sandstone masonry bonded in lime mortar forming the bedding layer for an earlier configuration of wall-walk steps.
207	Modern (c2014) cement bed for grass bars.

## LIST OF DRAWINGS

No.	Trench	Туре	Description	Scale
1	2	Plan	Post-excavation.	1:20

### LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Trench location, shot at wall-walk steps.	SE	09/05/2016
2	Bonded masonry 206 at north end of trench.	E	09/05/2016
3	Bonded masonry 206 at north end of trench.	S	09/05/2016
4	Bonded masonry 206 at north end of trench.	W	09/05/2016
5	Trench location, shot at wall-walk steps.	S	09/05/2016
6	Cement bedding 207, revealed after removal of grass bars.	W	09/05/2016
7	Cement bedding 207, revealed after removal of grass bars.	Ν	09/05/2016
8	Original sandstone step 203.	S	09/05/2016
9	Original sandstone step 203.	W	09/05/2016
10	Post-excavation shot of trench.	S	09/05/2016
11	Post-excavation shot of trench.	W	09/05/2016
12	Post-excavation shot of trench.	Ν	09/05/2016

## HISTORIC ENVIRONEMNT SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2016/2017

### Stirling Castle • Monitoring • May 2016

### HS PIC Index Number: 90291

SITE:	Stirling Castle, Stirling.
N.G.R.:	NS 788 941 - NS 792 938
DESCRIPTION:	Archaeological watching brief during the excavation of a relocated trench to install the footing for a handrail upright serving the wall-walk stairs in the north-east portion of the Douglas Gardens.
PROJECT CODE:	HSCO-90291-2016-02
CONTENTS:	Introduction 1   Description 2   Conclusions 4   List of Contexts 5   List of Drawings 5   List of Digital Photographs 5

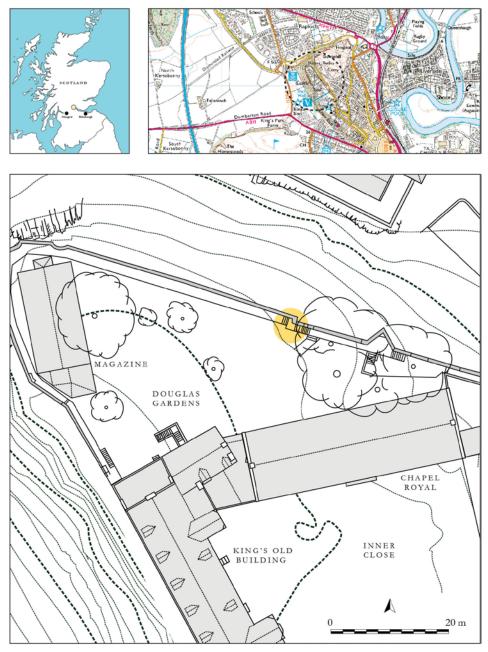


4 Western Terrace, Murrayfield, Edinburgh EH12 5QF

JUNE 2016

### INTRODUCTION

Under the terms of its PIC call-off contract with Historic Environment Scotland, Kirkdale Archaeology was asked to carry out an archaeological watching brief at Stirling Castle during the excavation of a trench to house a concrete footing for a handrail upright in the Douglas Gardens (Fig. 1).



**Figure 1**: Plan showing the general location of Trench 2 (for a detailed location plan, see Figure 2). Inset No. 2 © Crown copyright. All rights reserved 2016. Licence number 100036933.

A wall-walk runs over the bastion wall around the Douglas Gardens and there are two stair accesses, one to the south-west (near to the King's Old Building) and one to the north-east (opposite the north wall of the Chapel Royal). Both stairs were to be fitted with new handrails. An archaeological watching brief was

undertaken in November/December 2014<sup>1</sup> during which Trench 1 to the south-west was excavated to the required depth, while Trench 2 to the north-east was found to contain historic fabric in the form of a sandstone step with rounded edges, which appeared to relate to an earlier configuration of the wall-walk. This prevented the emplacement of the foundation and required the trench to be relocated 0.3m to the west. This relocated trench was excavated in May 2016<sup>2</sup> but more masonry was encountered preventing the handrail base as designed to be bedded here. The current works relate to a further relocation of the trench in order to find a suitable site for the base.

The area of the Douglas Gardens has been subject to historic levelling over the undulating bedrock summit on which it is situated. From the west, the rampart wall can be seen to be built directly onto the bedrock. To the north it is likely that a natural bedrock terrace has been 'faced up' with a rampart wall separating it from the falling ground to the Nether Bailey. To the south, the extent of the garden is demarcated by the King's Old Building and Chapel Royal. The Powder Magazine occupies the north-west portion of the gardens which currently consist of grass lawns and trees with paths formed by grass bars. This is the latest configuration of a layout which can be seen to have changed many times since the early 18<sup>th</sup> century (and doubtless prior to that).

The trench was excavated manually by the MCU under archaeological supervision, and the work was carried out on 26<sup>th</sup> May, 2016.

#### DESCRIPTION

Trench 2 was previously relocated to flank the west side of the re-set steps leading to the north wall-walk (approximately 0.35m west of the trench as originally intended). A portion of *in-situ* angular sandstone masonry **206** bonded in lime mortar at ground level within an area 0.35m E/W x 0.35m N/S in the northern portion of the relocated trench was encountered sitting against the south side of the rampart wall-walk. This appeared to be a bedding layer for an earlier configuration of wall-walk steps.

The trench was therefore relocated (during the current set of works) to flank the southern portion of masonry **206** and to be set off from the west side of the original threshold slab **203**. The relocated trench measured 0.5m E/W x 0.5m N/S and required a depth of 0.32m. Some 0.1m below the ground, a further concrete structure **209** was found in the western portion of the relocated trench. This structure took up the full N/S run of the trench and projected into its western portion by 0.12m. The concrete pour was 0.12m thick and sat over (and had been cut into) layer **205**. The pour was of indeterminate age, extent and function and there was no remit to extend the trench in order to investigate. Despite the presence of **209**, the remaining portion of the trench was sufficient to hold the relocated, re-designed foundation. The

<sup>&</sup>lt;sup>1</sup> See HSCO-90291-2015-01.

trench thus created measured 0.5m N/S x 0.36m E/W x 0.32m deep. The trench was fully excavated through a layer of compact pinkish/grey gravelly/gritty soil **205** flecked with charcoal which had been encountered during the previous excavations. The original threshold slab **203** was further shown to sit over a contemporary, roughly-dressed, sandstone bedding slab **208**, some 0.2m deep. It was only revealed in the W-facing section of the trench.

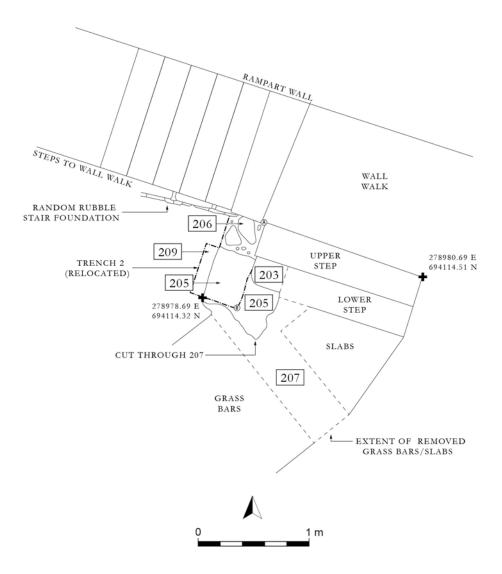


Figure 2: Trench 2 (as repositioned), post-excavation plan.

<sup>&</sup>lt;sup>2</sup> See HSCO-90291-2016-01.

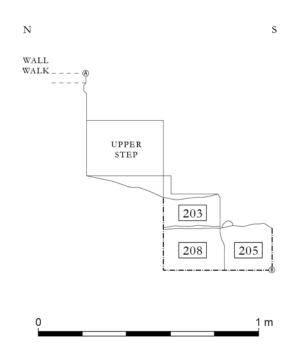


Figure 3: W-facing section.



Plate 1: Concrete 209, post-excavation.

## CONCLUSIONS

The excavation has again shown that the area within the Douglas Gardens is of high archaeological potential. The trench as excavated should have the appropriate dimensions to allow the handrail base to be inserted as required. It is recommended that any subsequent ground-breaking works be similarly accompanied by an archaeological watching brief.

## LIST OF CONTEXTS

Context	Description
201	Mixed silt, gravel and sandstone rubble bedding for modern concrete slabs.
202	Layer of sandstone rubble below 201.
203	Sandstone threshold slab.
204	Concrete patches on 203.
205	Layer of compact pinkish/grey gravelly/gritty soil flecked with charcoal lapping up against
	203.
206	Portion of <i>in-situ</i> angular sandstone masonry bonded in lime mortar forming the bedding
	layer for an earlier configuration of wall-walk steps.
207	Modern cement bed for grass bars c.2014.
208	Contemporary roughly-dressed sandstone bedding slab for 203.
209	Concrete pour in western portion of trench.

### LIST OF DRAWINGS

No.	Trench	Туре	Description	Scale
1	2	Plan	Post-excavation.	1:20
2	2	Section	W-facing.	1:20

## LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Pre-excavation shot of Trench 2.	Е	26/05/2016
2	Pre-excavation shot of Trench 2.	N	26/05/2016
3	Concrete 209 as exposed.	S	26/05/2016
4	Concrete 209 as exposed.	Е	26/05/2016
5	Concrete 209 as exposed.	N	26/05/2016
6	Bedding slab 208 below threshold slab 203.	W	26/05/2016
7	Bedding slab 208 below threshold slab 203.	W	26/05/2016
8	Post-excavation shot of Trench 2.	SW	26/05/2016
9	Concrete 209 as exposed.	Е	26/05/2016
10	Bedding slab 208 below threshold slab 203.	W	26/05/2016
11	Post-excavation shot Trench 2.	NW	26/05/2016
12	Post-excavation shot Trench 2.	N	26/05/2016