

Interpretation, Design & Display

Land adjacent to Highfield **Burgh by Sands** Carlisle, Cumbria

Archaeological Evaluation

Report No. Y155/14







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Summary

An archaeological desk based assessment and an evaluation consisting of trial trenching was undertaken by CFA Archaeology Ltd on land adjacent to Highfield, Burgh on Sands, Carlisle, Cumbria during April 2014. Ten trenches were excavated with a number of undated field boundaries and field systems recorded and no finds were recovered, though some ditches may relate to wider field-system ditches possibly as early as the Roman period while predominantly north-east to south-west orientated furrows or field boundaries may relate to medieval or post-medieval field systems.

1. INTRODUCTION

This report presents the results of an archaeological desk based assessment and evaluation undertaken by CFA Archaeology Ltd (CFA) on behalf of Mr and Mrs Greenall during April 2014, ahead of a proposed development on land adjacent to Highfield, Burgh by Sands, Carlisle, Cumbria. The proposed development plan is for residential development and associated infrastructure. All work was undertaken in accordance with a specification issued by the Cumbria County Council Historic Environment Service (CCCHES). The CFA code and number for the project is HIBU/2179.

1.1 Site Location and Description

The development site is on the outskirts the village of Burgh by Sands, Cumbria (Fig.1, NGR NY 3270 5945). The site is an irregular parcel of land bounded to the south by residential properties, the north and west by agricultural pastureland, and to the east by The Pack Road. The site consists of overgrown grass pastureland, with the ground level at up to 26.4m above the Ordnance Datum towards the southern boundary and slumping to around 23m (AOD) towards the northern boundary of the site. The land use of the site has historically been agricultural with periods of cattle farming. During the field work the site was overgrown in some areas.

The soils of the area are variable and are described as 'light to medium deposits of clayey loam to sandy loam' (NERC 2014). The geology of the area consists of 'Mercia Mudstone Group- mudstone with gypsum-stone and/or anhydrite stone', with superficial deposits of Gretna Till Formation - Diamicton period (BGS 2014).

1.2 Archaeological Background and Previous Work

The site lies within the visual impact zone of the Hadrian's Wall World Heritage Site, 200m from the Scheduled Monument of Hadrian's Wall and Burgh Roman Fort. A number of previous archaeological evaluations and excavations have been undertaken in the local area in the recent past.

An evaluation of Lamonby Farm to the south by CFA Archaeology Ltd in 2006 (Suddaby and Glendinning 2007) identified what is thought to be the Wall Ditch running through the courtyard of the farmstead. A number of archaeological features (not including field drains) were identified in this area, some apparently sealed by subsoil and others definitely cut through it. Despite the presence of Roman pottery in the topsoil and subsoil, and in three of the features, none of the identified features could be securely dated to the Roman period.

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Various excavations have been undertaken to the south and east of the fort which lies to the south of the proposed development area. These have led to the discovery of buildings of the civil settlement: buildings dating to the mid 3rd to early 4th century AD, fronting on to a major east-west road were found in the rear the vicarage. Other work has identified remains providing evidence of 2nd and 3nd century occupation.

Excavations conducted by CFA Archaeology Ltd to the immediate south of Buckbottom Farm and to the south of the *Vallum* identified a number of gullies, a probable well and a probable tanning pit, suggesting an area used for stock control and industrial processing. Roman ceramics recovered from the fills of these features were dated to the 2nd and 3rd century AD. The features were most likely to represent the remains of industrial and/or agricultural activities associated with the civilian settlement located further to the east (Mitchell 2006).

A watching brief undertaken by CFA Archaeology Ltd at Demesne Cottage (Mitchell 2009) which is to the south of the site and within the Fort identified nothing of archaeological significance although the site was significantly disturbed by modern features and the excavation did not reach depths at which in-situ archaeological features would be expected.

1.3 Project Aims and Objectives

In accordance with the specification produced by Jeremy Parsons of the Cumbria County Council Historic Environment Service the general objective was to 'gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the proposed development area, and to record at an appropriate level, archaeological features encountered in the excavation trenches'.

2. WORKING METHODS

2.1 Monitoring

The project was monitored by Jeremy Parsons of the Cumbria County Council Historic Environment Service (CCCHES), who was kept informed of developments on site and visited the site for the purpose of monitoring the fieldwork on 30 April 2014.

2.2 Desk-based Research

The following sources were consulted:

- Cumbria County Council Historic Environment Record (HER) for sites, find spots or monuments within the proposed development area or within a 500m buffer zone around the proposed development area, as well as aerial photographs and relevant secondary documentary sources;
- Penrith Library for Historic Maps, and;
- Internet sources were consulted for information relating to general background, listed buildings and other heritage resources within the study area.

The bibliography contains a list of all sources consulted, including online resources and unpublished reports.

2.3 Trenching

The trenches were positioned across the site so as best to test the survival of underlying archaeology as fully as possible. Areas of known modern disturbance and deep modern stratigraphy were avoided.

Trenches were accurately surveyed using industry standard surveying equipment. All machining was undertaken using a toothless ditching bucket under constant archaeological supervision. Topsoil and other overburden was removed by machine down to the top of natural subsoil or the first significant archaeological horizon, whichever was encountered first.

The topsoil and subsoil were separated during the excavation and trenches were backfilled upon completion of necessary work. Trenches were only backfilled on completion of recording and with the consent of CCCHES.

The spoil was scanned for artefacts during machine excavation, the trenches were then cleaned as necessary and the location of all features and deposits recorded at a scale of 1:50. A representative sample of linear features was excavated (typically 1m per section). Discrete features were sampled at a minimum of 50%.

All archaeological remains were recorded by means of photographs, drawings and written records conforming to IfA standards (1994) and CFA's quality manuals. All features were planned and drawn in section at an appropriate scale (normally 1:10, 1:20 or 1:50). All plans and sections were related in height to the ordnance datum.

Modern finds were recorded on site but not retained unless they were from stratigraphically significant deposits or intrinsically significant, all other finds were to be retained for post-excavation assessment. The requirements of the 1996 Treasure Act (with subsequent amendments) were accorded with.

2.4 Standards and Guidance

CFA Archaeology is a registered organisation (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1994), English Heritage Guidance (EH 2005a, 2006, 2007, 2008a and 2008b), CFA's standard methodology and the terms of the specification issued by CCCHES.

2.5 Archiving

The project archive, comprising all CFA record sheets, finds, plans and reports, will be prepared to current guidelines (IfA 2001, Brown 2011) ensuring the proper transfer of ownership. The project report shall include an index to the site archive and all digitally generated data. The archive will be retained by CFA until being deposited at a suitable repository.

3. DESK-BASED ASSESSMENT

3.1 Cartographic Sources

A selection of pre and post-World War II Ordnance Survey maps were examined. No significant development has appeared to have taken place within the proposed development area during the modern period, with development located adjacent to the proposed site limited to the construction of the presently standing cottages to the east, which first appear on OS maps from 1971 onwards.

3.2 HER sites

Figure 2 shows the location of all cultural heritage sites and events within the 500m buffer around the proposed development area, these are listed in the gazetteer (Appendix 1). Three Scheduled Ancient Monuments fall within the buffer zone, the Burgh by Sands Roman Fort (26116), Hadrian's Wall between Fulwood House at Burgh by Sands (26119), and Hadrian's Wall *Vallum* between the east side of the road at Burgh Head and the boundary south of Ash Tree Square, Burgh by Sands (26120).

A number of sites are also listed in the SMR records of the area. Hadrian's Wall and *Vallum* (5782) lies to the south of the study area, with a number of monuments and buildings that fall within the scheduled monument area also listed in the SMR. These include the Burgh by Sands Bath House/Temple (414), the Aballava Fort and Turret 71B (415), the Aballava *Vicus* (428), and Hadrian's Wall Milecastle 72 (416).

A number of finds are also listed south of the study area, these including altar finds at Hallstones, Longburgh (460), Kiln Garth (454), and Orchard House (15198), and finds including a statuette (13660) and a lamp (17964).

Field systems attributed to the Roman period have been identified from cropmarks in the area around the *Aballava Vallum*, with boundary ditches with an Iron Age-Roman date located towards the north-east of the study area. Medieval ridge-and-furrow field systems are also noted as surviving to the north of the study area, with a number of post-medieval field systems also recorded.

In the 1850s, the now dismantled Carlisle and Silloth Railway was built along the line of the disused canal 500m to the south of the study area.

There have been a number of previous archaeological investigations within the study area in the past, with the majority of these to the south, within the boundaries of the Hadrian's Wall scheduled monument area.

An evaluation was conducted on the Burgh-by-Sands *Vallum*, while further small scale evaluations were carried out prior to building work on properties 350m to the south of the study area, at Buckbottom Farm and Faulds Farm.

Other work on the study area includes desk-based assessments and watching briefs carried out in advance of extensions to residential properties that lay within the Hadrian's Wall Scheduled Monument Area.

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4. EVALUATION RESULTS

A full list and description of contexts comprises Appendix 2. Tables listing all photographic and drawn records form appendices 3 and 4. A table summarising all results by trench forms Appendix 5.

A total of 10 trenches were excavated. Trench 3 was moved from its original position due to the presence of an existing and live water pipe in this area. The trench was moved to the south and towards the location of Trench 6.

3.1 Trench 1 (Fig. 3)

Trench 1 contained two features; a ditch (123) and a plough furrow or field boundary (126). Ditch 123 (Plate 1) was located towards the northern end of the trench and was on a rough north-south orientation with a slight turn towards the east at its northern end. The feature was steep sided with a concave profile and consisted of two fills. It was 1.5m wide and 0.34m deep.

Towards the southern end of the trench and on a northeast to southwest orientation was a likely plough furrow or field boundary (126). This feature was shallow and had a slightly concave profile 1.63m wide and 0.09m deep.

3.2 Trench 2 (Fig. 3)

Trench 2 contained one ditch (Plate 2, 128) towards the centre of the trench on a rough east-west orientation. It was steep sided with a flat base 1m wide and 0.18m deep, continuing beyond the limits of the trench to both the east and the west.

3.3 Trench 3 (Fig. 3)

Trench 3 contained two plough furrows or field boundaries (119 and 121). One (119) was towards the southern end of the trench and was on a rough northeast-southwest orientation. It was shallow sided with a slightly concave profile 2.02m wide and 0.12m deep. The second (Plate 3, 121) was similar in form and was 3.6m wide and 0.12m deep.

3.4 Trench 4 (Fig. 3)

Trench 4 contained a northeast to southwest orientated furrow or field boundary (109). It was only partially exposed and was 1.6m wide and 0.12m deep with shallow sides and a concave profile.

3.5 Trench 5 (Fig. 4)

Trench 5 contained another furrow or field boundary (130) on a northeast to southwest orientation it had shallow sides with a flat base and was 2.81m wide and 0.15m deep. Towards the northern end of the trench a modern water pipe orientated northeast to southwest.

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3.6 Trench 6 (Fig. 4)

Trench 6 contained two features; a ditch (115) and a gully (117). Ditch 115 was towards the centre of the trench and on a rough north-south orientation (Plate 4). It was steep sided with a concave profile, 1.65m wide and 0.4m deep. Gully 117 was towards the north-eastern end of the trench on a north to south orientation. It was steep sided with a slightly concave profile 0.87m wide and 0.39m deep, the western side was steeper than the eastern.

3.7 Trench 7 (Fig. 4)

Trench 7 contained six features; two pits (132 and 134), and four furrows or field boundaries (132, 138, 140, and 142). The four furrows or field boundaries were all on a northeast to southwest orientation within the trench, and were all similar in form, with the features having shallow sides and generally concave profiles. Furrow 132 was towards the southern end of the trench and was 2.18m wide and 0.12m deep. Towards the centre of the trench running parallel were furrows 138 and 140 (Plate 5), they were 0.34m wide and 0.08m deep and 0.81m wide and 0.07m deep respectively. Furrow 142 was towards the northern end of the trench and was 0.94m wide and 0.06m deep.

Pits 134 and 136 were between furrows 132 and 138 towards the southern end of the trench. Pit 134 was only partially exposed with the visible portion 0.38m wide and 0.12m deep. It had moderately sloping sides with a u-shaped profile. Pit 136 lay to the west of Pit 134 and again was only partially exposed within the trench. It was 0.48m wide and 0.14m deep with a similar form and shape.

3.8 Trench 8 (Fig. 5)

Trench 8 contained one shallow northeast to southwest orientated plough furrow (107) which was towards the western end. It was only partially exposed and the excavated portion was 0.5m wide and 0.05m in deep with shallow sides and a slightly concave profile.

3.9 Trench 9 (Fig. 5)

Trench 9 contained two plough furrows or field boundaries (103 and 105), both on northeast to southwest orientations and similar in form; both had shallow sides with a slightly concave profile. Furrow 105 (Plate 6) was towards the centre of the trench and was 1.34m wide and 0.06m deep, while Furrow 103, towards the northern end of the trench was 1.7m wide and 0.08m deep.

3.10 Trench 10 (Fig. 5)

Trench 10 contained two features; a ditch (111) and a gully (113). Ditch 111 was towards the western end on a rough north to south orientation with a slight turn towards the west at its southern end. It had shallow sides with a concave profile widening towards the south, it was 1.5m wide and 0.16m deep. Gully 113 was towards the centre of the trench on a north-south orientation, and measured 0.8m wide and 0.26m deep, with shallow sides and a concave profile which again widened towards the south.

5. DISCUSSION

The large number of shallow ditches across the site suggests that the remains of a number of former field systems exist in the area of the proposed development. Historic maps of the area dating to 1867 show the site as a large open field. This suggests that these field systems predate this period, and although there was no direct dating evidence, the field systems they represent may even be from the Roman period given the archaeological evidence in the wider area with similar field systems identified as cropmarks particular to the north of the site.

Areas of post-medieval narrow ridge and furrow have also been recorded to the south of the site and it may be that some of the shallow ditches recorded in this evaluation represent a continuation of these features

The larger ditch excavated and recorded in trenches 1 and 2 (123 and 128) appears to represent the corner of a curvilinear feature, or an enclosure. The remains of a number of enclosures are noted in the local area, in particular a series of 'D'-shaped enclosures of likely Roman date identified during the Hadrian's Wall NMP Project (EH 2005b). One site within Burgh by Sands had 'enclosures linked by sinuous linear ditches, which may be acting as boundaries or trackways', possibly similar to the features recorded during this evaluation.

6. CONCLUSION

Although no artefacts were recovered from any of the features excavated, excavations at other similar sites in the area have recovered dating evidence that link similar features to the 2nd to 4th century AD, and it is possible that the remains recorded during this evaluation are of a similar date

No modern truncation of the site was recorded, with the exception of one small water pipe located towards the north-eastern corner of the investigation area.

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Cartography

1867 Ordnance Survey Pre-WWII 1:2,500 Cumberland Map

1900 Ordnance Survey 1:10,560 Cumberland Map

1925 Ordnance Survey Pre-WWII 1:2,500 Cumberland Map

1957 Ordnance Survey Post-WWII 1:10,560 Cumberland Map

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1971 Ordnance Survey Post-WWII 1:2,500 Cumberland Map

1974-1978 Ordnance Survey Post-WWII 1:10,000 Cumberland Map

Appendix 1: Gazetteer of HER Sites within 500m Buffer

SMR No.	Name	Source	Period	NGR
414	Burgh by Sands Bath House/Temple	Excavated Feature	Roman	332910 559070
415	Aballava Fort and Turret 71B, Burgh by Sands		Roman	332882 559135
416	Hadrian's Wall Milecastle 72, Burgh by Sands	Earthworks	Roman	332420 559100
428	Aballava Vicus, Burgh by Sands	Earthworks	Roman	332867 559032
454	Altar Find, Kiln Garth	Find spot	-	332720 559120
460	Altar Find, Hallstones, Longburgh	Find spot	-	332800 559120
3769	Church of St. Michael	Roofed Building	Medieval, Post-medieval	332870 559106
3772	Burgh by Sands unclassified cropmark site	Cropmark	Unknown	333020 559716
4545	Hangman Tree, Burgh by Sands	Documentary	Unknown	332720 559120
5782	Hadrian's Wall	Earthwork	Roman	333867 559167
6891	Burgh by Sands Linear Cropmark	Cropmark	Unknown	332152 559596
9756	Burgh by Sands Linear Cropmark	Cropmark	Unknown	332370 559750
13660	Statuette Find, Burgh by Sands	Find spot	Roman	332970 559200
15198	Altar Find, Orchard House, Burgh by Sands	Find spot	-	332820 559226
17964	Lamp Find, St Michaels Church, Burgh by Sands	Find spot	-	332860 559090
21586	Buckbottom Farm, Burgh by Sands	Roofed Building	Post-Medieval	332687 559125
21593	Ludgate Bridge, Burgh by Sands	Structure	Post-Medieval	332735 559017
40443	Demense Farm	Documentary	Post-Medieval	332780 559157
41775	Aballava Vicus field system, Amberfield, Burgh by Sands	Earthworks	Roman	332626 558947
41826	Buckbottom Farm Well, Burgh by Sands	Structure	Post-Medieval	332640 559150
41827	Buckbottom Farm Field System, Burgh by Sands	Find spot	Roman, Medieval	332700 559090
41828	Buckbottom Farm Field System, Burgh by Sands	Find spot	Roman, Undated	332650 559200
43162	Rosemount Cottage, Burgh by Sands	Roofed Building	Post-Medieval	332667 559167
43315	North End Cottage/Edna's Cottage, Burgh by Sands	Roofed Building	Post-Medieval	332779 559350
43318	Yew Tree Cottage	Roofed Building	Post-Medieval	332761 559270
43325	The Old Vicarage	Roofed Building	Post-Medieval	332899 559127
43437	North End Building, Burgh by Sands	Documentary, Excavated	Post-Medieval	332759 559326
43822	Village Hall Stock Enclosure, Burgh by Sands	Excavated Feature	Roman	332610 559100

SAM No.	Description	Easting	Northing
26116	Burgh by Sands Roman fort, Beaumont Camp, Burgh Castle	333519	559165
	and Hadrian's Wall from boundary west		
26119	Hadrian's Wall between Fulwood House at Burgh by Sands and	331583	559221
	Burgh Marsh in wall miles 72 and 73		
26120	Hadrian's Wall Vallum between east side of road at Burgh	332524	559024
	Head, and boundary south of Ash Tree Square, Burgh by Sands		
	in wall miles 71 and 72		

Appendix 2: Context Summary

Context no.	Trench/Area	Fill of	Width (m)	Depth (m)	Type	Discussion
100	All			0.15-0.3	Layer	Topsoil layer for area of evaluation. Consisted of dark brown silty clay with organic inclusions throughout.
101	All			0.2-0.5	Layer	Subsoil layer for area of evaluation. Consisted of a light brown silty clay with some small stone inclusions.
102	All			N/A	Layer	Natural substrate for evaluation area. Consisted of orange sandy gravel with some medium to large stones in places.
103	Tr 9		1.7	0.08	Cut	Cut of a shallow, east-west orientated plough furrow. Feature had a slightly concave base. Similar to feature 105 to the immediate south.
104	Tr 9	103	1.7	0.08	Fill	Fill of plough furrow 103. Consisted of a mid red-orange brown sandy silt, with numerous small stone inclusions.
105	Tr 9		1.34	0.06	Cut	Cut of an east-west orientated plough furrow. Feature had shallow sides and a slightly concave base.
106	Tr 9	105	1.34		Fill	Fill of plough furrow 105. Consisted of mid-red to orange-brown sandy silt that contained numerous small stones throughout.
107	Tr 8		0.5	0.05	Cut	Cut of a shallow, east-west orientated plough furrow. Feature not fully exposed and present only along southern edge of Trench 8. Probable continuation of similar feature 103 in Trench 9.
108	Tr 8	107	0.5	0.05	Fill	Fill of plough furrow 107. Consisted of mid-red to orange-brown silty sand with numerous small stone inclusions throughout.
109	Tr 4		1.6+	0.12	Cut	Cut of an east-west orientated plough furrow within Trench 4. Feature consisted of very shallow sides with a concave profile.
110	Tr 4	109	1.6+	0.12	Fill	Fill of plough furrow 109. Consisted of mid grey to orange-red clay silt with some small stone inclusions in places.
111	Tr 10		1.5	0.16	Cut	Cut of a shallow ditch on a rough north-south orientation within Trench 10. Feature consisted of shallow sides with a concave profile which widened towards the south.
112	Tr 10	111	1.5	0.16	Fill	Fill of Ditch 111. Consisted of mid orange-red brown sandy silt that contained some small stone inclusions in places.
113	Tr 10		0.8	0.26	Cut	Cut of a small, shallow-steep sided gully within Trench 10. Feature had a concave profile which widened slightly towards the south.
114	Tr 10	113	0.8		Fill	Fill of Gully 113. Consisted of mid brown-grey sandy silt with occasional small stone inclusions.
115	Tr 6		1.65	0.4	Cut	Cut of a ditch/field boundary within Trench 6. Feature consisted of moderate-steep sides with a concave profile and was on a northwest to southeast orientation.
116	Tr 6	115	1.65	0.4	Fill	Fill of ditch/field boundary 115. Consisted of a mid grey-brown clay silt with occasional small stone inclusions.

Context no	. Trench/Area	a Fill o	f Width (n	n) Depth (m) Type	Discussion
117	Tr 6		0.87	0.39	Cut	Cut of a north-south orientated gully. Feature consisted of steep sides with a concave base (west side of feature much steeper than the eastern edge).
118	Tr 6	117	0.87	0.39	Fill	Fill of Gully 117. Consisted of mid red to orange- brown sandy silt with occasional small stone inclusions.
119	Tr 3		2.02	0.12	Cut	Cut of a shallow plough furrow, quite wide and may be part of a larger field system in the area. Consisted of shallow sides with a slightly concave profile.
120	Tr 3	119	2.02	0.12	Fill	Fill of plough furrow/field boundary 119. Consisted of mid orange-red brown sandy silt with small stone inclusions throughout.
121	Tr 3		3.6	0.12	Cut	Large, shallow plough furrow/field boundary on a north-east to south-west orientation within Trench 3. Consisted of shallow sides with a concave profile.
122	Tr 3	121	3.6	0.12	Fill	Fill of plough furrow/field boundary 121. Consisted of mid brown sandy clay with small stone inclusions throughout.
123	Tr 10		1.5	0.34	Cut	Cut of a north-south orientated ditch within Trench 2. Feature consisted of steep sides with a concave profile.
124	Tr 10	123	1.5	0.17	Fill	Fill of Ditch 123. Consisted of mid black-brown sandy clay with occasional small stones throughout. Primary fill of two within this feature. Not uniform within feature, some areas are denser than others.
125	Tr 10	123		0.3	Fill	Fill of Ditch 123. Consisted of mid red-orange brown clay silt with occasional small stone inclusions throughout. Secondary fill of two within the feature.
126	Tr 1		1.63	0.09	Cut	Cut of a roughly east-west orientated plough furrow within Trench 1. Consisted of shallow sides with a concave profile.
127	Tr 1	126	1.63	0.09	Fill	Fill of plough furrow 126. Consisted of mid orange-red brown sandy silt with occasional stone inclusions.
128	Tr 2		1	0.18	Cut	Cut of an east-west orientated field boundary within Trench 2. Consisted of steep sides with a flat base.
129	Tr 2	128	1	0.18	Fill	Fill of field boundary 128. Consisted of mid-light grey brown sandy silt with occasional small stone inclusions.
130	Tr 5		2.81	0.15	Cut	Cut of a very shallow northeast to southwest orientated plough furrow/field boundary. Feature consisted of very shallow sides with a flat base.
131	Tr 5	130	2.81	0.15	Fill	Fill of field boundary/plough furrow 130. Consisted of mid orange-red brown sandy silt with numerous small stone inclusions throughout.
132	Tr 7		2.18	0.12	Cut	Cut of a northeast to southwest orientated plough furrow/field boundary. Feature consisted of very shallow sides with a flat base.

Context no.	Trench/Area	Fill of	Width (m)	Depth (m)	Type	Discussion
133	Tr 7	132	2.18	0.12	Fill	Fill of plough furrow/field boundary 132. Consisted of mid orange-red brown sandy silt with occasional small stone inclusions.
134	Tr 7		0.38	0.12	Cut	Cut of a small pit to the eastern edge of Trench 7. Feature consisted of moderately sloping sides with a u-shaped profile. Continued beyond limit of trench.
135	Tr 7	134	0.38	0.121	Fill	Fill of Pit 134. Consisted of mid grey orange-red brown sandy silt with occasional small stone inclusions.
136	Tr 7		0.48	0.14	Cut	Cut of a small pit/treebole to the western edge of Trench 7. Feature consisted of moderately sloping sides with a u-shaped profile.
137	Tr 7	136	0.48	0.14	Fill	Fill of pit/treebole 136. Consisted of mid red- orange brown sandy silt with some small stone inclusions.
138	Tr 7		0.34	0.08	Cut	Cut of a very shallow northeast-southwest orientated plough furrow within Trench 7. Consisted of shallow sides with a slightly concave profile.
139	Tr 7	138	0.34	0.08	Fill	Fill of plough furrow 138. Consisted of mid red- orange brown sandy silt with occasional small stone inclusions.
140	Tr 7		0.81	0.07	Cut	Cut of a northeast-southwest orientated plough furrow/field boundary within Trench 7. Feature consisted of shallow sides with a slightly concave profile.
141	Tr 7	140	0.81	0.07	Fill	Fill of plough furrow/field boundary 140. Consisted of mid red-orange brown sandy silt with occasional small stone inclusions.
142	Tr 7			0.06	Cut	Cut of a northeast-southwest orientated plough furrow/field boundary within Trench 7. Feature consisted of shallow sides with a slightly concave profile.
143	Tr 7	142	0.94	0.06	Fill	Fill of plough furrow/field boundary 142. Consisted of mid red-orange brown sandy silt with occasional small stone inclusions.

Appendix 3: Photographic Register

Number	Contexts/description	Facing	Conditions
1	Trench 9 post machining shot	NNW	Fair
2	Trench 9 post machining shot	SSE	Fair
3	Trench 8 post machining shot	WSW	Fair
4	Trench 8 post machining shot	ENE	Fair
5	Trench 7 post machining shot	NNW	Fair
6	Trench 7 post machining shot	SSE	Fair
7	Trench 4 post machining shot	WSW	Fair
8	Trench 4 post machining shot	ENE	Fair
9	Trench 5 post machining shot	NNW	Fair
10	Trench 5 post machining shot	SSE	Fair
11	Trench 2 post machining shot	ENE	Fair
12	Trench 2 post machining shot	WSW	Fair
13	Trench 3 post machining shot	NNW	Fair
14	Trench 3 post machining shot	SSE	Fair
15	Trench 6 post machining shot	WSW	Fair
16	Trench 6 post machining shot	ENE	Fair
17	Trench 10 post machining shot	WSW	Overcast
18	Trench 10 post machining shot	ENE	Overcast
19	Trench 1 post machining shot	SSE	Overcast
20	Trench 1 post machining shot	NNW	Overcast
21	East-north-east facing section of plough furrow 103, Trench 9	WSW	Overcast
22	East-north-east facing section of plough furrow 103, Trench 9, oblique shot	NW	Overcast
23	East-north-east facing section of plough furrow 105, Trench 9	WSW	Overcast
24	East-north-east facing section of plough furrow 105, Trench 9, oblique shot	NW	Overcast
25	West facing section of plough furrow 107, Trench 8	ENE	Overcast
26	West facing section of plough furrow 107, Trench 8	ENE	Overcast
27	West-north-west facing section of plough furrow 109, Trench 4	ENE	Overcast
28	East facing section of plough furrow 109, Trench 4	WSW	Overcast
29	North-north-east facing section of Ditch 111, Trench 10	SSW	Overcast
30	South-south-east facing section of Ditch 111, Trench 10	NNW	Overcast
31	North-north-east facing section of Gully 113, Trench 10	SSW	Overcast
32	South-south-west facing section of Gully 113, Trench 10	NNE	Overcast
33	West-south-west facing section of Linear 121, Trench 3	ENE	Overcast
34	South-west facing section of Linear 121, Trench 3, oblique shot	NW	Overcast
35	VOID	VOID	VOID
36	South facing section of Ditch 123, Trench 1	N	Overcast
37	North facing section of Ditch 123, Trench 1	S	Overcast
38	West-south-west facing section of Linear 126, Trench 1	ENE	Overcast
39	East-north-east facing section of Linear 126, Trench 1	WSW	Overcast
40	East-north-east facing section of Linear 126, Trench 1, oblique shot	NW	Overcast
41	Ditch 128, east facing section, Trench 2	W	Sunny
42	Ditch 128, west facing section, Trench 2	E	Sunny
43	East-north-east facing section, 17chell 2	WSW	Sunny
44	East-north-east facing section of 130, Trench 5, oblique shot	NW	Sunny
45	East-north-east facing section of 130, Trench 5, oblique shot	S	Sunny
46	East-north-east facing section of 130, Trench 7 East-north-east facing section of 132, Trench 7	WSW	Overcast
47	West-south-west facing section of 132, Trench 7	ENE	Overcast
48	West-south-west facing section of 132, Trench 7, oblique shot	SE	Overcast
48		N N	
50	West-south-west facing section of 132, Trench 7, oblique shot		Overcast
	Pit 134, south-south-east facing section, Trench 7	NNW	Sunny
51	Pit 136, south-south-east facing section, Trench 7	WNW	Sunny

Number	Contexts/description	Facing	Conditions
52	Pit 136, south-south-east facing section, Trench 7, oblique shot	NW	Sunny
53	Plough furrow 138, west-south-west facing section, Trench 7	ENE	Sunny
54	Plough furrow 138, east-north-east facing section, Trench 7	WSW	Sunny
55	Plough furrow 140, west-south-west facing section, Trench 7	ENE	Sunny
56	Plough furrow 140, west-south-west facing section, Trench 7, oblique shot	SE	Sunny
57	Plough furrow 140, west-south-west facing section, Trench 7, oblique shot	N	Sunny
58	Plough furrow 140, east-north-east facing section, Trench 7	WSW	Sunny
59	Pit 136, south-south-east facing section, Trench 7	NNW	Sunny
60	Plough furrow 142, west-south-west facing section, Trench 7	ENE	Sunny
61	Plough furrow 142, east -north-east facing section, Trench 7	WSW	Sunny
62	Subsoil spread towards end of Trench 7	ENE	Overcast
63	General backfill shots of trench areas	W	Sunny
64	General backfill shots of trench areas	S	Sunny
65	General backfill shots of trench areas	NW	Sunny
66	North-north-west facing section of Ditch 115, Trench 6	SSE	Overcast
67	North-north-west facing section of Ditch 115, Trench 6	NNW	Overcast
68	North facing section of Gully 117, Trench 6	S	Overcast
69	South facing section of Gully 117, Trench 6	N	Overcast
70	West-south-west facing section of plough furrow 119, Trench 3	ENE	Overcast
71	East-north-east facing section of plough furrow 119, Trench 3	WSW	Overcast
72	East-north-east facing section of plough furrow 119, Trench 3, oblique shot	S	Overcast

Appendix 4: Drawing Register

Number	Sheet No.	Scale	Plan / Section	Description/contexts
1	1	1:10	Section	East facing section of 103
2	1	1:20	Plan	Plan of 103
3	1	1:10	Section	East-north-east facing section of 105
4	1	1:20	Plan	Plan of 105
5	1	1:10	Section	West facing section of 107
6	2	1:20	Plan	Plan of 107
7	1	1:10	Section	West-south-west facing section of 109
8	2	1:50	Plan	Plan of 109
9	1	1:10	Section	North-north-east facing section of 111
10	1	1:20	Plan	Plan of 111
11	1	1:10	Section	North-north-east facing section of 113
12	2	1:20	Plan	Plan of 113
13	2	1:10	Section	South-south-east facing section of 115
14	2	1:20	Plan	Plan of 115
15	1	1:10	Section	South facing section of 117
16	2	1:20	Plan	Plan of 117
17	3	1:10	Section	East-north-east facing section of 119
18	3	1:20	Plan	Plan of 119
19	3	1:20	Section	East-north-east facing section of 121
20	3	1:20	Plan	Plan of 121
21	3	1:10	Section	North facing section of 123
22	3	1:50	Plan	Plan of Trench 1
23	4	1:10	Section	East-north-east facing section of 126
24	3	1:10	Section	West facing section of 128
25	4	1:50	Plan	Plan of 128
26	4	1:10	Section	East-north-east facing section of 130
27	4	1:20	Plan	Plan of 130
28	4	1:10	Section	West-south-west facing section of 132
29	2	1:10	Section	South-south-east facing section of 136
30	3	1:10	Section	South-south-east facing section of 134
31	4	1:20	Section	West-south-west facing section of 138 and 140
32	4	1:20	Section	West-south-west facing section of 142
33	4	1:50	Plan	Plan of 142
34	4	1:50	Plan	Plan of features 132-140

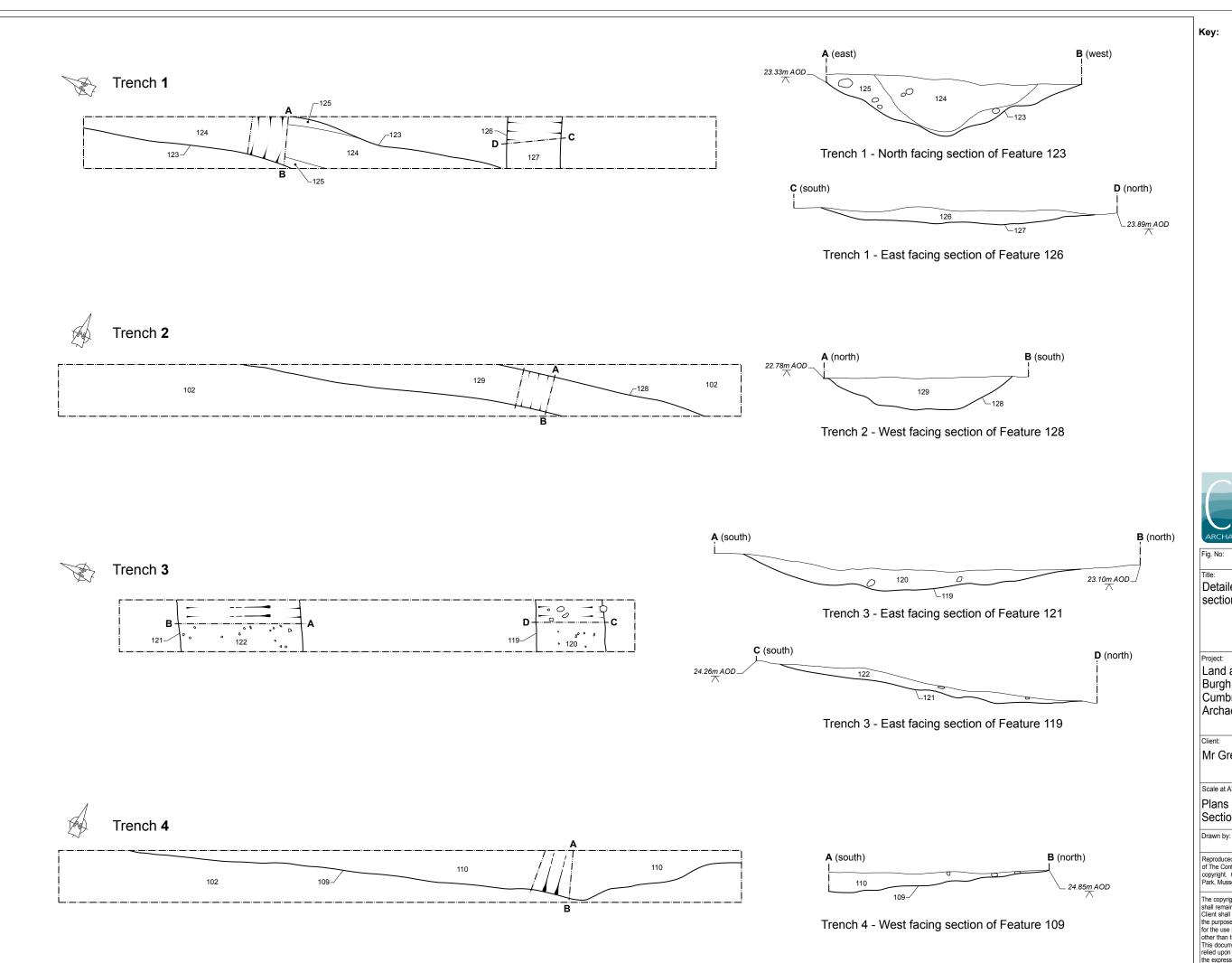
Appendix 5: Trench Summary Table

Trench No.	Trench Size (m)	Depth of Topsoil (m)	Description			
1	19.5 x 1.5	0.22	Natural substrate was located at a depth of 24.37m AOD to the southern end of the trench and 22.75m AOD at the northern end, and consisted of red-brown sandy clay with small stone inclusions. Trench itself sloped from south-north, and contained one ditch 123 and one plough furrow 126.			
2	20 x 1.5	0.3	Natural substrate was located at a depth of 22.85m AOD to the north-eastern end of the trench and 22.89m AOD at the south-western end, and consisted of mid grey red sandy clay with small stone inclusions. Trench was fairly flat, and contained one ditch 128.			
3	16 x 1.5	0.25	Natural substrate was located at a depth of 24.26m AOD to the southern end of the trench and 23.06m AOD at the northern end, and consisted of mid brown orange-red silty sand with small stone inclusions. Trench itself sloped from south-north, and contained two plough furrows/field boundaries 119 and 121.			
4	20 x 1.5	0.35	Natural substrate was located at a depth of 24.73m AOD to the north-eastern end of the trench and 24.88m AOD at the south-western end, and consisted of mid brown red silty sand with small stone inclusions. Trench itself was fairly flat, and contained one plough furrow 109.			
5	22.5 x 1.5	0.22	Natural substrate was located at a depth of 25.19m AOD to the southern end of the trench and 23.77m AOD at the northern end, and consisted of mid brown yellow-red silty sand with small stone inclusions. Trench itself sloped from south-north, and contained one plough furrow/field boundary 126. One modern water pipe was located towards the northern end of the trench.			
6	20.5 x 1.5	0.27	Natural substrate was located at a depth of 24.75m AOD to the north-eastern end of the trench and 24.62m AOD at the south-western end, and consisted of mid brown orange-red silty sand with small stone inclusions. Trench itself was fairly flat, and contained one ditch 115 and one gully 117.			
7	20 x 1.5	0.25	Natural substrate was located at a depth of 25.46m AOD to the southern end of the trench and 25.44m AOD at the northern end, and consisted of mid red yellow silty sand with small stone inclusions. Trench itself was fairly flat, and contained four plough furrows/field boundaries 132, 138, 140, and 142, and two small pits 134 and 136.			
8	20 x 1.5	0.26	Natural substrate was located at a depth of 25.76m AOD to the northeastern end of the trench and 25.57m AOD at the south-western end, and consisted of mid red yellow silty sand with small stone inclusions. Trench itself was fairly flat, and contained one plough furrow 107.			
9	20 x 1.5	0.34	Natural substrate was located at a depth of 26.14m AOD to the southern end of the trench and 25.58m AOD at the northern end, and consisted of mid-light brown red sandy silt with small stone inclusions. Trench itself sloped from south-north, and contained two plough furrows/field boundaries 103 and 105.			
10	20 x 1.5	0.2	Natural substrate was located at a depth of 25.61m AOD to the north-eastern end of the trench and 25.59m AOD at the south-western end, and consisted of mid yellow red-orange silty sand with small stone inclusions. Trench itself was fairly flat, and contained one plough furrow 111 and one small gully 113.			

FIGURES 1 – 5











Y155/14

Detailed trench plans and sections. Trenches 1 - 4

Land adjacent to Highfield, Burgh by Sands, Carlisle Cumbria Archaeological Evaluation

Mr Greenall

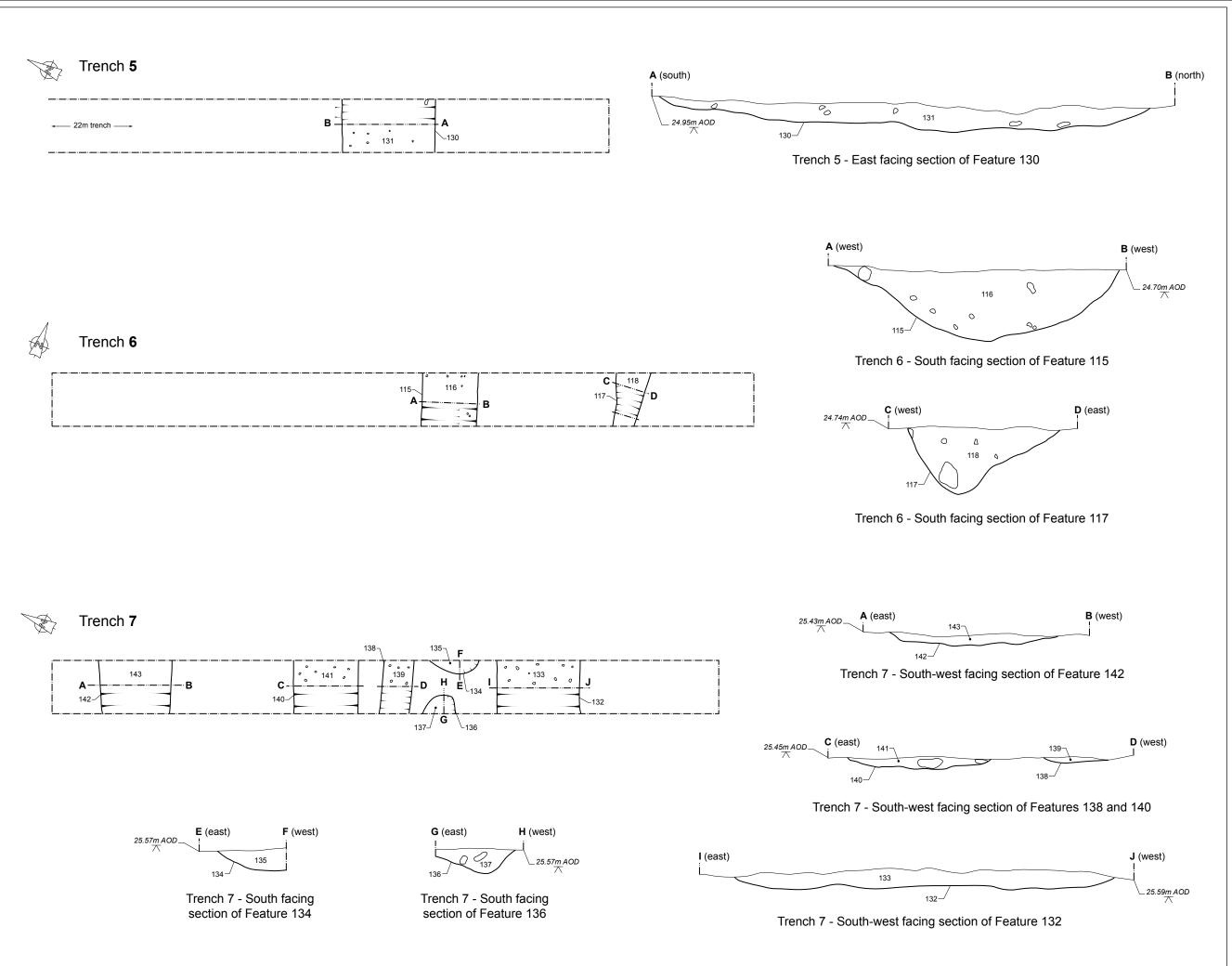
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Plans - 1:100 Sections - 1:20

Checked by: Date: 29/05/2014 KH

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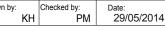
Detailed trench plans and sections. Trenches 5 - 7

Land adjacent to Highfield, Burgh by Sands, Carlisle Cumbria Archaeological Evaluation

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Scale at A3:

Plans - 1:100 Sections - 1:20



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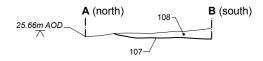


Trench 8

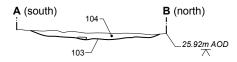
Trench 9



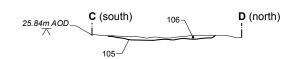
104 .



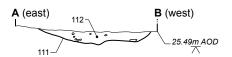
Trench 8 - West facing section of Feature 107



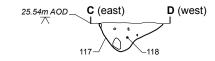
Trench 9 - East facing section of Feature 103



Trench 9 - East facing section of Feature 105



Trench 10 - North north-east facing section of Feature 111



Trench 10 - South facing section of Feature 117



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Fig. No: 8 Revision: Y155/14

Detailed trench plans and sections. Trenches 8 - 10

Projec

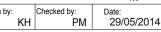
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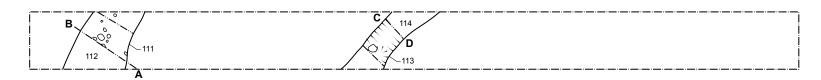
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Trench 10



106

PLATES 1-6



Plate 1: North facing section of Ditch 123, Trench 1



Plate 2: West facing section of Ditch 128, Trench 2

Plates:	2	Revision:	Project:	Land adjancent to Highfield, Burgh by Sands, Cumbria	& CISTER S	CEA	CFA ARCHAEOLOGY LTD Offices C1 & C2 Clayton Business Centre
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Plate 3: South-west facing section of Furrow 121, Trench 3



Plate 4: North-west facing section of Ditch 115, Trench 6

Plates: 3-4		Revision:	Project:	Land adjancent to Highfield, Burgh by Sands, Cumbria	& CISTERS	CFA ARCHAEOLOGY LTD Offices C1 & C2 Clouten Purinees Centre
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Plate 5: South-west facing section of Furrow 140, Trench 7



Plate 6: North-east facing section of Furrow 105, Trench 9

Plates: 5-6	6	Revision:	Project:	Land adjancent to Highfield, Burgh by Sands, Cumbria	& CISTER S	CEA	CFA ARCHAEOLOGY LTD Offices C1 & C2 Clayton Business Centre
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