

**KINTORE EAST
TOFTHILLS
ABERDEENSHIRE**



Archaeological Evaluation
Carried out February 2016
by
Murray Archaeological Services Ltd



Report No: MAS 2016-04
by
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KINTORE EAST TOFTHILLS ABERDEENSHIRE

-Archaeological Evaluation -

H K Murray and J C Murray

1. Background
 - 1.1 An application for planning permission (APP/2013/3830) was approved for a residential development comprising 600 dwelling houses, neighbourhood centre, landscaping, open space and associated infrastructure on a green field site at Toft hills and Brae Head Farms, on land to the east of Kintore, Aberdeenshire. An archaeological condition was applied to this application in the context of Scottish Planning Policy (PAN 2/2011, SPP, SHEP).

The condition required that there should be a programme of archaeological works in accordance with a written scheme of investigation approved by the Archaeology Service, Aberdeenshire Council. This stipulated that no development should take place before the implementation of a 7% archaeological evaluation.
 - 1.2 The archaeological condition was applied in the context of planning legislation (PAN 2/2011, SPP, SHEP), which states that it is necessary for developers to arrange for archaeological work to take place prior to development, in appropriate circumstances.
 - 1.3 Murray Archaeological Services Ltd was commissioned by the Kintore East Consortium to undertake the work.

1.4 The evaluation was undertaken between 1st February and 1st March 2016.

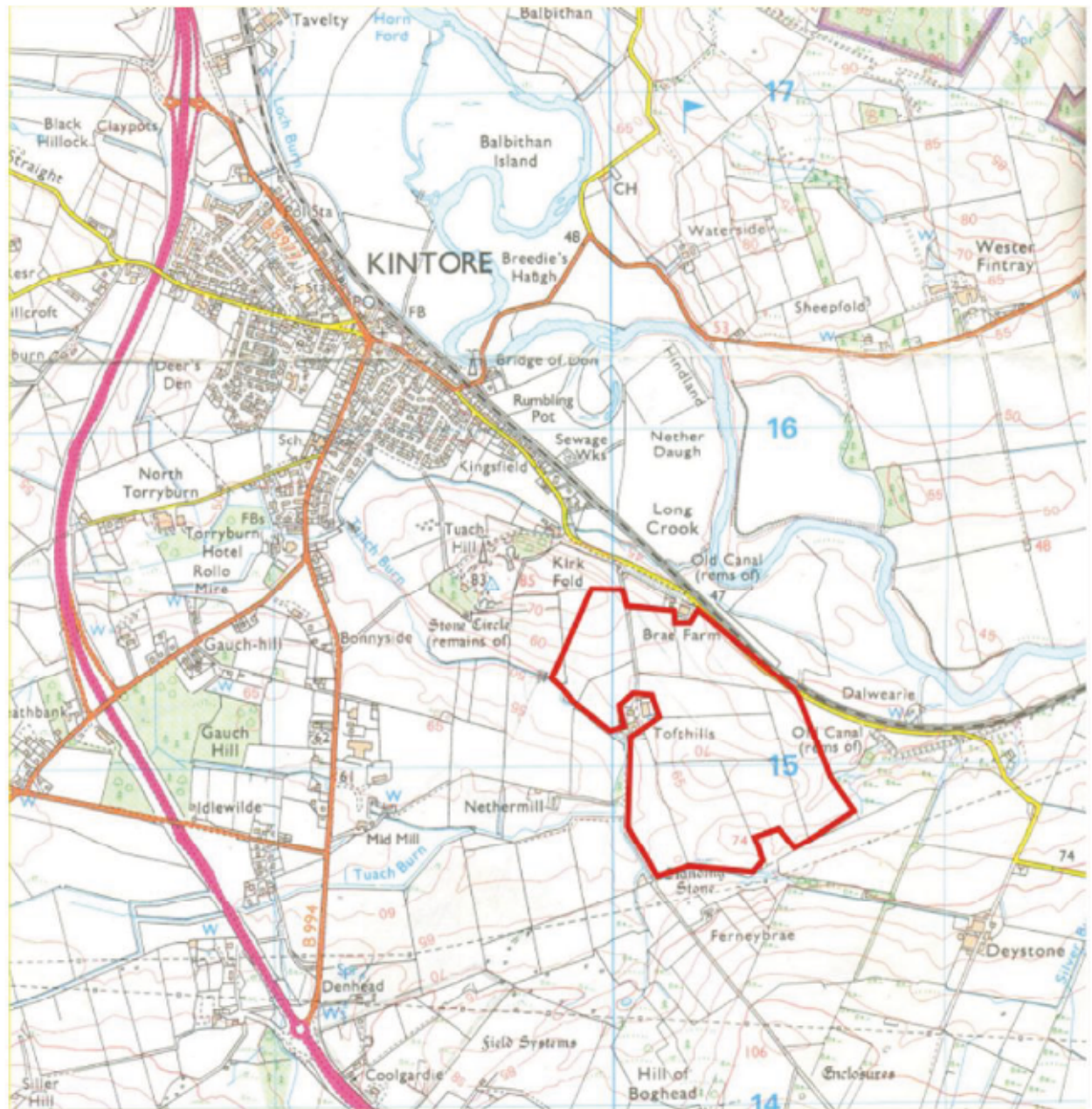
2. The Site

2.1 The evaluation area lay to the SE of Kintore between the Tuach Burn and the river Don on a series of ridges at 70-74m OD.

The total area was 45.5 hectares.

Parish: Kintore

NGR (central) NJ 80308 15119



Illus 1 Location of site. (development outline in red). © Crown Copyright. All rights reserved
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3 Methodology

- 3.1 The cultivated topsoil was removed by a full slew excavator with a 2.1m wide toothless ditching bucket. Any possible features were cleaned and excavated by hand.
- 3.2 All mapping was done with a Magellan Mobile Mapper 120 GPS and Glonass.

4. Desktop survey

4.1 Map evidence

Roy's Military map 1747-55

Roy shows the area as cultivated ground surrounding the settlements of the Braye (sic) and Tofthill.



Illus 2 Roy's Military Map 1747-55. www.nls.ac.uk

1st Ordnance Survey Map. 1865 (published 1869)

Aberdeen sheets lxxv.1 and lxxv.5

The site is shown divided into a number of relatively small enclosed fields. No significant features are depicted.



Illus 3 OS Maps of 1865 (pub 1869) www.nls.ac.uk (Approximate site outline in red).

Ordnance survey 1899 (published 1900)

Aberdeenshire sheets 065.01 and 065.05

By 1899 the layout of the fields has been simplified but there were no other significant changes.

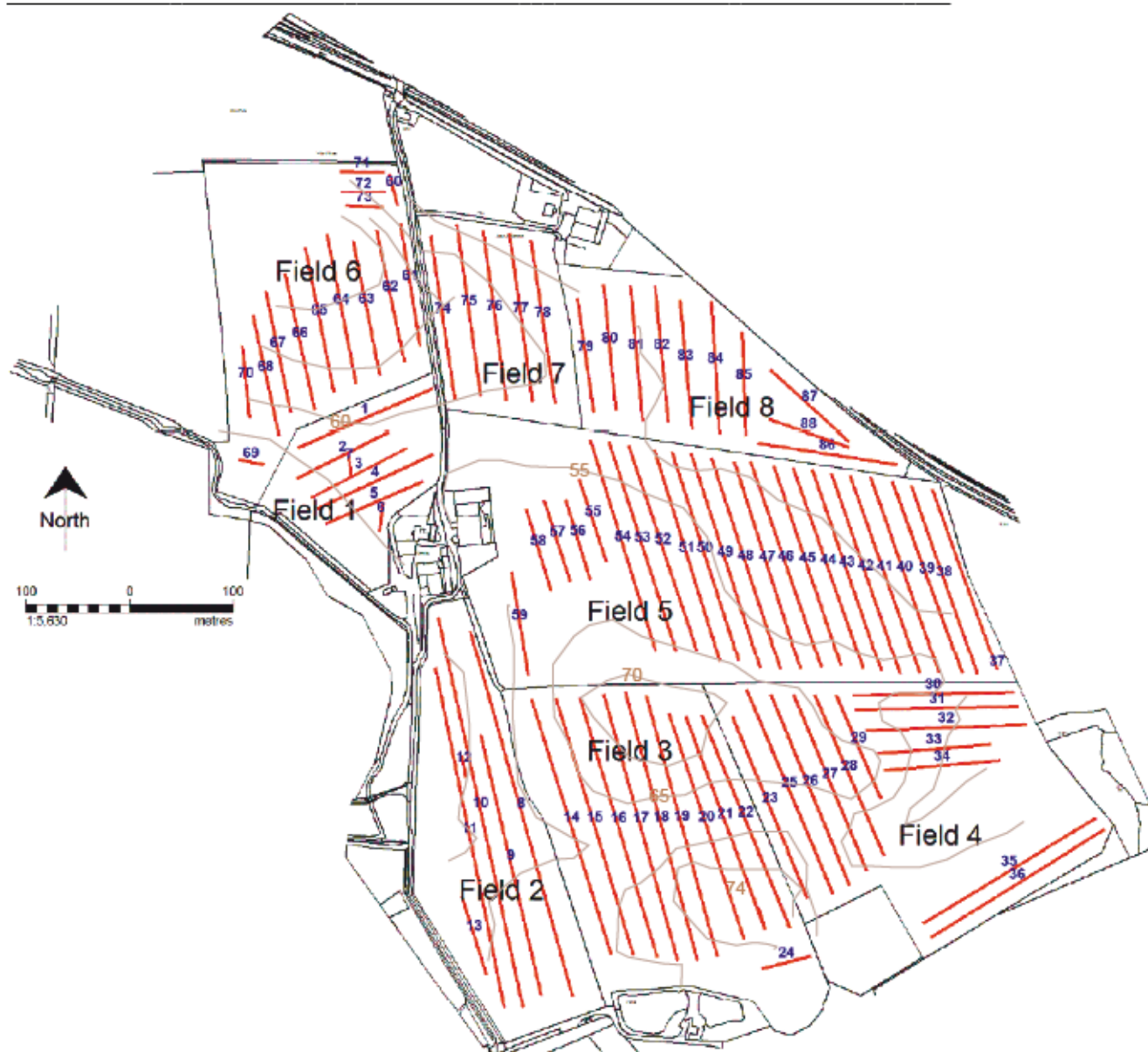


Illus 4 OS map of 1899 (pub 1900) www.nls.ac.uk

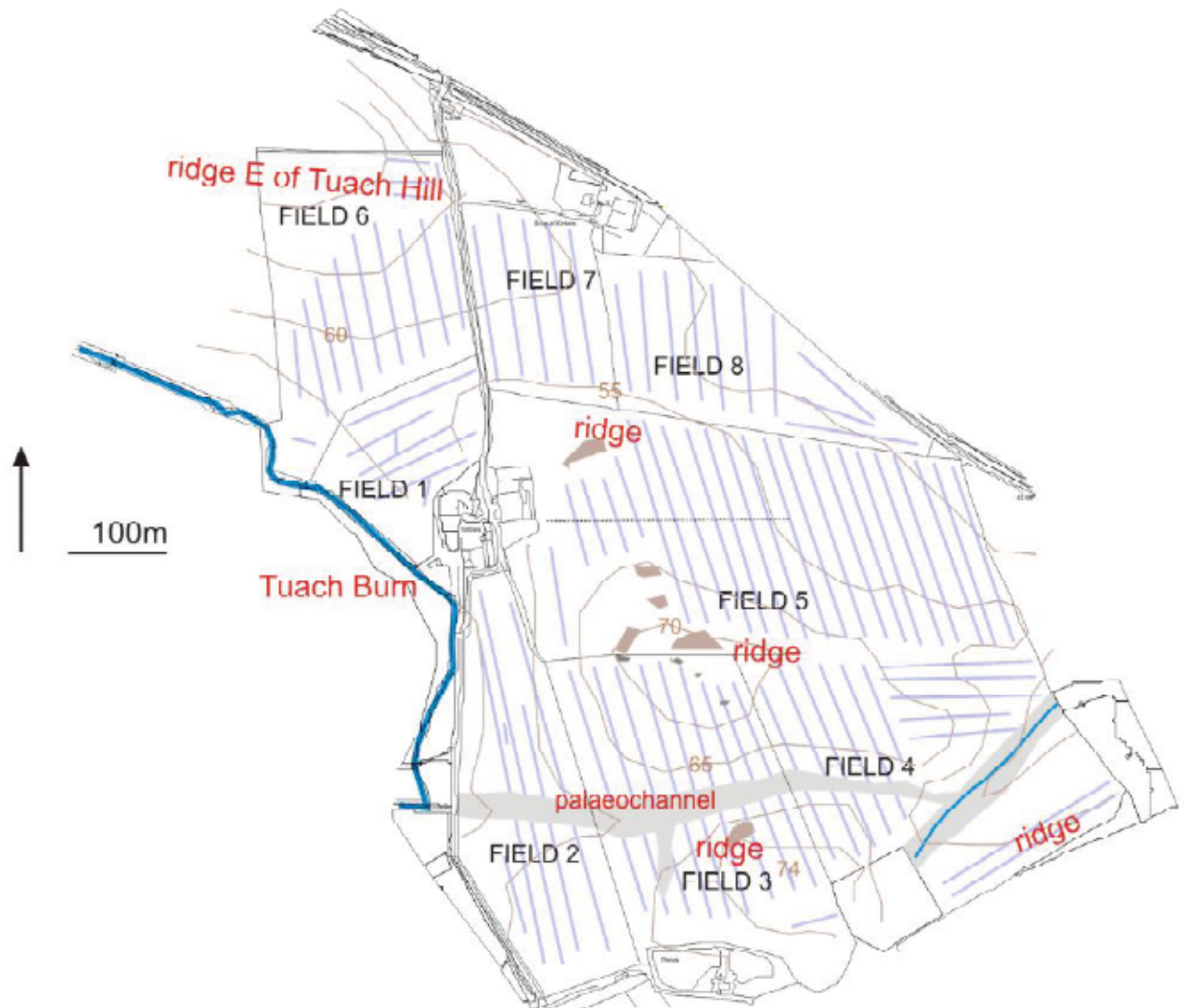
4 Results of the Evaluation

Eighty-eight evaluation trenches were excavated in total (Illus 5). [Note that the field numbers are as excavated; they are not the same as in the written scheme of investigation].

Some areas were not trenched where there was wet ground near the burn in Fields 1 and 6, or the small stream in field 4. Areas of rock outcrop were avoided in Fields 3 and 5 and steep slopes beside the stream in Field 4.



Illus 5 Field layout and trench numbers. OS map reproduced Crown Copyright. License 100041040



Illus 6 Simplified plan of topography

Field 1

Field 1 slopes down to the Tuach burn with a pronounced, gently sloping terrace running roughly N/S parallel to the burn (Illus 6, 7). The edge of the terrace is some 40m from the burn, with this lower ground being silty and water logged. The field has views to the W towards the Midmill long cairn. A series of ephemeral features in Trenches 2, 3 and 7 (Illus 9), one associated with a fragment of prehistoric pottery (undiagnostic), and a surface find of burnt flint, all lay along the terrace.



Illus 7 View of Field 1, looking W across Tuach Burn to Midmill long cairn (red arrow)

Trench 1

GPS NE end: 380060,815298

SW end: 379930,815241

Orientation: NE/SW

Length: 142m Width: 2.1m

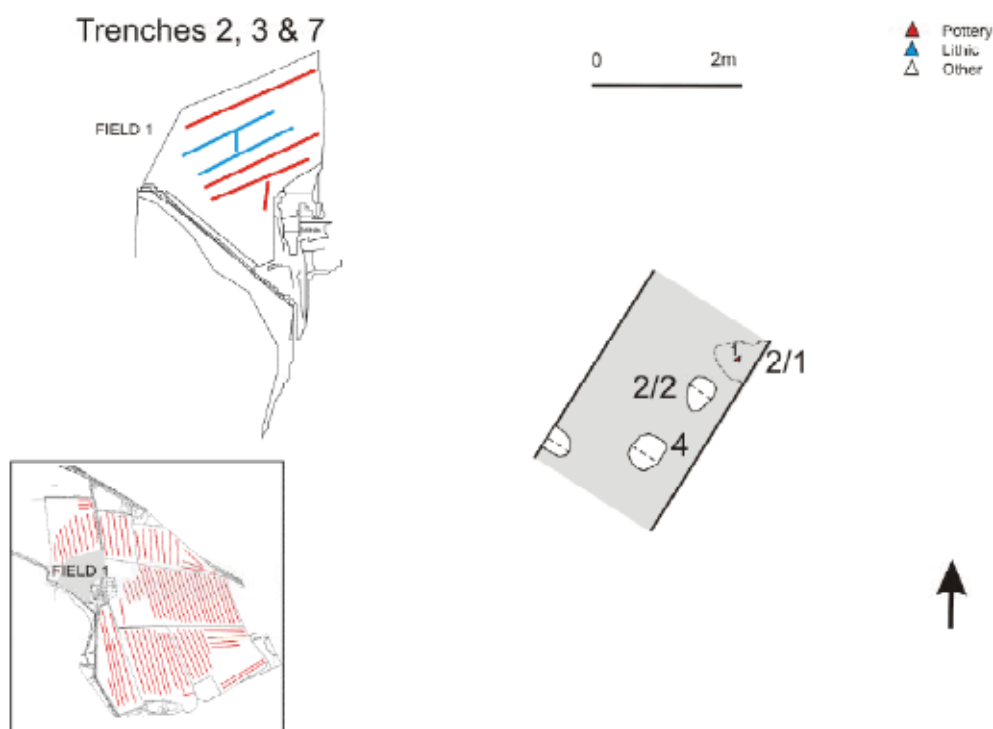
Depth above natural: 300-600mm

Stratigraphy: NE: 300-600mm topsoil lay over large glacial boulders (<1m) with sand between and below. This was on the crest of the slope and extended from NE end to 380003, 815277, where there was stoney sand below 400mm of topsoil. This merged to clean sand from 379989, 815271) below topsoil which deepened down the slope from 300-500mm.

Features None.



Illus 8 Trench 1, looking W



Illus 9 Field 1 Plan

Trench 2

GPS NE end: 380018, 815257

SW end: 379929, 815212

Orientation: NE/SW

Length: 100m Width: 2.1m

Depth above natural: 300-600mm

Stratigraphy: The NE end was at the S end of the boulder ridge noted in Trench 1 with c350mm topsoil over sand and boulders (<1m). From 380005, 815251 there was a gently sloping terrace with 300-600mm topsoil over sand without boulders. The ground dipped again down towards the burn from 379945, 815220 to the end of trench. This last 20m of the trench was fine greyish silt with water ingress.

Features

No	Easting	Northing	Feature	Associated finds	Comment
1	379978	815237	Burnt patch on sand of upper terrace sealed by c400mm topsoil. Scatter of rare wood charcoal over c 2m extent with smaller patch c500mm across of pink heat-coloured sand. No artefacts.		Could be modern but position in line with contexts 2-4 in Trench 3 is suggestive

Trench 3

GPS NE end: 380036, 815241

SW end: 379943, 815193

Orientation: NE/SW

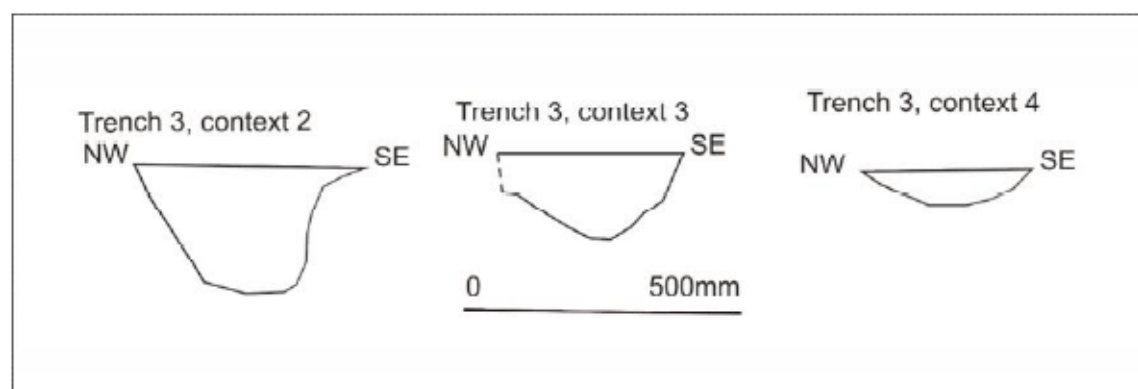
Length: 105m Width: 2.1m

Depth above natural: 400-800mm

Stratigraphy: At the NE end of the trench there were some stones and 1 large boulder but this seemed to decrease to the S. Most of the trench was gently sloping terrace with c. 400mm of topsoil over sand. At the S end the natural deepened to 800mm towards burn with grey silt and water ingress (from 379956, 815200)

Features

No	Easting	Northing	Feature	Associated finds	Comment
2/1	379952	815212	Shallow spread dark sandy silt. Max depth: 40mm.	SF1	Spread from 2/2
2/2	379981	815213	Irregular hole 370 x 400mm. Depth: 220mm. Fill fine dark brown sandy silt with rare charcoal. 1 frag burnt bone.		Appeared to be cut feature
3	379979	815212	Small irregular hole. 300 x 310mm. Depth: 140mm. Fill grey/brown silt, occasional charcoal. Animal burrow into N side		
4	379980	815212	Irregular hollow, 300 x 500mm. Depth: 50mm. Fill grey silt, no charcoal.		



Illus 10 Sections of Trench 3 features



Illus 11 Trench 3, feature 2/2

Trench 4

GPS NE end: 380062, 815235

SW end: 379949, 815182

Orientation: NE/SW

Length: 125m Width: 2.1m

Depth above natural: 300-600mm

Stratigraphy: NE stoney end to 3800025, 815219 but no big boulders. S of this there was 300-450mm topsoil over clean sand sloping to S. Deepened at S end to 400-600mm of topsoil over grey silt. Water ingress.

Features None

Trench 5

GPS NE end: 380051, 815209

SW end: 379957, 815168

Orientation: NE/SW

Length: 103m Width: 2.1m

Depth above natural: 300-450mm

Stratigraphy: Much less stoney at N. Most of trench had 300-450mm topsoil over clean gritty sand. Merged to grey silt from 379982, 815179. In places there was up to 700mm of silt over clean sand.

Features None

Trench 6

GPS N end: 380013, 815189 S end: 380009, 815160

Orientation: N/S Length: 28m Width: 2.1m

Depth above natural: 300-450mm

Stratigraphy: Topsoil over gritty sand.

Features None. A modern disturbance about halfway along the trench was not excavated as the position indicated the possibility that it was a soakaway from the Tofthills farmhouse.

Trench 7

GPS N end: 379979, 815237 S end: 379981, 815214

Orientation: N/S Length: 22m Width: 2.1m

Depth above natural: 400-600mm

Stratigraphy: Trench 7 was placed between Trench 2 context 1 and Trench 3 contexts 2-4, to establish if there was any greater extent or survival of prehistoric activity. Trench 2 context 1 did not extend further S into Trench 7. A small hollow (context 5) was similar to the features in Trench 3 and equally difficult to interpret. The whole area was much riddled by small mammal holes.

Features

No	Easting	Northing	Feature	Associated finds	Comment
5	379981	815217	Irregular hollow c. 350mm diameter and maximum 80mm deep.		
5/1			The upper fill was black with charcoal dust, but no fragments. 20mm thick		
5/2			Lower fill 60mm. grey silty sand		Animal burrow in from side



Illus 12 Trench 7, feature 5

Field 2

Field 2 has a gentle slope W towards the Tuach Burn, and also slopes up towards the S, with two dominant ridges running roughly E/W and separated by a palaeochannel (Illus 6); the ridges and palaeochannel extend E through Fields 3 and 4.



Illus 13 Field 2, looking N from S ridge across palaeochannel to N ridge

Trench 8

GPS N end: 380097, 815064 S end: 380196, 814711

Orientation: N/S Length: 366m Width: 2.1m

Depth above natural: Generally 300–400mm but up to 700mm topsoil in the palaeochannel.

Stratigraphy: N end 300–400mm topsoil over sand, then deepened to dip c15m wide centred at 380113, 815010, before rising to N ridge at 380125, 814969 with 300mm topsoil over gravel. Surface then fairly level with 300mm over sand and gravel with modern plough marks. At 380145, 814901 the ground began to dip into palaeochannel (centre at 380156, 814862) with 700mm topsoil and silty topsoil over leached silty sand. Rose to sand and gravel ridge at 380162, 814840; S of this the natural was much stonier, with another dip with 600mm topsoil, then levelling to very shallow topsoil less than 200mm over stony natural..

Features None. A modern water pipe to a field trough and a modern field drain were not logged.



Illus 14 Trench 8, looking N across palaeochannel

Trench 9

GPS N end: 380107, 814963 S end: 380166, 814712

Orientation: N/S Length: 257m Width: 2.1m

Depth above natural: Generally 300- 400mm, with up to 700mm in palaeochannel

Stratigraphy: The N end of the trench was at the S end of the N ridge. From this point there was 300-400mm topsoil over sand and gravel running fairly level until it began to dip into the palaeochannel from 380122, 814902. At the centre of the palaeochannel (380133, 814902), there was up to 600-700mm topsoil and silt over leached silty sand. The natural then rose steeply up to the S ridge (380141, 814825) where there was only 250-300mm topsoil over sand and gravel with modern plough marks. As in trench 8, there was a hollow c. 4m wide S of this ridge (380148, 814786) with topsoil and grey silt to 600mm. Then the ground rose to the S ridge with very stoney natural and only c. 200mm topsoil.

Features None. A modern water pipe to a field trough and a modern field drain (as in Trench 8) were not logged.

Trench10

GPS N end: 380066, 815077 S end: 380148, 814699

Orientation: N/S Length: 387m Width: 2.1m

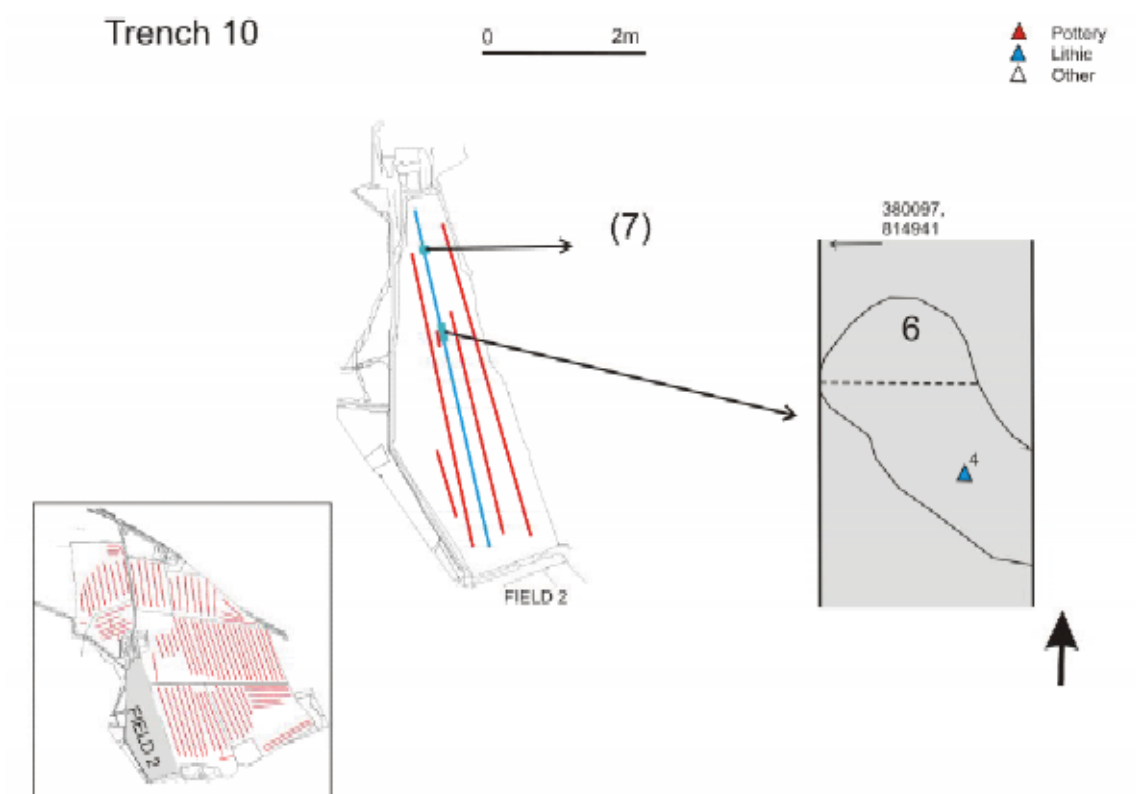
Depth above natural: Generally 300-400mm, with dips to 600 and 850mm

Stratigraphy: N end of trench c 400mm topsoil over sand. Between 14 and 27m from N end there was a dip with clay silt < 800mm (centre 380071, 815057); this may have been natural or could possibly have been associated with a run-off from the mill dam shown on the 1st OS map (Illus 3). The ground levelled out from 380073, 815050 to 380081, 815006 with 300-400mm topsoil over sand with modern plough marks. This included the area around context 7 (Illus 15). The natural then dipped with 850mm topsoil and silt at centre (380083, 815000). From 380085, 814991 the ground levelled out on the N ridge with sand and stoney natural below 300-400mm topsoil generally, but deepening to 500mm above context 6, allowing some survival of prehistoric features (Illus 8). At 380105, 814895, the ground gradually sloped down into the palaeochannel which extended between 380111, 814869 and 380115, 814851 with a maximum depth of 600mm topsoil over grey leached silt. It then rose steeply to the top of the S stoney ridge and ran fairly level to the S end of trench with < 300mm topsoil.

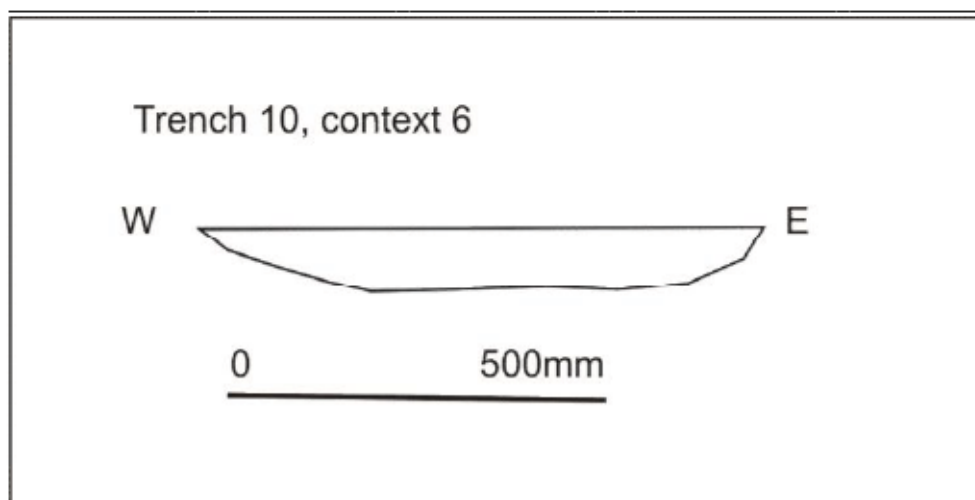
Modern drains E/W near dip at N end and drain in S side of palaeochannel not logged.

Features

No	Easting	Northing	Feature	Associated finds	Comment
6	380097	814938	Irregular ovoid shallow feature. Max E/W: 1.00m. Max N/S: 1.6m. Max depth 80mm		Sealed by 500mm topsoil Possibly the very base of a ploughed out pit. Vole/mole holes have taken more charcoal -rich material down through base. Context too contaminated for useful sample. On flattish ridge.
6/1			Dark grey-black sandy silt with occasional charcoal fragments	SF 4	
7	380077	815031	Red burnt patch on sand. C 350mm diam. Patches of charcoal in sand in the 3m to S- especially in animal holes. Topsoil 300mm.		



Illus 15 Plan of Trench 10



Illus 16 Section of Trench 10, context 6



Illus 17 Trench 10, context 6, box sectioned

Trench 11

GPS N end: 380063, 815028

S end: 380130, 814699

Orientation: N/S

Length: 336 m Width: 2.1m

Depth above natural: 350-400 at N end, 250-300mm at S end but deepening to 600mm in palaeochannel.

Stratigraphy: The N end comprised very wet and sandy clay, sloping down towards the N. A stone drain ran along the trench between 19m and 50m from N end. From 380073,

814977 the ground was fairly level with 350-400mm topsoil over stony sand. SF 6 (fragments of prehistoric pottery) survived in a modern plough line on this. There were occasional charcoal patches within vole/mole holes. Plough marks and modern drains in this area of natural were not logged. The natural gradually sloped down to the palaeochannel which ran from 380094, 814877 with grey leached silt to 600mm. The ground then rose steeply to a stony gravel ridge with occasional boulders (<500mm). Topsoil depth at the S end was 250-300mm.

Features None. Modern drains not logged.

Trench12

GPS N end: 380089, 814947: S end: 380093, 814921

Orientation: N/S Length: 21m Width: 2.1m

Depth above natural: 300-400mm

Stratigraphy: Topsoil over sandy natural

Features None

Trench13

GPS N end: 380089, 814807 S end: 380113, 814732

Orientation: N/S Length: 79m Width: 2.1m

Depth above natural: 300-400mm

Stratigraphy: Trench along top of S ridge. Topsoil lay directly on sand, stonier to N end of trench

Features None

Field 3

Field 3 slopes down from E to W, facing along the Tuach Burn. A wide palaeochannel extends E/W across Field 3 and into Fields 2 and 4. Another smaller channel runs from the SW corner of the field, running NE into the

main palaeochannel. On either side of the palaeochannel, there are wide stoney ridges to 70-74m OD, c 80m apart, with rock outcrops (Illus 6). The topsoil is generally very shallow on the ridges, with little possibility of survival. Cultivation has caused movement of topsoil down the S slope of the N ridge and the N slope of the S ridge, giving areas of deeper, but still undifferentiated topsoil on either side of the palaeochannel. In some trenches, the sand at the base of the channel showed modern plough marks below 700mm of topsoil, indicating that much of this depth had accumulated fairly recently, probably as the result of heavier modern ploughs. Certainly the small hollow or pit (context 16) cut into the sand at the base of the channel in Trench 22 indicates that there was no great accumulation when pottery and flint were buried here, possibly in the Neolithic period.

A series of partially ploughed out features with prehistoric pottery or flint, and isolated artefacts not related to surviving features, indicate that there had been settlement/useage of the sheltered and fairly gentle S slope of the N ridge. Survival is patchy and threatened by every ploughing – in places such as Trench 19, survival appears to have depended on the proximity to rock outcrop which had bounced the ploughs; elsewhere survival has been due to the slippage of soil down slope allowing some greater depths of topsoil (although these features would have been partially ploughed out before the soil slippage protected them). Charcoal and burnt bone from some features should be able to give accurate dating for this activity (Samples 1, 2). The pottery and flint suggests a range between later Neolithic and Bronze Age.

The palaeochanel gives wide views W towards the Tuach Burn and the Midmill cairn (Illus 18).



Illus 18 View NW across the W end of Field 3 from the S ridge across the palaeochannel. The excavator is working on the S ridge. To the LHS is Midmill Industrial Estate (red arrow =Midmill cairn).

Trench 14

GPS N end: 380156, 814997 S end: 380233, 814751

Orientation: N/S Length:258 m Width: 2.1m

Depth above natural: 200-300mm on the ridges, up to 400mm in the palaeochannel.

Stratigraphy: At the N end, along the N ridge, there was 250-300mm of topsoil onto stoney sand with some boulders (<300mm) and rock to the surface in some places. At 380198, 814862 the ground began to slope down into the palaeochannel, rising again from 380213, 814814. The natural in the palaeochannel comprised sand at the sides and gravel at the base below c 400mm topsoil. On the S ridge there was 200-300mm topsoil on sand with boulders, some of the boulders to the surface.

Features None

Trench 15

GPS N end: 380179,814998 S end: 380255, 814750

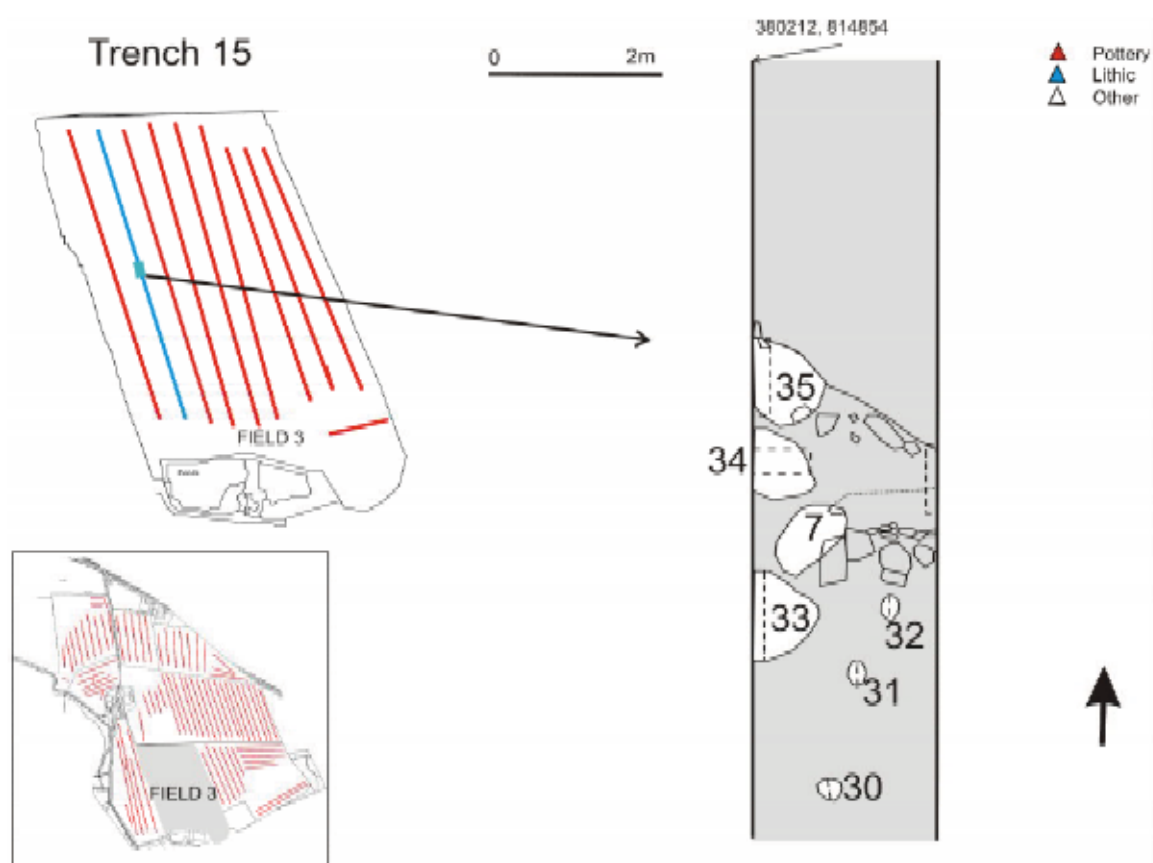
Orientation: N/S Length: 258m Width: 2.1m

Depth above natural: 200-300mm on ridges and up to 600mm in palaeochannel.

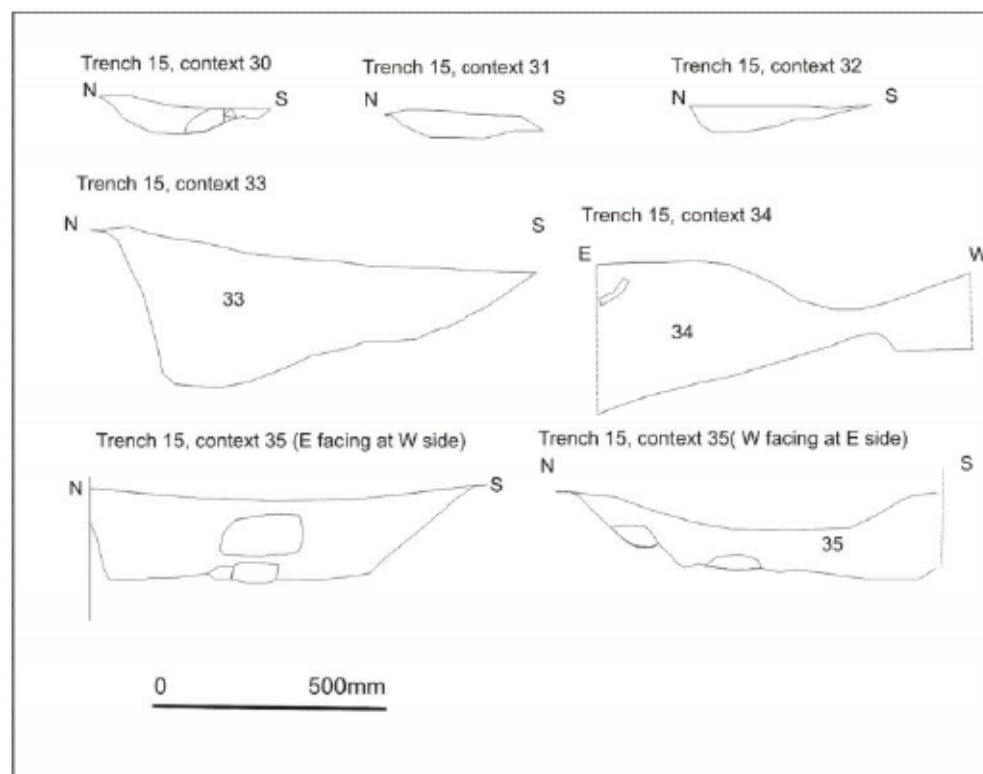
Stratigraphy: The N ridge was similar to Trench 14 with 300mm topsoil over sand and boulders, though some of the boulders were up to 1m. There was a slight dip between 50 and 70m from N end which had 600mm topsoil. S of this, the N ridge continued with shallow topsoil and rocks to the surface. At 380210, 814895 the ground began to dip into the palaeochannel which extended to 380233, 814823. Generally the topsoil in the channel was only 350-400mm but there was up to 600mm at the base of the N slope of the S ridge. A group of features (7, 30- 35- below) were on the S slope of the N ridge. A charcoal spread with burnt bone and burnt flint (7) was clearly prehistoric and can probably be related to the survival of features in Trench 16 but the other features could not be clearly interpreted in the confines of the evaluation trench. A modern drain crossed the base of the channel. The base of the channel was sandy. The rocky crest of the S ridge began at 380240, 814799 and continued fairly level below 200mm topsoil to the end of the trench, apart from a slight dip to 500mm at 380248, 814722, where a smaller NE/SW channel ran onto the central palaeochannel. A modern clay drain ran along this.

Features

No	Easting	Northing	Feature	Associated finds	Comment
7	380216	814879	Burnt patch with much charcoal, some burnt bone and burnt flint. Approx 1.5m N/S x 2m E/W. Extended into W section.		This is the only clearly prehistoric feature in this group.
7/1			Charcoal upper fill of 7 mixed with overlying topsoil and at edges	SF 7-10 from initial cleaning- all from E side SF11	Sample (1) for C14 dating
30	380216	814876	Hollow 340 x 250mm. Depth: 50mm. Compact loamy sand, charcoal and tiny frags burnt bone in upper fill		Possible stone hole. Charcoal possibly derived from context 7- but this may be by plough drag.
31	380216	814878	Hollow 310 x 200mm. Depth: 50mm. Fill: compact loamy sand.		Possible stone hole.
32	380216	814879	Hollow 400 x 200mm. Depth: 60mm. Fill: grey compact loamy sand with flecks of charcoal		Possible stone hole.
33	380215	814878	840 x 750mm. Depth: 300mm. Fill Compact loamy sand with flecks of charcoal and occasional stones.		
34	380214	814880	800 x 700mm. Depth: 320mm. Fill Grey compact loamy sand with flecks of charcoal. Greater concentration of charcoal in top fill.		Irregular hollow. Appeared to cut 7
35	380215	814881	Hollow or cut. 950 x 800mm. Depth: 170mm. Fill Grey compact loamy sand with flecks of charcoal.		Irregular hollow. Appeared to cut 7



Illus 19 Plan of features in Trench 15



Illus 20 Sections of features in Trench 15



Illus 21 Trench 15 features, looking N



Illus 22 Trench 15 features looking E. Mid foreground charcoal 7 (sectioned) cut by context 34 (LHS)

Trench 16

GPS N end: 380203, 814999 S end: 380278, 814748

Orientation: N/S Length: 261m Width: 2.1m

Depth above natural: 200-400mm with up to 500-600mm in palaeochannel

Stratigraphy: The N ridge had generally 400mm topsoil over sand and gravel and boulders <1m, some of which reached to the surface. There was a slight dip c500mm deep at 380209, 814976, with a dip at 380220, 814942 (as seen in Trench 15 this seemed a dip in the top of the ridge), with depths to 600mm. The palaeochannel extended from 380239, 814881 to 380253, 814831, with topsoil depths of only 300mm over rocks in the centre but deeper with slippage at the base of the slopes on either side. A series of features (8, 27-29, 36) lay below just 300-400mm topsoil on the S slope of the N ridge as it dipped into the palaeochannel. The S ridge had 250-300mm topsoil over rocky natural.

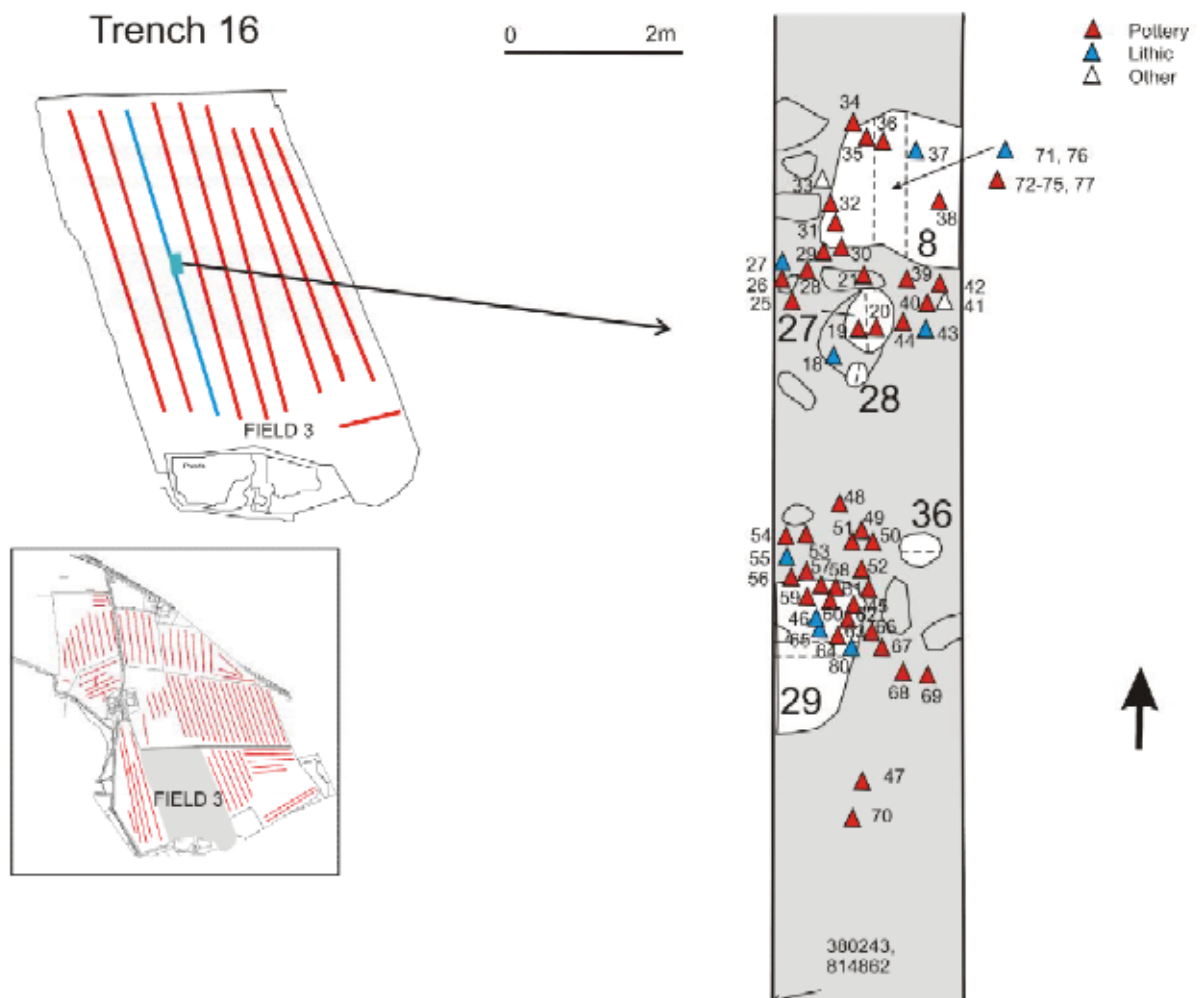
Features

The group of features in Trench 16 appeared to be the truncated remains of an occupation surface, either internal or external; this impression is supported by the concentration of finds, including many small abraded pieces which are typical of a trampled surface. Many were from surface cleaning of the features and may include some element of plough drag (and a single sherd of modern china SF 41 is a reminder of the shallow topsoil depths). However others, found during sectioning of features, were well stratified in the fill of features 8 and 29 and indicate the relationship of the overall spread of finds with the features. Features 27 and 36 appeared to be dug features. The other contexts may have been an accumulation in hollows or the base of denuded features such as pits; in this context it is interesting that SF 72 in the fill of context 8 comprised three large pieces of the same pot- far more likely to have been in a pit than on a floor. Only the stratified finds are shown in the table below. In total 59 prehistoric artefacts were recovered- 49 pottery, 9 lithics and 1 fragment of daub. Some of the pottery appears to be of Neolithic date.

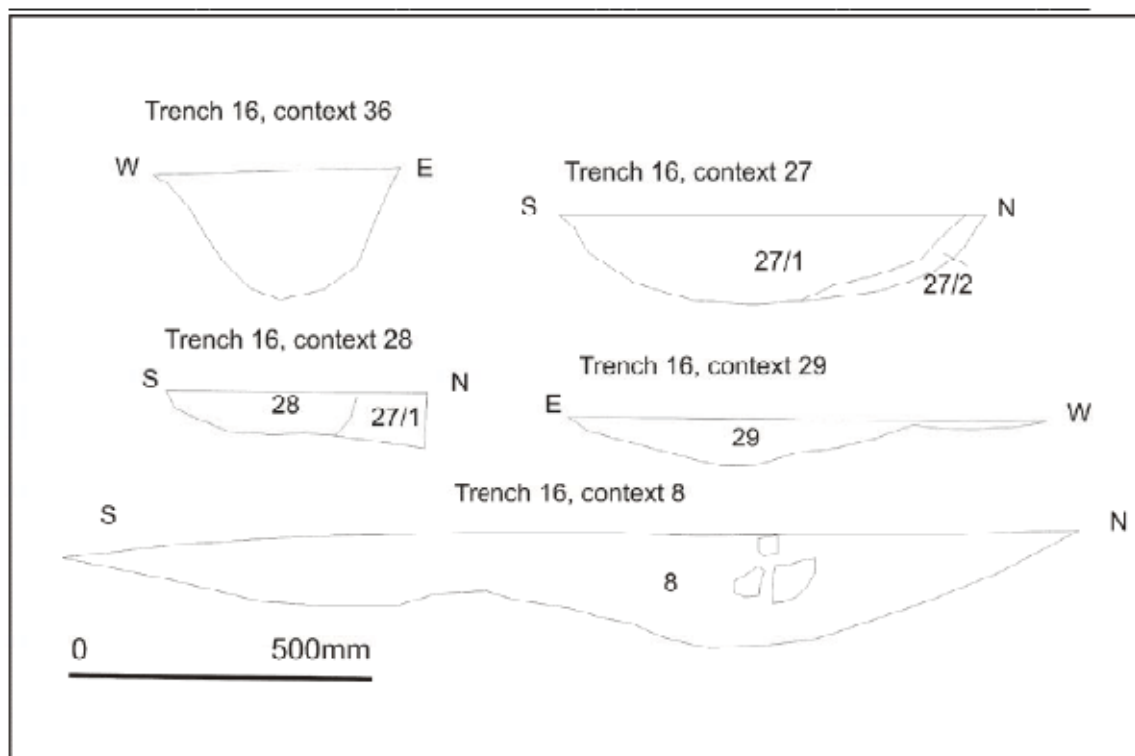
No features were fully excavated as this area should be part of a further investigation- analysis is therefore limited.

No	Easting	Northing	Feature	Associated finds	Comment
8	380242	814870	Charcoal patch in hollow 1.6 x 1.5m. Depth: 200mm. Dark brown/grey very compact silt/loam- charcoal rich. Fill	SF 30-38	Possible truncated pit.

			included some large pot sherds.	
8/1			Surface of 8	SF12,
8/2			Fill of 8- section showed no difference to surface	SF 71-79
27	380242	814870	Pit 700 x 600mm, with spread of fill to SW cut by 28. Depth: 140mm	SF 18, 19, 20
28	380242	814869	300 x 250mm. Depth: 50mm. Fill: charcoal rich sand.	
29	380242	814866	1.7 x 0.8m (into section). Depth: 80mm. Slightly gingery sand with some charcoal.	SF 45, 46, 56-65,
36	380243	814869	400 x 420mm. Depth: 200mm. Fill: fine grey silt.	



Illus 23 Plan of Trench 16



Illus 24 Sections of Trench 16 features



Illus 25 Trench 16 features. Dark spread is context 8. White tags indicate the spread of finds.

Trench 17

GPS N end: 380226, 815002 S end: 380297, 814745

Orientation: N/S Length: 266m Width: 2.1m

Depth above natural: 250-300mm on the ridges, up to 600mm in palaeochannel

Stratigraphy: The N ridge was quite level with 200-300mm topsoil over a very rocky surface until it dropped with an abrupt slope into the palaeochannel at 380259, 814884. There was up to 600mm topsoil slippage at the base of the slope. The S side of the channel was 380273, 814834, with two modern drains running NW/SE down it. The S ridge sloped gently up to the S with 250-300mm of rocky sand. Modern plough marks were visible.

Features None

Trench 18

GPS N end: 380247, 815004 S end: 380317, 814745

Orientation: N/S Length: 268m Width: 2.1m

Depth above natural: 200-300mm on ridges and up to 800mm in palaeochannel.

Stratigraphy: The N ridge was fairly level with a slight slope down to S. 300mm topsoil lay over sand with stones and boulders, some boulders to ground surface, modern plough marks visible. At 380275, 814897, the ground dipped more steeply into the paleochannel with undifferentiated topsoil slippage up to 800mm in depth over sand at the base of slope. The S side of the palaeochannel rose steeply at 380291, 814842, with a modern drain down the slope. The S ridge very stoney with only 200mm topsoil from 380298, 814816, in line with a large rock outcrop to E.

Features None

Trench 19

GPS N end: 380267, 815000 S end: 380336, 814749

Orientation: N/S Length: 260m Width: 2.1m

Depth above natural: 200-300mm on ridges and up to 700mm in palaeochannel.

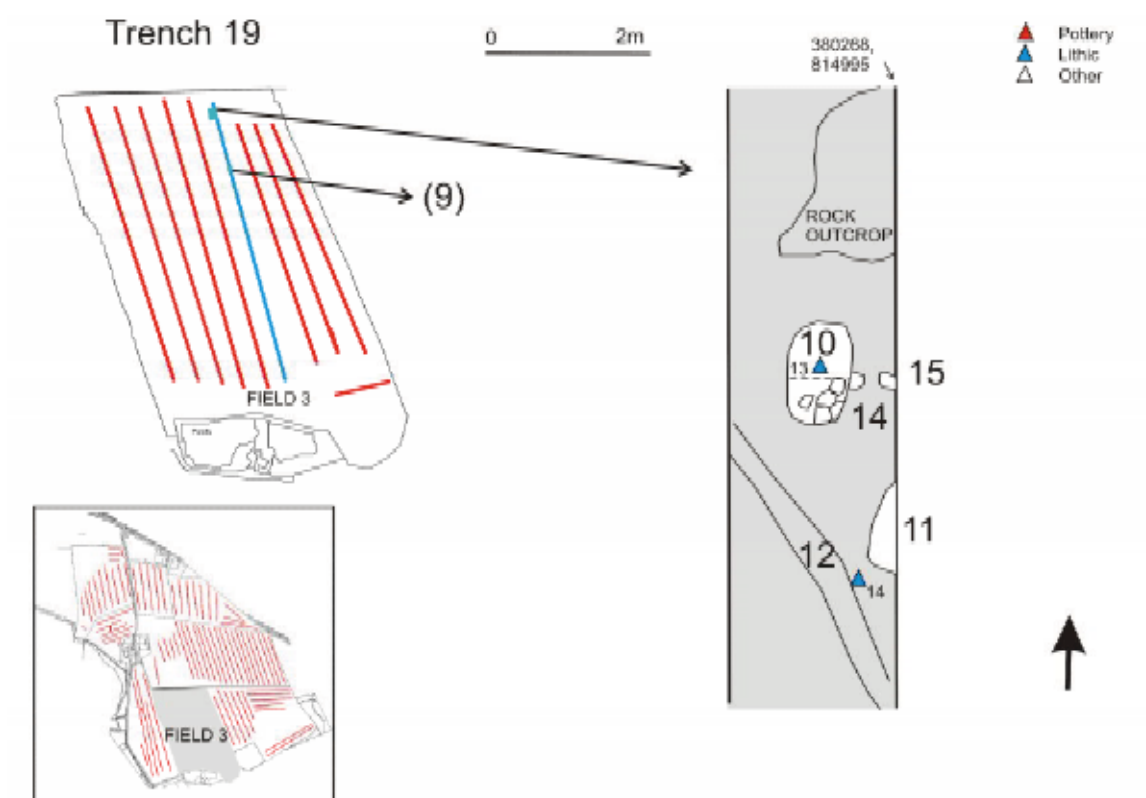
Stratigraphy: At the N end there was 250mm topsoil over stoney sand with rock outcrop to surface. Features 10-12, 14-15 cut into natural sand just S of the outcrop. There was another outcrop at 380273, 814974, then the ground sloped and levelled out with 1 250-300mm topsoil, with modern plough marks in stoney sand natural. Burnt patch context 9 cut into this at 380281, 814939. S of this ground the sloped into the palaeochannel from

380292, 814905 to 380308, 814848. The base of channel was sandy with up to 700mm of undifferentiated topsoil. It then rose to the S ridge and rock outcrop. The topsoil was 400-500mm deep just below the S side of the rock outcrop, then levelled and was 200-300mm to the end of the trench where the ground just began to slope down to the S side of the ridge.

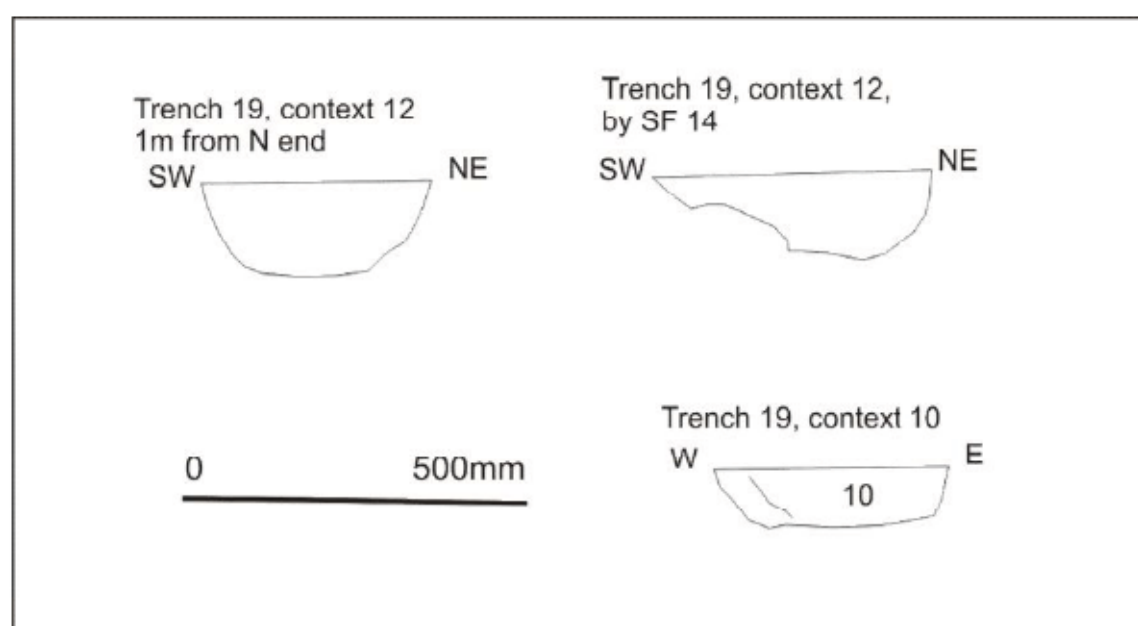
Features

A group of features (10, 11, 12, 14, 15) survived below just 300mm of topsoil, protected by a rock outcrop c. 1m to the N which may have caused the plough to jump slightly or be lifted. Although further up slope than the features in Trenches 15 and 16, these features were also on the sheltered S facing slope of the ridge and the two related flints suggest a prehistoric date. A charcoal sample (Sample 2) from the hearth (context 10) will be C14 dated for a more precise date.

No	Easting	Northing	Feature	Associated finds	Comment
9	380281	814939	Burnt patch with twig charcoal mixed with topsoil (<100mm). 700mm N/S x 650mm+ E/W.		Below 300mm topsoil. Nothing to indicate date but possible prehistoric on basis of features to N.
10	380269	814991	Fire pit 1.06m N/S x 700mm E/W. Max depth 190mm. Base baked hard. Stones in fill		
10/1			Red ash and charcoal fill of 10	SF 13	Sample (2) for C14 dating
11	380270	814989	Pit? 1.10m N/S 400mm+ E/W into E section		
11/1			Fill of 11. Black with much charcoal		
12	From 380268 To 380271, 814987	814989 (NW)	Linear cut feature NW/SE. c. 3.5m exposed across trench, slightly curved Width 290-350mm		
12/1			Top fill of 12. Grey silty with charcoal	SF 14	
14	380269	814991	250 x 300mm. Grey silty fill. At edge of or cut by 10		Not sectioned
15	380270	814991	180 x 350mm. 50mm deep. Fill grey silty		Could be stone hole



Illus 26 Plan of Trench 19



Illus 27 Sections of Trench 19 features

Trench 20

GPS N end: 380289, 814983 S end: 380362, 814766

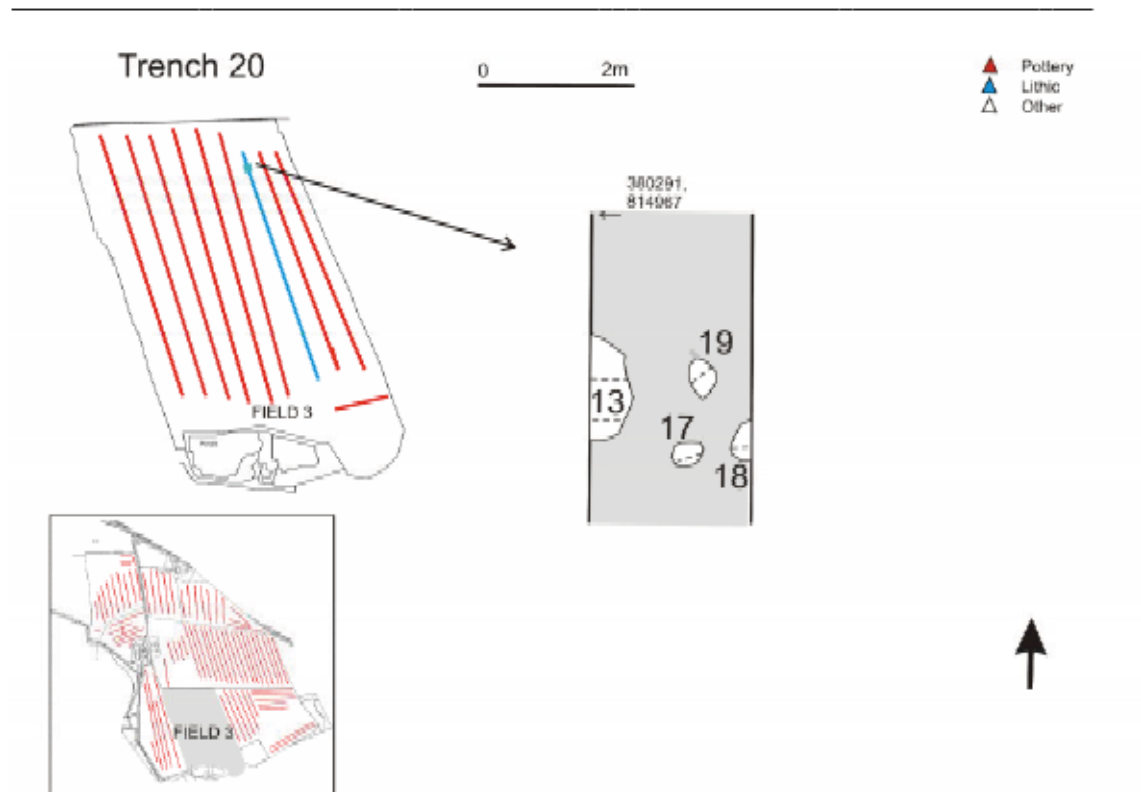
Orientation: N/S Length: 228m Width: 2.1m

Depths above natural: 200-400mm on ridges and up to 800mm in palaeochannel.

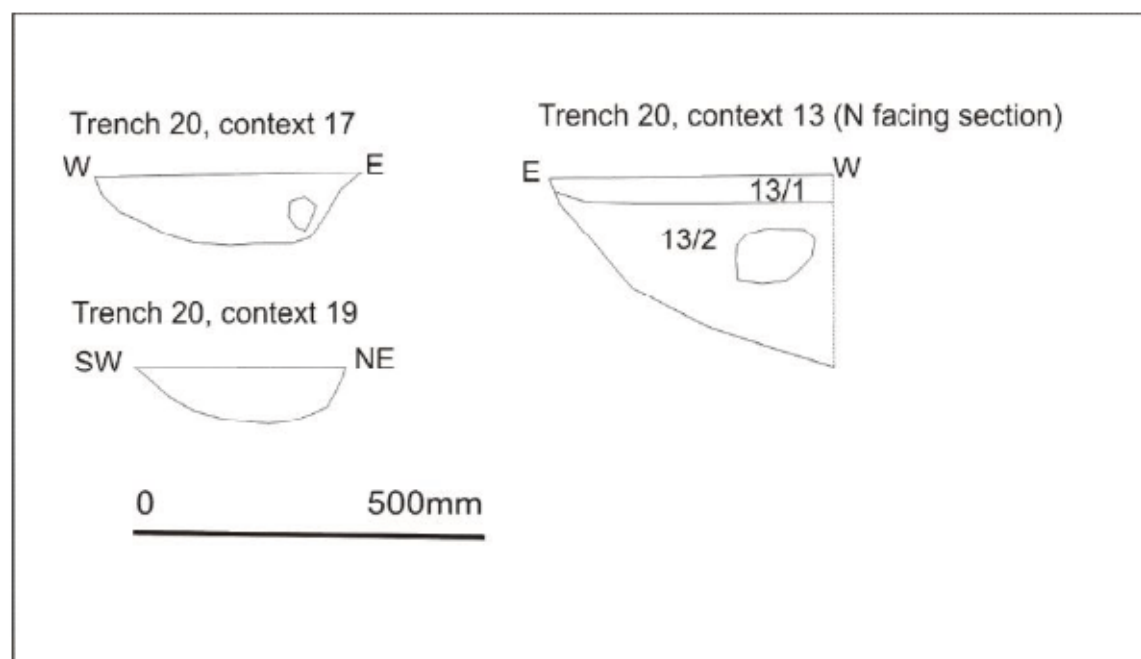
Stratigraphy: At the N end there was 300-400mm of topsoil over stoney sand natural to large outcrop at 380291, 814977. A burnt patch (context 13) lay on natural at 380295, 814962 in an area with modern plough marks in the sand. The ridge sloped more steeply into a dip between 380307, 814928 and 380310, 814917 with topsoil depth of 400mm. The palaeochannel extended between 380316, 814903 and 380331, 814861 with depths of undifferentiated topsoil to 800mm. Prehistoric pot sherd SF 15 was found on clean natural sand in the channel. S of the channel the ground rose to a rock outcrop on the S ridge. Topsoil depths on the S ridge were 200-300mm over very stoney sand. The last 5m of the S end of the trench sloped down the S side of the ridge.

Features

No	Easting	Northing	Feature	Associated finds	Comment
13	380295	814962	Burnt patch on natural below 300mm topsoil. 1.25m N/S x 0.55m E/W into W section. Depth: 250mm.		
13/1			<50mm black with occasional charcoal. A little of this down E edge.		
13/2			Fine quite compact gritty grey silt. Stones in fill.	1 vitreous lump. Non Fe. (Sample 9)	
17	380296	814963	Oval hollow. 380 x 220mm. Depth: 100mm. Fill dark grey silt.		
18	380297	814963	500 x 260mm+ and into E section. Depth: 150mm. Fill dark grey silt		
19	380296	814964	380 x 300mm. Depth: 80mm. Black silty with occasional charcoal. Animal burrow at N end.		



Illus 28 Plan of Trench 20



Illus 29 Sections of Trench 20 features



Illus 30 Trench 20 features, looking N

Trench 21

GPS N end: 380305, 814980 S end: 380382, 814775

Orientation: N/S Length: 217m Width: 2.1m

Depths above natural: 200-400mm on ridges and up to 500mm in palaeochannel.

Stratigraphy: The N end was very rocky with topsoil up to 400mm. Rock outcrop at 380312, 814962. Then the ridge sloped gently to the S with topsoil of 250mm, which gradually deepened down the slope to 400mm. Modern plough marks on shallow areas. The palaeochannel extended from 380333, 814904 to 380350, 814863. The natural in the paleochannel was very sandy, with plough marks even though the topsoil was 500mm deep. This suggests that the slippage of topsoil into the channel is the result of modern ploughing practice. The ground rose to the S ridge with 200-300mm topsoil over stoney natural.

Features None

Trench 22

GPS N end: 380320, 814982 S end: 380406, 814776

Orientation: N/S Length: 222m Width: 2.1m

Depths above natural: 200-400mm on ridges and up to 700mm in palaeochannel.

Stratigraphy: The N ridge comprised rocky sand with 300-400mm topsoil at the N end, reducing to the S where modern plough marks were visible. The S slope of the ridge was steeper with boulders and rock outcrop. The palaeochannel extended from 380345, 814920 to 380368, 814867 with 500mm of topsoil at the base of the S slope of the N ridge and up to 700mm of topsoil at the base of the N side of the S ridge. Topsoil over the S ridge was generally very shallow with 200mm topsoil over stoney natural, but a small dip in the top of the ridge extended between 380383, 814831 and 380389, 814818 with up to 800mm topsoil.

Features

A small pit/ hollow (context 16) containing pottery (SF16) and flint (SF 17) was cut into the clean sand at base of the palaeochannel.

No	Easting	Northing	Feature	Associated finds	Comment
16	380364	814879	Small pit 300mm in diameter and 110mm visible depth. Fill slightly greyer sand	SF 16, 17	Feature only visible when box sectioned. Cut into natural yellower sand at base of paleochannel. Below 700mm topsoil slippage.

Trench 24

GPS E end: 380427, 814749 W end: 380378, 814738

Orientation: E/W Length: 50m Width: 2.1m

Depths above natural: 200-400mm

Stratigraphy: This trench extended along a small ridge further S than the main S ridge.

Topsoil lay directly on stoney sand.

Features None

Field 4

A palaeochannel extended through Fields 2, 3 and 4, separated by high ridges to N and S. In Field 4, the E end of this channel sloped down into a narrow valley extending E/W with a small burn along the base which was running quite fast at the time of evaluation but this may be due to recent wet weather and may be a seasonal water source (partially canalised by a modern plastic drain). Both N and S ridges also sloped steeply down into

this valley. Another area of higher ground lay in the SE corner of the field (Illus 6).

A cluster of prehistoric features in Trenches 30-33, possibly including several roundhouses, lay on an E facing slope, sheltered to N and W (and partially to the S) by higher ground. They extended down towards the small stream. Two isolated but undated features at the S end of Trenches 40 and 44 in Field 5 may relate to this activity.

Evidence of some form of heat-related 'industrial' process in Trench 36 needs further analysis and dating.

Later, possibly post-medieval or early modern bloomery iron working was found in a pit in Trench 29, with areas of burning on the natural in Trenches 26-29 possibly associated.

Trench 23

GPS N end: 380350, 814980 S end: 380423, 814805

Orientation: N/S Length: 190m Width: 2.1m

Depths above natural: 200-400mm on ridges and up to 800mm in palaeochannel.

Stratigraphy: On the N ridge there was 300mm topsoil over stoney sand with modern plough marks. This gradually sloped down into the palaeochannel which extended between 380384, 814898 and 380397, 814869 where the topsoil increased to 600mm. The S ridge was rocky with 300-400mm topsoil.

Features None

Trench 25

GPS N end: 380364, 815006 S end: 380448, 814809

Orientation: N/S Length: 214m Width: 2.1m

Depths above natural: 250-300mm on ridges, up to 900mm in palaeochannel.

Stratigraphy: The top of the N ridge was fairly level with stoney sand and boulders below 250-350mm of topsoil, then there was a long gentle slope down to the palaeochannel. The palaeochannel extended between 380410, 814895 and 380420,

814873 with depths of up to 900mm, comprising undifferentiated topsoil over clean fine sand. The S ridge was stoney sand with occasional boulders below 250-300mm topsoil.

Features None

Trench 26

GPS N end: 380388, 815001 S end: 380463, 814817

Orientation: N/S Length: 199m Width: 2.1m

Depths above natural: 300mm on the ridges, 1m in the palaeochannel

Stratigraphy: The N ridge was level with stoney sand and boulders to about 70m from N end, then sloped down into to the palaeochannel which extended between 380429, 814901 and 380437, 814879 with up to 1m of accumulated topsoil over the sand at the base. A small patch of charcoal c. 300mm diameter lay at 380434, 814888 on the clean sand at base below the topsoil but was undiagnostic. There was a gentle rise to the S ridge with stoney sand below 300mm topsoil. There was surface burning of natural at the S end.

Features None

Trench 27

GPS N end: 380409, 815001 S end: 380480, 814831

Orientation: N/S Length: 185m Width: 2.1m

Depths above natural: 300mm on ridges, up to 1m in palaeochannel.

Stratigraphy: The N ridge was stoney sand, flat for the northern 50m of the trench, then sloping down into to the palaeochannel. Pink, possibly burnt, sand around 380449, 814905, may have been related to the metal working in Trench 29 or may have been the result of former straw/stubble burning on very shallow soil. The palaeochannel extended from 380451, 814897 to 380460, 814877 and had a maximum of 1m of undifferentiated topsoil accumulation over a slightly sandy clay. The S ridge was of stoney sand with modern plough marks below 300mm topsoil. From this point the S ridge was also sloping E to the E gully.

Features None

Trench 28

GPS N end: 380430, 815001 S end: 380497, 814846

Orientation: N/S Length: 169m Width: 2.1m

Depths above natural: 250-400mm on the ridges and up to 1.1m in the palaeochannel.

Stratigraphy: The N ridge had 250-300mm topsoil over stoney sand and boulders, with a band of large boulders at 3880469, 814912, S of which the ground sloped down to the palaeochannel. There was widespread pink, possibly heat affected sand on this slope (see Trench 27). The palaeochannel extended between 380475, 814897 and 380485, 814873. The base had 1.1m of topsoil accumulation over sandy clay with water ingress. A stone drain ran along the base. The S ridge was stoney sand/gravel with 300-400mm of topsoil, being deeper at the finer sandier S end of the trench.

Features None

Trench 29

GPS N end: 380451, 815001 S end: 380494, 814900

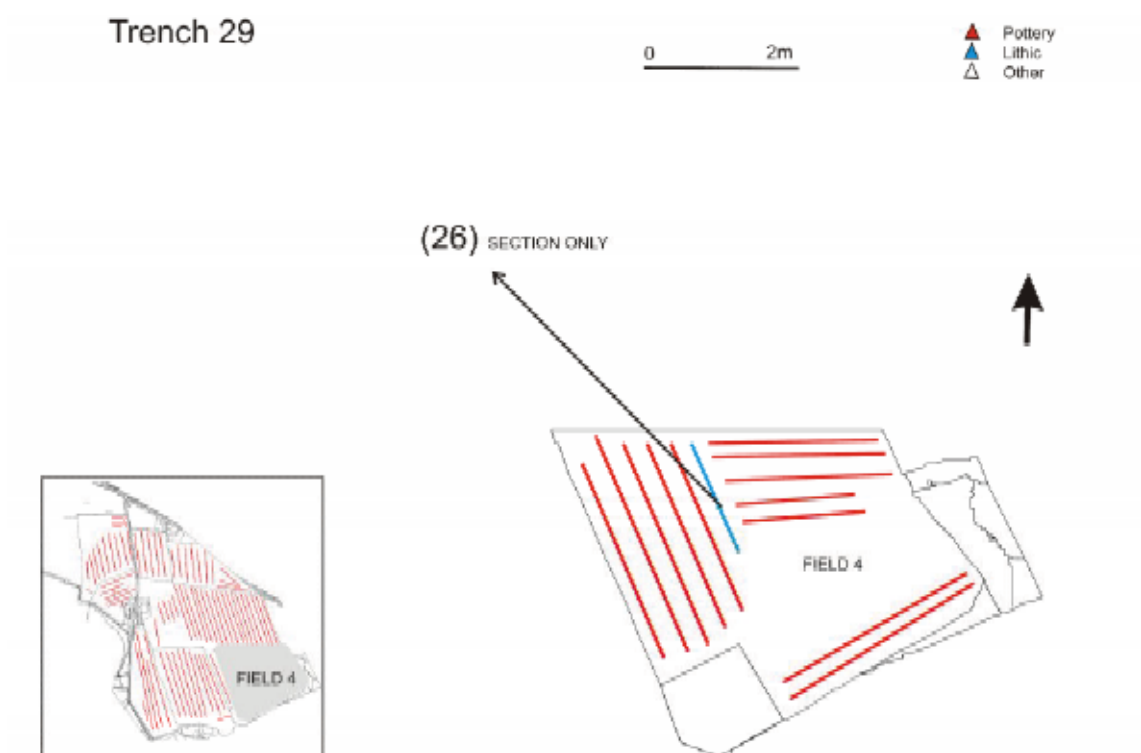
Orientation: N/S Length: 109m Width: 2.1m

Depths above natural: 250-300mm

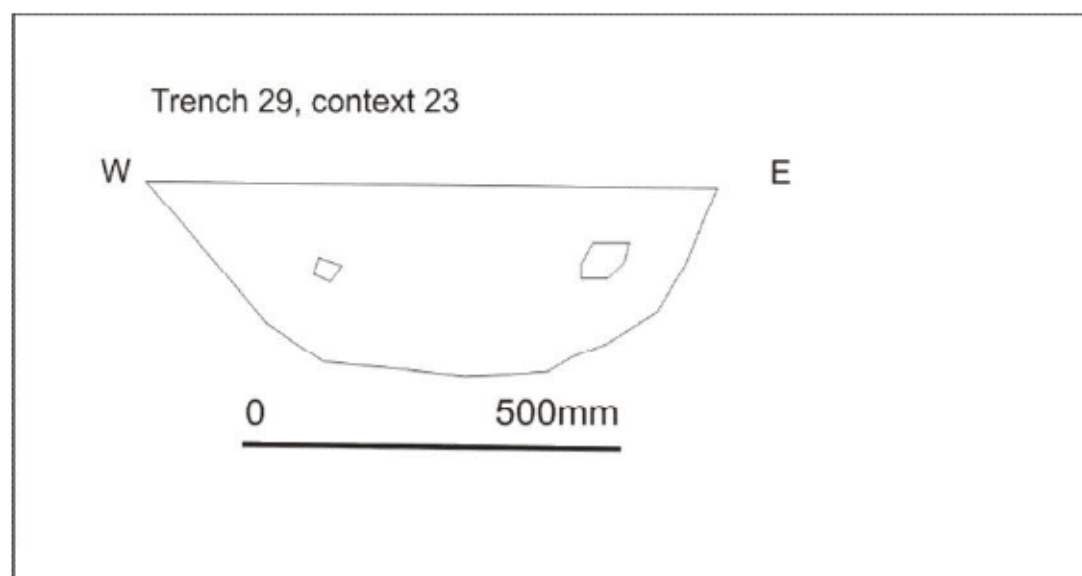
Stratigraphy: This trench only extended to the N of the palaeochannel and up across the N ridge. Topsoil was 250-300mm deep over stoney sand. Much of the sand on the slope was pink, possibly heat affected (See Trenches 27 and 28). This may be associated with the slag in context 26 but appeared too widespread so is as likely to be the result of brush or stubble burning.

Features

No	Easting	Northing	Feature	Associated finds	Comment
26	380476	814942	Bowl-shaped pit 1.3m x 0.70m. Depth: 290mm. Fill: Iron working bloomery debris and slag with chunks of burnt clay from bloomery furnace and some burnt stones. The sides of the pit were not burnt		Sample 11: Dr M Spearman examined the iron working waste, identifying it as bloomery waste and suggesting that the composition of the waste indicated a high degree of skill that was most likely to date to the 15 th -17 th centuries. Fired clay from furnace also present in sample.



Illus 31 Plan of Trench 29



Illus 32 Section of Trench 29, context 26



Illus 33 Trench 29, context 26 sectioned.

Trench 30

GPS E end: 380623, 815004 W end: 380466, 815000

Orientation: E/W Length: 156m Width: 2.1m

Depths above natural: 300-800mm

Stratigraphy: The ground sloped down from the N ridge onto a fairly level terrace beside the E valley and 'stream'. The W end of the trench comprised very stoney sand, sloping down from 380486, 815000 to sand with plough marks below 400-800mm of accumulated topsoil, gradually levelling and becoming shallower from 380514, 815000 with only c 300mm topsoil at the E end. There were abundant rabbit holes, some below the base of the trench.

Features

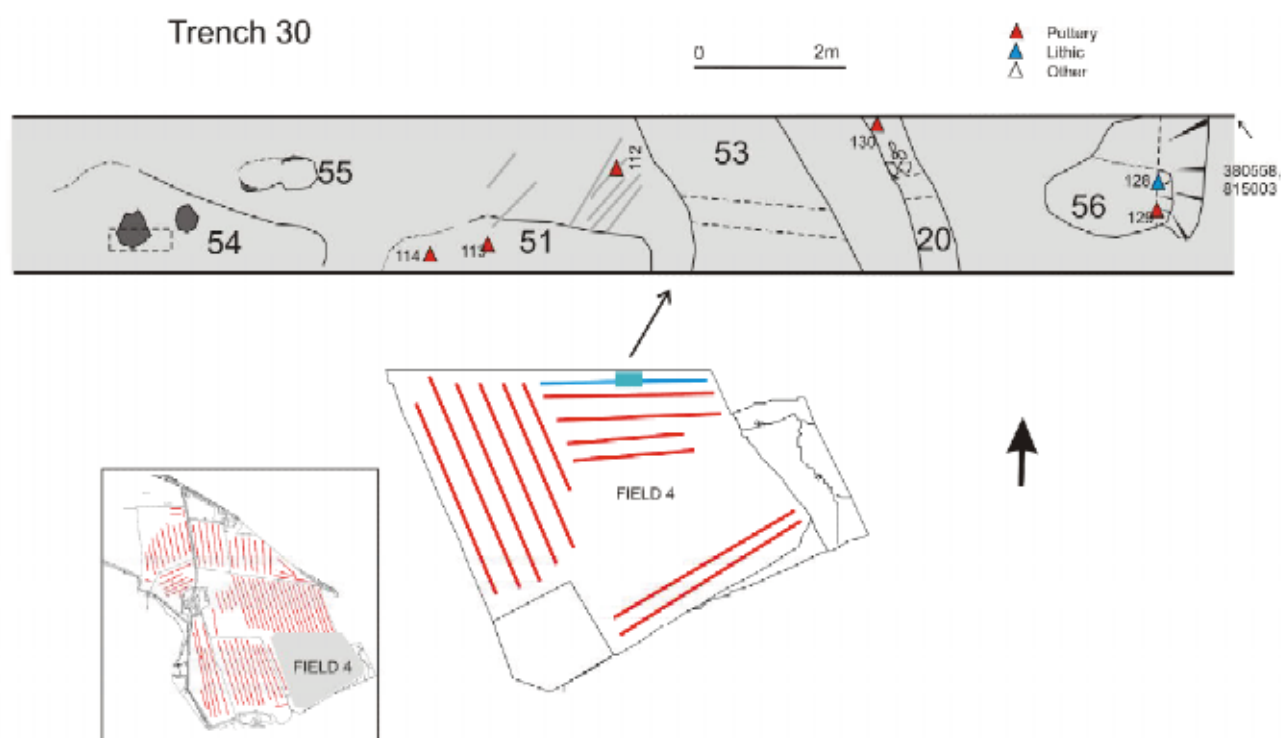
A cluster of features lay on the sheltered slope, just E of a boulder outcrop. The impression was of a possible occupation horizon of grey silt with some charcoal (51, 54, 55), with similar material filling in a wide, slightly curved gully (53). Both 53 and the narrower, parallel slot (20) could indicate the E wall line of a round house. There was no obvious W 'wall line' but at this end the slope was higher with rocks and shallower topsoil, so it may have been ploughed out. However the number of finds is low, and does not indicate intense or long-lasting activity.

Ard marks suggest that ploughing took place after the occupation.

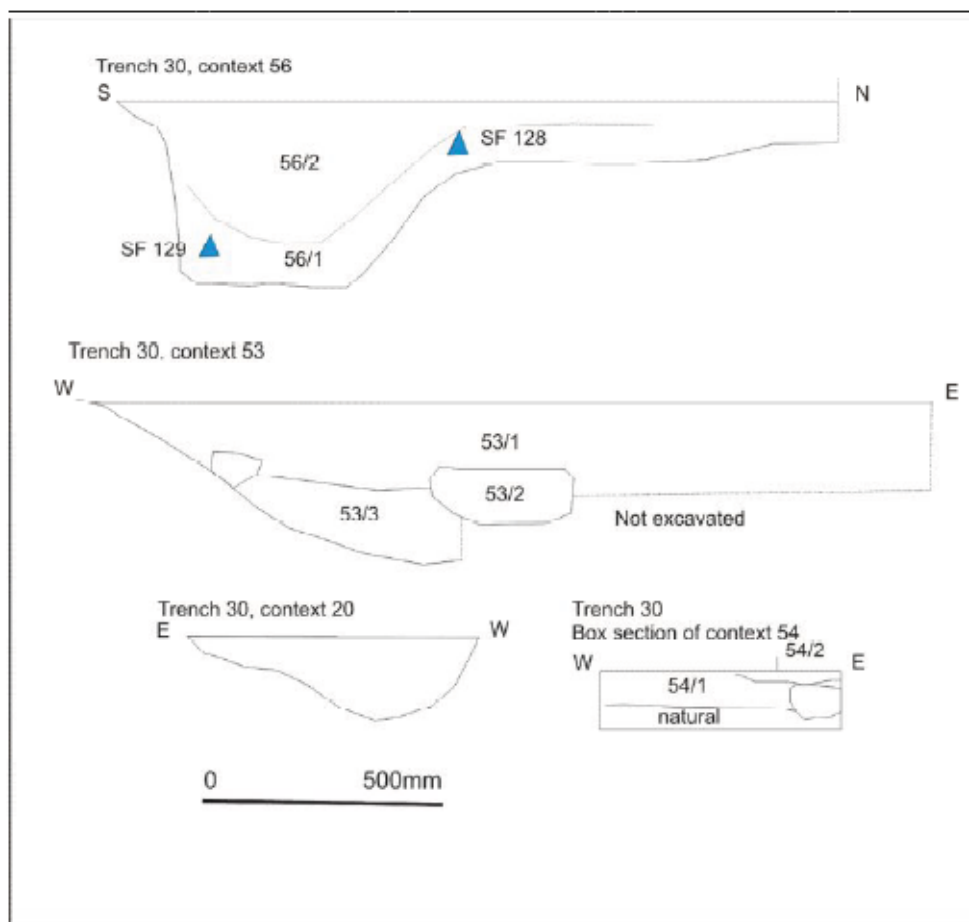
The features were not fully excavated as this is part of a wider group of features observed in Trenches 30-33 which require further work. Severe frost also limited surface cleaning.

No	Easting	Northing	Feature	Associated finds	Comment
20	380557	815002	NNW/SSE linear feature across trench. Length as exposed 2.2m. W: <460mm. Depth as sectioned 180mm. Fill: Mid grey fine silt with occasional charcoal lumps. Stones in fill (c130x 170mm) where sectioned.	SF 130 (pottery) in top fill	
21	380554	815002	Part of 53 numbered prior to cleaning		Not on plan
22	380544	815002	Heat affected sand/burnt patch 600 x 800mm		Not on plan.
51	380548	815006	Grey silt spread. Not sectioned. 3.5m E/W x 500mm (into S section)	SF 113, 114	The fill of 51, 53, 54 very similar and appeared to be parts of the same spread
52	380550	815001	Possible ard marks running NE/SW, 50-70mm wide, which had pulled grey silt and charcoal from context 51	SF 112 (small very abraded sherd - probably dragged from context 51)	The close spacing and size suggest these are ard marks not modern plough marks and not burrows although there are numerous animal runs in the soft sand
53	380552	815001	Gully c. 1.9m wide, NW/SE across trench. Partial section indicated this was a cut feature with a depth in section of 330mm.		The fill of 51, 53, 54 very similar and appeared to be parts of the same spread.
53/1			Upper fill of 53. Dark grey/black silt with moderate charcoal. Lay over stones 53/2 in section.		
53/2			Stones in fill of 53. Lay on and in 53/3, sealed by 53/1		
53/3			Lighter yellow/grey sandy silt but still clearly fill rather than discoloured sand.		
54	380545	815001	Grey silt spread with charcoal patches. C 4m x 1.5m (into S section) Box sectioned only.		The fill of 51, 53, 54 very similar and appeared to be parts of the same spread.
54/1			Dark grey charcoal-rich sandy silt. Up to 80mm deep in section.		
54/2			Intense irregular charcoal patches up to 20mm deep on surface of 54/1		
55	380547	815002	Irregular-shaped hollow with grey silt fill, charcoal at edges 1m x 400mm.		Looked like same fill as 51, 53, 54 in a hollow, with probable animal disturbance
56	380558	815002	Pit 1.2m x 600mm, Depth:380mm, with both fills extending N over natural to a		E end excavated.

	depth of 100-120mm.	
56/1	Lower fill of 56. Dark grey silt, some charcoal, including some lumps	SF 128, 129. Well stratified in pit
56/2	Upper fill of 56. Dark grey silt charcoal rare	



Illus 34 Plan of Trench 30



Illus 35 Sections of Trench 30 features



Illus 36 Trench 30, looking E up the slope



Illus 37 Trench 30, context 53 sectioned



Illus 38 Trench 30. Context 20, sectioned



Illus 39 Trench 30, context 56 sectioned



Illus 40 Trench 30, context 54. Box section

Trench 31

GPS E end: 380627, 814990 W end: 380469, 814987

Orientation: E/W Length: 158m Width: 2.1m

Depths above natural: 300-900mm

Stratigraphy: The W end of the trench followed the edge of the N ridge and was very rocky with 300mm topsoil. The ground levelled from 380495, 814987 to 380606, 814989 with 700-900mm topsoil. Features 23 and 24 were cut into the sand below up to 800mm topsoil. The ground then sloped down to the E on to sand into the E valley, with accumulations of up to 700mm topsoil. A further series of features (47-50) survived lower down the slope. There was much rabbit activity at the E end.

Features

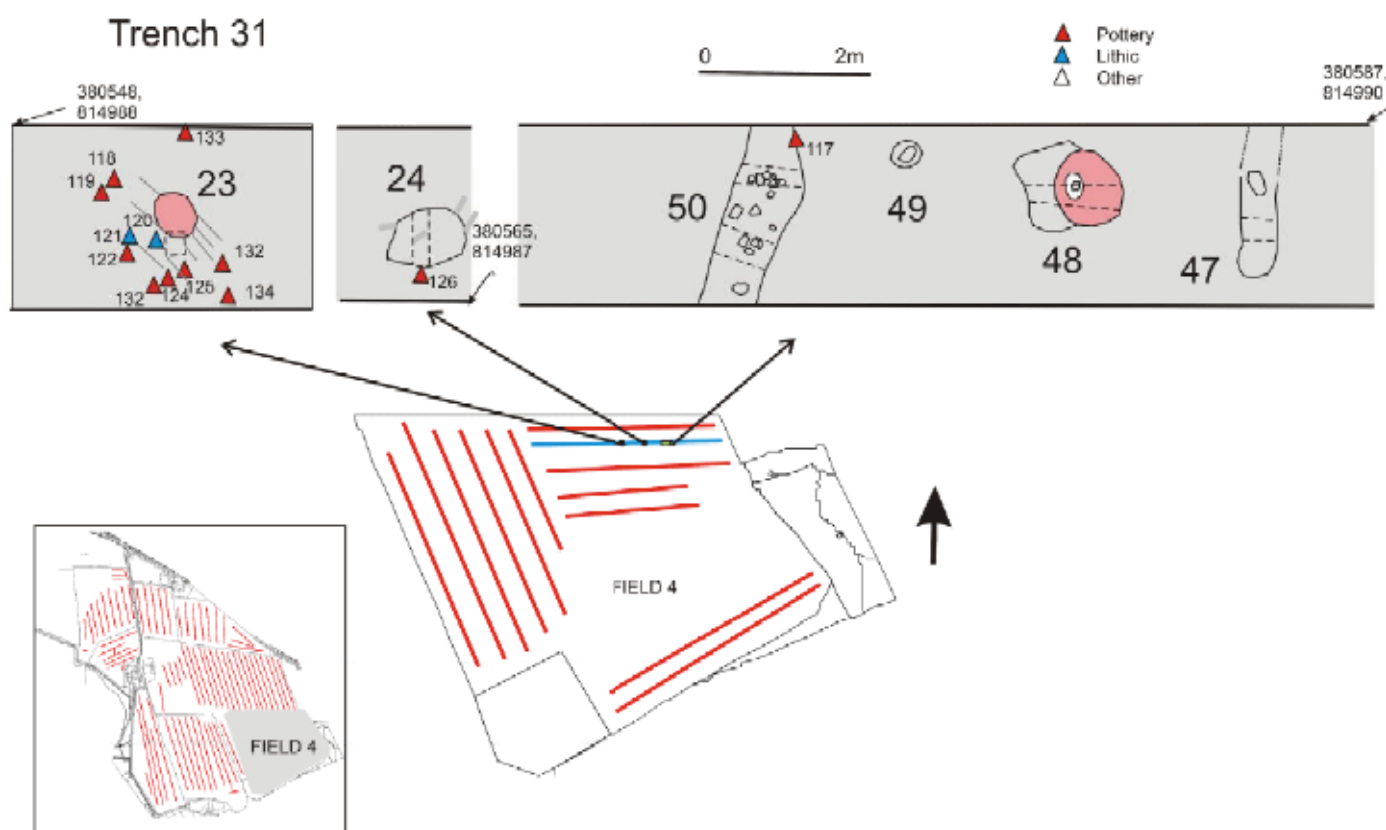
The main group of features (47-50) appear to comprise the wall line/ring ditch (50, possibly 47) and hearth (48) of a roundhouse. A small hole (48/2, cut into the hearth appeared to be secondary and may have been a deliberate deposition, possibly when the house was decommissioned – a heat-cracked stone almost filled the hole, sealing three sherds of pottery. Charcoal from this deposit was sampled for dating (Sample 3).

Around 600mm topsoil covered these features; there was no evidence of associated layers in the section so they appear to have been greatly denuded prior to the movement of topsoil down slope.

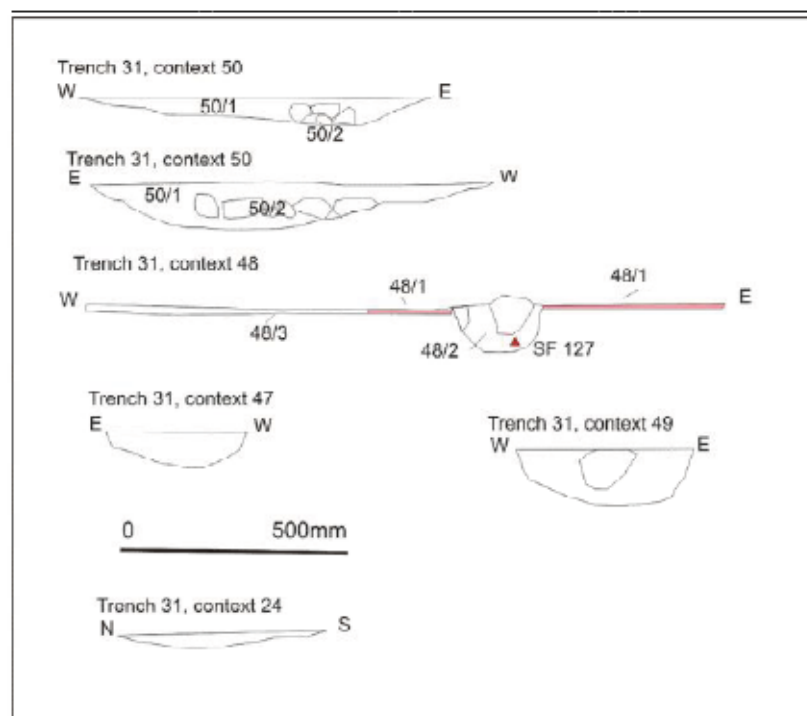
Two features further W up the slope may reflect related or contemporary activity although they are also likely to relate to the Trench 30 features at the same point on the slope. Context 23 appeared to have been another hearth site with a scatter of finds around it. As with the features to the N in Trench 30, ard marks, apparently later than the hearth, were noted in the sand.

No	Easting	Northing	Feature	Associated finds	Comment
23	380549	814987	Patch of heat-coloured (pink) sand. 600 x 500mm. Slight grey of sand around edges but no surviving charcoal. Ard marks through it with scatter of finds	SF 23, 118-125, 132-134 In ard marks and on natural around context 23.	Topsoil 900mm over these features. Section shows no related layer.
24	380565	814988	Shallow irregular hollow 750 x 460mm. Depth: 30mm. Fill grey brown silt	SF 24, 126	Much rabbit activity – so this could be very truncated feature but as likely to be burrow.
47	380586	814988			
48	380584	814989	Hearth with burnt sand (48/1), cut by charcoal filled pit (48/2). Outer spread 48/3		

48/1			Sand burnt red 950 x 750mm		
48/2			Charcoal-filled hole 230 x 260mm. Depth: 120mm. Cut through 48/1. Stone (heat cracked to 2 joining pieces) almost filled it, with pottery below it.	SF 127: 3 large sherds below stone in fill	Sample (3) for C14 dating
48/3			Burnt sand and patches of charcoal in grey silt. Extended c 500mm W of 48/1		
49	380582	814990	Linear feature. W: 300-460mm. Depth: 80mm. Fill grey silt with 1 stone noted. Sectioned only.		
50	380580	814989	Slightly curved linear cut. W: 500-900mm. Max depth in sections 100mm	SF 117	Possible ring ditch/wall line
50/1			Dark grey/brown silty loam. No obvious charcoal		
50/2			Irregular line of stones along deepest part of 50- most lay on natural, sealed by 50/1, others within 50/1. Two cross sections.		



Illus 41 Plan of Trench 31



Illus 42 Sections of Trench 31 features



Illus 43 Trench 31, features 47-50 (50 in foreground) looking E (down slope). As first cleaned.



Illus 44 Trench 31, features 47-50 (50 in foreground) looking E (down slope). With sections.



Illus 45 Trench 31, features 47-50 (47 in foreground) Looking W (up slope). As first cleaned.



Illus 46 Trench 31. Hearth 48



Illus 47 Trench 31, feature 47



Illus 48 Trench 31. Feature 49



Illus 49 Trench 31. Feature 50, possible ring ditch



Illus 50 Trench 31, context 23. Tags indicate spread of finds

Trench 32

GPS E end: 380634, 814972 W end: 380479, 814966

Orientation: E/W Length: 155m Width: 2.1m

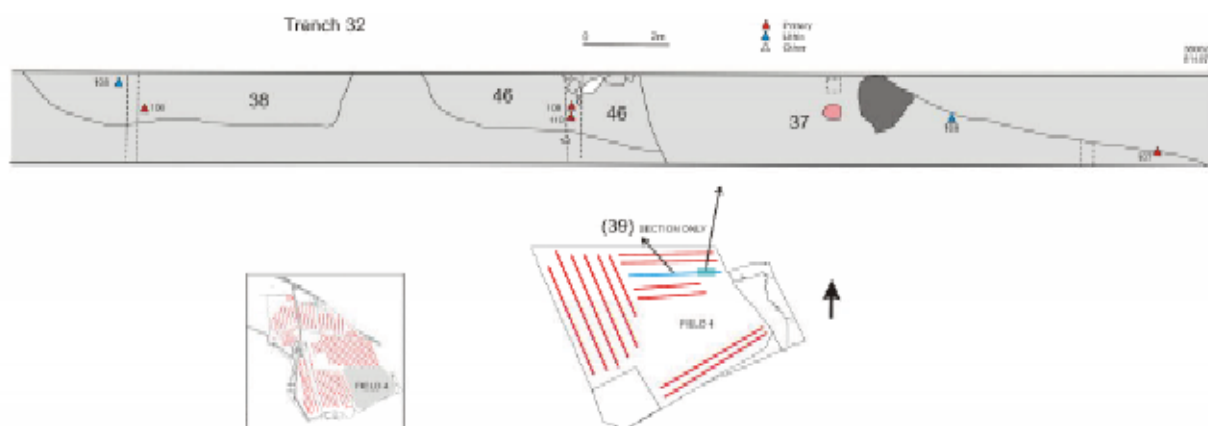
Depths above natural: 300-500mm at ridge and up to 1.1m in valley.

Stratigraphy: At W end 300-500mm topsoil over stoney sand which was pink in places, some boulders; this is E end of ridge and also slopes down to N to Field 5. Slopes to E from 380549, 814968 is steeper down into E valley. From 380576, 814968 on to clean sand with 300mm topsoil, then deepened abruptly into valley with clay/silt below 1-1.1m topsoil; charcoal 37 on this. Water ingress at E end.

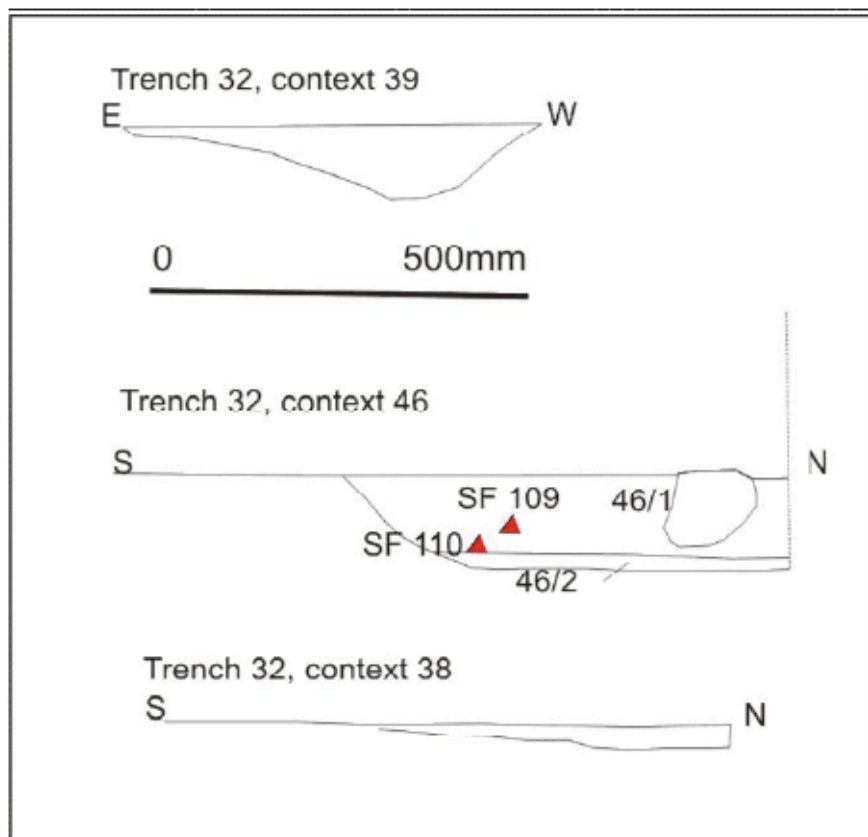
Features

Features 37, 38 and 46 are associated with Beaker pottery. They appear to be the S edge of a possible internal or external occupation layer (38) and what may be the S side of a wall line/ring ditch (46). The large area of burning (37) directly overlay 46 and may tentatively be considered as a destruction layer. The features lie below 600mm (uphill) to nearly 1m of topsoil, although the layer 37 was partly overcut at its W end. Each feature was sectioned but not fully excavated as this area requires full excavation.

No	Easting	Northing	Feature	Associated finds	Comment
37	380618	814971	Charcoal-rich layer up to 130mm thick in band up to full width of trench at W end but tapering off SE onto S section at E end. Extended c 5.2m, with further extension to W (up hill) visible in section. Some concentrations of charcoal and one area of in situ heat (red on plan). Overlay 46. Below c. 1m topsoil.	SF 107-108	Two small box sections cut. Sample (4) for C14 dating
38	380602	814971	3m x 0.42m (into N section) Grey silt layer up to 60mm deep in section.	SF 81-82, 105-6,	Sectioned only. Could be an internal or external occupation deposit.
39	380557	814968	Possible pit 750mm N/S x 1.35m E/W. burnt bone in grey sandy fill. Depth: 80mm. Below 300mm topsoil.	SF 83	Shallow on E down slope side so this could be a stone pull hole. Pottery and fragment of burnt bone may however indicate residual prehistoric activity.
46	380611	814971	Grey silty sand layer c 2.20m x 0.50m (into N section. Depth: 260mm. Section shows stones in fill. Appeared to continue below 37 at E end.	109-110	Sectioned only. Unlike 38, this appears to have been a cut feature. The section indicates a cut edge along the S side of the feature.



Illus 51 Plan of Trench 32



Illus 52 Sections of Trench 32 features



Illus 53 Trench 32 looking E (down slope) with context 38 in foreground



Illus 54 Trench 32, looking E with 46 (sectioned) in foreground and black burnt layer 37 extending down trench



Illus 55 Trench 32. Section of feature 46. Tags indicate Beaker sherds SF 109, 110.



Illus 56 Trench 32. Looking W (up slope) with black burnt layer 37 in foreground



Illus 57 Trench 32 showing W end of black burnt layer (37) overcut in section (red arrow). Note it extended to W end of feature 46. Feature 46 in foreground RHS.

Trench 33

GPS E end: 380600, 814953 W end: 380490, 814945

Orientation: E/W Length: 110m Width: 2.1m

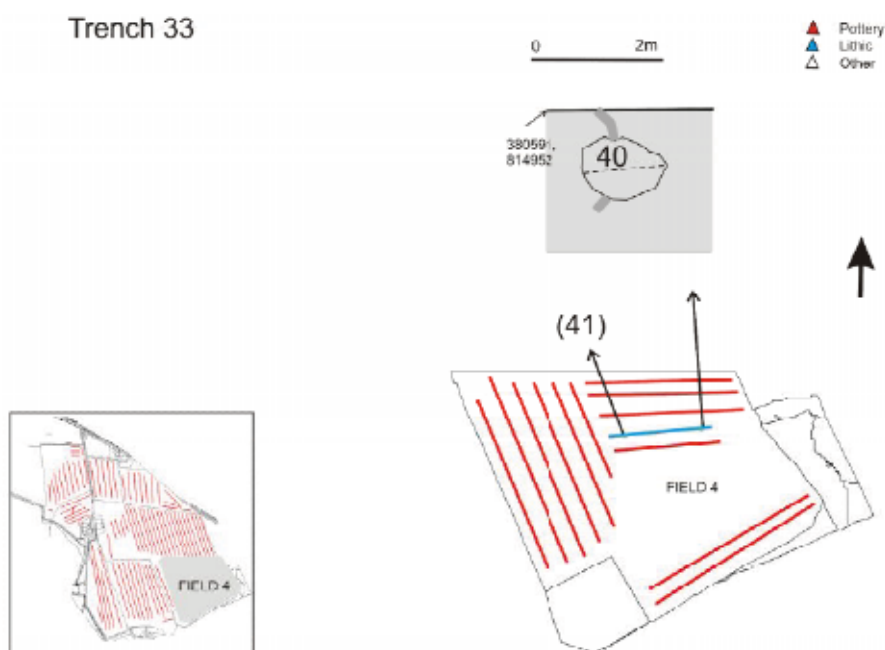
Depths above natural: 250-300mm on ridge, up to 600mm down slope

Stratigraphy: The W end of the trench was on the top of the N ridge with 250-300mm topsoil over stoney sand. The ground sloped down into the valley from 380559, 814950 with fine sand and few stones, apart from a stoney band at 380575, 814951 with up to 600mm topsoil accumulation directly down slope of it. 300mm topsoil over sand at E end.

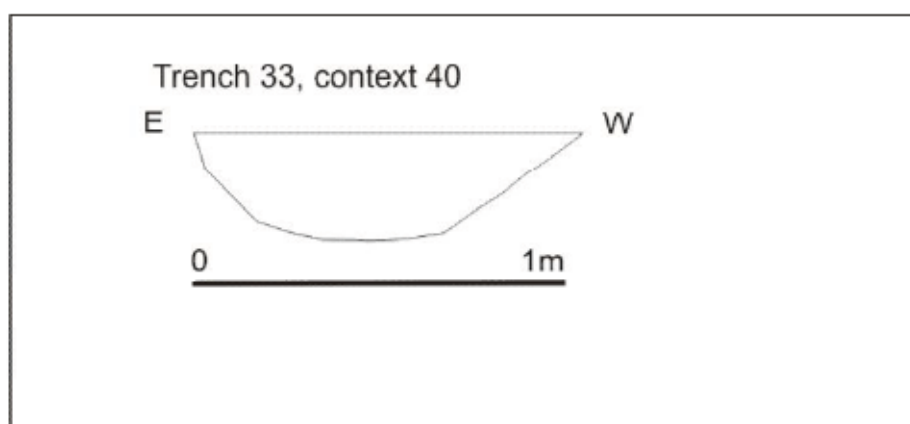
Features

A small pit (40) was clearly prehistoric and probably related to the features on the same part of the slope in Trenches 30-32.

No	Easting	Northing	Feature	Associated finds	Comment
40	380591	814952	Pit. 1.05m x 0.92m. Depth: 260mm.	SF 93	
40/1			Grey silt with occasional charcoal and rare frags burnt bone.	SF 84, 94-103	Half sectioned. No related features observed in vicinity
41	380507	814946	Hollow with charcoal and sandy loam fill. 750 x 500mm, < 150mm deep.		No finds. This was further up slope than most of the prehistoric activity and it may be unrelated.



Illus 58 Plan of Trench 33



Illus 59 Section of Trench 33, feature 40



Illus 60 Trench 33, feature 40

Trench 34

GPS E end: 380609,814938 W end: 380947, 814928

Orientation: E/W Length: 112m Width: 2.1m

Depths above natural: 300-500mm

Stratigraphy: The W end of the trench was on the N ridge with 300mm topsoil on stoney sand. At this point the N ridge was sloping S into the palaeochannel as well as E down into the E valley. From 380563, 814934 the ground sloped into the valley where

there was clean, stone free sand with 500mm of topsoil just below the break of slope and 300mm by the end of the trench.

Features None

Trench 35

GPS NE end: 380702, 814882 SW end: 380534, 814781

Orientation: NE/SW Length: 196m Width: 2.1m

Depths above natural: 200-600mm

Stratigraphy: From the SW end of the trench there was a gentle slope up to the top of the E ridge, with stoney sand/gravel and occasional boulders below 300mm of topsoil, some of the sand was pink, probably due to in situ burning. The top of the ridge was at 380566, 814800, then the ground sloped gently down to the N (and down to the W into the valley. There was a very rocky E/W band at 380662, 814857, then the ground dipped into an E/W gully which extended into the valley, with a maximum of 600mm topsoil over stoney sand, before the ground then rose to the NW end of the trench, with 300mm of topsoil over sand.

Features None

Trench 36

GPS NE end: 380709, 814871 SW end: 380542, 814767

Orientation: NE/SW Length: 197 m Width: 2.1m

Depths above natural: 300-800mm

Stratigraphy: The SW end of the trench was on the crest of the ridge at 380575, 814787 with 250-300mm of topsoil over stoney sand. This dipped between 380621, 814814 and 380611, 814809 where there was an extensive area of grey-stained sand around context 42, below 800mm topsoil. There were boulders at 380664, 814842, with rock outcrop at 380648, 814831. The NE end of the trench was stoney sand.

Features

Context 42 included a group of features that are clearly associated with a process requiring sufficient heat to have fused soil and burnt fuel to a hard brittle debris- often in lumps (Sample 12b), but also, in patches below stones, almost flattened to a crust (Sample 12c). Most of this debris was in the backfill of a large shallow pit- possibly a working area? Unstructured stones also formed part of the backfill, possibly derived

from some form of structure such as a shelter around a hearth- although none showed signs of heat cracking.

An area of heat-coloured sand surrounded by charcoal lay to the NW and was clearly the base of a hearth of some heat intensity (or repetition). None of the fused fuel debris was found in the charcoal or on the coloured sand.

A tentative interpretation is that this was an industrial hearth with a stone kerb, lying just NW of a slightly sunken-floored working area/pit. After it went out of use the stones of the hearth and associated debris were thrown into the pit.

Two possible post pits, another pit and a hollow scoop appeared related.

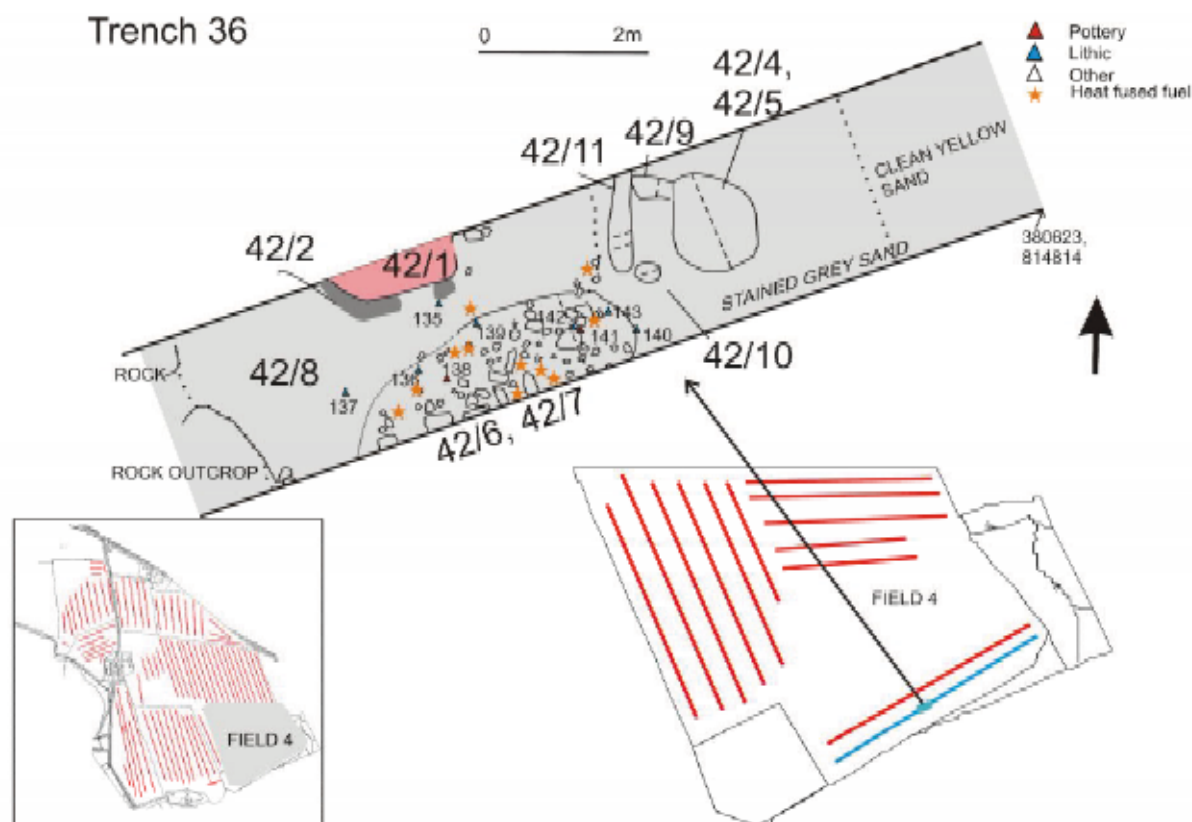
The nature of the industrial process is not yet identified but two sherds (85) were tentatively identified by Dr Spearman as part of a small clay 'tray' of a type used in small scale metalworking. Three other fired clay pieces (91, 92, 141) may be from tuyere or similar. They do not have any visible metal residues to suggest that they were crucible fragments. One sherd (138) appears more likely to have been pottery.

A number of flints were also found; these require specialist examination but do not appear to be finely worked and are unlike flints from other contexts on the site.

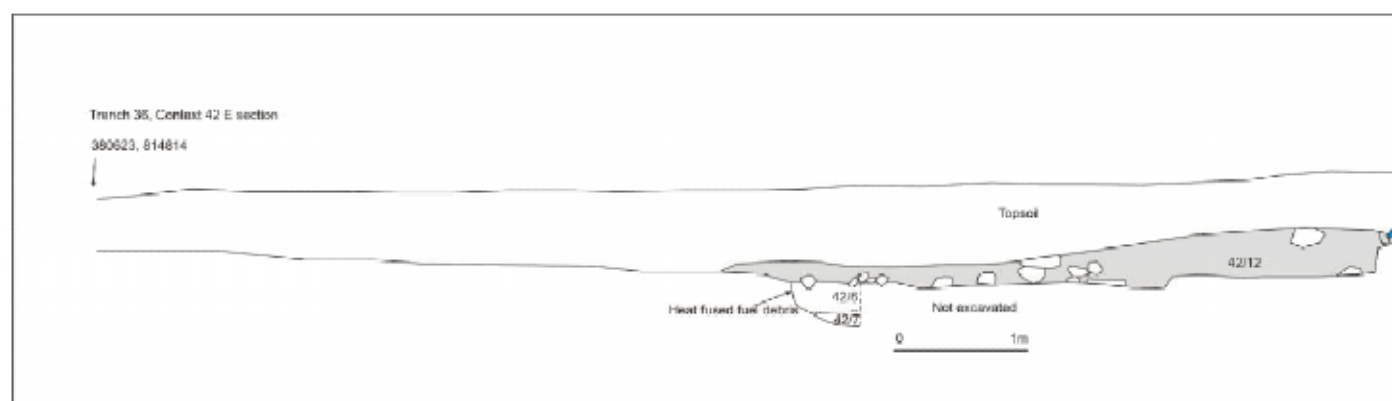
At present none of the artefacts give a clear indication of date; however there is nothing to suggest this is medieval-modern. A charcoal sample (Sample 5) from around the hearth will be C14 dated.

No	Easting	Northing	Feature	Associated finds	Comment
42	380615	814813	Metal working?	Finds from initial cleaning SF 85-92 (not on plan). Most from top of 42/6.	Dr Mike Spearman examined some of the debris associated with these features. (Samples 12 a-c). He could not identify any hammer scale or other evidence of iron working. Only 1 lump (Sample 12a) showed Fe with magnet. There was no visible evidence of bronze or copper. XRF analysis is suggested.
42/1			Heat affected (red) sand. 1.35m x 0.60m (into section). Depth of heat colouration: 50mm, thinning out to E edge so it would appear centre of fire to NW beyond section		Hearth
42/2			Charcoal. Band of charcoal <180mm across and 20mm deep in arc around edge of heat-coloured sand 42/1. In NW section of trench, 42/2 extended over 42/1 with 42/3 between.	SF 135 at edge of 42/2	Fuel debris around hearth. Sample (5) for C14 dating

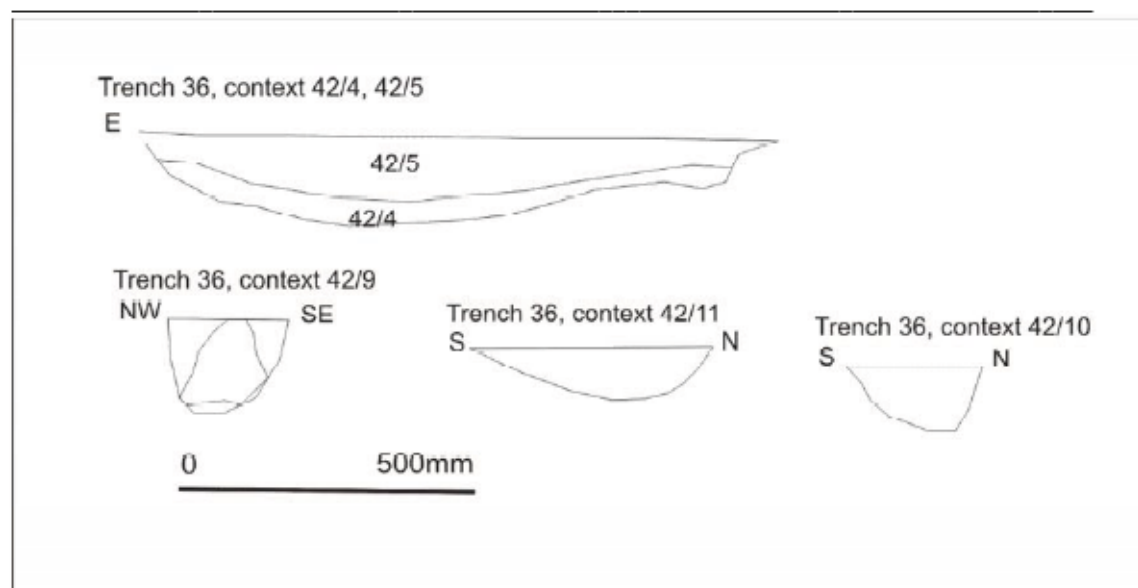
42/3	In NW section of trench. Pink/grey sandy interface between 42/1 and 42/2		
42/4	Pit 1.10m x 1.07m. Depth 150mm. No sign of in situ heating. Lower fill of pit. Mid brown/grey sandy with some (unburnt) stones. A few fragments of fused fuel debris in 42/4 and at base and sides		
42/5	Upper fill of pit. Dark brown slightly humic gritty. 2 pieces of fused fuel debris on surface, none in fill		
42/6	Pit 3.4m N/S x 1.2m (extended into SE section). Depth 400mm to top of stones where sectioned. 42/6. No sign of in situ heat. Upper fill of grey gritty sand with abundant random stones. All finds on surface of layer.	SF 136, 138-143	c. 700mm of N end of feature excavated. Not further excavated until it can be dated and function defined. Stones appear to have been a deliberate backfilling, not structural in present position.
42/7	Lower fill of pit 42/6//42/7. Similar grey gritty sand but without stones. Patches of fused fuel debris apparently flattened below stones and numerous chunks of debris at edges and base.		
42/8	Dirty top of natural sand with occasional bits of fused fuel debris.		Appeared to be spread from pit 42/6//42/7
42/9	Cut. 430 x 220mm. Depth: 150mm Fill dark grey gritty sand with stone. Appeared cut by 42/11. Relationship to pit 42/4//42/5 unclear.		Charcoal 42/2 is over this Possible post-pit
42/10	Cut. 250 x 200mm. Depth: 120mm. Fill as 42/9. Appeared cut by 42/11		Possible post pit
42/11	Linear shallow scoop/hollow with irregular sides. 1.25m x 400mm. Depth: 80mm. Cut into grey stained natural sand.		Possibly a wear-hollow
42/12	Grey gritty sand. Same as 42/6 but without the stones. In SE section extended over pit 42/6//42/7 and S to rock outcrop. Did not appear in NW section or over hearth 42/1	SF 137, 144	



Illus 61 Plan of Trench 36



Illus 62 SE section of Trench 36, beside context 42



Illus 63 Sections of Trench 36 features



Illus 64 View of Trench 36, context 42 looking NE. Rock outcrop in foreground. Hearth to LHS of trench (pink). Pit/working pit to LHS.



Illus 65 NE end of pit 42/6//42/7 with part of unexcavated S end of pit showing stones



Illus 66 Pit 42/4//42/5 in foreground in relation to pit 42/6//42/7 in background RHS and hearth 42/1 (red arrow)

Field 5

Field 5, which was in grass at the time of the evaluation, extended between the ridge that bordered the N side of Fields 2-4 and another lower ridge that extended along the boundary between Fields 5 and 8. Some rock outcropping was evident on the W ends of both ridges (Illus 6). Although there were views along the gully between the ridges W towards Midmill, the greater emphasis was on the wide views across the Don valley to the N and NE.

Two small undated features in the SE corner of the field, in Trenches 40 (context 56) and 44 (context 61) may have been prehistoric and may relate to the Bronze Age activity in the NE part of Field 4, otherwise the only proven evidence of prehistoric activity were two isolated finds on natural (SF 115 prehistoric pottery, SF 104 Flint).

A series of features associated with large areas of burning in the middle of the N end of the field (Trenches 46-53) can not yet be dated and the only associated artefact was a flint flake from a small burnt patch in Trench 48 (context 72).

An E/W dyke line that is shown on the 1865 OS map had been recently dug out and could be seen in Trenches 47-58.

Trench 37

GPS N end: 380543, 815201 S end: 380606, 815025

Orientation: N/S Length: 187m Width: 2.1m

Depths above natural: 300-400mm generally, up to 1m in dip

Stratigraphy: The natural at the S end of the trench was stoney sand with some boulders to the surface, generally covered by 250-300mm topsoil. From 380593, 815060 there was fine sand natural with plough marks. A slight dip ran E/W between 380569, 815123 and 380562, 815144 with up to 800mm of topsoil. N of the dip the ground levelled slightly with c 500mm topsoil over sand. It then sloped down into another dip at 380549, 815183 where there was up to 1m of soil above natural; comprising c800mm of topsoil

over c200mm dark brown/grey humic silt with some charcoal (43). At the N end of the trench the ground rose with 400mm of topsoil over sand.

Features

No	Easting	Northing	Feature	Associated finds	Comment
43	380549	815182	Patch of dark brown/grey humic silt with occasional charcoal. Max depth 200mm. <6m N/S. E/W 1.5m extended to W section but did not extend to E section	No associated finds.	Section not drawn
44	380570	815117	Drain/fence line		

Trench 38

GPS N end: 380523, 815205 S end: 380587, 815021

Orientation: N/S Length: 194m Width: 2.1m

Depths above natural: Generally 250-400mm topsoil, up to 850mm in dip

Stratigraphy: The S end of the trench had stoney sand natural with boulders below 250-300mm of topsoil. This changed abruptly to sand at 380571, 815062, with topsoil <400mm. There was a slight dip at 380545, 815134 with up to 600mm topsoil over traces of dark grey subsoil. A modern drain ran NE/SW across the trench for c 20m N of the dip. A further dip started N of 380534, 815168 and had up to 850mm of topsoil over the sand. The ground rose at the N end of the trench with 300mm topsoil over sand.

Features

No	Easting	Northing	Feature	Associated finds	Comment
45	380554	815115	Drain/fence line		

Trench 39

GPS N end: 380504, 815209 S end: 380573, 815022

Orientation: N/S Length: 199m Width: 2.1m

Depths above natural: 250-400mm

Stratigraphy: At the S end of the trench there was 250-300mm of topsoil over stoney sand to 380557, 815006 where the natural became clean fine sand with 300-400mm of topsoil. There was a stoney band from 380525, 815153 to 380518, 815173 with 400mm of topsoil. The N end was sandy with pebbles.

Features None

Trench 40

GPS N end: 380484, 815213 S end: 380550, 815023

Orientation: N/S Length: 201 m Width: 2.1m

Depths above natural: 300-400, but up to 800mm in dips

Stratigraphy: At the S end of the trench there was 300-400mm topsoil over level stoney sand natural, apart from a dip to 600mm at 380510, 815135. A further dip at the N end had up to 800mm topsoil over natural.

Features

No	Easting	Northing	Feature	Associated finds	Comment
57	380531	815076	Burnt patch. Diam 1.25m. Sectioned. Wood charcoal in shallow hollow in sand <100mm deep.	No associated finds	Not drawn.
58	380520	815108	Drain/fence line		

Trench 41

GPS N end: 380464, 814214 S end: 380531, 815022

Orientation: N/S Length: 203m Width: 2.1m

Depths above natural: Generally 300mm, up to 800mm in dips

Stratigraphy: There was sandy natural at the S end of the trench with 250-300mm of topsoil, becoming stonier to 380515, 815068. The ground dipped gently to 700mm at 380494, 815128. There was another dip to the N between 380477, 815180 and 380472, 815193 with up to 800mm topsoil over sand. At the N end there was 300mm of topsoil over sand.

Features

No	Easting	Northing	Feature	Associated finds	Comment
59	380503	815106	Drain/fence line		

Trench 42

GPS N end: 380446, 815216 S end: 380512, 815022

Orientation: N/S Length: 205m Width: 2.1m

Depths above natural: Generally 250-300mm, up to 800mm in dips.

Stratigraphy: At the S end of the trench there was a slight dip with 600mm of topsoil over sand, then the ground rose to the N with stoney sand and only 250-300mm of topsoil. It dipped at the N end from 380450, 815204 to the end of the trench with natural sand below 800mm topsoil.

Features None

Trench 43

GPS N end: 380428, 815220 S end: 380494, 815024

Orientation: N/S Length: 207m Width: 2.1m

Depths above natural: 250-300, up to 800mm in dips

Stratigraphy: The natural at the S end of the trench was sandy with frequent stones and 250-300mm of topsoil. SF 115 (sherd prehistoric pottery) on natural. The ground dipped to sand below c 800mm of topsoil at 380448, 815157, then levelled with sand below 300-400mm topsoil, before dipping again from 380433, 815202 to the N end.

Features

No	Easting	Northing	Feature	Associated finds	Comment
60	380470	815092	Drain/fence line		

Trench 44

GPS N end: 380409, 815222 S end: 380477, 815027

Orientation: N/S Length: 206m Width: 2.1m

Depths above natural: 300mm, 700mm in dip

Stratigraphy: At the S end of the trench there was stoney natural to 380445, 815122, with a rocky ridge between 380418, 815196, dipping away to 380415, 815205 where there was 700mm topsoil at the base of the slope. At the N end of the trench there was level sand with 300mm topsoil.

Features

No	Easting	Northing	Feature	Associated finds	Comment
61	380474	815034	Small cut, diam 300mm, with wood charcoal fill to 60mm. Below 600mm topsoil		No finds but depth suggests possibly prehistoric

Trench 45

GPS N end: 380390, 815224 S end: 380455, 815029

Orientation: N/S Length: 205m Width: 2.1m

Depths above natural: 300-600mm, up to 800mm in dip

Stratigraphy: The S end of the trench was on the ridge, then the ground sloped gently to the N with 400-600mm of topsoil on to stoney sand; this deepened at the base of the slope. The natural was stoney from 380425, 815115 with 300-350mm of topsoil. There was a stoney ridge from 380409, 815162 to 380400, 815191, with deeper topsoil to 600mm at the base of the slope to N. At the N end of the trench there was 350mm topsoil over sand.

Features None

Trench 46

GPS N end: 380368, 815228 S end: 380436, 815028

Orientation: N/S Length: 212 m Width: 2.1m

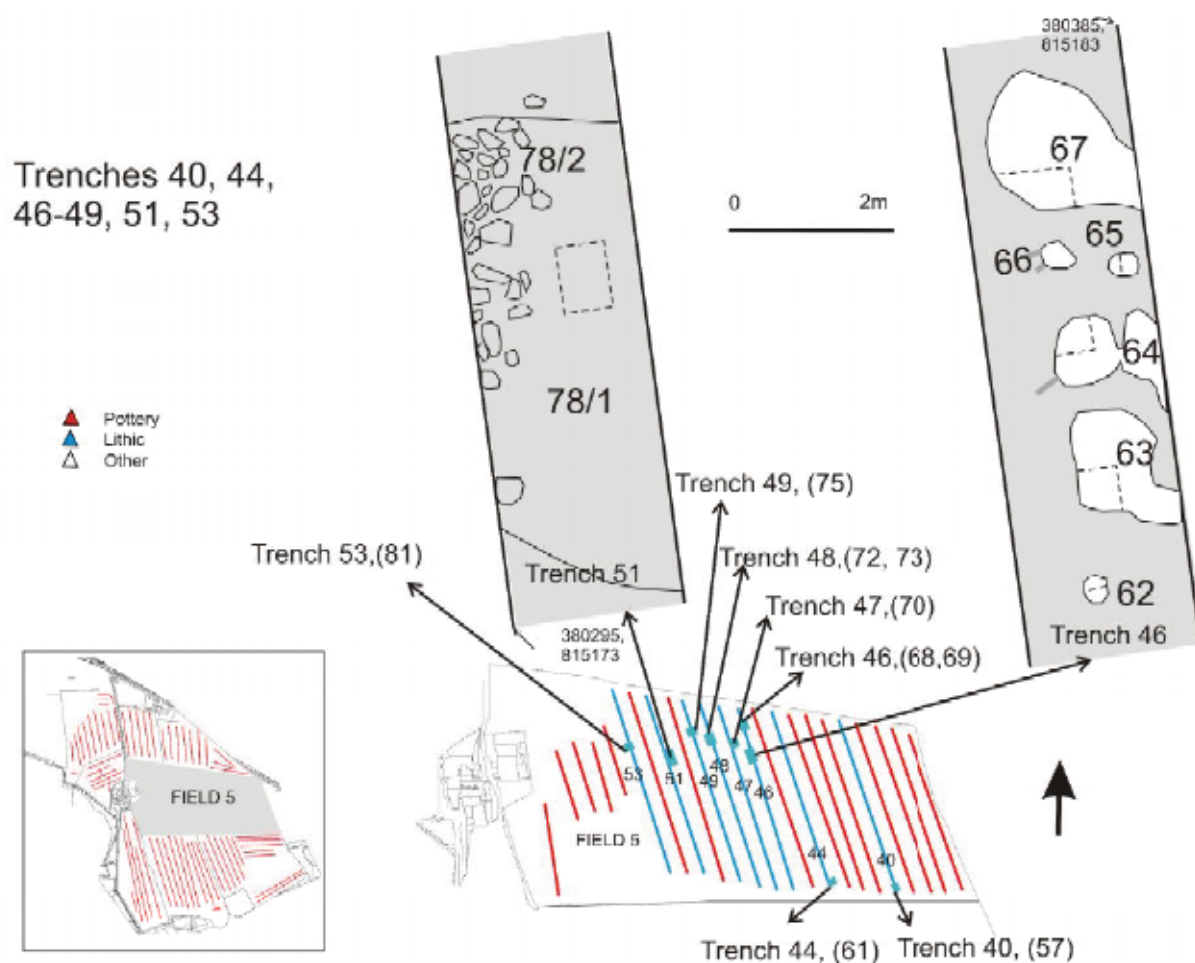
Depths above natural: 300-400mm, 600 in dip

Stratigraphy: The S end of the trench was on a slight ridge (this was the N end of the N ridge in Fields 2-4) with 300mm of topsoil over stoney sand, dipping to the N with 600mm of topsoil at the base of the slope at 380433, 815038. Then the ground was fairly level and full of boulders until 380411, 815100 where the natural was sandier and dipped with up to 600mm topsoil at the base of the slope, rising again to 300-400mm from 380400, 815134 with boulders. This then levelled to the N end with up to 400mm of topsoil. A series of charcoal-filled features (contexts 62-69) were on the top of and in hollows in the sand around 380385, 815177 and further N.

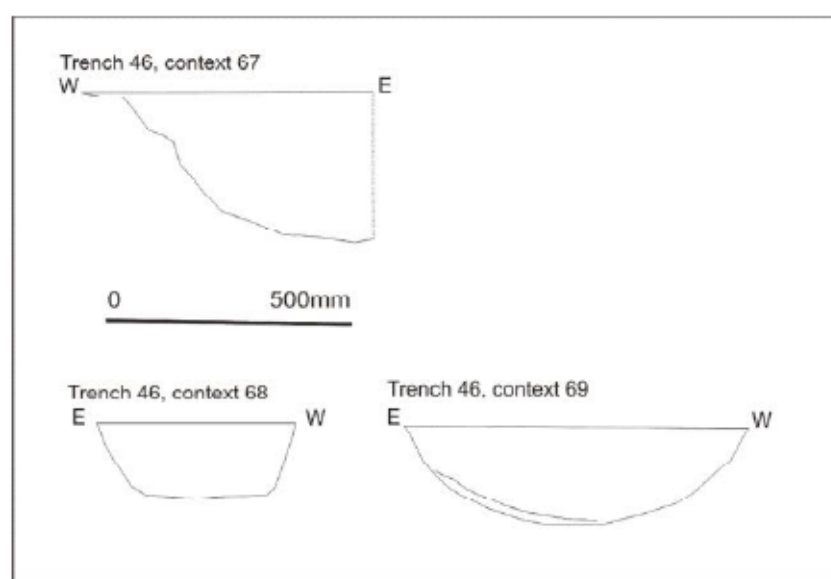
Features

A group of features with generally charcoal-rich fills extended some 6m along the trench. In some trenches this appeared to be related to iron working. There was no evidence of date but samples were taken for C14 dating.

No	Easting	Northing	Feature	Associated finds	Comment
62	380386	815176	300 x 250mm. Depth: 30mm. Fill black charcoal-rich sand. Burrow in base		
63	380386	815178	1.3 x 1.1m. Depth: 140mm. Ash and charcoal, including lumps, in grey sandy silt		63 & 64 probably same feature-patchy between.
64	380385	815179	1.25m x 0.70m. Depth: 140mm. Fill: as 63		
65	380386	815180	300 x 250mm. Depth: 80mm. Fill: Grey silty		Possibly a stone hole
66	380385	815180	400 x 350mm. Not sectioned. Burrows to W. Fill: As 66.		
67	380384	815181	Pit 1.8 x 1.7m. Depth: 290mm. Fill: grey silt with charcoal. Animal burrows.		Cut feature
68	380376	815206	Small pit/cut 580 x 400mm, depth: 30mm. Fill dark brown/black silty with much small charcoal.		Steep-sided. Looked like a cut feature
69	380376	815208	Pit. 1m x 650mm. Depth: 200mm. Fill dark brown/grey silty loam with much charcoal. At base charcoal thicker but same layer		Sample (6) for C14 dating



Illus 67 Plan of Field 5



Illus 68 Sections of Trench 46 features



Illus 69 Trench 46 looking SE. Context 67 in LHS

Trench 47

GPS N end: 380352, 815229 S end: 380416, 815026

Orientation: N/S Length: 212 m Width: 2.1m

Depths above natural: 350-400, up to 900mmm in dip

Stratigraphy: The S end of the trench was on the ridge with stoney sand natural and 300mm of topsoil, the ground sloped down to 380413, 815037 with up to 900mm at the base of the slope. Then it was fairly level with sand and boulders and 350-400mm of topsoil, then gently sloped to the S with 600mm of topsoil at 380379, 815144 (probably greater depth as this was beside a former dyke line (71). S of this former boundary the ground rose, being very full of boulders with 400-500mm topsoil. It dipped again N of this to 800mm at 380353, 815221, before rising with 400mm of topsoil over natural at the end of the trench.

Features

No	Easting	Northing	Feature	Associated finds	Comment
70	380365	815188	Small patches of charcoal between rocks and residual in animal burrows.		
71	380376	815153	Modern machine trench E/W c. 3m wide.		Buried dyke (on 1865 OS map)

Trench 48

GPS N end: 380330, 815231 S end: 380397, 815026

Orientation: N/S Length: 216m Width: 2.1m

Depths above natural: 300-500mm, up to 1.10m in dip

Stratigraphy: Natural at the S end of the trench was rocky with 300mm of topsoil, then it dipped sharply to 700mm at 380391, 815042. Then it was fairly level sand with boulders and 400-500mm of topsoil. This became deeper to 700mm beside the former dyke (74). The ground then dipped to 1.10m maximum between 380350, 815166 and 380348, 815176, then rising with fairly level stoney, rocky natural and 400mm of topsoil. Sand from 380339, 815203 to end of trench

Features

No	Easting	Northing	Feature	Associated finds	Comment
72	380341	815198	Burnt patch (sand heat coloured)		SF 116 flint and burnt bone
73	380344	815191	Burnt patch (sand heat coloured)		
74	380356	815151	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 49

GPS N end: 380310, 815236 S end: 380377, 815027

Orientation: N/S Length: 219m Width: 2.1m

Depths above natural:

Stratigraphy: The S end of the trench was on the stoney ridge with 300mm of topsoil, deepening to 700mm at the base of the slope at 380373, 815039. Then fairly level with a gentle slope to the N and 400-500mm of topsoil over sand and boulders, which deepened slightly to 600mm at 380349, 815113.

Features

No	Easting	Northing	Feature	Associated finds	Comment
75	380322	815199	Burnt patch (sand heat coloured)		Only 350mm topsoil
76	380338	815150	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 50

GPS N end: 380292, 815238 S end: 380356, 815034

Orientation: N/S Length: 213m Width: 2.1m

Depths above natural: 350-400mm, up to 900mm in dip

Stratigraphy: At the S end of the trench there was 400mm of topsoil over stoney sand, deepening to 900mm at the base of the slope at 380352, 815043. It then levelled and became shallower as the ground dipped gently to the N. Topsoil was generally 350-500mm over sand and boulders, deepening to 600mm in the central dip at 380326, 815126.

Features

No	Easting	Northing	Feature	Associated finds	Comment
77	380319	815150	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 51

GPS N end: 380275, 815240 S end: 380338, 815033

Orientation: N/S Length 215: m Width: 2.1m

Depths above natural: 350-450, 700 -800 in dips

Stratigraphy: At the S end of the trench there was sandy natural with boulders at the edge of the ridge. The topsoil deepened to 800mm at the base of the slope at 380334, 815043. It then levelled out with topsoil of 350-400 apart from the central dip around 380301, 815154 with topsoil to 700mm. Natural at the N end was fairly level sand with 350-450mm topsoil. Some boulders to surface.

Features

No	Easting	Northing	Feature	Associated finds	Comment
78	360294	815176	Iron working debris in ash filled shallow cut or hollow. Stones along N and W sides.		Note: On photographs this is named as Trench 50 in error. Below 300-400mm topsoil.
78/1			Grey silt. 100mm deep in box section. Extended 5.5m along trench and full width of trench.		
78/2			Stone spread on 78/1		
78/3			Charcoal. Below 78/1. 40mm deep in box section. On natural.		
79	380301	815150	Modern machine trench E/W c. 3m wide		Sample (7) for C14 dating Sample (10). Furnace base. Fe. Buried dyke (on 1865 OS map)



Illus 70 Trench 51, context 78, looking S [Note this is wrongly marked as Trench 50]

Trench 52

GPS N end: 380250, 815243 S end: 380316, 815045

Orientation: N/S Length: 209m Width: 2.1m

Depths above natural: 300-500, up to 700 in dip

Stratigraphy: The S end of the trench was at the base of the slope down from the ridge with 600mm of topsoil over sand and boulders. Then, the ground was fairly level with 300mm topsoil over natural up to the central dip at 380284, 815139 with 700mm topsoil over sand. At the N end of the trench there was generally 350-500mm topsoil

Features

No	Easting	Northing	Feature	Associated finds	Comment
80	380280	815815149	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 53

GPS N end: 380231, 815247 S end: 380296, 815044

Orientation: N/S Length: 213m Width: 2.1m

Depths above natural: 300-600, with up to 800mm in dips

Stratigraphy: The S end of the trench was directly down slope from the rock outcrop on the ridge and had topsoil depth of 800mm. The ground then levelled out with 300-

500mm of topsoil over sand and boulders. It was very rocky at 380273, 815112 in line with the outcrop to the W. The central dip at 380265, 815137 had topsoil to 700mm depth. There was up to 800mm of topsoil at 380253, 815173. Natural was stoney from that point to 380241, 815241 – in line with the outcrop to the W. Burnt patch (81) lay on these stones. The N end of the trench had 400-600mm of topsoil over stoney sand.

Features

No	Easting	Northing	Feature	Associated finds	Comment
81	380250	815185	Burnt patch c 1m across with 1 piece of slag. Below 300mm topsoil.		Sample (8): Furnace base. Fe
82	380261	815150	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 54

GPS N end: 380213, 815249 S end: 380276, 815044

Orientation: N/S Length: 215m Width: 2.1m

Depths above natural: 300-500mm with 700mm in dips

Stratigraphy: At the S end of the trench there were rocks just below the outcrop with 400mm topsoil, this deepened to 700mm at the base of the slope. There were rocks from 380270, 815060 to 380255, 815113 with 300-400mm of topsoil, some rocks to surface. Then the ground was fairly level with 300-400mm of topsoil over stoney sand. There was a gentle slope to the central dip with 700mm of topsoil at 380236, 815173. The ground then levelled to the N end with 300-500mm topsoil over stoney sand.

Features

No	Easting	Northing	Feature	Associated finds	Comment
83	380244	815148	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 55

GPS N end: 380202, 815211 S end: 380229, 815130

Orientation: N/S Length: 84 m Width: 2.1m

Depths above natural: 300-400mm, 600mm in dip

Stratigraphy: The trench ran between two rock outcrops. There was 300-400mm of topsoil over stoney sand. The ground was fairly level except for the central dip with up to 600mm at 380213, 815175.

Features

No	Easting	Northing	Feature	Associated finds	Comment
84	380223	815149	Modern machine trench E/W c.		Buried dyke (on 1865 OS map)

3m wide

Trench 56

GPS N end: 380189, 815191 S end: 380213, 815114

Orientation: N/S Length: 80m Width: 2.1m

Depths above natural: 300-400, 500 in dip.

Stratigraphy: The trench ran between two rock outcrops. The ground was generally level with 300-400 of topsoil over stoney natural. It dipped to 500mm at 380197, 815163, then rose slightly to the N.

Features

No	Easting	Northing	Feature	Associated finds	Comment
85	380203	815147	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 57

GPS N end: 380169, 815190 S end: 380194, 815112

Orientation: N/S Length: 82m Width: 2.1m

Depths above natural:

Stratigraphy: The trench ran between two rock outcrops. The ground was generally level with 300-400 of topsoil over stoney natural. There was up to 600mm of topsoil S of the old dyke line. The ground to the N rose to the outcrop with a dip to 600mm at 380176, 815163.

Features

No	Easting	Northing	Feature	Associated finds	Comment
86	380182	815146	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 58

GPS N end: 380151, 815182 S end: 380175, 815103

Orientation: N/S Length: 83m Width: 2.1m

Depths above natural: 300mm, 600mm at base of slope

Stratigraphy: There was generally 300-500mm of topsoil over stoney sand. The ground sloped down to W (towards Tuach Burn). N of the old dyke line at 380162, 815145, the

ground rose gradually to the N end towards rock outcrop. The natural was stonier at the N end of the trench, with up to 600mm of topsoil at the base of the slope up to the rock outcrop.

Features

No	Easting	Northing	Feature	Associated finds	Comment
87	380162	815145	Modern machine trench E/W c. 3m wide		Buried dyke (on 1865 OS map)

Trench 59

Trench sloped down W to the Tuach Burn. The position of the mill pond shown on the 1st OS map of 1865 lay to the W of the N end of the trench; it was visible as a slight depression.

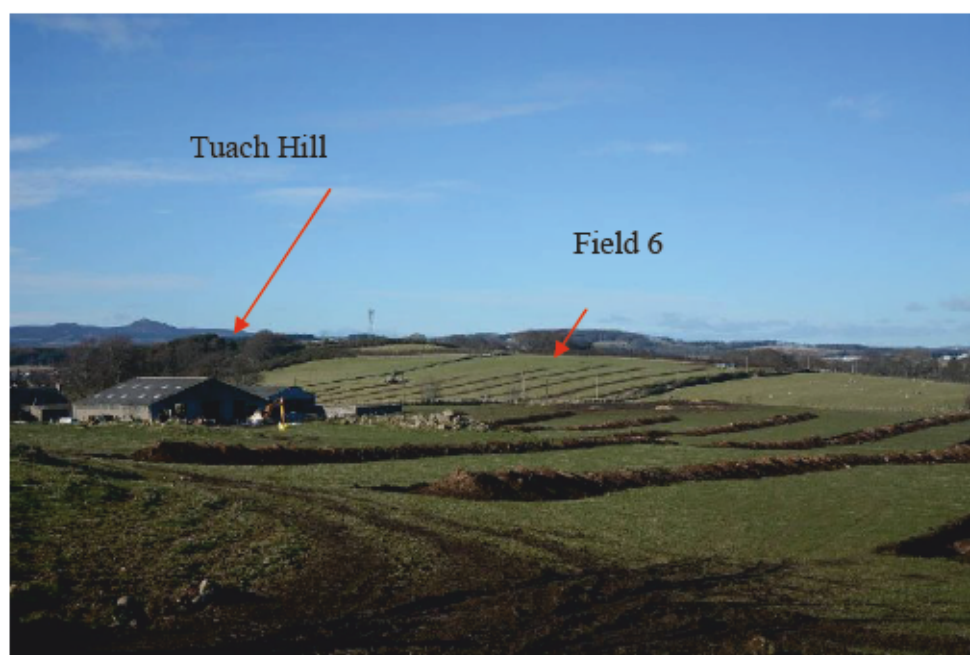
GPS N end: 380137, 815121 S end: 380153, 815020

Orientation: N/S Length: 103m Width: 2.1m

Depths above natural: 300mm, 600mm in dip.

Stratigraphy: The S end of the trench was sandy with 300mm topsoil. The ground deepened to 550-600mm in the central dip between 380146, 815160 and 380142, 815087. Natural at the N end of the trench was stoney sand with 300mm topsoil.

Features None



Illus 71 View looking NW from Field 5 to Field 6

Field 6

Field 6, which was in grass, slopes up to the N to a ridge which extends E from Tuach Hill. The SW corner of the field slopes down to the Tuach Burn and was partly waterlogged at the time of the evaluation (Illus 6).

There was no evidence of prehistoric activity in the trenches in Field 6.

Trench 60

Trench 60 lies N of ridge and sloped down to N towards Don.

GPS N end: 380019, 815507 S end: 380027, 815475.

Orientation: N/S Length: 33m Width: 2.1m

Depths above natural: 300-700mm.

Stratigraphy: The N end of the trench lay down the slope from the ridge with 700mm of topsoil over stoney sand. The S end of the trench was on top of the ridge with just 300mm topsoil.

Features None

Trench 61

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 380030, 815458 S end: 380048, 815339

Orientation: N/S Length: 120m Width: 2.1m

Depths above natural: 300-450mm. Up to 1.10m in dip.

Stratigraphy: At the N end of the trench there was 450mm topsoil over stoney sand with boulders. The topsoil was generally 300mm on the ridge. The natural began to slope down from 380040, 815394 with many larger boulders to 380044, 815367, where it became stoney sand with 300mm topsoil. The ground fell away steeply from 380047, 815350 to 1.10m depth- possibly some fill-in as large boulders in topsoil.

Features

No	Easting	Northing	Feature	Associated finds	Comment
88	380034	815429	Modern cut		Possibly water
89	380030	815455	Electric cable from pump		Below 450mm topsoil

Trench 62

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 380006, 815452 S end: 380033, 815324

Orientation: N/S Length: 130m Width: 2.1m

Depths above natural: 300-500, 850 in dip.

Stratigraphy: There was generally 300-500mm of topsoil over stoney sand, the ground being fairly level at the N end, then steadily sloping to the S. There were boulders from 380020, 815386 to 380024, 815371, some to the surface. The ground sloped more steeply from 380028, 815351 to 850mm at 380030, 815338, then it levelled to 700mm at the S end.

Features

No	Easting	Northing	Feature	Associated finds	Comment
90	380012	815424	Electric cable from pump		Below 500mm topsoil

Trench 63

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379984, 815441 S end: 380010, 815311

Orientation: N/S Length: 133m Width: 2.1m

Depths above natural: 300-450mm, 700mm in dip.

Stratigraphy: The N end of the trench was on ridge and gently sloped to the S with 300mm of topsoil over stoney sand. There were boulders to near the surface from 379988, 815418 to 379991, 815403. There was another stoney band from 379998, 815374 to 380005, 815335, at which point the ground sloped steeply to 700mm, before levelling to 450mm at the S end.

Features

No	Easting	Northing	Feature	Associated finds	Comment
91	379994	815388	Electric cable from pump		

Trench 64

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379959, 815448 S end: 379987, 815303

Orientation: N/S Length: 147m Width: 2.1m

Depths above natural: 300mm, 600mm in dip.

Stratigraphy: At the N end of the trench there was 300mm of topsoil over stoney sand with boulders, sloping down to the S. There was a rocky area from 379973, 815378 to the end of the trench, many of the boulders being just below the surface. The ground dipped to 600mm at 379982, 815324 at the base of the slope, then levelled to the S end.

Features

No	Easting	Northing	Feature	Associated finds	Comment
92	379977	815353	Electric cable from pump		

Trench 65

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379938, 815434 S end: 379965, 815295

Orientation: N/S Length: 142 m Width: 2.1m

Depths above natural: 500-700mm

Stratigraphy: At the N end of the trench there was 500mm of topsoil over stoney sand with boulders. The natural deepened to sand below 600mm of topsoil by 379948, 815378. It was rocky from 379955, 815347 to 379960, 815318 where the natural deepened to below 700mm of topsoil at the base of the slope.

Features

No	Easting	Northing	Feature	Associated finds	Comment
93	379959	815321	Electric cable from pump		

Trench 66

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379918, 815410 S end: 379947, 815278

Orientation: N/S Length: 135m Width: 2.1m

Depths above natural: 350-500mm, up to 700mm in dip.

Stratigraphy: At the N end of the trench there was 350-500mm of topsoil over sand with boulders- some to near the surface. There was a gentle slope to the S. The natural was less stoney and deeper with 600-700mm of topsoil over sand from 379922, 815390 to 379928, 815362; this is slippage at the base of a slight slope. The natural was stoney from this point to 379940, 815309 where it levelled out and was sandier with up to 600mm of topsoil.

Features

No	Easting	Northing	Feature	Associated finds	Comment
94	379944	815290	Electric cable from pump		

Trench 67

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379899, 815393 S end: 379923, 815275

Orientation: N/S Length: 120m Width: 2.1m

Depths above natural: 300-500mm.

Stratigraphy: At the N end of the trench there was 500mm of topsoil over sand (this is the slope down from the Tuach Hill ridge). The ground gently sloped S. From 379905, 815363 to the S end of the trench the natural was full of boulders, some to near the surface, with 300-500mm of topsoil.

Features None

Trench 68

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379887, 815369 S end: 379912, 815253

Orientation: N/S Length: 119m Width: 2.1m

Depths above natural: 300-500mm, 700mm in dip.

Stratigraphy: From the N end of the trench there was a gradual slope to 379905, 815284 with 300-500mm topsoil over boulders in gravelly sand. From this point the ground went down to the S and W into the flood plain of Tuach Burn with up to 700mm of topsoil over coarse sand. From 379909, 815267 the topsoil lay over very fine clay/silt above sand.

Features None

Trench 69

This was the only trench in flood plain as waterlogged.

GPS NW end: 379872, 815230 SE end: 379897, 815225

Orientation: NW/SE Length: 25m Width: 2.1m

Depths above natural:

Stratigraphy: There was 450mm of sandy, silt topsoil at the NW end of the trench, which deepened to 800mm of topsoil over silt/clay above sand at the SE end.

Features None

Trench 70

Trenches 61-68, 70 all extended down the S slope from the Tuach Hill ridge.

GPS N end: 379877, 815340 S end: 379883, 815269

Orientation: N/S Length: 71m Width: 2.1m

Depths above natural: 300-500mm, up to 900mm in dip.

Stratigraphy: The N end of the trench was on the S slope down from the Tuach Hill ridge with 500mm of topsoil over stoney sand and boulders, which deepened to 700mm of topsoil down the slope. There was cleaner sand from 379878, 815329. The slope flattened with 300mm of topsoil over coarse sand from 379880, 815299 to 379883, 815215. From that point to the end of the trench there was up to 900mm of topsoil and silt. Water ingress.

Features

No	Easting	Northing	Feature	Associated finds	Comment
95	379878	815313	Charcoal patch on sand below 550mm topsoil. N/S 1.10m x 400mm+ (into W section) Depth into natural: 150mm. Fill black humic sand with frequent charcoal.	No associated finds	

Trench 71

GPS E end: 380014, 815509 W end: 379972, 815809

Orientation: E/W Length: 43m Width: 2.1m

Depths above natural: 550-600mm

Stratigraphy: The E end of the trench had 600mm of topsoil over stoney sand with some boulders. The ground rose to the W end (on the Tuach Hill ridge), with 550mm of topsoil. Soils here were deeper than in Trench 72 because the ground in Trench 71 was also beginning to slope off the ridge to the N, towards the Don valley.

Features None

Trench 72

GPS E end: 380015, 815489 W end: 379972, 815489

Orientation: E/W Length: 43m Width: 2.1m

Depths above natural: 250-300mm

Stratigraphy: The ground rose from E to W, with 250-300mm of topsoil over stoney sand.

Features None

Trench 73

GPS E end: 380013, 815473 W end: 379976, 815475

Orientation: E/W Length: 37m Width: 2.1m

Depths above natural: 300mm

Stratigraphy: The ground rose to the W with 300mm of topsoil over stoney sand.

Features None

Field 7

The field was in grass at the time of evaluation. It slopes down from the N end, which is a continuation of the ridge from Tuach Hill, to an E/W gully running across the S half of the field. S of the gully the ground rises again to the ridge along the N side of Field 5. The gully continues W into Field 6 (Illus 6).

No prehistoric features were identified in this field, although a single isolated sherd of prehistoric pottery was found between rocks in Trench 77.

Trench 74

GPS N end: 380059, 815446 S end: 380083, 815286

Orientation: N/S Length: 162 m Width: 2.1m

Depths above natural:

Stratigraphy: The natural at the N end of the trench was stoney sand with 400-500mm of topsoil. The natural was very rocky with 300mm topsoil over stoney sand with boulders from 380067, 815389 to 380072, 815356. S of this the ground fell steeply. From 380073, 815340 to 380080, 815305 the sand was fairly level with up to 900mm of topsoil in the gully at the base of the N slope. The S end of the trench had 300-500mm of topsoil over sand and boulders.

Features None

Trench 75

GPS N end: 380084, 815457 S end: 380107, 815291

Orientation: N/S Length: 168m Width: 2.1m

Depths above natural: 350-500mm, 800mm in dip.

Stratigraphy: The N end of the trench was fairly level with 350-500mm of topsoil on to stoney sand, with a gradual slope to the S. There were boulders from 380087, 815436 to 380095, 815374. The ground sloped down more steeply to a sandy dip with up to

800mm topsoil between 380099, 815352 and 380104, 815315. It then rose to the S end of the trench with 300mm of topsoil over stoney sand.

Features None

Trench 76

GPS N end: 380109, 815451 S end: 380132, 815286

Orientation: N/S Length: 167 m Width: 2.1m

Depths above natural: 300-450mm, 800 in dip.

Stratigraphy: The N end of the trench had 300-450mm of topsoil over stoney sand with boulders. From 380114, 815416 it was rocky and sloping, with up to 500mm of topsoil at the base of the slope. There was a steeper slope from 380122, 815353 into the central gully with up to 800mm of topsoil, then a slight rise from 380126, 815327.

Features None

Trench 77

GPS N end: 380134, 815449 S end: 380157, 815285

Orientation: N/S Length: 165m Width: 2.1m

Depths above natural:

Stratigraphy: At the N end of the trench there was 500mm of topsoil over stoney sand with boulders, this rose slightly to 380137, 815429 with 300mm topsoil. The ground then levelled with a slight slope to the S until 380147, 815361 when it sloped down abruptly to the central dip with 700mm topsoil over sand. It rose from 380152, 815325, and was very rocky to the S end. A sherd of prehistoric pottery (SF 131) was found in sand between boulders below 300mm topsoil- there was no associated feature.

Features

No	Easting	Northing	Feature	Associated finds	Comment
96	380151	815334	Cast iron water pipe		Not in use

Trench 78

GPS N end: 380155, 815442 S end: 380179, 815283

Orientation: N/S Length: 160m Width: 2.1m

Depths above natural: 300-400mm, up to 700mm in dip

Stratigraphy: At the N end of the trench there was 650mm of topsoil over stoney sand in a slight dip. The ground rose by 380158, 815420, and was then fairly level with 300-

400mm topsoil until a dip with 700mm of topsoil between 380168, 815351 and 380171, 815337. It rose to the S end of the trench with 300mm topsoil.

Features None

Field 8

Field 8 was in grass at time of evaluation. The S part of the field slopes down from the outcrops at the N side of Field 5. The N part rises to the ridge extending E from Tuach Hill, which also extends through Fields 6 and 7. At the NE corner of the field this ridge falls away to the E. There are wide views along the river Don to the E and NE (Illus 6).

No archaeological finds or features were observed in this field.

Trench 79

GPS N end: 380201, 815385 S end: 380216, 815275

Orientation: N/S Length: 111m Width: 2.1m

Depths above natural: 300mm, up to 600mm in dip.

Stratigraphy: At the N end of the trench there was 300mm topsoil over stoney sand, lying fairly level to 380204, 815362 where it dipped to 650mm, with topsoil and silt over stoney wet clayey silt. It rose from 380208, 815336 to the S with 300mm topsoil, deepening at the S end of the trench to 600mm of topsoil over sand.

Features None

Trench 80

GPS N end: 380226, 815399 S end: 380238, 815277

Orientation: N/S Length: 122m Width: 2.1m

Depths above natural: 250-400mm, up to 600mm in dip.

Stratigraphy: At the N end of the trench there was 250-400mm topsoil over stoney sand. By 380230, 815359 there was 500-600mm of topsoil and silt over stoney wet clayey silt. This gradually rose to the S end of the trench with 500mm of topsoil over sand.

Features None

Trench 81

GPS N end: 380252, 815398 S end: 380263, 815266

Orientation: N/S Length: 132m Width: 2.1m

Depths above natural: 300-500mm

Stratigraphy: From the N end to the centre of the trench, the natural was very rocky with 300-400mm topsoil. There was a slight dip from 380257, 815337 to 380260, 815305, where there was wet clayey silt with 500mm of topsoil. The ground rose to the S end of the trench with 350mm of topsoil over stoney sand.

Features None

Trench 82

GPS N end: 380276, 815398 S end: 380288, 815266

Orientation: N/S Length: 132m Width: 2.1m

Depths above natural: 400-600mm

Stratigraphy: The N end of the trench was on the ridge with stoney sand and boulders below 400mm of topsoil. The ground levelled with a gentle slope to the S. It dipped between 380382, 815332 and 380284, 815316 with 600mm of topsoil over wet clayey silt. It rose to the S end of the trench with 400-550mm of topsoil over stoney sand.

Features None

Trench 83

GPS N end: 380299, 815384 S end: 380312, 815259

Orientation: N/S Length: 126m Width: 2.1m

Depths above natural: 300-450mm, 500-600mm in dips.

Stratigraphy: At the N end of the trench there was 300-450mm topsoil over stoney sand and gravel, the natural being fairly level with a gentle slope to S. It deepened to 500mm of topsoil over wet clayey silt from 380304, 815337 until it rose to the S from 380308, 815301. At the S end there was up to 600mm of topsoil over sand.

Features None

Trench 84

GPS N end: 380330, 815383 S end: 380338, 815255

Orientation: N/S Length: 128m Width: 2.1m

Depths above natural: 350-500mm, up to 1.2m in dip

Stratigraphy: At the N end of the trench there was 350mm of topsoil over sand. The natural lay fairly level to 380331, 815358. From that point, stoney sand dipped to the N and to the E, with up to 700mm of topsoil at the base of the slope. It levelled out by 380333, 815338 where there was 350mm topsoil over stoney sand. It deepened again from 380334, 815318 to 380336, 815282. At the deepest point (380337, 815298) there was 1.2m topsoil over wet clayey silt and stones. At the S end there was 350-500mm topsoil over sand.

Features None



Illus 72 Trench 84, looking N towards the river Don

Trench 85

GPS N end: 380360, 815354

S end: 380363, 815252

Orientation: N/S

Length: 102m Width: 2.1m

Depths above natural: 350-400mm with 700mm – 1.2m in dips.

Stratigraphy: At the N end of the trench there was 750mm of topsoil to stoney sand with modern tile drains. The ground rose by 380361, 815344 with 350-450mm of topsoil over sand. It then dipped steeply between 380361, 815337 and 380362, 815315 with up to 1.2m topsoil over wet silty clay and boulders. It then rose to the S with a sandy ridge below 350-400mm of topsoil from 380362, 815298 to the end of the trench.

Features None

Trench 86

GPS E end: 380509, 815225 W end: 380375, 815246

Orientation: E/W Length: 136m Width: 2.1m

Depths above natural: 300-500mm, up to 1.1m in dip.

Stratigraphy: At the W end of the trench there was 300-500mm of topsoil over sand. There was considerable rabbit activity. The ground sloped down between 380426, 815239 and 380442, 815235 with up to 1.1m topsoil over sand. At the E end of the trench there was 300-400mm of topsoil over sand.

Features None

Trench 87

GPS NW end: 380387, 815316 SE end: 380436, 815247

Orientation: NW/SE Length: 102m Width: 2.1m

Depths above natural: 300-350mm, up to 1.5m in dip.

Stratigraphy: At the NW end of the trench there was 300-350mm of topsoil over sand. It deepened between 380431, 815276 and 380441, 815265 with up to 1.5m of topsoil over sand. It then rose to the SE to gravel and sand with 300mm topsoil.

Features None

Trench 88

GPS WNW end: 380385, 815269 ESE end: 380463, 815242

Orientation: WNW/ESE Length: 82m Width: 2.1m

Depths above natural: 300-350mm, with up to 1.55m in dip.

Stratigraphy: At the WNW end of the trench there was 300-350mm of topsoil over sand with a gentle slope to the E. The ground deepened from 380422, 815256 to 380440, 815248 with up to 1.55m of topsoil at 380430, 815252. It rose at the ESE end of the trench to 300-350mm of topsoil over sand.

Features None

5 The Finds

With the exception of one abraded sherd of medieval pottery, the finds were of prehistoric date, probably between later Neolithic and Early Bronze Age.

No	Easting	Northing	Field	Trench	Context	Identification
1	379982.1	815212.6	1	3	2/1	Pottery, Small 2 frags prehistoric
2	380006	815200	1	-	On top of topsoil in stubble	Burnt flint
3	380096	814953	1	-	On top of topsoil in stubble	Large flint
4	380097	814939	2	10	6/1	Flint scraper
5	380099	814914	2		Surface of ploughsoil	Pottery, Abraded sherd medieval
6	380083	814931	2	11	On top of natural in modern plough mark	Pottery, 1 sherd & frags, prehistoric
7	380216	814879	3	15	7, 7/1	Burnt flint
8	380216	814879	3	15	7, 7/1	Burnt flint
9	380216	814879	3	15	7, 7/1	Burnt flint
10	380216	814879	3	15	7, 7/1	Not artefact, disposed
11	380216	814879	3	15	7, 7/1	Unburnt flint
12	380242	814870	3	16	8/1	Pottery, Big thick bodysherd, finger fluting. ?Neolithic
13	380269	814991	3	19	10/1	Burnt flint
14	380269	814988	3	19	12/1 edge of feature	Burnt flint
15	380327	814873	3	20	In silt of palaeochannel. No feature.	Pottery, 3 sherds, prehistoric
16	380363	814879	3	22	16	Pottery, rim, 11 body sherds (2, poss 3 with linear decoration), 2 joining base sherds- flat base c50mm, 1 base sherd

						different vessel
17	380363	814879	3	22	16	Flint
18	380242.2	814869.3	3	16	27	Flint
19	380242.2	814869.6	3	16	27	Pottery, small frag, prehistoric
20	380242.4	814869.5	3	16	27	Pottery, sherd, prehistoric
21	380242.2	814870.2	3	16	Top of natural	Pottery, sherd, prehistoric
22	380243.8	814868	3	16	Top of natural	Flint
23	380549.9	814988	4	31	23	Pottery
24	380565	814988	4	31	24	Pottery, Big rim sherd & frag. Poss decorated
25	380241.5	814869.9	3	16	Top of natural	Pottery, sherd, prehistoric
26	380241.3	814870.2	3	16	Top of natural	Pottery, sherd, prehistoric
27	380241.3	814870.2	3	16	Top of natural	Flint
28	380241.6	814870.2	3	16	Top of natural	Pottery, 2 frags
29	380241.5	814870.1	3	16	Top of natural	Pottery, sherd, prehistoric
30	380241.6	814870.1	3	16	Top of natural	Pottery, frag
31	380241.6	814870.6	3	16	8	Pottery, small sherd, prehistoric
32	380241.4	814870.7	3	16	8	Pottery, sherd, prehistoric
33	380241.3	814871	3	16	Edge of 8	Daub
34	380241.6	814871.8	3	16	8	Pottery, small sherd, prehistoric
35	380241.7	814871.8	3	16	8	Pottery, sherd, prehistoric
36	380241.9	814871.9	3	16	8	Pottery, sherd, prehistoric
37	380242.5	814871.7	3	16	8	Burnt flint
38	380242.9	814871.1	3	16	8	Pottery, frag
39	380242.5	814870.7	3	16	Top of natural	Pottery, bodysherd, sharp carination
40	380242.7	814870.6	3	16	Top of natural	Pottery, sherd, prehistoric
41	380242.9	814870.6	3	16	Top of natural	Frag modern china, disposed
42	380242.8	814870.7	3	16	Top of natural	Pottery, sherd, prehistoric
43	380243	814870	3	16	Top of natural	Quartz
44	380242.9	814870	3	16	Top of natural	Pottery, frag
45	380243	814866.9	3	16	Edge of 29	Pottery, small sherd, prehistoric
46	380242.9	814866.5	3	16	29	Flint
47	380243.7	814865	3	16	Top of natural	Pottery, sherd, prehistoric

48	380242.9	814867.4	3	16	Top of natural	Pottery, frag
49	380243.1	814867.1	3	16	Top of natural	Pottery, sherd, prehistoric
50	380243.3	814867	3	16	Top of natural	Pottery, frag
51	380243	814866.9	3	16	Top of natural	Pottery frag
52	380243.2	814866.7	3	16	Top of natural	Pottery, sherd, prehistoric
53	380242.4	814866.8	3	16	Top of natural	Pottery, small sherd, prehistoric
54	380242.2	814866.7	3	16	Top of natural	Pottery, sherd, prehistoric
55	380242.4	814866.5	3	16	Top of natural	Flint
56	380242.5	814866.5	3	16	29	Pottery, frag
57	380242.7	814866.5	3	16	29	Pottery, sherd (2), prehistoric
58	380242.8	814866.5	3	16	29	Pottery rim, fine small pot, prehistoric
59	380242.6	814866.3	3	16	29	Pottery, spalled sherd, prehistoric
60	380242.6	814866.3	3	16	29	Pottery, sherd, prehistoric
61	380242.8	814866.5	3	16	29	Pottery, sherd(2) prehistoric
62	380243	814866.6	3	16	29	Pottery , sherd, (4) prehistoric
63	380243	814866.4	3	16	29	Pottery, sherd, prehistoric
64	380243.1	814866.3	3	16	29	Pottery, sherd, prehistoric
65	380242.8	814866.3	3	16	29	Flint
66	380243.3	814866.5	3	16	Top of natural	Pottery , sherd, (3) prehistoric
67	380243.5	814866.4	3	16	Top of natural	Pottery , sherd, (5) prehistoric
68	380243.7	814866.3	3	16	Top of natural	Pottery, frag
69	380243.9	814866.3	3	16	Top of natural	Pottery, sherd, prehistoric
70	380243.7	814864	3	16	Top of natural	Pottery, sherd, prehistoric
71	380242.4	814870.6	3	16	8/2	Flint
72	380242.3	814871	3	16	8/2	Pottery, 3 big sherd & frag (join) prehistoric
73	380242.1	814871.4	3	16	8/2	Flint
74	380242.1	814871.4	3	16	8/2	Pottery, sherd, (2) prehistoric
75	380241.8	814871.6	3	16	8/2	Pottery, sherd, prehistoric
76	380241.8	814871.7	3	16	8/2	Pottery, sherd, prehistoric
77	380241.7	814871.9	3	16	8/2	Pottery, sherd, prehistoric
78	380242.7	814870.6	3	16	8/2	Pottery, sherd, (2) prehistoric

79	380242.4	814871.5	3	16	8/2	Pottery, sherd, prehistoric
80	380242.8	814866.4	3	16	29 in section	Flint
81	380601.9	814971	4	32	38	Pottery, sherd, prehistoric
82	380602.2	814971.2	4	32	38	Pottery, sherd, prehistoric. Dec groove ? Beaker
83	380558.2	814969	4	32	39	Pottery sherd, prehistoric. Dec groove ? Beaker
84	380591.1	814952.3	4	33	40/1	Pottery, sherd (84,93-97 same pot)
85	380613.7	814811.5	4	36	42 (42/6) Surface cleaning	Fired clay (3). Poss metal-working
86	380618.9	814813.2	4	36	42(42/6) Surface cleaning	Pock-marked stone. Stone ½ pebble 65 x 70mm c30mm high. Flat 'base', pocked/worn hollow in upper surface c30mm diameter, c 10mm deep.
87	380618.6	814811.6	4	36	42(42/6) Surface cleaning	Flint
88	380617.9	814811.4	4	36	42(42/6) Surface cleaning	Flint
89	380618.1	814811	4	36	42(42/6) Surface cleaning	Quartz
90	380617.2	814811.2	4	36	42(42/6) Surface cleaning	Flint
91	380615.9	814810.4	4	36	42(42/6) Surface cleaning	Fired clay/Poss tuyere/crucible. Curved base/edge c 60mm diameter
92	380615	814811.6	4	36	42(42/6) Surface cleaning	Fired clay/Poss tuyere/crucible
93	380590.7	814953.1	4	33	40 on surface 40/1	Pottery sherd (84,93-97 same pot)
94	380590.6	814953.4	4	33	40/1 in fill	Pottery sherd (84,93-97 same pot)
95	380590.9	814953.6	4	33	40/1 in fill	Pottery sherd (84,93-

						97 same pot)
96	380590.9	814953.6	4	33	40/1 in fill	Pottery sherd (84,93-97 same pot)
97	380590.9	814953.6	4	33	40/1 in fill	Pottery sherd (84,93-97 same pot)
98	380590.8	814953.6	4	33	40/1 in fill	Flint
99	380590.8	814953.6	4	33	40/1 in fill	Not artefact. disposed
100	380590.7	814953.5	4	33	40/1 in fill	Flint
101	380591	814953.6	4	33	40/1 in fill	Flint
102	380590.9	814953.7	4	33	40/1 in fill	Flint
103	380591.4	814953.4	4	33	40/1 in fill	Pottery sherd (poss as 84,93-97 same pot)
104	380552.5	815122.1	5	38	In rabbit run in natural	Flint
105	380600.4	814971.3	4	32	38	Flint
106	380600.8	814970.5	4	32	38	Pottery , bodysherd, Beaker
107	380624.7	814971.7	4	32	37	Pottery sherd (2) v abraded
108	380619.7	814971.6	4	32	37	Flint
109	380611	814971.1	4	32	46/1	Pottery , rim, Beaker
110	380611	814971.2	4	32	46/1	Pottery , bodysherd, Beaker
111	380584.6	814988.1	4	31	On natural	Pottery rim, prehistoric
112	380550.7	815001.5	4	30	52	Pottery , frag
113	380549.2	815000.5	4	30	51	Pottery , frag
114	380548.4	815000.3	4	30	51	Pottery, rim, prehistoric
115	380467.3	815103.2	5	43	On natural	Pottery , sherd & frags, prehistoric
116	380340.7	815198.7	5	48	72	Flint
117	380581.5	814989.8	4	31	50	Pottery sherd, prehistoric
118	380549.9	814988	4	31	In ard marks and on natural around context 23.	Pottery sherd, spalled, prehistoric
119	380549.7	814987.9	4	31	In ard marks and on natural around context 23.	Pottery , frag
120	380549.9	814986.5	4	31	In ard marks and on natural around context 23.	Flint

121	380549.6	814986.5	4	31	In ard marks and on natural around context 23.	Flint
122	380549.9	814987.4	4	31	In ard marks and on natural around context 23.	Pottery (2) sherd, prehistoric, spalled
123	380550.3	814987.1	4	31	In ard marks and on natural around context 23.	Pottery , rim, carinated
124	380550.5	814986.8	4	31	In ard marks and on natural around context 23.	Pottery sherd, prehistoric
125	380550.9	814986.7	4	31	In ard marks and on natural around context 23.	Pottery sherd, prehistoric
126	380564.3	814988.1	4	31	On natural by 24	Pottery sherd, spalledprehistoric
127	380584.5	814989	4	31	Below stone in 48/2	Pottery (3) large bodysherds (1 with carination)
128	380557.8	815002.5	4	30	56/1 (50mm below surface)	Flint 36/1
129	380557.7	815002.2	4	30	56/1 (300mm below surface)	Pottery sherd, prehistoric Same pot/type as rim 114
130	380554.2	815002.7	4	30	20/1	Pottery , frag, spalled
131	380154.1	815312	7	77	Top of natural	Pottery sherd, carinated and finger fluting prehistoric
132	380550.5	814987.3	4	31	23	Pottery sherd, (2) prehistoric
133	380550.1	814989.4	4	31	23	Pottery spalled frag
134	380550.6	814987.5	4	31	23	Pottery, big rim, prehistoric
135	380615.3	814813.3	4	36	Edge of 42/2	Burnt flint
136	380616.1	814811.6	4	36	42/6	Flint
137	380615.4	814811.3	4	36	42/12	Flint
138	380616.3	814811.5	4	36	42/6	Pottery ? v coarse may be industrial

139	380616.5	814812.2	4	36	42/6	Flint
140	380618.6	814811.7	4	36	42/6	Flint
141	380617.5	814813	4	36	42/6	Fired clay/Poss tuyere/crucible
142	380617.5	814813.1	4	36	42/6	Flint
143	380617.7	814813.4	4	36	42/6	Flint
144	380614.8	814809.9	4	36	42/12	Flint

7 Discussion

7.1 Background

The location of Kintore on fertile land alongside the River Don has been attractive to settlement throughout prehistoric and historic times. The Pictish symbol stones found in Kintore indicate it was a centre of territorial power in the Early Historic period and in the medieval period Kintore became a burgh in c1187-1200 with a motte at Castlehill. As modern development has expanded the modern town, archaeological discoveries have emphasized the extraordinary continuity and complexity of early settlement.

The first large scale series of excavations on the route of the A96 and in ground on the W side of the town centre at Forest Road, between 2000 and 2006 (Cook and Dunbar, 2008), revealed an Early Neolithic ritual site and considerable settlement from the Neolithic, Bronze Age and Iron Age. One of the few Roman marching camps in the NE of Scotland also covered this area and activity continued throughout the medieval period.

However as the town has expanded further to the S and E it has become increasingly clear that prehistoric settlement and ritual activity also extended S of the town to the S of the Tuach Burn. Significantly, the Tuach Burn forms a loop around the very visible landscape feature of Tuach Hill. Two visible ritual monuments appear focused on this area; the Bronze Age stone circle on Tuach Hill itself and the Neolithic Midmill long cairn lying along the ridge on the opposite side of the burn.

Evaluation and excavations on the Midmill Industrial Estate between 2007 and 2012, most recently summarized by Murray & Murray (2013) have shown Neolithic and Bronze Age settlement extending up the slopes S of the burn, looking across at these two ritual monuments. A further area of burial and ritual deposition beside the burn, facing towards the cairn was also discovered during this pre-development archaeological work.

7.2 Results of the East Kintore evaluation

Prehistoric

The present evaluation has demonstrated that there was further Neolithic and Bronze Age settlement in this eastern area, to the E and SE of Tuach Hill. To some extent this area must be regarded, not only in relation to the Midmill sites, but also to the Don valley between Kintore and Hatton.



Illus 73 The evaluation (outlined in red) in relation to the Don (Green areas indicate two main areas of prehistoric settlement).

There was no evidence of prehistoric activity (with the exception of a single sherd of pottery) from the higher ground in Field 6, or from Fields 7 and 8- much of this ground lying along the ridge extending E from Tuach Hill. The lack of prehistoric evidence extended across most of Field 5, with only a couple of isolated finds. In all these fields there were areas with some depth of topsoil, so lack of survival may not have been a factor. It is possible that there had been a deliberate avoidance of this higher ground which had no shelter, especially from the N or E.

A scatter of prehistoric finds and several very truncated features were found in Fields 1 and 2 along the relatively level ground on the E side of the Tuach Burn. The low density of evidence in these areas may be in part a lack of survival; the topsoil was generally fairly shallow and this area, near the farm of Tofthills has been intensively cultivated. While Roy's map takes settlement at Tofthills back to the mid-18th century, it is likely to have had medieval origins and a single medieval pottery sherd is a strand of evidence to support this possibility.

Further E in Field 3 (Trenches 15, 16, 19, 20) there are a number of features extending along the well-sheltered S facing slope of a ridge of high ground, with views along the palaeochannel towards the Midmill long cairn. Survival in this area has been helped by deeper soils at the base of slope where soil, loosened by cultivation, has moved down the slope. Oddly it may also have been helped by the presence of large outcropping boulders, where ploughing may have been avoided. While many of the features were difficult to interpret in the confines of the evaluation trenches, they appear to have been domestic. Trench 16 in particular yielded a high concentration of finds, including many small sherds of pottery, which was reminiscent of the concentration in trodden surfaces such as floors. The finds suggest a later Neolithic, or possibly Bronze Age date; samples for C14 dating have been taken from two contexts (Trench 15: Sample 1 and Trench 19, Sample 2).



Illus 74 Plan with interpretation of areas of surviving archaeology.

There was a second well-preserved area of prehistoric settlement at the E end of Field 4 (Trenches 30-33), on a well-sheltered SE facing slope down into a small valley with a

stream along the base. Although interpretation is limited from the narrow evaluation trenches, there was evidence of part of a round house crossing Trench 31, possible evidence of a round house across Trench 30 and another structure, possibly destroyed by fire, in Trench 32. Pits and other evidence of settlement were found around these features. The pottery included sherds of at least one Beaker pot, suggesting an Early Bronze Age date for at least some of the structures. Ard marks indicate prehistoric cultivation after some of the structures or related features had gone out of use – so the evidence may be of a sequence of occupation, with buildings falling out of use and being replaced. Samples have been taken from Trenches 31 (Sample 3) and Trench 32 (Sample 4) for C14 dating.

Later activity

In Fields 4 and 5 there were three areas of activity which all appear to be related to metalworking. In Field 5 there were extensive areas of burning, and charcoal-rich spreads. Two furnace bases from iron working were found (Trenches 51, 53) suggesting that this activity may have been related to iron work but the low quantities of slag and other debris would indicate that this must have been on the periphery of any working area. Two C14 samples have been taken to date this spread of activity.

Possibly related iron working was found in Field 4, Trench 29, where a small pit was full of iron working bloomery debris and slag as well as chunks of burnt clay from a bloomery furnace and some burnt stones. The sides of the pit showed no sign of heat so this is unlikely to have been the site of the furnace. Dr M Spearman who examined a sample indicated that there was a high level of skill shown and suggested that this activity was most likely to be of 15th-17th century date. Areas of the natural in trenches in this vicinity were burnt pink but this is as likely to have been from burning of stubble or brushwood as from any industrial processes.

Also in Field 4 (Trench 36) there was another series of features which appeared related to metal-working- or possibly some other heat- using process. Only one piece of related debris showed any of the magnetism found with iron but there were large amounts of what appeared to be fuel debris and a burnt area, surrounded by charcoal, which had been the focus of an intense or repeated fire. Fused clay fragments appeared to be from a tuyere or similar object related to metal working. Fragments of a highly fired clay ‘dish’ were identified by Dr Spearman as possibly from a working ‘tray’ for non ferrous metal working. However there was no visible evidence of metal so, depending on the dating, XRF analysis might be worthwhile on the ‘tray’ and possibly on some of the fuel debris.

Samples for C14 dating have been taken from the charcoal around the hearth. This should indicate whether this activity was earlier or contemporary with the identified iron working described above.

Impacts and Mitigations

8.1 Impacts The development will destroy the surviving archaeology of East Kintore. In some areas, such as Fields 1 and 2, shallow topsoil and cultivation over many years has reduced survival to an extent that further excavation would be unlikely to yield any considerable increase in evidence.

In three areas, in Fields 3 and 4 there is a significant level of survival of evidence of the cultural heritage. There is potential that the archaeology of these areas may considerably increase the understanding of the prehistory of the settlement of the Don valley. The evidence of iron working, which may be of medieval or post-medieval date, has the potential to increase our understanding of an important and little documented aspect of the pre-Industrial rural landscape of Scotland.

8.2 Mitigations

(i) *Immediate Post evaluation stage*

A number of actions are necessary to process the results of the evaluation to allow a fully informed decision regarding the extent of further work in the future, prior to the development.

1. C14 Dating: Seven samples have been selected for identification and processing by Dr Scott Timpany (Orkney College) and subsequent submission to SUERC for C14 dating.
These include two samples from the Field 3 area of prehistoric activity, two from the Field 4 area of prehistoric activity, two from the later iron working in Field 5 and one from the possibly earlier metal working in Field 4.
2. The lithics to be submitted to Dr Torben Ballin for identification.
3. Depending on the C14 date from Trench 36, XRF analysis of any metal residues from the fired clay objects associated with the processing.
4. A short supplementary report to be written by MAS Ltd to submit the results of 1-3 above and put them in context.

(ii) *Secondary stage- further full excavation of specified areas*

On the basis of the results of the evaluation, three areas are considered to require full excavation over a wider area as shown in Illus 75. The results of the post-evaluation dating and other works detailed above are necessary to inform the focus and scale of this future work.

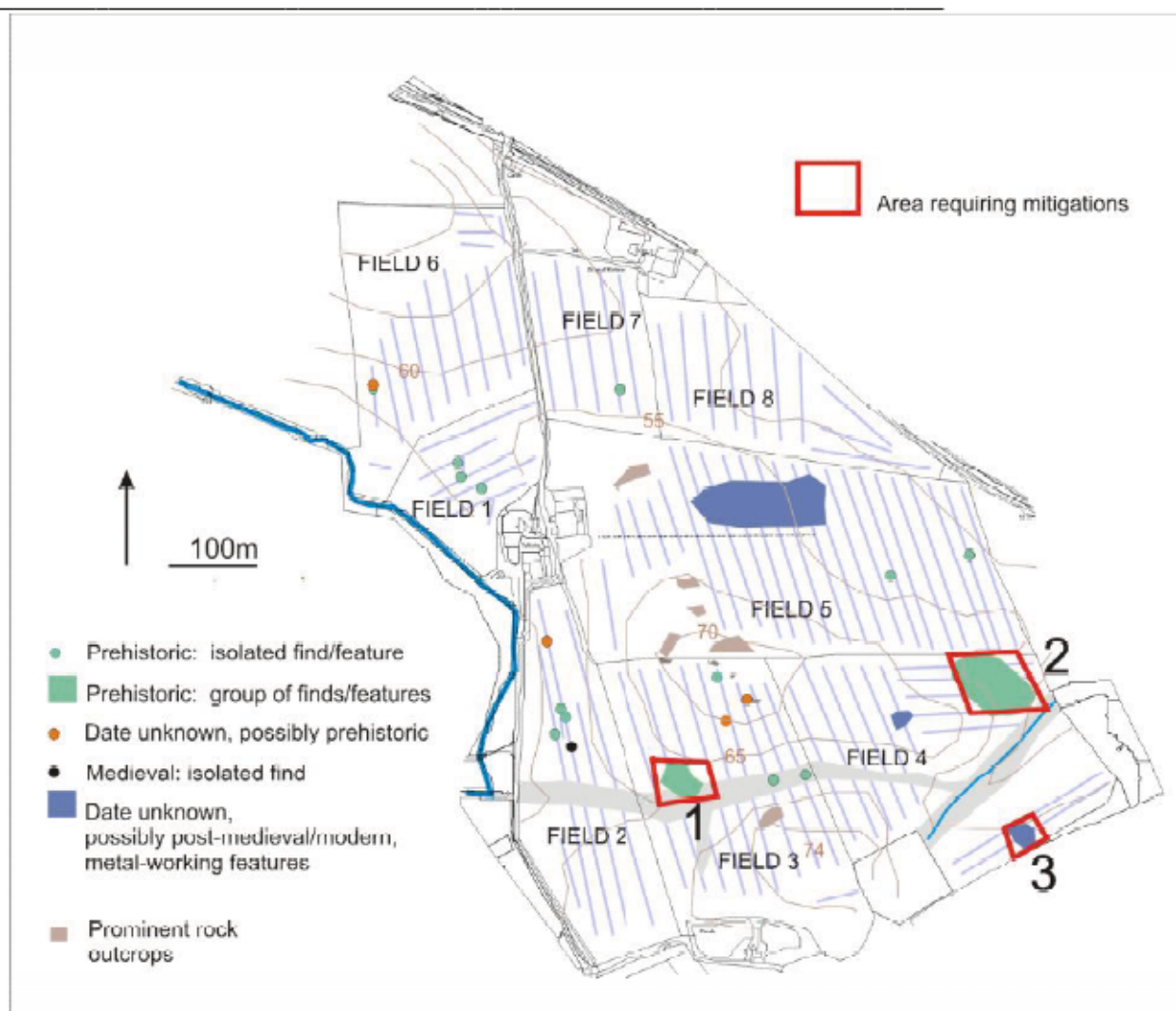
Areas 1 & 2. Significant areas of prehistoric settlement. Area 1 should include an area between and around Trenches 15 and 16, just below the ridge where there is a visible flattish 'apron' of ground. (*Coordinates of suggested area: 380246, 814890; 380202, 814882; 380211, 814859; 380257, 814860 = approx 1232 sq m*).

Depending on the dating from Trench 19, another area may be worth opening up between Trenches 19 and 20.

Area 2 should extend to include Trenches 30-33 from just below the top of the slope. (*Coordinates of suggested area: 380524, 815012; 380530, 814966; 380628, 814965; 380620, 815012 = 4387 sq m*). Topsoil removal will be difficult as there is a large overburden over much of the area and the natural slopes steeply to the S and to the E, so considerable care will be needed to avoid damaging the underlying archaeology.

Area 3. The industrial processing area in Field 4, Trench 36, may require full excavation depending on date and on the results of any metallurgical analysis. Prior to deciding the area to be examined around this feature, a geophysical survey should be undertaken to establish its extent.

(iii) The presence of surviving archaeology within the evaluation area does not preclude the possibility of chance finds or archaeological discoveries outwith the evaluation trenches. Should such chance finds occur, then the Archaeology Service, Aberdeenshire Council must be informed immediately so that an appropriate archaeological response can be formulated and agreed by all parties concerned.



Illus 75 Plan with areas of suggested mitigations

References

Cook M & Dunbar L 2008 *Rituals, roundhouses and Romans: Excavations at Kintore, Aberdeenshire 2000-2006. Vol 1: Forest Road*. STAR: Edinburgh.

Murray H K & Murray J C 2013 *Midmill Industrial Estate, Kintore, Aberdeenshire: Archaeological Evaluations and Excavations 2007-2012*. Unpublished report MAS 2013-10 in archive at Aberdeenshire SMR and NMRS.

Roy. Military Map of 1747-55 on line at <http://www.nls.uk/maps>

Appendices

Appendix 1: Catalogue of digital photographic record

Digital frame number	Content
1-4	Trench 1 general looking W
5-8	Trench 3, context 2, looking E
9	W end Trench 3, Tuach Burn in background
10-11	Field 1, looking W across Tuach Burn from between Trenches 2 and 3
12-13	Trench 7, looking N
14-17	Field 2, Trench 8, looking N
18-19	Trench 8, looking S
20-21	Trench 10, context 6, looking E
22-24	Trench 10, context 6, box-section
25-28	Field 2, Trench 13 in foreground. Views across palaeochannel, looking NE. Tofthills farm in background
29-31	General views from N ridge of Field 3, looking SW across palaeochannel, Midmill Industrial estate to RHS background
32	Field 3, looking WSW along palaeochannel
33-34	Field 3, looking W/NW from S ridge. Machine in Trench 16, approx where prehistoric features found
35	Field 3, looking N across palaeochannel from S ridge
36	Field 5 looking E along Don towards Hatton
37	Field 5, looking N/NW across Tofthills farm to Tuach Hill
38	Field 5, looking N across Barehead farm N along Don. White tower of Inverurie paper mill (near Broomend of Chrichie) visible on horizon, L of farm
39	Field 5, looking N/NW across Tofthills farm to Tuach Hill. Note rock outcrops with field gatherings
40	Looking NW across Field 5 with Tuach Hill in background
41	Looking NNE across field 5 and across Don flood plain
42-43	Trench 15, context 7 as first exposed
44-49	Trench 19, contexts 10-12 looking N
50	Trench 19, contexts 10-12 looking E. Tags note finds
51	Trench 19, contexts 10-12 looking S
52	Trench 19, looking S- the features 10-12 are just down slope from this rock outcrop
53-55	Field 3. General views from S ridge looking N & NW (55 =Trench 21)
56-58	Trench 15 features 7 etc looking N. Contexts 30,31 in foreground
59	Trench 15 features 7 etc looking E

60-62	Trench 15 features 7 etc looking S
63-66	Trench 20, context 13 looking N
67-68	Trench 20, context 13 looking E
69-70	Trench 20, context 13 looking SE
71	Filed 4, general view looking E
72-75	Trench 15, looking N
76	Trench 15, looking E
77-78	Trench 15, looking SE
79-80	Trench 15, looking S
81-83	Trench 16, looking N. Tags indicate finds
84-87	Trench 29, context 26 looking N
88-89	Field 3. truck and 2 people indicating potential excavation area around trenches 15,16. slight shelf below ridge
90	Field 3, Trench 15 showing relationship of features to ridge
91-92	Field 4, looking E across valley. Trenches 35 and 36 in background
93	Field 4, looking W, trenches 35 and 36 to LHS, trenches 32-34 across valley on RHS
94	Field 4, looking SW along trench 36
95	Trench 36, looking SW to context 42 below ridge
96-98	Trench 36, 42 as first cleaned. White tags=fuel debris, red tags =finds. Looking E
99	Trench 36, 42 as first cleaned. Looking S
100-101	Trench 33, context 40, looking S
102-105	Trench 32, looking E, context 38 in foreground
106-108	Trench 32, looking E. Context 46 (sectioned) foreground. 37 background
109-110	Trench 32, looking S. Section of context 46. Tags indicate finds
111-114	Trench 32, looking W, 37 in foreground
115	Trench 32, looking W. Section of context 46. Tags indicate finds
116-121	Trench 32, S section to indicate topsoil depth
122-124	Trench 31, looking E, context 50 in foreground, pink of hearth 48 behind
125	Trench 31, looking E, hearth 48
126-127	Trench 31 looking W, context 47 in foreground
128	Trench 31, looking SE
129	Trench 31, detail of hearth 48
130-132	Trench 30, looking E
133-134	Trench 30, looking SE
135-138	Trench 46, contexts 42-46 looking SE & E

139-140	Trench 46, contexts 68, 69
141-142	Trench 51 (50 wrongly on board), context 78, looking S
143-144	Trench 51 (50 wrongly on board), context 78, looking SE detail of stones
145-146	Trench 51 (50 wrongly on board), context 78, looking N
147	Trench 51 (50 wrongly on board), context 78, looking N, detail of box section
148	Trench 51 (50 wrongly on board), context 78, looking NW, detail of topsoil over features
149-151	Looking SE from N end of Field 6 across Field 5 and 8 RHS (background)
152-153	Trench 31, looking W, context 47 in foreground (sectioned)
154-155	Trench 31, looking E, context 50 in foreground (sectioned)
156-157	Trench 31, looking E. context 47 section
158-160	Trench 31, looking E context 48 section
161-162	Trench 31, looking N context 49 section
163-164	Trench 31, looking E context 50, section
165-166	Trench 31, looking S context 50 section
167-169	Trench 31, looking W context 24
170-171	View across Field 5 to Field 6 looking NW
172	View across Field 5 looking NE
173-176	Trench 30, context 56 looking W and SW (sectioned)
177-178	Trench 30, section of context 53, looking E
179-180	Trench 30, section of context 53, looking SE
181-183	Trench 30, section of context 20 looking S
184-185	Trench 30, section of context 20 looking E
186-188	Trench 30, section of context 54 looking S
189-191	Trench 84 looking N
192-194	Trench 31, context 23 looking S tags=finds
195-196	Trench 31 S section showing redeposited natural just W (uphill) from features- probably a removed drystone dyke line
197	Field 4, looking W showing area for future excavation around trenches 30-33
198-204	Trench 36, Context 42 looking E white tags=fuel debris, red= finds
205-207	Trench 36, Context 42 looking SE white tags=fuel debris, red= finds
208-211	Trench 36, context 42, with section of 42/4//42/5 looking SW
212-215	Trench 36, context 42, with section of 42/6//42/7 looking SE
216	Trench 36, context 42 looking SW
217-221	Looking across Field 5 to Fields 6 & 7 Backfilling

222	Looking across Field 5 to Field 8. Backfilling
223-224	Air photographs of evaluation site in relation to Kintore and river Don

Sample No	Field	Trench	Context	Detail of context	Reason for sample
1	3	15	7/1	Charcoal patch with small frags burnt bone and burnt flint (SF7-9)	C14 dating
2	3	19	10	Charcoal fill of fire pit with in situ burning	C14 dating
3	4	31	48/2	Charcoal fill of very small pit cut into a hearth, sealed by a heat-cracked stone-pottery SF 127 also sealed below stone	C14 dating
4	4	32	37	Possible destruction layer-post dates features which may be part of round house	C14 dating
5	4	36	42/2	Fuel debris around hearth related to probable metal working	C14 dating
6	5	46	69	Charcoal from fill of pit related to group possible metal working areas	C14 dating
7	5	51	78/3	Charcoal from fill of pit related to group possible metal working areas	C14 dating
8	5	53	81		Furnace bottom Fe (magnetic)
9	3	20	13/2		Small vitreous lump. Non-Fe

10	5	51	78/3		Furnace bottom Fe (magnetic)
11	4	29	26		Bloomery waste and clay from furnace. Fe (magnetic)
12a	4	36	42		Heavy block Fe (magnetic)
12b	4	36	42/6		Light concreted lumps fuel debris Non-Fe
12c	4	36	42/6		Flattened lump and miscellaneous bits Non Fe