Discovery and Excavation in Scotland

LOCAL AUTHORITY:	West Lothian
PROJECT TITLE/SITE NAME:	Linlithgow Palace
PROJECT CODE:	HSCO-90201-2016-01
PARISH:	Linlithgow
NAME OF CONTRIBUTOR:	Paul Fox
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Watching brief
NMRS NO(S):	NT07NW 9.00
SITE/MONUMENT TYPE(S):	Palace
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	Centred c. NT 0021 7732
START DATE (this season)	9 February 2016
END DATE (this season)	17 March 2016
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was maintained during the removal of existing cobbles, ground preparation and the resetting of new cobbles within the courtyard of Linlithgow Palace against the east range and portions of the south range. Despite the relative shallowness of the excavations, this exercise was of value in furthering our understanding of the development of the palace via the differences in style and alignment of the various base courses encountered.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
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ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with Historic Environment Scotland

HISTORIC ENVIRONMENT SCOTLAND PROPERTIES IN CARE MINOR ARCHAEOLOGICAL WORKS 2015/2016

Linlithgow Palace • Watching Brief • February/March 2016

HS PIC Index Number: 90201

SITE:	Linlithgow Palace, Linlithgow.	
N.G.R.:	Centred c. NT 0021 7732	
DESCRIPTION:	Archaeological watching brief during the removal of existing ground preparation and resetting of new cobbles within the p courtyard against the east range and portions of the south ran	alace
PROJECT CODE:	HSCO-90201-2016-01	
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INTRODUCTION

Under the terms of its PIC contract with Historic Scotland, Kirkdale Archaeology was asked at carry out a watching brief at Linlithgow Palace during the replacement of the existing cobbles around the south and east portions of the courtyard (Fig. 1). The work involved the lifting of the extant cobbles, partial cutting-back of the bedding layer below, and the resetting of the cobbles in a new bed.

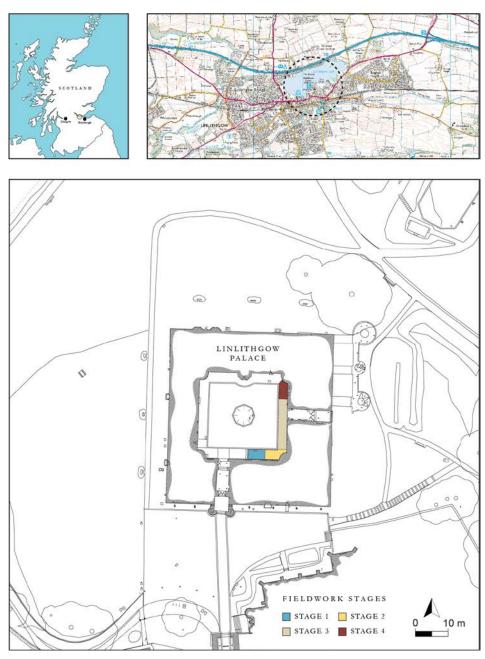


Figure 1: Plan showing the location of the four stages of excavation. Mapping © Crown copyright. All rights reserved 2016. Licence number 100036933.

The work was undertaken by hand, by Historic Scotland staff under archaeological supervision, and was carried out in four discrete phases on the 9th, 15th and 22nd February, 2016, and the 17th March, 2016.

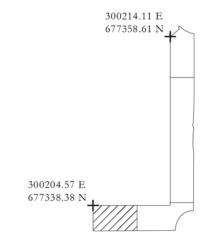
DESCRIPTION

Stage 1 (9th February, 2016)

The cobbles were removed in a 5m long (E/W) x 2.88mm wide area from the east side of the lower slabs against the central portion of the south courtyard façade. The bedding **101** below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. In a couple of areas against the south courtyard wall (containing the open-window gallery of the south range internally) flat stones could be seen. When cleaned (in an area 2.10m E/W x 0.25m N/S), these were shown to be a projecting foundation course **102** of stippled sandstone blocks carrying the base course of the wall above, and projecting from it by 18cm –20cm (*see* Plate 1). There was one slate 'packer' between one of the slabs and the wall above.



Plate 1: Looking west towards the foundation course 102.



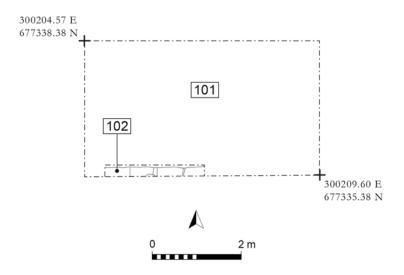


Figure 2: Stage 1, post-excavation plan (bottom) with location.

Stage 2 (15th February, 2016)

The cobbles were removed in a 6.80m long (E/W) x (up to) 2.88mm wide area from the east side of the Stage 1 excavation, along the eastern portion of the southern courtyard wall, around the south-east stair tower and partially along the south end of the east wall of the east range (c.0.95m N/S).

The bedding layer **201** below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the south courtyard wall (containing the open-window gallery of the south range internally) the foundation course **202** (seen in Stage 1 as **102**) of stippled sandstone blocks carrying the base course of the wall could be seen. There were again slate packers between some of the slabs and the wall above. When seen together, the foundation courses revealed in Stages 1 and 2 are on a different alignment to the wall above. This suggests either that the foundation course is older, or that the angle of the wall was adjusted slightly after the foundation course had been set in place. Immediately north of the eastern end of the foundation course, and at the same level, a stone setting **203** with a central square recess was uncovered (*see* Plate 2).



Plate 2: Looking west at the foundation course 202 (left) and feature 203 (lower centre).

The stone surround measured up to 0.85m E/W x 0.80m N/S. The central recess measured 0.25m E/W x 0.25m N/S x 0.25m deep (*i.e.* 10" x 10" x 10"). There were two possible shallow troughs on the surround – one running north-east from the north-east corner of the central void, and another running north from the central portion of the void's northern edge. The function of the stone setting remains enigmatic. It could possibly be a pad for an upright related to a now-vanished building, or similarly a setting for an upright post of unknown date and function (signage *etc.*)

In the angle between the south wall and the south-east stair tower, the modern stone drain **204** was shown to feed a cast iron drain pipe **205** in several sections. This was partially revealed within **201** for a distance of 1.5m N/S. The cylindrical body of the south-east stair tower was also shown to have been built upon a foundation course **206** of stippled sandstone blocks, this time with angled instead of flat faces. The course projected from the build above by 4cm – 8cm. Unfortunately, the relationship between the foundation courses of the south wall and the south-east stair tower was truncated by the insertion of the stone drain **204**. In the angle between the south-east stair tower and the wall of the east range, another modern stone drain **207** had again obscured the relationship between the two.



Plate 3: Looking south-east at the foundation course 206 of the south-east stair tower.

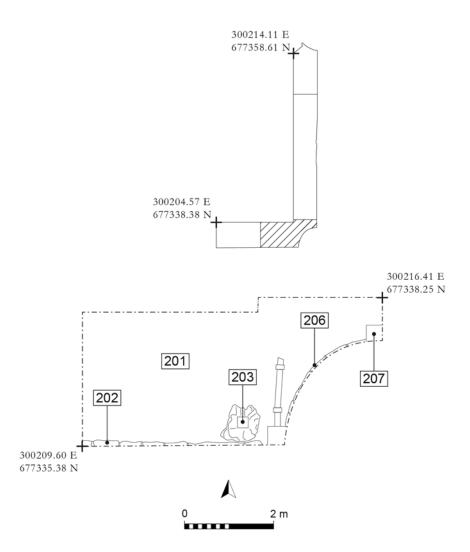


Figure 3: Stage 2, post-excavation plan (bottom) with location.

Stage 3 (22nd February, 2016)

The cobbles were removed in a 15.15m long (N/S) x (up to) 2.88m wide area from the north end of the east side of the Stage 2 excavation, along the southern portion of the east courtyard wall, across the large eastern doorway and partially along the southern end of the north portion of the east wall of the east range.

The bedding **301** below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the east courtyard wall, a foundation course **302** of stippled sandstone blocks carrying the wall could be seen, on the same alignment as the wall above. There were slate packers between some of the slabs and the wall above, and the foundation projected from the wall by *c.*0.1m. The foundation course was interrupted for 0.5m at the small door in the east wall near the south-east stair tower by a cut **309** in the area of which terram could be seen; this appeared to be a modern service cut.



Plate 4: Looking east at the foundation course 302 of the east wall and the cut 309 through it.

In total, the aligned foundation course ran for 6m in Stage 3 at which point the foundation course turned to a ragged rubble course 303 which ran for 3m up to the south side of the main east doorway (see Plate 4). This course projected by up to 0.2m and had a totally different character from 302. The change is difficult to interpret given that it was only observed in a discrete area. The suggestion would seem to be either that a wider foundation was required near the main eastern doorway, or that this possibly represents a feature which predates it.

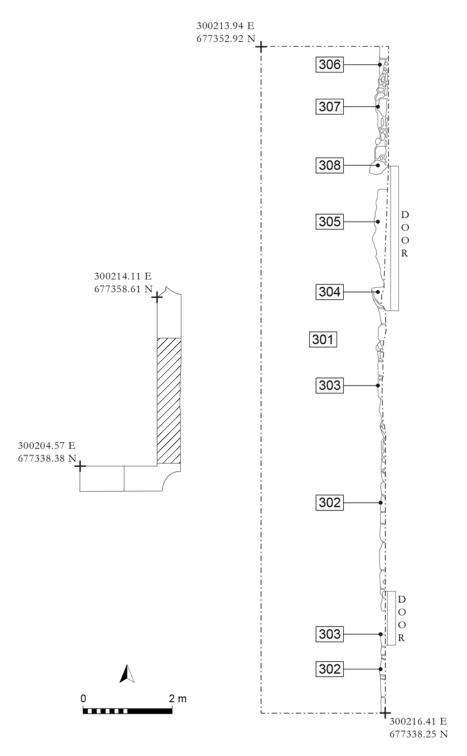


Figure 4: Stage 3, post-excavation plan (right) with location.



Plate 5: Looking north-east at the ragged foundation course 303 of the east wall at the east door.

Some voided sandstone rubble **304** was partially uncovered to the north of **303** below the bedding layer **301**. This may be related to voided rubble **308** on the opposite side of the east doorway and either shows the composition of the made-up ground or that services have been channelled through this portion of the courtyard and the eastern doorway. A patch of modern cement **305** (for bedding the cobbles) was left against the excavated eastern section of the cobbles. On the north side of the eastern doorway, a similar arrangement to that on the south side was noted. Against the eastern courtyard wall, a foundation course **306** of flat stippled sandstone blocks carrying the wall could be seen, on the same alignment as the wall above. The foundation projected from the wall by a0.18m and was only visible in a discrete area 0.70m N/S at the northern end of the Stage 3 work. Between this course and the edge of the eastern doorway was another ragged rubble course **307** which ran for 2.4m up to the north side of the main eastern doorway (see Plate 6), stopping 0.36m short of the corner. This course projected by up to 0.30m centrally while the north and south ends sloped in towards the wall. The impression is that the wall is built over something which used to project here; there is even a hint of partial rotundity to the feature on its western face, which may suggest a stair base. Alternatively it may simply be an additional strengthening of the wall at this point.



Plate 6: Looking south-east at the foundation course 306 and the ragged foundation course 307 of the east wall at the east door.

Stage 4 (17th March, 2016)

The cobbles were removed in an area up to 5.65m long x (up to) 2.88m wide from the north end of the Stage 3 excavation, along the northern portion of the eastern courtyard wall, and around the north-east stair tower. No foundations were uncovered, and the bedding **401** below the cobbles was a mixed deposit of ash, sandy gravel, small pebbles and angular stones. Against the wall of the north-east stair tower was a sandstone setting with a central rectangular aperture 0.30m x 0.12m in size providing air and light to the internal level below (this is normally visible and sits at the same level as the top of the cobbles). Nothing of archaeological interest was uncovered.

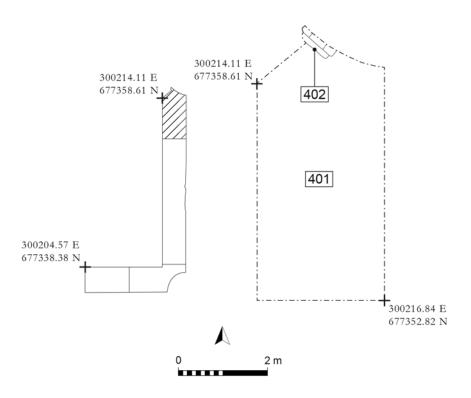


Figure 5: Stage 4, post-excavation plan (right) with location.

CONCLUSIONS

Despite the relative shallowness of the excavations, this exercise has proven itself to be of value in furthering our understanding of the development of the palace via the differences in style and alignment of the various base courses encountered, along with the discovery of some other enigmatic features. As the cobbles are still to be lifted and re-laid along the north and west courtyard walls, it is highly recommended that this future exercise be accompanied by an archaeological watching brief.

LIST OF CONTEXTS

Trench	Context	Description	
1	101	Mixed deposit of ash, sandy gravel, small pebbles and angular stones.	
1	102	Projecting foundation course of stippled sandstone blocks carrying the south wa	
2	201	Mixed deposit of ash, sandy gravel, small pebbles and angular stones.	
2	202	Projecting foundation course of stippled sandstone blocks carrying the south wall.	
2	203	Stone setting with a central square recess.	
2	204	Stone drain.	
2	205	Cast iron drain pipe.	
2	206	Projecting foundation course of stippled angled sandstone blocks carrying the wall	
		of the south-east stair tower.	
2	207	Stone drain.	
3	301	Mixed deposit of ash, sandy gravel, small pebbles and angular stones.	
3	302	Projecting foundation course of stippled sandstone blocks carrying the east wall.	
3	303	Ragged rubble foundation course carrying the east wall.	
3	304	Voided sandstone rubble.	
3	305	Modern cobble bedding.	
3	306	Projecting foundation course of stippled sandstone blocks carrying the east wall.	
3	307	Ragged rubble foundation on the northern side of the east door.	
3	308	Voided sandstone rubble.	
3	309	Service cut through 302.	
4	401	Mixed deposit of ash, sandy gravel, small pebbles and angular stones.	
4	402	Sandstone setting with a central rectangular aperture.	

LIST OF DRAWINGS

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

LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Stage 1 – foundation course 102.	N	09/02/2016
2	Stage 1 – foundation course 102.	N	09/02/2016
3	Stage 1 – foundation course 102.	N	09/02/2016
4	Stage 1 – foundation course 102.	Е	09/02/2016
5	Stage 1 – foundation course 102.	NE	09/02/2016
6	Stage 1 – foundation course 102.	Е	09/02/2016
7	Stage 1 – foundation course 102.	Е	09/02/2016
8	Cobble removal in progress.	SW	09/02/2016
9	Stage 1 – south gallery wall.	N	09/02/2016
10	Stage 1 – S gallery wall foundation.	N	09/02/2016
11	Stage 1 – S gallery wall foundation.	N	09/02/2016
12	Stage 1 – S gallery wall foundation.	N	09/02/2016
13	Stage 1 – S gallery wall foundation.	NE	09/02/2016
14	Stage 1 – S gallery wall foundation.	N	09/02/2016
15	Re-laying cobbles in area to west of Stage 1 work.	NE	09/02/2016
16	Stage 2 – foundation 202 and feature 203.	N	15/02/2016
17	Stage 2 – foundation 202.	N	15/02/2016
18	Stage 2 – foundation 202 and feature 203.	N	15/02/2016
19	Stage 2 – feature 203, drain 204 and pipe 205.	N	15/02/2016
20	Stage 2 – feature 203.	N	15/02/2016
21	Stage 2 – feature 203.	NW	15/02/2016
22	Stage 2 – feature 203 and stair tower foundation 206.	W	15/02/2016
23	Stage 2 – pipe 205 and stair tower foundation 206.	NW	15/02/2016
24	Stage 2 – stair tower foundation 206 and drain 207.	N	15/02/2016
25	Stage 2 – general view.	NW	15/02/2016
26	Stage 2 – general view.	NE	15/02/2016

No.	Description	From	Date
27	Stage 2 – foundation 202 and feature 203.	Е	15/02/2016
28	Stage 2 – feature 203 and pipe 205.	N	15/02/2016
29	Stage 3 – ragged south foundation 303.	SW	22/02/2016
30	Stage 3 – ragged south foundation 303	W	22/02/2016
31	Stage 3 – ragged south foundation 303	NW	22/02/2016
32	Stage 3 – ragged south foundation 303	N	22/02/2016
33	Projecting masonry within the eastern gate pend.	N	22/02/2016
34	Projecting masonry within the eastern gate pend.	NE	22/02/2016
35	Stage 3 – south side of the east range.	NW	22/02/2016
36	Stage 3 – wall foundation 302 and ragged south foundation 303.	N	22/02/2016
37	Stage 3 – ragged south foundation 303.	W	22/02/2016
38	Stage 3 – wall foundation 302.	W	22/02/2016
39	Stage 3 – wall foundation 302.	W	22/02/2016
	Stage 3 – wall foundation 302, cut 303 and door in the west wall of the east	W	22/02/2016
40	range.		
41	Wall foundation 302 and drain 207.	W	22/02/2016
42	Stage 3 – wall foundation 302 & ragged S foundation 303	S	22/02/2016
43	Stage 3 – wall foundation 302 & ragged S foundation 303	S	22/02/2016
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	W	22/02/2016
44	rubble 308.		
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	N	22/02/2016
45	rubble 308.		
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	N	22/02/2016
46	rubble 308.		
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	NW	22/02/2016
47	rubble 308.		
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	S	22/02/2016
48	rubble 308.		
	Stage 3 – wall foundation 306, ragged north foundation 307 and voided	N	22/02/2016
49	rubble 308.		
50	Looking west from the east gate pend.	Е	22/02/2016
51	Stage 4 – general view.	S	17/03/2016
52	Stage 4 – general view.	S	17/03/2016
53	Stage 4 – west wall of E range N/S.	W	17/03/2016
54	Stage 4 – west wall of E range N/S.	W	17/03/2016
55	Stage 4 – west wall of E range N/S.	W	17/03/2016
56	Stage 4 – feature 402.	S	17/03/2016
57	Stage 4 – general view.	SW	17/03/2016
58	Stage 4 – general view.	N	17/03/2016
59	Stage 4 – feature 402.	S	17/03/2016