

Date: October 2007
Client: CEMEX
Project Code: CMQ07

**Cambusmore Quarry, Balvalachlan, Callander:
Report on an archaeological evaluation**

Planning Ref. No. S/96/0267/MIN

Jamie Humble

**ARCHAEOLOGICAL EVALUATION
PROJECT SUMMARY SHEET (CMQ07)**

BALVALACHLAN, CALLANDER

<i>Client</i>	CEMEX
<i>National Grid Reference</i>	NN 6365 0650
<i>Project Manager</i>	Stephen Carter
<i>Text</i>	Jamie Humble
<i>Illustrations</i>	Anna Faris-Pagowska
<i>Fieldwork</i>	Jamie Humble Clionadh McGarry
<i>Schedule</i>	
Fieldwork	8 th – 9 th October 2007
Report	November 2007

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Summary

Headland Archaeology Ltd was commissioned by CEMEX to undertake an archaeological evaluation at Cambusmore Quarry, Balvalachlan, Callander in advance of a scheme of tree planting to create a screen around the margins of Phases 19 and 20. This evaluation was concerned with an area of land that had been excluded from tree planting due to its proximity to the Lots of Callander enclosure (a cropmark of a prehistoric pallisaded enclosure).

The work comprised trial trenching of 10% of the area. The vestiges of previous agricultural activities were uncovered in the form of a relict field drainage system. The evaluation failed to locate any remains associated with the Lots of Callander enclosure cropmark or any other features of archaeological interest.

1. Introduction

Planning Permission (Appl No. S/96/0267/MIN) was granted in 1997 to Russell Quarry Products (now CEMEX) to extract sand and gravel at Cambusmore Quarry, near Callander. CEMEX was undertaking a scheme of advance tree planting to create a screen around the margins of Phases 19 and 20 of the quarry, as required under the terms of its planning permission. These phases are likely to be quarried in roughly ten years time. This part of the quarry at Balvalachlan was affected by the terms of three archaeological conditions attached to the consent. In summary:

- Condition 10 required the fencing off of an area of land close to the Lots of Callander enclosure (a cropmark of a prehistoric pallisaded enclosure);
- Condition 11 required the developer to retain an archaeologist to observe works in Phase 20 of the quarry;
- Condition 12 required the developer to secure the implementation of an approved programme of archaeological works.

No development, including planting and bunding, could take place until Conditions 10 and 12 had been satisfied.

A site meeting was held on Monday 23 April 2007, attended by Alan Doak (CEMEX), Lorna Main (Stirling Council Archaeologist, on behalf of the Planning Authority, Loch Lomond and the Trossachs National Park) and Stephen Carter (Headland Archaeology), to discuss how Conditions 10, 11 and 12 should be addressed by CEMEX.

The following course of action was agreed by CEMEX and the Stirling Council Archaeologist:

It was decided that the area of land to be fenced adjacent to Lots of Callander (referred to in Condition 10) would be the subject of a 10% intrusive archaeological evaluation. In the event that archaeological features were found, the Planning Authority (as advised by Stirling Council's Archaeologist) would determine whether these were of sufficient importance to merit preservation *in situ* or whether it would be appropriate to permit excavation.

This report relates to the evaluation of this area of land adjacent to the Lots of Callander enclosure.

2. Site Location and description

Balvalachlan lies 1.5km to the south of Callander. The site to be investigated was a semi-circular area close to the Lots of Callander pallisaded enclosure that had previously been identified as a cropmark from aerial photographs. It measured 80 m in diameter with an area of c.2500 m². This area was identified as a target for archaeological investigations as it may have contained sub-surface features related to the recorded cropmark

The land was being used as pasture for sheep at the time of the investigations but had previously been regularly ploughed (landowner, pers. comm.).

3. Methodology

Trial trenches were to be excavated with a total area of 250m² (160m linear) equating to a 10% sample of the area. The first trench was excavated parallel and close to the existing field boundary (i.e. closest to the cropmark enclosure), this was intended to be 80 m long but had to be reduced to 60m in order to avoid power lines running across the site. The remaining 90m of trench was assigned to three radial trenches (30m in length), sampling the remainder of the semi-circular area while avoiding and maintaining a safe distance from the power lines (*figure 1*). This meant that the total area of trenches excavated was 240m².

Turf and topsoil were stripped with a mechanical excavator, equipped with a toothless bucket under direct archaeological supervision. Excavation ended at the subsoil surface. Stripped surfaces were hand cleaned as necessary and examined for archaeological features.

All archaeological features and deposits were recorded using standard archaeological methods and pro-forma record sheets. Archaeological contexts were recorded in plan at a scale of 1:20 and in section at 1:10. All drawings were tied into national grid. All sections were photographed using colour print and slide film.

Overall site plans were created using a Total Station linked to a *Penmap* digital mapping system. All surveying was linked to the National Grid.

All excavations were backfilled after completion of recording and the site left in a safe condition.

4. Results

The following summarises the results of the evaluation. Trench records can be found in the appendix.

Four trenches were located over the area to be investigated, placed to give even coverage over the site while avoiding overhead power cables at the western end of the site. The topsoil was a dark brown silty sand approximately 0.30 – 0.40m in depth. This overlay a poorly sorted gravel subsoil throughout most of the trenches with a band of sandier material running across the middle of trench 2.

Throughout the area investigated there were several discrete patches of black iron pan that had cemented the gravel of the subsoil to form a thick layer / lens. There did not appear to be an obvious reason why the iron pan had formed in this pattern.

Two small parallel linear features **F004 and F005** (*figure 2*) were discovered running from NE-SW across the width of Trench 1. These were the only man-made features encountered during the evaluation.

Excavation of a section through **F004** showed this feature to be filled with larger stones than the surrounding gravel with a siltier matrix. The date of which could be placed in the post medieval period on the basis of a small sherd of 17th century pottery found in the fill (Julie Franklin, pers. comm.)

Excavation of a section across **F005** was inconclusive with this feature proving to be a very shallow fill of slightly siltier material in a slight depression in the surrounding gravel.

5. Discussion

The excavations at Lots of Callander revealed what is interpreted as a small field drain **F004** of post medieval date. It seems probable that a parallel feature **F005** is of similar age to the drain due to their alignment and similarity of fills. The features discovered in Trench 1 are vestiges of agricultural activity in the recent past. No features of archaeological significance were encountered.

There is no evidence that features of prehistoric date associated with the lots of Callander enclosure extend into the area investigated. It is concluded that tree planting of the area will not lead to any significant adverse impact on archaeological features.

APPENDIX A

Context Register

Context no.	Area	Description
001	All	Topsoil. Dark brown to black loamy sand and poorly sorted gravel. Throughout all trenches.
002	Trench 1	Black iron pan cementing together the gravels of the glacial till
003	All	Glacial till. Poorly sorted sand and gravel. Throughout all trenches.
004	Trench 1	Dark brown silty sand and gravel, composed of larger stones than surrounding glacial till with a siltier matrix. 0.50m wide with a max depth of 0.12m. Fill of F008. Contained a small sherd of 17 th century pottery (not retained).
005	Trench 1	Dark brown silty sand and poorly sorted gravel. In a linear depression running NE-SW. 0.40m wide with a max depth of 0.04m.
006	Trench 3	Black iron pan cementing together the gravels of the glacial till
007	Trench 4	Black iron pan cementing together the gravels of the glacial till
008	Trench 1	Linear cut running NE-SW, steep sided with a concave base. Filled by F004. Cut of small rumbling field drain or gully. 0.50m wide with a max depth of 0.12m.

Drawing Register

Drawing No.	Scale	Description
1	1:20	F004 and F005 pre-ex plan
2	1:20	F007 pre-ex plan
3	1:20	F002 pre-ex plan
4	1:20	F006 pre-ex plan
5	1:10	F005 NE facing section
6	1:10	F004 NE facing section

Photo Register (Colour Slide and Print)

Shot no.	Direction	Description
1		ID shot
2	NW	General Pre-ex view
3	N	General Pre-ex view
4	NE	General Pre-ex view
5	N	Iron pan F002 in trench 1
6	E	Iron pan F002 in trench 1
7	E	Linear feature F004 pre-ex
8	E	Linear Feature F005 pre-ex with F004 in background.
9	E	Trench 1 post-ex
10	SSW	Trench 2 post-ex
11	SE	Trench 4 post-ex
12	SE	Iron pan F007 in trench 4
13	SSE	Trench 3 post-ex
14	SSE	Iron pan F006 in trench 3
15	SW	NE facing section through F005
16	SW	NE facing section through F004/F008
17	W	Working shot

Finds Register

Find no.	Context	Description
1	004	Small sherd of 17 th century pottery (not retained)

Trench Register

Trench	Description	Dimensions (All trenches 1.60m wide)
1	Located parallel and close to the existing field boundary (This trench was closest to the cropmark feature). Topsoil consisted of dark brown silty sand and gravel overlying poorly sorted gravel subsoil with patches of iron panning. The topsoil had a maximum depth of 0.30m. Two parallel linear features F004 and F005 running NE-SW were located in this trench.	Length: 60m Max depth: 0.30m Oriented: E-W
2	Located at the western edge of the site, excavated as close to the power lines as was safe. Topsoil consisted of dark brown silty sand and gravel overlying poorly sorted gravel subsoil at the NE and SW ends of the trench with a band of pale brown sand with lots of animal burrow/root disturbance in the centre of the trench. The topsoil had a maximum depth of 0.40m	Length: 30m Max depth: 0.50m Oriented: NE-SW
3	Located in the centre of the site running perpendicularly from the middle of trench 1 to the south. Topsoil consisted of dark brown silty sand and gravel overlying poorly sorted gravel subsoil with patches of iron panning. The topsoil had a maximum depth of 0.30m	Length: 30m Max depth: 0.35m Oriented: NNW-SSE
4	Located at the eastern edge of the site. Topsoil consisted of dark brown silty sand and gravel overlying poorly sorted gravel subsoil with patches of iron panning. The topsoil had a maximum depth of 0.35m	Length: 30m Max depth: 0.30m Oriented: NW-SE

APPENDIX B

Summary report for Discovery and Excavation in Scotland

LOCAL AUTHORITY:	Stirling Council
PROJECT TITLE/SITE NAME:	<i>Cambusmore Quarry, Balvalachlan/Lots of Callander, Callander</i>
PROJECT CODE:	CMQ07
PARISH:	Callander
NAME OF CONTRIBUTOR(S):	Jamie Humble
NAME OF ORGANISATION:	Headland Archaeology Ltd
TYPE(S) OF PROJECT:	Archaeological Evaluation
NMRS NO(S):	
SITE/MONUMENT TYPE(S):	
SIGNIFICANT FINDS:	
NGR (2 letters, 6 figures)	NN 6365 0650
START DATE (this season)	8 th October 2007
END DATE (this season)	9 th October 2007
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p><i>A programme of archaeological evaluation was undertaken at Cambusmore Quarry, Balvalachlan, Callander in advance of a scheme of tree planting to create a screen around the margins of Phases 19 and 20. This evaluation was concerned with an area of land that had been excluded from tree planting due to its proximity to the Lots of Callander enclosure NN60NW23 (a cropmark of a prehistoric pallisaded enclosure).</i></p> <p><i>The work comprised trial trenching of 10% of the area. The vestiges of previous agricultural activities were uncovered in the form of a relict drainage system. The evaluation failed to locate any remains associated with the Lots of Callander enclosure or any other features of archaeological interest.</i></p>
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	CEMEX
CAPTION FOR ILLUSTRATION	
ADDRESS OF MAIN CONTRIBUTOR:	13 Jane Street, Edinburgh, EH6 5HE.
EMAIL ADDRESS:	jamie@headlandarchaeology.com
ARCHIVE LOCATION (intended/deposited)	<p>Archive to be deposited in NMRS.</p> <p>Report to be lodged with Stirling Council SMR and NMRS.</p>

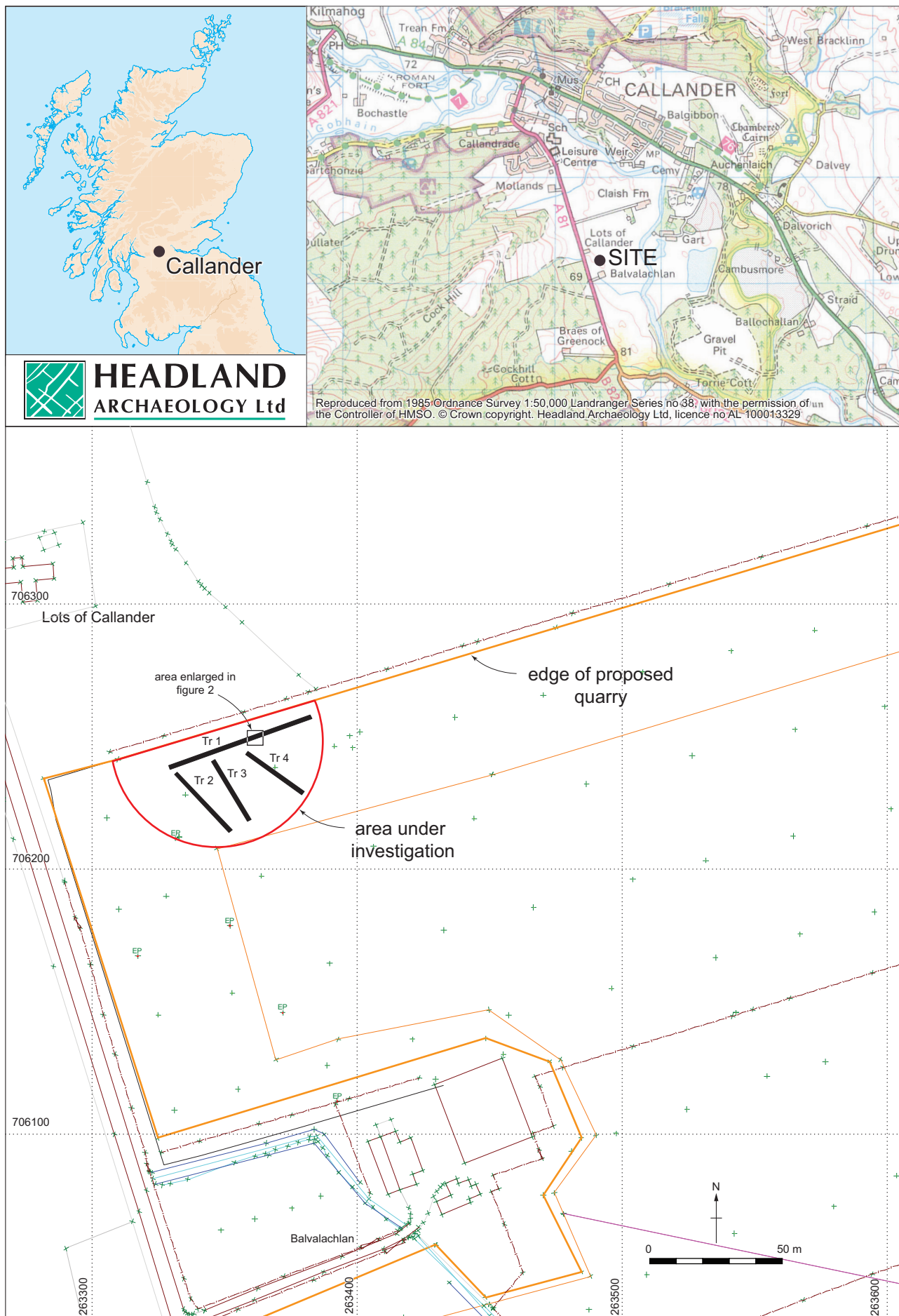


Figure 1: Cambusmore Quarry, Balvalachlan. Location and trenches.

Trench 1

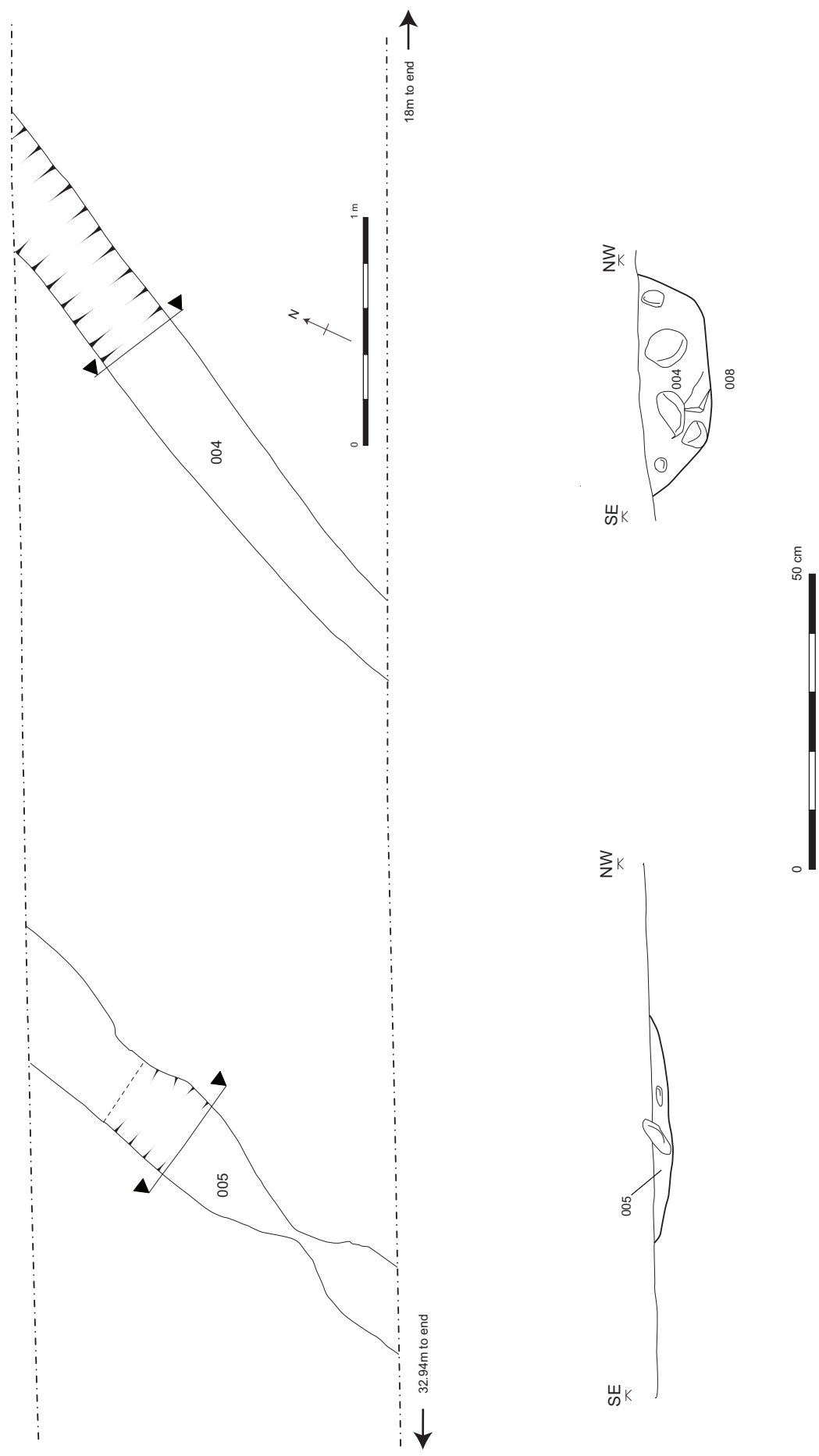


Figure 2: Plan and sections of features in trench 1