CFA Archaeology Ltd

archaeological consultants

Advice on Archaeology & Planning

Environmental Impact Assessment

Interpretation, Design & Display

Finds/ Environmental Analysis

Field Evaluation & Excavation

Historic Building Recording

Site & Landscape Survey

Geophysical Survey

Stage 1 Interim Report
Keir Wood Fort
Kincardine, Fife

Archaeological Evaluation

Report No. 2159

t 0131 273 4380 f 0131 273 4381 e info@cfa-archaeology.co.uk w www.cfa-archaeology.co.uk

CFA ARCHAEOLOGY LTD

The Old Engine House
Eskmills Business Park
Musselburgh
East Lothian
EH21 7PQ

Tel: 0131 273 4380
Fax: 0131 273 4381
email: info@cfa-archaeology.co.uk
web: www.cfa-archaeology.co.uk

Author	Magnus Kirby MA FSA Scot AIfA
Illustrator	Leeanne Whitelaw BSc MIfA
Editor	Melanie Johnson MA PhD FSA Scot MIfA
Commissioned by	Forestry Commission Scotland
Date issued	December 2012
Version	0
OASIS Reference	cfaarcha1-139888
Planning Application No	N/A
Grid Ref	NS 9464 8822

This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

Stage 1 Interim Report
Keir Wood Fort
Kincardine, Fife

Archaeological Evaluation

Report No. 2159

CONTENTS

Appendices

Illustrations (bound at rear)

1. INTRODUCTION

1.1 General

This interim report presents the results of an archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) in November 2012 at Keir Wood Fort, near Kincardine, Fife (NGR: NS 9464 8822) (Fig. 1). The work was commissioned by Forestry Commission Scotland (FCS).

A Project Design (PD) dated 21 September 2012 was produced by CFA on behalf of FCS. The PD was based upon information supplied by Matt Ritchie of FCS and set out a programme of evaluation trenching and indicative post-excavation analysis designed to evaluate the damage caused to the site by recently wind-blown timber.

The results of the fieldwork contained within this interim report represent the first part (Stage 1) of a two part project. Stage 2 of this project will comprise post-excavation analysis and final reporting as required.

1.2 Background

Keir Wood Fort is located to the north-east of Kincardine on the eastern side of Moor Loch and consists of an upstanding sub-circular earthwork with ramparts and ditches visible. The area in which the fort is located has been largely wooded since the First Edition Ordnance Survey map of 1861 and it currently stands within mature woodland forming part of Devilla Forest.

The fort has been compromised by poorly executed thinning operations which have resulted in a number of windblown trees. This damage is particularly apparent on the well preserved ramparts on the south-western side. Damage has also been inflicted by the timber extraction machinery utilised during thinning operations. A clearance operation is planned to fell and remove all remaining trees and wind-blow from the site and within a 5-10m buffer zone surrounding it. As part of this operation, all brash and discarded timber shall be removed from the site.

The purpose of the archaeological works reported herein was to evaluate the damage caused by forestry operations, ascertain the extent and nature of surviving archaeological deposits, and enhance the historic environment record through the archaeological investigation (enhancing our knowledge of both the individual site and its regional context).

1.3 Archaeological context

Keir fort is recorded as an earthwork by RCAHMS (Site No. NS98NW 9) and the site record goes under the name of 'Moor Dam'. Other alternative names include 'The Trench Knowe', 'The Roman Camp', and 'The Danish Camp'. Recorded in 1933, it was described as 'a low roughly pear-shaped elevation, which rises from ground that must have always been more or less swampy'. It was noted on a subsequent visit in 1953 to be covered in ferns, while a visit undertaken in 1974 described the earthwork as 'now afforested'. In 1963 it was suggested that it may be a medieval earthwork, while the surveyors of 1974 suggested that it was 'too denuded and obscured by

vegetation to positively classify'. There had been no previous intrusive work undertaken on the site and its date and function are unknown, but it is considered to be a lowland late prehistoric defended enclosure. It is currently undesignated, but is considered to be of schedulable quality.

More recently, the site was the subject of an archaeological measured survey by Rebecca Shaw Archaeological Services in 2011. The report states that

> 'known locally as 'The Danish Camp', Keir Wood fort is located roughly half way up the eastern side of Moor Loch in an area of unthinned mixed woodland. The west of the site is bordered by the Moor Loch, the north by marshy ground that was originally part of the loch with both the east and south comprising flat ground. The fort is sub-circular in shape and measures roughly 70m in diameter (at most) with a number of banks and ditches. There is a knoll at the northern end which would have originally formed a promontory into the loch. Although there is no internal rampart the incline on the inner face of the ditch is very sharp measuring over 1.5m in height in places. There is a possible entrance to southwest [sic: south-east] where there is a definite break in both the bank and ditch' (Shaw and Edwards 2011).

1.3 Objectives

The aims of Stage 1 of this two part project were:

- To evaluate the damage caused by wind-blow and forestry operations
- To determine the character, extent and preservation of any surviving in situ archaeological deposits
- To enhance knowledge of the fort and its regional context
- To enhance the Historic Environment Record
- To provide a lasting record of the archaeological resource through the compilation and deposition of the site archive and through public dissemination via appropriate outlets
- To enable the results to inform wider regional, national and period based research frameworks.

2. WORKING METHODS

2.1 General

All work was conducted in accordance with the Institute for Archaeologists' Code of Conduct and relevant Standards and Guidance, and with Historic Scotland's standard requirements.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, by photography and by completing standard CFA record forms. The stratification was recorded even if no deposits of archaeological significance were discovered.

2.2 Evaluation Trenches

In accordance with the terms of the PD, three trenches (Trench 1 – Trench 3) (Fig. 2) were hand excavated. These trenches were intended to explore both the effects of the wind-blow and to answer questions about the nature, function and date of the fort. The locations and intents of the individual trenches are described below.

- Trench 1 measured 25.4m by 1m. It was placed on the south-western side of the fort to provide a complete section through the ramparts and ditches from the interior to the exterior. This trench was intended to clarify the construction methods and phasing of the defences, and to assess the damage caused by wind-blown timber to the better preserved side of the fort.

- Trench 2 measured 5.75m by 1m. It was placed on the south-east side of the fort within the location of the putative entrance in order to clarify whether the entrance was in fact present.

- Trench 3 measured 17.6m by 1m. It was placed in the north-eastern side of the fort extending from outside of the structure, through the rampart and into the interior. This trench was intended to investigate the nature of the defensive works on the north-east side of the site to see how they differed from those on the south-west side.

The trench locations were recorded using industry standard surveying equipment and the trenches were back-filled on completion of the evaluation.

3. ARCHAEOLOGICAL RESULTS

3.1 General

Numbers in bold in the following text refer to contexts, a full list of which is contained in Appendix 1.

All of the trenches were excavated through the features associated with the fort to the level of the underlying natural (**002**). The natural varied from light grey clay/sandy-clay to orange-brown sandy clay. The orange-brown sandy clay natural predominantly occurred on the higher, better draining ground whereas the heavier grey clay deposits were largely confined to the lower ground such as the base of the ditches.

3.2 Trench 1

Trench 1 measured 25.4m by 1m (Fig. 6 and 7). Within this location, the fort defences from the interior to the exterior consisted of an inner rampart (Rampart 1), an inner ditch (Ditch 1), an intermediate rampart (Rampart 2), an outer ditch (Ditch 2), and an outer rampart (Rampart 3) (Fig. 3). Rampart 1 appears to have run around the full circumference of the fort, whereas Rampart 2 had a number of breaks and appears to have been absent from the northern side of the fort, and Rampart 3 appears to have been only present on the south-western side of the fort extending for a distance of c.35m. The ramparts had been constructed from re-deposited natural. Details of these principal defensive features are contained below.

3.2.1 Rampart 1 (003/004)

Rampart 1 (**003/004)** (Fig. 8) was situated on the outer edge of the interior of the fort. It measured 4.25m wide and was upstanding to a height of 0.3m above the level of the natural substrate (**002**). The rampart had been constructed from orange-brown clayey sand (**004**) and light grey-brown sandy clay (**003**). This rampart material was abutted by subsoil (**005**) and overlain by topsoil (**001**).

A post-hole (**022**) (Fig. 9) had been cut into the surface of the rampart. It measured c.0.3m in diameter by 0.3m deep, and contained a number of packing stones. The entire fill (**023**) of the post-hole was retained for analysis.

3.2.2 Ditch 1 (006)

Ditch 1 (**006**) (Fig. 10) was situated at the base of the slope dropping down from rampart **003/004**. It measured 3m wide by 0.8m deep, giving a 2.2m height difference between the top of the rampart and the base of the ditch.

The fill of this ditch from the base upwards consisted of light grey-brown sandy clay (**007**) overlain by dark grey-brown sandy clay (**008**) and mottled slightly orangey-brown silty clay (**009**). A bulk sample of deposit **007** was retained for analysis.

Subsoil **005** had been cut by the ditch, suggesting that it had built up prior to the construction of the fort.

3.2.3 Rampart 2 (011/012/021)

Rampart 2 (**011/012/021**) (Fig. 10) sloped upwards from ditch **006.** It measured 4.25m wide and was upstanding to a height of 0.95m above the level of the natural substrate (**002**). This meant that there was a total height difference of 1.9m between the top of the rampart and the base of ditch **006.**

The material forming the rampart consisted of slightly clayey sand (**021**) which was vivid orange in colour. This was overlain by further orange clayey sand (**011**), which was slightly less vivid in colour than **021** and was divided from it by a thin lens of grey sandy material. Deposit **011** was overlain by mottled light grey-brown sandy clay (**012**). The horizon between these two deposits was considerably merged and **012** had been heavily disturbed by bioturbation caused by root action.

3.2.4 Ditch 2 (014)

Ditch 2 (**014**) (Fig. 11) was situated immediately down from the intermediate rampart (**011/012/021**). It measured 3.5m wide by 1m deep, giving a height difference of 2.15m between the base of the ditch and the top of the rampart.

The fill of this ditch from the base upwards consisted of light grey clay (**018**), mottled grey/orangey-brown sandy clay (**017**), a thin band of black silty clay (**016**), and mottled orangey-brown clayey sand (**015**). Deposits **015, 016** and **017** had been affected by an area of bioturbation caused by root action, which had resulted in a pocket of dark-brown sandy silt (**013**) forming between the edge of the bank material (**011** and **21**) and the edge of the ditch. A bulk sample of deposit **018** was retained for analysis.

3.2.5 Rampart 3 (*019)*

Rampart 3 (**019**) (Fig. 12) sloped upwards from the edge of ditch **014**. It measured 4.2m wide and was upstanding to a height of 0.35m above the level of the natural substrate (**002**). The rampart had been constructed from orange-brown clayey sand (**019**), which was more vividly orange and less compact than the underlying natural. Along the outside edge, the rampart had been faced with undressed stones and boulders (**020**) (Fig. 13). These stones appeared to have been piled up roughly against the edge and did not show any evidence of formal construction.

3.3 Trench 2

Trench 2 measured 5.75m by 1m and was located to target a possible entranceway as defined by a break in the outer rampart (Fig. 2). The location of the entranceway as identified by CFA in the field lay slightly to the north-east of that depicted on the topographic survey, suggesting a degree of inaccuracy within the original survey (the surveyed position of the break in the rampart as identified by CFA is shown on Fig. 2).

No evidence of any features associated with the entranceway was identified within this location, with the principle features consisting of a rampart (Rampart 1)

constructed from re-deposited natural and an artificially created escarpment (Fig. 4). Details of these features are contained below.

3.3.1 Rampart 1 (026/027)

Rampart 1 (**026/027**) **(**Fig. 14) was partially uncovered within this trench. It measured >2.5m wide and was upstanding to a height of 0.2m. Rampart material **026** consisted of pale yellowish-orange sandy-silt, and **027** consisted of mottled yellow-brown sandy-silt. Deposit **027** partially overlay deposit **030** which had built up against the face of the escarpment, but this would suggest a degree of erosion within **027** rather than indicating that **030** pre-dated **027**.

The rampart overlay buried soil **028** (dark reddish-brown sandy silt), which in turn sealed a lens of mottled orange-grey sandy-clay re-deposited natural (**029**). Deposit **029** is thought to represent an isolated lens of banking material which was engulfed by the former topsoil (**028**) during the construction process.

3.3.2 Escarpment 038

Escarpment **038** (Fig. 15) appears to have been artificially created by cutting into an existing natural slope in order to create the steeper gradient required for defensive purposes. This gave a height difference of 1.75m between the top of the surviving rampart (**026/027**) and the base of the escarpment.

A number of thin lenses of material (**032**, **033**, **035** and **036**) had built up at the base and up the side of the escarpment. These were overlain by a number of more substantial deposits (**030, 031, 034** and **037**). Charcoal was present throughout most of the material that had accumulated within the escarpment cut. Samples of charcoal-rich deposits **030** and **035** were retained for analysis.

3.4 Trench 3

Trench 3 measured 17.6m by 1m (Fig. 16). Within this location the fort defences from the interior outwards consisted of an inner rampart (Rampart 1), an artificially created escarpment, and an outer rampart (Rampart 2) (Fig. 5). The ramparts had been constructed from re-deposited natural. A substantial stone wall identified between the escarpment and Rampart 2 almost certainly post-dates the use of the fort. Details of these features are contained below.

3.4.1 Rampart 1 (041)

Rampart1 (**041**) (Fig. 17) measured 5.5m wide and was upstanding to a height of 0.5m above the level of the natural substrate (**002**). However, some of the recorded width may represent material that had slumped down the escarpment, with the bulk of the rampart material measuring nearer to 4.5m in width. The rampart material consisted of orange-brown sandy clay (**041**), which was overlain by subsoil **040** and topsoil **039**.

A post-hole (**054**) (Fig. 18) had been cut into the surface of the rampart. It measured c.0.3m in diameter by 0.25m deep. The fill (**055**) of this feature consisted of loose light-brown sandy clay containing packing stones. A sample of this material was

retained for analysis. This post-hole was very similar in nature to that identified within Trench 1 (Rampart 1) suggesting that there may have been a ring of posts, perhaps forming a fence, around the entire circumference of the inner rampart.

3.4.2 Escarpment (047)

Escarpment **047** (Fig. 19) appears to have been artificially created by cutting into an existing natural slope in order to create the steeper gradient required for defensive purposes. This gave a height difference of 2.7m between the top of the surviving rampart (**041**) and the base of the escarpment.

A number of thin lenses of material (**043, 044, 045, 046, 051** and **053**) had built up at the base and up the side of the escarpment. Samples of charcoal-rich deposits **046** and **053** were retained for analysis. These were overlain by a more substantial deposit (**050**) of yellow-brown sandy silt. This deposit merged into subsoil **040** suggesting that it post-dated the rampart. A single sherd of medieval pottery and a fragment of possible fired clay were recovered from deposit **050**, but the aforementioned stratigraphic relationship suggests that the finds post-date the usage of the fort. Further details of these finds are contained in Section 3.5 below.

A substantial stone wall (**042**) (Fig. 20) was identified sitting on top of the fills at the base of the escarpment. The wall measured 1.25m in width and stood a single course high (c.0.45m max). Sitting on top of deposit **050** and abutted by topsoil **039**, this feature almost certainly post-dates the original use of the fort.

3.4.3 Rampart 2 (049)

Rampart 2 (**049**) (Fig. 21) measured c.4.5m in width and was upstanding to a height of 0.25m. This gave a height difference of only 0.5m between the base of the escarpment and the top of the surviving rampart. The material forming the rampart (**049**) consisted of mottled orangey-white silty clay and is probably re-deposited natural. Overlying subsoil deposit **048** may also have contained a degree of banking material, but this had become considerably merged into the subsoil which extended well beyond the edges of the rampart and consequently could not be accurately deciphered.

3.5 **The Finds**, by Sue Anderson

A jar rim (5g) in Scottish white gritty ware of medieval date, and an abraded fragment of fired clay (or possibly burnt natural fine-grained rock, 13g) were recovered from context **050** (Appendix 4).

3.6 **Evaluation of Tree Damage,** by Mike Cressey

Published examples of tree induced archaeological damage have been compiled by Crow (2004) who draws on a wide range of useful examples in relation to the types of archaeological site that have widely been affected to a lesser or greater extent. This report shows that the impact of root activity on archaeological remains is not always straightforward as there are a wide number of variables to be considered which could include tree species and their typical rooting systems, geology, local soil chemistry, drainage and planting history.

A report commissioned to look specifically at the impacts of forestry on a fort, settlement and field system at Tamshiel Rig (NMRS No. MT60 NW5), in the Scottish Borders (Cressey 1996), jointly funded by Historic Scotland and Forestry Commission Scotland, analysed the effects of the cultivation methods used prior to afforestation, and the subsequent rooting impacts. Cressey found that root activity had affected some archaeological evidence but the extent of damage was clearly dependent on the proximity to the trees. The report concluded that the worst site damage was caused during cultivation, and that root induced problems were more local. The direct risk to near-surface archaeological evidence from tree roots is therefore also related to the stand density (the number of trees per hectare). Comparable findings were reported by a similar study of a settlement at Glen Brein, Inverness-shire (Hanley and Wordsworth 1997).

In the case of Keir Wood Fort there has been a negative impact on the ramparts which has not led to the total loss of the earthwork profiles. Fig. 22 shows a windblown mature birch tree (Betula pendula) which has lifted up a great deal of soil with medium to smaller sized boulders within its root plate. Fig. 23 shows the same impact caused by a fairly young pine tree (Pinus sylvestris). Both are relatively shallow rooting species but nonetheless the impact is the same.

4. DISCUSSION

This programme of works established that the fort was probably a defensive structure consisting of a series of ramparts and ditches on the south-western side and a series of ramparts and artificially created escarpments on the eastern/south-eastern side. Some of these ramparts were upstanding to a height of as little as 0.2m indicating a considerable degree of erosion, or that the ramparts were never built to a considerable height. The presence of post-holes in two of the trenches along the top of the innermost rampart suggests there may have been a timber fence in addition to the ramparts. The trench placed at the possible entrance on the south-east side, indicated by a break in the middle ditch and rampart, found no evidence to suggest that an entrance was located here.

Historic map coverage of the area suggests that the fort has been under tree cover since at least the mid-19th century and these earlier periods of afforestation are likely to have had a significant but unquantifiable impact on the material condition of the defences.

The site was notable for its scarcity of finds, with a single sherd of medieval pottery being uncovered. This sherd came from an unsecure context high up in the stratigraphic sequence and is considered unlikely to be an indication of the date of the fort. Obtaining dating evidence is now dependent on the forthcoming programme of post-excavation analysis.

5. CONCLUSION AND RECOMMENDATIONS

A programme of evaluation trial trenching was undertaken at Keir fort. The three trenches excavated gave considerable information on the construction of the fort defences, which consisted of a series of ramparts, ditches, and artificially created escarpments. A single sherd of pottery recovered during the evaluation proved to be medieval in date, but this came from high up within the deposits and is considered to be unsecure in relation to dating the fort. Several soil samples were taken, a number of which contain pieces of charcoal, which may allow the date of the fort to be established.

The survey of the trench locations carried out by CFA as part of this programme of works identified an anomaly in the location of the possible entranceway, placing it c.10m to the north-east of the location indicated on the original topographic survey (Shaw and Edwards 2011). This anomaly is likely to relate to the usage of GPS technology within heavily wooded areas and potentially points towards problems with the original survey, which was undertaken prior to the storm damage when tree cover was denser. Consequently CFA recommend that the fort be re-surveyed following the removal of the trees when considerably more accurate results can be expected.

A programme of post-excavation analysis and publication will be required in relation to this programme of works, and will be provided under separate cover.

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of reports will be lodged with the Fife Council Sites and Monuments Record.

A summary statement of the results of this programme of works will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 6).

6. REFERENCES

Cressey, M 1996 *Forestry and Archaeology at Tamshiel Rig, Scottish Borders*. Report 308. Centre for Field Archaeology, University of Edinburgh.

Crow, P 2004 *Trees and Forestry on Archaeological sites in the UK: a review document.* Forestry Research (Web Version).

Hanley, R and Wordsworth, J 1997 *Preserved in the forest? Excavations at Glen Brein, Stratherrick, Inverness-shire 1997*. 2nd interim report. Highland Council, Inverness.

Shaw, R and Edwards, B 2011 *Keir Plantation Kincardine, Castlehill Kincardine, Callandar Hill Falkirk: Archaeological Topographical Survey of three Forts in the Scottish Lowlands.* Rebecca Shaw Archaeological Services Survey Report.

APPENDIX 1: CONTEXT REGISTER

Context no.	Trench	Description
001	1	Topsoil (dark humic silt)
002	All	Natural (orange-brown/yellow sand/sandy-clay/clay)
003	1	Material forming Rampart 1 (light grey-brown sandy-clay)
004	1	Material forming Rampart 1 (loose orange-brown clayey-sand)
005	1	Subsoil (mid-brown sandy-silt)
006	1	Cut of Ditch 1
007	1	Fill of 006 (light grey-brown sandy-clay
008	1	Fill of 006 (Grey-brown sandy-clay)
009	1	Upper fill of 006 (mottled slightly orangey-brown sandy-clay)
010	1	Pocket of mid-brown sandy-silt, possibly result of bioturbation
011	1	Material forming Rampart 2 (Orange clayey-sand)
012	1	Material forming Rampart 2 (mottled light grey-brown sandy-clay)
013	1	Pocket of dark-brown sandy-silt
014	1	Cut of Ditch 2
015	1	Upper fill of 014 (mottled orangey-brown clayey-sand)
016	1	Fill of 014 (band of hard black silty-clay)
017	1	Fill of 014 (mottled grey/orangey-brown sandy-clay
018	1	Lower fill of 014 (light grey clay with a thin band of darker organic material at the base)
019	1	Material forming Rampart 3 (orangey-brown clayey-sand)
020	1	Edging stones on outside of Rampart 3
021	1	Material forming Rampart 2 (Orange clayey-sand)
022	1	Cut of post-hole
023	1	Fill of 022 (grey-brown sandy silt with packing stones)
024	2	Topsoil (dark humic silt)
025	2	Subsoil (reddish-brown sandy-silt)
026	2	Material forming Rampart 1 (pale-yellow sandy-silt)
027	2	Material forming Rampart 2 (mottled yellow-brown sandy-silt)
028	2	Buried soil underlying Rampart 2 (reddish-brown sandy-silt)
029	2	Isolated lump of rampart material (mottled grey sandy-clay)
030	2	Fill of escarpment 038 (mid-grey clayey-silt)
031	2	Fill of escarpment 038 (reddish-grey silt)
032	2	Fill of escarpment 038 (orange clay)
033	2	Fill of escarpment 038 (dark-brown sandy-silt)
034	2	Fill of escarpment 038 (pale grey-brown clayey-silt)
035	2	Fill of escarpment 038 (dark grey clay)
036	2	Fill of escarpment 038 (white-grey clay)
037	2	Fill of escarpment 038 (mid-brown sandy-silt containing charcoal)
038	2	Cut of escarpment
039	3	Topsoil (dark humic silt)
040	3	Subsoil (reddish sandy-silt)
041	3	Material forming Rampart 1(orange-brown sandy-clay)
042	3	Stones forming wall
043	3	Fill of escarpment 047 (pale grey sandy-clay)
044	3	Fill of escarpment 047 (mid grey-brown sandy-clay)
045	3	Fill of escarpment 047 (dark grey-brown sandy silty clay)
046	3	Fill of escarpment 047 (black charcoal rich deposit)
047	3	Cut of escarpment
048	3	Subsoil possibly containing elements of rampart material (mid grey-brown sandy-clay)
049	3	Material forming Rampart 2 (mottled orangey white silty-clay)
050	3	Subsoil merging with 040 (mid yellow-brown sandy-silt)
051	3	Fill of escarpment 047 (black charcoal rich deposit)
052	3	Buried soil underlying Rampart 2 (dark-brown silty loam)

053	3	Fill of escarpment 047 (black charcoal rich deposit)
054	3	Cut of post-hole
055	3	Fill of post-hole 054 (light-brown silty-clay)

APPENDIX 2: DIGITAL PHOTOGRAPHIC REGISTER

Shot	Description	From	Conditions
1	Trench 1, pre-excavation	East	Overcast
2	Trench 1, pre-excavation	West	Overcast
3	Trench 1, following removal of brash	NE	Overcast
4	Trench 1, following removal of brash	SW	Overcast
5	Trench 1, eastern end following removal of brash	SW	Overcast
6	Trench 1, large stone to east of ditch 006	SE	Overcast
7	Trench 2, pre-excavation	SE	Overcast
8	Trench 2, pre-excavation	NW	Overcast
9	Trench 2 following removal of brash	SE	Overcast
10	Trench 2 following removal of brash	NW	Overcast
11	Trench 3, pre-excavation	NE	Overcast
12	Trench 3, pre-excavation	SW	Overcast
13	Trench 3, following removal of brash	NE	Overcast
14	Trench 3, following removal of brash	SW	Overcast
15-16	Trench 2, post-excavation	SE	Rain
17	Trench 2, post-excavation	NW	Rain
18-21	Trench 2, facing section	SW	Rain
22-24	Trench 2, facing section	NE	Rain
25-26	Trench 1, general	NE	Rain
27-28	Trench 1, general	SW	Rain
29-42	Trench 1, NW-facing section	NW	Rain
43	Trench 1, edging stones 020	NE	Rain
44	Trench 1, edging stones 020	SW	Rain
45-56	Trench 1, SE-facing section	SE	Rain
57-58	Trench 1, post-hole 021	South	Rain
59	Trench 1, oblique shot of Ditch 1 and Rampart 2	NE	Rain
60	Trench 1, oblique shot of Ditch 2 and Rampart 2	West	Rain
61-77	Trench 3, sequence of shots showing NW-facing section	NE	Rain
78	Trench 3, Rampart 2 (049), oblique shot	West	Rain
79	Trench 3, NW-facing section at NE end	NW	Rain
80-86	Trench 3, series of oblique shots showing NW-facing section	West	Rain
87-91	Trench 3, series of oblique shots showing NW-facing section	NE	Rain
92-93	Trench 3, SE-facing section at NE end	SE	Rain
94	Trench 3, SE-facing section, oblique shot	East	Rain
95-96	Trench 3, SE-facing section NE end, oblique shot	SW	Rain
97-98	Trench 3, wall 042 oblique shot	SE	Rain
99	Trench 3, SE-facing section, oblique shot	East	Rain
100	Trench 3, wall 042, oblique shot	SW	Rain
101-120	Trench 3, sequence of shots showing SE-facing section (some oblique)	SE	Rain
121-122	Trench 3, general post-ex shot	SW	Rain
123-124	Trench 3, general post-ex shot	NE	Rain
125-126	Trench 3, post-hole 054, partially excavated	Above	Rain
127-128	Trench 3, post-hole 054, fully excavated	Above	Rain
129	Trench 1, post-hole 022, post-ex	Above	Rain
130	Trench 1, post-hole 022, post-ex	SE	Rain
131	Trench 1, SE-facing section, oblique shot	South	Overcast
132-133	Trench 1, SE-facing section, oblique shot	East	Overcast
134	Trench 1, SE-facing section, oblique shot	South	Overcast

135	Trench 1, NW-facing section, oblique shot	West	Overcast
136-137	Trench 3, wall 042	SW	Overcast
138	Trench 3, backfilled	SW	Overcast
139	Trench 3, backfilled	NE	Overcast
140	Trench 2, backfilled	NW	Overcast
141	Trench 2, backfilled	SE	Overcast
142	Trench 3, backfilled	NE	Overcast

APPENDIX 3: DRAWINGS REGISTER

Sheet No	Drawing No	Scale	Section/Plan	Description
1	1A	1:20	Section	Trench 1 NW-facing section
1	1B	1:20	Section	Trench 1 NW-facing section
1	1C	1:20	Section	Trench 1 NW-facing section
2	1C (Duplicated)	1:20	Section	Trench 1 NW-facing section
2	1E	1:20	Section	Trench 1 NW-facing section
2	2	1:20	Plan	Trench 1, plan of NE end showing location of post-hole 022
2	3	1:20	Section	Post-hole 022, SE-facing section
3	4	1:20	Section	Trench 2 SW-facing section
4	5A	1:20	Section	Trench 3 NW-facing section
4	5B	1:20	Section	Trench 3 NW-facing section
5	5C	1:20	Section	Trench 3 NW-facing section
5	6	1:10	Section	Trench 3, SW-facing section showing wall 042 and underlying deposits
5	7	1:10	Section	Post-hole 054, east-facing section
6	8	1:50	Plan	Trench 3, plan of SW end
6	9	1:20	Plan	Trench 3, plan of wall 042

APPENDIX 4: FINDS REGISTER

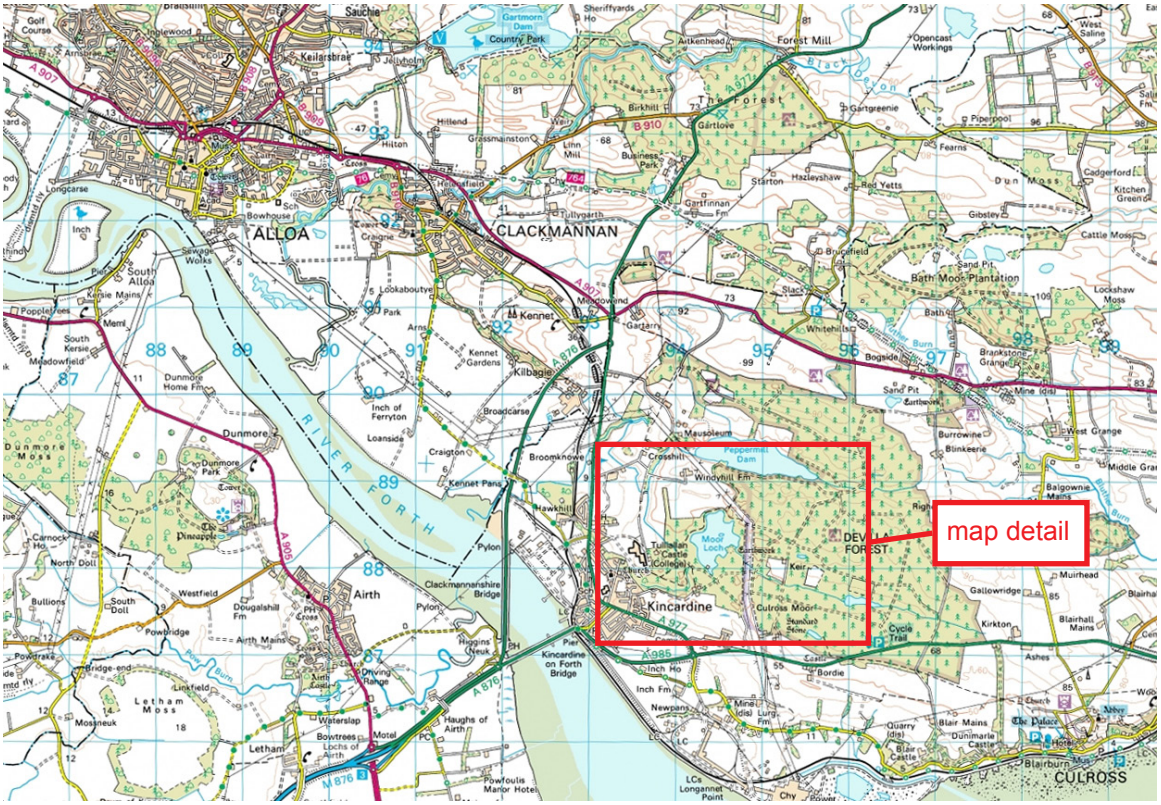
Context	Find type	No	Wt/g	Notes
050	Pottery	1	5	jar rim, sooted, white gritty ware
050	Fired clay?	1	13	abraded fragment, dense, possibly natural?

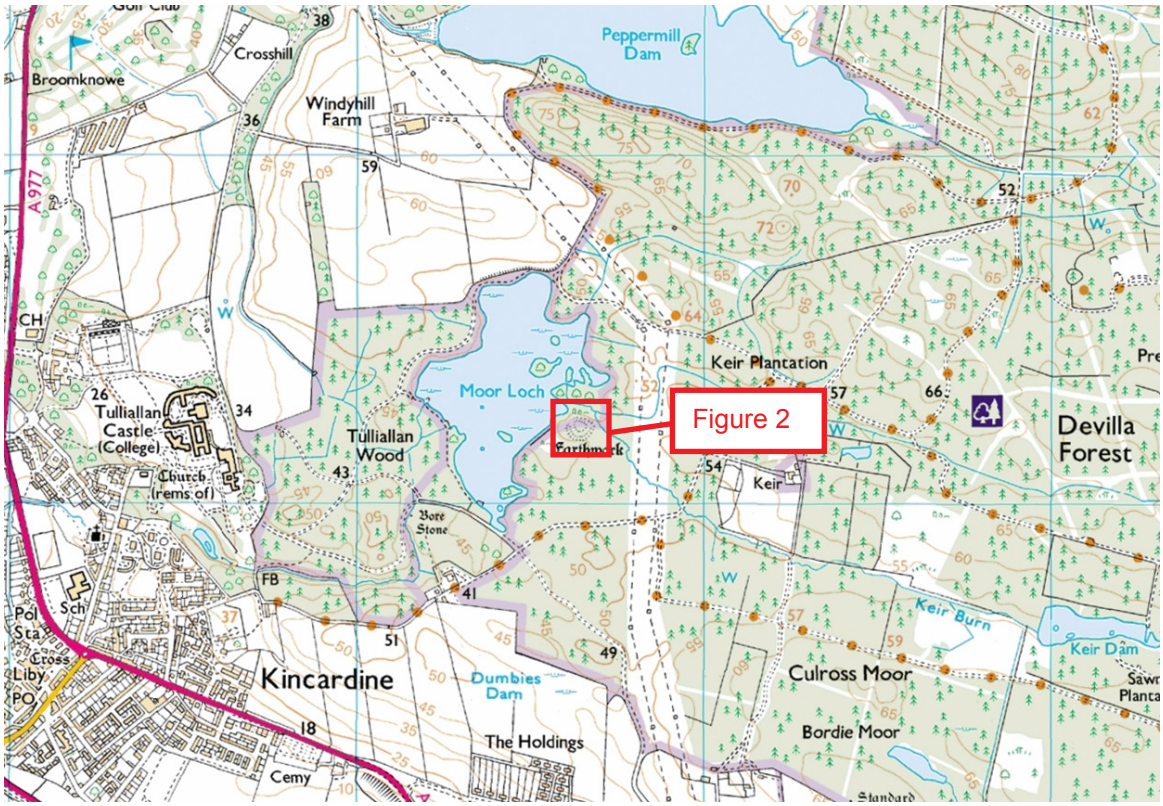
APPENDIX 5: SAMPLES REGISTER

Sample no.	Context	Trench	Comment	Size
1	007	1	Basel fill of Ditch 1 (006)	2 buckets
2	018	1	Basel fill of Ditch 2 (014)	2 buckets
3	023	1	Fill of post-hole 022 (100% sample)	2 buckets
4	030	2	Deposit from escarpment 038 (charcoal rich)	1 buckets
5	035	2	Deposit from escarpment 038 (charcoal rich)	1 bucket
6	046	3	Deposit from escarpment 047 (charcoal rich)	1 bucket
7	053	3	Deposit from escarpment 047 (charcoal rich)	1 bucket
8	055	3	Fill of post-hole 054	1 bucket

APPENDIX 6: Discovery & Excavation in Scotland Entry

LOCAL AUTHORITY:	Fife
PROJECT TITLE/SITE NAME:	Keir Wood Fort, Kincardine, Fife
PROJECT CODE:	WOFO
PARISH:	Culross
NAME OF CONTRIBUTOR:	Magnus Kirby
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Evaluation (hand-dug trial-trenches)
NMRS NO(S):	NS98NW 9
SITE/MONUMENT TYPE(S):	Earthwork
SIGNIFICANT FINDS:	None
NGR	NS 9464 8822
START DATE (this season)	November 2012
END DATE (this season)	November 2012
PREVIOUS WORK (incl. *DES* ref.)	Topographic survey
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A programme of evaluation trial trenching was undertaken at Keir fort. The three trenches excavated gave considerable information on the construction of the fort defences, which consisted of a series of ramparts, ditches, and artificially created escarpments. A single sherd of pottery recovered during the evaluation proved to be medieval in date, but this came from high up within the deposits and is considered to be unsecure in relation to dating the fort. Several soil samples were taken, a number of which contain pieces of charcoal, which may allow the date of the fort to be established.
PROPOSED FUTURE WORK:	Post excavation analysis of soil samples and production of archive/publication report
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Forestry Commission Scotland
ADDRESS OF MAIN CONTRIBUTOR:	Old Engine House, Eskmills Business Park, Musselburgh, EH21 7PQ
EMAIL ADDRESS:	mkirby@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Royal Commission for the Ancient and Historical Monuments of Scotland (RCAHMS) Fife Council Sites and Monuments Record





Key:

Fig. No: 1

Revision: A

Client: Forestry Commission Scotland

Title: Location map

Project: Keir Wood Fort

Scale at A4:

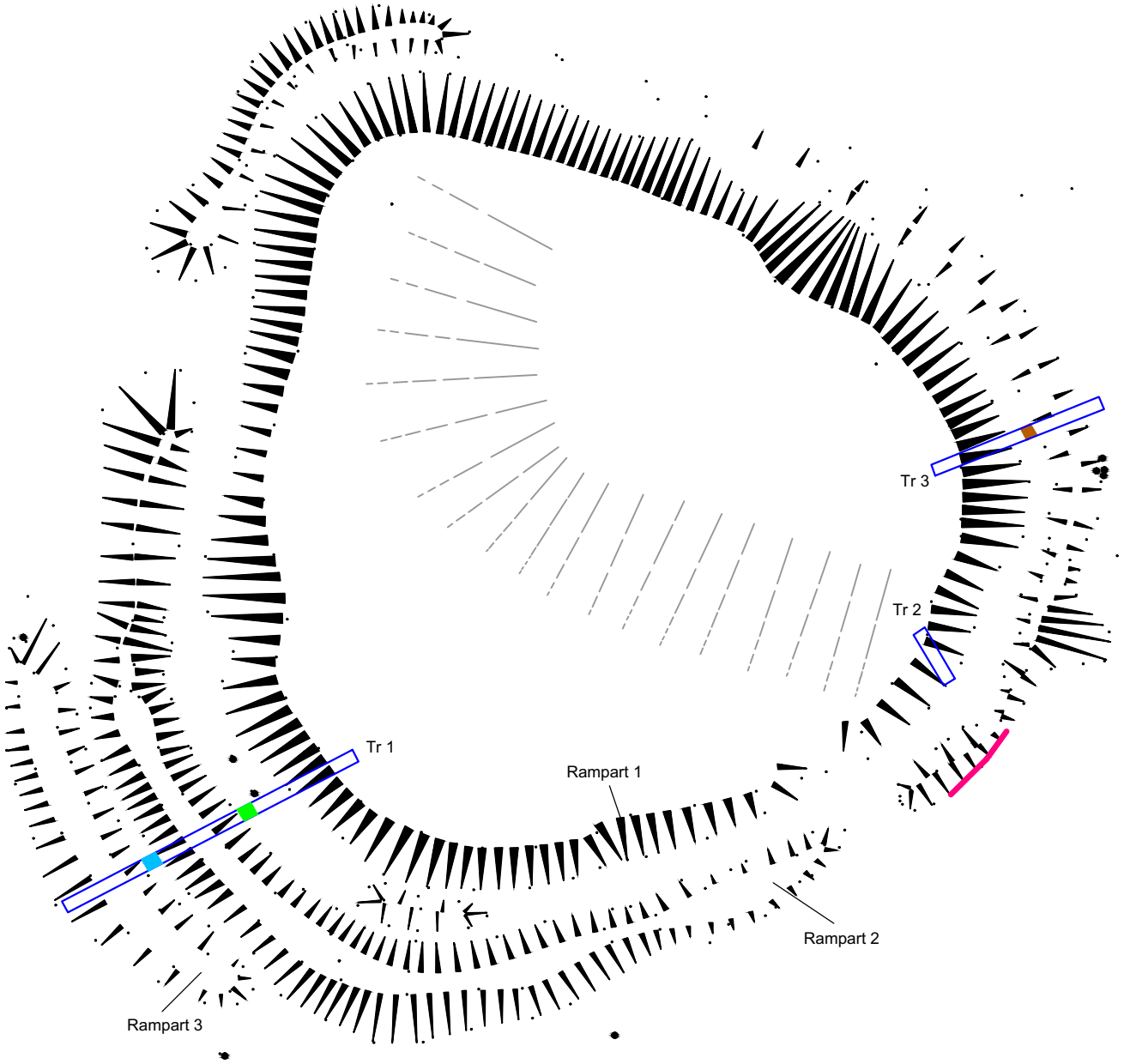
CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by: GC

Checked: LW

Report No: 2159



Key:
- Excavation Trench
- GPS survey of bank (top)
- Location of entrance as surveyed by CFA
- Ditch 1
- Ditch 2
- Wall

Scale at A4: 1:500

Fig No: 2

Revision: 0

Client: Forestry Commission Scotland

Title: Survey and excavation plan. (Hachure plan courtesy of Dr Ben Edwards - 2011)

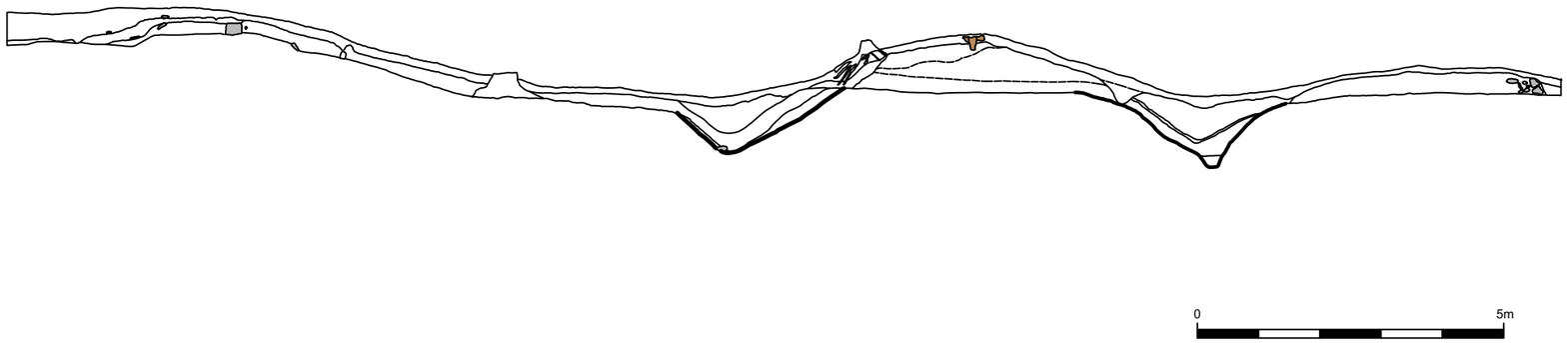
Project: Keir Wood Fort

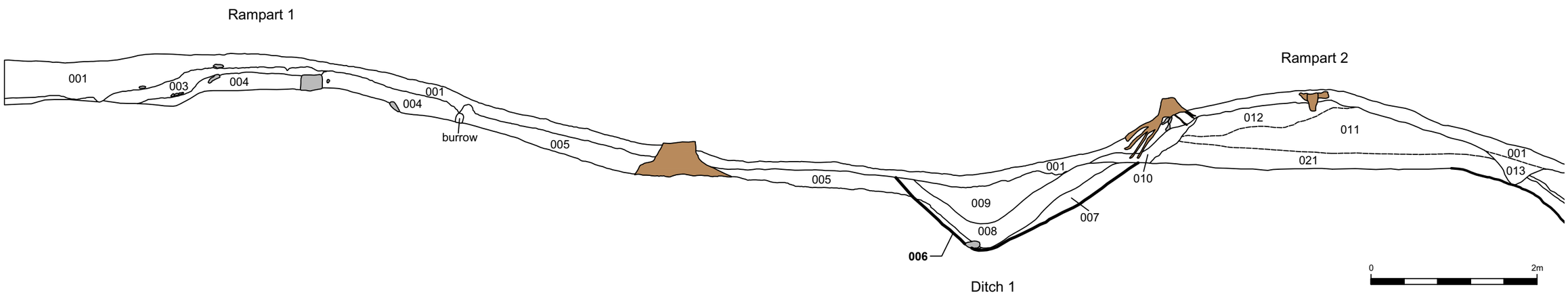
CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by: KH

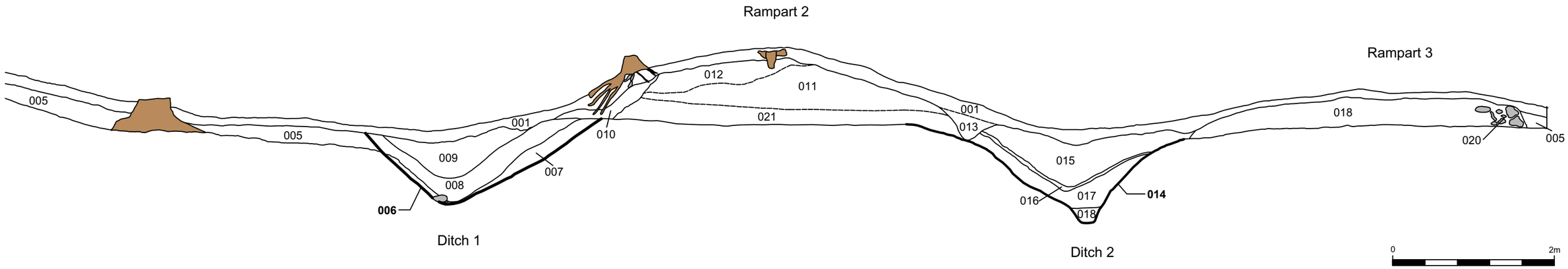
Checked: LW

Report No: 2159





Ditch 1



Ditch 1 Ditch 2

Fig. No:	Revision:	Checked:	Report No:	Drawn by:	Scale at A3:
3	A	LW	2159	GC	1:100 and 1:50

Title: Trench 1, north-west-facing section

Project: Keir Wood Fort

Client: Forestry Commission Scotland

Key:
- stone
- tree

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

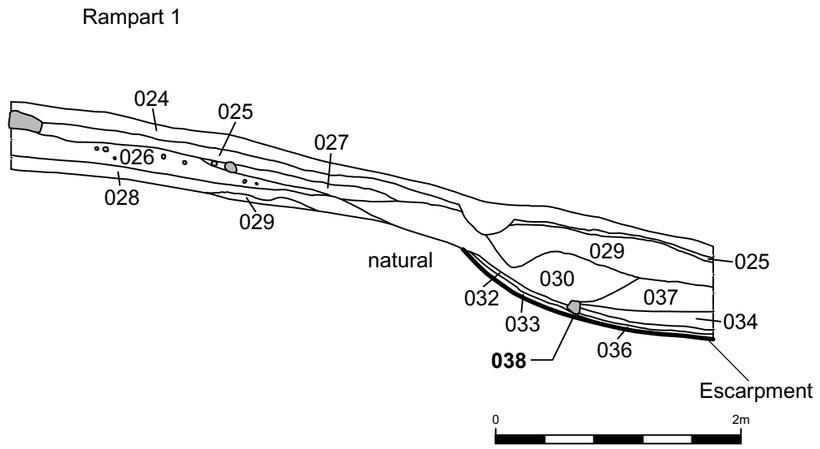


Fig.4: Trench 2 south-west-facing section

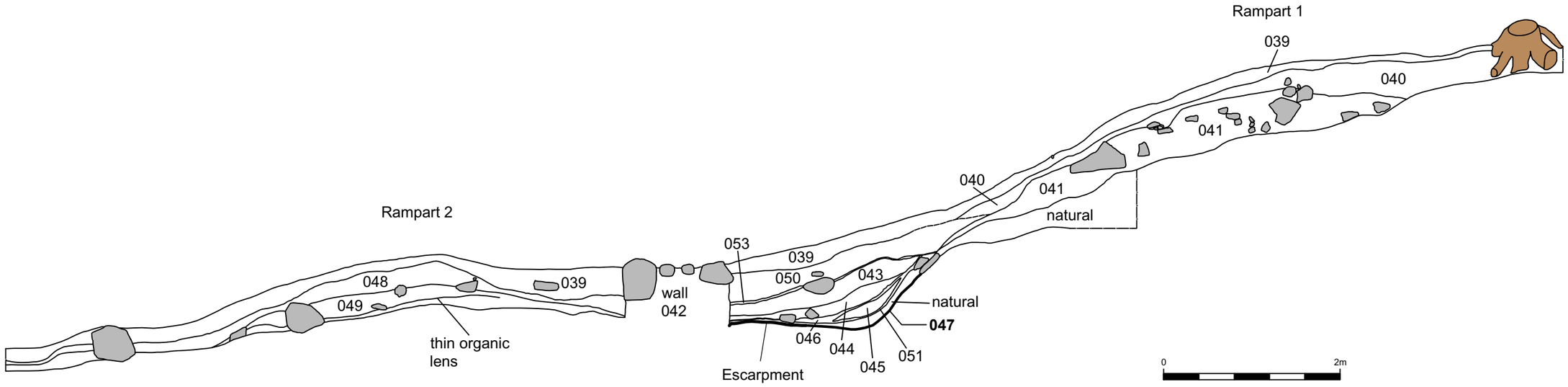


Fig.5: Trench 3 north-west-facing section

Fig. No:	Revision:	Checked:	Report No:	Drawn by:	Scale at A3:
4-5	A	LW	2159	GC	1:50

Title:

Project: Keir Wood Fort

Client: Forestry Commission Scotland

Key:

stone

tree

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. 6 - Trench 1, general shot from NE

Fig. 7 - Trench 1, general shot from SW

Fig. 8 - Trench 1, Rampart 1 (003/004), from NW

Fig. 9 - Trench 1, post-hole 022

Fig. No: 6-9		Revision: A	Project: Keir Wood Fort
Drawn by: SW	Checked: LW	Report No: 2159	Client: Forestry Commision Scotland

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. 10 - Trench 1, oblique shot showing Ditch 1 (006) and Rampart 2 (011/012/021)

Fig. 11 - Trench 1, oblique shot showing Ditch 2 (014) and Rampart 2 (011/012/021)

Fig. 12 - Trench 1, Rampart 3 (019) from NW

Fig. 13 - Trench 1, Rampart 3 (019) showing edging of stones 020

Fig. No: 10-13		Revision: A	Project: Keir Wood Fort
Drawn by: SW	Checked: LW	Report No: 2159	Client: Forestry Commision Scotland

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. 14 - Trench 2, Rampart 1 (026/027) from SW

Fig. 15 - Trench 2, escarpment 038 from SW

Fig. 16 - Trench 3, general shot from SW

Fig. 17 - Trench 3, Rampart 1 from SW

Fig. No: 14-17		Revision: A	Project: Keir Wood Fort
Drawn by: SW	Checked: LW	Report No: 2159	Client: Forestry Commision Scotland

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

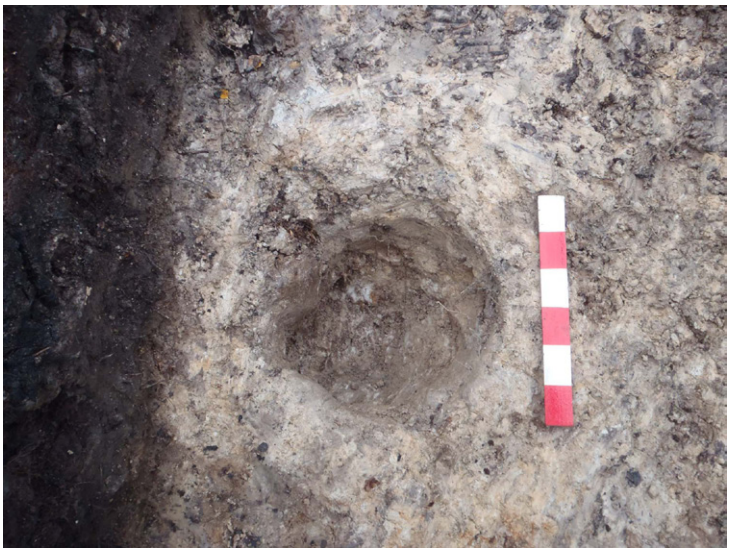


Fig. 18 - Trench 3, post-hole 054

Fig. 19 - Trench 3, escarpment 047

Fig. 20 - Trench 3, wall 042

Fig. 21 - Trench 3, Rampart 2 (049), oblique shot

Fig. No: 18-21		Revision: A	Project: Keir Wood Fort
Drawn by: SW	Checked: LW	Report No: 2159	Client: Forestry Commision Scotland

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. 22 - Windblown Birch

Fig. 23 - Windblown Pine

Fig. No: 22-23		Revision: A	Project: Keir Wood Fort
Drawn by: SW	Checked: LW	Report No: 2159	Client: Forestry Commision Scotland

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk