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Summary

The watching brief strongly suggested that Roman deposits pertaining to the fort of *Aballava* were still extant within the grounds of Paddock Hall. Although form and structure were not clearly defined due to the limitations imposed by the specification of the brief, a strong suggestion of Roman masonry structures with attendant metalled surfaces was evident.

1. Introduction

The author of this report Gerry Martin has been commissioned by Ms Fiona Stoddart to enact a Programme of Archaeological Watching Brief Action relating to the ground works for an annex at Paddock Hall, Burgh-by-Sands.

The watching brief action requested by the County Historic Environment Service, Cumbria County Council and English Heritage suggested potential and significant archaeological remains could be encountered. The watching brief was also a condition of the Planning Consent.

The development of the site involved the insertion of four square plan trenches 0.90m x 0.90m, which represented a series of footings supporting the proposed building.

The development took place in area that was a former patio, stretching onto the garden and inhibited by standing buildings and walls.

Due to the sensitivity of the study area and the wish to avoid potential delays for the contractor and client, the four trenches were hand dug under controlled archaeological conditions by the author in advance of the formal watching brief between March 7th and 8th 2009. Building works occurred between March 23rd and 27th 2009 and monitored throughout. The study area was located at NY 32820 59085 and covered by planning application 1/07/0916.

All projects are carried out in accordance with PPG 16 and PPG 15 (DoE, 1990) and the guidelines and recommendations issued by the Institute of Field Archaeologists and English Heritage.

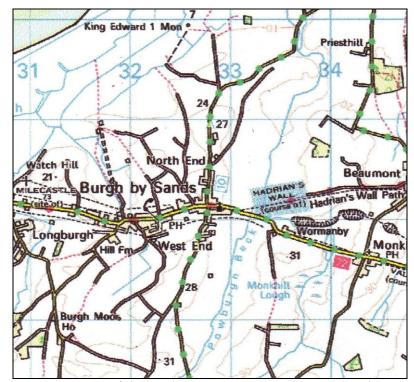


Figure 1. Location of the study area (NY 32820 59085), scale 1:25,000 (OS copyright licence no. 100044205).

2. Site History

The study area (NY 32820 59085) lies just inside the southwest corner of the Roman fort at Burgh-by-Sands (HER no. 415) and within the projected corridor occupied by the line of Hadrian's Wall *vallum* (Scheduled Monument nos. 26116 & 26120) part of a World Heritage Site.

The study area is likely to have been occupied by the fort defences, most probably the fort ditch and its rampart. The rampart has almost certainly been slighted leaving little or no archaeological trace, but the ditch being a negative feature may be present.

The fort *Aballava* (HER 415), formed part of a significant Roman settlement dating from the Hadrianic period that included a Severan *vicus* (HER 428), an area of industrial production (HER 41775) and Roman field systems (HER 41827 and 41828).

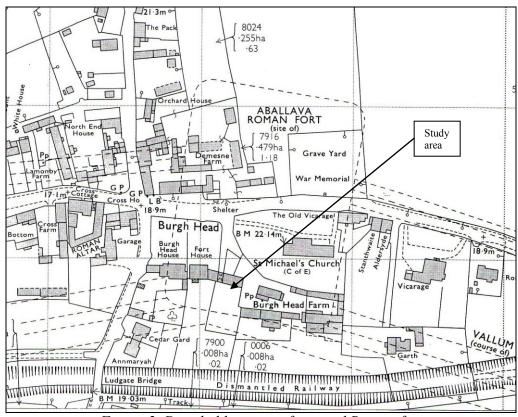


Figure 2. Detailed location of site and Roman fort (OS copyright licence no. 100044205).

The Hadrianic fort (Fort II) measuring 150m x 120m, replaced two earlier auxiliary forts and numerous marching camps that guarded two important fording points (Peat Wath and Sand Wath) across the Solway Firth and to discourage incursions from northern raiding parties from the Novantae and the Selgovae. The fort is mentioned in the 5th Century *Notitia Dignitatum*.

The fort was identified in 1922 by R.G.Collingwood who undertook a minor excavation in land that is now the War memorial graveyard but formerly Monk Croft. The excavation was undertaken in three days in April by two workmen with

volunteers from the Cumberland and Westmorland Antiquarian Society and four extra hands on the final day (Collingwood 1922, 5-6).

Collingwood's research design was to identify the existence of the fort and then examine the ramparts of the fort which he identified as being approximately 2.00m in width and built in stone possibly consolidated by a later inner wall. By referencing himself to the eastern rampart and known fort design he also identified the eastern gateway and its heavily denuded guard chamber. The fort was also identified as overlying the course of Hadrian's Wall a parallel with the fort at Chesters (ibid, 7-12).

Within the scope of his works, Collingwood identified deposits that conformed to barrack blocks separated by metalled surfaces but noted that despite deep stratification in places (0.60m in the guard chamber), masonry was heavily robbed damaging the archaeological sequence. (ibid, 7-9).

By extension and examining a limited pottery assemblage, he suggested that the fort was extensively occupied from the mid 2nd Century to at least the late 4th Century and being approximately two hectares in size accommodated either a military cohort or a cavalry unit as was the case from the mid 3rd Century. Moreover, the location of fort elements was proposed: the *via principalis* on the extant road, a putative granary in the churchyard and the *praetentura* in undeveloped ground (ibid 10-12).

On the current Ordnance Survey map, Collingwood's observations have gone uncontested (figure 2).

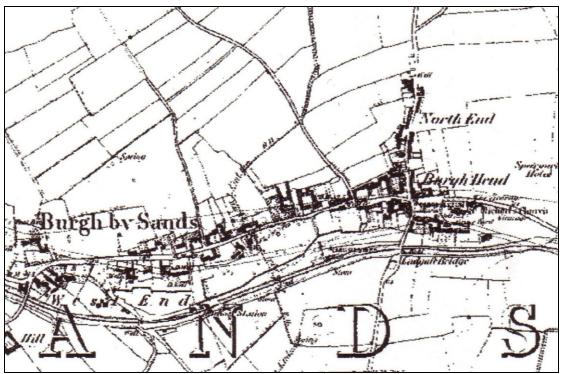


Figure 3. Burgh-by-Sands on 1st Edition 1868 map

On the 1868 First Edition Ordnance Survey map, Paddock Hall is illustrated, maintaining a similar ground plan as today except for a southward limb that is no longer present, an outbuilding removed relatively recently.

3. Methodology

The objective of the watching brief investigation is to carry out a formal programme of archaeological observations and investigations during any operations on site that may disturb or destroy archaeological or architecturally informative deposits or remains. The specific aims of the work are to:

- Provide a record of those works associated with the removal of the topsoil
- Provide a record of any significant archaeological or architectural features encountered by intrusive activities

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations were made consisting of detailed context records on individual pro-forma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works concerning the four trenches were undertaken by hand under controlled archaeological scrutiny. This action consisted of observation and recording of uncovered archaeological deposits, monitoring the displaced soil and checking any stone or masonry possibly removed from Roman structures. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

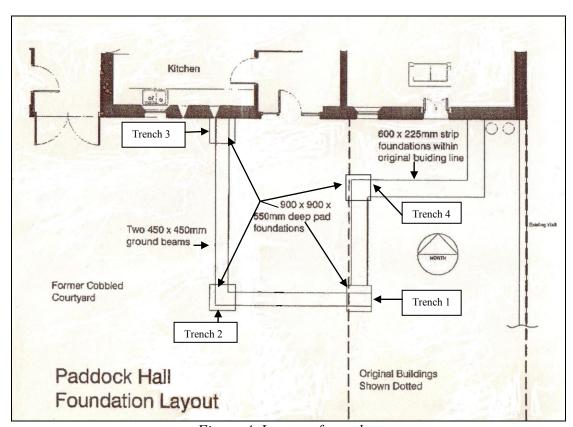


Figure 4. Layout of trenches

Some minor ground reduction was also monitored but this action did not penetrate below the modern ground surface.

4. Results

Four trenches were excavated measuring 0.90m x 0.90m to a depth of 0.55m where excavation ceased irrespective of whether natural had been reached. This condition was specified by English Heritage and formed a core discipline within the archaeological brief. The results of each trench are described below as does a summary of the watching brief.

Trench 1

The final level within Trench 1 exposed a concordant surface that comprised of the following elements.

Beside the southern edge of the trench was a pale yellow clay $\underline{2}$ and a compacted orange-brown clay possibly containing yellow mortar $\underline{3}$ that may have covered a stub of buried east-west aligned wall.

Respecting surfaces $\underline{2}$ and $\underline{3}$, was a hard orange sand and clay matrix $\underline{4}$ containing small pebbles that may have represented a metalled surface.

Cutting surface $\underline{4}$ was a potential circular plan cut $\underline{6}$ (left unexcavated), filled by a soft mid grey-brown sandy silt $\underline{5}$.

Overlying these deposits was a tilled soil of brown clayey, sandy silt $\underline{1}$ measuring 0.20m in depth, sealed by a heavily stony surface $\underline{7}$ measuring 0.12m in depth. This surface was beneath a compacted yellow sand and brown soil $\underline{8}$ measuring 0.14m in depth sealed by turf $\underline{9}$ measuring 0.10m in depth.



Figures 5 and 6. Trench 1 showing finished level and stony horizon 7.

Trench 2

The earliest archaeological deposit appears to be an east-west aligned stone wall $\underline{11}$ bonded by orange clayey mortar and comprising angular stones butted by a red sandstone concordant stony surface $\underline{18}$ cut by a circular plan post-hole $\underline{17}$ (left unexcavated) filled by compacted stony grey silt $\underline{16}$.

Modifications may have ensued. A possible low stone east-west aligned wall $\underline{13}$ consisting of red sandstone and orange clayey mortar that was parallel to wall $\underline{11}$.

Between the two walls were two patches of clean brownish grey clayey silt with occasional stones <u>14</u> and <u>12</u>, the latter covered by some displaced stones from wall 11.



Figure 7 and 8. Trench 2 showing finished level and upper archaeological horizon.

Disuse and robbing probably accounted for some structural displacement before garden soil $\underline{15}$ accumulated. This horizon was then cut by an east-west trench $\underline{19}$ filled by loose stone and pebbles $\underline{10}$ before being sealed by stony surface $\underline{7}$. In Trench 2, this surface was also sealed by grouting layer $\underline{8}$ and then turf-line $\underline{9}$.

Trench 3

The finished level comprised stony, orange clayey sand $\underline{20}$ that bore a stone surface $\underline{21}$ comprising two red sandstone blocks (0.20m x 0.35m x 0.05m and 0.24m x 0.20m+ x 0.13m), a yellow sandstone block (0.18m+ x 0.20m x 0.12m) and a large cobble (0.23m x 0.20m x 0.05m).

A grey-brown silt $\underline{22}$ overlay this surface filling the possible void left by robbing of the stone, that was then cut by services and wall foundations $\underline{27}$ for the extant building Paddock Hall.

Stone and rubble backfill <u>26</u> to these foundations was sealed by a modern concrete surface 25.



Figure 9 and 10. Trench 3 showing finished level and stone surface 21.

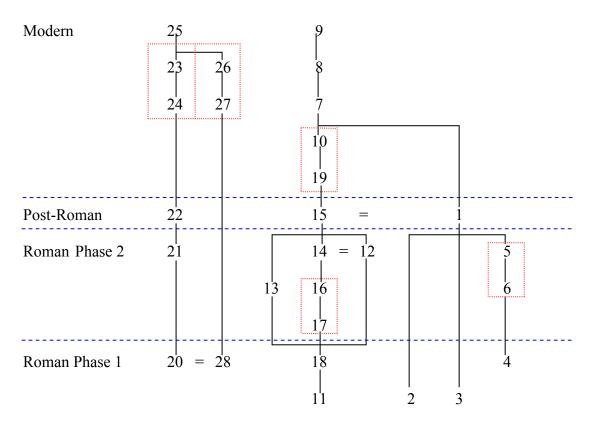
Trench 4

The earliest level comprised stony pinkish orange clayey sand <u>28</u> heavily truncated by a wide, east-west aligned trench <u>27</u> filled by loose, but heavily compacted river cobbles and broken yellow sandstone within a brown silty clay matrix <u>26</u>. Cut <u>27</u> was not entirely excavated but demonstrated a stepped profile suggestive of a deep, hand dug trench, its fill sealed by concrete surface <u>25</u>.



Figures 11 and 12. Trench 4, finished level and western section with rubble fill 26.

Site matrix



Matrix describing the site structure in Trenches 1-4

Watching brief

Within the footprint of the development, approximately 0.10-0.15m of modern concrete paving and turf was removed in order to insert the floor. This action did not compromise any potential archaeological deposits and no deposits of any antiquity were uncovered.



Figure 13. Reduction of ground within proposed building

5. Discussion

Any discussion regarding the observed deposits remains provisional and lacking empirical certainty due to the tiny sample size and the closure of excavation at an artificial horizon but within probable cultural deposits. The following discussion therefore, presents a model that with further future research may be considerably altered.

Roman Phase 1

The earliest deposit appears to be in Trench 2 as an east-west aligned external masonry wall $\underline{11}$ with an accompanying stony surface $\underline{18}$ that probably represents an external metalled surface.

Extending eastwards into Trench 1, wall $\underline{11}$ was not visible but a putative east-west aligned wall formed from deposits $\underline{2}$ and $\underline{3}$ may have belonged to an earlier contemporary phase with an accompanying metalled surface 4.

Clays <u>20</u> and <u>28</u> in Trenches 3 and 4 appeared to possess some silt marbling suggesting an element of reworking consistent with a re-deposited dump forming a platform. Possibly, this buried earlier deposits, but it could represent upcast for a building platform as well as sculpting of a natural terrace in order to accommodate a building. At the nearby Roman fort of *Maia* (Bowness-on-Solway), similar clay dumps were identified belonging to a restructuring of the fort in the later Second Century, interpreted as platforms for timber buildings and sealing earlier cobbled surfaces (Potter 1979, 323).

Although no configuration could be ascertained for these putative structures, the presence of masonry walls and metalled surfaces is synonymous with barrack blocks

or service buildings located close to the periphery of a Roman fort e.g. Stanwix and Carlisle Roman forts (*pers obs*).

Based on such a limited insight into the archaeological record, it is difficult to interpret with certainty the function for these deposits. Conceivably, these service buildings could include a granary but as *Aballava* was described as a cavalry fort, stabling may be a likelier option.

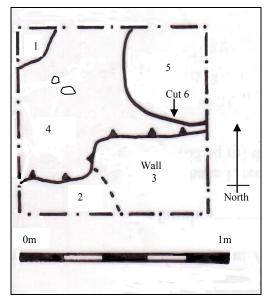


Figure 14. Trench 1 Plan of finished level

Roman Phase 2

Wall $\underline{11}$ remained upstanding and was adapted for a possible extension to that structure. A post-hole $\underline{17}$ was located beside wall $\underline{11}$ with a possible east-west aligned dwarf wall or foundation $\underline{13}$ that may have carried a sill beam accompanying this configuration.

Layers <u>12</u> and <u>14</u> probably represent disuse but could conceivably be occupation deposits within a putative structure.

An undated circular plan post-hole $\underline{6}$ lay to the east of this association but does not necessarily belong to this period of activity.

Just to the north of these deposits, a stony clay platform formed from contexts $\underline{20}$ and $\underline{28}$ (described above) may have been raised to form a terrace upon which a flat stone surface $\underline{21}$ was lain.

This appears to have been a coarse but effective internal floor to a lost building, its temporal age remaining unknown. These crude adaptations may be consistent with the late and sub-Roman phases of forts found at Stanwix and Birdoswald where timber adjuncts to buildings are introduced. The *Notitia Dignitatum* states that *Aballava* was in use in the 5th Century and being located at a fording point on the Solway may have been required to discourage incursions from the north.

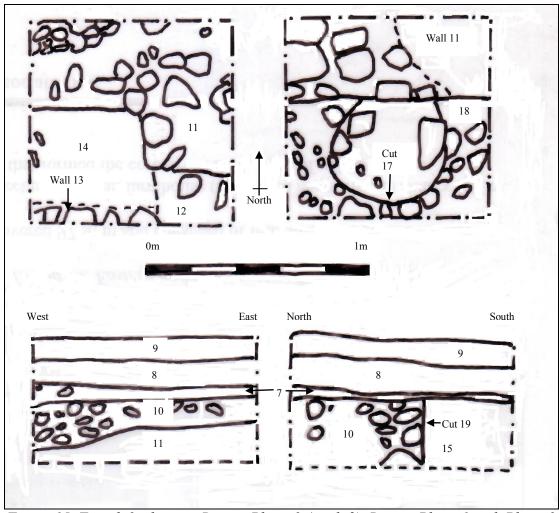
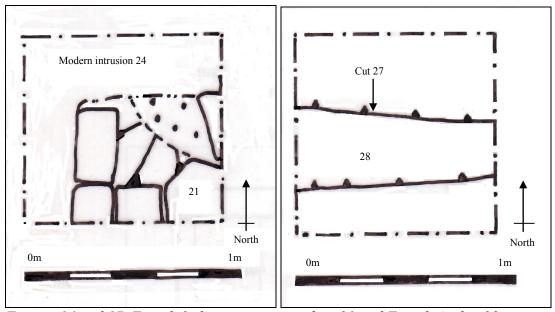


Figure 15. Trench 2, showing Roman Phase 2 (top left), Roman Phase 1 with Phase 2 post-hole (top right), section showing rubble 10 and section showing robber trench 19



Figures 16 and 17. Trench 3 showing stone surface 21 and Trench 4, clay 28

Post Roman

Following abandonment of the Roman fort, grey-brown silt $\underline{1}$, $\underline{15}$ and $\underline{22}$ accumulated in Trenches 1-3 developing into a tilled, garden soil. This material contained largely residual Roman pottery but one Medieval pot sherd.

Modern

Possibly as late as the 18th Century, stubs of Roman wall may have been visible at ground level. These walls provided a ready supply of building stone and were subsequently utilised for agricultural and domestic buildings. Cut <u>19</u> in Trench 2 was a probable robber trench filled with cobbles <u>10</u> that was sealed by a crude stony surface 7 representing a yard.

Cut <u>27</u> may have been further wall robbing but the stepped profile suggests that it may have accommodated a sewer or drain not located on service plans, the backfill <u>26</u> containing interstices and seemingly lacking consolidation.

In Trench 3, cut <u>24</u> was probably part of the foundations of Paddock Hall with a southward spur representing a drain.

During the late 20^{th} Century, a concrete patio $\underline{25}$ was laid beside Paddock Hall whilst the yard surface $\underline{7}$ was replaced with a lawn $\underline{9}$ resting above a bed of sand $\underline{8}$.

6. Finds

Pottery recovered during the archaeological investigation has been listed in the table below. The entire assemblage was recovered from a soil horizon (1, 15 and 22) that sealed the abandoned Roman fort.

Context	Greyware	Samian	Colour Coat	Amphora	BB1	Mortaria	Medieval	Other	Totals
1	2	1	0	1	1	1	0	2	8
15	1	0	1	1	6	0	1	0	10
22	1	0	0	0	0	0	0	0	1
Totals	4	1	1	2	7	1	1	2	19

Table showing sherd count per context

The assemblage was composed principally of Roman pottery 84%, with 11% of uncertain date and 5% Medieval.

The sherds were unabraded and sharp in definition suggesting that they had not been disturbed within the archaeological sequence. Being residual material, the assemblage (approximately 150-400 AD) is not particularly diagnostic for a date for deposition, but must have been lain during the late Roman period. The presence of a green-glazed sherd (12th-14th Centuries) suggests that Medieval robbing of stone was prevalent, possibly associated with the castle of Sir Hugh de Morville, 300 metres eastwards (Collingwood 1922, 3) and comparable to the two Medieval sherds discovered by Collingwood 0.30m below the surface (ibid, 10).

The assemblage supports Collingwoods assertions, identifying similar Samian and coarse pottery that he dated to the mid second to fourth centuries and regarded by him

as typical of a "Wall site". Like Collingwood's excavations, the Paddock Hall assemblage is too small to infer substantive interpretations other than continuous Roman occupation of the fort.

Other finds are listed below.

Context	CBM	Slag	Fe nail	Total
1	1	1	1	3
15	1	0	0	1
22	0	0	0	0
Totals	2	1	1	4

Table showing other finds per context

The finds described above are not particularly diagnostic of a particular function, although the presence of a lump of slag probably suggests that a smithy or forge was present within the fort.

7. Archive

The archive for this project will be deposited with the appropriate archaeological curator, Tullie House, Carlisle. This archive has been assembled in accordance within the protocols of Management of Archaeological Projects (MAP 2).

8. Acknowledgements

Thanks are due to Ms Fiona Stoddart for her assistance on this watching brief.

Thanks are also due to English Heritage and the County Historic Environment Service for providing the background information and specification for this survey.

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