

# *Discovery and Excavation in Scotland*

Updated on 15/06/2007

<b>LOCAL AUTHORITY:</b>	Edinburgh, City of
<b>PROJECT TITLE/SITE NAME:</b>	Edinburgh Castle: National War Memorial
<b>PROJECT CODE:</b>	HSCO-90130-2014-03
<b>PARISH:</b>	Edinburgh, City of
<b>NAME OF CONTRIBUTOR:</b>	Alan Radley
<b>NAME OF ORGANISATION:</b>	Kirkdale Archaeology
<b>TYPE(S) OF PROJECT:</b>	Watching brief and archaeological evaluation
<b>NMRS NO(S):</b>	NT27SE 1; NT27SE 1.31
<b>SITE/MONUMENT TYPE(S):</b>	Castle; War Memorial (20 <sup>th</sup> century)
<b>SIGNIFICANT FINDS:</b>	
<b>NGR (2 letters, 8 or 10 figures)</b>	NT 2515 7348
<b>START DATE</b>	3 March 2014
<b>END DATE</b>	5 May 2015
<b>PREVIOUS WORK</b> (incl. <i>DES</i> ref.)	
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	<p>Due to water ingress within the western half of the north side of the Scottish National War Memorial, an irregular area of concrete screed at the base of the outside face of the north wall was removed in stages under archaeological supervision. The concrete extended westwards along the full length of the N wall from its junction with the centrally placed semi octagonal apse . The present building is the latest in a series of major structures on the same site and was built between 1924 and 1927.</p> <p>The concrete was a single and extremely compacted deposit filling a series of shallow declivities within the bedrock. These were the result of clearance and quarrying activities associated with a small complex of early 19thC service structures including a cookhouse and wash house , which lay immediately N of the 18thC barrack block which was partly recycled to create the present Scottish National War Memorial.</p> <p>Amongst dumped material that was revealed there were what appeared to be at least one rock-cut post setting, and some basalt slabs. No clear date for these features was discernible.</p>
<b>PROPOSED FUTURE WORK:</b>	
<b>CAPTION(S) FOR ILLUSTRS:</b>	
<b>SPONSOR OR FUNDING BODY:</b>	Historic Scotland
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<b>ARCHIVE LOCATION</b>	Archive to be deposited in NMRS

**HISTORIC SCOTLAND PROPERTIES IN CARE  
MINOR ARCHAEOLOGICAL WORKS 2014/2015**

**Edinburgh Castle War Memorial • Excavation**

**HS PIC Index Number: 90130**

**SITE:** Edinburgh Castle, Edinburgh

**N.G.R.:** NT 2515 7348

**DESCRIPTION:** Excavation prior to the construction of the new World War I Memorial.

**PROJECT CODE:** HSCO-90130-2014-03

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**AUGUST 2014**

## **INTRODUCTION**

The work has been under way intermittently since 3<sup>rd</sup> March, 2014 and is currently still on-going.

The archaeological input has involved:

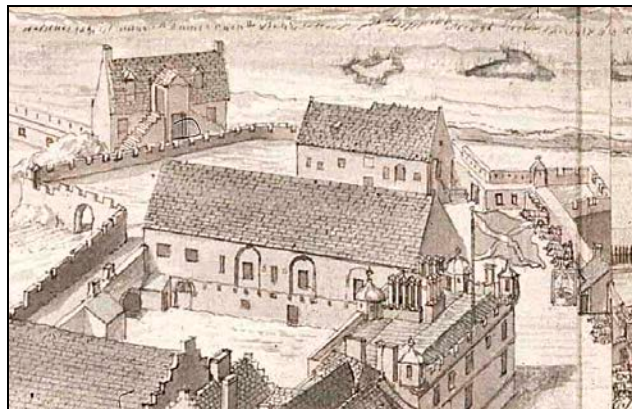
- Full excavation of the footprint of the proposed memorial;
- Full recording of all exposed surfaces and structures;
- Monitoring of all down-taking of upstanding masonry; and,
- Liaison with HS photographer, Design Team and Laser Scanner Team.

## **HISTORICAL BACKGROUND**

This area is difficult to assess from pictorial sources before the beginning of the 18<sup>th</sup> century as it remains hidden behind adjacent buildings; for example in Gordon of Roithiemay's drawing of 1647 and in the detailed bird's eye view of the castle by Slezer, c.1700.

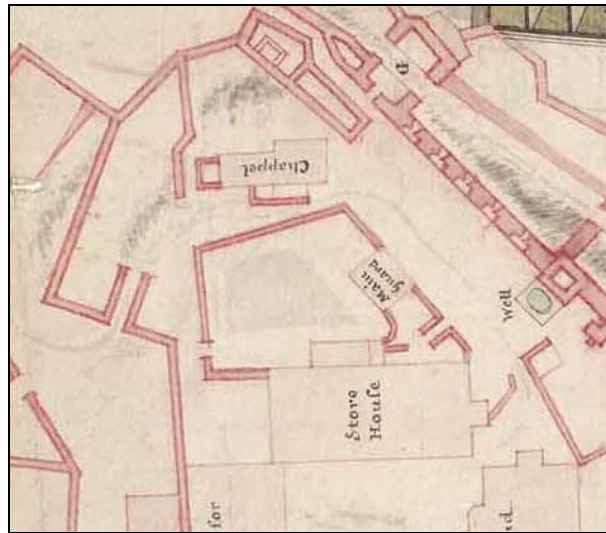


**Fig.1:** 1647 Gordon of Roithiemay.

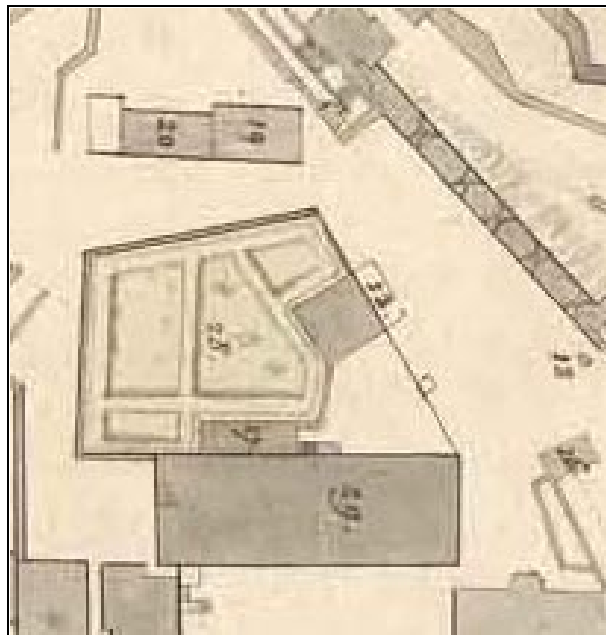


**Fig.2:** Slezer, c.1700.

The plan of 1709 by Talbot Edwards shows it enclosed as the Governor's garden, and it continues as such during the first half of the 18<sup>th</sup> century.



**Fig.3:** 1709 Talbot Edwards *A Plan of Edinburgh Castle*.



**Fig.4:** 1737 John Romer *Plan of Edinburgh Castle*.



**Fig.5:** 1750 William Skinner and Stephen Fane *Plan of Edinburgh Castle*  
(23: The Main Guardhouse; 28: The Governor's Garden).

The area of the Governor's Garden takes on a more utilitarian role following the erection of a new Governor's House in 1740-2. The footprint of the boundary wall is preserved but it becomes an area for service buildings such as the Cook House and Wash House, both seen on the 1<sup>st</sup> edition Ordnance Survey plan of 1854.



**Fig.6:** Detail from the 1st Edition Ordnance Survey plan of 1854.

## **EXCAVATION ACCOUNT**

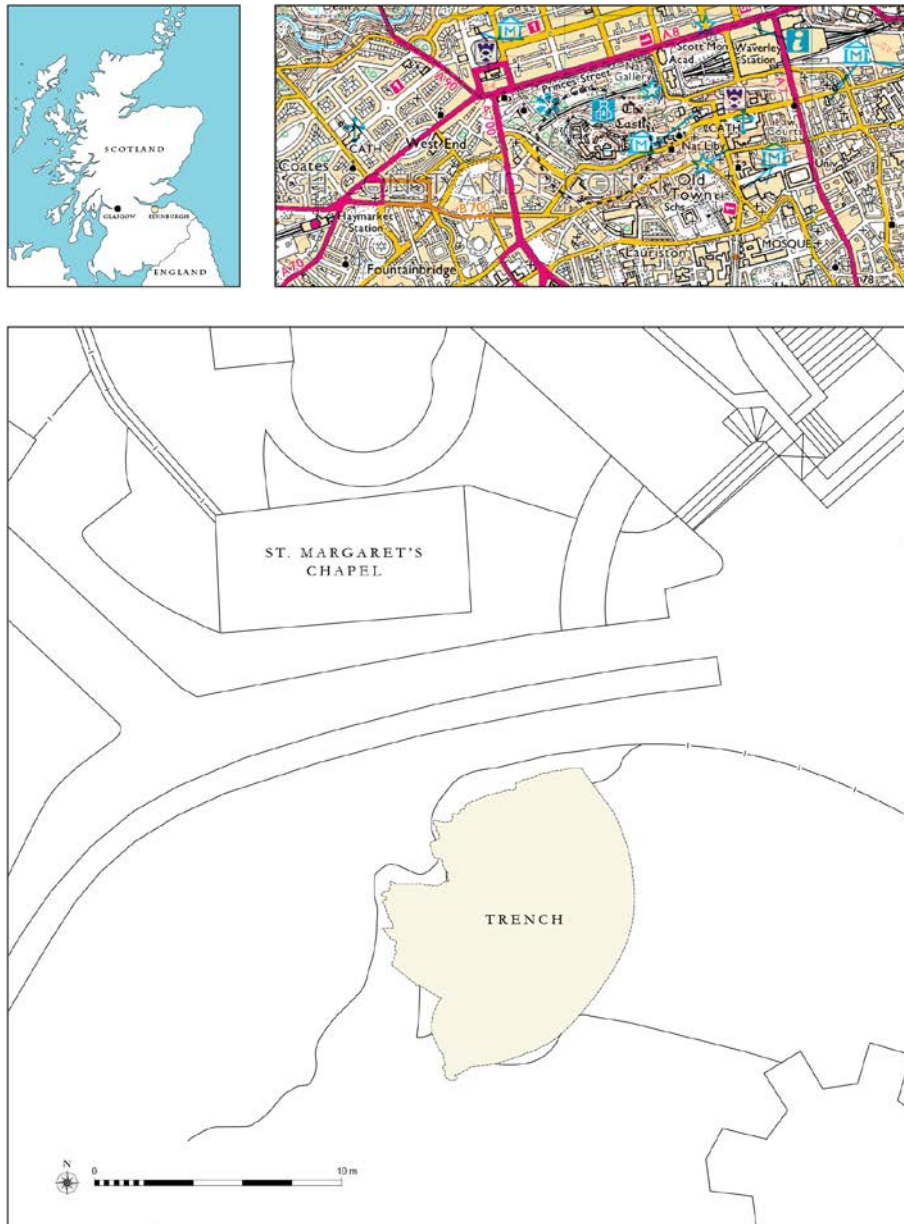
The area of excavation followed the footprint of the proposed memorial garden and as such, defines an irregular trench up to c.10m N/S x 10m E/W, located immediately S of the present paved roadway S of St Margaret's Chapel (Fig. 7). The site is known to have been extensively cleared alongside the construction of the National War Memorial in 1923 - creating an informal garden area with low shrubs and bushes surrounded by lawn.

After the removal of garden deposits (turf and plant beds), a general deposit of demolition debris was found across the site (001). This was removed to reveal a series of wall lines, defining the W end of a rectangular building measuring c.6m wide (N/S) and at least 8m long (E/W). These walls (003, 004) in turn enclosed a massive masonry pad or plinth (002) measuring 6.6m (E/W) x 2.5m (N/S), placed symmetrically between the exposed wall lines, separated from each by a mix of dumped dark silt, demolition debris and broken bedrock (006, 008). There was also evidence of an entrance at the W end of the structure, defined by a gap in the W wall (003).

The wall lines and central plinth plus intra-mural infill/levelling were all set within a depression in the bedrock head, which deepened to c.1m directly beneath the middle area of the central plinth. There was clear evidence of quarrying against the weathered sides of the depression to accommodate the S and N walls in particular.

It was notable that the fabric of all exposed masonry – walls and central plinth, was consistently of crude but very solid construction, comprising large (some massive) fragments of apparently locally quarried bedrock bonded with extremely hard lime mortar, directly over cleared/exposed bedrock. The demolition of the masonry eventually required use of a mechanical excavator.

Most of the intra-mural fills were removed to N and S of the central plinth, showing that they comprised a series of tipped deposits laid sequentially as the central plinth was built, in at least two stages. The latter were reflected by separate spreads of mortar extending from the face of the plinth, across part of the fill. This evidence suggests that the wall lines were built first, followed by the plinth with the fills added later. The plinth was built up from the deepest part of the bedrock depression, ultimately to create a level platform across the irregular surface of the bedrock.



**Fig.7:** Plan showing the location of the trench.

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**Plate 1:** Site from the S, showing the S wall of the Cook House and central plinth.

Once all the masonry was removed, the exposed bedrock was recorded, showing evidence of:

- Quarrying of various types, whether for simple stone extraction or to create settings within the bedrock;
- An irregular declivity in the bedrock - apparently an enhanced natural feature; and,
- A possible bedrock gully or sunken way, currently exploited by the present roadway, providing access via the Foog's Gate and serving the gun platforms to the N.

## **CONCLUSIONS**

The recent excavation has revealed archaeological features associated with four principal phases of clearance/construction/occupation:

1. Residual bedrock features;
2. Governor's Garden;
3. Construction and use of Cook House; and,
4. Demolition of existing service structures associated with the construction of the new National War Memorial.



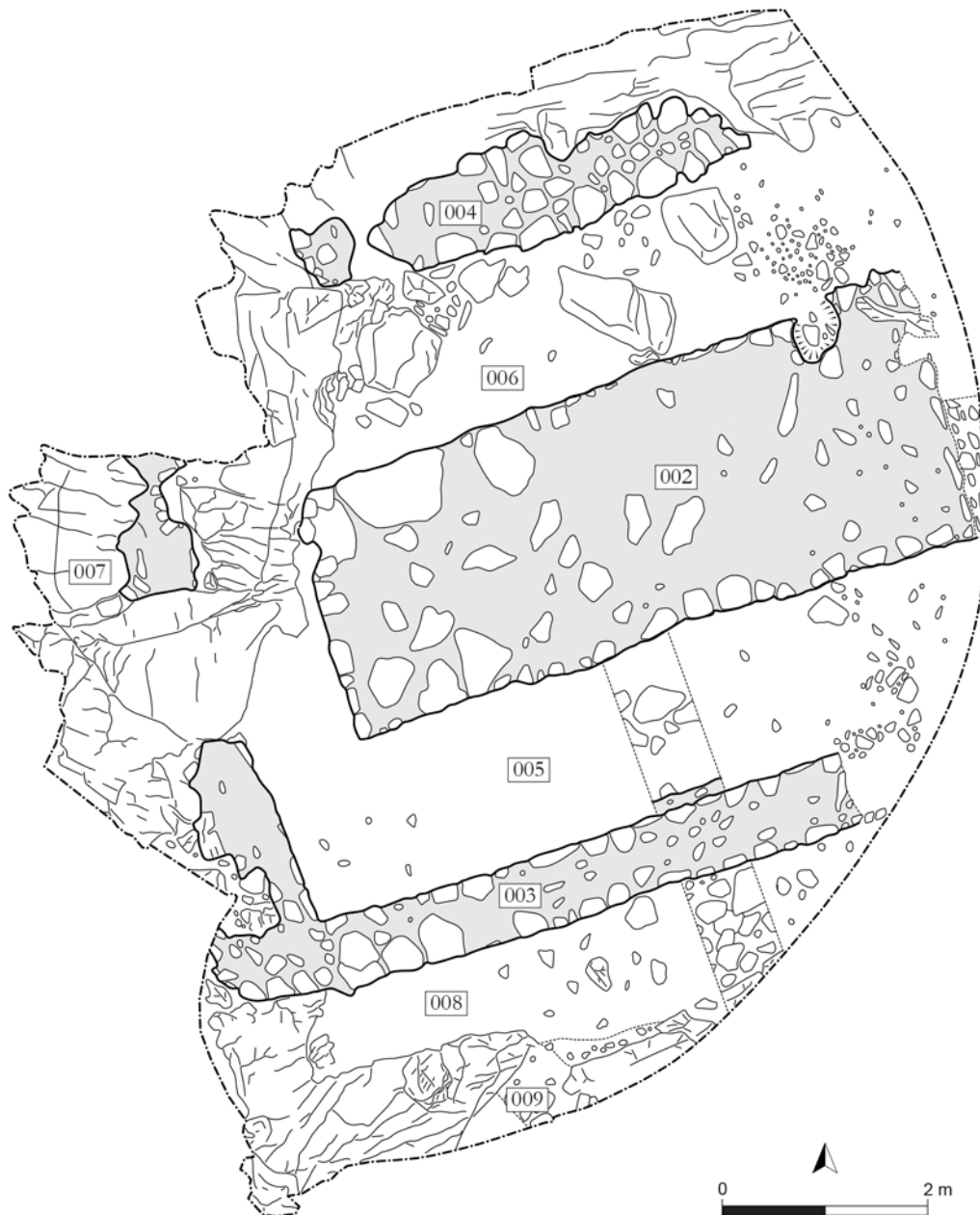


**Plate 2:** Site from the SE, showing the S wall and central plinth.

### **Residual bedrock features: quarrying, a depression and gully**

The site encompasses a natural declivity in the bedrock running roughly E/W with steep sides to the S and W, with more sloping sides to the NW, N and NE. Later quarrying associated with the construction of the Cook House and the National War Memorial work from 1923, have both truncated the highest bedrock outcrops and cut back the weathered edges of the depression. The natural bedding planes of the bedrock run roughly SE/NW and bedrock slabs were prised free by exploiting the natural ‘strike’. Greater effort was required to lower the bedrock head or to cut against the ‘strike’ – resulting in a characteristic ‘pecked’ effect on the stone. This is in contrast to the machine drilling of the rock head c.1923.

The bedrock appears to have risen steeply to the S of the site creating a natural gully between it and the bedrock exposed under the S wall of St Margaret’s Chapel. This defile has been widened and levelled to create the routes to adjacent gun batteries and the Foog’s Gate. The road under the latter shows clear evidence of having been lowered (to allow easier access for guns), arguably from the mid-16<sup>th</sup> century. It is possible that the natural defile was also modified at this time.



**Fig.8:** Post-excavation plan.

However, the depression itself is a natural feature and not the result of any quarrying – whether 16<sup>th</sup> century, 19<sup>th</sup> century or later. It may owe its survival by serving as a cistern - a water supply, predating and later augmenting the medieval rock cut wells, as was found at Dundonald Castle where a late Iron Age cistern was retained as part of the water supply alongside a 14<sup>th</sup> century well.

In addition, there are several examples of discrete areas where stone has been clearly dug/cut out creating a sunken feature with clear sides. They are of two basic types – large, irregular pits up to 0.7m wide and smaller, squarer cuts up to 0.3m wide. At this stage, their function is uncertain – potentially evidence of either quarrying large, individual blocks for building stone, or settings for earth fast posts.



Fig.9: Post-excavation plan following the removal of contexts 002 - 006, 008 and 009.

### **The Governor's Garden**

A walled area of formal planting is shown in the vicinity of the memorial trench from the early 18<sup>th</sup> century up until the construction of the Cook House and service yard some time before 1852.

Significantly, this was accessed via a stepped entrance on the W side of the enclosure, a feature which was retained in the later service yard arrangements. This suggests that the garden and yard were both at a higher level than the surrounding access roads.





**Plate 3:** Fill between bedrock and S wall, as seen from the E.

The garden was demarcated to the N by a stone wall which in turn follows the same line as the N wall of the 19<sup>th</sup> century Cook House. However, the N wall of the latter was not found to be a residual, recycled structure, and the similarity in line may reflect reuse of the construction cut against the bedrock outcrop, by the 19<sup>th</sup> century wall line.



**Plate 4:** Site from the NE, showing bedrock and plinth in foreground.

### Construction of the Cook House

This structure formed the N principal element of a suite of service structures, including a Wash House to the W and Guardhouse to the E, enclosing a small yard area defined to the S by the 'Old Barracks'. The 1<sup>st</sup> Edition 1852 Ordnance Survey plan (Fig. 10) shows that the Cook House was rectangular in plan, with doors in both W and E gables. The interior featured 2 rows of 6 round structures laid in parallel across (E/W) a rectangular feature. At present these are seen as a series of individual boilers set in 2 rows on top of a plinth or pad.

It is likely that the floor level itself was *c.*1.m above the surviving upper surface of the excavated plinth. This is based on the fact that the access into the Cook House was via the yard to the S, which in turn was laid over the bedrock and required a short flight of steps at its SW corner, as was also the case for the earlier Governor's Garden.

The need for such a substantial footing for the 'boiler array' is a probably a reflection of:

- The very uneven surface of the underlying bedrock;
- The need to isolate any heat affect from the heat source(s) for the boilers, in order to minimise fire risk; and,
- The need to provide a stable platform for potentially hazardous activity involving hot liquids – avoiding spillage *etc.* in what was an early form of standardised mass catering for the garrison and other members of the extended castle community.



**Plate 5:** Plinth over bedrock depression with tipped fill between N wall and plinth, as seen from the NE.

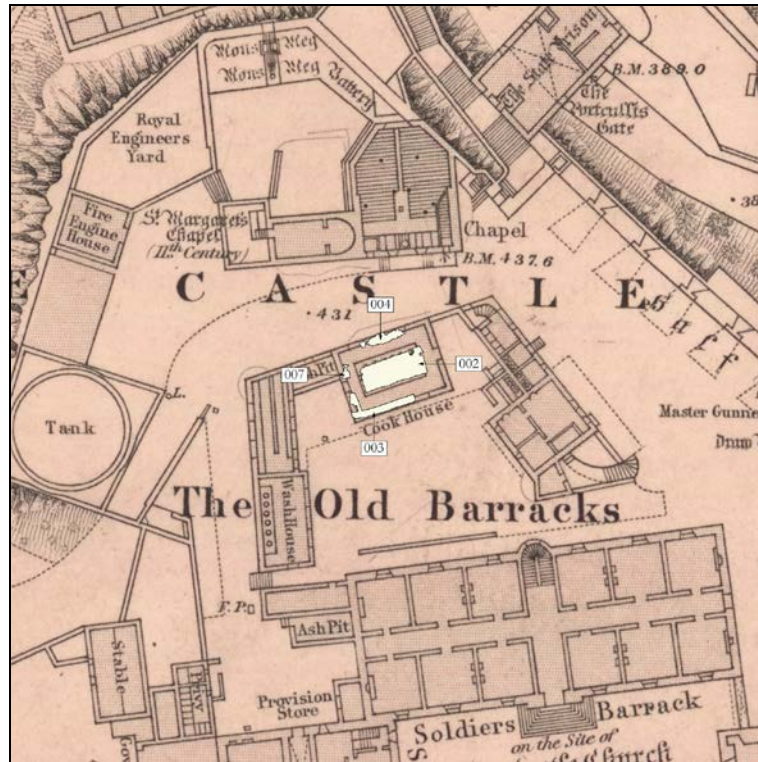


Fig.10: 1<sup>st</sup> Edition OS plan of 1854 with the results of the current work superimposed

### The clearance work of 1923

The Cook House walls were demolished down to the level of the footings while the central plinth was levelled off at the same height. This new reduced surface provided the base for the new garden of remembrance and allowed clear views towards the new War Memorial. The area was then sealed with a dump of demolition debris before being finally sealed by imported garden soils.



## LIST OF CONTEXTS

No.	Description
001	Turf and topsoil, 0.25m-0.35m deep. Introduced garden soil used to create present memorial lawn and garden.
002	Large, heavily reduced, rectangular masonry platform- masonry is a mix of undressed angular blocks of pinkish grey sandstone and local dolorite bonded with hard, yellow/grey coarse lime mortar.
003	The heavily reduced S and W walls of the Cook House. S wall is 0.71m-0.74m wide (N/S) and is 6.5m long (W/E). The W wall is 1.1m wide at the SW corner of the building, diminishing to 0.7m when it turns N, running for a distance of 2.75m. Both walls incorporate bedrock outcrops (hence variations in width) bonded to general fabric of undressed fragments of local dolorite and pinkish grey sandstone blocks. The stonework was bonded with grey/yellow lime mortar. Fragments of slate and fragments of pan tile were also noted in the wall fabric.
004	The truncated remains of the N wall of the Cook House. The wall is 0.75m wide (N/S) and is 5m long. The fabric is same as 003.
005	Area of infill between 002 and 003. It comprises a mix of dark silt, mortar fragments and local dolorite and sandstone fragments. This deposit varied in depth from 0.1m at its W end, and up to 0.35m at its E end.
006	Area of infill between 002 and 004 measuring c.1.5m wide. It comprises a similar mix of material to 005 and is characterised by large outcrops of bedrock among the general fill.
007	Small area of mortared masonry in a bedrock declivity – probably remains of the W wall of the Cook House. It comprises a single course of mortared pinkish coloured sandstone.
008	An area of mortar-flecked dark coloured silt and stone to the S of 003.
009	A similar deposit to 008, lying to the S, containing numerous brick fragments, barbed wire and iron nails.
010	Sealed by 005. A mixed and compact deposit of dark silt and mortar flecks – an old ground surface.
011	Sealed by 010. Even mix of grey brown clay with brick fragments.
012	Loose rubble deposit in mid-grey silt – mainly fragments of local dolorite, sealed by 011.
013	Light – mid-brown sandy silt with fragments of local dolorite, charcoal and coal fragments, to the S of 008.
014	An infill deposit, comprising mid-brown clay silt and charcoal flecks, towards the SE corner of the trench.
015	Shallow scooped feature within 010, sub-rounded in plan, backfilled with 005.
016	Scooped feature within 010, similar to 015.
017	Mortar rich deposit at base of the N face of S wall of Cook House.
018	Infill deposit, comprising rubble and clay rich silt, sealed by 013.
019	As per 018, but located between 002 and 003.
020	Dolorite blocks creating foundation for E part of N face of S wall of the Cook House.

**LIST OF DIGITAL PHOTOGRAPHS**

No.	Description	From	Date
01	Contexts 002 and 003	S	07/04/2014
02	Contexts 002 and 003	SE	07/04/2014
03	Contexts 002 and 003	SE	07/04/2014
04	Context 002	E	07/04/2014
05	Context 002	NE	07/04/2014
06	Context 002	NE	07/04/2014
07	Context 002	N	07/04/2014
08	Context 002	NW	07/04/2014
09	Contexts 002 and 003	NW	07/04/2014
10	S face of 002 – series # 1	S	07/04/2014
11	S face of 002 – series # 2	S	07/04/2014
12	S face of 002 – series # 3	S	07/04/2014
13	S face of 002 – series # 4	S	07/04/2014
14	S face of 002 – series # 5	S	07/04/2014
15	S face of 002 – series # 6	S	07/04/2014
16	S face of 002 – series # 7	S	07/04/2014
17	S face of 002 – series # 8	S	07/04/2014
18	S face of 002 – series # 9	S	07/04/2014
19	S face of 002 – series # 10	S	07/04/2014
20	S face of 002 – series # 11	S	07/04/2014
21	S face of 002 – series # 12	S	07/04/2014
22	S face of 002 – series # 13	S	07/04/2014
23	S face of 002 – series # 14	S	07/04/2014
24	S face of 002 – series # 15	S	07/04/2014
25	Contexts 002, 003 and 004 from platform	E	08/04/2014
26	Contexts 002, 003 and 004 from platform	E	08/04/2014
27	Contexts 002, 003 and 004 from platform	E	08/04/2014
28	Contexts 002, 003 and 004 from platform	E	08/04/2014
29	Contexts 002 and 004	SE	08/04/2014
30	Contexts 002 and 003	E	08/04/2014
31	W end of contexts 002 and 003	E	08/04/2014
32	E end of contexts 002 and 003	E	08/04/2014
33	E end of 002, fill 006	E	09/04/2014
34	E end of 002, fill 006	E	09/04/2014
35	E end of 002, fill 006	NE	09/04/2014
36	E end of 002, fill 006	E	09/04/2014
37	E end of 002, fill 006	E	09/04/2014
38	Surface of 002 at E end	NE	09/04/2014
39	Surface of 002 at E end	NE	09/04/2014
40	Surface of 002 at E end	N	09/04/2014
41	Surface of 002 at E end	N	09/04/2014
42	Removal of 002	SW	09/04/2014
43	Removal of 002	SW	09/04/2014
44	E end of 002	W	09/04/2014
45	E end of 002	SW	09/04/2014
46	E end of contexts 002 and 004	S	09/04/2014
47	Context 004 and N face of 002	N	10/04/2014
48	Context 004 and N face of 002	N	10/04/2014
49	Context 004 and N face of 002	N	10/04/2014
50	Context 004 and N face of 002	N	10/04/2014

No.	Description	From	Date
51	Context 004 and N face of 002	N	10/04/2014
52	Context 004 and N face of 002	N	10/04/2014
53	Context 004 and N face of 002	N	10/04/2014
54	Context 004 partially removed and the N edge of 002	E	10/04/2014
55	Context 004 partially removed and the N edge of 002	E	10/04/2014
56	Context 004 partially removed and the N edge of 002	SE	10/04/2014
57	Machine removal of contexts 002 and 003	E	14/04/2014
58	Machine removal of contexts 002 and 003	E	14/04/2014
59	Machine removal of contexts 002 and 003	SE	14/04/2014
60	Machine removal of contexts 002 and 003	SE	14/04/2014
61	Machine removal of contexts 002 and 003	SE	14/04/2014
62	Machine removal of contexts 002 and 003	E	14/04/2014
63	Machine removal of contexts 002 and 003	E	14/04/2014
64	W end of trench, showing contexts 003 and 005	E	15/04/2014
65	W end of trench, showing contexts 003 and 005	E	15/04/2014
66	W end of trench, showing contexts 003 and 005	E	15/04/2014
67	Machine removal of context 002	E	15/04/2014
68	Context 002 at the E section	N	21/04/2014
69	Rock cut gully at the E section, fill of 005	W	21/04/2014
70	E section, fill 005	W	21/04/2014
71	E section, fill 005	W	21/04/2014
72	Rock cut features at the SW corner of 003	SE	23/04/2014
73	Context 005 at the SW corner of 003	SE	23/04/2014
74	Rock cut feature W of 003	W	23/04/2014
75	Machine removing remainder of 002	SW	23/04/2014
76	Rock cut feature W of 003	W	23/04/2014
77	E edge of trench	S	23/04/2014
78	Rock cut features in the SW corner of the trench	NW	23/04/2014
79	Rock cut features in the SW corner of the trench	NW	23/04/2014
80	W wall with rubble against W face	N	23/04/2014
81	W wall with rubble against W face	NE	23/04/2014
82	W wall with rubble against W face	N	23/04/2014

## LIST OF FINDS

Context	Ceramic	Mammal/ bird bone	Shell	Iron	Clay Pipe	Other	Glass V=vessel W=window
001	8	105	3	10 (including wire and nails)			1V
005		35	2				
006		43					
008	2						
010		30	6				
012		10	3				
017	2	2	2	2			
018				2 (possible shovel blade/axe blade)			
019	4				1		
<b>Totals</b>	<b>16</b>	<b>225</b>	<b>16</b>	<b>14</b>	<b>1</b>		<b>1</b>

All the excavated contexts represent levelling and backfill. Context **001** reflects the clearance of the Cook House and its associated structures (from 1923) and featured a significant level of residual midden – most notably, large quantities of butchered animal bone fragments, with some shell, pottery and vessel glass. All other contexts reflect the construction of the Cook House and all feature residual midden material from the castle community predating the earlier years of the 19<sup>th</sup> century. As in **001** this is primarily reflected by animal bone, shell and ceramics, which in turn suggests that the midden from **001** is likely to derive from the infill contemporary with the construction of the Cook House, disturbed when the buildings were demolished and reduced.