Archaeological Excavation at Eden Drive, Sedgefield, County Durham

Aerial view of Roman Iron Age Roundhouse 2 with associated stock pen in the background.

ARS Ltd Report No-2018/109
OASIS No: archaeol5-320519

Compiled By:
Philippa Hunter ACIfA and Nick Hodgson
Archaeological Research Services Ltd
The Eco Centre
Windmill Way
Hebburn
Tyne and Wear
NE31 1SR

Checked By:
Clive Waddington MCIfA

Tel: 0191 4774111
admin@archaeologicalresearchservices.com
www.archaeologicalresearchservices.com

Archaeological Research Services Ltd

Archaeological Excavation at Eden Drive, Sedgefield, County Durham

ARS Ltd Report 2018/109

June 2018

Archaeological Research Services Ltd

Contents

LIST OF ILLUSTRATIONS

LIST OF TABLES

EXECUTIVE SUMMARY

Project Name: Archaeological Excavation at Eden Drive, Sedgefield, County Durham
Site Code: ED17
Planning Authority: Durham County Council
Planning Ref: DM/15/03808/OUT
Geology: Devensian till overlying Roxby formation mudstone
NGR: NZ 29705 14641
Dates of fieldwork: June – August 2017
Dates of report: May 2018

In June 2017 Archaeological Research Services Ltd (ARS Ltd) was commissioned by Taylor Wimpey to undertake an archaeological strip, map and sample excavation on land adjacent to Eden Drive, Sedgefield, County Durham, in advance of development.

The excavation targeted an Iron Age – Roman Iron Age rectilinear enclosure that had first been identified through geophysical survey and was subsequently confirmed through the excavation of evaluation trenches. The excavation covered an area of approximately 2.6ha and revealed evidence for occupation spanning the Mesolithic period to the post-medieval period, and confirmed multiple phases of the enclosed settlement with at least two phases of Iron Age occupation and a subsequent phase of Roman Iron Age occupation.

The earliest phase of Iron Age occupation on the site was characterised by a single unenclosed roundhouse, Roundhouse 1, located at the extreme northern edge of the excavation area towards the higher part of the site. Likely to be contemporary with Roundhouse 1 were a series of narrow, intercutting ditches and possible droveways located centrally within the excavated area, about 70m to the west of the small roundhouse. These ditches demarcated a roughly rectangular-shaped area and, given the presence of the droveways, could represent stock enclosures associated with the roundhouse.

The subsequent phase of Iron Age occupation on the site saw the development of an enclosed settlement. This was represented by Roundhouse 2 comprising a ring groove construction slot with a south-east facing entrance, an internal hearth, and an associated sub-circular enclosure, thought to be a stock pen for the holding of livestock. Both the large roundhouse and the stock pen, believed to be roughly contemporary by the way in which they respected each other's locations, were enclosed by a rectilinear enclosure bordered by a small number of possible droveways for the corralling of livestock. West of Roundhouse 2 was a much larger rectilinear enclosure defined by a wide, deep ditch although the northern side of the enclosure was beyond the limit of the excavation. At its eastern end, the larger Iron Age rectilinear enclosure had been embellished with a second, internal ditch running parallel. This inner ditch had an entrance within it and it can be assumed that, had it survived, the outer ditch would also have had an entrance in this location, unless it was offset, creating an inner and an outer entrance to the enclosure's interior.

The latest, Roman Iron Age, phase of occupation on the site was characterised by a re-cut and extension of the Phase II Iron Age rectilinear enclosure with the addition of further boundary ditches to the east. Some of these later ditches truncated the Phase II Iron Age ditches, however the large roundhouse and associated enclosure were respected, indicating that they may have remained in use within the Roman Iron Age phase of occupation. The

main Roman Iron Age rectilinear enclosure ditch was more substantial however there was no Roman Iron Age settlement evidence recovered from the enclosure's interior. This may indicate that the enclosure, both during the later Iron Age and Roman Iron Age phases, was used for the rearing and protection of livestock as opposed to a living space. This could suggest an expansion of the settlement and an intensification of pastoral activities, supported by the recovery of domesticated animal bone from the ditch fills. The large Roman Iron Age enclosure clearly encompasses the hilltop, which lies to the immediate north of the excavated area and, given the discovery of Roman ceramics and a large fragment from a possible voussoir box tile used in bath-house roofs, could suggest a Roman building was located within this enclosure on the highest part of the site, but beyond the limit of excavation.

Analysis of the animal bone retrieved from the site across Iron Age and Roman Iron Age phases indicated a predominance of the major domesticates including cattle, sheep/goat and pig. Some elements, such as average weight, suggested a shift in animal husbandry between the Iron Age and Roman Iron Age whereby there was a consistently lower level of large and medium mammal bone fragmentation during the Roman Iron Age in comparison to the earlier phases. Horse was not represented at all in the earliest phase of occupation on the site, however they were the second most frequently identified mammal amongst the Roman Iron Age material. Although only a minor presence, pig was a constant across all phases of occupation.

Palaeoenvironmental analysis of the charred remains revealed that spelt wheat appeared in all Roman Iron Age features, however the most significant concentration of remains was seen around Roundhouse 2 where the pits at the entrance produced numerous charred cereal grains including wheat (spelt and emmer), barley and possibly oats. Extensive concentrations of charred woody twigs found within the construction slots of both Roundhouse 2 and the adjacent stock pen could have been from wattle and daub wall panels that may have been charred to help preserve them where they were in contact with the ground. Alternatively, they could be charred hearth sweepings.

1. INTRODUCTION

1.1 In June 2017 Archaeological Research Services Ltd was commissioned by Taylor Wimpey to undertake an archaeological excavation on a site adjacent to Eden Drive in Sedgefield, County Durham, in advance of development. Planning permission was granted by Durham County Council for the proposed development which includes outline planning permission for up to 220 dwellings and full planning permission for 80 dwellings with associated access and landscaping (DM/15/03808/OUT). Only the northern-most part of the development site was subjected to full excavation while three evaluation trenches were opened within the south-western area.

1.2 Nearby, 2005 to 2008, Durham University conducted four summer seasons of archaeological excavation, including geophysical survey, on the site of East Park to the west of Sedgefield. The project aimed to provide training in excavation, recording and surveying for the local community, while establishing the extent, character, date and material culture of a known Roman roadside settlement. Several large ditched property plots were examined along with an open central area which is believed to have been a type of market-place.

1.2 A Desk Based Assessment (ArcHeritage 2012) found no evidence of activity within the development site until the medieval period. Cropmarks indicating the presence of prehistoric archaeology were identified both to the north and south of the village of Sedgefield although not within the immediate vicinity of the development site itself. Levelled ridge and furrow was noted within the northern half of the site.

1.3 A geophysical survey carried out in 2014 (Johnson 2014) revealed anomalies suggesting the presence of substantial ditched enclosures and associated boundary ditches, as well as roundhouses and other small buildings within the proposed development site. Subsequently, an archaeological evaluation (Archaeological Services Durham University 2014) was carried out which confirmed the results of the geophysical survey and revealed evidence for a multi-phase enclosure settlement of probable Roman Iron Age date within the northern portion of the site. No archaeological deposits were encountered within the southern part of the site.

1.4 In 2015 a geophysical survey was carried out on the site of Beacon Lane which is located immediately to the east of Eden Drive across Stockton Road (Scott 2015). The survey successfully located and identified a number of anomalies including the remains of ridge and furrow agricultural cultivation as well as a number of ditches or gullies. A large sub-circular feature was identified in the south-western corner of the site containing a collection of smaller features. Subsequently an archaeological evaluation was carried out (McKelvey 2016) that confirmed the presence of prehistoric settlement evidence on the site. This included two areas of concentrated archaeology: one located in the south-west and another towards the north-west. Three sherds of prehistoric pottery and one sherd of Roman pottery from the base of a cooking pot were also recovered. Two radiocarbon dates of late prehistoric/early Roman date were obtained. No further archaeological work was carried out on the site.

1.4 A full archaeological and historical background is included in the Written Scheme of Investigation which has been included at the end of this report (Appendix V).

2. SITE LOCATION AND GEOLOGY

2.1 Sedgefield is situated almost equidistant between the cities of Durham and Middlesbrough. The development site is located at the south-eastern extent of Sedgefield, adjacent to Eden Drive and Thurlow Road and covers a total area of 10.06ha, while the excavation area measured 2.6ha. The field in which the excavation was carried out varied in height from 94.18m aOD in the south to 101.28m aOD at the centre of the northern boundary. The large enclosures identified through geophysical survey, and which form the focus of this archaeological excavation, encompassed the highest areas of the field.

2.2 The geology of the site consists of Devensian till overlying Roxby formation mudstone (BGS 2018).

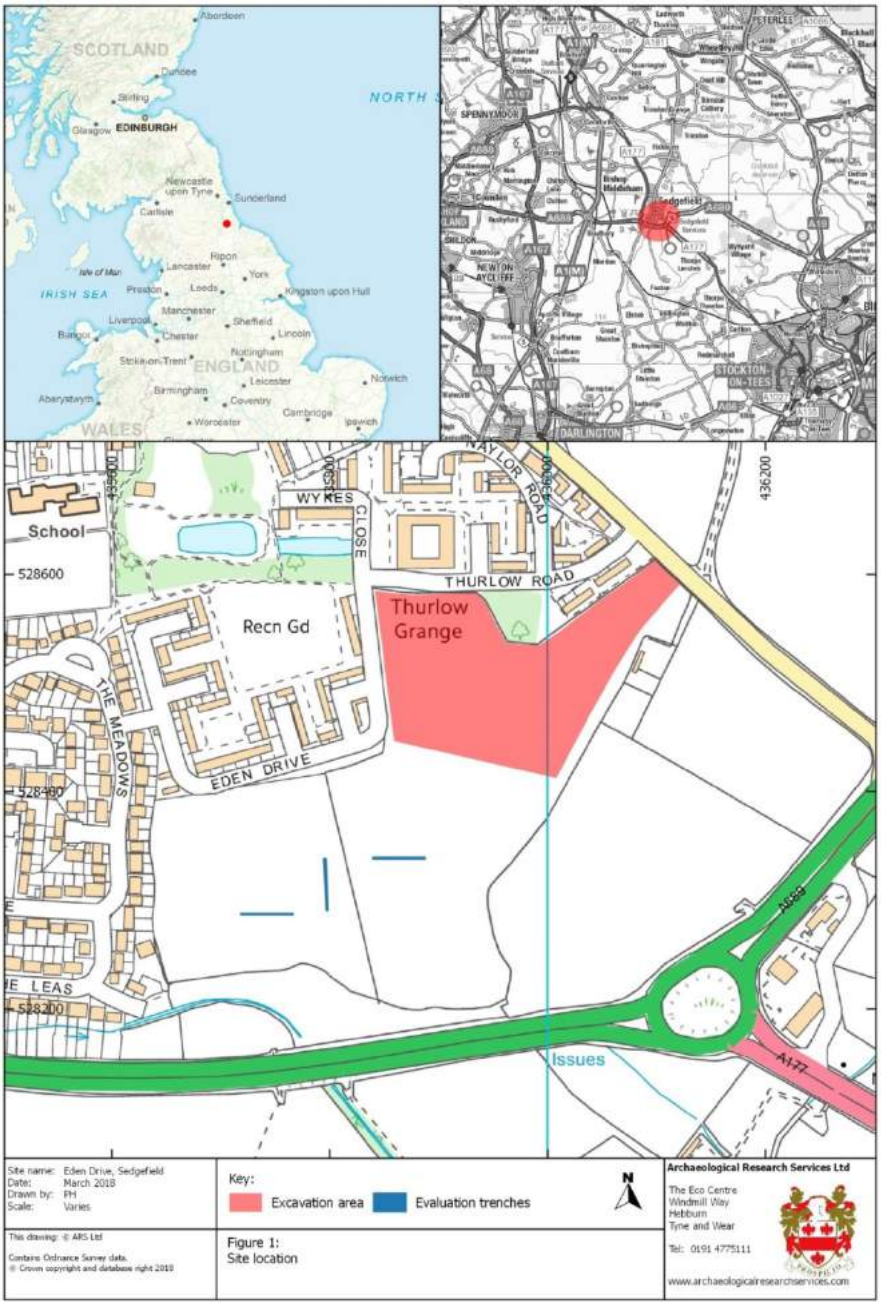


Figure 1. Site location
(Ordnance Survey data copyright OS, reproduced by permission, Licence no. 100045420).

3. AIMS AND OBJECTIVES

3.1 Regional Research Aims and Objectives

3.1.1 Research objectives identified in the *North-East Regional Framework* (Petts and Gerrard 2006) considered to be the most relevant to the project include:

Late Bronze Age and Iron Age (Petts and Gerrard 2006, 136)

- Iii Settlement
- Iv Material Culture: general
- Ivi Material Culture: ceramics.

Roman (Petts and Gerrard 2006, 146-53)

- Ri The Iron Age to Roman transition
- Riv Native and civilian life
- Rv Material culture
- Rix Landscape and environment.

3.1.2 These research objectives have assisted in informing the aims and objectives for the trenching and strip, map and record excavation.

3.2 Principal Aims and Objectives

3.2.1 The aims of the programme of work were to gather sufficient evidence to establish, supplement, improve and make available information about any archaeological remains existing within the area of investigation, and to provide an appropriate post-excavation assessment, analysis, reporting, archiving and dissemination.

3.2.2 The specific objectives were as follows.

- To produce a photographic, drawn and descriptive record of any surviving below-ground archaeological remains.
- To produce dating and phasing for any recorded archaeological deposits.
- To establish the character and delimit the extent of archaeological deposits in order to define functional areas on the site, e.g. industrial and domestic.
- To produce information on the economy and local environment.

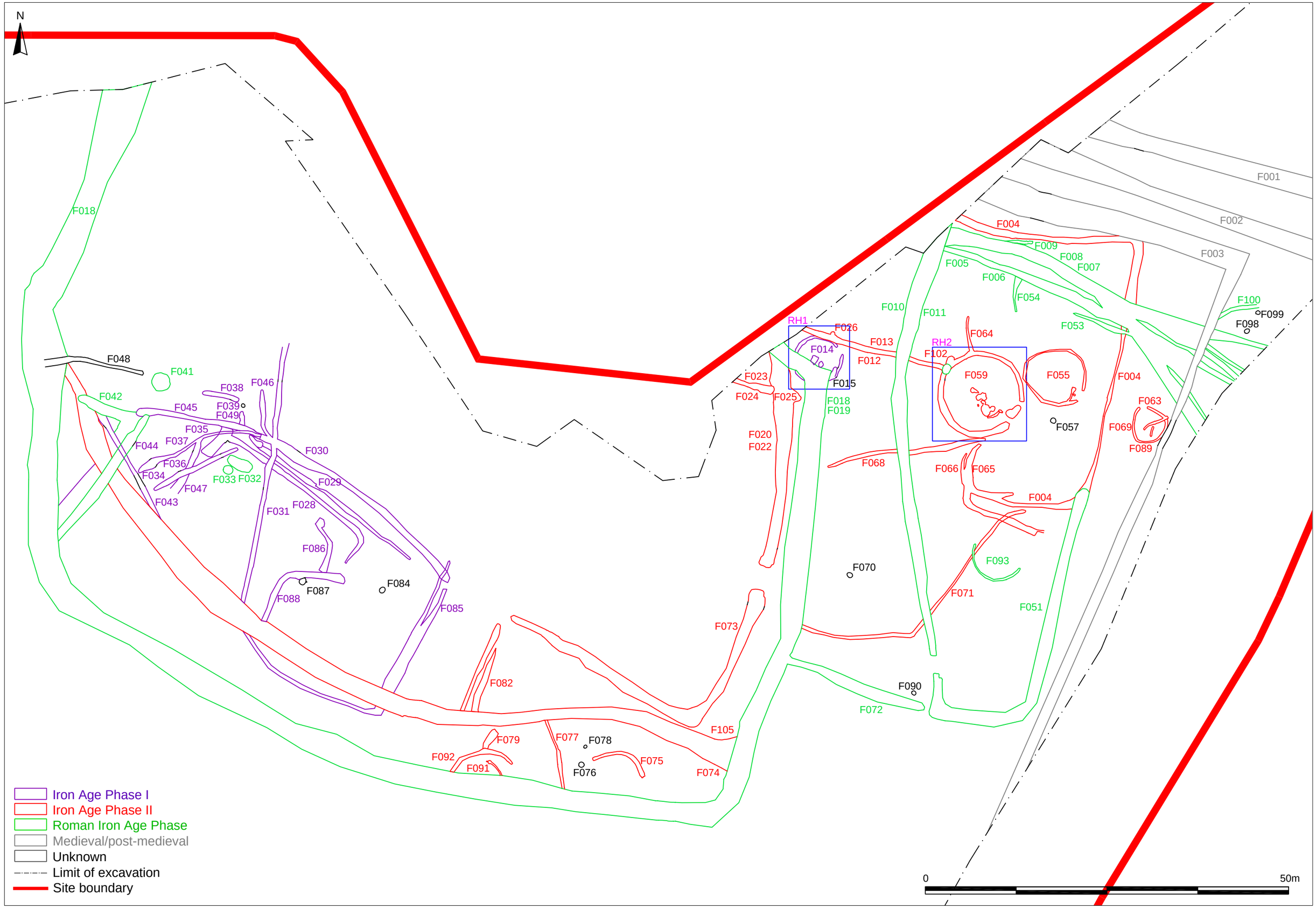
4. METHODOLOGY

4.1 Three evaluation trenches, each measuring 50 x 2m, were excavated within the south-western portion of the development area (Figure 1). The strip, map and record excavation monitored the stripping of all topsoil and subsoil across the designated excavation area (Figure 1 and Figure 2).

4.2 All elements of the trenching and the archaeological strip, map and record excavation were carried out in accordance with CIfA's *Code of Conduct* (2014a) and *Standards and Guidance for Archaeological Excavation* (2014c) and the regional guidance

document *Yorkshire, The Humber & the North East: a regional statement of good practice for archaeology in the development process*.

4.3 Full methodologies for both the evaluation trenching and the strip, map and record excavation are provided within the Written Scheme of Investigation included as an appendix to this report.


N
F018
F048
F041
F042
F038
F046
F045
F039
F049
F035
F044
F037
F030
F036
F034
F033
F032
F029
F047
F043
F031
F028
F086
F087
F084
F088
F085
F082
F073
F105
F079
F092
F091
F077
F078
F076
F075
F074
F070
F090
F072
F071
F093
F051
F001
F002
F003
F004
F009
F008
F007
F005
F006
F054
F100
F099
F098
F010
F011
F053
RH1
F026
F014
F013
F012
F015
F023
F024
F025
F018
F019
F020
F022
F068
RH2
F064
F102
F059
F055
F057
F063
F069
F089
F066
F065
F004
0
50m
Iron Age Phase I
Iron Age Phase II
Roman Iron Age Phase
Medieval/post-medieval
Unknown
Limit of excavation
Site boundary

5. EVALUATION TRENCH RESULTS

5.1 Three 50 x 2m evaluation trenches were excavated within the southern part of the proposed development area (Figure 1). Trench 1 was orientated east-west, as was Trench 3, while Trench 2 was orientated north-south.

5.2 The trenches were excavated in order to investigate the part of the site that had not previously been subject to archaeological investigation.

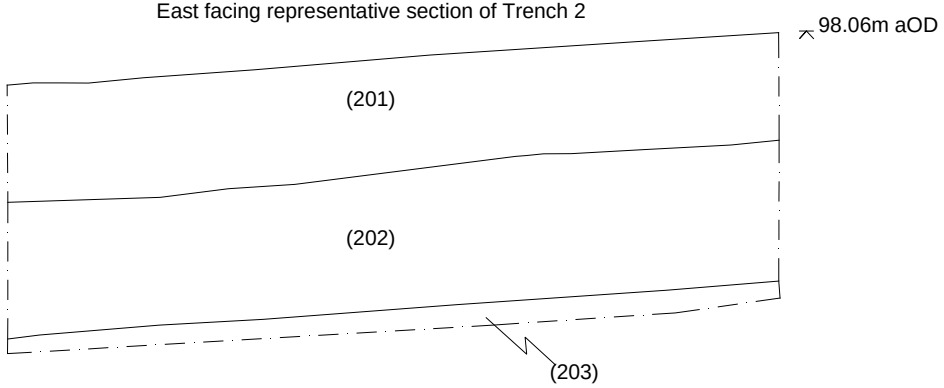
5.3 Within each trench, the topsoil (101), (201) and (301) had an average depth of 0.2m and was overlying pale brown clay subsoil (102), (202) and (302) that had an average depth of 0.3m. The orange/ brown natural clay substrate (103), (203) and (303) was encountered at an average depth of 0.5m below the modern ground surface. None of the trenches contained any features or buried land surfaces of archaeological importance.

Figure 3. Trench 1, looking west (scales = 1m + 2m).

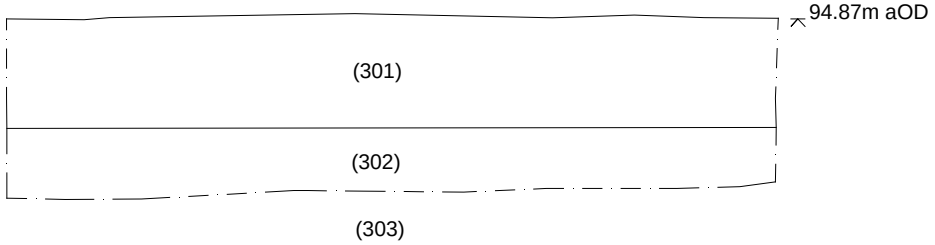
Figure 4. Trench 2, looking south (scales = 1m + 2m).

Figure 5. Trench 3, looking west (scales = 1m + 2m).

East facing representative section of Trench 2



South facing representative section of Trench 3



North-east facing representative section of Trench 1

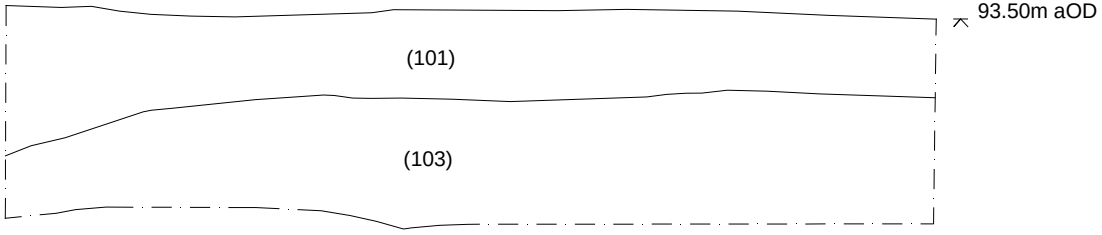


Figure 6:

Sections of Evaluation trenches 1, 2 and 3.

Scale = 1:20 at A4.

Key:

6. EXCAVATION RESULTS

6.1 Site stratigraphy

6.1.1 The topsoil across the site consisted of dark brown loamy sand with an average depth of 0.25m (001). This was overlying pale brown clay subsoil that had an average depth of 0.3m (002). The natural substrate comprised orange/brown clay which in places graded to a brown/orange sand and gravel (003). All archaeological features identified across the site were found to have been cut into the natural substrate.

6.1.2 Excavated features dimensions are all taken from the top of the archaeological horizon unless otherwise stated.

6.2 Phase I Iron Age

6.2.1 Roundhouse 1 (RH1) was situated within the eastern half of the excavation area, close to the northern boundary, and consisted of a shallow curving gully with two, probably associated, internal pits (Figure 2, Figure 7, Figure 8 and Figure 12). The circular gully, F014, had a maximum internal diameter of 6.2m and an estimated internal area of 25.65m^2. The gully measured 0.52m wide at its top and had a maximum surviving depth of 0.13m from the top of the natural clay (003) (Figure 8). The fill of the gully (026) was finely textured grey silty clay containing occasional stones while the cut [025] had gently sloping sides and a rounded base. The roundhouse had been substantially truncated on both its north-east and south-west sides by later ditches (F012 and F019) but there still existed evidence of an entrance on the roundhouse's north-east side (Figure 7). Located centrally within the roundhouse were two pits, side-by-side (Figure 9 and Figure 12). The first of these, F016, was an ovoid pit measuring 0.62 x 0.82 in width and 0.33m in depth from the top of the natural clay (003). The cut [049] was steeply sided and uniform with a rounded base and contained two distinct fills: a lower fill of light grey/brown clay loam (050) overlain by black/grey silt loam (051). The other pit, F017, was slightly larger than F016 measuring 1.19 x 0.82m in width and with a maximum depth of 0.37m from the top of the natural clay (003). The cut of the pit [052] was uneven and contained two separate fills: a lower fill of grey/brown clay loam (053) overlain by black silt loam (054). There was no evidence of any internal postholes however the roundhouse's gully is most likely to be the truncated remains of a drip ditch.

6.2.2 Also thought to belong to the earliest phase of Iron Age occupation on the site was a series of small, intercutting ditches located across to the western extent of the excavation area (Figure 2). A total of 14 ditches were identified within an area where the natural clay had graded to coarse, brown gravel which made feature identification difficult. The inclusion of these features within the earliest phase of Iron Age occupation is based on their truncation by later Iron Age and Roman Iron Age features (Figure 13, Figure 14, Figure 15, Figure 16, Figure 17 and Figure 18).

6.2.3 None of the ditches were particularly deep and most only contained one fill. None of the ditches produced any finds. The ditches appeared to demarcate a small, roughly rectangular-shaped area although numerous alterations had evidently been made to many of them (Figure 2). The earliest of the ditches were F028, F029, F035, F049, F086 and F088 (Figure 10 and Figure 11). Together they formed what has been interpreted as a droveway system for the corralling of livestock, with an entrance located on the south-east side from

which the animals would have been led towards the north-west. Animal bone recovered from the Phase I Iron Age contexts on the site suggests a reliance on pig, sheep/goat and cattle as well as wild animals such as red deer. Ditches F028 and F029 were both truncated by later ditch F031 (Figure 15) which dissected the area from north to south, splitting it in two. Ditch F031 had in turn been truncated by ditch F030 (same as F045) (Figure 14). Ditch F030/F045 ran parallel to ditches F028 and F029, indicating that they were created in order to directly expand or improve upon the existing ditch system. There was no evidence that any of the ditches had held wooden posts and it is therefore possible that the up-cast from the ditches had been used to create small banks, running parallel to the ditches. These banks could then have had fences constructed on top although there was no surviving evidence of either banks or fences. A charred cereal grain from the fill of F030/F045 (176) produced a calibrated radiocarbon date of 1640-1937 cal AD (95.4% probability) 1647-1798 cal AD (68.2% probability) (SUERC-79164 (GU47265)). This sample is believed to be intrusive, given that the stratigraphic relationships show these to be some of the earliest ditches on the site.

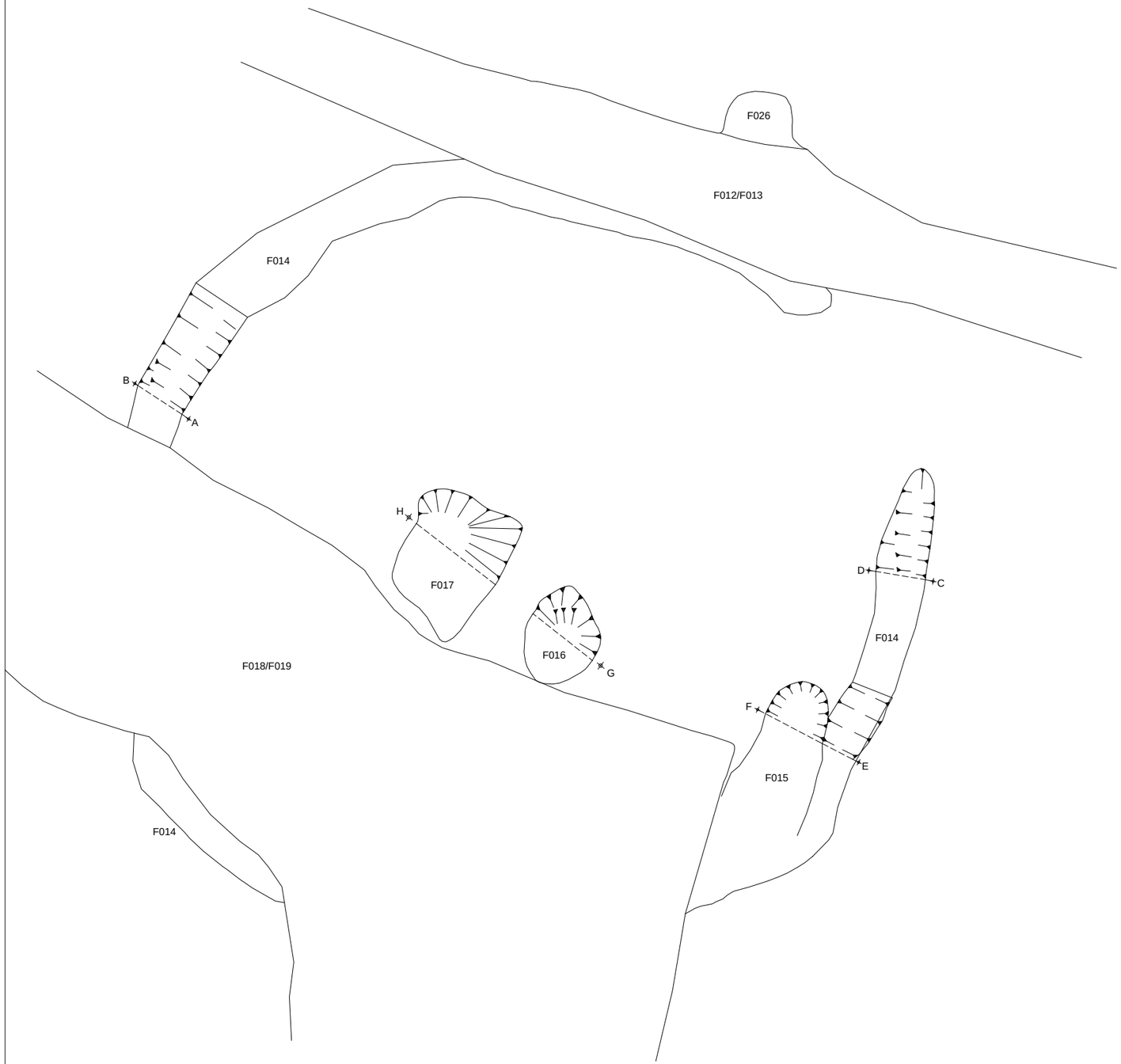
Figure 7. Roundhouse 1 prior to excavation, looking south-west (scales = 2 x 2m).

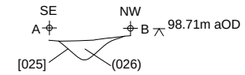
Figure 8. The ring groove of Roundhouse 1 after partial excavation (scale = 1m).

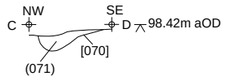
Figure 9. Pits F016 and F017 after partial excavation (scales = 1m + 2m).

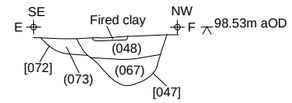
Figure 10. An excavated slot through droveway ditch F028 (scale = 0.25m).

Figure 11. Excavated slots through droveway ditches F029 and F030 after partial excavation (scale = 1m).









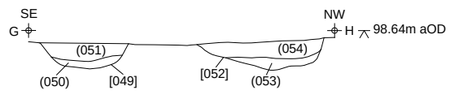


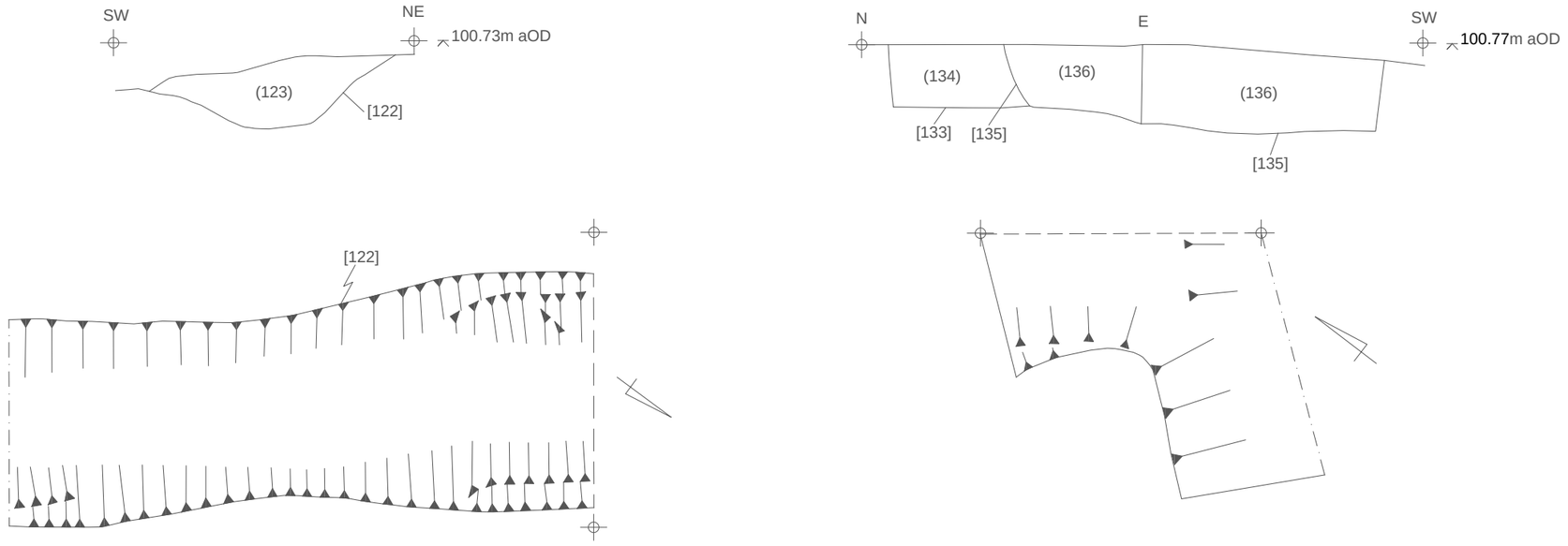
Figure 12:

Plan of Roundhouse 1 and associated sections.

Scale = 1:20 at A3

Key:

Plans and sections of droveway ditch F028



Plans and sections of droveway ditch F029

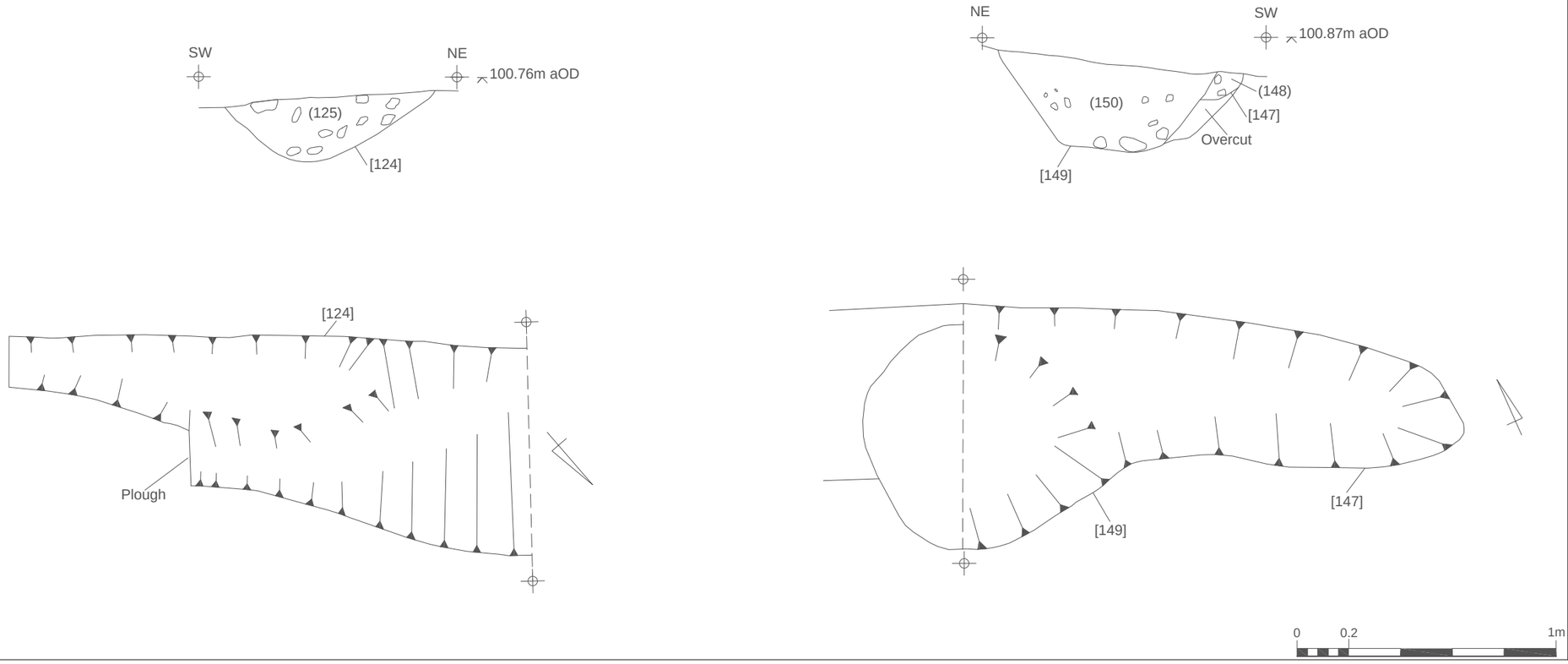
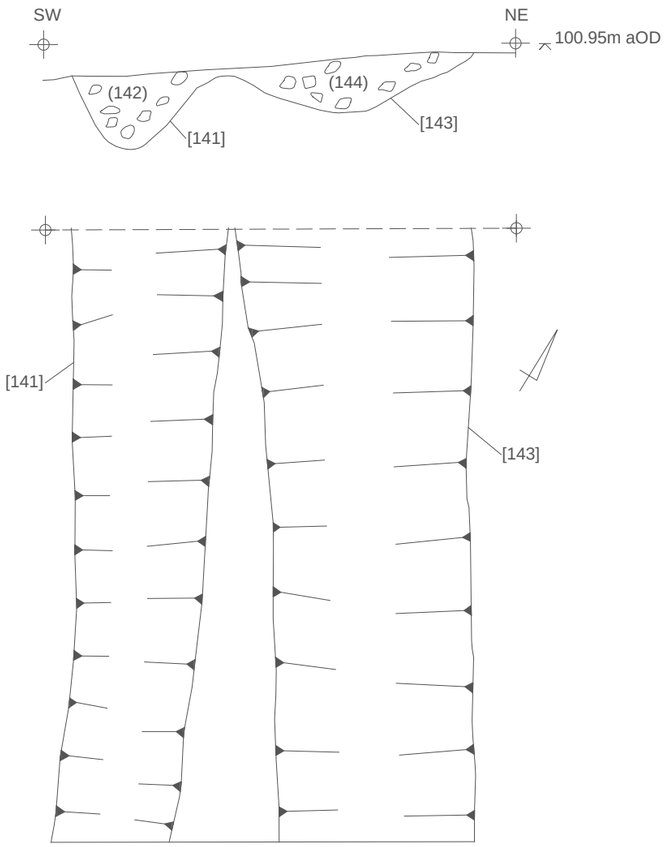


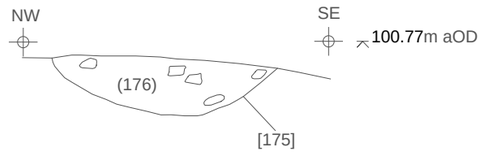
Figure 13:

Plans and sections of droveway ditches F028 and F029.

Scale = 1:20 at A3

Key:





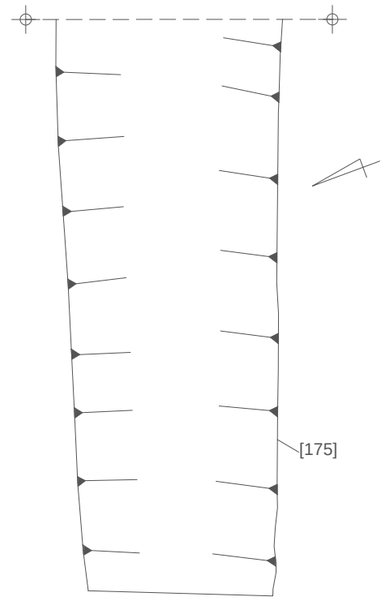


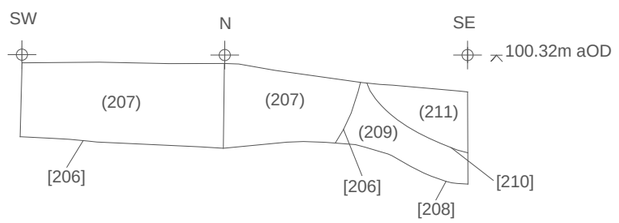
Figure 14:

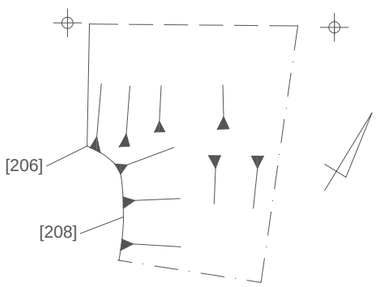
Plans and sections of droveway ditch F030/F045.

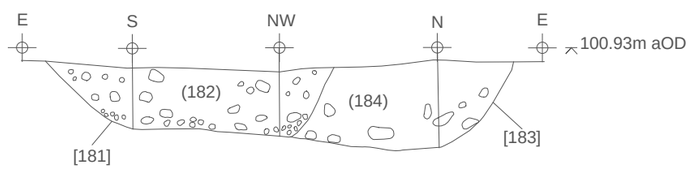
Scale = 1:20 at A3

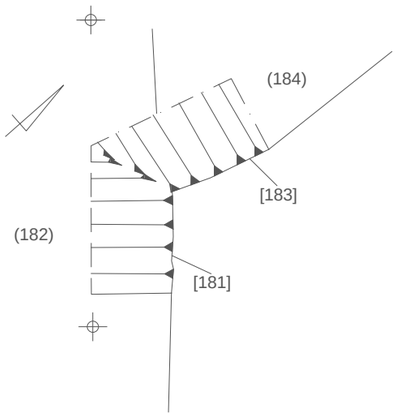
Key:

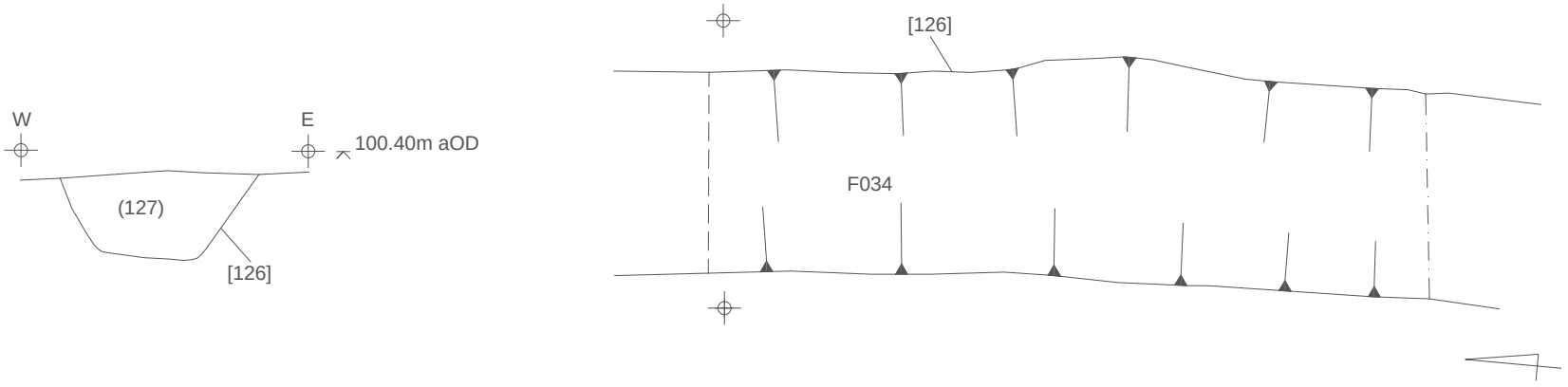
Relationship with F035











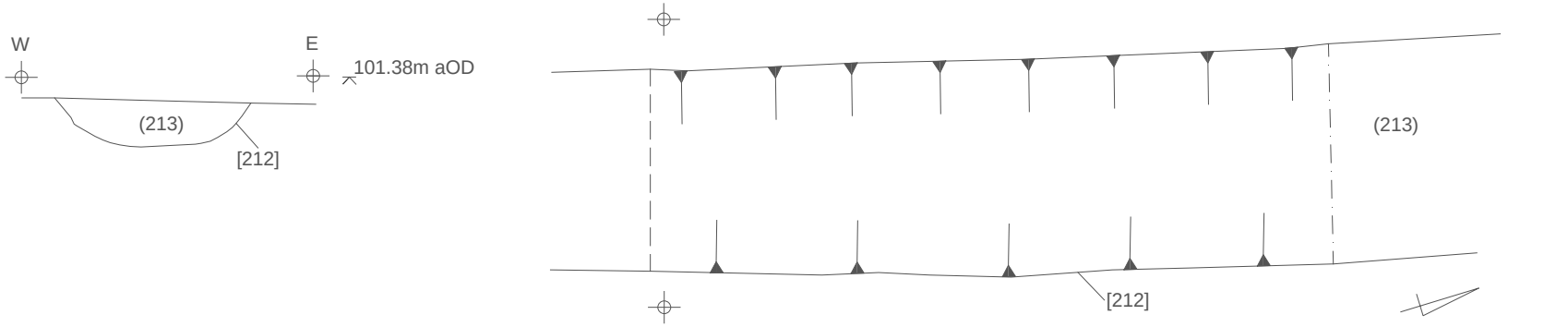
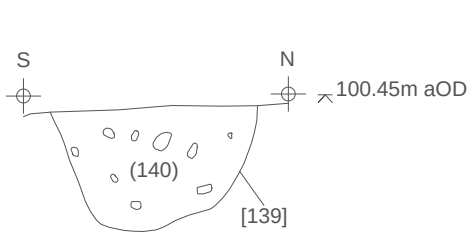


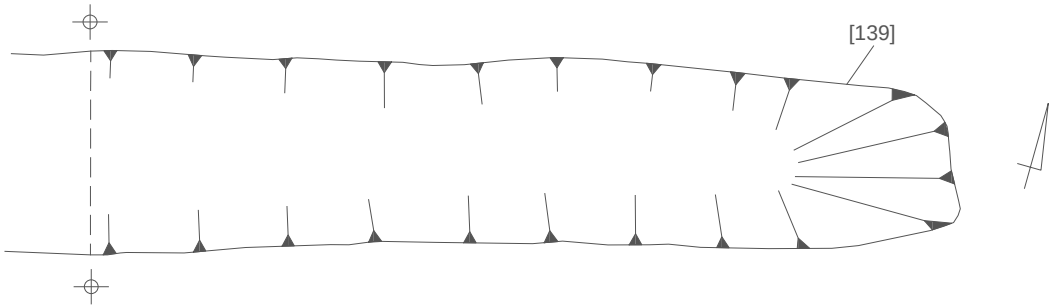
Figure 15:

Plans and sections of droveway ditch F031.

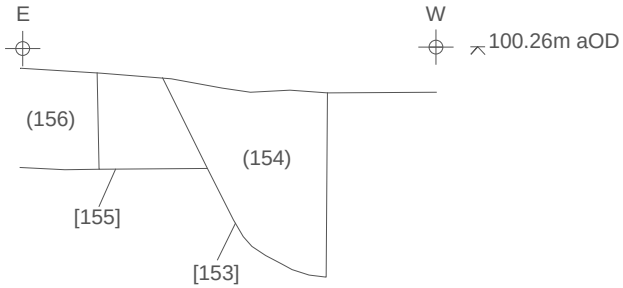
Scale = 1:20 at A4.

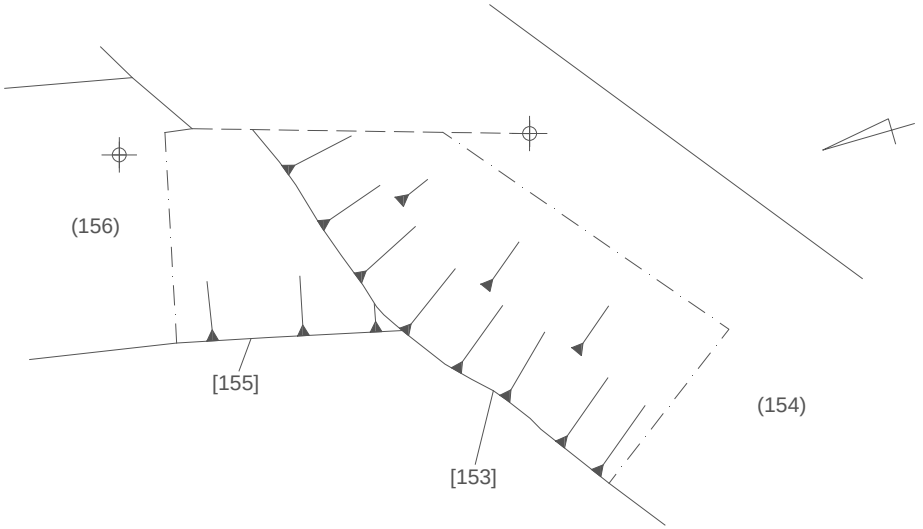
Key:

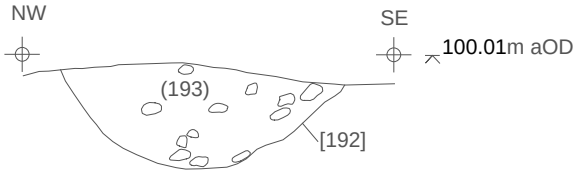




Relationship with F036/F047







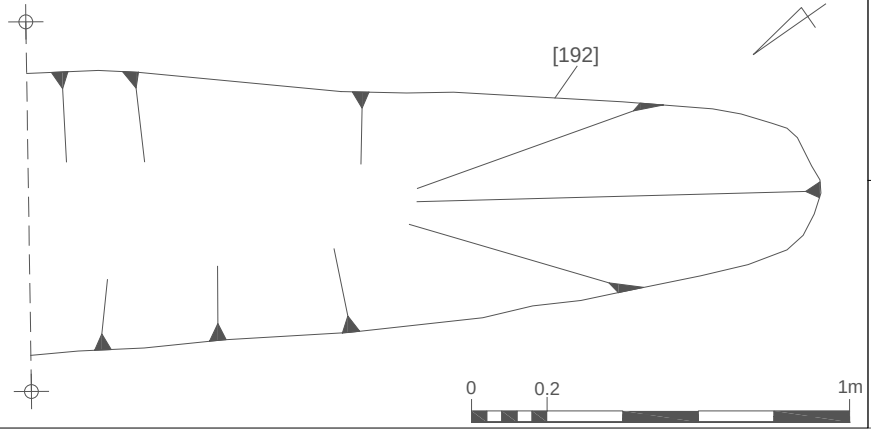


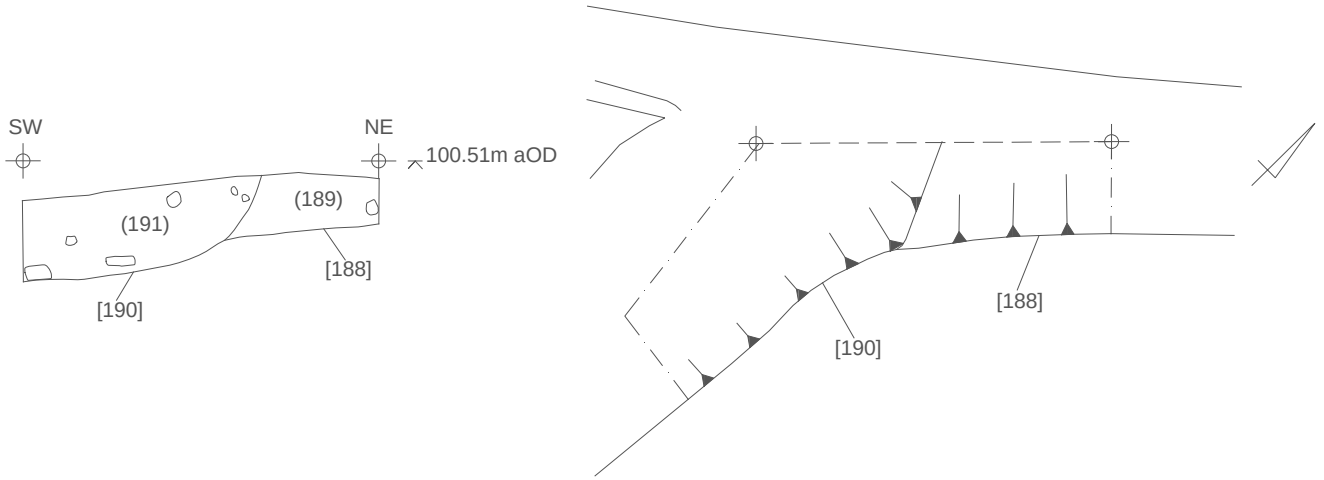
Figure 16:

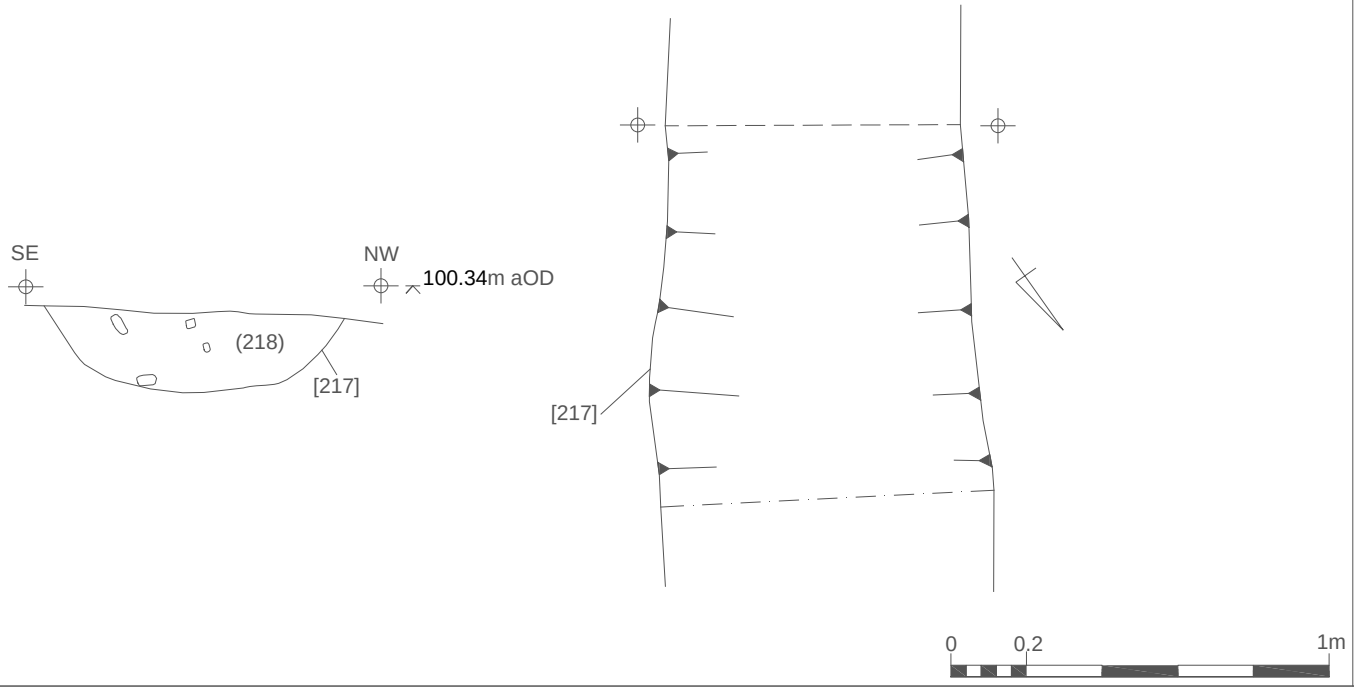
Plans and sections of droveway ditch F034.

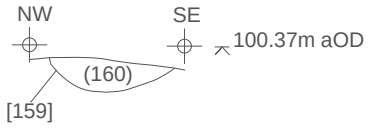
Scale = 1:20 at A4.

Key:

Relationship between droveway ditches F036 [190] and F037 [188]







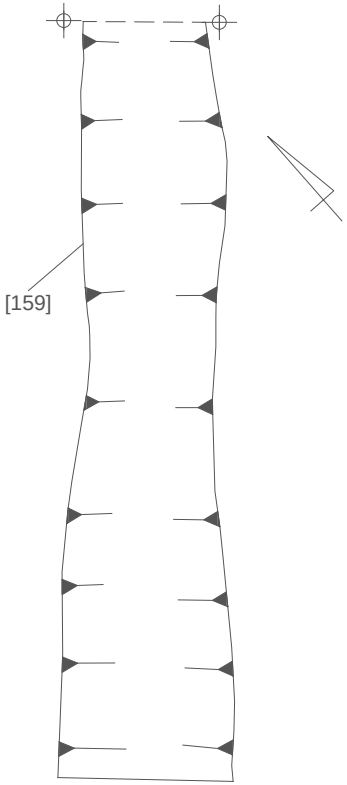


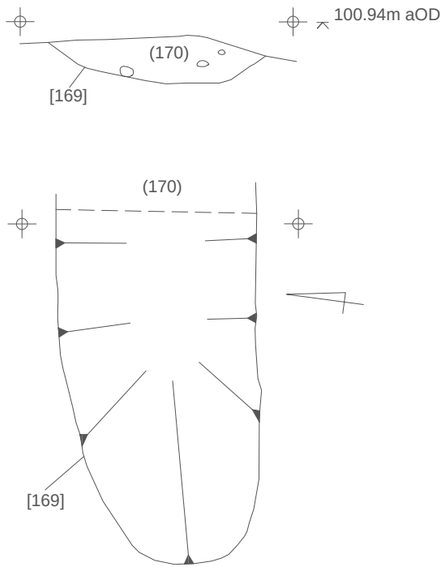
Figure 17:

Plans and sections of droveway ditch F037.

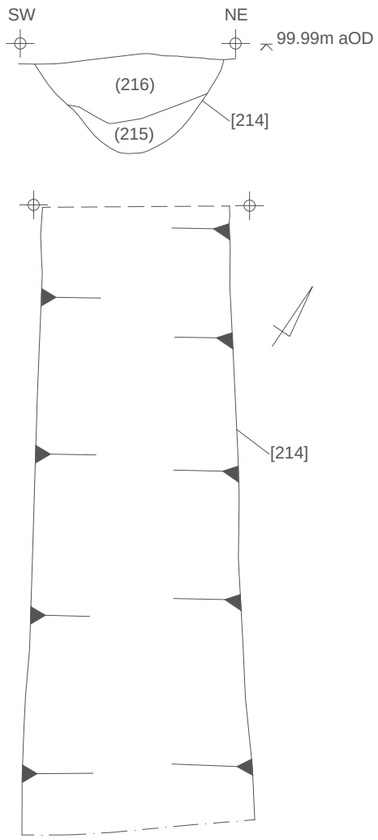
Scale = 1:20 at A4.

Key:

Droveway ditch F038



Droveway ditch F043



Droveway ditch F046

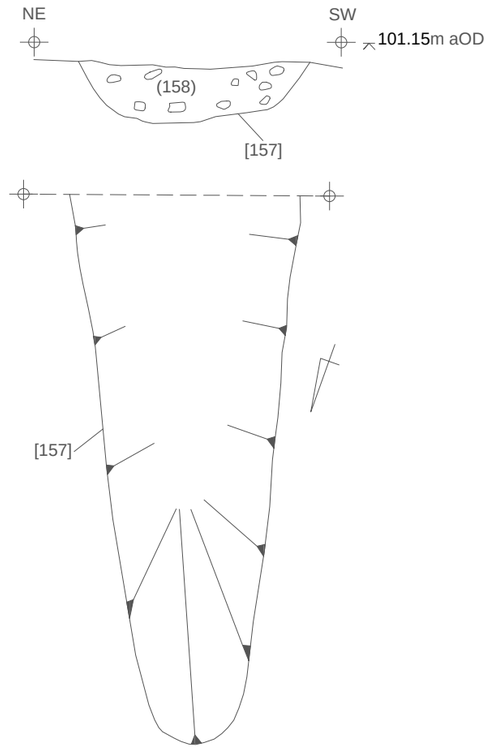


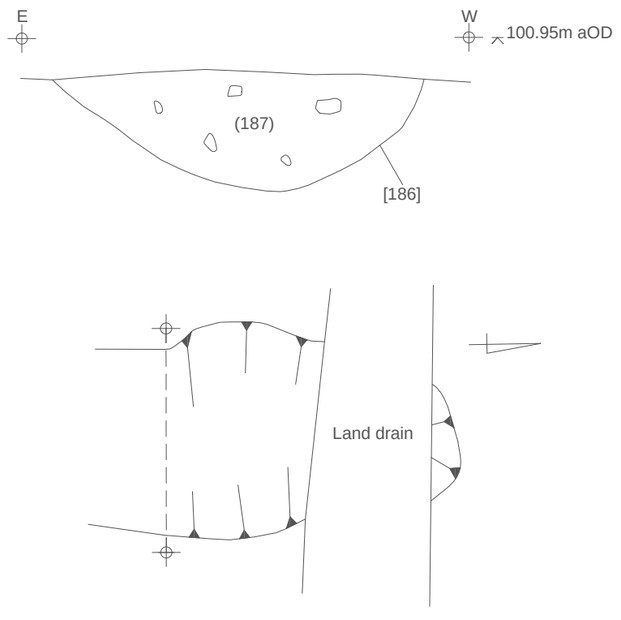
Figure 18:

Plans and sections of droveway ditches F038, F043, F046, F049, F086 and F088.

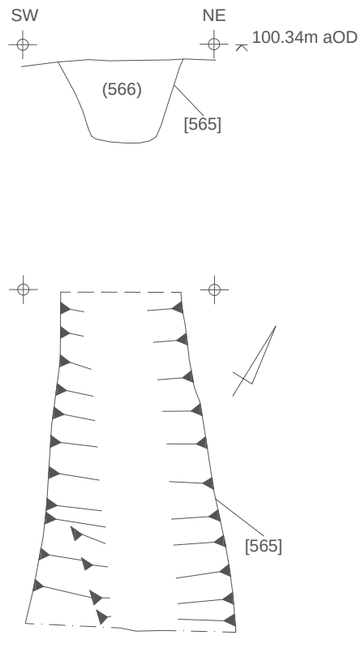
Scale = 1:20 at A3

Key:

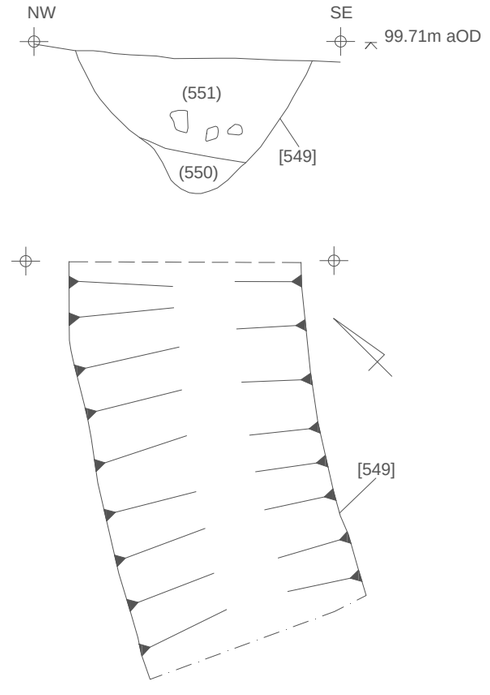
Droveway ditch F049



Droveway ditch F086



Droveway ditch F088



Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability) cal BC
F014	RH1 ring groove	[025]	0.52	0.13	-	-	-
		(026)	0.52	0.13	Grey	Silty clay	-
		[070]	0.42	0.1	-	-	-
		(071)	0.42	0.1	Grey	Silty clay	-
		[072]	0.36	0.12	-	-	-
		(073)	0.36	0.12	Grey	Silty clay	-
		[091]	0.2	0.11	-	-	-
		(092)	0.2	0.11	Mid grey/brown	Clay loam	-
		[120]	0.26	0.08	-	-	-
		(121)	0.26	0.08	Light grey/brown	Clay loam	-
F016	Pit within RH1	[049]	0.58	0.17	-	-	-
		(050)	0.45	0.08	Light grey/brown	Clay loam	-
		(051)	0.58	0.12	Black/grey	Silt loam	-
F017	Pit within RH1	[052]	1.16 x 0.83	0.2	-	-	-
		(053)	0.61	0.08	Mid grey/brown	Clay loam	-
		(054)	1.16 x 0.83	0.12	Black w/ orange	Silt loam	-
F028	Droveway ditch	[122]	0.8	0.2	-	-	-
		(123)	0.8	0.2	Dark brown	Gravel and clay	-
		[133]	0.8	0.25	-	-	-
		(134)	0.8	0.25	Brown/orange	Sandy clay	-
		[196]	0.82	0.14	-	-	-
		(197)	0.82	0.14	Red/brown	Gravel and clay	-
F029	Droveway ditch	[124]	0.8	0.26	-	-	-
		[125]	0.8	0.26	Dark grey/brown	Clay and gravel	-
		[147]	0.62	0.11	-	-	-
		(148)	0.62	0.11	Mid brown	Silty loam	-
		[149]	0.84	0.39	-	-	-
		(150)	0.84	0.39	Mid brown	Silty loam	-
F030/ F045	Droveway ditch	[143]	0.7	0.17	-	-	-
		(144)	0.7	0.17	Dark grey/brown	Clay and gravel	-
		[175]	0.7	0.18	-	-	-
		(176)	0.7	0.18	Dark grey/brown	Clay and gravel	1640-1937 cal AD (intrusive)
		[181]	0.28	0.21	-	-	-
		(182)	0.28	0.21	Grey/brown	Sandy silt	-
		[202]	0.83	0.25	-	-	-
		(203)	0.83	0.25	Brown/grey	Sandy silt	-
		[206]	0.9	0.23	-	-	-
		(207)	0.9	0.23	Brown	Sandy clay	-
		[235]	1.27	0.2	-	-	-
		(236)	1.27	0.2	Light brown/grey	Sandy silty clay	-
F031	Droveway ditch	[126]	0.6	0.25	-	-	-
		(127)	0.6	0.25	Dark brown/grey	Clayey silt	-
		[135]	0.92	0.29	-	-	-
		(136)	0.92	0.29	Brown/orange	Sandy clay	-
		[165]	0.73	0.27	-	-	-
		(166)	0.73	0.27	Brown/grey	Loamy silt	-
		[183]	0.7	0.28	-	-	-
		(184)	0.7	0.28	Grey/brown	Sandy silt	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability) cal BC
		[212]	0.6	0.2	-	-	-
		(213)	0.6	0.2	Dark brown	Sandy silt	-
F034	Droveway ditch	[139]	0.55	0.33	-	-	-
		(140)	0.55	0.33	Mid brown	Silty loam	-
		[153]	0.8	0.5	-	-	-
		(154)	0.8	0.5	Dark grey	Sandy clayey silt	-
		[192]	0.74	0.28	-	-	-
		(193)	0.74	0.28	Dark grey/brown	Clayey silt gravel	-
F035	Droveway ditch	[151]	0.76	0.41	-	-	-
		(152)	0.76	0.41	Brown/grey	Loamy silt	-
		[198]	1.45	0.3	-	-	-
		(199)	1.45	0.3	Red/brown	Clay with gravel	-
		[208]	1.63	0.2	-	-	-
		(209)	1.63	0.2	Brown	Sandy clay	-
F036/ F047	Droveway ditch	[155]	0.7	0.26	-	-	-
		(156)	0.7	0.26	Dark brown grey	Sandy silt	-
		[190]	0.58	0.27	-	-	-
		(191)	0.58	0.27	Mid brown	Silty loam	-
		[217]	0.95	0.22	-	-	-
		(218)	0.95	0.22	Mid brown	Silty loam	-
F037	Droveway ditch	[159]	0.4	0.07	-	-	-
		(160)	0.4	0.07	Brown	Sandy clay	-
		[188]	0.4	0.15	-	-	-
		(189)	0.4	0.15	Yellow/brown	Silty loam	-
		[210]	0.6	0.19	-	-	-
		(211)	0.6	0.19	Brown	Sandy clay	-
		[219]	1.27	0.14	-	-	-
		(220)	1.27	0.14	Mid brown	Silty loam	-
F038	Droveway ditch	[169]	0.7	0.25	-	-	-
		(170)	0.7	0.25	Dark brown/grey	Sandy silt	-
F039	Pit	[167]	0.45	0.1	-	-	-
		(168)	0.45	0.1	Dark grey	Sandy silt	-
F043	Droveway ditch	[214]	0.62	0.36	-	-	-
		(215)	0.34	0.12	Dark orange/brown	Silty sand	-
		(216)	0.62	0.24	Dark grey/brown	Silty clay	-
		[228]	0.8	0.2	-	-	-
		(229)	0.8	0.2	Brown/grey	Loamy silt	-
F046	Droveway ditch	[157]	0.74	0.18	-	-	-
		(158)	0.74	0.18	Dark grey/brown	Clay with gravel	-
		[204]	0.46	0.17	-	-	-
		(205)	0.46	0.17	Brown/grey	Sandy silt	-
F049	Droveway ditch	[186]	0.57	0.19	-	-	-
		(187)	0.57	0.19	Mid brown	Silty loam	-
F085	Droveway ditch	[575]	0.75	0.14	-	-	-
		(576)	0.75	0.14	Dark grey	Sandy silt	-
		[577]	1	0.32	-	-	-
		(578)	1	0.32	Dark brown	Clayey silt	-
		[579]	0.6	0.16	-	-	-
		(580)	0.6	0.16	Mid brown/grey	Clayey silt	-
F086	Droveway ditch	[565]	0.75	0.25	-	-	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability) cal BC
		(566)	0.75	0.25	Dark grey	Sandy silt	-
F088	Droveway ditch	[549] (550) (551)	0.76 0.3 0.76	0.44 0.12 0.32	- Light brown Black	- Clayey silt Clayey silt	- - -

Table 1. Phase I Iron Age features.

6.3 Phase II Iron Age

6.3.1 The subsequent phase of Iron Age activity and occupation on the site was characterised by a large rectilinear enclosure and associated structures with additional enclosure ditches located beyond. The main enclosure, F020, (shown in red on the plan in Figure 2) was located centrally within the site and encircled the highest point within and extending beyond the excavation area. It measured 109m from east to west and a minimum of 77m from north to south although the northern boundary was not captured within the limit of the excavation and clearly extends further in this direction. It is believed that, originally, the rectilinear enclosure would have consisted of a single ditch, most probably with an associated bank, on its north, south and west sides, with two ditches separated by a bank and an embellished entrance on the eastern side. However, the enclosure had been severely truncated, and replaced, on its eastern and western sides by the much larger later Roman Iron Age enclosure ditch F018/F019 and therefore the outer Iron Age ditch on the enclosure's eastern side was no longer extant.

6.3.2 The surviving inner Phase II Iron Age ditch on the eastern side, F020, measured 30m from where it entered the excavation area in the north to where it terminated at the enclosure's entrance in the south (Figure 19, Figure 20 and Figure 21). The ditch measured a maximum of 2.9m wide and, upon excavation, was actually found to comprise two contemporary ditches running side by side. The eastern of these two ditches measured 0.97m wide and had a maximum depth of 0.28m from the top of the natural clay. The western ditch was slightly larger, measuring 1.3m in width and 0.66m in depth from the top of the natural clay. The cut of the double ditch [040] was regular and had been filled with a number of successive deposits. Fill (061) has been interpreted as a deliberate backfilling of the two ditches although the eastern ditch was later re-cut by a small ditch (F022). Ditch F022 measured 0.7m wide and had a maximum depth of 0.2m from the top of the natural clay. The basal fill of the ditch (062) produced a sherd from a Local Traditional Ware vessel which was produced in the Iron Age period and through into the Roman period. Where the terminal of F020 was excavated, it was found to also comprise two contemporary ditches, with the smaller of the two at the eastern side. In plan, the terminal had a sub-rounded shape and a maximum width of 1.57m. The shallower of the two ditches had a maximum depth of 0.38m while the deeper of the two had a maximum depth of 0.62m from the top of the natural clay (Figure 31). The ditches contained a total of four separate fills, however none of these produced any material culture. A total of three sections were excavated across the width of F020.

6.3.3 There was a distance of 3.2m between the terminal of F020 and the opposing terminal of the ditch, F073 (Figure 2 and Figure 38). The terminal was also rounded in plan and also comprised two ditches, however they were not contemporary as ditch [430] cut

ditch [433]. The earlier of the two ditches [433] had a maximum depth of 0.8m from the top of the natural clay and had a maximum surviving width of 1.29m. None of the ditches' three fills produced any material culture. The later ditch [430] had a maximum width of 1.28m and a maximum depth of 0.68m from the top of the natural clay. Neither of this ditches' two fills produced any material culture. Enclosure ditch F073 ran for a length of 20m from its terminal in the north towards the south before turning at right angles and running for a further 28m towards the west where it terminated. At the corner of the ditch (Figure 38) it measured 1.8m in width and had a maximum depth of 0.5m from the top of the natural clay. Only one ditch was recognised within the section in this location although five separate fills were recorded (516), (517), (518), (519) and (520). Believed to be associated with ditch F073 was a further enclosure ditch F082. Ditch F082 extended from the inner edge of the main Phase II Iron Age enclosure ditch in a north-north-easterly direction for 12m before it terminated (Figure 2). This ditch was orientated at right angles to ditch F073 so that the terminal of ditch F082 and the north-west terminal of ditch F073 almost met, but with a gap of *c*.2m between them. These two ditches with the gap between them formed a triangular enclosure in the corner of the large enclosure with an overall area of 163m^2. The purpose of this smaller, triangular enclosure is unknown although it could have been for the penning of livestock, or possibly domestic fowl. A total of three sections were excavated across the width of F073.

6.3.4 The outer Phase II Iron Age enclosure had been completely eradicated on its eastern and western sides by the subsequent Roman Iron Age enclosure ditch F018/F019. Therefore, only the southern boundary of the outer Phase II Iron Age enclosure still survived at the time of excavation. The feature was excavated towards the eastern corner of the enclosure and was found to consist of two separate ditches, one later than the other, F074 and F105 (Figure 39). The two ditches together measured 115m from east to north-west and had a maximum width of 3.7m. The earlier of the two ditches on the inner, northern side of the enclosure F105 had a maximum depth of 0.95m from the top of the natural clay and measured a minimum of 2.1m wide, although the southern edge of its cut [504] had been eradicated by the later ditch. The smaller, later ditch F074 was situated on the outer, southern side of the enclosure and measured 1.36m wide and had a maximum depth of 0.74m from the top of the natural clay. Neither of these ditches produced any material culture where they were excavated in this location. Where it was investigated elsewhere along its length to the west, the enclosure was seen to consist of an earlier, smaller ditch on the enclosure's outer, southern side and a much larger, later ditch on the inner, northern side. Without any evidence otherwise, it can be presumed that the later ditch was F074 and the earlier was F105 based on the size of the two ditches. A total of three sections were excavated across the width of ditches F074 and F105.

6.3.5 Located *c*.18m beyond the eastern side of the Phase II Iron Age enclosure was a substantial roundhouse, Roundhouse 2 (RH2) (F059) and an associated sub-circular enclosure (F055) (Figure 2, Figure 22, Figure 26, Figure 32 and Figure 33). The roundhouse had an internal diameter of 10.16m with an internal floor area of *c*.83m^2 and an entrance located on its south eastern side which measured 3.6m wide. Upon excavation the roundhouse's ring groove slot was found to have a depth of between 0.29m and 0.74m from the top of the natural clay with a maximum width of 0.96m and a minimum width of 0.56m. On its northern and north-eastern side, [310] and [326], the roundhouse's ring groove had a

'U'-shaped profile which became shallower and wider towards the north-western side [344]. On the roundhouse's south-western side, however, the ring groove became much deeper, [354] and [348], and narrowed towards the base to a rounded 'V' shape where it clearly resembled a construction slot rather than a drip gully. It is possible that the apparent differences in form and depth in the ring groove can be attributed to truncation of the roundhouse prior to excavation, by historic ploughing. The eastern side of the roundhouse was encountered at a height of c.97.7m aOD while the western side sat at *c*.98m aOD which may also have contributed to the difference in the appearance of the ring groove's form. There was no evidence of internal, supporting postholes however which has led to the conclusion that the roundhouse's walls set within the ring groove would have supported the weight of the roof. Palaeoenvironmental analysis of the roundhouse ring groove's fills (312), (330), (347) and (376) found them to contain a significant number of charred indeterminate twigs (see Section 17: Palaeoenvironmental Assessment). It is possible that these twigs had been used in the roundhouse's construction, for example to make wattle and daub wall panels. Alternatively they may have derived from hearth sweepings. The fill of the roundhouse ring groove, (358) and (329), also produced sherds of Flat Rimmed Ware (see Section 8: Prehistoric Ceramics Assessment), the production and use of which is known to have continued into the Iron Age. The assemblage was dominated by domestic cooking vessels.

6.3.6 Within the interior of RH2 was what has been interpreted as a rudimentary oven with an associated rake pit and flue (Figure 23 and Figure 33). The oven F062 comprised a wide pit measuring 1.65 x 1.2m with a maximum depth of 0.3m from the top of the natural clay. The cut of the pit [293] was regular with a flat base and gently sloping sides. The oven pit contained three separate fills, the first of which was a 0.01m deep lens of ashy material (339) at its base. Above this was a deposit of light grey clay containing flecks of charcoal (309). This deposit measured 0.9m wide with a maximum depth of 0.1m and was overlain by the upper deposit of mid grey silty clay which also contained flecks of charcoal (294). The upper fill (294) measured 1.36 x 1.44m and had a maximum surviving depth of 0.14m. Also within the pit but mostly contained with the secondary fill (309) were a large number of stones, many of them showing evidence of having been heat-affected. Many of the stones had been dislodged, particularly on the pit's eastern side, however those surviving *in-situ* had clearly been used to line the edges of the pit (Figure 23). Immediately to the east of the oven pit was a much smaller, rounded pit F061. The cut of the pit [291] was even with a slightly concave base and gently sloping sides. The fill consisted of orange/black sandy silt (292) containing moderate pieces of charcoal and ash. This smaller pit has been interpreted as a rake-out pit which would have been used to dispose of waste materials from the oven (Figure 33). The supposed flue for the oven (F101) was located immediately to the north of oven pit F062 and consisted of an irregular, shallow depression measuring 0.56 x 0.53m and 0.08m in depth from the top of the natural clay. The fill (308) consisted of mid brown/grey clayey silt containing small flecks of charcoal and occasional stones. It is thought that this irregular feature may have been created in order to provide a supply of oxygen for the oven. While there was little evidence of *in-situ* burning within the oven, this could be due, in part, to truncation and disturbance prior to excavation. There was a large patch of heat affected clay, F060, located immediately north of the flue indicating that this may have been where the main hearth was located, although no further evidence had survived.

6.3.7 Immediately to the south of the oven pit (F062) was a narrow curving gully F097 measuring 1.5m in length, 0.34m in width and with a maximum depth of 0.09m (Figure 23, Figure 33 and Figure 34). The fill of the ditch (353) was fine-textured dark grey/brown silt with ash, containing frequent flecks of charcoal. At the eastern end of the small ditch were a series of three small postholes, side-by-side. It is possible that the small ditch and the three postholes were part of a retractable screen or gate that could have been used to shelter the oven from wind and rain entering the roundhouse's entrance.

6.3.8 Located directly within the entrance to the roundhouse were two pits, F058 and F080 (Figure 24, Figure 33 and Figure 34). Pit F058 measured 2.22 x 0.89m with a maximum depth of 0.07m from the start of the archaeological horizon (003). The fill (282) was a dark brown clay loam that produced 52 charred spelt wheat grains amongst other charred organic debris. Pit F080 was a circular pit that had been cut into the top of pit F058. The cut of pit F080 [283] was shallow and irregular and the fill (284) consisted of black silty clay loam. The pit measured 1.03m in diameter and had a maximum depth of 0.05m. A charred emmer wheat grain was retrieved from the fill of pit F058 (282) and this produced a calibrated radiocarbon date of 96 cal BC-66 cal AD (95.4% probability) 47 cal BC - 25 cal AD (68.2% probability) (SUERC-79284 (GU47268)) which places the pit, and therefore most likely the roundhouse itself, in the Late Iron Age period.

6.3.9 Also located within the roundhouse was posthole F096 (Figure 33 and Figure 34). This feature measured 0.52m in diameter and had a maximum depth of 0.4m. The posthole contained two fills, the primary one of which was yellow-grey clay (462) measuring 0.25m in depth. The upper fill was dark grey clay (463) that measured up to 0.15m in depth. Whilst the posthole was not particularly deep at the time of excavation, it had most probably been truncated and had originally been much deeper. Instead of being located centrally within the roundhouse, the posthole was slightly off-centre towards the north-west. However, this positioning may have been in order to allow room for the hearth F060, which was located centrally, in order for the smoke to escape through the top of the structure's conical roof. It is therefore possible that posthole F096 may have provided additional roof support or support for a mezzanine deck.

6.3.10 Believed to be associated with the roundhouse due to its close proximity was a sub-circular structure F055 (Figure 22, Figure 26 and Figure 32). The structure was situated immediately to the east of the roundhouse and measured 8.2m from east to west and 7.4m from north to south. It was defined by a sub-circular gully. There was an entrance on its south-eastern side as well as one opposite, on the north-western side. Upon excavation the structure's gully was found to have steeply sloping sides and a flat base, and was therefore interpreted as a construction slot. Due to its shallow depth, however, it is thought to have only held a low fence as opposed to a more substantial, roofed structure. The feature is provisionally interpreted as a stock pen or possibly an enclosure for keeping fowl. The cut of the slot [289]/[313]/[322]/[324]/[331] varied in depth between 0.09 and 0.33m from the top of the natural clay and had a width of between 0.18 and 0.38m. Where the slot was best-preserved it was seen to have two separate fills. The primary fill (321)/(325)/(333) was a dark grey clay silt containing frequent charcoal flecks, while the upper fill (314)/(332)/(343) was dark brown-grey clay silt also with frequent charcoal flecks. Palaeoenvironmental analysis of the slot's fills found that they contained numerous fragments of charred twigs, similar to the fill of the Roundhouse 2 gully. It is possible that

these twigs had been used in the pen's construction, such as for wattle and daub fence panels. A charred spelt wheat grain extracted from the fill of the stock pen's construction slot (290) produced a calibrated radiocarbon date of 42 cal BC-85 cal AD (95.4% probability) 5-68 cal AD (68.2% probability) (SUERC-79166 (GU47267)). This places the stock pen within the late Iron Age period and as it overlaps with the date from Roundhouse 2 suggests that it is likely to have been in use contemporaneously, however its close proximity indicates it is unlikely to have been thatched if the two structures were standing at the same time. Alternatively, it is possible that this may represent a small roundhouse that replaced Roundhouse 2, although given its more irregular shape and lack of internal features this is considered less likely.

6.3.11 Within the entrance of the stock pen was a narrow slot (F056) and associated postholes (Figure 32). The slot ran between the gully's entrance terminals having a length of 1.9m. It had a maximum width of 0.36m and a maximum depth of 0.11m from the top of the natural clay. At the gully's northern end was a shallow, flat-bottomed, wide posthole. This is likely to have held a gate post for hanging a gate or entrance screen. The short gate slot cut the enclosure's construction gully indicating that the gully had been backfilled, presumably around fence panels to hold them in place, before the entrance structure was added.

6.3.12 Located eastwards of the main Phase II Iron Age rectilinear enclosure and enclosing RH2 and its associated stock enclosure, was a smaller enclosure characterised by a narrow ditch (Figure 27 and Figure 29). This enclosure (F004) measured 36m from north to south and 25m from east to west. The north-western corner of the enclosure continued beyond the limits of the excavation. The enclosure ditch entered the excavation area from the northern edge of the site and ran for a distance of 25m from west to east before turning 90 degrees towards the south. The ditch then ran for a further 35m southwards before again turning 90 degrees towards the west for 15m and then curving towards the north for a short distance before merging with ditch F065. The ditches terminated at the edge of RH2 and could be seen to respect its location. This indicates that the roundhouse was already in existence when enclosure F004 was created, or that they were built together as a single planned enterprise. Where excavated, the ditch was found to consist of only one fill and one cut. The cut [004] was shallow with a concave base and gently sloping, even sides. The fill (005) was a grey clay containing occasional small stones. A small copper alloy strip of unknown function was recovered from the fill of enclosure ditch F004. It is possibly part of a pair of tweezers although tweezers are rare in Iron Age contexts in the north of England (see Section 14: Small Finds Assessment). A total of four sections were excavated across the width of enclosure ditch F004.

6.3.13 Ditch F066, which merged with ditch F004 on the southern side of RH2, was a semi-circular curving ditch which measured 12.5m in length, 0.57m in width and up to 0.22m in depth (Figure 36). Ditch F066 was cut by enclosure ditch F004 and it seems possible that it had supported a temporary shelter, perhaps used during the construction of RH2, prior to the creation of enclosure ditch F004, after which time ditch F066 became redundant and was backfilled. Ditch F065, which also merged with enclosure ditch F004 and ditch F066, measured 17.6m in length and ran from east to west for 10.5m before turning through almost 90 degrees to run for 6.9m towards the north. It measured 0.83m wide and 0.57m deep from the top of the natural clay. Ditch F065 was cut by ditches F004 and F066.

6.3.14 Ditch F068 was an east-west aligned ditch that began where ditches F004, F065 and F066 met the edge of RH2 (Figure 37). Ditch F068 ran for a distance of 22m towards the west before terminating. The ditch had a maximum width of 0.55m and a maximum surviving depth of 0.14m from the top of the natural clay. The cut of the ditch [381] was regular with a flat base and it contained two separate fills. The primary fill (382) was mid brown-grey clay silt with no inclusions, whilst the upper fill (383) was dark brown-grey silty clay. This ditch has been interpreted as a boundary ditch that post-dated RH2, as it respected the roundhouse's location, and was most probably created in order to divide up the surrounding land for livestock or agriculture. It was truncated by the later Roman Iron Age ditch F010/F011.

6.3.15 Ditch F012 was orientated east to west and entered the excavation area from the west along its northern boundary (Figure 2 and Figure 30). The ditch terminated where it met the north-western edge of RH2. Ditch F012 measured 1.06m in width and was 0.39m in depth from the top of the natural clay. The cut of the ditch [016] varied between gently-sided with a concave base to steeply-sided with a flat base. The ditch contained five separate fills (017), (029), (030), (031) and (032) which varied between light brown-grey clay loam and dark brown silty loam. This ditch truncated RH1 from the Phase I Iron Age but was, in-turn, truncated by a later ditch (F010/F011). Ditch F012 terminated where it met RH2 and while the relationship had been removed by a later Roman Iron Age pit (F094) ditch F012 was evidently later than the roundhouse as it respected its location and did not continue beyond it. It is probable that ditch F012 was a boundary ditch and was contemporary with ditch F068. Ditch F012 had been re-cut by ditch F013 which was much narrower and shallower. Ditch F013 measured 0.63m in width and was 0.2m deep from the top of the natural clay. The cut [033] had gently sloping sides and a concave base while the fill (019) was a light brown-grey sandy silt. A further fill (018) was noted at the base of ditch F013, but only intermittently. Fill (018) was light grey-yellow sandy silt and measured up to 0.03m in depth. A total of four sections were excavated across the width of ditch F012/F013.

6.3.16 A further small ditch was discovered abutting RH2. Ditch F064 met the roundhouse at its northern side and ran for 4.9m before terminating (Figure 2 and Figure 34). The ditch was shallow with a gently curving, concave cut [377] and a single fill of mid grey silty clay (378). It measured 0.29m in width and 0.07m in depth from the top of the natural clay. The roundhouse's ring groove was seen to cut ditch F064 which has been interpreted as a drainage ditch to help carry excess water away from the structure.

6.3.17 Approximately 4m beyond enclosure ditch F004, to the east, was a sub-circular structure F063 (Figure 2, Figure 28 and Figure 35). The structure measured 5.2m from north to south and 4.2m from east to west internally with a 1m wide entrance on the northern side. The structure consisted of a single ring groove measuring 0.38m wide and a maximum of 0.11m deep from the top of the natural clay. The cut [418]/[426] was shallow with steep sides and had a concave base while the fill (419)/(427) was a dark brown-grey clay silt. Projecting from the inner edge of the structure's north-eastern side was a straight gully which ran towards the structure's centre. This feature (F069) measured 3.4m in length and its gully measured 0.32m wide and 0.11m deep from the top of the natural clay. The cut [428] was shallow with steep sides and a concave base and the fill (429) was a dark grey clay silt. This feature cut the structure's gully and was therefore a later addition. Also within F063 was a smaller ditch orientated north to south and located to the south of F069. Gully

(F089) measured 1.3m in length and was 0.22m wide and up to 0.13m deep from the top of the natural clay. The cut [440] was steeply sided with a concave base while the fill (441) was a dark grey clay silt. Structure F063 is unlikely to have been a roundhouse due to it not being circular in plan and its small size therefore it could have been a storage shed, workshop or small barn.

6.3.18 A number of additional features, also thought to belong to the Late Iron Age phase of activity across the site, were located between the Phase II Iron Age enclosure and the Roman Iron Age enclosure F018/F019. The first of these (F075) was an arcing ditch which measured 9m in length and arced from west to south (Figure 40). The ditch had a maximum width of 0.6m and a depth of 0.23m from the top of the natural clay. The fill of the ditch (421)/(423) was a dark brown-grey clay silt containing occasional stones and charcoal flecks. The cut of the ditch [420]/[422] varied between steeply sided with a flat base and uneven with a rounded base. This feature is believed to represent a temporary structure.

6.3.19 Located 4.3m to the west of F075 was a further ditch (F077) (Figure 41). This ditch extended from the outer edge of the main Phase II Iron Age enclosure and ran for 10m towards the south where it had been truncated by the Roman Iron Age rectilinear enclosure ditch. The ditch had a maximum width of 0.53m and a maximum depth of 0.34m from the top of the natural clay. The fill of the ditch (467) was a medium textured mid grey-brown silty loam while the cut [466] was steeply sided with a flat base. The fill of the ditch produced some small pottery sherds from an undiagnostic vessel.

6.3.20 To the west of ditch F077, 6.15m away, was a further arcing ditch (F092) (Figure 42). This ditch arced from east to south but had been truncated by the Roman Iron Age enclosure ditch F018/019. Ditch F077 had a maximum length of 9.8m and a maximum width of 0.62m and was up to 0.07m deep, measured from the top of the natural clay. The fill of the ditch (481) was a dark grey-brown clay containing charcoal flecks, while the cut [480] had gently sloping sides and a concave base. Located within the boundary of arcing ditch F092 was a narrower arcing ditch F091 that had a posthole at its western end. This ditch had a maximum length of 3m before it had been truncated by the Roman Iron Age enclosure ditch F018/F019. It measured 0.2m in width and had a maximum depth of 0.17m from the top of the natural clay. The posthole had a maximum depth of 0.32m from the top of the natural clay and the fill (528) contained a number of stones that had presumably been used as packing material.

Figure 19. Phase II Iron Age enclosure ditch F020 and F022, looking north (scale = 2m).

Figure 20. The terminal of enclosure ditch F020 and F022, looking north-east (scales = 1m + 0.25m).

Figure 21. The south-east corner of ditch F020 and F022, looking north-east (scale = 1m).

Figure 22. A high-level photograph of Roundhouse 2 F059 with stock pen F055 in the background (scales = 2 x 2m).

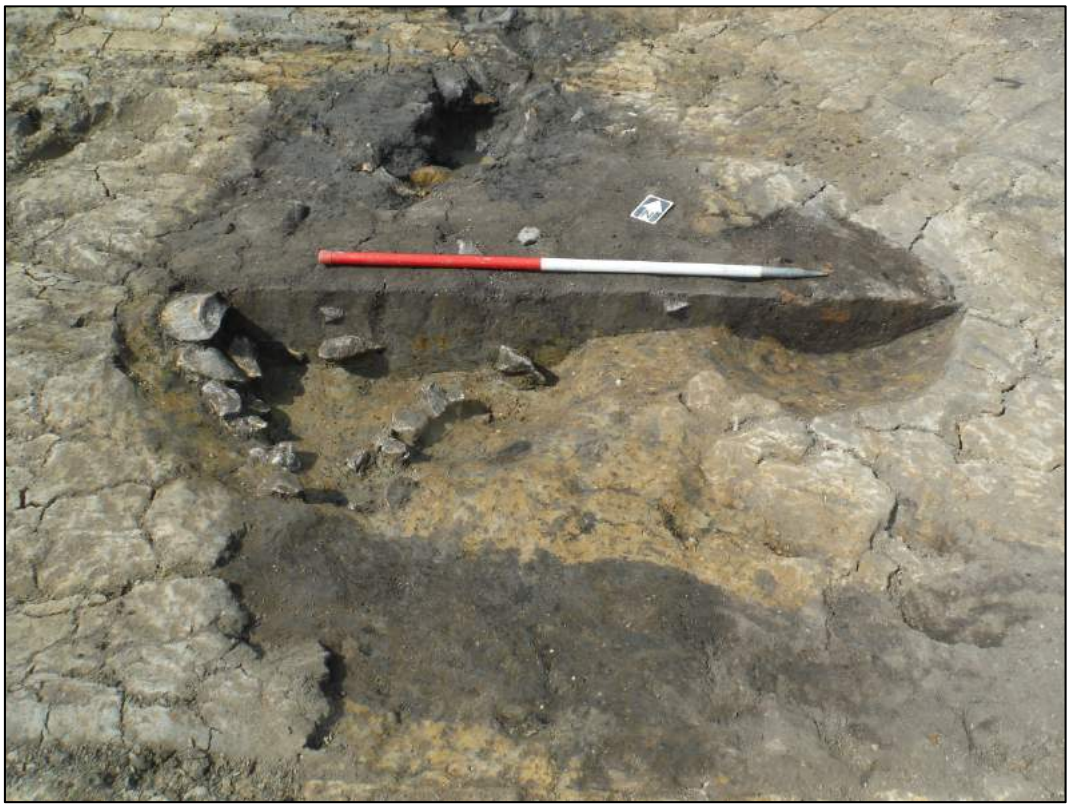


Figure 23. 'Oven' F062 with associated rake pit F061 after partial excavation, looking north-west (scale = 1m).

Figure 24. Threshold pit F058, cut by darker pit F080, within the entrance of Roundhouse 2, looking north-west (scales = 1m + 2m).

Figure 25. The partially excavated construction slot of stock pen F055, looking north-west (scale = 0.25m).

Figure 26. Stock pen F055 after excavation, looking north-west (scales = 2 x 2m).

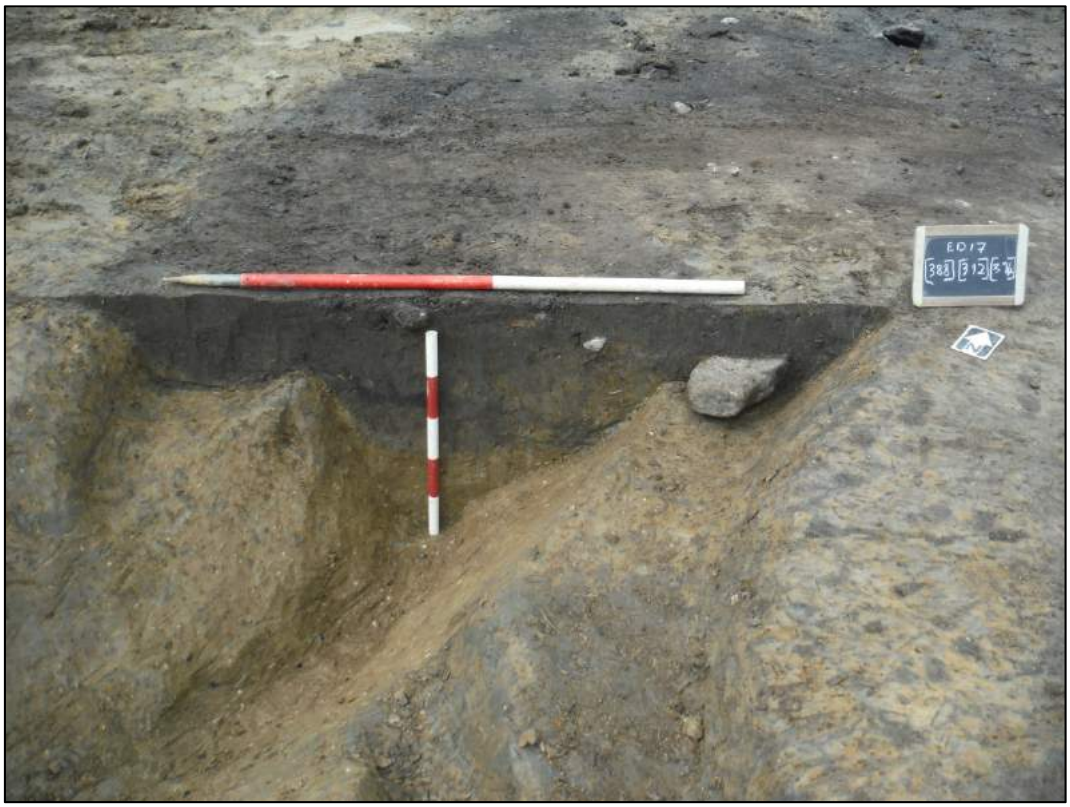
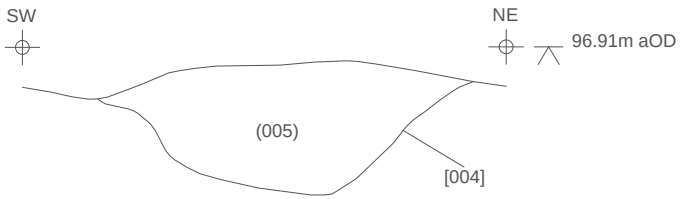
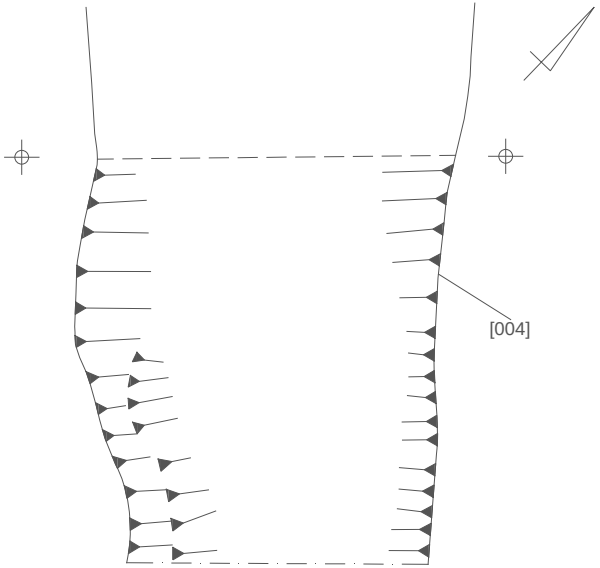


Figure 27. An excavated section across F004, F065 and F066, looking north-west (scales = 1m + 0.25m).

Figure 28. Small structure F063 with associated internal ditches F069 and F089, looking west (scales = 2 x 2m).





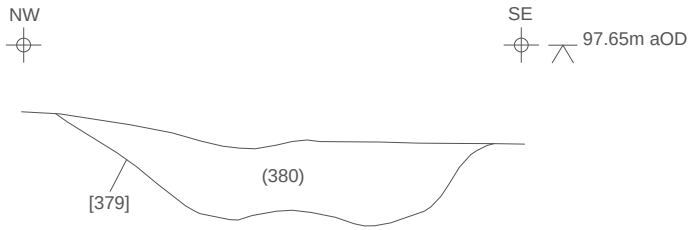
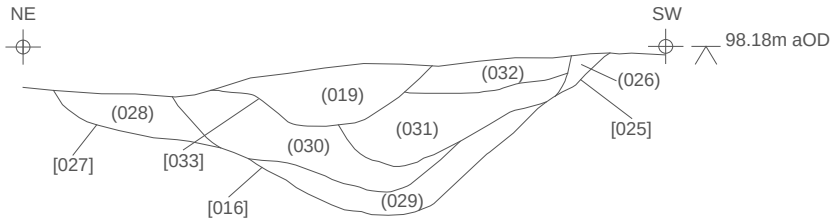


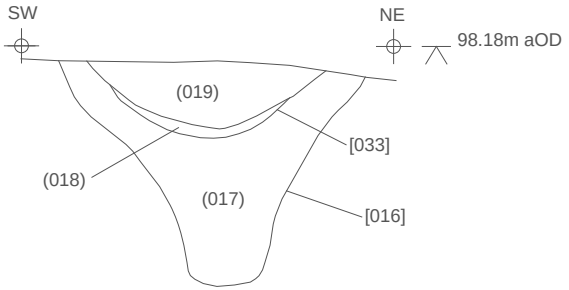
Figure 29:

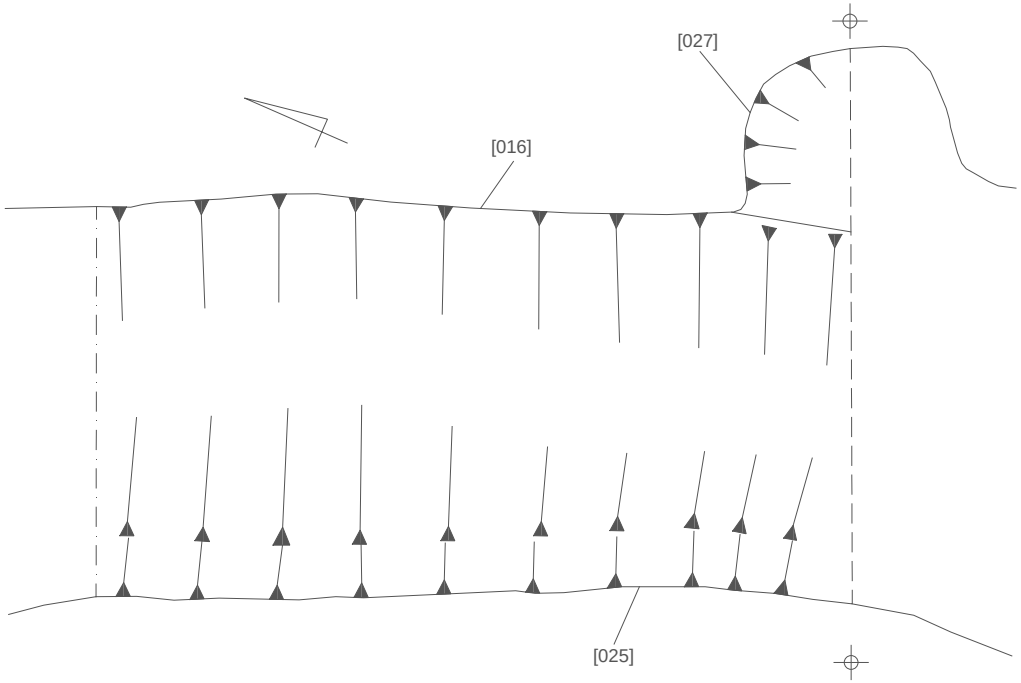
Plans and sections of excavated sections through enclosure ditch F004.

Scale = 1:20 at A4.

Key:







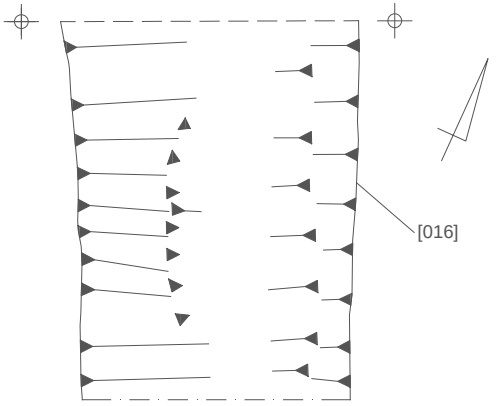


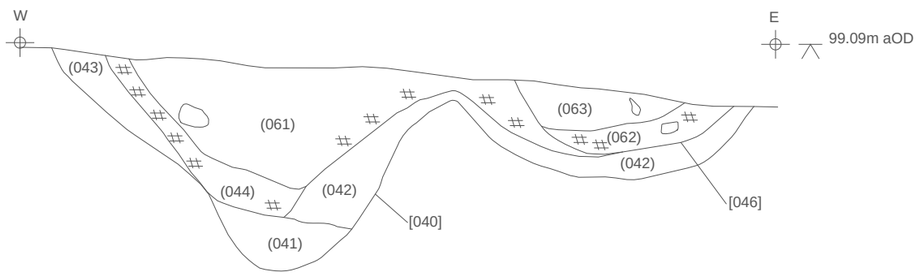
Figure 30:

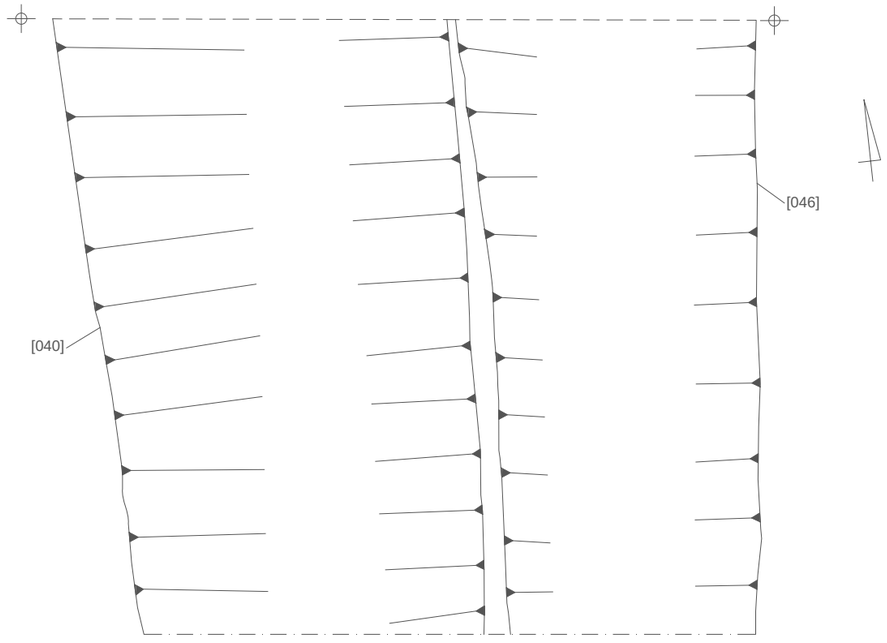
Plans and sections of excavated sections through enclosure ditch F012/F013.

Scale = 1:20 at A4.

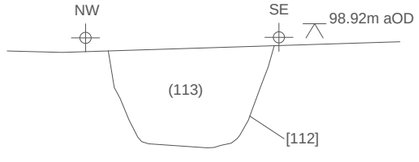
Key:

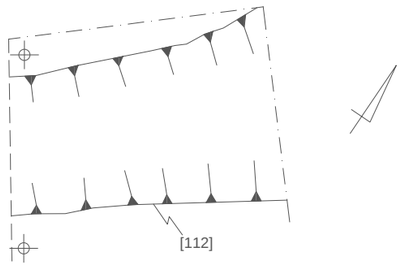
Enclosure ditch F020 [040]/F022 [046] where it was excavated on its eastern side



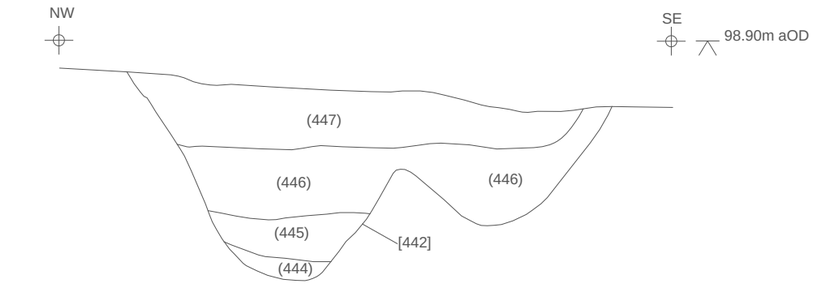


Enclosure ditch F022





The terminal of enclosure ditch F020



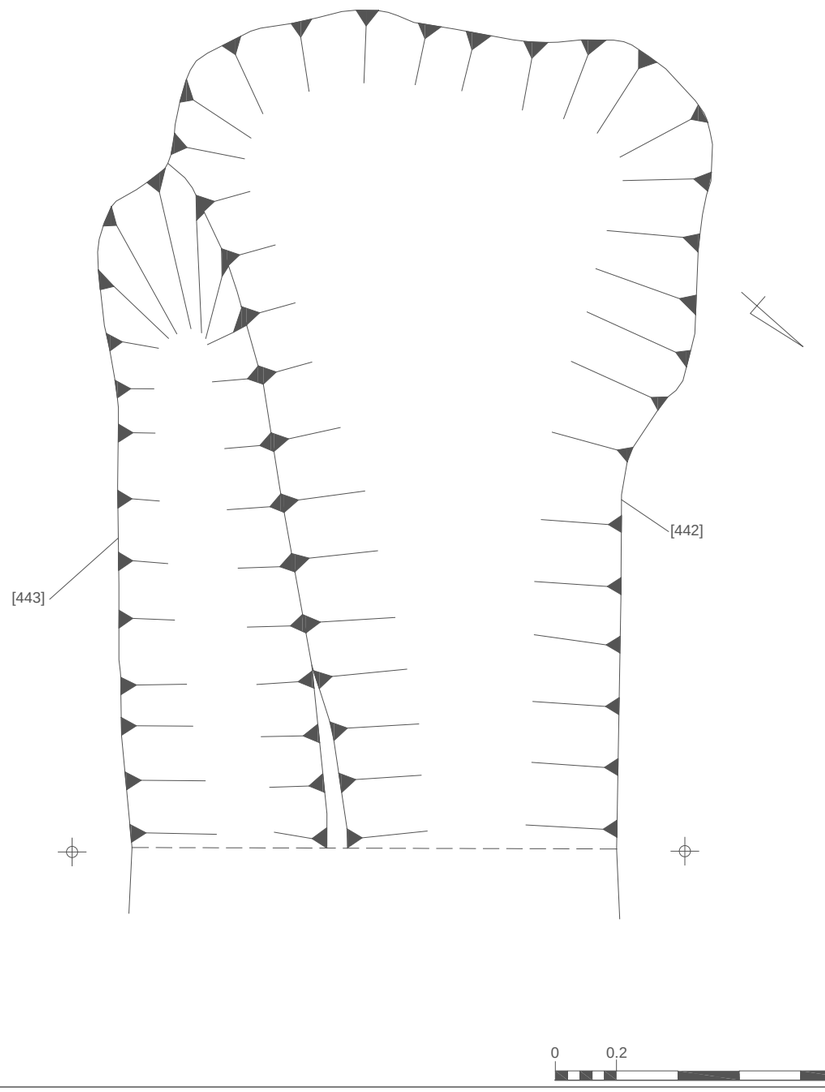
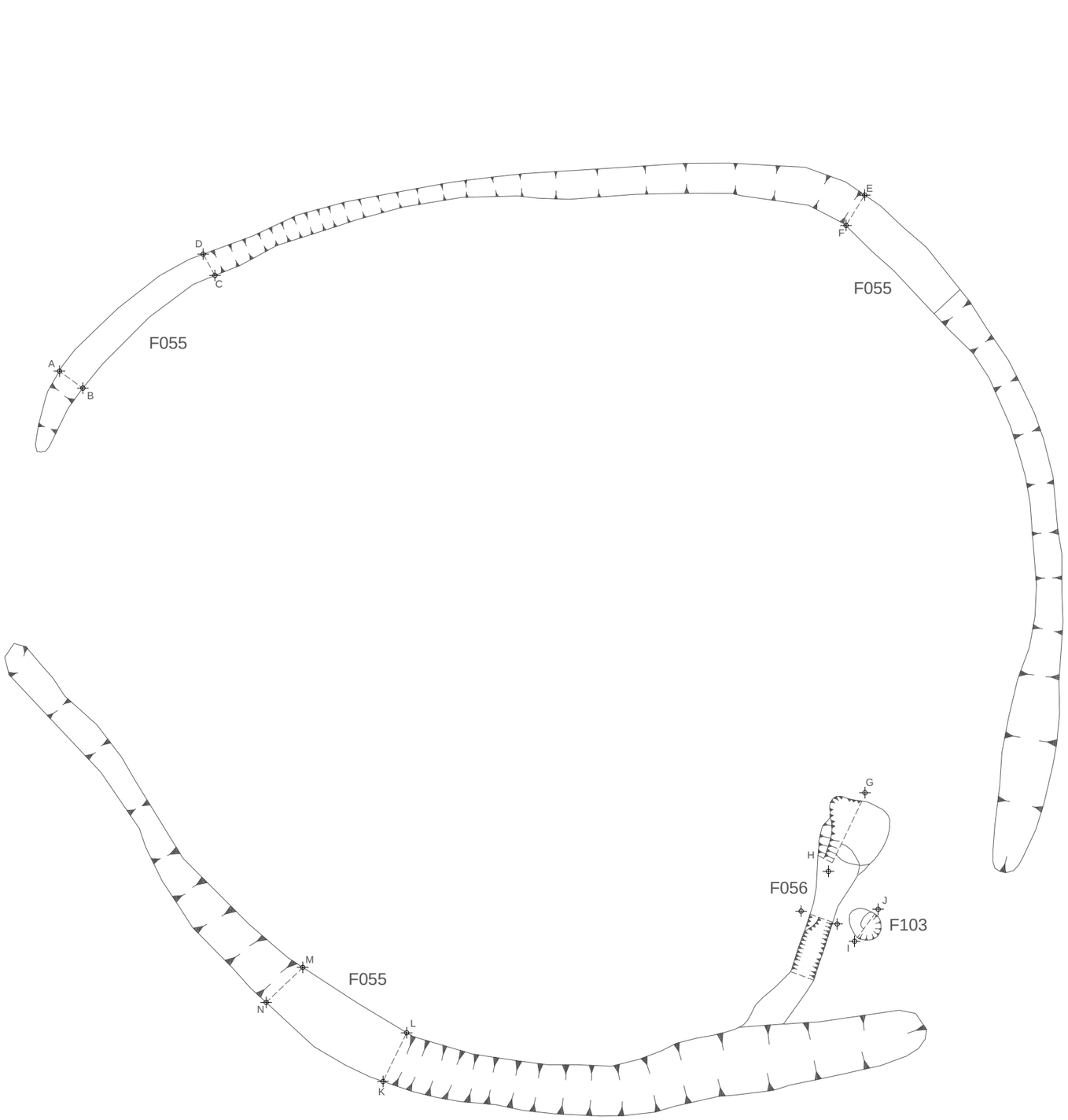


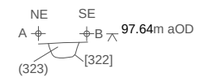
Figure 31:

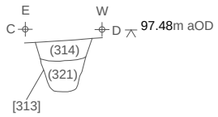
Plans and sections of excavated sections through enclosure ditch F020/F022.

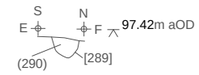
Scale = 1:20 at A3

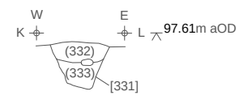
Key:

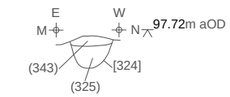




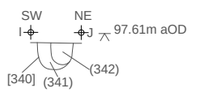








South-east facing section through posthole F103



North-west facing section through F056

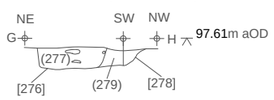


Figure 32:

Plans and sections of stock pen F055.

Scale = 1:40 at A3

Key:

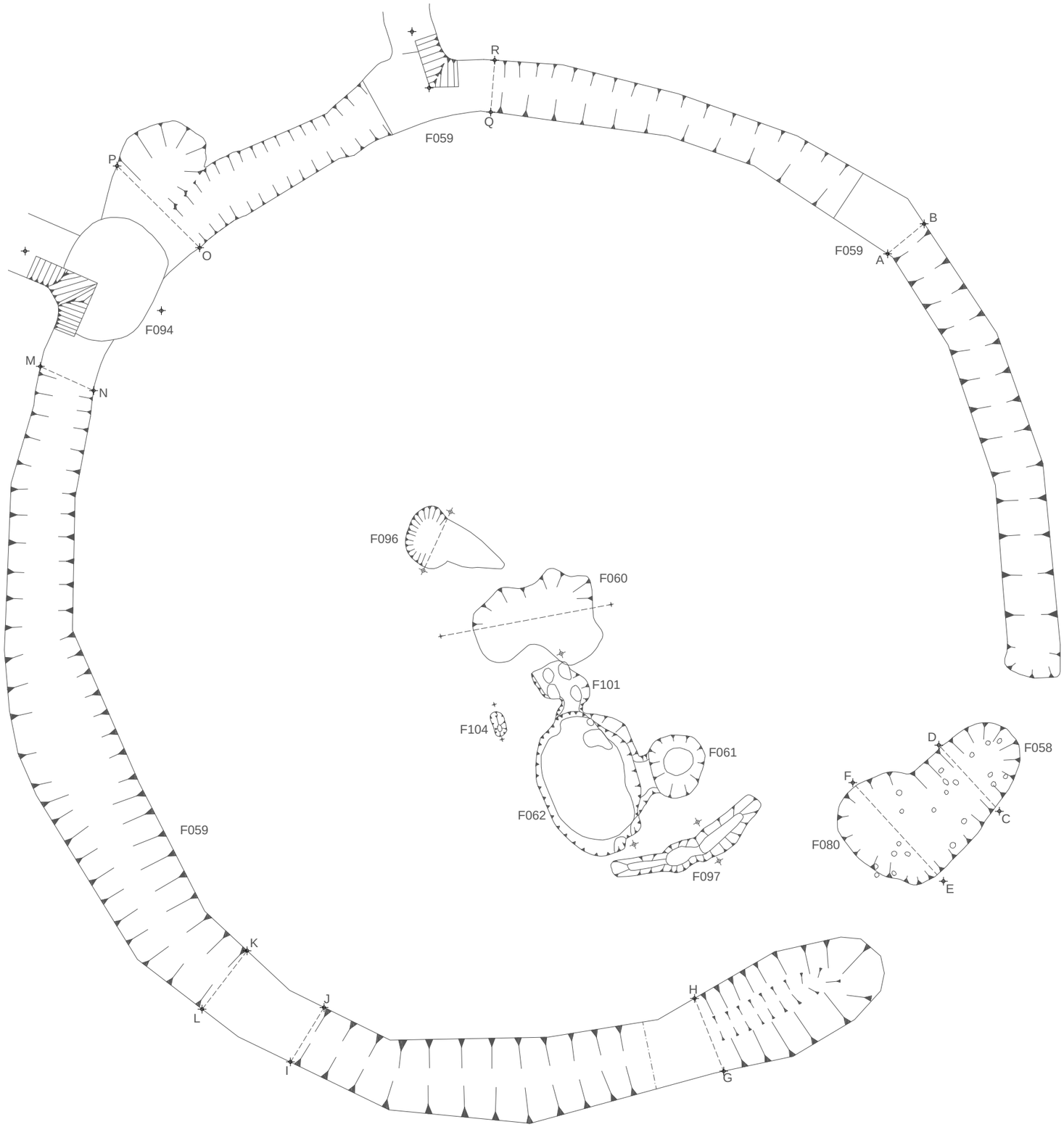


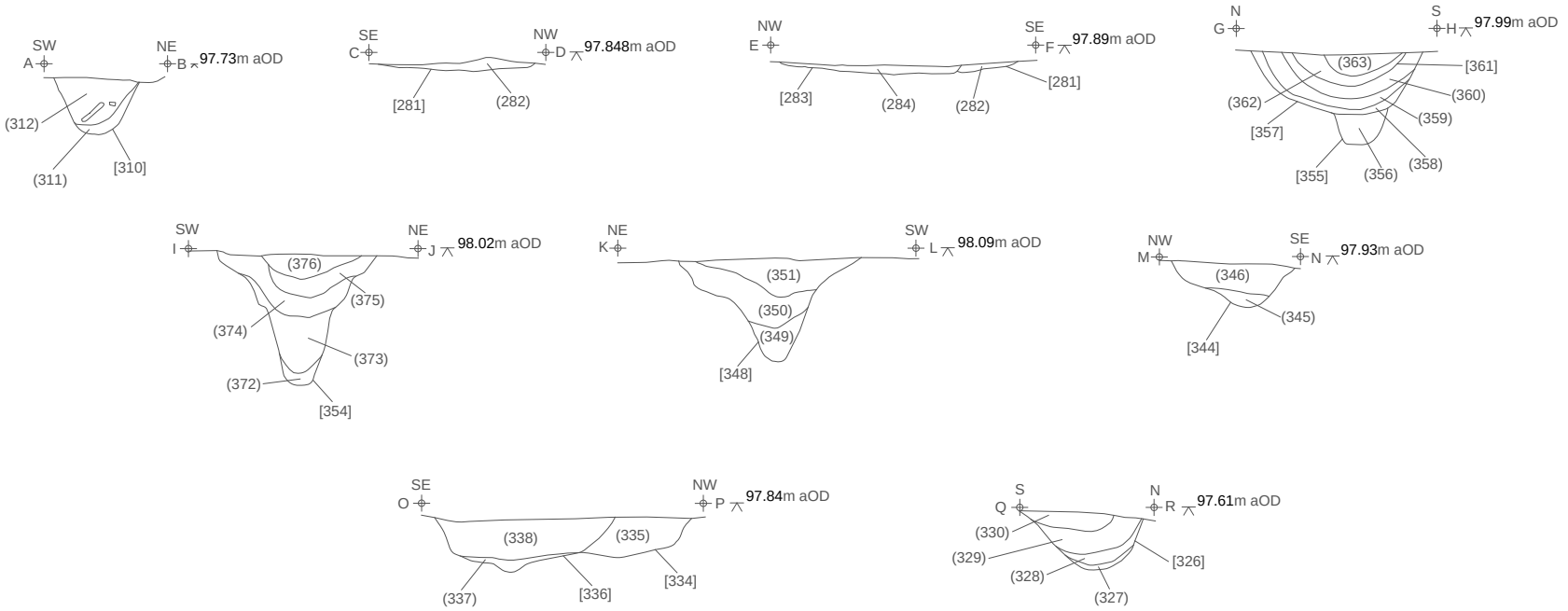
Figure 33:

Plans of Roundhouse 2 F059 construction slot and features within the roundhouse.

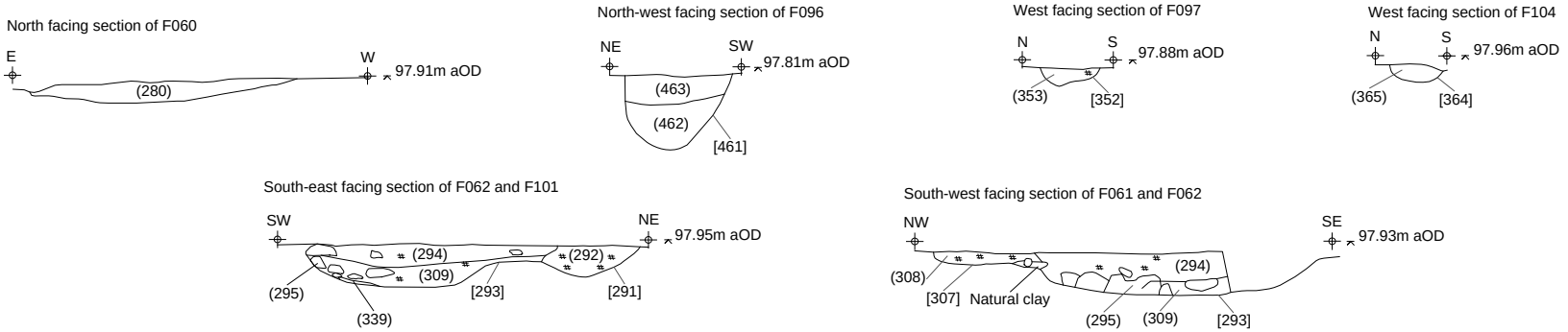
Scale = 1:50 at A3

Key:

Sections of Roundhouse 2 construction slot F059



Sections of features within Roundhouse 2



Sections showing feature relationships with Roundhouse 2 F059

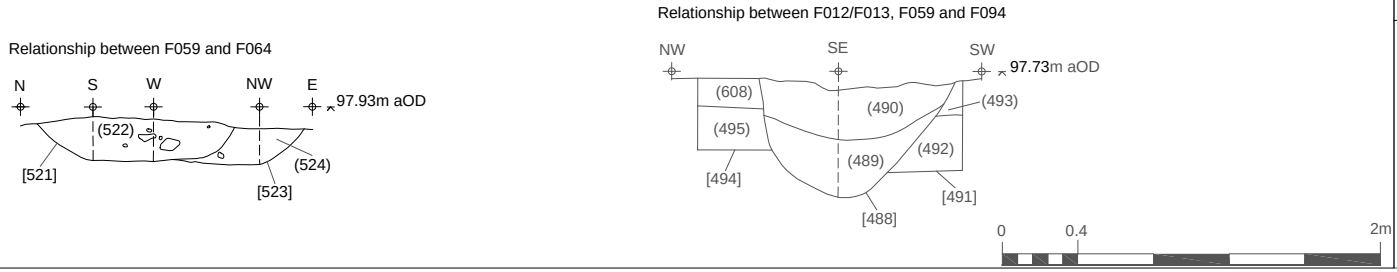
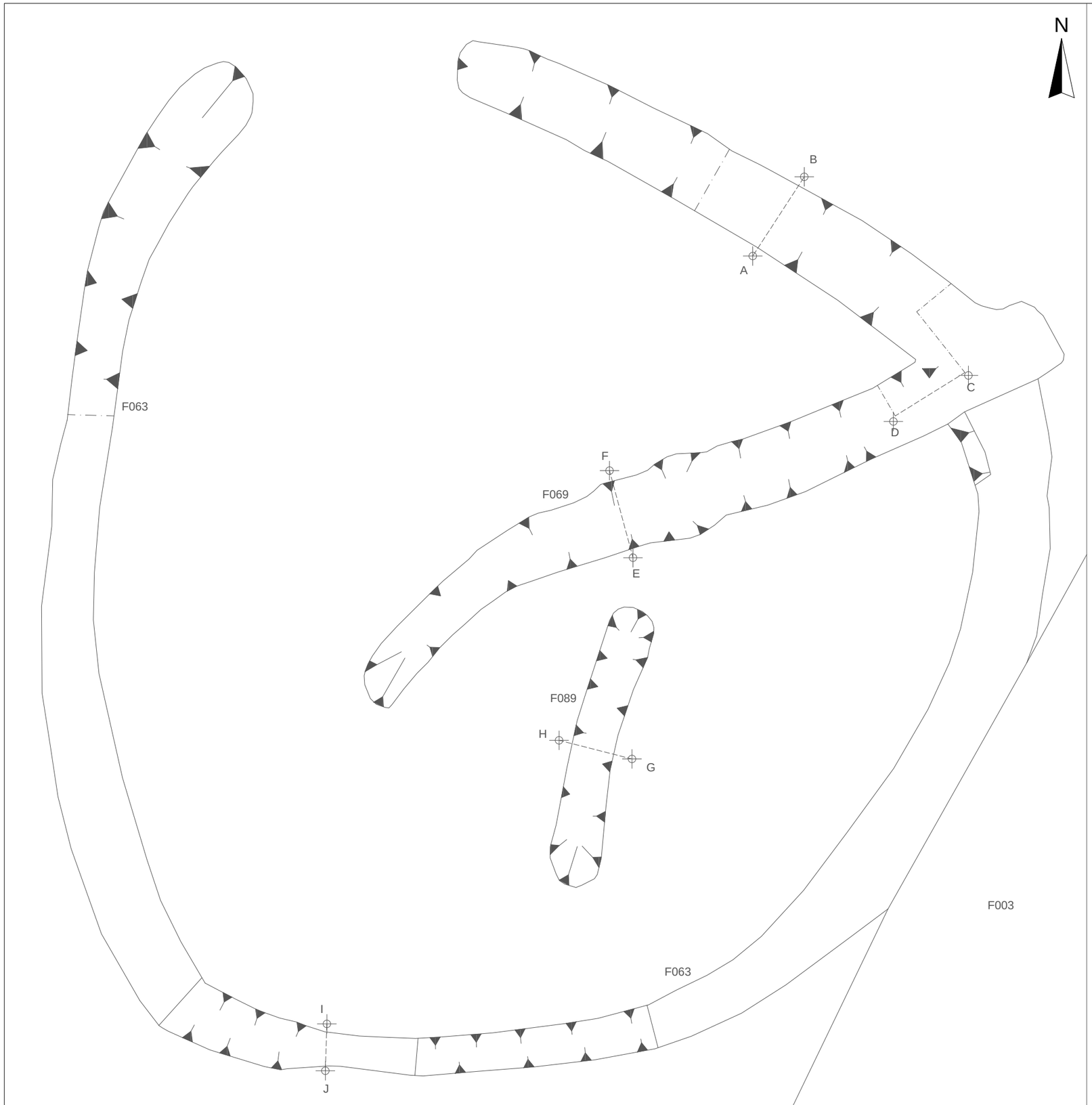


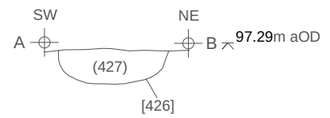
Figure 34:

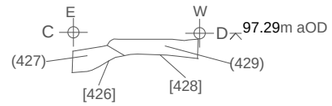
Sections of Roundhouse 2 construction slot and features within Roundhouse 2 as well as feature relationships.

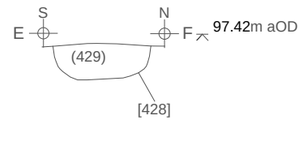
Scale = 1:40 at A4.

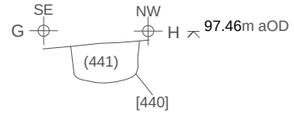
Key:











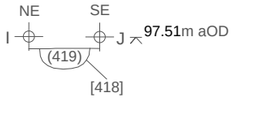


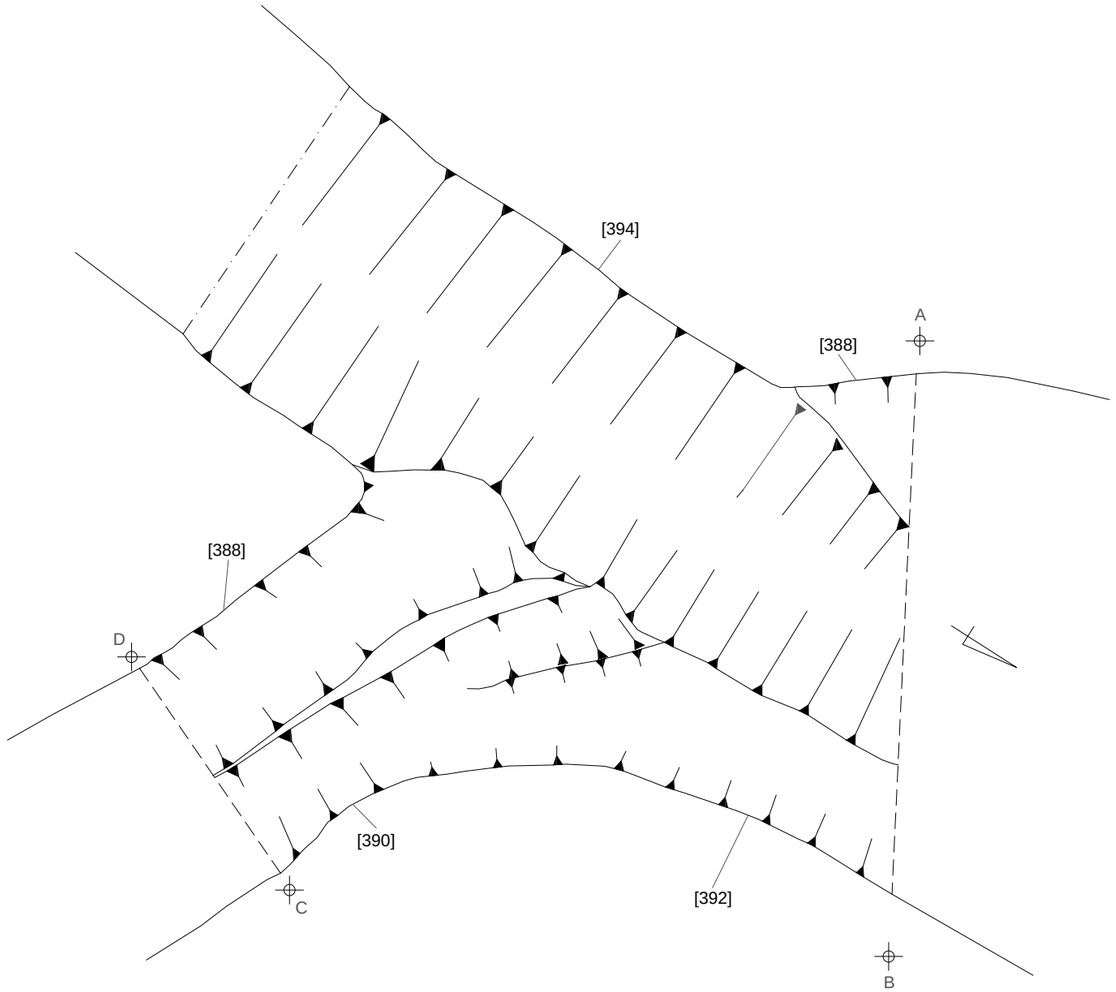
Figure 35:

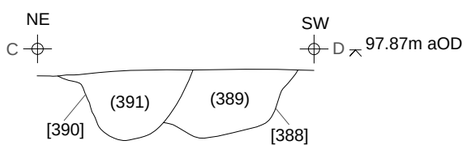
Plan and sections of enclosure F063 with internal ditches F069 and F089.

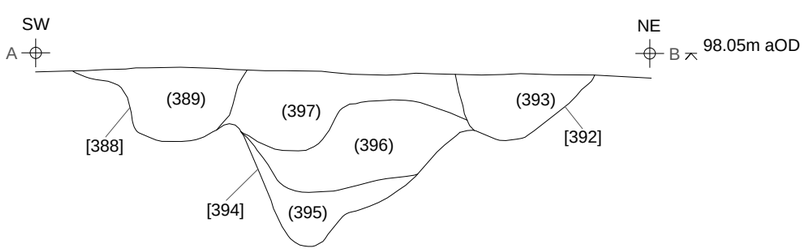
Scale = 1:20 at A3

Key:

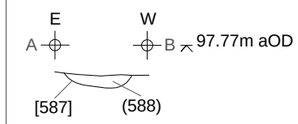
Relationship between F004, F065 and F066

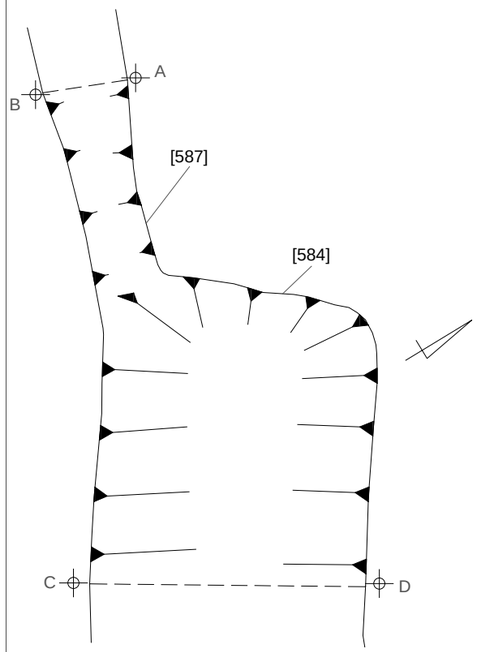


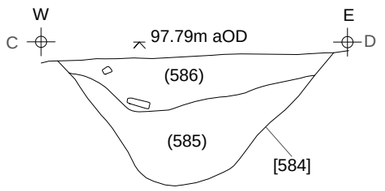




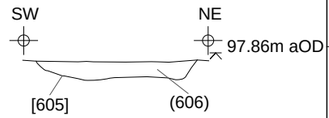
Plan and sections through F065



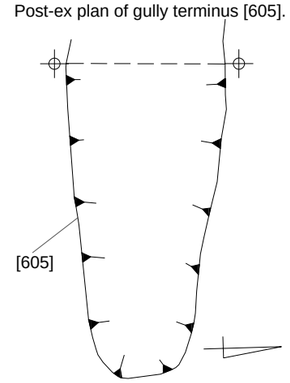




Plan and section of F066 terminal

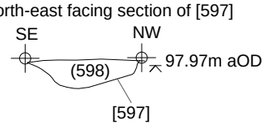


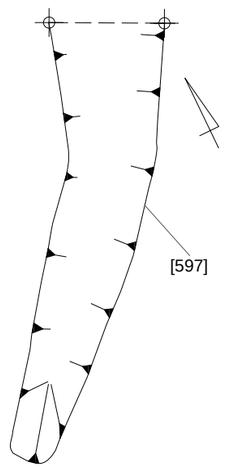
Post-ex plan of gully terminus [605].



Plan and section of F066 terminal

North-east facing section of [597]





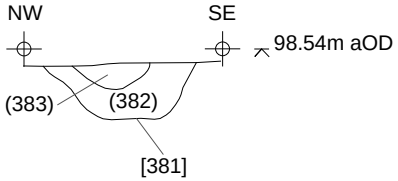
0 0.2 1m

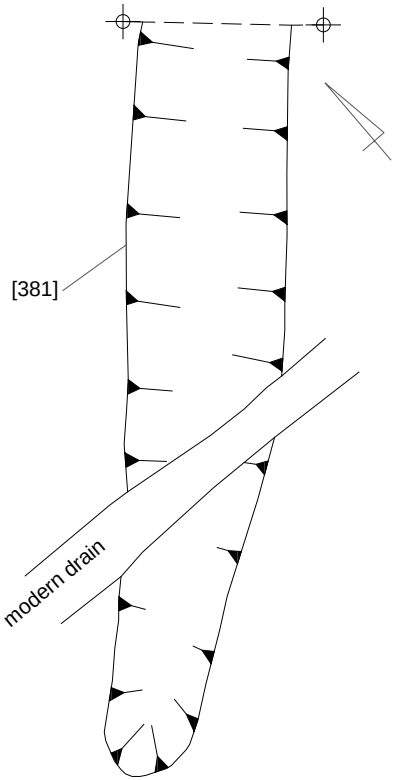
Figure 36:

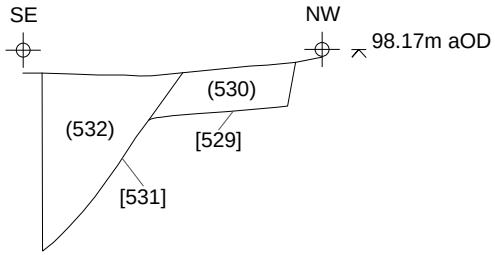
Plans and sections of enclosure ditches F004, F065 and F066.

Scale = 1:20 at A3

Key:







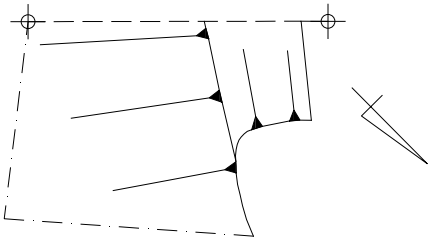


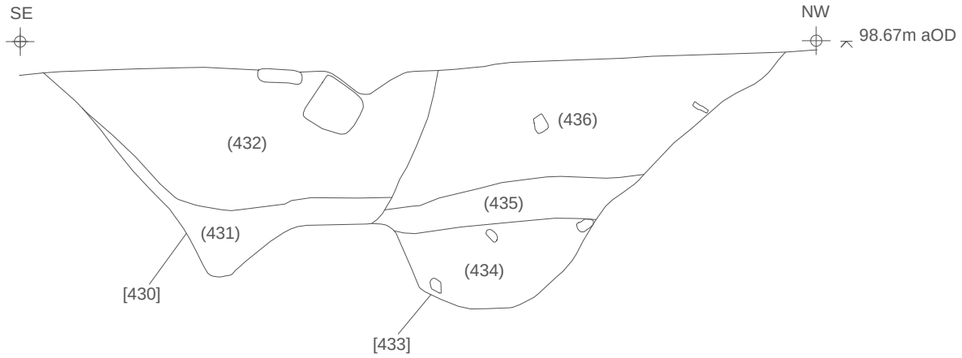
Figure 37:

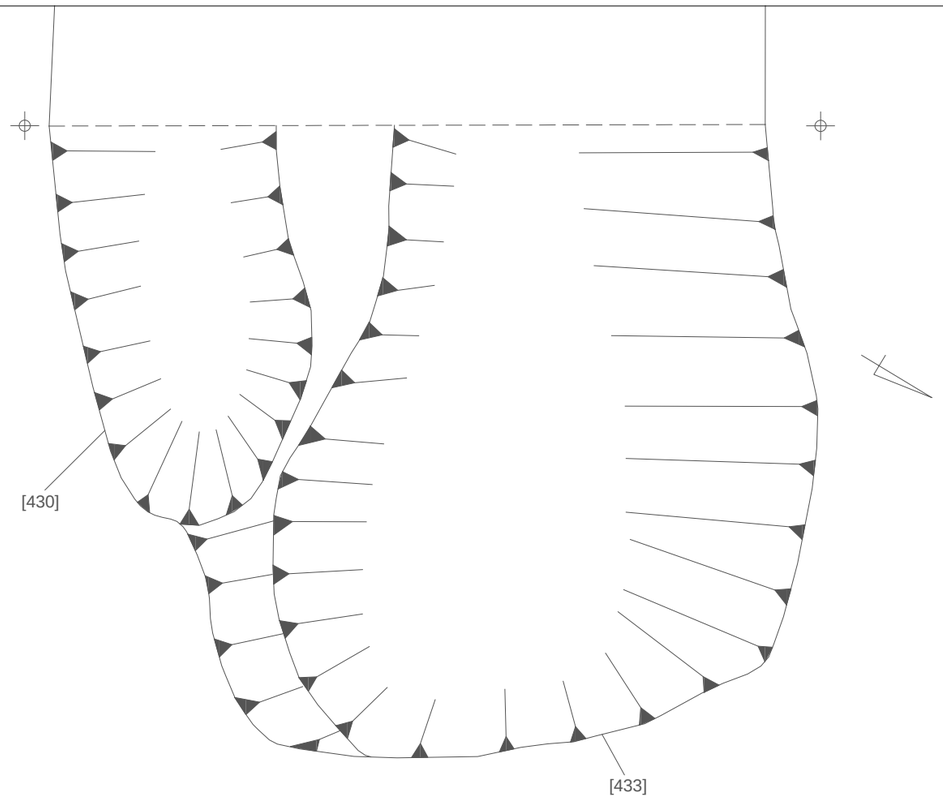
Plans and sections of enclosure ditch F068.

Scale = 1:20 at A4.

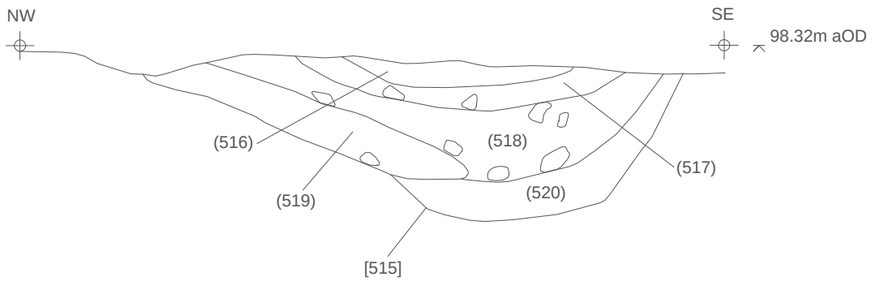
Key:

The terminal of ditch F073





Encloure ditch F073 where it was excavated at its south-east corner



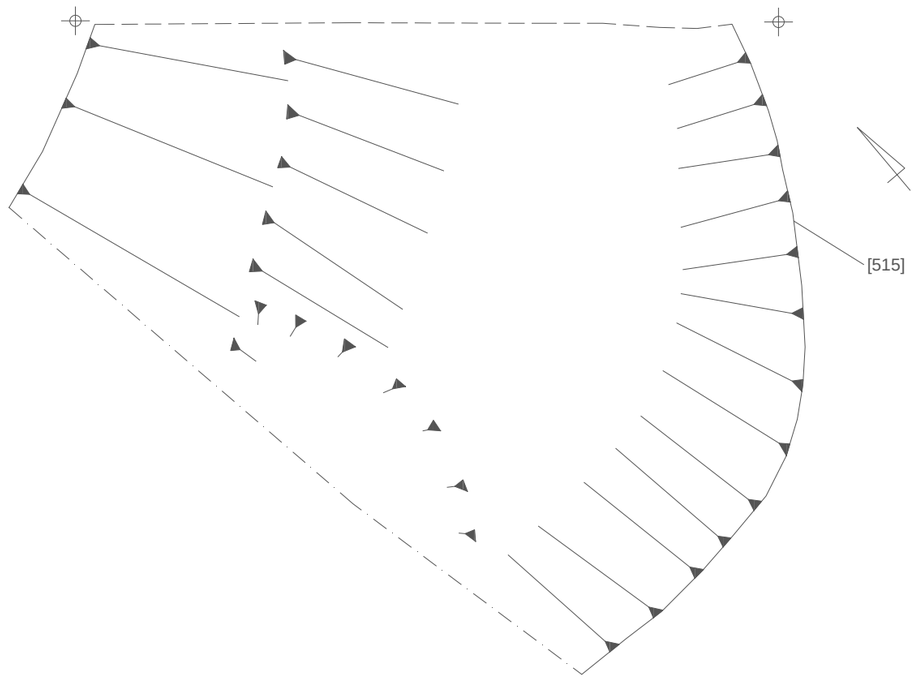
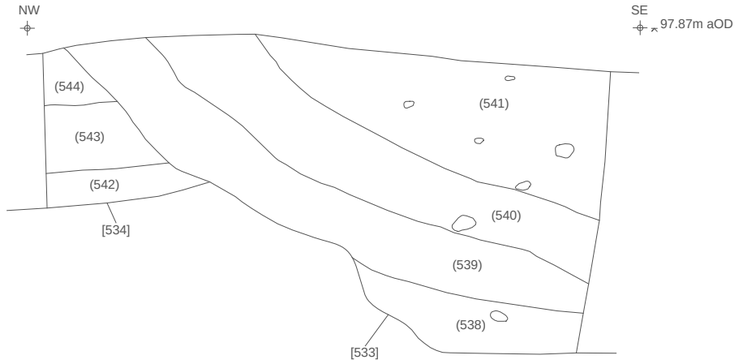


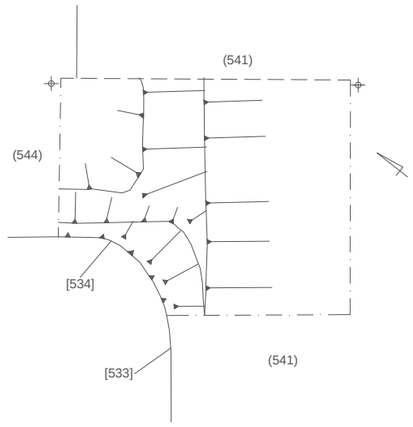
Figure 38:

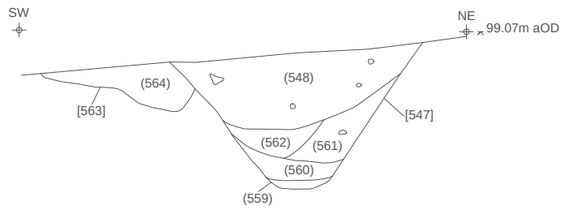
Plans and sections of double enclosure ditch F073.

Scale = 1:20 at A3

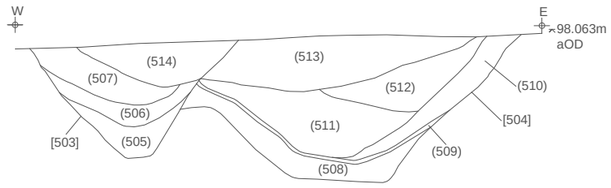
Key:







Relationship between enclosure ditches F074 [503] and F105 [504]



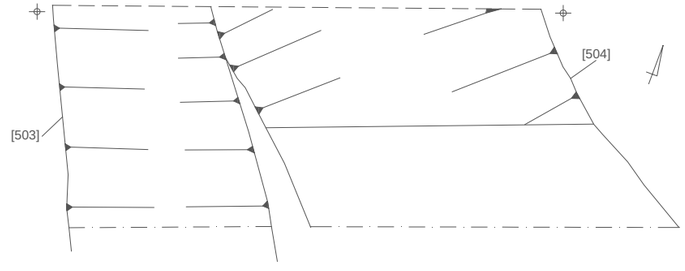
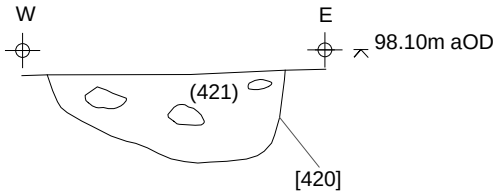


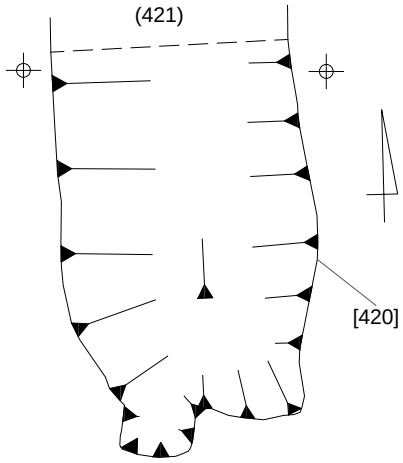
Figure 39:

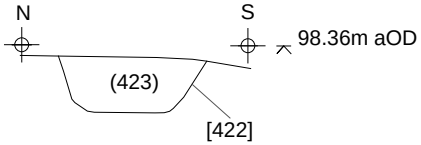
Plans and sections of enclosure ditch F074.

Scale = 1:40 at A3

Key:







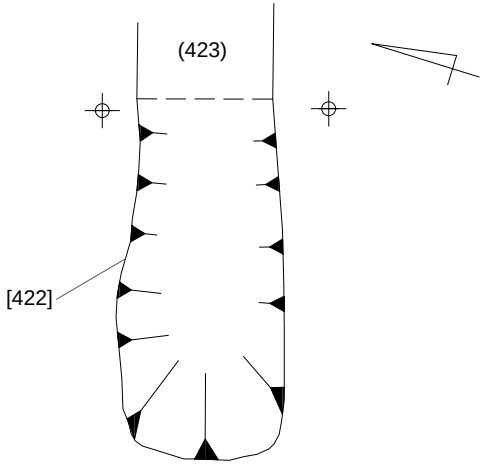
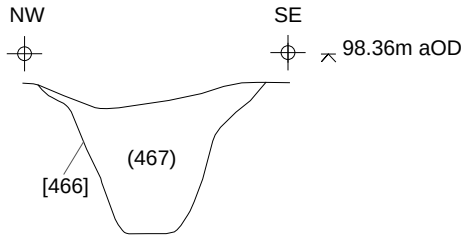


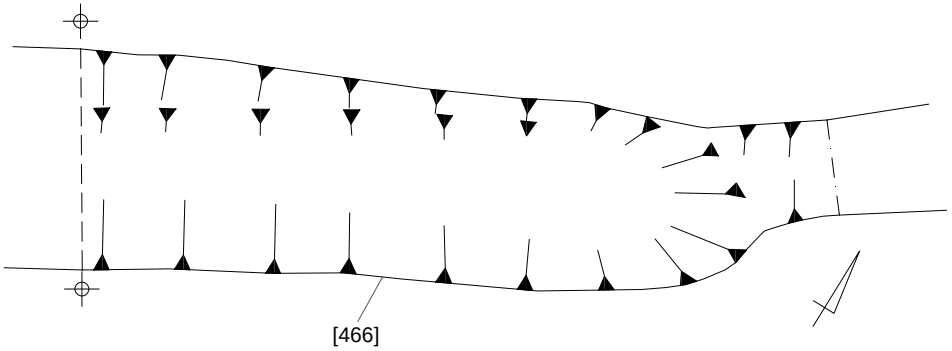
Figure 40:

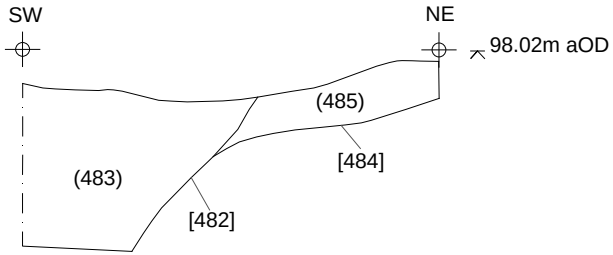
Plans and sections of enclosure ditch F075.

Scale = 1:20 at A4.

Key:







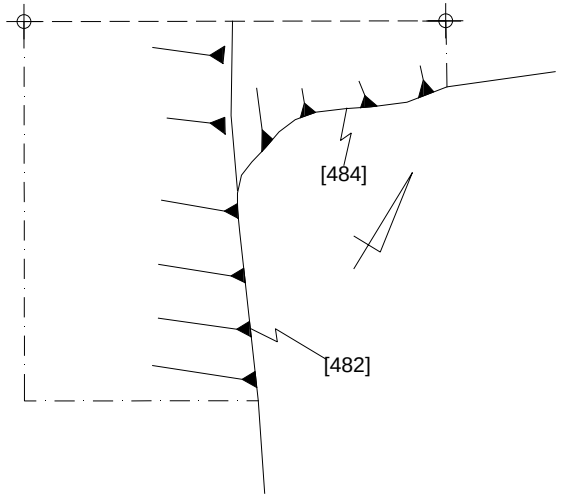


Figure 41:

Plans and sections of enclosure ditch F077.

Scale = 1:20 at A4.

Key:

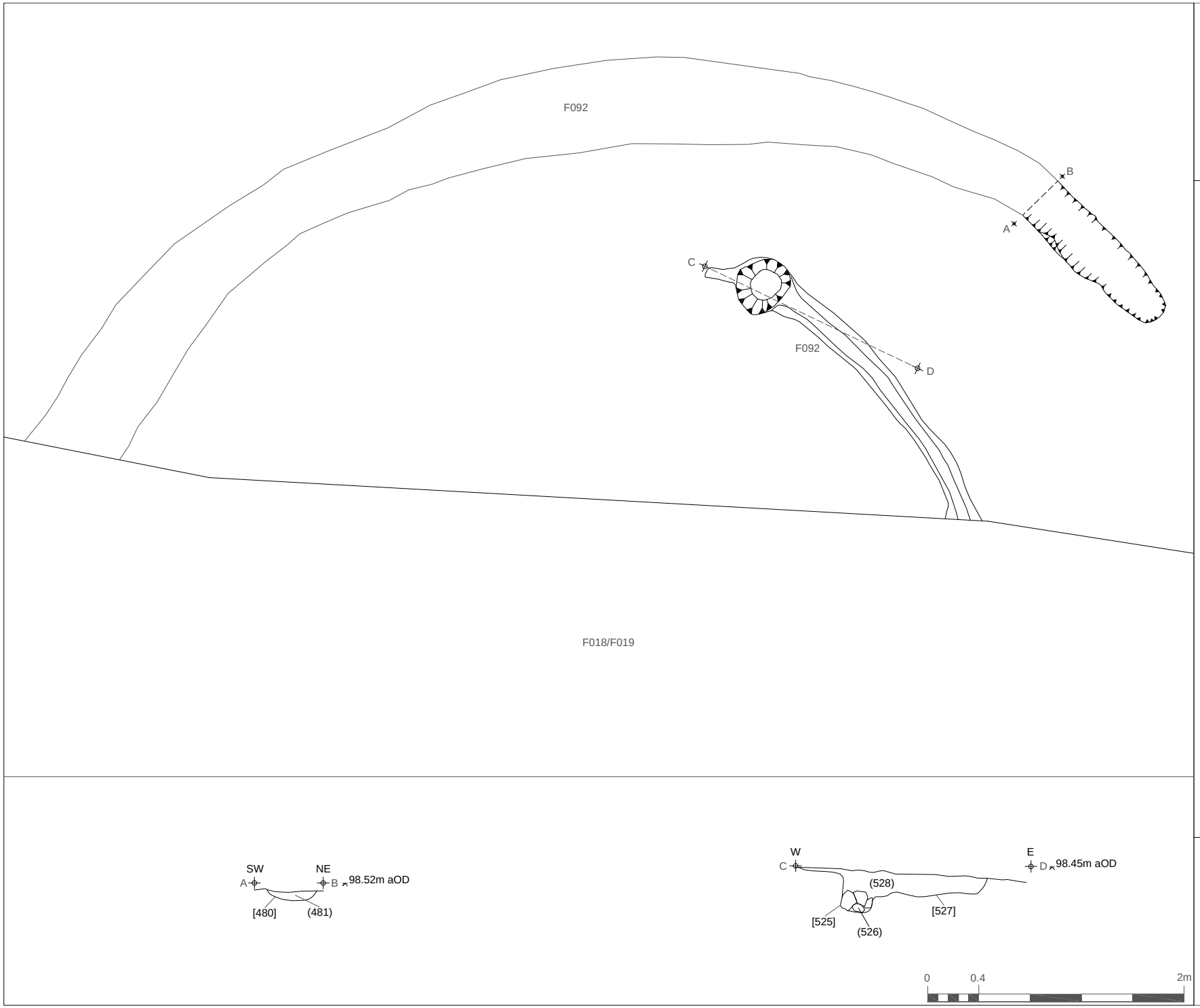


Figure 42:

Plans and sections of gullies F091 and F092.

Scale = 1:40 at A4.

Key:

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
F004	Enclosure ditch	[004]	1	0.35	-	-	-
		(005)	1	0.35	Very dark grey	Clay	-
		[100]	1.04	0.38	-	-	-
		(101)	1.04	0.38	Yellow/grey	Silty clay	-
		[379]	0.56	0.1	-	-	-
		(380)	0.56	0.1	Dark grey	Silty clay	-
		[390]	0.43	0.23	-	-	-
		(391)	0.43	0.23	Mid brown	Silty loam	-
		[392]	0.43	0.21	-	-	-
		(393)	0.43	0.21	Mid brown	Silty loam	-
		[437]	0.62	0.54	-	-	-
		(438)	0.32	0.2	Dark brown/grey	Silty clay	-
		[591]	0.47	0.22	-	-	-
		(592)	0.47	0.22	Dark brown	Silty loam	-
F012	Boundary ditch	[016]	0.8	0.6	-	-	-
		(017)	0.6	0.3	Mid brown/grey	Clayey silt	-
		(029)	0.78	0.29	Light brown/grey	Clay loam	-
		(030)	0.74	0.26	Mid brown/grey	Silty clay loam	-
		(031)	0.6	0.25	Dark brown	Silty loam	-
		(032)	0.44	0.1	Black	Clay loam	-
		[494]	0.6	0.37	-	-	-
		(495)	0.6	0.23	Yellow/grey	Clay	-
		(496)	0.6	0.17	Grey	Clay	-
F013	Boundary ditch re-cut	(018)	0.46	0.03	Light grey/yellow	Sandy silt	-
		(019)	0.62	0.16	Light brown/grey	Sandy silt	-
		[033]	0.58	0.16	-	-	-
F020	Double enclosure ditch	[037]	2.3	0.39	-	-	-
		(038)	0.21	0.13	Yellow grey	Sandy silt	-
		(039)	0.72	0.39	Mid grey	Silty clay	-
		[040]	1.3	0.66	-	-	-
		(041)	0.44	0.18	Light grey	Clay	-
		(042)	0.12	0.12	Light brown/grey	Clayey silt	-
		(043)	0.14	0.1	Grey/brown	Silt	-
		(044)	0.06	0.12	Dark grey/black	Silt	-
		[045]	0.98	0.22	-	-	-
		(061)	1.4	0.35	Mid brown/grey	Silt	-
		[112]	0.56	0.32	-	-	-
		(113)	0.56	0.32	Black	Clayey silt	-
		(171)	0.68	0.24	Mid grey	Sandy silt	-
		(172)	0.24	0.1	Mid grey/brown	Silty sand	-
		(173)	0.46	0.12	Dark brown/grey	Sandy silt	-
		(174)	1.06	0.3	Dark brown	Clayey silt	-
		[442]	1	0.67	-	-	-
		[443]	0.8	0.43	-	-	-
		(444)	0.34	0.12	Mid brown/orange	Clay loam	-
		(445)	0.53	0.16	Grey	Clay loam	-
		(446)	1.41	0.38	Mid brown	Silty loam	-
		(447)	1.48	0.25	Mid-light brown	Silty loam	-
F022	Re-cut of F020	[046]	0.7	0.2	-	-	-
		(062)	0.58	0.2	Black	Silt	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
		(063)	0.34	0.14	Dark grey	Silt	-
		[443]	0.8	0.43	-	-	-
F055	Sub-circular stock enclosure	[289]	0.18	0.12	-	-	-
		(290)	0.18	0.12	Dark brown/grey	Clay	42 cal BC-85 cal AD
		[296]	0.46	0.13	-	-	-
		(297)	0.46	0.13	Mid-dark grey	Clay	-
		[298]	0.53	0.43	-	-	-
		(299)	0.53	0.43	Grey	Clayey silt	-
		[313]	0.33	0.35	-	-	-
		(314)	0.16	0.35	Dark grey	Clay	-
		(321)	0.17	0.3	Dark grey	Clay	-
		[322]	0.2	0.1	-	-	-
		(323)	0.2	0.1	Dark grey	Clay	-
		[324]	0.2	0.2	-	-	-
		(325)	0.2	0.15	Dark grey	Clayey silt	-
		[331]	0.4	0.45	-	-	-
		(332)	0.14	0.45	Dark brown/grey	Clayey silt	-
		(333)	0.4	0.3	Dark grey	Clayey silt	-
		(343)	0.2	0.08	Dark brown/grey	Clayey silt	-
F056	'Gate' structure in entrance of F055	[276]	0.31	0.14	-	-	-
		(277)	0.31	0.14	Mid grey	Clay	-
		[278]	0.36	0.13	-	-	-
		(279)	0.36	0.13	Mid to dark grey	Clay	-
		[287]	0.19	0.14	-	-	-
		(288)	0.2	0.14	Mid to dark grey	Clay	-
F058	RH2 'threshold deposit'	[281]	0.89	0.07	-	-	-
		(282)	0.89	0.07	Mid dark brown	Clay loam	96 cal BC-66 cal AD
F059	RH2 gully	[310]	0.48	0.32	-	-	-
		(311)	0.36	0.28	Mid brown/orange	Clay loam	-
		(312)	0.47	0.27	Mid-dark brown	Silt loam	-
		[326]	0.68	0.32	-	-	-
		(327)	0.34	0.04	Light brown/grey	Clayey silt	-
		(328)	0.34	0.06	Light brown/yellow	Silty clay	-
		(329)	0.5	0.12	Mid brown/grey	Silty clay	-
		(330)	0.5	0.1	Dark brown/grey	Silty clay	-
		[336]	1.03	0.3	-	-	-
		(337)	0.64	0.11	Mid brown/orange	Clay loam	-
		(338)	1.03	0.24	Dark brown	Silt loam	-
		[344]	0.6	0.25	-	-	-
		(345)	0.34	0.11	Yellow/grey	Clay loam	-
		(346)	0.6	0.19	Mid brown	Silty clay loam	-
		(347)	0.7	0.15	Mid brown	Silty loam	-
		[348]	1.03	0.59	-	-	-
		(349)	0.34	0.32	Orange/grey	Clay loam	-
		(350)	0.77	0.38	Mid grey/brown	Silty clay loam	-
		(351)	0.93	0.23	Mid brown	Silty loam	-
		[355]	0.3	0.51	-	-	-
		(356)	0.3	0.15	Grey	Clay	-
		[357]	0.97	0.35	-	-	-
		(358)	0.9	0.05	Grey	Silty clay	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
		(359)	0.86	0.16	Grey	Clay	-
		(360)	0.73	0.13	Grey/brown	Clay	-
		[361]	0.64	0.18	-	-	-
		(362)	0.64	0.09	Grey	Silty clay	-
		(363)	0.44	0.12	Grey/brown	Clay	-
		[354]	0.92	0.66	-	-	-
		(372)	0.18	0.08	Yellow/grey	Silty clay	-
		(373)	0.36	0.32	Yellow/grey	Silty clay	-
		(374)	0.44	0.22	Dark brown/grey	Silty clay	-
		(375)	0.42	0.12	Light brown/grey	Silty clay	-
		(376)	0.56	0.14	Dark brown/grey	Silty clay	-
		[491]	-	0.47	-	-	-
		(492)	-	0.47	Yellow/grey	Clay	-
		(493)	-	0.18	Mid grey	Clay	-
		[521]	0.8	0.24	-	-	-
		(522)	0.8	0.24	Mid blue grey	Clay	-
F060	Heat-affected clay	(280)	1.1	0.12	Mid yellow/red	Clayey silt	-
F061	Oven rake pit	[291]	0.6	0.18	-	-	-
		(292)	0.46	0.16	Orange/grey	Sandy silt	-
F062	Oven pit	[293]	1.2	0.3	-	-	-
		(294)	1.36	0.14	Mid grey	Silty clay	-
		(295)	1	0.27	-	Stones	-
		(309)	0.9	0.1	Light grey	Clay	-
		(339)	1	0.01	Grey	Silt and ash	-
F063	Sub-circular structure	[418]	0.17	0.06	-	-	-
		(419)	0.17	0.06	Dark brown/grey	Clayey silt	-
		[426]	0.38	0.1	-	-	-
		(427)	0.38	0.1	Dark brown/grey	Clayey silt	-
F064	Drainage ditch	[377]	0.29	0.07	-	-	-
		(378)	0.29	0.07	Mid grey	Silty clay	-
		[523]	0.52	0.19	-	-	-
		(524)	0.52	0.19	Blue grey	Clay	-
F065	Enclosure ditch	[394]	0.83	0.57	-	-	-
		(395)	0.56	0.36	Orange/brown	Clayey loam	-
		(396)	0.72	0.3	Brown	Silty clay loam	-
		(397)	0.83	0.26	Mid brown	Silty loam	-
		[584]	0.95	0.44	-	-	-
		(585)	0.78	0.36	Brown/orange	Silty clay loam	-
		(586)	0.95	0.19	Mid brown	Silty loam	-
F066	Enclosure ditch	[388]	0.43	0.22	-	-	-
		(389)	0.43	0.22	Mid brown	Silty loam	-
		[597]	0.37	0.1	-	-	-
		(598)	0.37	0.1	Dark brown/grey	Sandy silt	-
		[605]	0.52	0.06	-	-	-
		(606)	0.52	0.06	Dark brown	Sandy silt	-
F068	Ditch	[381]	0.39	0.14	-	-	-
		(382)	0.39	0.14	Mid brown/grey	Clayey silt	-
		(383)	0.21	0.07	Dark brown/grey	Silty clay	-
		[529]	0.46	0.12	-	-	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
		(530)	0.46	0.12	Dark grey	Silty clayey loam	-
F069	Gully within F063	[428]	0.4	0.12	-	-	-
		(429)	0.4	0.12	Dark grey	Clayey silt	-
F073	Double enclosure ditch	[430]	1.29	0.68	-	-	-
		(431)	1	0.54	Mid brown	Silty loam	-
		(432)	1.29	0.46	Mid brown	Silty loam	-
		[433]	1.34	0.81	-	-	-
		(434)	0.65	0.29	Mid brown/orange	Clayey loam	-
		(435)	0.87	0.19	Mid grey/brown	Clayey loam	-
		(436)	1.31	0.52	Mid brown	Silty loam	-
		[500]	0.5	0.4	-	-	-
		(502)	0.5	0.4	Mid-dark brown	Silty loam	-
		[515]	1.76	0.52	-	-	-
		(516)	0.76	0.08	Dark brown/grey	Sandy clay	-
		(517)	1.06	0.06	Light grey/brown	Sandy clay	-
		(518)	1.5	0.24	Mid brown/grey	Silty clay	-
		(519)	1.06	0.12	Light grey	Silty sand	-
		(520)	0.9	0.14	Light yellow/grey	Silty clay	-
		(535)	0.88	0.25	Mid grey/brown	Silty clay	-
		(536)	0.21	0.15	Dark brown/grey	Silty clay	-
		[537]	1.3	0.3	-	-	-
F074	Double enclosure ditch	[503]	1.4	0.78	-	-	-
		(505)	0.8	0.3	Grey/orange	Silty clay	-
		(506)	1	0.3	Grey	Clayey silt	-
		(507)	0.95	0.38	Orange/brown	Silty clay	-
		(514)	1.04	0.3	Black	Silt	-
		[534]	-	0.5	-	-	-
		(542)	-	0.2	Grey/orange	Clayey silt	-
		(543)	-	0.43	Brown/orange	Silty clay	-
		(544)	-	0.16	Grey	Clayey silt	-
		[547]	1.6	1	-	-	-
		(548)	1.6	0.52	Black	Silty clay	-
		(559)	0.42	0.06	Grey	Sandy silt	-
		(560)	0.7	0.17	Grey/orange	Clayey sandy silt	-
		(561)	0.7	0.3	Grey/orange	Clayey sandy silt	-
		(562)	0.6	0.18	Black	Clayey silt	-
F075	Arcing gully	[420]	0.69	0.24	-	-	-
		(421)	0.69	0.24	Dark brown/grey	Clayey silt	-
		[422]	0.45	0.15	-	-	-
		(423)	0.45	0.15	Dark brown/grey	Clayey silt	-
F077	Narrow ditch	[466]	0.58	0.4	-	-	-
		(467)	0.58	0.4	Mid grey/brown	Silty loam	-
		[484]	0.36	0.19	-	-	-
		(485)	0.36	0.19	Mid grey/brown	Silty loam	-
		[501]	0.12	0.05	-	-	-
		(607)	0.12	0.05	Mid-dark brown	Silty loam	-
F080	RH2 'threshold deposit'	[283]	1.03	0.05	-	-	-
		(284)	1.03	0.05	Black	Silty clay loam	-
F089	Gully within F063	[440]	0.22	0.14	-	-	-
		(441)	0.22	0.14	Dark grey	Clayey silt	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
F091	Small arcing gully	[525] (526) [527] (528)	0.42 0.2 0.42 0.48	0.3 0.18 0.12 0.12	- Dark grey - Dark grey/brown	- Silty clay - Sandy silt	- - - -
F092	Arcing gully	[480] (481)	0.38 0.38	0.07 0.07	- Dark grey/brown	- Clay	- -
F096	RH2 central posthole	[461] (462) (463)	0.59 0.52 0.56	0.42 0.3 0.18	- Red/yellow Dark grey	- Clay Silty clay	- - -
F097	Small ditch within RH2	[352] (353)	0.35 0.35	0.2 0.2	- Dark grey/brown	- Silt and ash	- -
F101	Possible flue within RH2	[307] (308)	0.53 0.53	0.08 0.08	- Mid brown/grey	- Clayey silt	- -

Table 2. Phase II Iron Age features.

6.4 Roman Iron Age Phase

6.4.1 The Roman Iron Age phase of occupation on the site was characterised by a large rectilinear enclosure (F018/019) encompassing the highest point of the development site, along with a number of smaller enclosure ditches, all shown in green in Figure 2. The main enclosure F018/F019 measured 107m internally along its north-west to south-east side, but could only be traced for 77m along its south-west to north-east side as it continued northwards beyond the limit of the excavation where it appears to have encompassed the top of the hill. Where it was excavated, in some places the enclosure displayed a double ditch, whereas elsewhere it displayed a single ditch. It is believed that the Roman Iron Age ditch had followed the line of the earlier Phase II Iron Age ditch along its eastern and western extents but had been taken beyond the extent of the earlier ditch in a southerly direction in order to create a larger enclosure. Where the Roman Iron Age ditch appeared as a double ditch, therefore, it is quite possible that the earlier Iron Age ditch had not been entirely truncated and was still visible in section being cut by the later Roman Iron Age ditch. Where the ditch was excavated at its eastern extent, for example, the section displayed a large ditch to the west, on the enclosure's inner edge F018, and a smaller ditch to the east, on the enclosure's outer edge F019 (Figure 43 and Figure 52). A relationship could not be discerned between the two, however, and both ditches produced Roman Iron Age pottery from their fills, indicating that they were each likely to have been in use at some point during the Roman Iron Age, although it is likely that one replaced the other. Ditches F018 and F019 will therefore be discussed together.

6.4.2 Where it was excavated at its eastern extent, enclosure ditch F018 had a maximum width of 2.1m and a maximum depth of 0.69m from the top of the natural clay, while ditch F019 measured 0.95m in width and up to 0.42m in depth from the top of the natural clay (Figure 43). The cut of ditch F018 [079] was stepped on its western side while the eastern side was regular and even. The base of the ditch was slightly convex. Ditch F019 also had a small step on its eastern edge, however the western side was regular and the base was slightly convex. The upper fill of ditch F018 (081) was a yellow-brown clay and this produced 17 sherds of pottery in total from the various sections excavated. These included nine sherds from a grey ware storage jar and a single sherd of Samian ware. The primary fill of

ditch F019 was a yellow-grey clay (088) that produced six sherds from a Local Traditional Ware 4.1 cooking pot with an upright rim (see Section 9: Roman Iron Age Ceramics Assessment for further information).

6.4.3 Elsewhere, such as along its southern extent, the Roman Iron Age enclosure consisted of a single ditch (Figure 44). Here, the ditch measured 2.69m in width and up to 0.92m in depth from the top of the natural clay (referred to as F018 from this point onwards). The cut [554] was regular with a slightly convex base and it contained four separate fills (555), (556), (557) and (558). The primary fill (555) was a dark brown silty loam that produced five fragments from a possible North Gaulish flagon (see Section 9: Roman Iron Age Ceramics Assessment). Further to the west, before the Roman Iron Age enclosure had truncated the earlier Phase II Iron Age enclosure, F018 also consisted of a single ditch. In this location the enclosure ditch was of significant proportions measuring 4.18m in width and up to 1.06m in depth from the top of the natural clay. A fragment of green glass bangle was recovered from ditch fill (271) in this location. Glass bangles such as this are generally rare outside southern Scotland (see Section 14: Small Finds Assessment). A total of eight sections were excavated across the width of ditch F018/F019.

6.4.4 Ditches F018 and Phase II Iron Age enclosure ditch F074 were excavated where they merged at their western ends (Figure 45, Figure 46, Figure 52, Figure 53, Figure 54 and Figure 55). Here, ditch F018 was seen to have a 'V'-shaped cut [260] and contained four separate fills (261), (262), (263) and (264). This ditch was clearly seen cutting earlier ditch F074 [265] which contained three separate fills (266), (267) and (268). In this location, ditch F018 was of substantial proportions measuring 4.3m in width and up to 1.3m in depth from the top of the natural clay. Ditch F074 had a maximum depth of 1.06m from the top of the natural clay.

6.4.5 Ditch F018 was also investigated at its western end where it is thought to have truncated the western side of the earlier Phase II Iron Age enclosure ditch F020/F022. In this location ditch F018 had a 'V'-shaped profile [249] that appeared to have been subsequently re-cut and widened [250]. Cut [249] contained two fills (256) and (257). It had a maximum surviving width of 2.4m and a depth of 1.5m from the top of the natural clay. The re-cut measured 4.6m in width.

6.4.6 Located almost at the north-eastern extent of the excavation area were a series of narrow, inter-cutting ditches F005, F006, F007, F008, F009 and F053 (Figure 47, Figure 48 and Figure 50) that were all cut by later Roman Iron Age ditch F010/F011. Together they formed a wide but irregular boundary that truncated earlier Phase II Iron Age enclosure ditch F004 and ran in a west-north-west to east-south-east direction before exiting the excavation area after *c*.44m. The earliest of these ditches appeared to be F007 and F009, although the relationship between the two had been removed by later ditch F008. The maximum depth, from the top of the natural clay, of any of these ditches, was 0.42m. Even accounting for truncation it would seem that these ditches were probably intended for drainage purposes as opposed to serving as boundary ditches due to their very shallow depth. During excavation this area of the site regularly filled with water thereby highlighting the drainage problems that also no doubt existed during the Roman Iron Age. Fill (009) from ditch F005 produced a scrap of Local Traditional Ware 4.1 pottery while fill (103) from ditch F007 produced a sherd from a Local Traditional Ware 4.2 vessel. While Local Traditional Wares were produced in the Late Iron Age and through into the Roman Iron Age, the fact

that these ditches truncated ditch F004 from the Iron Age Phase II occupation of the site suggests that they belong with the Roman Iron Age phase of activity.

6.4.7 Located approximately 11m to the east of the eastern side of the Roman Iron Age ditch F018 was a further enclosure F010/F011 (Figure 2 and Figure 51). This feature entered the site from the northern boundary and continued in a southerly direction for 59m. It consisted of two separate ditches, F010 and F011, with F010 being the earlier of the two. Ditch F010 was located on the western side and had a maximum surviving width of 0.48m and a maximum depth of 0.68m from the top of the natural clay. The ditch had steeply sloping sides and a concave base while the fill (077) varied between dark brown silty clay and very dark grey silty clay. Ditch F011 had a maximum width of 1.8m and a maximum depth of 0.6m from the top of the natural clay. It is believed that ditch F011 was a re-cut of ditch F010 intended to widen and deepen the original boundary. The ditch was not straight and diverted slightly in order to respect the location of Roundhouse 2. This indicates that although Roundhouse 2 dated to the Late Iron Age, it may still have been extant, and possibly even in use, during part of the Roman Iron Age phase on the site. The terminal of the ditch measured 0.8m wide and 0.38m deep from the top of the natural clay. Only one ditch was noted at the terminal suggesting that the ditches had merged by this point. The fill (568) produced sherds of Local Traditional Ware 4.2 ceramics. Further to the north, fill (075) produced a sherd of Samian Ware pottery (see Section 9: Roman Iron Age Ceramics Assessment) as well as the complete length of a squat box tile with a lattice pattern inscribed on its surface. It is possible that the tile comes from a voissoir box tile which would have been used in the roof of a bath-house (see Section 10: Briquetage Assessment). A total of three sections were excavated across the width of ditch F010/F011. A charred barley grain from fill (400) within F010 produced a calibrated radiocarbon date of 8-135 cal AD (95.4% probability) 57-124 cal AD (68.2% probability) (SUERC-79171 (GU47270)) which is securely within the Roman Iron Age.

6.4.8 Where ditch F010/F011 terminated, the opposing terminal of ditch F051 was located 2.43m to the south (Figure 2 and Figure 58). Ditch F051 then continued to the south for 6.5m before turning 90 degrees to the east for 14.8m then turning 90 degrees again towards the north-north-east and continuing for 33m. Ditch F051 terminated at the corner of earlier Phase II Iron Age enclosure ditch (F004) which was evidently still extant when ditch F051 was created. The terminal of ditch F051 was irregular with a square shape in plan. It measured 1.18m in width and 0.43m in depth from the top of the natural clay. Elsewhere, the ditch had a maximum width of 1.4m and a maximum depth of 0.57m from the top of the natural clay. Ditch F072 was located to the west of the south-west corner of enclosure ditch F051 with a gap of only 0.76m between the two (Figure 2). Ditch F072 then continued towards the west-north-west for 20m where it met the main Roman Iron Age enclosure ditch F018. Together, ditches F004, F051 and F072 created a rectilinear enclosure which was bisected by ditch F010/011 and abutted the main rectilinear enclosure F018. Investigation of the relationship between ditch F072 and enclosure ditch F018 determined that the two were contemporary.

6.4.9 Located to the west of enclosure ditch F051 and the east of ditch F010/F011 was a curvilinear ditch F093 forming a semi-circle which arced to the south from north-west to south-east (Figure 59). This feature had a maximum diameter of 7.04m and its ditch had a maximum width of 0.32m and a maximum depth of 0.08m from the top of the natural clay.

The fill of the ditch (385) consisted of dark grey silty clay while the cut [384] had gently sloping sides and a concave base. Owing to the shallow surviving depth of the ditch it is quite possible that it was originally a completely circular feature but that the north-eastern side had been severely truncated by the time of excavation. The fill of the ditch (385) produced the rim and handle from a Type B flagon (see Section 9: Roman Iron Age Ceramics Assessment). It is quite possible that this feature represents the truncated remains of a roundhouse ring groove.

6.4.10 Also belonging to the Roman Iron Age phase of occupation on the site were four pits F032, F033, F041 and F070 (Figure 49 and Figure 57). F032 was an elongated oval-shaped pit located towards the west of the Roman Iron Age rectilinear enclosure's interior. The pit had a maximum width of 3.6m and a maximum depth of 0.36m from the top of the natural clay. The fill of the pit (146)/(162) consisted of brown-yellow gravel and clay while the cut [145]/[161] had steeply sloping sides and a flat base. The pit produced sherds of Northern Gaulish pottery, Samian ware, amphora and Local Traditional Wares 4.1 and 4.2 (see Section 9: Roman Iron Age Ceramics Assessment). This feature has been interpreted as a waste pit. Pit F033 was located immediately to the west of pit F032 and was circular in plan with a maximum diameter of 1.4m and a maximum depth of 0.48m from the top of the natural clay. The fill of this pit (138) was found to contain leg bones from a horse. A charred spelt grain from fill (138) of pit F033 produced a calibrated radiocarbon date of 73-226 cal AD (95.4% probability), 82-210 cal AD (68.2% probability) (SUERC-79165 (GU47266)). Pit F041 was located 13m to the north-west of pits F032 and F033 and was circular in plan with a maximum diameter of 2.6m and a maximum depth of 0.58m from the top of the natural clay. The pit contained three separate fills (185), (178) and (180). Fill (178) produced sherds of Black Burnished ware from south-east Dorset while fill (180) produced sherds of Samian ware and Local Traditional Ware 1 and 4.1 (see Section 9: Roman Iron Age Ceramics Assessment). Pit F070 was located between ditches F018 and F010/F011. The pit measured 0.66m in diameter and had a maximum depth of 0.18m from the top of the natural clay. The pit contained three fills (405), (406) and (407) and its cut [404] had gently sloping sides and a concave base. Fill (406) produced a single fragment from a prismatic blue-green glass bottle (see Section 12: Glass Finds Assessment).

6.4.11 In addition to these four pits, there were two linear ditch features F042 and F044 also assigned to the Roman Iron Age phase of occupation on the site and located near the western extent of the main rectilinear Roman Iron Age enclosure (Figure 57). Ditch F042 was a short ditch running in a north-west to south-east direction and measured 9.7m in length. The ditch had a single fill (195) of dark brown-grey clayey silt while the cut [194] had gently sloping sides and a concave base. The ditch had a maximum width of 1.43m and a maximum depth of 0.29m from the top of the natural clay. The fill of the ditch produced a copper alloy needle with a spatulate head (see Section 14: Small Finds Assessment). This ditch cut the Phase II Iron Age rectilinear enclosure ditch F074 suggesting it belonged to the Roman Iron Age phase. Ditch F044 was orientated at right angles to ditch F042 and ran from the eastern end of F042 from north-east to south-west for a distance of 22m before it was truncated by the main Roman Iron Age enclosure ditch F018. Ditch F044 measured 1.61m in width and up to 0.42m in depth from the top of the natural clay. It is probable that ditches F042 and F044 together created a small triangular enclosure within the main enclosure, possibly for the holding of stock.

6.4.12 During excavation a pit was noted cutting both the Phase II Iron Age Roundhouse 2 construction slot F059 and ditch F012/F013 so that it removed the relationship between the two. The pit was evidently later than the roundhouse and had been created once the structure's construction slot was no longer in use. The pit had a steep, uneven-sided cut [488] and contained two fills: the primary fill (489) was a brown-yellow clay while the upper fill (490) was dark grey clay. The upper fill of the pit (490) produced a sherd from a *terra nigra* platter and is the only type of *terra nigra* to have been found on Roman military sites in northern England and Scotland (see Section 9: Roman Iron Age Ceramics Assessment).

6.4.13 A number of the Roman Iron Age features (e.g. F041, F010/F011, and F018) produced fragments of briquetage that are believed to have been used in salt-making. These include examples of vessels, pedestals, spacers and structural elements. These are discussed within Section 10 (Briquetage Assessment).

Figure 43. Roman Iron Age enclosure ditch F018/F019 after partial excavation, looking north (scale = 2m).

Figure 44. Roman Iron Age enclosure ditch where it became a single ditch, looking north-west (scales = 2m + 0.5m).

Figure 45. Roman Iron Age enclosure ditch F018/F019 where it merged with Iron Age enclosure ditch F074 in the west (scales = 1m + 2m).

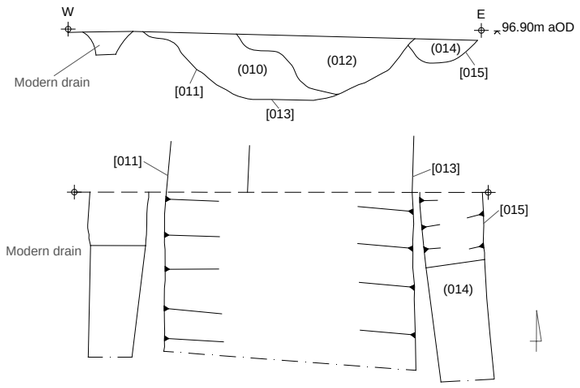
Figure 46. Enclosure ditches F018/F019 and F074 where they merged in the east, looking north-west (scale = 2m).

Figure 47. Roman Iron Age enclosure ditches F007, F008 and F009 (scales = 1m + 2m).

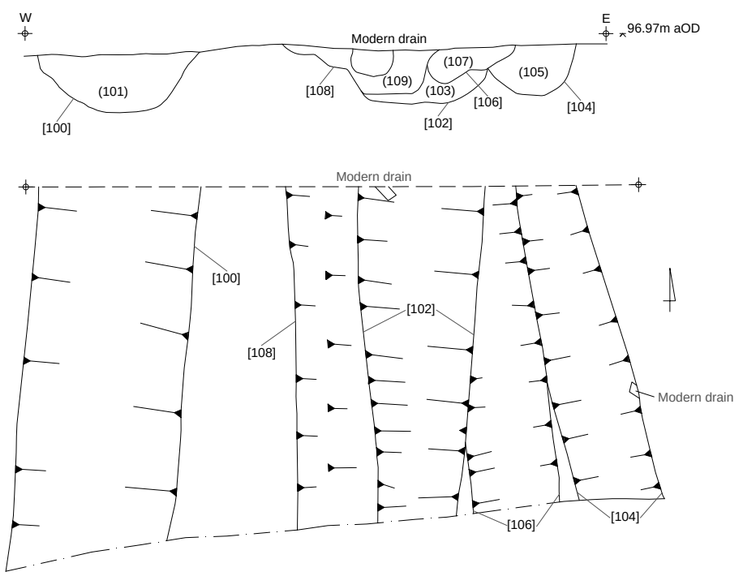
Figure 48. Roman Iron Age enclosure ditches F007, F008 and F009, looking north-west (scale = 2m).

Figure 49. Pit F033 after partial excavation, looking north (scales = 1m + 0.5m).

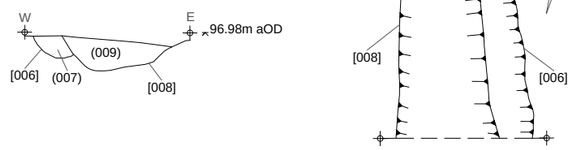
Ditches F007, F008 and F009



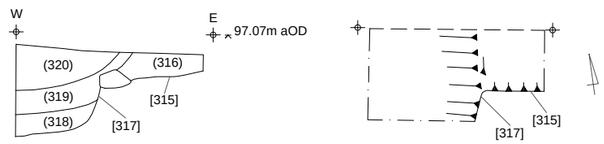
Ditches F004, F007, F008 and F009



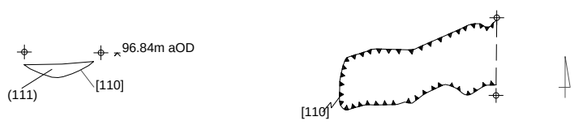
Ditches F005 and F006



Relationship between ditches F006 and F010/F011



Ditch F009



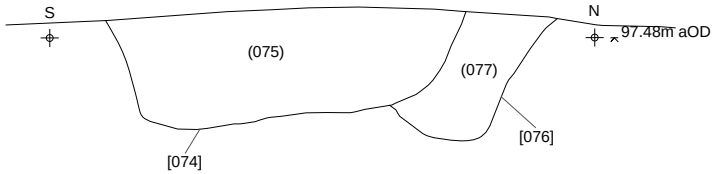
0 0.4 2m

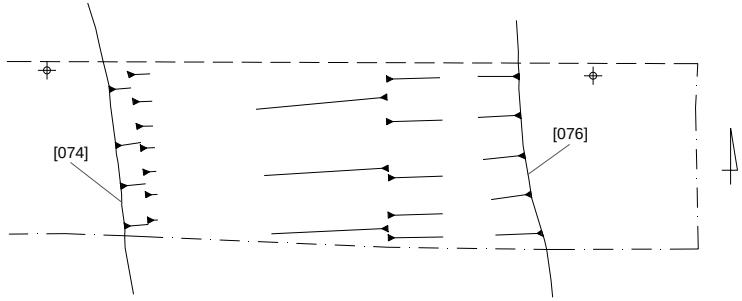
Figure 50:

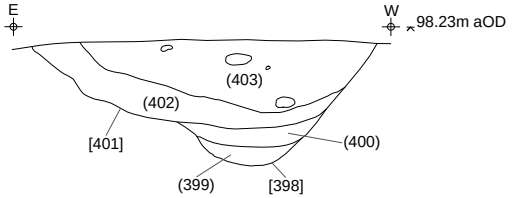
Plans and sections of enclosure ditches F005, F006, F007, F008 and F009.

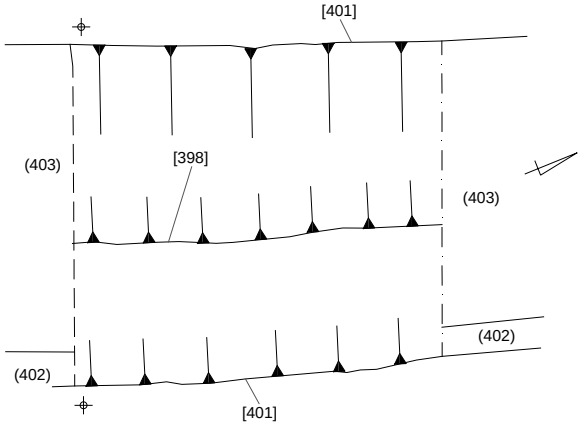
Scale = 1:40 at A3

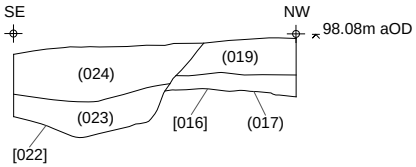
Key:

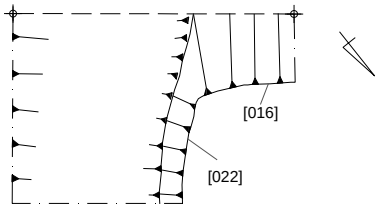


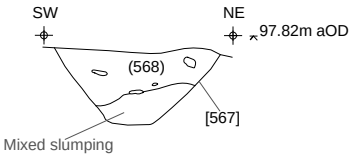












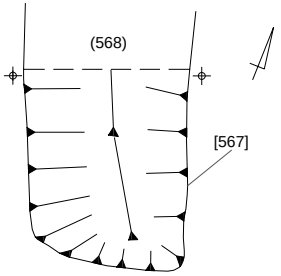


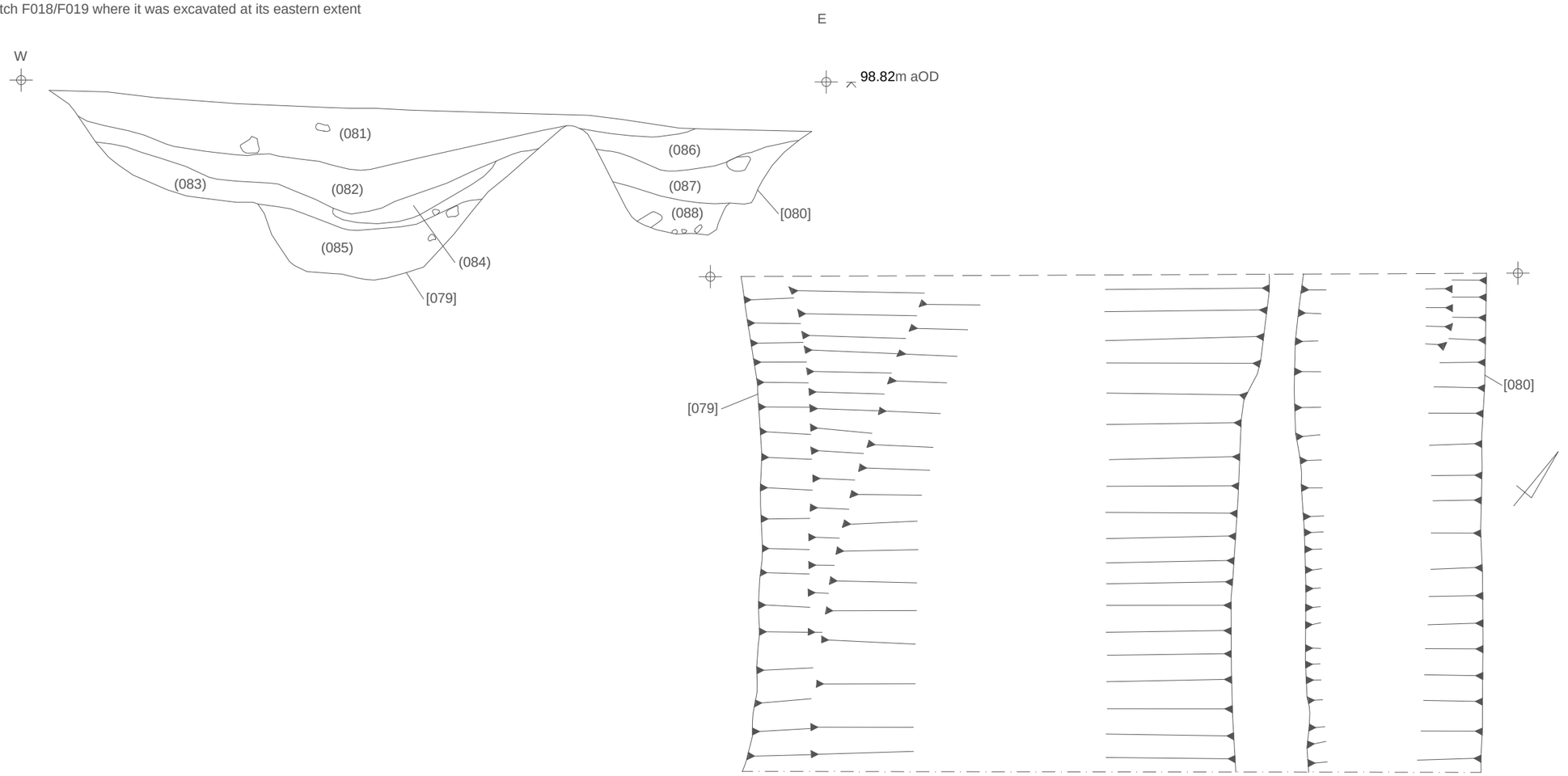
Figure 51:

Plans and sections of enclosure ditch F010/F011.

Scale = 1:40 at A4.

Key:

Ditch F018/F019 where it was excavated at its eastern extent



Ditch F018/F019 where it truncated Roundhouse 1 [120]

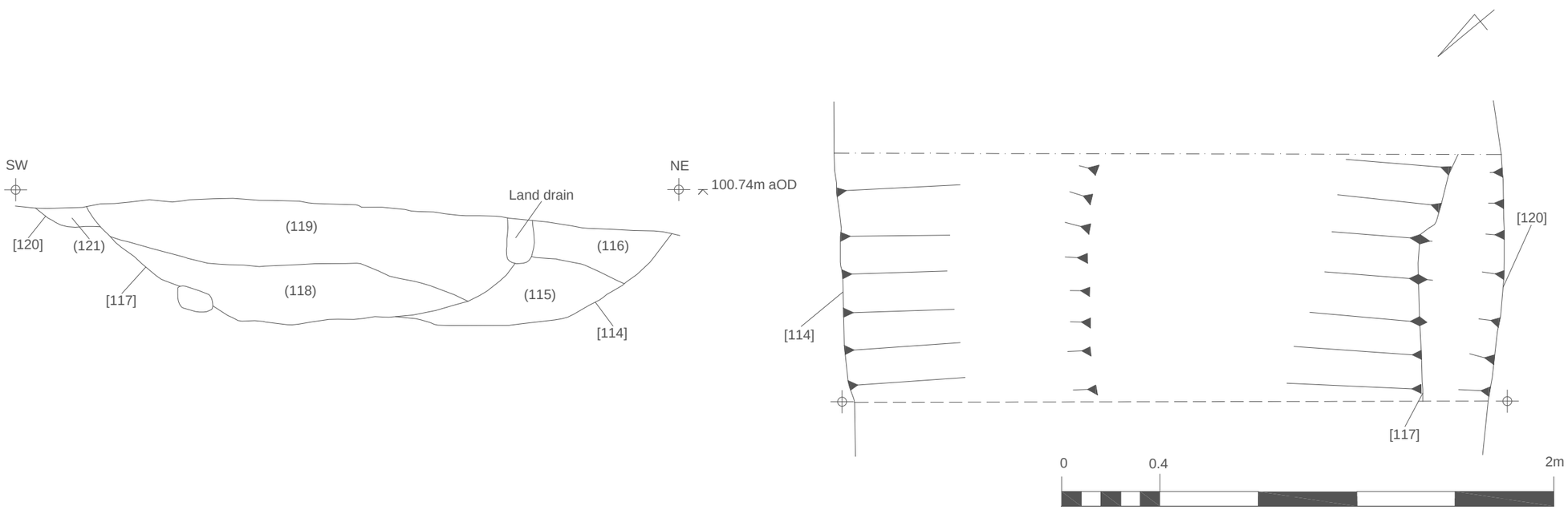


Figure 52:

Plans and sections of Roman Iron Age enclosure ditches F018 and F019.

Scale = 1:20 at A3

Key:

Ditch F018/F019 where it was excavated at its western extent

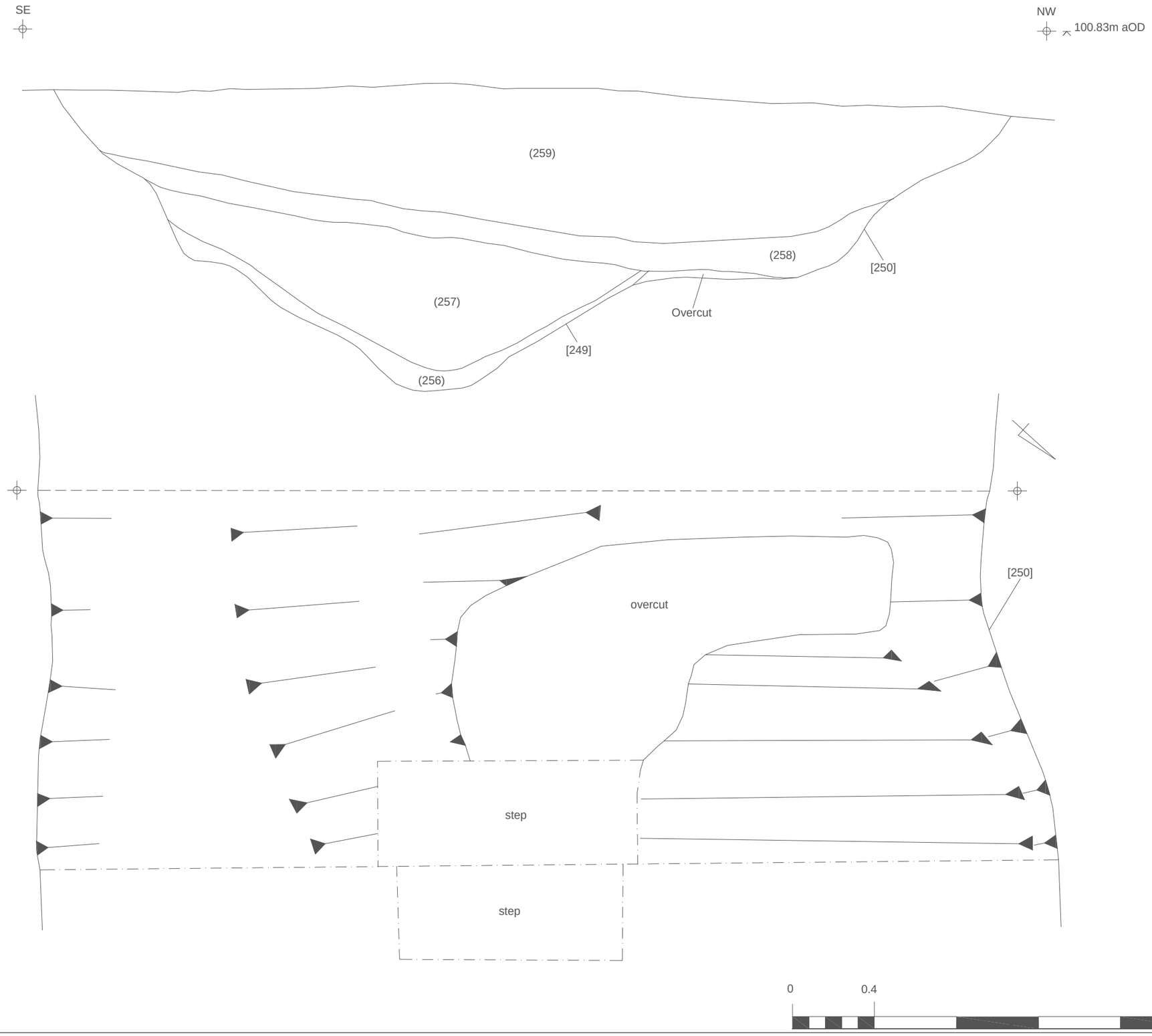


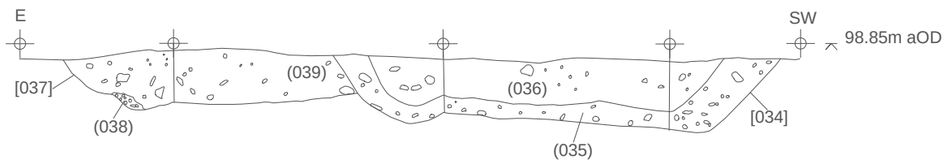
Figure 53:

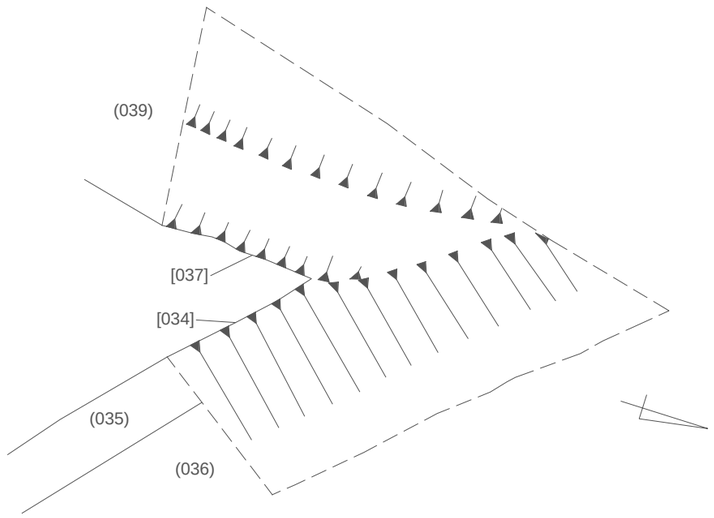
Plans and sections of Roman Iron Age enclosure ditches F018 and F019.

Scale = 1:20 at A3

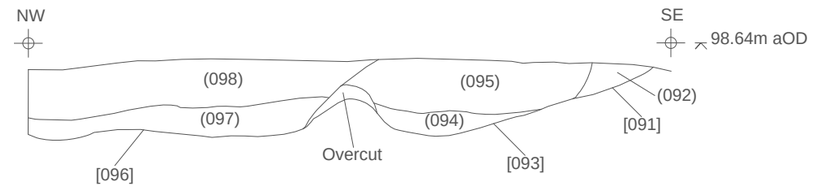
Key:

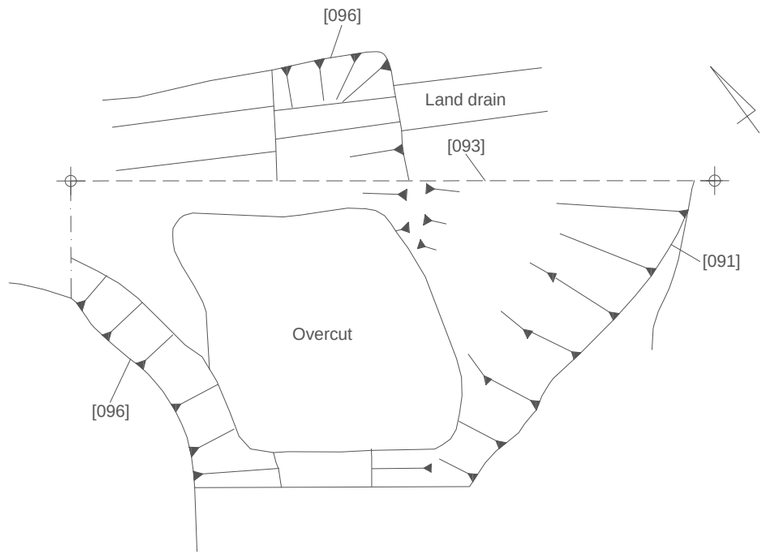
Relationship between ditches F018 [034] and F020 [037]



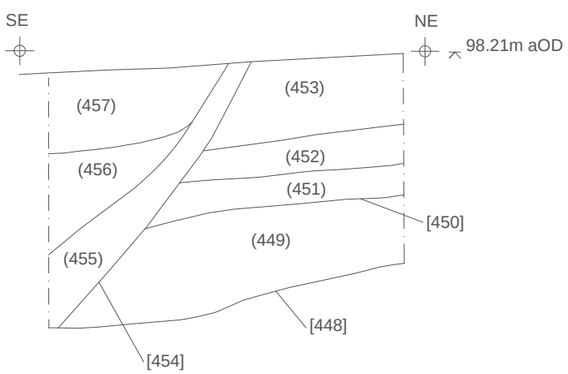


Relationship between ditches F019 [096], pit F015 [093] and Roundhouse 1 [091]





Relationship between ditches F018/F019 [448]/[450] and F072 [454]



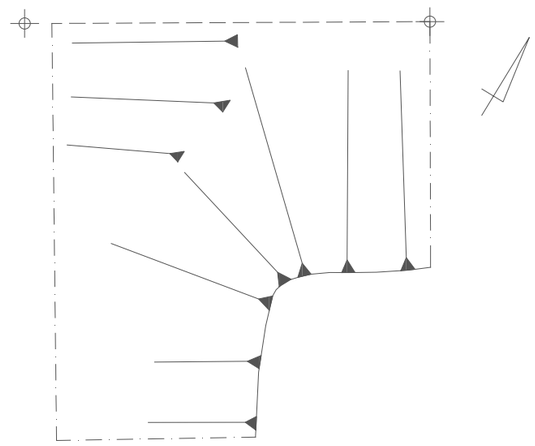
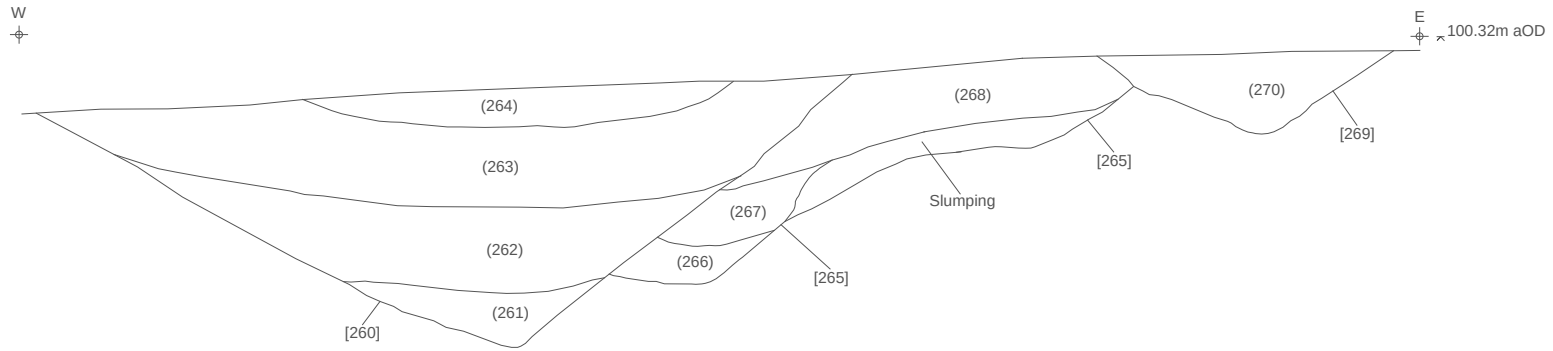


Figure 54:

Plans and sections showing relationships between F018/F019 and other features.

Scale = 1:20 at A3

Key:



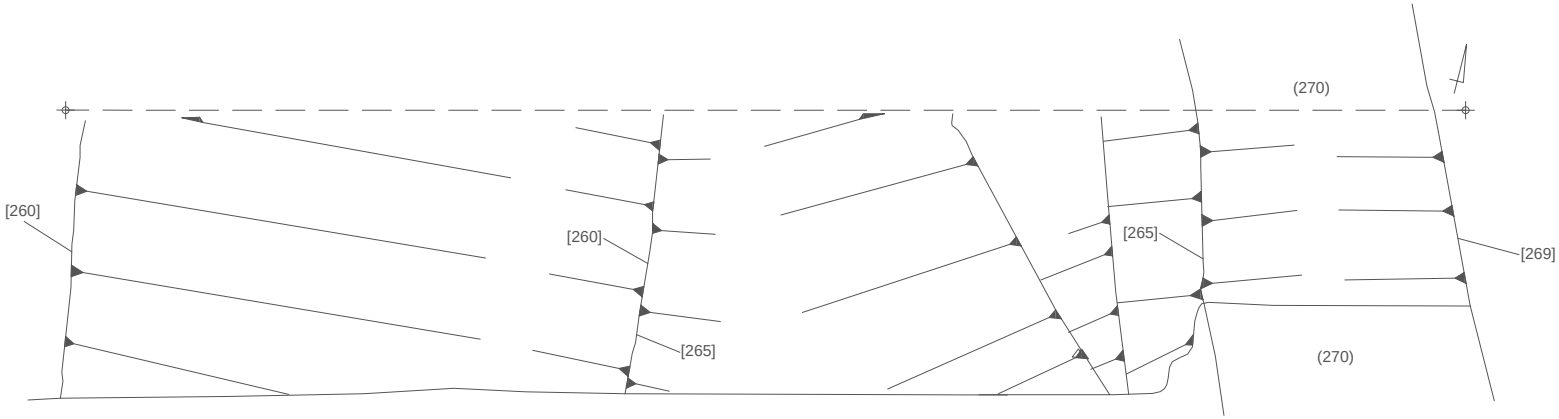


Figure 55:

Plans and sections of enclosure ditch F018/019.

Scale = 1:40 at A4.

Key:

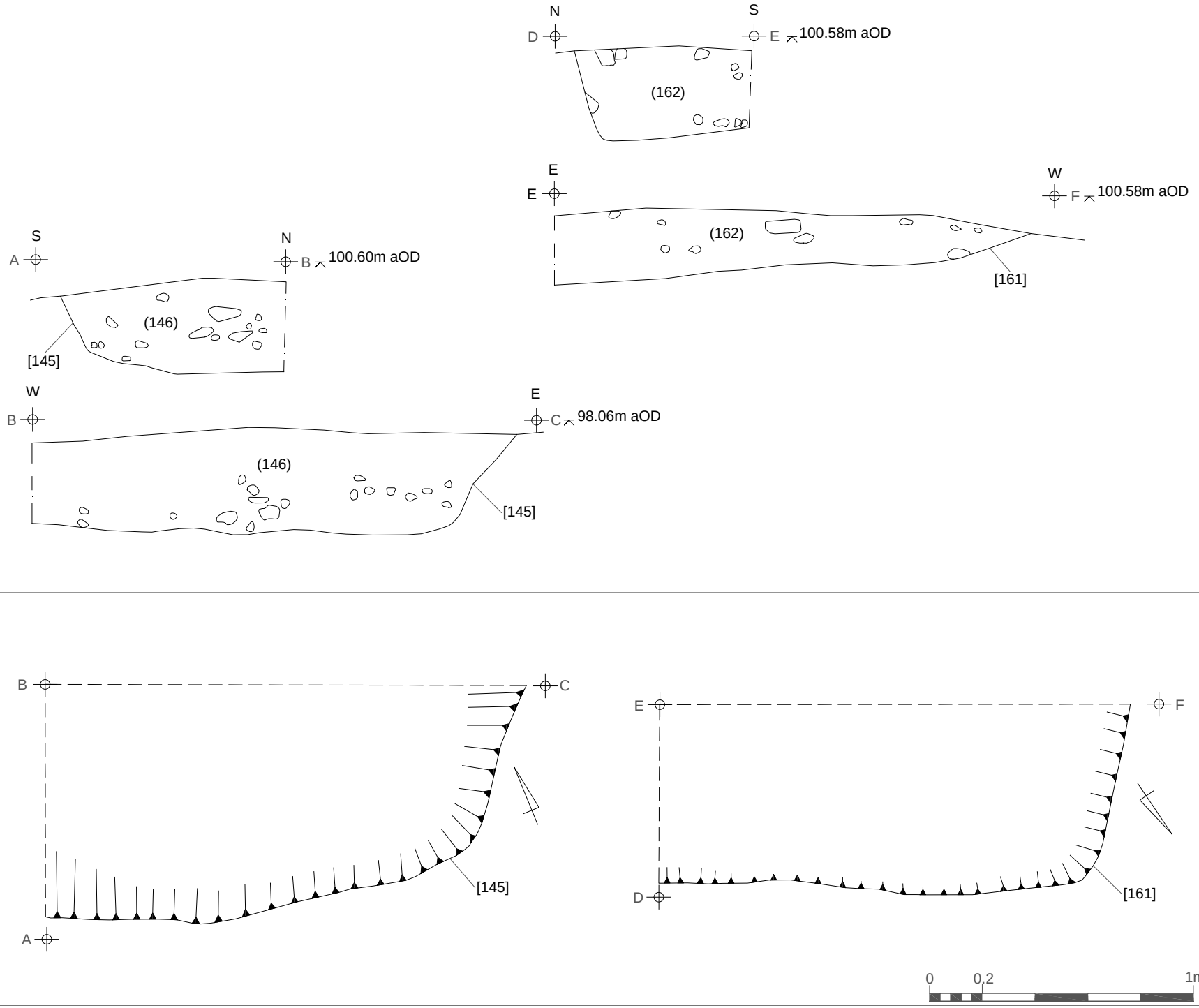


Figure 56:

Plans and sections of pit F032.

Scale = 1:20 at A4.

Key:

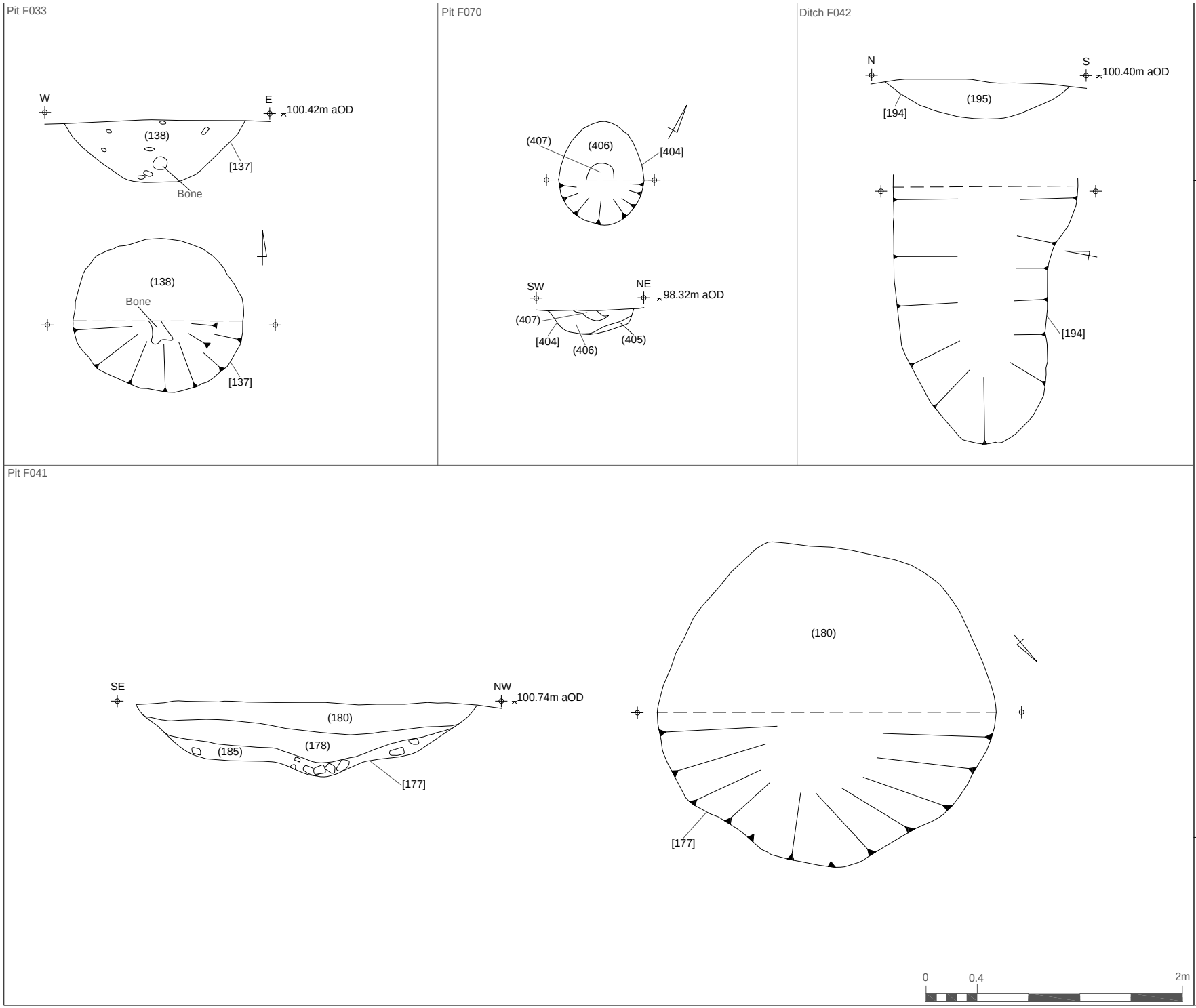
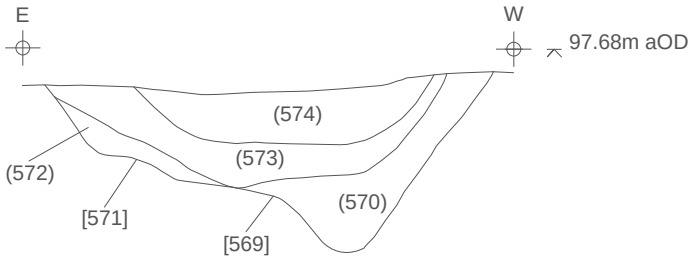


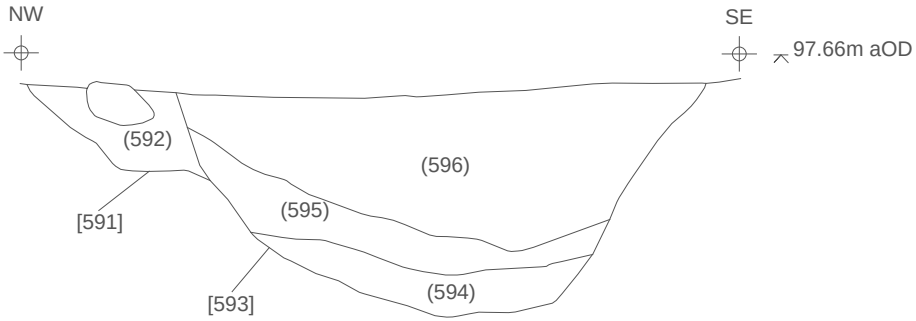
Figure 57:

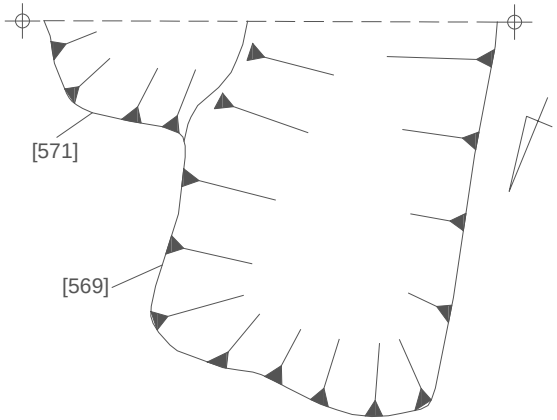
Plans and sections of pits F033, F041 and F070 and ditch F042.

Scale = 1:40 at A4.

Key:







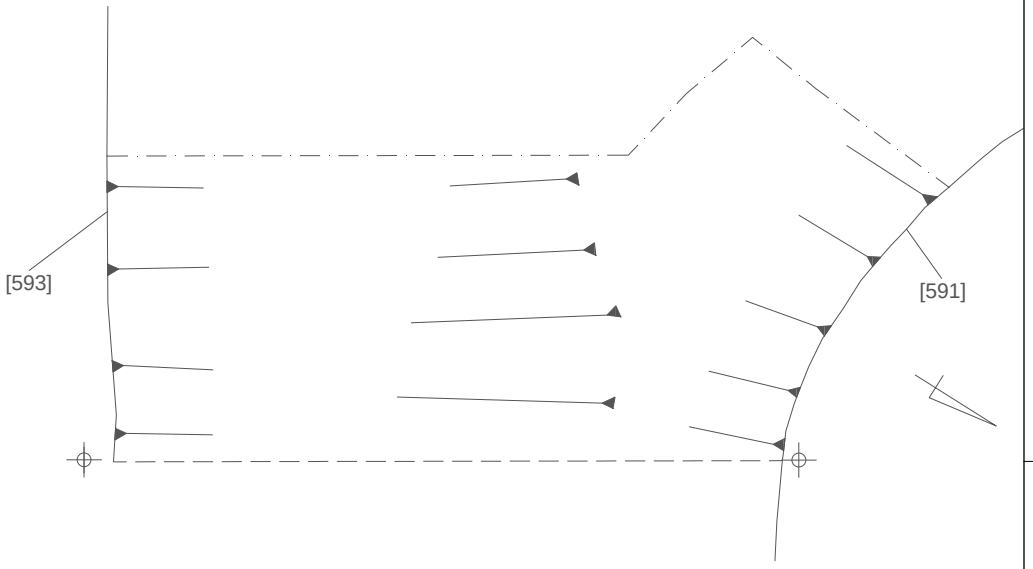


Figure 58:

Plans and sections of enclosure ditch F051.

Scale = 1:20 at A4.

Key:

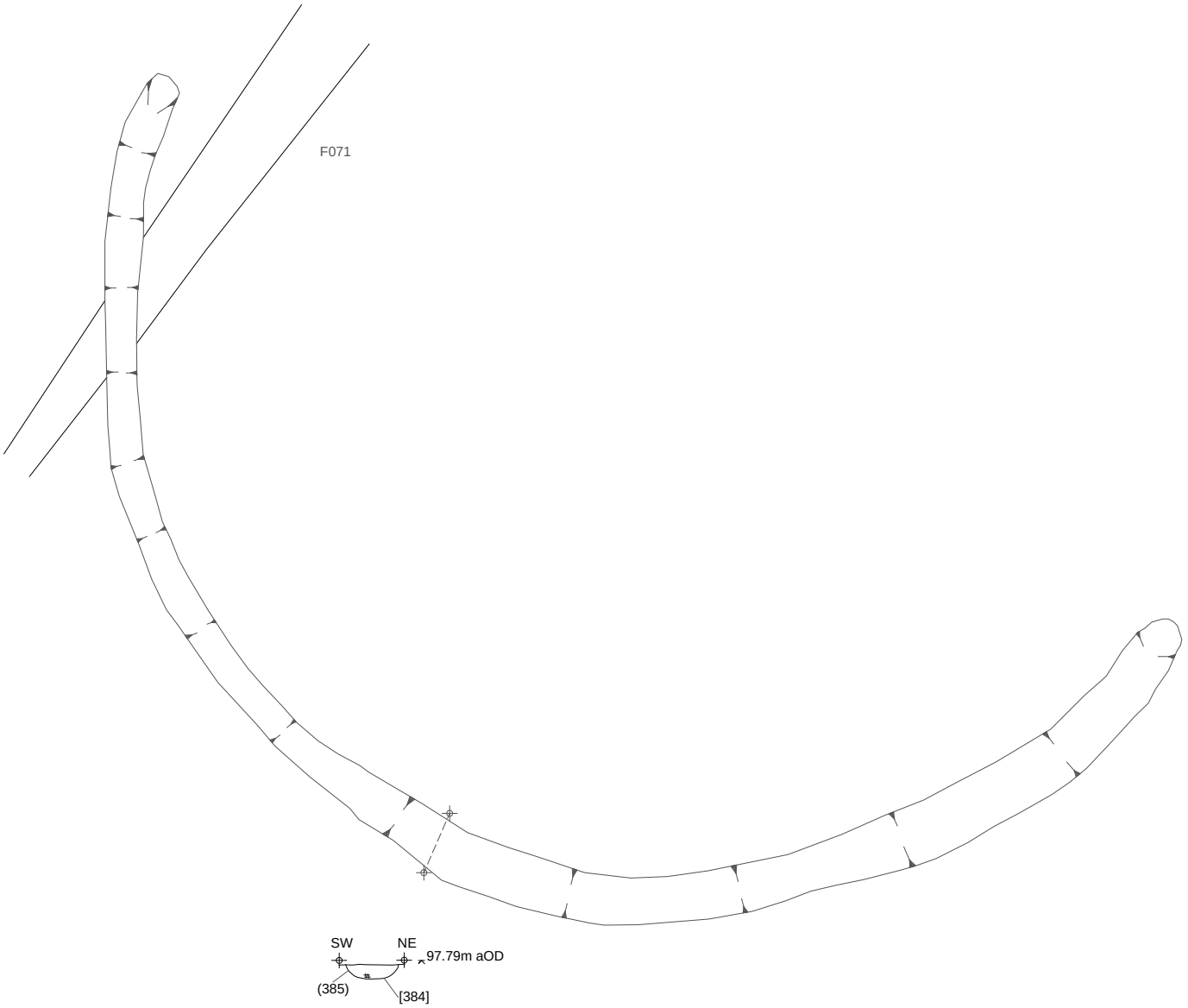


Figure 59:

Plans and sections of curvilinear ditch F093.

Scale = 1:40 at A4.

Key:

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
F005	Drainage ditch	[008]	0.68	0.18	-	-	-
		(009)	0.68	0.18	Mid brown/grey	Silty clay	-
F006	Drainage ditch	[006]	0.16	0.1	-	-	-
		(007)	0.16	0.1	Mid brown/grey	Silty clay	-
		[315]	0.16	0.1	-	-	-
		(316)	0.16	0.1	Mid brown/grey	Silty clay	-
F007	Drainage ditch	(010)	0.66	0.38	Dark grey	Clayey silt	-
		[011]	0.66	0.38	-	-	-
		[102]	0.68	0.24	-	-	-
		(103)	0.68	0.24	Dark brown/grey	Silty clay	-
		[468]	0.64	0.34	-	-	-
		(469)	0.54	0.34	Orange/grey	Silty clay	-
		(470)	0.2	0.12	Light yellow/orange	Silty clay	-
		[471]	-	0.12	-	-	-
		(472)	0.28	0.12	Dark grey	Silty clay	-
		[473]	0.46	0.3	-	-	-
		(474)	0.46	0.3	Dark brown/grey	Silty clay	-
		[475]	0.19	0.22	-	-	-
		(476)	0.1	0.06	Dark brown/grey	Silty clay	-
		(477)	0.19	0.18	Grey	Silty clay	-
F008	Drainage ditch	(012)	1.12	0.34	Grey	Clayey silt	-
		[013]	1.12	0.34	-	-	-
		[108]	0.9	0.28	-	-	-
		(109)	0.9	0.28	Mid grey/brown	Silty clay	-
F009	Drainage ditch	(014)	0.4	0.14	Light grey/brown	Clayey silt	-
		[015]	0.4	0.14	-	-	-
		[104]	0.56	0.32	-	-	-
		(105)	0.56	0.32	Light yellow/grey	Silty clay	-
		[110]	0.45	0.1	-	-	-
		(111)	0.45	0.1	Yellow/grey	Clay	-
F010	Boundary ditch	[076]	0.8	0.7	-	-	-
		(077)	0.8	0.7	Dark brown	Silty clay	-
		[398]	0.75	0.17	-	-	-
		(399)	0.54	0.12	Yellow/brown	Clay	-
		(400)	0.77	0.1	Dark grey	Clayey silt	-
		[531]	-	0.48	-	-	-
		(532)	-	0.48	Very dark grey	Silty clay loam	-
F010/011	Boundary ditch	[022]	2	0.4	-	-	-
		(023)	1.9	0.2	Dark yellow/brown	Clay loam	-
		(024)	2	0.2	Dark brown	Silty clay loam	-
		[567]	0.87	0.41	-	-	-
		(568)	0.87	0.41	Brown/black	Clayey silt	-
F011	Boundary ditch re-cut	[401]	1.9	0.9	-	-	-
		(402)	1.6	0.4	Dark grey	Clayey silt	-
		(403)	1.55	0.38	Dark grey	Dark grey	-
		[074]	2.3	0.65	-	-	-
		(075)	2.3	0.65	Dark brown	Silty clay	-
		[317]	-	0.57	-	-	-
		(318)	-	0.2	Grey/orange	Silty clay	-
		(319)	-	0.13	Grey	Clay	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
		(320)	-	0.25	Grey	Clay	-
		[401]	1.9	0.4	-	-	-
		(402)	1.6	0.4	Dark grey	Clayey silt	-
F018	Enclosure ditch	[034]	2.44	0.23	-	-	-
		(035)	2.44	0.42	Dark to mid grey	Silty clay	-
		(036)	1.7	0.31	Mid grey/brown	Clay	-
		[079]	2.5	0.7	-	-	-
		(081)	2.5	0.22	Yellow/brown	Clay	-
		(082)	1.85	0.18	Very dark grey	Clay	-
		(083)	1.8	0.1	Very dark grey	Clay	-
		(084)	0.65	0.8	Brown/yellow	Silty sand	-
		(085)	0.7	0.23	Yellow/grey	Clay	-
		[117]	1.74	0.51	-	-	-
		(118)	1.44	0.36	Mid grey/brown	Clay loam	-
		(119)	1.74	0.41	Mid brown	Silty clay loam	-
		[249]	2.38	1.12	-	-	-
		(256)	2.1	0.97	Mid yellow/brown	Sandy loam	-
		(257)	2.18	0.9	Mid-dark brown	Silty loam	-
		[265]	2.5	1.07	-	-	-
		(266)	0.86	0.25	Mid grey/brown	Sandy silt	-
		(267)	0.89	0.28	Dark brown	Clayey silt	-
		(268)	2.1	0.43	Grey	Silty clay	-
		[448]	2.5	0.91	-	-	-
		(449)	2.5	0.25	Orange/grey	Silty clay	-
		[482]	0.5	0.5	-	-	-
		(483)	0.5	0.5	Mid brown	Silty clay loam	-
		[533]	-	1.85	-	-	-
		(538)	-	0.26	Orange/grey	Clayey sandy silt	-
		(539)	-	0.92	Brown/orange	Silty clay	-
		(540)	-	0.2	Mid brown/grey	Silty clay	-
		(541)	-	0.58	Mid orange/brown	Silty clay	-
F019	Enclosure ditch	[080]	0.93	0.4	-	-	-
		(086)	0.93	0.17	Yellow/grey	Clay	-
		(087)	0.65	0.15	Dark grey	Clay	-
		(088)	0.36	0.1	Yellow/grey	Clay	-
		[096]	0.91	0.26	-	-	-
		(097)	0.37	0.12	Grey	Silty clay	-
		(098)	0.91	0.2	Mid brown	Silty loam	-
		[114]	1.08	0.43	-	-	-
		(115)	0.88	0.27	Dark grey/brown	Clay loam	-
		(116)	1.08	0.26	Dark brown	Silty loam	-
		[251]	3.4	1.06	-	-	-
		(252)	0.8	0.18	Mid grey/brown	Sandy clay	-
		(253)	0.96	0.3	Mid brown	Sand and gravel	-
		(254)	2.4	0.2	Dark grey	Silty clay	-
		(255)	3.06	0.3	Mid grey/brown	Sandy silt	-
		(271)	1.9	0.4	Mid brown/grey	Silty clay	-
		[250]	4.68	0.94	-	-	-
		(258)	3.81	0.39	Mid brown/orange	Sandy loam	-
		(259)	4.68	0.75	Mid brown	Silty loam	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
		[260]	4.3	1.37	-	-	-
		(261)	1.38	0.28	Mid grey/brown	Clayey silt	-
		(262)	3.3	0.45	Grey/brown	Clayey silt	-
		(263)	4.3	0.42	Grey	Silty clay	-
		(264)	2.28	0.21	Grey	Silty clay	-
		[414]	0.5	0.3	-	-	-
		(415)	0.5	0.3	Brown/grey	Silty clay	-
		[450]	-	0.42	-	-	-
		(451)	-	0.08	Grey	Clay	-
		(452)	-	0.16	Pale grey/orange	Silty clay	-
		(453)	-	0.29	Dark grey/orange	Silty clay	-
		[552]	0.42	0.2	-	-	-
		(553)	0.42	0.2	Dark grey/brown	Silty clay loam	-
		[554]	2.76	0.98	-	-	-
		(555)	0.73	0.58	Mid-dark brown	Silty loam	-
		(556)	2	0.66	Light orange/brown	Silty loam	-
		(557)	2.46	0.63	Mid-dark brown	Silty loam	-
		(558)	2.41	0.44	Dark brown	Silty loam	-
F032	Elongated pit	[145]	1.66	0.35	-	-	-
		(146)	1.66	0.35	Brown/yellow	Gravel and clay	-
		[161]	3.7	0.35	-	-	-
		(162)	3.7	0.35	Brown/yellow	Gravel and clay	-
F033	Pit	[137]	1.3	0.5	-	-	-
		(138)	1.3	0.5	Grey/brown	Clayey silt	-
F041	Pit	[177]	2.65	0.59	-	-	-
		(178)	2.32	0.33	Orange/brown	Sandy silt loam	-
		(179)	0.3	0.2	Black/brown	Silty clay loam	-
		(180)	2.65	0.25	Dark brown	Silt loam	-
		(185)	2.2	0.38	Orange/brown	Sandy silt loam	-
F042	Ditch	[269]	1.56	0.43	-	-	-
		(270)	1.56	0.43	Brown/grey	Clayey silt	-
		[194]	1.46	0.3	-	-	-
		(195)	1.46	0.3	Dark brown/grey	Clayey silt	-
		[233]	1.6	0.42	-	-	-
		(234)	1.6	0.42	Dark brown/grey	Sandy silty clay	-
F051	Enclosure ditch	[569]	0.66	0.48	-	-	-
		(570)	0.66	0.48	Mid brown	Silty loam	-
		[571]	1.06	0.26	-	-	-
		(572)	0.44	0.22	Brown/orange	Clay loam	-
		(573)	1.06	0.3	Mid brown	Silty loam	-
		(574)	0.78	0.18	Light-mid brown	Silty loam	-
		[593]	0.89	0.22	-	-	-
		(594)	0.89	0.22	Orange/brown	Silty clay loam	-
		(595)	1.1	0.38	Mid brown	Silty loam	-
		(596)	1.4	0.44	Orange/brown	Silty clay loam	-
F070	Pit	[404]	0.8	0.17	-	-	-
		(405)	0.25	0.04	Orange	Clay	-
		(406)	0.65	0.14	Grey	Silty clay	-
		(407)	0.21	0.04	Orange	Clay	-
F072	Enclosure	[454]	-	0.9	-	-	-

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
	ditch	(455) (456) (457)	- - -	0.23 0.34 0.27	Grey Orange/grey Dark grey	Clay Silty clay Silty clay	- - -
F093	Curvilinear ditch	[384] (385)	0.32 0.32	0.09 0.09	- Dark grey	- Silty clay	- -

Table 3. Roman Iron Age features.

6.5 Features of unknown date

6.5.1 A number of features across the site were undated either due to their lack of relationship with other features or their failure to produce material culture. Located at the extreme western side of the Roman Iron Age rectilinear enclosure F018 was an east-west orientated ditch F048 that appeared to truncate the large enclosure's ditch. Ditch F048 had a maximum length of 11.9m and a maximum width of 0.61m with a maximum depth of 0.17m (Figure 63). The purpose of this feature is unknown.

6.5.2 In close proximity to the Phase II Iron Age Roundhouse 2 was an undated pit F057 (Figure 60 and Figure 63). This pit was circular in plan with a diameter of 0.74m and a maximum depth of 0.14m from the top of the natural clay.

6.5.3 Pits F076 and F078 were located close to the Phase II Iron Age phase ditches F075 and F077 and therefore may also be contemporary, however this is not a certainty. Pit F076 was circular with a maximum diameter of 0.75m and a maximum depth of 0.16m from the top of the natural clay. The cut [458] was irregular with steeply sloping sides to the south-west and gently sloping sides to the north-east. The primary fill of this pit (459) consisted purely of coal which has led to the conclusion that this pit was a fire rake pit for depositing used hearth material. The cut of the feature did not display evidence of having been heat-affected therefore the material must have been deposited once it had cooled. Pit F078 was located 1.9m to the north of pit F076 and was ovoid in plan with a maximum width of 0.46m and had a maximum depth of 0.09m from the top of the natural clay. This pit contained a single fill (465) comprising a reddish brown silty clay (Figure 61 and Figure 63).

6.5.4 Situated close to the excavation area's north-eastern side were two pits and a small ditch. Pit F098 was circular in plan with a maximum diameter of 0.62m and a maximum depth of 0.25m from the top of the natural clay (Figure 62 and Figure 64). Pit F099 was located 2.4m to the north-east of pit F098 and was also circular in plan with a maximum width of 0.52m and a depth of 0.43m from the top of the natural clay. Pit F099 had a 'V'-shaped cut so therefore may have been a posthole rather than a pit. Ditch F100 had been truncated by a later, medieval ditch F003 so had only survived to a maximum length of 5.8m from west to east. The ditch had a maximum width of 0.52m and a maximum depth of 0.18m from the top of the natural clay.

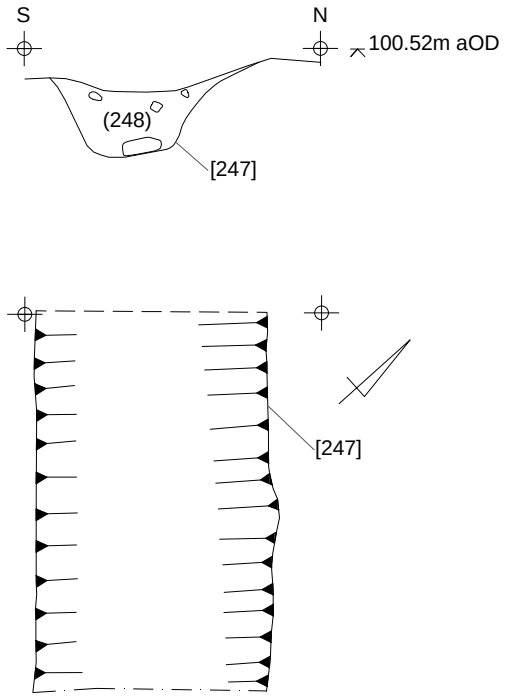
6.5.5 Two wide furrows F001 and F002 and an associated field boundary F003 were noted at the north-eastern extent of the excavation area (Figure 2). Two of these features were investigated, however no dating evidence or material culture was recovered. These features are presumed to be either medieval or post-medieval in date.

Figure 60. Pit F057 after full excavation, looking north-east (scale = 0.5m).

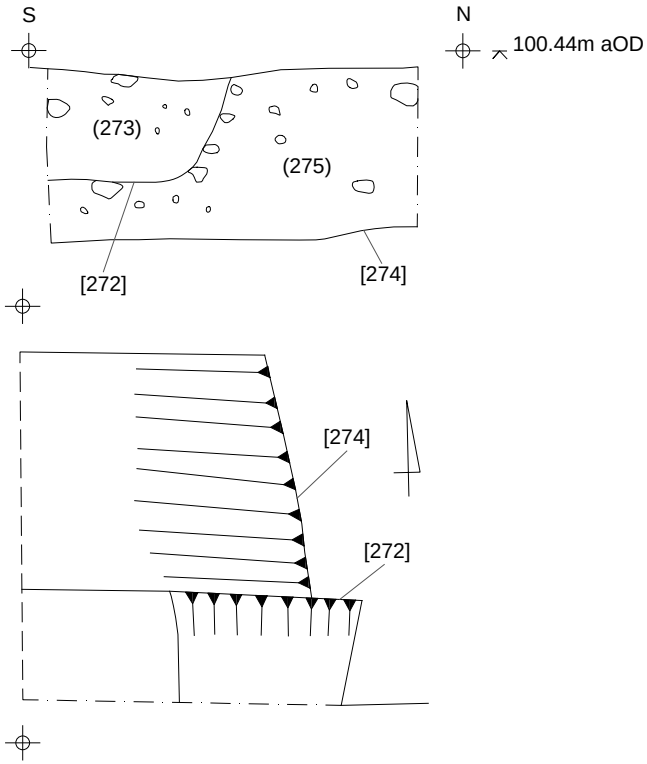
Figure 61. Pit F076 after partial excavation showing the primary fill of black hearth material, looking north-west (scale = 0.5m).

Figure 62. Pit F098 after partial excavation, looking west (scale = 0.5m).

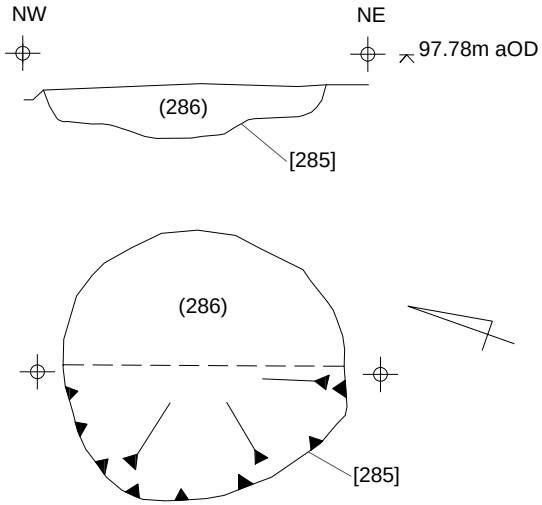
Ditch F048



Relationship between ditches F048 and F018/F019



Pit F057



Pit F076

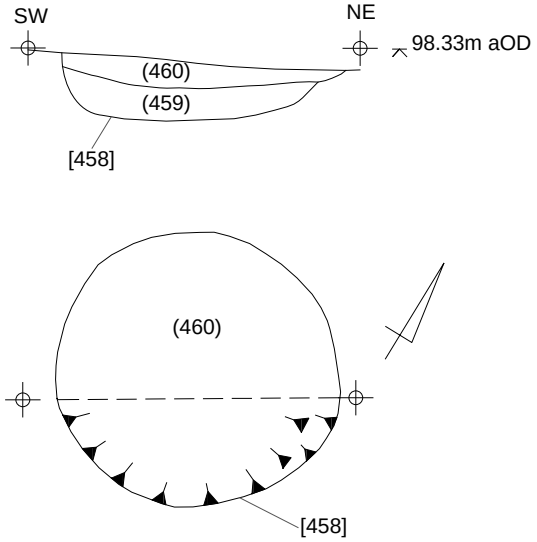


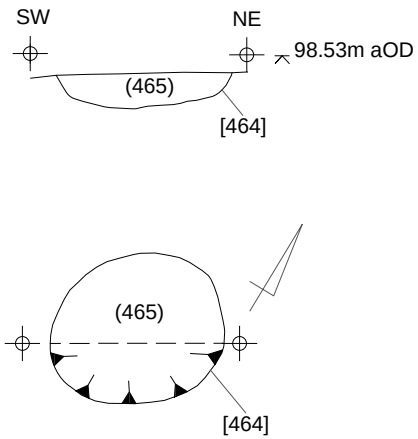
Figure 63:

Plans and sections of undated features.

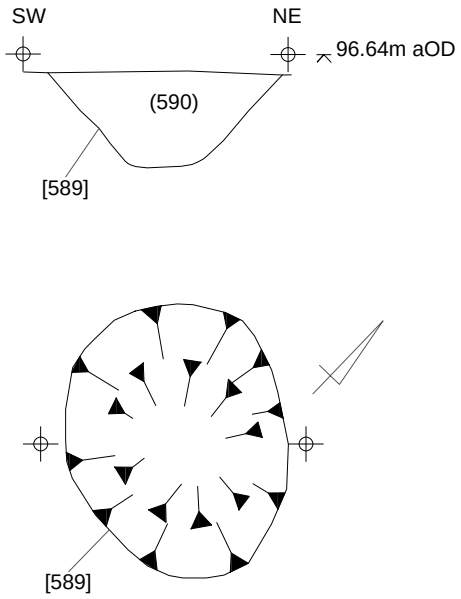
Scale = 1:20 at A4.

Key:

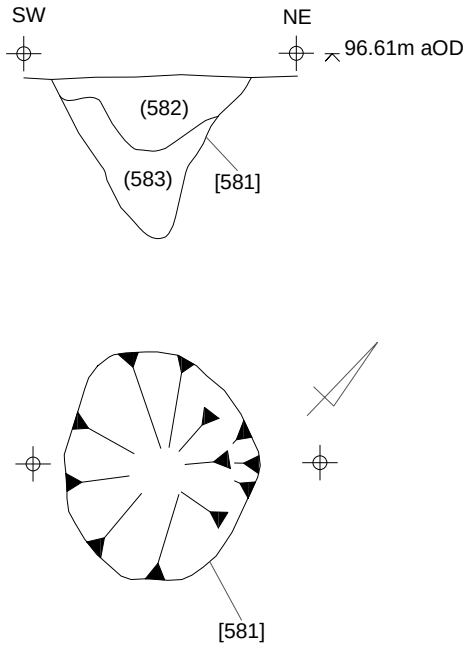
Pit F078



Pit F098



Pit F099



Pit F100

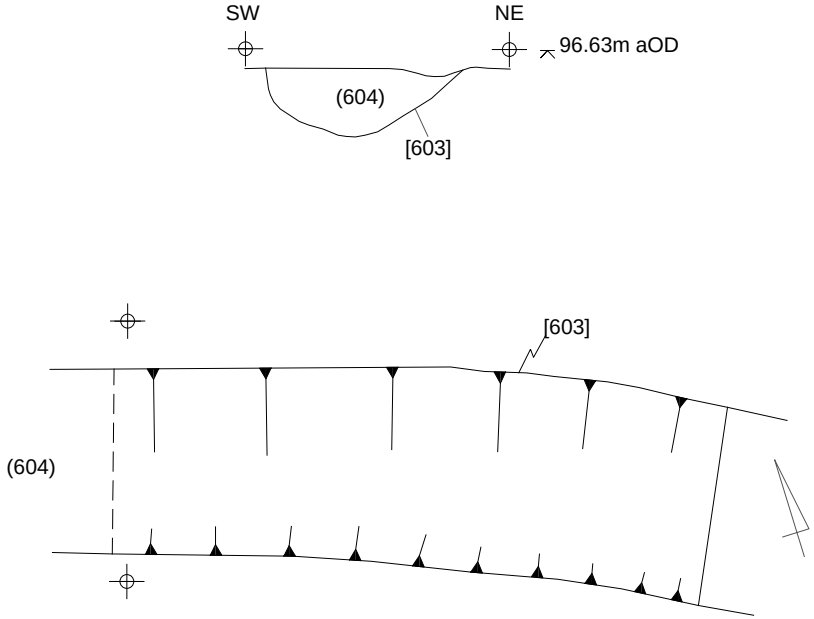


Figure 64:

Plans and sections of undated pit features.

Scale = 1:20 at A4.

Key:

Feature No.	Description	Context numbers	Max. dimensions (m)	Max. depth (m)	Colour of fill	Composition	Calibrated date range (95.4% probability)
F048	Ditch	[247] (248)	0.61 0.61	0.17 0.17	-	-	-
		[272] (273)	0.8 0.8	0.28 0.28	- Dark brown	- Silty clay	- -
F057	Pit	[285] (286)	0.76 0.76	0.13 0.13	- Dark grey	- Silty clay	- -
F076	Pit	[458] (459) (460)	0.74 0.67 0.74	0.15 0.08 0.07	- Black Brown/grey	- Coal Clayey silty sand	- - -
F078	Pit	[464] (465)	0.47 0.47	0.09 0.09	- Red/brown	- Silt and clay	- -
F098	Pit	[589] (590)	0.6 0.6	0.8 0.8	- Brown	- Sandy clayey silt	- -
F099	Pit	[581] (582) (583)	0.6 0.55 0.27	0.43 0.2 0.35	- Grey Black	- Clay Clay	- - -
F100	Ditch	[603] (604)	0.6 0.6	0.19 0.19	- Brown/grey	- Sandy silty clay	- -

Table 4. Features of unknown date.

7. RADIOCARBON DATING

6.1 A total of six radiocarbon dates were obtained and these are summarised in Table 5.

6.2 A charred spelt grain from the fill of pit F033 (138) located in close proximity to the Phase I Iron Age droveway ditches produced a radiocarbon age of 1870 ±30 (SUERC-79165 (GU47266)).

6.3 A charred spelt grain from the fill of the Phase II Iron Age stock pen F055 (290) returned a radiocarbon age of 1965 ±28 (SUERC-79166 (GU47267)).

6.4 A charred emmer wheat grain from the fill of pit F058 (282), located in the entrance to Roundhouse 2, produced a radiocarbon age of 2012 ±32 (SUERC-79284 (GU47268)).

6.5 A charred barley grain from the secondary fill of Roman Iron Age enclosure ditch F010 (400) produced a radiocarbon age of 1920 ±28 (SUERC-79171 (GU47270)).

6.6 A charred barley grain from the fill of droveway ditch F045 (176) produced a radiocarbon age of 231 ±27 (SUERC-79164 (GU47265)). This sample has been classed as intrusive on account of it being of relatively modern date.

6.7 A charred spelt grain from the primary fill of the main Roman Iron Age enclosure F019 (258) produced an inconclusive result (SUERC-79167 (GU47269)).

Laboratory no.	Feature and context description	Sample	Radiocarbon Age (BP)	δ13C (0/00)	Calibrated date range (95.4% probability)	Calibrated date range (68.2% probability)
Phase II Iron Age						
SUERC-79284	Fill of pit F058 (282)	Charred	2012 ±32	-20.8	96 cal BC-66 cal AD	47 cal BC – 25 cal

(GU47268)	located at the entrance to Roundhouse 2	emmer wheat grain				AD
SUERC-79166 (GU47267)	Fill of Phase II Iron Age stock pen F055 (290)	Charred spelt grain	1965 ±28	-23.0	42 cal BC-85 cal AD	5-68 cal AD
Roman Iron Age Phase						
SUERC-79171 (GU47270)	Secondary fill of Roman Iron Age enclosure ditch F010 (400)	Charred barley grain	1920 ±28	-21.7	8-135 cal AD	57-124 cal AD
SUERC-79165 (GU47266)	Fill of pit F033 (138)	Charred spelt grain	1870 ±30	-21.4	73-226 cal AD	82-210 cal AD
Intrusive/inconclusive						
SUERC-79164 (GU47265)	Fill of droveway ditch F045 (176)	Charred barley grain	231 ±27	-23.0	1640-1937 cal AD	1647-1798 cal AD
SUERC-79167 (GU47269)	Primary fill of Roman Iron Age phase rectilinear enclosure ditch (258)	Charred spelt grain	-	23.6	-	-

Table 5. Radiocarbon dating results table.

6.8 The radiocarbon dates show that occupation commenced on the site in the Late Iron Age in either the late 1st century BC or the early first century AD. The overlap with the Roman Iron Age suggests that settlement on the site may have continued largely uninterrupted between the native Iron Age phase of occupation and the Roman Iron Age phase when the larger enclosure was constructed, suggesting a potential expansion of this settlement.

8. PREHISTORIC CERAMICS ASSESSMENT

by Clive Waddington

8.1 Introduction

8.1.1 The corpus of prehistoric ceramic material recovered from Sedgefield Road is small but informative comprising sherds from three late prehistoric Flat Rimmed Ware pots and small sherds from three Late Iron Age or Romano-British native pots. The vessel determinations were based upon consideration of form and fabric, as well as slightly less reliable indicators such as colour and wall thickness. The Flat Rimmed Ware was recovered from deposits associated with Iron Age Roundhouse 2, whilst the other later pots were found associated with the Phase II Iron Age structure F063.

8.1.2 The Flat Rimmed Ware assemblage can be compared to the assemblage of Flat Rimmed Ware from Cheviot and Lanton Quarries (Waddington 2008; Passmore and Waddington 2012, 208-9) and material from the multi-phase late prehistoric settlements excavated at Pegswood Moor (Proctor 2009) and St George's Hospital, Morpeth (Waddington in Lotherington 2016). The later material is considered likely to be of Late Iron Age or, more likely, Romano-British date and compares with material from the many

Romano-British sites excavated throughout the north-east region such as Thorpe Thewles (Heslop 1987) and Catcote (Long 1988).

8.2 Method Statement

8.2.1 The sherds were gently finger-washed in cold water and then left to air dry. Once they had dried the remaining soil was gently brushed off with a sable shaving brush. The sherds were laid out according to context and then by fabric group and individual vessels. The pottery was examined macroscopically with the aid of a x10 hand lens. No microscopic analysis was undertaken. Any joining sherds were refitted using HMG adhesive.

8.3 Catalogue

8.3.1 A catalogue describing each identified vessel by number and ceramic type is presented below.

Vessel Number	Small Find Number	Context Number	Description	Weight (grams)
Flat Rimmed Ware				
1	89	329	Ten sherds, of which two conjoin, from a broad bowl-shaped, coarseware, hand-made pot. The two large pieces of rim show an upright rim with flat top and the body sherds show a curving belly. It has an internal rim diameter of *c*.22cm. There is no decoration present. The fabric is hard and well fired and contains prepared angular crushed quartz inclusions which occasionally erupt on both the inner and outer surfaces and can be up to 10mm across. There is also the use of grog as an opening agent. The vessel has a slip on its inner and outer surfaces which is unevenly oxidised giving it surface colours that range from orange-brown to grey reflecting uneven firing control suggestive of a bonfire or related kiln. It has a wall thickness ranging between 8-10mm. There is charred residue adhering to the outer surface where the bowls content has boiled over on to the side of the pot. This suggests a domestic vessel associated with the cooking of foodstuffs.	225.9g
2	42	174	Three sherds, of which two conjoin, from a large bowl-shaped coarseware, hand-made pot. The two pieces of rim show an upright neck with slightly everted rim with flat top and the body sherds show a curving belly. It has an internal rim diameter of *c*.32cm. There is no decoration present. The fabric is hard and well fired and contains prepared angular crushed stone inclusions which occasionally erupt on both the inner and outer surfaces and can be up to 8mm across. The vessel has a slip on its inner and outer surfaces and a dark grey core which is oxidised giving it a distinct and evenly coloured internal orange-brown surface colour	243.5g

Vessel Number	Small Find Number	Context Number	Description	Weight (grams)
			and a mixed orange-brown to dark grey outer surface where it is less evenly fired. It has a wall thickness ranging between 12-14mm. There is what appears to be residue adhering to the outer surface of the smaller of the two rim sherds. This suggests a domestic vessel associated with the cooking of foodstuffs.	
3	94	358	A single rim shed from a bowl-shaped pot. It has a slightly concave neck, and the rim slightly flares on its inner and outer sides due to the flattening of the top to make a flat-topped rim, and with a curved body. It has an internal rim diameter of *c*.14cm. There is no decoration present. The fabric is hard and well fired and contains prepared angular crushed stone inclusions which occasionally erupt on both the inner and outer surfaces and can be up to 6mm across. The vessel has a slip on its inner and outer surfaces which is unevenly oxidised giving it surface colours that range from orange-brown to grey reflecting uneven firing control suggestive of a bonfire or related kiln. It has a wall thickness ranging between 8-10mm.	53.3g
Late Iron Age, Romano-British				
4	102	427	A small rim sherd and a body sherd from a plain coarseware vessel. It has a carination at the base of the neck and an everted plain rim. It has an internal rim diameter in the region of 12cm but the small size of the sherd means this is an approximation. Hard, even, well-fired fabric with brown – dark grey inner and outer surfaces and core. It has gritty surfaces on account of the inclusions which consist of regular-sized crushed quartzitic stone averaging 1-3mm across. A slip has been applied. Wall varies between 4mm and 6mm thick. Smoothed on inner and outer surface.	12.7g
5	102	427	Four small body sherds from a plain coarseware vessel. Hard, even, well-fired fabric with brown – dark grey outer surface and very dark grey inner surface where charred residue adheres. It has gritty surface on account of the inclusions which consist of regular-sized crushed quartzitic stone averaging 1-3mm across. A slip has been applied. Wall thickness is 3-4mm.	11.1g
6	111	441	Three small sherds, of which one is a rim, from a small pale grey – orange brown coarseware pot. It is of different fabric to pots 4 and 5. The rim indicates an upright neck and rim plain, flat top and presumably a curving body. It has an internal rim diameter in the region of 14cm but the small size of the sherd means this is an	12.8g

Vessel Number	Small Find Number	Context Number	Description	Weight (grams)
			approximation. Hard, even, well-fired fabric with pale grey core. It contains prepared angular crushed quartz stone inclusions up to 4mm across. A slip has been applied. Wall is 6.5-8mm thick. Smoothed on inner and outer surface.	

Table 6. Catalogue of prehistoric ceramics from Sedgefield.

8.4 Fabric

8.4.1 The Flat Rimmed Ware material has some variation in its surface colour, including on individual vessels. This is usual with ceramics fired under a bonfire or pit clamp and repeatedly exposed to smoke discolouration, heat and differential oxygen supply. On the whole these sherds tend to have orange-brown, dark brown and brown surfaces and are well fired. This makes the pots strong and durable. Pot 1 and possibly Pot 2 have carbonised residue surviving below the rim on their outer surfaces. The Flat Rimmed ware has a hard fabric with large crushed stone inclusions typically 8mm across. The slip is likely to have been applied to these pots to help produce smoother and watertight surfaces. These substantial domestic cooking vessels have thick walls ranging from 8-14mm.

8.4.2 The Late Iron Age-Romano British material contains finely crushed stone inclusions giving a gritty fabric. They are well fired and have slips applied.

8.5 Form

8.5.1 The Flat Rimmed Ware vessels comprise bowl-shaped vessels of substantial size. They have plain, flat-topped and fairly squared rims.

8.5.2 The later Iron Age-Romano British pots are all from small domestic vessels of what appears to be bowl forms of one type or another but the small size of the surviving sherds allows little further comment, other than that Pot 4 had an everted plain rim.

Figure 65. All sherds from Pot 1 showing rims at top and inner surface on the left and outer surface on the right.

Figure 66. All sherds from Pot 2 showing rims at top and inner surface on the left and outer surface on the right.

Figure 67. Pot 3 sherd showing rim at top outer surface.

8.6 Decoration

8.6.1 None of the sherds have any decoration present.

8.7 Numbers and Weight

8.7.1 A total of 23 prehistoric-Roman Iron Age sherds were recovered from the site which represent a minimum of six vessels. These pots include three Flat Rimmed Ware vessels and three Late Iron Age-Romano British coarseware vessels. The combined weight of the sherds for each type of ceramic is as follows: Flat Rimmed Ware 522.7g, Late Iron Age – Romano-British 36.6g. The total weight of all the pottery assemblage is 559.3g.

8.8 Discussion

8.8.1 Late prehistoric ceramics from north-east England are generally sparse, due to the heavy truncation of remains of this period and hitherto the rarity of large-scale strip, map and sample excavations, and there is still much work to be done to classify and typologise this material. The assemblage from Sedgefield makes an important addition to the region's corpus of Flat Rimmed Ware. Halliday (1988), and more recently Burgess (1995), have cautioned against the use of the term 'Flat-Rimmed Ware' as a catch-all label for diverse types of coarse pottery, but as yet there is too little information on sequence or types of decoration to provide a new label, so it is retained here, particularly as the only notable feature on the Sedgefield ceramics is their flat rims. Although the term 'Flat-Rimmed Ware' has in the past been used to refer to coarse wares dating from the third to first millennia cal BC (Coles and Taylor 1970, 97), it is more correctly used to refer to predominantly flat-rimmed and bevel-rimmed vessels that date to the late second and early first millennia cal BC (Hedges 1975). This somewhat featureless coarseware ceramic material is the principal pottery of the Middle to Late Bronze Age outside Deverel-Rimbury and Trevisker-using areas, although its use is known to have continued into the Iron Age, hence its appearance in the fill of the Iron Age Roundhouse 2 ring groove at Sedgefield. As Hedges stated, the term covers "simple, crude, bucket- and barrel-shaped pots" (Hedges 1975). It fills the ceramic void between the 'cord-decorated' and 'decorated band pottery' that Burgess

(1995) identified for the late Early Bronze Age, based primarily on the as yet unpublished Houseledge material, and the coarsewares of the middle and later Iron Age.

8.8.2 The material from Sedgefield compares to that from other lowland roundhouse settlement sites in the region at Cheviot and Lanton Quarries and St George's Hospital, Morpeth, which although similarly heavily truncated, have produced significant assemblages of Bronze Age – Iron Age Flat-Rimmed ceramics (Johnson and Waddington 2008; Waddington 2009; Waddington in Lotherington 2016). The pottery from all of these houses is all coarseware used for domestic purposes. The sherds from Sedgefield display the typical attributes associated with Flat-Rimmed Ware pottery, including flat rims, coarse fabric, an absence of decoration and bowl-shaped vessels. Their shape, fabric and presence of residues suggests the use of these vessels for cooking/food storage purposes and this correlates with the residue analysis undertaken on the Cheviot Quarry North assemblage which shows the occupants of these houses practised dairying and using the pots for storage, cooking, serving, eating and drinking (see Johnson and Waddington 2008).

Figure 68. Pot 4 sherds showing rim on right and outer surface of pot.

Figure 69. Pot 5 on left and Pot 6 on right showing outer surfaces. The upper sherd of Pot 6 has rim uppermost.

8.8.3 The Late Iron Age-Romano-British coarseware is composed of very small sherds allowing little to be said of their form or function. The vessels are all relatively thin-walled suggesting domestic vessels likely to have been used for cooking, serving or perhaps storage and this is supported by the presence of charred residue on Pot 5.

9. ROMAN IRON AGE CERAMICS ASSESSMENT

by Paul Bidwell and Alex Croom

9.1 Introduction

9.1.1 The site produced 127 sherds of Iron Age and Roman pottery, weighing 2.046kg. The assemblage consisted of 42% local traditional ware and 58% Roman pottery by sherd count.

Fabric		NRFRC	Wt (kg)	no	EVE (%)
Local Traditional Ware	Fabric 1		0.234	13	10
	Fabric 3.2		0.082	3	3
	Fabric 4.1		0.275	15	15
	Fabric 4.2		0.214	15	15
	Fabric 4.3		0.014	1	
	Fabric 4.4		0.016	2	5
	Fabric 6		0.028	9	21
Samian			0.017	11	
Fine wares	*Terra nigra*	GAB TN 1	0.019	1	
	Argonne colour-coated	ARG CC	0.008	1	10
Coarse wares	North Gaulish (?) flagon		0.298	5	200
	Flagon fabric B		0.161	13	13

	Flagon fabric M		0.006	1	
	Hard oxidised ware		0.046	2	
	Unclassified oxidised wares		0.029	5	
	South-east Dorset black burnished 1	DOR BB 1	0.146	10	28
	Grey ware		0.312	9	
	Fine grey ware		0.004	1	
	Hard grey ware		0.014	2	
	Unclassified reduced wares		0.024	1	
Total			**1.947**	**120**	**328**

Table 7. Pottery assemblage by fabric (excluding amphorae).

9.2 Local traditional ware

9.2.1 This was first made in the late Iron Age and continued to be made throughout the Roman period. It was probably made in small quantities within the household as and when required, so although there are certain widespread traditions relating to the make-up of the tempering used in the clay, the actual fabrics can vary considerably according to how the clay was prepared for each firing. Seven fabrics, or variants of fabrics, are represented, but this does not necessarily indicate seven different sources. The most common material used for tempering was quartz, making up 57% by sherd count, which appears to be a regional trait (Willis 2016, 228). At Stanwick dolerite tempering declines in use over time as quartz-tempering grows more common (*ibid.*, fig. 11.11), and it is possible the same happens here, as half the dolerite-tempered sherds come from Iron Age I and II features, despite there being less pottery in those phases.

9.2.2 The numbering of the fabrics below is not consecutive but is integrated with the fabric types in other reports (e.g. McBride 2012). They are distinguished by their choice of tempering, but in the absence of any other indications, this does not necessarily mean that examples with inclusions of similar character are necessarily from the same source. The pottery reported on here includes some types which are new to the writers (Fabrics 3.2 and 6.1).

Fabric 1: dolerite tempering
Black micaceous fabric, usually with one or both surfaces oxidised, with large angular fragments of dolerite up to 12mm across that often project from the surface, and are often very plentiful. Can have wipe marks on the exterior. Used for thick-walled barrel- or bucket-shaped jars and a thin-walled cooking pot with an upright rim.

Fabric 3.2: quartz and dolerite fragments of equal size
Thick dark grey or black fabric, hackly fracture. One or both surfaces can be oxidised. Ill-sorted white quartz tempering, most obvious 4mm and above in size, but with many smaller. Also large dolerite inclusions, up to 10mm across. Represented by a single, thick-walled vessel.

Fabric 4.1: quartz tempering
Hard fabric, with dark grey core and brown to buff surfaces. Large white or semi-translucent angular quartz inclusions, usually between 3-7mm across. The quartz can be abundant or sparse. Can have smoothing or wipe marks on the exterior. Used for thick-walled barrel- or bucket-shaped jars, thin-walled cooking pot with everted rim and a bowl.

Fabric 4.2: quartz-grain tempering
Fairly soft, handmade black or dark grey fabric, sometimes with oxidised surfaces. Tempered with rounded white/semi-transparent quartz grains *c.*1mm in size, with only very rare larger fragments. The abundant inclusions give a glittery appearance to the surfaces. Can have smoothed or burnished surfaces. Used for thick-walled barrel- or bucket-shaped jars and thin-walled cooking pots with upright or everted rims.

Fabric 4.3: fine quartz-grain tempering
Fairly soft, handmade fabric in dark grey fabric core; can have brightly oxidised surfaces, sometimes with a white margin. Tempered with abundant very fine white quartz grains less than 1mm in size, producing a very glittery surface. Represented by a single thin-walled vessel.

Fabric 4.4: quartz and biotite tempering
Cf. Stanwick fabric 115: Willis 2016, table 11.1.
Black fabric with buff margins and white/semi-transparent quartz inclusions mainly 2-3mm across but with rare larger pieces, and glittering black biotite inclusions mainly 2-3mm across. Represented by two vessels with smoothed or burnished surfaces, probably both bowls.

Fabric 6.1: sandy reduced
Sandy black or dark grey fabric, without any large tempering inclusions. Used for small vessels.

9.3 Catalogue

Local traditional ware

1. Narrow vessel with slightly flared, tapered rim. Oxidised on the exterior apart from area near base, and reduced on the interior from about 15mm from the rim. A small rounded base, oxidised on the exterior and reduced on the interior, possibly comes from the vessel. Function unknown. Fabric LTW 6, F088, (551), Phase I Iron Age.

2. Cooking pot with upright rim. Area of carbonised residue on the interior surface. Fabric LTW 4.1, quite sparse tempering, reduced, F019, (088), Roman Iron Age phase (Figure 71).

3. Cooking pot with out-turned rim. Carbonised residue on the exterior under the rim, and on the interior of a non-joining body sherd. Cf. Catcote: Long 1988, fig. 3, no. 30. Fabric 4.2, patchy reduced/oxidised exterior, oxidised interior, F010/011, (568), Roman Iron Age phase (Figure 72).

4. Cooking pot with everted squared rim. Carbonized residue on outside of rim and on shoulder. The fabric has a couple of dolerite inclusions but is otherwise relatively inclusion free; at Stanwick an inclusion-free fabric is preferred for jars with a similar squared everted rim (Willis 2016, fig. 11.12). Fabric LTW 1 with sparse tempering, F032, (162), Roman Iron Age phase (Figure 72).

5. Cooking pot with thin everted rim. Cf. Thorpe Thewles: Swain 1987, fig. 44, no. 103. Fabric LTW 4.1, with buff interior surface, (081), Roman Iron Age phase (Figure 72).

6. Jar or cooking pot with slightly flared base. This is a typical late Iron Age jar base, but unusually it has a concentric groove on the base, perhaps imitating those sometimes found on Roman vessels. Fabric LTW 4.1, mainly reduced but with oxidised patches, F041, (180), Roman Iron Age phase.

Roman

7. Footring and base of a platter in *terra nigra* (GAB TN 1); fine, pale grey fabric, with dark grey surfaces which are smoother on the interior of the platter. The base preserves on its upper surface part of an incised circle near its centre, and there is an offset along the outer edge of the base. Despite the absence of the rim, there are some indications of its possible type. The flat base of the platter joins its side at a sharp angle which would exclude the common Cam. 16 in which the convex side curves into the base, itself not flat but sloping up towards the centre. Other types, such as Cam. 8 and 12–14, display the same features that the Sedgefield fragment preserves. F059 (490). Roman Iron Age phase (Figure 73).

8. Cornice-rimmed beaker in cream fabric with traces of a black colour-coat. This is almost certainly a rough-cast Argonne beaker (ARG CC). The fabric of these beakers is usually red, but this example seems to have been affected by soil conditions. F010 (403). Roman Iron Age phase (Figure 71).

9. North Gaulish (?) flagon with a flanged rim and a single handle with a central rib; sandy, light brown fabric with occasional red (ferrous?) inclusions and a darker core. F032 (146). Roman Iron Age phase.

10. Ring-neck flagon, a single handle with a central groove, North Gaulish (?). Fabric similar to that of no.9 (d7), but lighter in colour and with a slightly gritty fabric. The interior of the flagon was slipped. F019 (555). Roman Iron Age phase (Figure 70).

11. Fragment of a hemi-spherical bowl with a flanged rim; hard oxidised ware, which is orange, slightly sandy and micaceous. The interior of the bowl has been smoothed. F018 (256). Roman Iron Age phase (Figure 71).

12. Flat-rimmed bowl in DOR BB 1; a non-joining sherd from another context shows that there was a chamfer above the base of the bowl. F041 (180). Roman Iron Age phase (Figure 70).

9.4 Discussion

Local traditional ware

9.4.1 'Cooking pots' with a comparatively narrow neck and wider body make up a large part of the assemblage, with only a single rim from a wide-mouthed barrel-shaped jar, although body sherds from thick-walled vessels show that other such jars were also present. A number of the vessels had carbonised residues on their exteriors, which is a relatively common feature of this type of pottery. These residues may be the remains of food that has boiled over during cooking, but could perhaps be evidence that the vessels were used for boiling glue, rendering animal fat, preparing lanolin or similar activities, where there was less incentive to clean up the exterior of the vessel.

Amphorae

9.4.2 The site produced seven sherds (98g) of amphora, all from Baetican olive-oil carrying vessels.

Samian

9.4.3 The site produced 11 sherds and scraps (17g), probably from at least six plain or decorated vessels including plain and decorated examples. All were small fragments but seemed to be from South Gaulish vessels no earlier than the Neronian-Flavian period, apart from two sherds in context (180) which were probably Central Gaulish and therefore no earlier than *c*. 120.

The other Roman pottery

9.4.4 The most important piece is the fragment of a *terra nigra* platter which is an import from northern Gaul and was found within pit F094 fill (490) which cut the Phase II Iron Age Roundhouse 2. Examples of this ware have been found together with other early Gallo-Belgic pottery at a number of sites occupied in the late pre-Roman Iron Age in County Durham and North Yorkshire: at Stanwick, there were 11 sherds, and at Melsonby, Catcote and Thorpe Thewles single sherds were found. What types they represent is uncertain, and thus it is especially significant that the present example can be shown not to have been a Cam. 16 type. This is the only type of *terra nigra* platter to have been found on Roman military sites in northern England and Scotland, and had clearly continued in use until the early AD 80s (Rigby 1993, 726–7). Large assemblages of Gallo-Belgic wares which included *terra nigra* have been found around the Humber and further south at sites with late pre-conquest occupation. Perhaps the most prolific was at Redcliff (North Ferriby) on the north side of the Humber, where in a series of groups dated to the Claudian period (Willis 1996, 191–5), the *terra nigra* platters included Cam. 8 and 12–14, as well as Cam. 16 (Corder and Davies Pryce 1938, fig, 2; Crowther and Didsbury 1988, table 1.1). The platter illustrated here is probably an example of one of the former types and would accordingly demonstrate that Sedgefield was one of the sites in the region where Gallo-Belgic wares arrived before the Roman conquest.

9.4.5 Much of the remainder of the Roman pottery is also likely to have been of first-century date, but none can be shown to have been pre-conquest. The two flagon rims are similar to those of types imported from North Gaul which occur on Neronian-Flavian military sites and some civilian sites throughout Britain. At London, the fabric of these flagons is designated NFSE-2667 and is 'rare but diagnostic of pre-Boudiccan and late Neronian-early Flavian levels' (Davies *et al.* 1994, 62–3, fig. 52, no.s 288-93, fig. 53, no.s 300–3). In northern Gaul, finds from the production site at Noyon (Oise) included flagons as no.9 (146) (Ben Redjeb 1992, fig. 30, no.s 4–7). Another kiln making ring-necked flagons as well as examples with flanged rims is known at Aux-Marais, on the outskirts of Beauvais (Oise), about 60km west of Noyon (Mauduit 2005). The fabric of the Sedgefield flagons is rather coarser than those of other examples examined by the authors from sites in north-east and south-west England; they might be copies made in north-east England but equally might be atypical products of a kiln in northern Gaul.

9.4.6 Other pottery which is probably of the same date as the North Gaulish flagons includes the hemi-spherical bowl (no.11) and fragments from a very large flagon, possibly double-handled, with a red external surface and a grey fabric (Flagon Fabric B, from 101 and 385). They were probably fairly local products, possibly made at kilns primarily serving the

nearest fort which was at Binchester. That was perhaps also the source of some of the grey-ware sherds.

9.4.7 The Argonne beaker (no. 00), no earlier than the beginning of the second century, and the BB1 bowl (no. 00), later than *c*. 120 and found with two sherds probably of Central Gaulish Samian, show that occupation of the site continued for several decades after the Flavian period. It is likely that a number of sherds from a large grey-ware jar, probably narrow-mouthed, are associated with this later stage (081 and 082). A kiln found at Sedgefield in 2002 was operating in the late second- or early third-century (Burnham 2003, 312; information from Janice Adams). It would be interesting to see whether the fabric of its products is similar to that of some of the grey-ware sherds from Eden Lane, bearing in mind the possibility that there might also have been kilns operating at Sedgefield earlier in the second century.

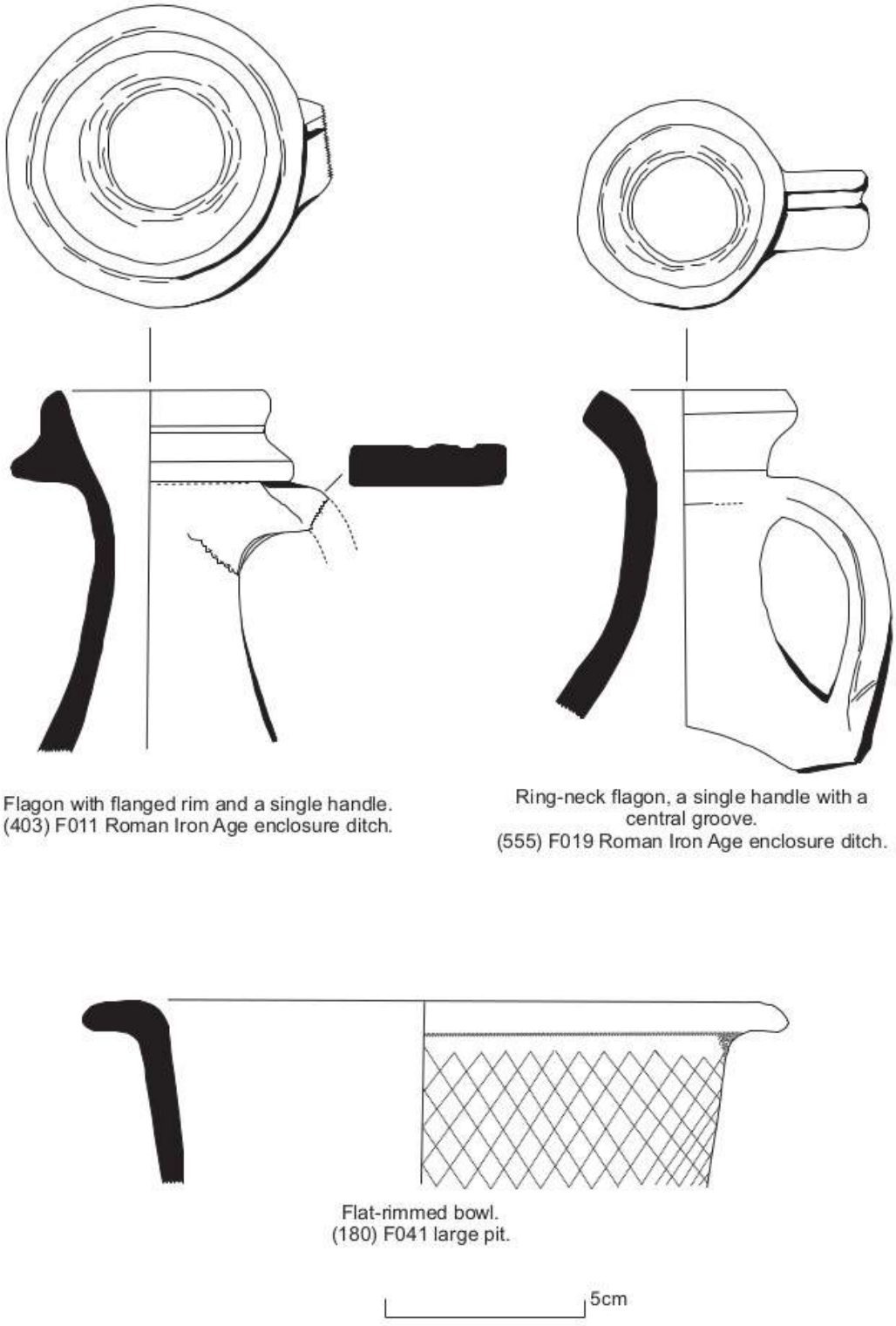
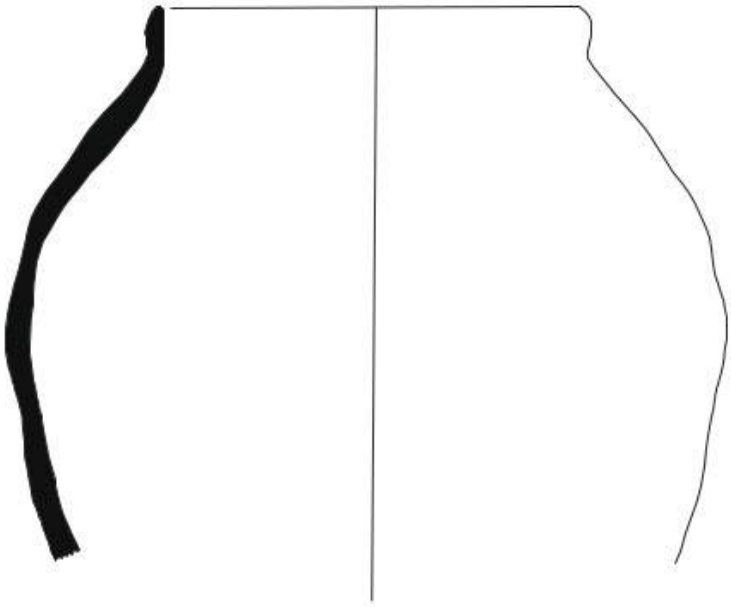
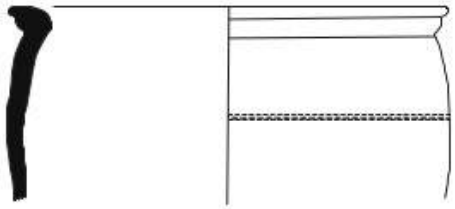


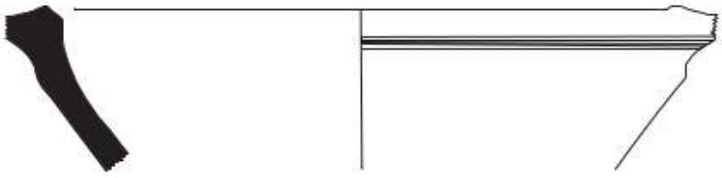
Figure 70. Reconstruction illustrations of some of the Roman Iron Age pottery.



Cooking pot with upright rim.
(088) F019 Roman Iron Age enclosure ditch.

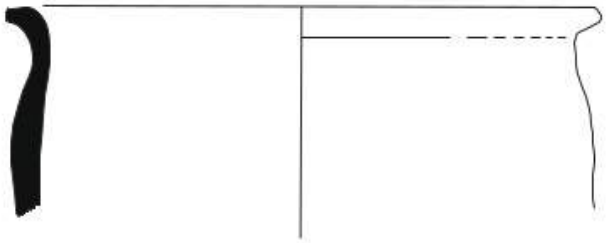


Cornice-rimmed beaker with traces of a black colour-coat.
(403) F010 Roman Iron Age enclosure ditch.

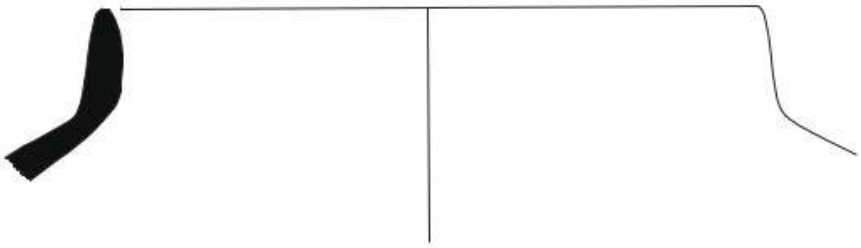


Hemi-spherical bowl with a flanged rim.
(256) F018 Roman Iron Age enclosure ditch.

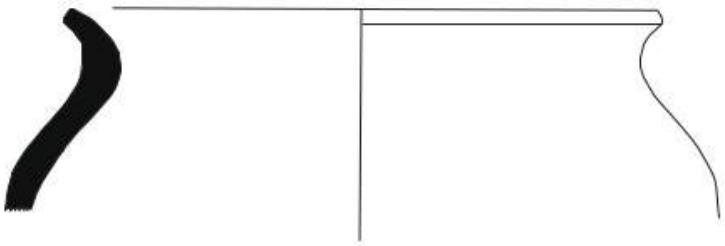
Figure 71. Reconstruction illustrations of some of the Roman Iron Age pottery.



Cooking pot with out-turned rim.
(568) F011/011 Roman Iron Age enclosure ditch.



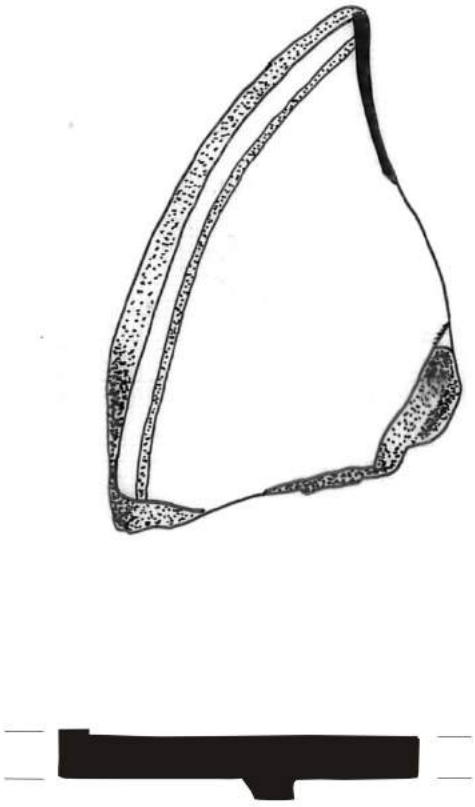
Cooking pot with thin everted rim
(081) F018 Roman Iron Age enclosure ditch.



Cooking pot with everted squared rim.
(162) F032 pit.

5cm

Figure 72. Reconstruction illustrations of some of the Roman Iron Age pottery.



Terra nigra platter sherd.
(490) F094 Pit.

Cooking pot with slightly flared based.
(180) F041.

5cm

Figure 73. Illustrations of some of the Roman Iron Age pottery.

10. BRIQUETAGE ASSESSMENT

by Alex Croom

10.1 Introduction

10.1.1 The site produced 83 fragments of fired clay (1.602kg), much of it in the organic-tempered fabric typically used for briquetage (0.941kg). There are four categories of briquetage: vessels, pedestals, spacers and structural elements from hearths. The vessels can be upright bowl-like cylinders, flat-bottomed rectangular troughs, or semi-hemispherical troughs (Willis 2016, figs 12.2, 19.12A, Morris 2007, fig. 6, Harding 2015, fig. 6.8). These were evaporation containers for boiling up the brine, and possibly also for transporting the salt. The pedestals were used to support the vessels over the fire, and could be of various shapes and sizes, including rectangular, triangular and cylindrical (Morris 2007, fig. 3, fig. 5), and could be either well-made and presumably intended for multiple use, or roughly-made for single use. 'Spacers' and 'clips' were lumps of clay, temporary and roughly shaped, used to separate vessels set close together over the fire (Morris 2007, fig. 4).

10.2 Fabrics

Fabric A: voids or impressions from organic tempering (vegetable matter or 'chaff'), with few other inclusions other than occasional rounded quartz grains; often feels light and porous. It can be red, pink, buff or orange with cream patches and streaks.

Fabric B: with only occasional organic temper, therefore denser and heavier than A. Usually orange in colour, with plentiful cream patches and streaks. The use of clay with little organic tempering for salt-making equipment has been noted at the salt-making site at Street House, Cleveland (Sherlock and Blaise 2013, 56).

Fabric C: pale orange, sandy fabric with rounded quartz grains and plentiful soft red inclusions up to 4mm across. Single fragment only.

10.3 Catalogue

All from RIA phase unless otherwise stated

1. One wall fragment from a bowl-like vessel with walls 13mm thick. Fabric A, red with brown interior surface. F041, (180)

2. Probable trough fragment from the junction of wall/base or two walls of a trough, although as no interior surface survives it could possibly be an edge section of a support. Fabric B. F010/011, (568)

3. Probable trough fragment from near a rounded corner but as there is no interior surface it could conceivably come from a support. Fabric A, pink fabric with slightly whitened surface, burnt on the rounded end. F018, (081)

4. Possible trough or support edge fragment, possibly with diagonal hole, plus 10 featureless fragments. Fabric as no. 3, F018, (081)

5. Conical support or foot with a flat end, cut at an angle (H:50mm W:42mm B:43mm). Fabric as no. 3, F018, (081)

Fragments no.s 3-5 are in a very characteristic fabric, being purple in colour, with traces of a white surface, thought to be the result of high-temperature firing and salt bleaching that develops after extensive use (Morris 2007, 440; Morris 2012, 70).

6. Rectangular support block, with two surviving faces and part of a possible third, at least 55mm by 60mm and over 85mm long. Fabric B, orange, with blackened surface on one face. F048, (248)

7. Fragment with flat face, possible clip. Fabric C, pale orange. F041, (179)

8. A possible clip or spacer fragment, with one flat face and curved wall. Fabric A, orange/cream fabric with dark grey core. F041, (179)

9. A possible spacer or structural element, fabric as no. 8, and 18 small fragments. F041, (179)

Unclassified briquetage

10. Five fragments, possibly thin-walled, Fabric A, red. F059, (358), Phase IA II.

11. Two fragments, one with a flat surface. Fabric A, pink. F019, (259)

12. Two featureless fragments, Fabric A, pink and buff exterior and grey core. F019, (555-558)

13. Three small fragments. Fabric A, orange/cream and brown. F041, (180)

14. Two fragments, Fabric A, buff. F032, (146)

15. Two fragments, Fabric A, buff. F032, (162)

Briquetage or fired clay

Featureless fragments with no or little visible organic temper. These could well be fragments of briquetage, but equally could simply be pieces of daub or other accidentally fired clay.

16. Seventeen fragments (wt: 0.578kg). One large fragment with rough surfaces (35mm thick). One fragment with more organic inclusions visible, with a smoothed, concave face. Fabric B, orange/cream, one piece with grey core. F051/067, (596), Phase IA II

17. One fragment, Fabric B, orange/cream. F006, (314)

18. Small fragment, Fabric B, orange/cream. F010, (402)

19. One fragment, Fabric B, red exterior surface and grey core. F010/011, (568)

20. One fragment, Fabric B, orange/cream with pink exterior. F010/011, (568)

21. One fragment, Fabric B, orange/cream. F019, (116)

22. One fragment, Fabric B, red/cream with grey patch. F019 (555-F558)

23. One fragment, Fabric B, orange/cream and grey. F032, (162)

24. Three fragments, Fabric B, brown. F032, (146)

25. One fragment, Fabric B, orange/cream and dark grey. F041, (180)

26. One fragment, Fabric B, orange/cream. F072 (574)

27. Small fragment, Fabric B, orange. F096, (463)

10.4 Discussion

10.4.1 Briquetage is predominately late Iron Age and early Roman in date and has been found on a number of sites in the region; its use seems to have died out after the first century (Willis 2016, 260-1; fig. 12.3). The assemblage is very fragmentary, but is likely to include pieces from both an upright vessel and from troughs, as well as pedestals. The fragments of vessels may be the result of the vessels being used to transport the salt (although large fragile pottery containers do not seem to be the most efficient way of carrying salt long distances), but the presence of fragments of supports such as pedestals and spacers is more difficult to explain. Suggestions include accidental inclusion, intentional inclusion for use as salt-licks, salt-making equipment being brought back to settlement sites at the end of the salt-making season, or secondary drying of the salt at the settlement (Tyrrell 2015, FF18).

10.4.2 The material from Iron Age Phase II come from the round-house trenches, and much of it is fragments that may not be briquetage (cat. no. 16). Most of the material from the Roman phases comes from the boundary ditches F018/F019 and F010/F011, F072, but there is a concentration of pieces in pit F041 (177) and ditch F048 (247).

11. ROMAN TILE ASSESSMENT

by Alex Croom

11.1 Introduction

11.1.1 The site produced five fragments of Roman roofing and wall/flooring tiles (wt:1.358kg). The largest piece came from F011 and is the complete length of a squat box tile with the remains of a square or rectangular vent and combed lattice with three vertical lines over an X (seven teeth, 38mm wide) (Figure 74). The tile is carelessly finished, with uneven ridges at either end. The surviving height of the tile is only 175mm and the width can be reconstructed as *c.*210mm and it is possible it comes from a voussoir box tile used in the roof of a bath-house, which tend to be shorter than the box tiles used in walls.

11.1.2 Feature F019 produced three fragments of tile, including a featureless scrap (116). The two identifiable pieces were in two different fabrics. One is the end fragment of an *imbrex*, although it is unusually thick (90mm) and may be possibly be part of a ridge tile (557). The other is an edge fragment probably of a *tegula* or just possibly from a *bessalis* (271). An unstratified piece of worn *tegula* or *bessalis* was also recovered from the site.

11.1.3 Small quantities of Roman tile are occasionally found on native sites. It has been suggested they could have been intended for use in structures such as hearths or ovens (Allason-Jones and Lowther 2016, 277), or they may have been collected to be ground up for making pigments or abrasives for scouring. However, all the fragments from the site came from enclosure ditches that are not associated with any structures and so may relate to a Roman-style stone building with a hypocaust outside the excavation area.

Figure 74. Complete length of a squat box tile or voissoir (scale = 8cm).

12. GLASS FINDS ASSESSMENT

by Alex Croom

12.1 Introduction

12.1.1 There was a single fragment of a prismatic bottle in blue-green glass (pit F070, (406), unphased).

12.2 Discussion

12.2.1 This type of bottle is common from the late Neronian period up until the end of the second or beginning of the third century (Price 2016, 265). These vessels were used to transport liquids, possibly foodstuff, although the exact contents are unknown. Its presence on a rural site suggests the occupants had some access to military or urban supply networks (Price 2013, 123).

13. LITHICS ASSESSMENT

by Clive Waddington

13.1 Quantity

13.1.1 A total of 12 chipped flint artefacts were recovered from the excavation which came from a mixture of topsoil, subsoil and discrete feature fills. All of this material is considered to be residual within the deposits they were found resulting from earlier Stone Age activity across the site.

13.2 Provenance

Table 1 below lists the flints by contexts from which they were recovered.

Context No	Find No	Context Type	No Lithics	Lithic Types Present	Other asstns.	Period
(002)	4	Subsoil - residual	1	Retouched blade	-	Meso-Early Neo
(048)	8, 9	Fill of pit	2	Two broken bladelet segments	F015	Later Meso
(082)	16	Fill of enclosure ditch	1	Burnt, broken flake	F018	
(087)	25	Secondary fill of enclosure ditch	1	Primary flake	F019	
(146)	35 (a, b and c)	Fill of large pit	3	Fragment from a broken scraper, primary flake, secondary flake	F032	
(172)	43	Fill of enclosure ditch	1	End scraper made on slender bulbous blade	F020	Meso
(180)	56	Fill of enclosure ditch	1	Bashed lump	F041	
(203)	58	Fill of ditch	1	Chip	F030	
(435)	108	Fill of ditch	1	Broken flake	F073	
Total			**12**			

Table 8. Lithic counts by context.

13.3 Dating

13.3.1 The few pieces in the assemblage that display diagnostic traits are several later Mesolithic pieces (Find nos. 4, 8, 9, 43) that include blade and bladelet forms. The use of locally available flint from the glacial deposits around the Tees valley and its environs is also suggestive of Mesolithic activity as most later Mesolithic assemblages in the north-east region rely on locally occurring material whilst Neolithic and early Bronze Age assemblages typically comprise exotic flint often imported from a primary source (Waddington 2004; Passmore and Waddington 2012). The shallow retouch on the broken scraper fragment (Find No. 35) could suggest this is perhaps a Late Neolithic – Early Bronze Age piece.

13.4 Raw Material

13.4.1 Five pieces in the assemblage are light grey flint, three are medium grey, two are red-brown, one is orange-grey and one unknown due to heavy patination. Based on the patches of thin cortex visible on some of the flint most of the pieces appear to have come from a secondary glacial context, although the cortex on Find Nos. 43 and 56 could suggest a primary nodular source for these pieces, perhaps from the chalklands of the Yorkshire Wolds.

13.5 Types

13.5.1 The assemblage includes an end scraper made on a blade with bulbous end and with narrow blade scar removals on its dorsal surface, together with a fragment from a different type of scraper that is much thinner and has shallow retouch. There is a retouched blade, the rest of the material being blades, bladelets, flakes and a bashed lump. The end scraper

has maximum dimensions of 44mm long, 22mm wide and 7.5mm thick, the retouched blade 38mm, 16mm and 4mm. All the other material is broken, for which no dimensions are recorded, apart from a chip (Find no.58) which is 11.5mm, 13mm and 1.5mm, and two primary flakes (Find nos. 25 and 25) which have measurements of 17mm, 15 and 10mm, and 23mm, 14.5mm and 8mm, respectively.

Figure 75. From left to right top: bashed lump (Find no.56), retouched blade (Find no.4), burnt flake (Find no.16), end scraper (Find no.43), broken scraper (find no.35b). Bottom: broken flake (Find no.108), primary flake (Find no.35a), primary flake (Find No. 25), broken flake (Find no.35c), broken bladelet segment (Find No. 8), chip (Find no. 58), broken bladelet segment (Find no.9). (scale = 10cm).

Type	No.
End Scraper	1
Scraper (indet.)	1
Retouched blade	1
Bladelet	2
Flake	5
Chip	1
Bashed lump	1
Total	**12**

Table 9. Lithics by type.

13.6 Condition

13.6.1 All of the material is in good condition. None of the pieces show fresh breaks and therefore the broken pieces have been broken in antiquity prior to discard.

13.7 Primary Sources and Documentation

13.7.1 There is no documentation that might enhance the study of this collection.

13.8 Means of Collecting the Data

13.8.1 The lithics were excavated from the ground using hand tools (trowels and small tools) and from sieves with a 1cm^2 mesh. Each lithic was washed in tap water and gently cleaned with a toothbrush before being left to air dry. Each lithic was placed in an individual plastic bag that was labelled with a unique small find number and the context number.

13.8.2 For the assessment and analysis the lithics were un-bagged and laid out on a table and grouped by context. Lithic counts were recorded and an examination made of all pieces. The lithics were then re-bagged and packed, by context, into a sturdy storage box.

13.9 Value of the Data

13.9.1 This assemblage of material is very small on its own and has limited potential to advance the regional research agenda and understand more, specifically, about lithic production, use and significance in the region, a topic that is currently poorly understood and for which few radiocarbon dated assemblages are known from the region. The two Mesolithic flints from context (048) may be of significance if this context could conceivably be of Mesolithic date. If that is the case, such as it being a pit for example, then it would be worth obtaining a radiocarbon date from any environmental residues from this pit if such material was recovered, and likewise for context (172) from which the Mesolithic end scraper came.

13.10 Integration of Study with Other Research

13.10.1 The lithic material from this assemblage adds to the corpus for the region and this is its main contribution to regional research. As all the material is, however, residual within the contexts they were found, there is no scope to obtain associated radiocarbon dates. The assemblage documents the presence of Mesolithic and possibly Neolithic-Early Bronze Age activity at Sedgefield prior to the occupation of the site as evidenced by the structural remains investigated as part of this investigation.

13.11 Storage and Curation

13.11.1 The lithics are currently contained in sealed and labelled plastic bags. Lithics from the same context are all bagged in a context specific bag. These bags are stored in a sturdy storage box with other finds from the site.

13.12 Retention and Discard Policy

13.12.1 It is recommended that all of this collection is kept for future study.

14. Small Finds Assessment

by Alex Croom

14.1 Glass

1. Bangle (Int. D: 70mm H:9mm B:15mm). Ditch F19, (271), phase RIA. Approximately one quarter of a glass bangle in opaque yellow glass, with a triangular cross-section (Type 3B). Although not so very different in appearance to opaque white bangles (Type 3A), this is an uncommon type that is rare outside southern Scotland. The yellow bangles are almost always found on native settlements and are very rare on Roman military sites, despite the presence of other styles of bangles (Hoffmann 2003, 42), and it is possible that the yellow bangles are earlier in date than the white examples, which may be a predominately second-

century type (Cool and Price 1998, 189). Most of the nearby native sites have white glass bangles, but at the fort at Binchester a fragment of a pale yellow/green bangle was found in a phase dated 80-90 AD (Price and Worrell 2010, 292, no. 344), and north of the Tyne an olive-yellow bangle was found in a late Iron Age context at Pegswood (Allason-Jones and Price 2009, fig. 36, no. 1). The exact function of these bangles is debated, but possibilities include bracelet, fastener, horse harness and hair ring.

14.2 Copper alloy

2. Strip (L:50mm W(max):9mm B:1.2mm). Gully F067, (391), Phase Iron Age II. Incomplete strip with flattened D cross-section. This expands, and flattens towards one end. This could possibly be a fragment of tweezers with flared blades. Tweezers are, however, extremely rare in late Iron Age contexts, and rare in early Roman contexts in the north (Eckhardt and Crummy 2008, 23, 148).

3. Needle (L:148mm D:2mm). Ditch F042, (195), phase Roman Iron Age. Crummy 1983 type 2 needle with spatulate head. There are transverse grooves above and below the rectangular eye. This type was probably made throughout the Roman period. This type of needle is too long to use for sewing garments, and is likely to have been used for sewing coarse fabrics for use as sacks, fleece bale covers and sail-cloth.

14.3 Iron

4. Bar (L:58mm W:12mm B:7mm). Ditch F042, (195), phase Roman Iron Age. Incomplete short length of iron, tapering to both ends.

Figure 76. Fragment of yellow glass bangle found within ditch F019, fill (271) (scale = 8cm).

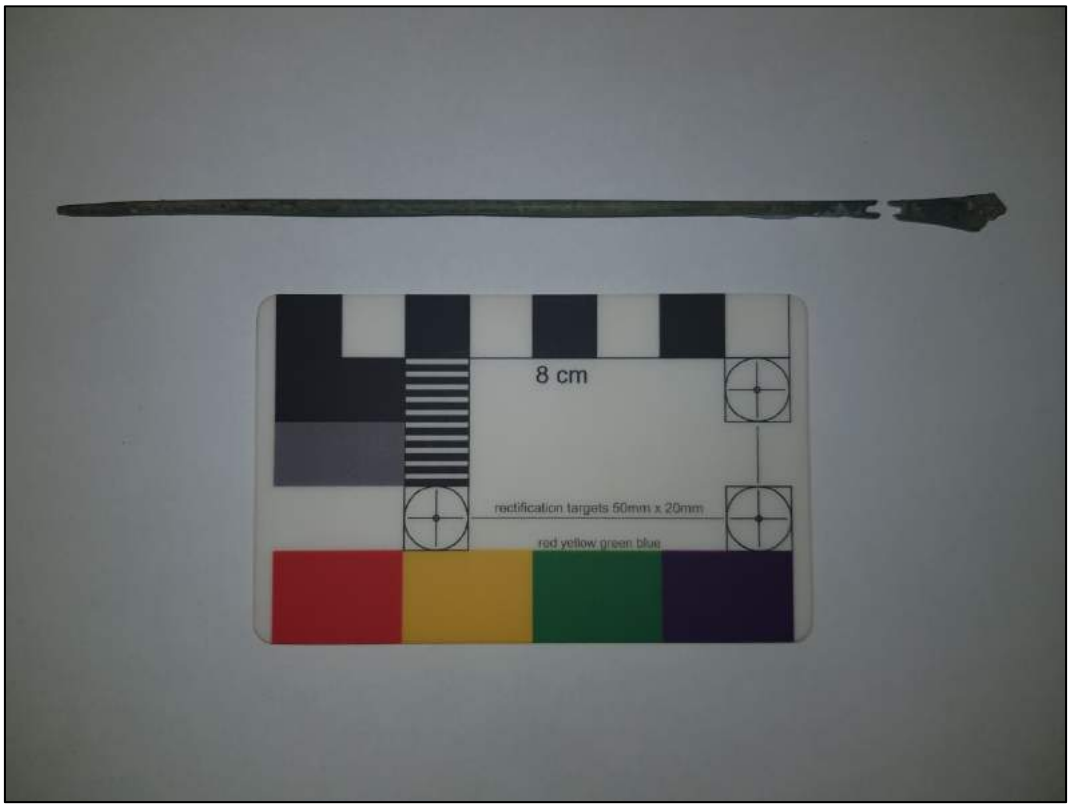


Figure 77. Copper alloy needle found within ditch F042, fill (195) (scale = 8cm).

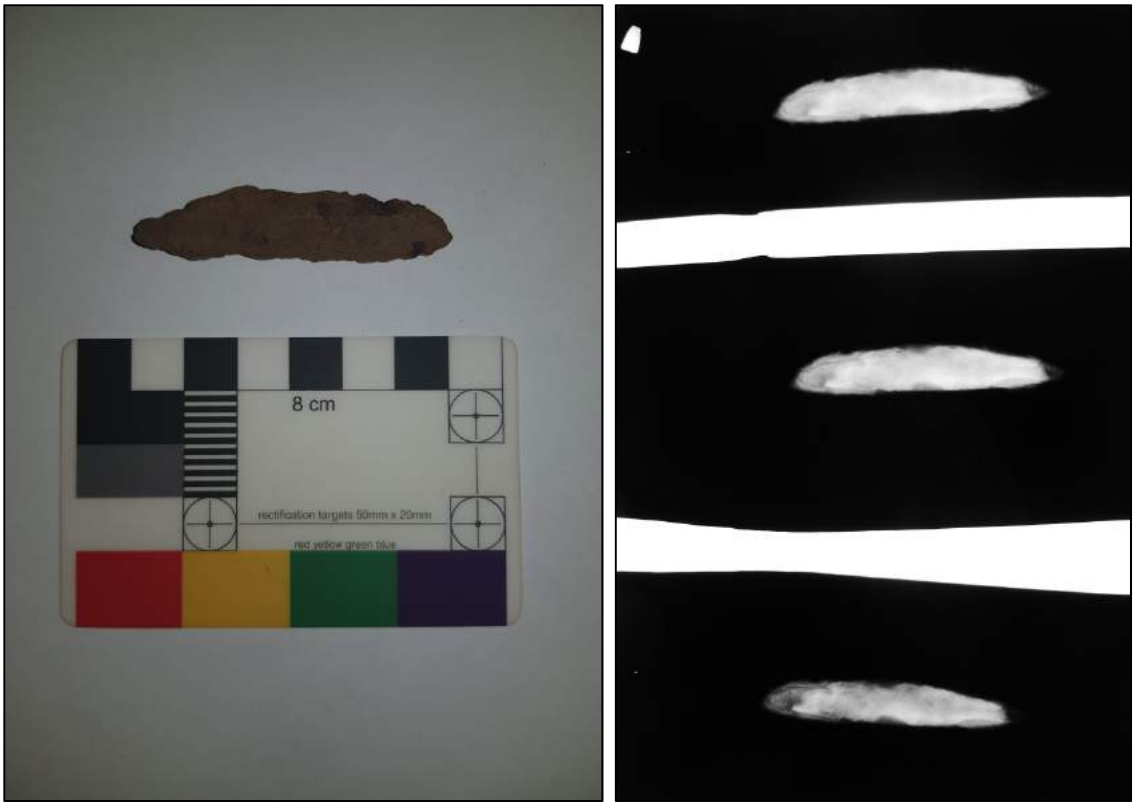


Figure 78. Iron bar found within ditch F042, fill (195) (scale = 8cm) with x-rays.

15. Metal Working Finds Assessment

by Alex Croom

15.1 Metalworking

Ferrous metalworking

A single fragment of undiagnostic slag was recovered from post-hole F56 (277), Iron Age II). Wt: 0.013kg.

Non-ferrous metalworking

A fragment of a sprue cup from a clay mould was found in the gully of Iron Age Phase II Roundhouse 2 (312). It was made using a soft pale orange fabric with some fine quartz inclusions, and has a mid-orange exterior and upper part of inner wall and a pale grey surface on the rest of inner wall. No other parts of the mould were recovered, so it is unclear what was being cast, but it is evidence for some manufacture of copper alloy objects on the site. Very similar cups were recovered from Stanwick and Thorpe Thewles (Lowther 2016, fig. 10.2; Swain 1987, fig. 45, no. 52, fig. 46, no. 207).

16. Osteological Analysis

by Milena Grzybowska

16.1 Material

16.1.1 The material consisted of over 5kg of hand-collected and sampled animal bone derived from fills of pits (8.5%), gullies (4.5%) and ditches (86.9%).

16.2 Methods

16.2.1 The analysis follows *Guidelines for best practice* (Baker and Worley 2013, English Heritage).

16.2.2 Specimens were identified to species or a broader taxonomic group where possible. Ribs and vertebrae (excluding the axis and atlas) and undiagnostic bone fragments were assigned to a size-class: 'large mammal' (cattle-size), 'medium mammal' (sheep-size) and 'small mammal' (cat-size). All specimens were recorded and each element was given an identification number. The state of surface preservation was scored using a five stage system (poor, bad, moderate, good, and excellent). The presence or absence of root etching, gnawing and burning was noted. The preservation and the location of butchery marks were recorded using a zoning system devised by Dobney and Rielly (1988). Epiphyseal fusion of bone was recorded. Mandibular wear assessment was undertaken for mandibles (with two or more ageable teeth), single deciduous premolars and third molars of pigs, cattle and sheep/goat. Minimum Number of Individuals (MNI) was calculated from the most common element by taking sides into consideration and accounting for epiphyseal fusion stage. For dentition, MNI was calculated from the greater number of lower dP4/M3 combined with wear stage and side of the mandibular dentition. Fused bones and permanent teeth were measured and data provided by the Animal Bone Metrical Archive Project (Centre for Human Ecology and Environment 1995) was used for comparison of measurements.

16.3 Results

16.3.1 A total assemblage of 952 refitted fragments of animal bone was analysed. Overall moderate preservation of the material allowed for identification of 12% of the assemblage and further classification according to size of over a half of the specimens (56%). All contexts included disarticulated remains.

16.4 Taphonomy

16.4.1 All phases presented comparable condition of bone with over a half (53.1%) of the pooled assemblage showing moderate surface preservation and a quarter (25.9%) poor (Table 10) (Table 11). The remaining specimens were well, badly or excellently preserved (15.1%, 4.8%, 0.9% respectively). An increased prevalence of poorly preserved bone from the Medieval/Post-medieval phase could be explained by a markedly smaller sample size in comparison to the remainder of the assemblage.

Phase	Poor %	Bad %	Moderate %	Good %	Excellent %
Iron Age I	27.0	3.1	55.5	14.3	0
Iron Age II	21.0	3.8	69.3	5.8	0
Roman Iron Age	21.5	8.3	42.0	24.4	3.6
M/PM	40.0	3.3	40.0	16.6	0

Table 10. Animal bone preservation by phase.

Feature	Poor	Bad	Moderate	Good	Excellent
Ditch	26.3	7.3	43.5	20.0	2.7
Pit	8.8	1.2	84.8	5.0	0
gully	0	2.3	93.0	4.6	0

Table 11. Animal bone preservation by feature type.

16.4.2 Few specimens displayed butchery marks (2.9%) (Table 12). Those that were present were visible on bone fragments from all categories of surface preservation. Cattle specimens manifested butchery marks most frequently and in all phases, whereas such marks were identified on single specimens of equid (horse/mule/donkey) (Roman Iron Age) (Figure 79), sheep/goat (Roman Iron Age) and red deer (M/PM).

Butchery marks	Number of fragments	% of all fragments	Species with butchery marks
Iron Age Phase I	2	3.2	Cattle
Iron Age Phase II	2	0.8	Cattle
Roman Iron Age	23	3.7	Cattle, equid, sheep/goat
M/PM	2	6.6	Cattle, red deer

Table 12. Animal remains with butchery marks by phase.

Figure 79. Equus sp. - humerus with a butchery mark (arrow) (scale = 10cm).

16.4.3 A small proportion of large mammal specimens, including cattle and *Equus* sp., displayed gnawing marks (1.5%). The Roman Iron Age phase manifested a higher frequency of gnawed bone (8.3%), which was predominantly retrieved from ditches and a pit. The presence of gnawed material indicated pre-depositional access to bone by mainly carnivores (e.g. dog) through deliberate feeding or scavenging.

16.4.4 Burnt and calcined bone was infrequent, constituting overall 2.5% of all the bone weight (excluding teeth), with its prevalence reaching its highest level of 8.9% in Iron Age Phase II (Table 13). The white colour of the heat-affected fragments, observed in most cases, indicated exposure to temperatures exceeding 600^{o}C, which was consistent throughout all the periods. Similarly, a large variation of oxidation levels in each phase was noted as the colour of bone ranged from black through blue, grey to white. A high proportion of all pooled medium sized mammals were heat affected (39.3%), followed by large mammals (9.9% of all large mammals). Large and medium-sized ribs were most abundant among burnt elements overall (37.0% of all ribs), followed by long bone fragments (12.1% of all), metapodia, cranium, tarsals, vertebrae and humeri. Small ruminant (sheep/goat/roe deer) and pig were identified within burnt specimens. Both taxons displayed marks of burning on extremities such as metapodia (ruminant), phalanx and skull (pig).

Phase	Number of fragments (NF)	NF %	Weight (g)	Weight %
Iron Age I	4	6.4	9.2	2.1
Iron Age II	120	50.4	38.5	8.9
Roman Iron Age	71	11.5	68	1.7
M/PM	1	3.3	0.6	0.2

Table 13. Total heat affected animal remains by phase.

16.5 Iron Age Phase I

16.5.1 The Iron Age Phase I material was composed of 430.1g of disarticulated bone deposited in ditches. Butchery marks were observed on cattle bone (Table 14). The identified material comprised of cattle (MNI:1) and cattle/red deer (MNI:1), sheep/goat (MNI:1), pig (MNI:1), red deer (MNI:1) (identification following Lister's (1996) criteria) and dog (MNI:1). The size-classified data confirmed that the cattle-size specimens were most abundant, followed by sheep-size fragments (Table 17). Mandibular tooth wear provided evidence of cattle being slaughtered at the age of 1-1.5 years (Table 18), and sheep/goat between 4 and 8 years old (Table 19). Measurements of sheep/goat (Table 20) fell within the metric range of contemporaneous individuals from southern British assemblages (ABMAP).

Context	Taxa	Element	Number of fragments	Left/right/ unsided	Preservation	Butchery	Burning	Gnawed
166	cattle	humerus	1	l	poor	-	-	-
170	pig	skull	1	u	moderate	-	-	-
170	lm	femur	1	u	moderate	cut	-	-
170	m	skull	22	u	moderate	-	-	-
181	sheep/goat	horncore	1	r	poor	-	-	-
181	cattle/red deer	humerus	1	r	bad	-	-	-
181	mm	rib	2	r	moderate	-	calcined	-
181	lm	lbs	1	u	good	-	calcined	-
181	mm	lbs	1	u	good	-	calcined	-
181	lm	ribs	1	u	bad	-	-	-
181	lm	lbs	3	u	poor	-	-	-
181	lm	tooth	12	u	poor	-	-	-
191	red deer	metatarsal	1	l	moderate	-	-	gnawed
218	cattle	humerus	2	r	good	cut	-	-
227	m	lbs	1	u	moderate	-	-	-
231	dog	skull	1	r	moderate	-	-	-

Table 14. Inventory of animal bone from Iron Age Phase I (m-mammal, lm- large mammal, mm-medium mammal, sm-small mammal, ind-indeterminate, lbs-long bone shaft).

Context	Taxa	Tooth	Lose (lt) Jaw (j)	Maxilla (x) mandib. (n)	Left/right/ unsided	Preservation	Butchery	Burning	Gnawed
231	cattle	M12	lt	n	r	good	-	-	-
231	cattle	M12	lt	n	r	moderate	-	-	-
231	cattle	dP4	lt	n	r	moderate	-	-	-
231	sheep/goat	M1	lt	x	l	moderate	-	-	-
231	sheep/goat	M2	lt	x	l	moderate	-	-	-
231	sheep/goat	M3	lt	x	l	moderate	-	-	-
231	cattle	dP3	lt	n	r	good	-	-	-
231	dog	P4, M2	j	x	r	good	-	-	-
231	dog	P4	lt	x	l	good	-	-	-
231	dog	M2	lt	x	l	good	-	-	-
245	sheep/goat	M3	lt	n	r	moderate	-	-	-

Table 15. Inventory of animal teeth from Iron Age Phase I (m-mammal, lm- large mammal, mm-medium mammal, sm-small mammal, ind-indeterminate, lbs-long bone shaft).

Taxon	MNI Bone	MNI Teeth	NISP %	Weight %
Cattle	1	1	38.8	58.7
Cattle/red deer	1	-	5.5	5.4
Sheep/goat	1	1	27.7	5.5

Pig	1	-	5.5	13.3
Dog	1	1	16.6	2.1
Red deer	1	-	5.5	14.8

Table 16. Taxonomic distribution of animal bone from Iron Age Phase I.

Size category	Iron Age I NF %	Iron Age I Weight %	Iron Age II NF %	Iron Age II Weight %	Roman Iron Age NF %	Roman Iron Age Weight %	M/PM NF %	M/PM Weight %
Large mammal	85.7	95.8	84.8	91.7	89.9	92.8	91.3	95.2
Medium mammal	14.3	4.1	14.1	6.5	9.5	7.1	8.7	4.8
Small mammal	0	0	1.1	1.8	0.5	0.1	0.0	0.0

Table 17. Distribution of size-classified mammals.

ID	Context	Phase	wDp4	wM12
20	231	Iron Age I		b
21	231	Iron Age I		f
22	231	Iron Age I	j	
19	082	Roman Iron Age		k

Table 18. Mandibular tooth eruption and wear: cattle, following Grant (1982).

ID	Context	Phase	Taxa	wM3
30	245	Iron Age I	O	11G
41	195	Roman Iron Age	O	6G

Table 19. Mandibular tooth eruption and wear: sheep/goat, following Payne (1973, 1987).

ID	Context	Phase	Element	Taxa	L/R X- upper	B	L	H
30	245	Iron Age I	M3	Sheep/goat	R		21.3	
41	195	Roman Iron Age	M3	Sheep/goat	L		18.4	
1T	257	Roman Iron Age	P2	*Equus* sp	RX	23.7	35.4	40.2
2T	257	Roman Iron Age	P2	*Equus* sp	LX	24.3	34.8	39.7
3T	257	Roman Iron Age	M3	*Equus* sp	LX	21.2	24.5	52.8
4T	257	Roman Iron Age	M3	*Equus* sp	RX	21.3	24.7	54.2
5T	257	Roman Iron Age	P4	Horse	LX	27.4	28.4	54.9
6T	257	Roman Iron Age	M1	Horse	LX	24.4	24.2	58.5
7T	257	Roman Iron Age	P2	*Equus* sp.	R	12.4	30.0	52.0
8T	258	Roman Iron Age	M1/2	Horse	RX	25.8	24.7	52.7
11	085	Roman Iron Age	M3	Cattle	L	13.4		

Table 20. Teeth measurements, following von den Driesch (1976) and (Levine 1982).

16.6 Iron Age Phase II

16.6.1 Animal bone from Iron Age Phase II comprised 429.2g of disarticulated remains deposited within ditches (80.7%, NF-based), ring gullies (18.4%), a gully (0.4%) and a pit (0.4%).

16.6.2 The assemblage was dominated by domesticates that included cattle (MNI:1), sheep/goat (MNI:1), donkey (MIN:1) (identification following Davis's (1981) criteria), equid (horse/mule/donkey) (MNI:1), pig (MNI:1) and dog (0.05%). Cattle/red deer (MNI:1), as well as sheep/goat/roe deer (MNI:1) were also identified (Table 23). Size-classified material produced corroborating results, with cattle-size specimens being most abundant (84.8%), followed by sheep-size (14.1%) and cat-size (1.1%). A relatively high proportion of all animal remains from Phase II were heat affected (8.9% by weight) (Table 13). Epiphyseal fusion data provided limited results, indicating that some cattle were at least 3.5 years old when slaughtered (Table 24). No juvenile individuals were identified among any of the species.

Cattle measurements (Table 25) fell within the normal range for contemporaneous southern assemblages (ABMAP) and nearby Thorpe Thewles (Heslop 1987).

Context	Taxa	Element	Number of fragments	Left/right/ unsided	Preservation	Butchery	Burning	Gnawing
005	mm	lbs	1	u	good	-	calcined	-
017	lm	ind	20	u	poor	-	-	-
061	pig	third phalanx	1	u	good	-	calcined	-
061	mm	ribs	4	u	moderate	-	calcined	-
061	mm	vertebra	2	u	moderate	-	calcined	-
061	m	lbs	4	u	moderate	-	calcined	-
061	m	ind	90	u	moderate	-	calcined	-
061	m	oth	4	u	moderate	-	calcined	-
101	cattle/ red deer	metatarsal	1	u	poor	-	-	-
172	sheep/ goat/ roe deer	metapodium	1	u	poor	-	calcined	-
172	mm	lbs	4	u	poor	-	calcined	-
172	m	ind	2	u	poor	-	calcined	-
172	mm	humerus	1	r	poor	-	calcined	-
174	cattle	horncore	1	u	poor	-	-	-
174	lm	oth	2	u	poor	-	-	-
282	horse/ mule/ donkey	oth	1	u	moderate	-	-	-
311	horse/ mule/ donkey	oth	1	u	moderate	-	-	-
311	cattle	oth	1	u	moderate	-	-	-
333	mm	lbs	1	u	moderate	-	charred	-
345	lm	ind	31	u	moderate	-	-	-
345	lm	axis	1	u	bad	-	-	-
345	lm	mandible	8	u	moderate	-	-	-
350	m	ind	2	u	good	-	calcined	-
395	m	ind	5	u	bad	-	-	-
395	sm	pelvis	1	l	bad	-	-	-
434	lm	lbs	1	u	moderate	-	-	-
435	m	ind	4	-	good	-	-	-
436	lm	lbs	2	u	good	-	calcined	-
445	cattle	metatarsal	1	r	good	cut	-	-
445	lm	ind	3	u	moderate	-	-	-
505	ind	ind	16	u	poor	-	-	-
505	ind	ind	1	u	moderate	-	calcined	-
518	cattle	radius	1	l	moderate	-	-	-
518	cattle	scapula	1	r	moderate	cut	-	-
518	lm	rib	1	u	moderate	-	-	-
518	lm	lbs	1	u	good	-	-	-
518	lm	femur	1	u	moderate	-	-	-
518	lm	ulna	1	l	moderate	-	-	-
542	lm	lbs	1	u	poor	-	-	-
542	lm	metapodium	1	u	poor	-	-	-
560	sheep/ goat	humerus	1	r	moderate	-	-	-
560	cattle	femur	1	l	good	-	-	-
560	lm	lbs	2	u	moderate	-	-	-

Context	Taxa	Element	Number of fragments	Left/right/ unsided	Preservation	Butchery	Burning	Gnawing
560	lm	ind	2	u	moderate	-	-	-

Table 21. Inventory of animal bone from Iron Age Phase II (m-mammal, lm- large mammal, mm-medium mammal, sm-small mammal, ind-indeterminate, lbs-long bone shaft).

Context	Taxa	Tooth	loose(lt) jaw (j)	Maxilla (x) mandib. (n)	Left/right/ unsided	Preservation	Butchery	Burning	Gnawing
024	cattle/ red deer	Ind	lt	u	u	bad	-	-	-
312	donkey	P/M	lt	n	r	bad	-	-	-
505	sheep/ goat	dP3	lt	x	l	moderate	-	-	-
505	sheep/ goat	dP4	lt	x	l	moderate	-	-	-
505	sheep/ goat	Ind	lt	u	u	moderate	-	-	-
505	sheep/ goat	ind	lt	x	l	good	-	-	-

Table 22. Inventory of animal teeth from Iron Age Phase II.

Taxon	MNI Bone	MNI Teeth	NISP %	Weight %
Cattle	1	-	33.1	65.1
Cattle/red deer	1	1	11.1	12.0
Sheep/goat	1	-	27.7	4.8
Sheep/goat/roe deer	1	-	5.5	2.6
Pig	1	-	5.5	0.6
Donkey	-	1	5.5	8.5
Equus sp.	1		11.1	6.3

Table 23. Taxonomic distribution of animal bone, Iron Age Phase II.

ID	Context	Phase	Element	Taxa	FUSP	FUSD
149	445	Iron Age II	metatarsal	B		F
82	560	Iron Age II	femur	B		F
117	518	Iron Age II	radius	B	F	
1	138	Roman Iron Age	metacarpal	B	F	
27	257	Roman Iron Age	metatarsal	B	F	
55	195	Roman Iron Age	radius	B	F	
72	555/F19	Roman Iron Age	1st phalanx	B	F	F
77	555/F19	Roman Iron Age	humerus	B		F
81	258	Roman Iron Age	femur	B		F
130	555	Roman Iron Age	metacarpal	B		F
131	555	Roman Iron Age	femur	B		F
144	248	Roman Iron Age	humerus	B		F
159	303	M/PM	humerus	B		F

Table 24. Cattle, epiphyseal fusion, following Silver (1969).

ID	Context	Phase	Element	SD	GLP	GLpe	BT	BP	DP	Bd	Dd	BATF	HTC	GB	BG	BFD	BFp
149	445	Iron Age II	metatarsal						28.6	46.5		43.2				47.5	
112	511	Roman Iron Age	scapula		64.5	55.7									47.1		
55	195	Roman Iron Age	radius					69.7									63.0
15	085	Roman	scu											49.5			

ID	Context	Phase	Element	SD	GLP	GLpe	BT	BP	DP	Bd	Dd	BATF	HTC	GB	BG	BFD	BFp
		Iron Age															
130	555	Roman Iron Age	metacarpal							49.5	18.2						
27	257	Roman Iron Age	metatarsal					40.8	40.1								
72	555	Roman Iron Age	1st phalanx	28.2				35.3									
87	483	Roman Iron Age	1st phalanx	29.8		64.2		35.4		34.8							
159	303	m/pm	humerus				66.5						27.8				

Table 25. Cattle measurements, following von den Driesch (1976) and Davis (1992).

16.7 Roman Iron Age

16.7.1 The Roman Iron Age material was composed of nearly 3926.2g of disarticulated bone deposited in ditches (89.1%, NF-based) and pits (10.8%). Taxonomic distribution (Table 28) indicated a predominance of cattle (MNI:2) and equid (MNI:2), followed by sheep/goat (MNI:1), horse (MNI:1), pig (MNI:1), and dog (MNI:1), cattle/red deer (MNI:1) and sheep/goat/roe deer (MNI:1). A relatively strong presence of birds (24%, NISP- based count) was identified; nevertheless these have been found in a single ditch and a pit. Large mammal specimens remained the most frequent, followed by medium-sized and small-sized specimens (Table 17). Epiphyseal fusion indicated that some cattle were at least 3.5 years old when slaughtered (Table 24) which was in agreement with the tooth wear present (Table 18). Sheep/goat ageing data indicated slaughtering juvenile (less than 10 months old) (Table 29) as well as mature individuals (Table 19), whereas ageable pig specimens indicated the presence of adult individuals (Table 31). Dental metric data for equid specimens indicated slaughtering 5-6 and 8-10 years old individuals (following Levine's criteria - Levine 1982) (Table 20). Measurements of cattle (Table 25) and equid (Table 32) specimens for the most part correspond with the metric range of contemporaneous southern British assemblages (ABMAP), however two cattle phalanges provided readings that fell significantly outside the top of that spectrum as well as that of the contemporaneous site at Thorpe Thewles, Cleveland (Heslop 1987) located 11 km from Sedgefield. An equid phalanx considerably exceeded the highest metrical values gathered from Thorpe Thewles (*ibid*) but fell within the upper size spectrum of contemporaneous southern sites (ABMAP).

Context	Taxa	Element	Number of fragments	Left/right /unsided	Preservation	Butchery	Burning	Gnawed
010	bird	lbs	20	u	excellent	-	-	-
075	lm	ind	1	u	poor	-	-	-
077	sheep/goat/roe deer	metacarpus	1	u	good	-	calcined	-
085	lm	rib	1	u	good	cut	-	-
085	lm	rib	5	u	good	-	-	-
085	lm	lbs	4	u	poor	-	-	-
085	lm	ind	30	u	poor	-	-	-
085	cattle	scu	1	l	good	cut	-	-
085	lm	lbs	38	u	good	-	-	gnawed
085	lm	tibia	1	r	good	cut	-	gnawed
085	m	lbs	1	u	good	-	-	gnawed
085	lm	oth	12	u	good	-	-	-
085	lm	ind	9	u	good	-	-	-

Context	Taxa	Element	Number of fragments	Left/right /unsided	Preservation	Butchery	Burning	Gnawed
085	lm	ind	2	u	good	-	-	-
085	lm	lbs	4	u	good	-	-	-
085	lm	ind	1	u	good	-	-	-
085	lm	femur	1	u	good	-	-	-
085	lm	oth	2	u	good	-	-	-
085	lm	mandible	1	u	moderate	-	-	gnawed
088	ind	lbs	1	u	poor	-	-	-
088	ind	ind	10	u	poor	-	-	-
088	lm	mandible	1	u	poor	-	-	-
088	lm	oth	1	u	good	cut	-	-
088	lm	oth	1	u	good	cut	-	-
138	horse/mule/donkey	femur	1	l	good	-	-	-
138	horse/mule/donkey	humerus	1	r	moderate	cut	-	gnawed
138	horse/mule/donkey	ulna	1	l	moderate	-	-	-
138	cattle/red deer	metatarsal	1	l	poor	-	-	gnawed
138	cattle/red deer	radius	1	r	moderate	-	-	gnawed
138	cattle/red deer	radius	1	r	moderate	-	-	-
138	cattle	metacarpus	1	l	moderate	-	-	gnawed
138	lm	vertebra	2	u	good	-	-	-
138	lm	lbs	6	u	moderate	-	-	-
138	lm	vertebra	6	u	moderate	-	-	-
146	lm	rib	35	u	moderate	-	calcined	-
162	lm	rib	1	u	moderate	-	calcined	-
178	lm	lbs	4	u	poor	-	-	-
178	m	ind	2	u	poor	-	-	-
178	bird	lbs	1	u	poor	-	-	-
180	mm	rib	13	l	moderate	-	-	-
185	mm	tarsal	1	u	good	-	calcined	-
195	pig	pelvis	1	l	bad	-	-	-
195	sheep/goat	mandible	1	u	moderate	-	-	-
195	horse/mule/donkey	ca	1	l	bad	-	-	-
195	cattle	horncore	1	l	bad	cut	-	-
195	cattle	radius	1	l	bad	-	-	-
195	lm	lbs	8	u	moderate	-	-	-
195	m	ind	4	u	moderate	-	-	-
195	lm	lbs	6	u	poor	-	-	-
195	lm	rib	1	u	poor	-	-	-
195	lm	lbs	1	u	bad	-	-	-
195	mm	lbs	8	u	bad	-	-	-
195	sm	rib	1	u	moderate	-	-	-
195	lm	radius	1	l	poor	cut	-	-
195	mm	radius	1	r	poor	-	-	-
195	mm	radius	1	r	poor	-	-	-
195	mm	tibia	1	r	bad	-	-	-
195	mm	tibia	1	l	bad	-	-	-
248	cattle	humerus	1	r	moderate	cut	-	gnawed
248	lm	lbs	7	u	moderate	cut	-	-
255	lm	metatarsal	1	u	poor	-	-	-
256	lm	lbs	1	u	bad	-	-	-

Context	Taxa	Element	Number of fragments	Left/right /unsided	Preservation	Butchery	Burning	Gnawed
257	horse/mule/donkey	first phalanx	1	u	poor	-	-	-
257	horse/mule/donkey	first phalanx	1	r	bad	-	-	-
257	horse/mule/donkey	pelvis	1	l	bad	-	-	gnawed
257	horse/mule/donkey	scapula	1	r	good	-	-	-
257	cattle	metatarsal	1	l	bad	-	-	-
257	mm	lbs	1	u	moderate	-	-	-
257	lm	vertebra	1	u	moderate	-	-	-
257	lm	vertebra	1	u	moderate	-	-	-
257	lm	vertebra	2	u	moderate	-	-	-
257	mm	rib	2	u	moderate	-	-	-
257	lm	rib	1	u	moderate	-	-	-
257	lm	ind	6	u	moderate	-	-	-
257	lm	lbs	3	u	moderate	-	-	-
257	lm	ind	3	u	bad	-	-	-
257	lm	vertebra	1	u	moderate	-	-	-
257	lm	oth	9	u	good	-	-	-
257	lm	oth	1	u	moderate	-	-	-
257	lm	tibia	1	r	bad	-	-	-
257	cattle/red deer	ulna	1	r	bad	-	-	-
257	lm	rib	1	r	bad	-	-	-
258	cattle	femur	1	l	moderate	-	-	-
259	lm	ind	8	u	bad	-	-	-
263	m	lbs	1	u	poor	-	-	-
271	lm	rib	15	u	bad	-	-	-
271	lm	lbs	1	u	poor	-	-	-
271	m	ind	14	u	poor	-	-	-
273	dog	mandible	1	l	moderate	-	-	-
273	lm	ulna	1	u	moderate	-	-	-
399	lm	rib	1	u	good	cut	-	-
399	lm	rib	2	u	good	-	-	-
402	horse/mule/donkey	metapodium	1	u	moderate	-	-	gnawed
402	lm	lbs	3	u	poor	-	-	-
457	lm	lbs	1	u	good	-	-	gnawed
483	cattle	first phalanx	1	u	moderate	-	-	-
511	cattle	scapula	1	l	moderate	cut	-	-
555	sheep/goat	femur	1	r	good	cut	-	-
555	sheep/goat	humerus	1	l	excellent	-	-	-
555	horse/mule/donkey	metapodium	1	u	moderate	-	-	-
555	horse/mule/donkey	oth	1	u	moderate	-	-	-
555	cattle/red deer	metacarpus	1	r	poor	-	-	-
555	cattle	femur	1	l	good	chop, cut	-	-
555	cattle	femur	1	l	good	-	-	-
555	cattle	metacarpus	1	r	moderate	-	-	-
555	m	ind	10	u	poor	-	-	-
555	sm	lbs	1	u	moderate	-	-	-
555	lm	oth	51	u	moderate	-	-	-

Context	Taxa	Element	Number of fragments	Left/right /unsided	Preservation	Butchery	Burning	Gnawed
555	sheep/goat	humerus	1	l	moderate	-	-	-
555	horse/mule/donkey	metacarpus	1	l	poor	-	-	-
555	horse/mule/donkey	tarsal	1	l	poor	-	-	-
555	cattle/red deer	astragalus	1	l	poor	-	-	-
555	cattle	humerus	1	r	good	cut	-	-
555	cattle	first phalanx	1	u	good	-	-	-
555	lm	vertebra	2	u	good	-	-	gnawed
555	mm	rib	3	l	good	-	-	-
555	mm	rib	1	u	good	-	-	-
555	lm	rib	1	l	moderate	-	-	-
555	lm	rib	28	u	moderate	-	-	-
555	ind	ind	2	u	poor	-	-	-
555	lm	lbs	2	u	good	-	-	-
555	m	ind	22	u	moderate	-	-	-
555	m	ind	1	u	good	-	calcined	-
555	lm	humerus	1	u	moderate	-	-	-
555	m	oth	3	u	moderate	-	-	-
556	m	ind	1	u	poor	-	-	-
556	lm	lbs	3	u	moderate	-	-	-
556	lm	lbs	1	u	moderate	-	-	-
556	m	ind	4	u	poor	-	-	-
556	ind	ind	1	u	moderate	-	calcined	-
557	lm	lbs	9	u	poor	-	-	-
557	m	ind	1	u	poor	-	-	-
558	lm	lbs	5	u	poor	-	-	-
558	m	ind	1	u	moderate	-	calcined	-
570	cattle	metacarpus	1	u	poor	-	-	-
570	cattle	mandible	1	r	poor	-	-	-
570	lm	vertebra	2	u	poor	-	-	-
570	lm	ind	7	u	poor	-	-	-
574	pig	oth	1	l	good	-	calcined	-
574	mm	rib	5	u	good	-	calcined	-
574	lm	lbs	8	u	good	-	calcined	-
574	m	ind	16	u	good	-	calcined	-
574	lm	othu	10	u	moderate	-	-	-

Table 26. Inventory of animal bone from Roman Iron Age (m-mammal, lm- large mammal, mm-medium mammal, sm-small mammal, ind-indeterminate, lbs-long bone shaft).

Context	Taxa	Tooth	Loose (lt) jaw (j)	Maxilla (x) mandib.(n)	Left/right/ unsided	Preservation	Butchery	Burning	Gnawing
010	sheep /goat	M12	lt	n	l	excellent	-	-	-
082	cattle	M12	lt	n	r	moderate	-	-	-
085	cattle	M3	lt	n	l	good	-	-	-
103	cattle	M	lt	n	u	good	-	-	-
103	sheep /goat	M12	lt	n	l	good	-	-	-
185	pig	I	lt	n	l	bad	-	-	-
185	pig	I	lt	n	r	bad	-	-	-
195	sheep /goat	M3	lt	n	l	moderate	-	-	-
195	sheep /goat	M12	lt	n	l	moderate	-	-	-

Context	Taxa	Tooth	Loose (lt) jaw (j)	Maxilla (x) mandib.(n)	Left/right/ unsided	Preservation	Butchery	Burning	Gnawing
195	pig	C	lt	n	r	bad	-	-	-
257	horse/ mule/ donkey	P2	lt	x	r	moderate	-	-	-
257	horse/ mule/ donkey	P2	lt	x	l	moderate	-	-	-
257	horse/ mule/ donkey	M3	lt	x	l	moderate	-	-	-
257	horse/ mule/ donkey	M3	lt	x	r	moderate	-	-	-
257	horse/ mule/ donkey	P2	lt	n	r	moderate	-	-	-
257	horse	P4	lt	x	l	moderate	-	-	-
257	horse	M2	lt	x	l	moderate	-	-	-
257	sheep /goat	M	lt	x	u	moderate	-	-	-
257	cattle	M3	lt	x	r	good	-	-	-
258	horse	M12	lt	x	r	moderate	-	-	-
555	cattle	I	lt	n	r	moderate	-	-	-
555	caf	I2	lt	x	l	moderate	-	-	-
555	pig	M3	lt	n	r	moderate	-	-	-
555	cattle	M3	lt	x	r	good	-	-	-
555	cattle	M3	lt	x	l	good	-	-	-
555	sheep /goat	M3	lt	x	l	good	-	-	-
574	cattle	M12	lt	x	l	moderate	-	-	-
574	cattle	M12	lt	x	l	moderate	-	-	-

Table 27. Inventory of animal teeth from Roman Iron Age.

Taxon	MNI Bone	MNI Teeth	NISP %	Weight %
Cattle	2	1	27.1	38.1
Cattle/red deer	1	-	6.5	5.7
Sheep/goat	2	1	10.8	1.7
Sheep/goat/roe deer	1	-	1.1	0.1
Pig	1	1	6.5	1.3
Horse	-	1	3.2	5.9
Equus sp.	2	-	19.5	46.5
Dog	1	1	2.1	0.3
Bird	-	-	22.8	0.1

Table 28. Taxonomic distribution of animal bone, Roman Iron Age.

ID	Context	Phase	Element	Taxa	FUSP	FUSD
33	555	Roman Iron Age	humerus	O	UD	UD
158	555	Roman Iron Age	femur	O	UD	

Table 29. Sheep/goat, epiphyseal fusion, following Silver (1969).

ID	Context	Phase	Element	FUSP	FUSD
5	138	Roman Iron Age	ulna	F	
6	138	Roman Iron Age	femur	F	
7	138	Roman Iron Age	humerus		F
25	257	Roman Iron Age	1st phalanx	F	F
26	257	Roman Iron Age	1st phalanx	F	F
67	555/F19	Roman Iron Age	metacarpal	F	
90	555	Roman Iron Age	metapodium	F	F

Table 30. Equid, epiphyseal fusion, following Silver (1969).

ID	Context	Phase	M3
47	555	Roman Iron Age	e

Table 31. Mandibular tooth eruption and wear: pig, following Grant (1982).

ID	Context	Phase	Element	GL	SD	BT	BP	DP	Bd	HTC	LAR	BFD	La	DPA
5	138	Roman Iron Age	ulna											61.0
7	138	Roman Iron Age	humerus			78.6			79.3	40.7				
24	257	Roman Iron Age	pelvis								61.8		64.8	
25	257	Roman Iron Age	1st phalanx	80.5	33.6		54.3	38.0	45.1			43.0		
26	257	Roman Iron Age	1st phalanx	70.0	26.7				40.5			36.0		

Table 32. Equid measurements, following von den Driesch (1976).

16.8 Dental pathology

16.8.1 Ditch fill (555) produced a cattle incisor showing bilateral asymmetrical wear on interproximal aspects of the tooth at cemento-enamel junction (Figure 80).

Figure 80. Cattle incisor showing bilateral asymmetrical wear.

16.9 Medieval/post-medieval

16.9.1 Medieval/Post-Medieval animal bone weighed 299.9g. Identified specimens included cattle (MNI:1), sheep/goat (MNI:1) and red deer (MNI:1) and size-classified data confirmed that large mammals were the most abundant followed by medium-size mammals (Table 27).

Context	Taxa	Element	Number of fragments	Left/right/unsided	Preservation	Butchery	Burning	Gnawing
303	red deer	first phalanx	1	u	moderate	cut	-	-
303	cattle	humerus	1	l	good	cut	-	-
303	m	ind	1	u	moderate	-	calcined	-
303	lm	lbs	8	u	moderate	-	-	-
303	mm	rib	2	u	moderate	-	-	-
303	lm	ind	12	u	poor	-	-	-
303	lm	oth	1	u	bad	-	-	-

Table 33. Inventory and taxonomic distribution of animal bone from Medieval/Post-Medieval phase (m-mammal, lm- large mammal, mm-medium mammal, sm-small mammal, ind-indeterminate, lbs- long bone shaft).

Context	Taxa	Tooth	Loose (lt) jaw (j)	Maxilla (x) mandib. m)	Left/right/unsided	Preservation	Butchery	Burning	Gnawing
301	cattle	M	lt	x	u	good	-	-	-
303	cattle	M12	lt	x	r	good	-	-	-
303	cattle	M12	lt	x	l	good	-	-	-
421	sheep/goat	M3	lt	x	l	good	-	-	-

Table 34. Inventory and taxonomic distribution of animal teeth from medieval/post-medieval phase.

16.10 Discussion

16.10.1 Samples from both Iron Age as well as Roman Iron Age phases contained the major domesticates including cattle, sheep/goat and pig. Identified size-classified specimens suggested cattle were a major domesticate in the Iron Age, followed by sheep/goat. Comparable relative frequencies of earlier and later Iron Age phases suggested no major change in animal husbandry during that period.

16.10.2 The relatively small size of the Sedgefield assemblage precludes any definitive conclusions, however there are multiple elements suggestive of a shift in animal husbandry during the Roman Iron Age phase. Firstly, the average weight of specimens indicated a consistently lower level of large and medium mammal bone fragmentation during the Roman Iron Age in comparison to the previous phases (Figure 81). This suggests less intense utilization of the carcass possibly due to an increased availability of livestock.

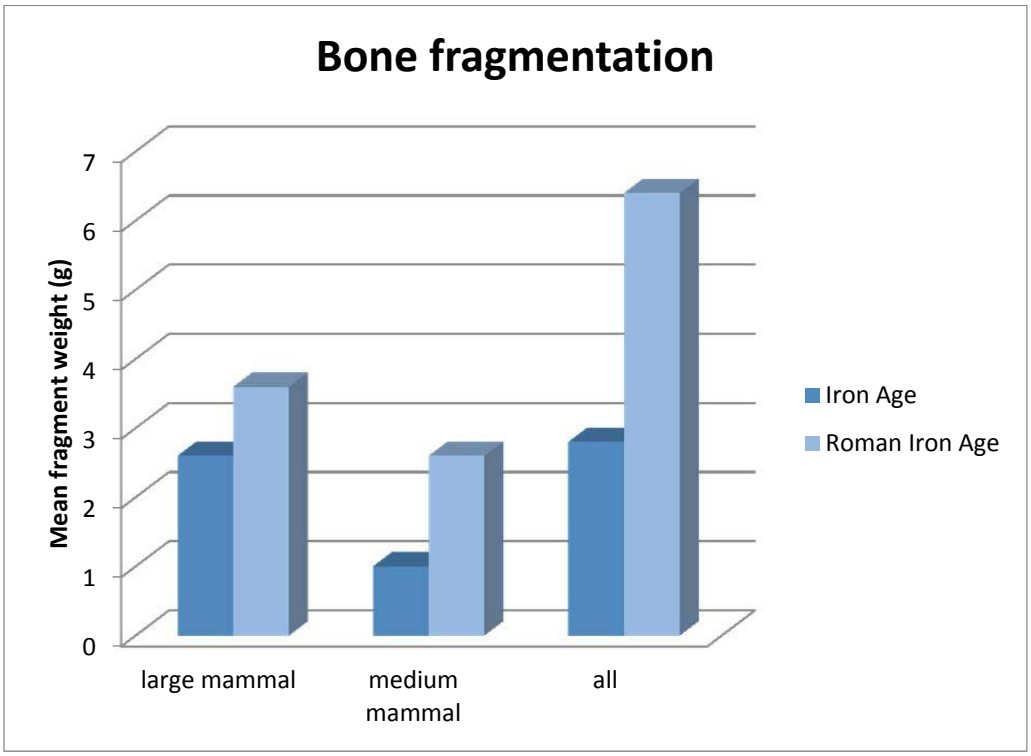


Figure 81. Bone fragmentation: pooled Iron Age (Iron Age Phase I and Iron Age Phase II) versus Roman Iron Age.

16.10.3 Further, the animal bone sample from the earliest phase of occupation on the site did not contain any equid species, whereas they were sporadically identified within the assemblage from the following Iron Age II to become the second most frequently identified mammal genus among the Roman Iron Age animal remains. Equid remains included donkey (Iron Age Phase II) and horse (Roman Iron Age). A proportion of those later specimens carried butchery marks, which indicated that *Equus* sp. served as a table beast in addition to being exploited for probable ploughing or transport.

16.10.4 Ageing data was too limited to recreate the kill-off profiles of main domesticates, nevertheless the presence of immature cattle during Iron Age Phase I may suggest a predisposition towards meat and dairy production. Conversely, an absence of young cattle individuals derived from the Roman Iron Age assemblage, which produced the largest amount of bovid specimens of all the phases, was suggestive of a focus other than dairy and meat production. It is unlikely that such underrepresentation of immature cattle during the Roman Iron Age Phase Is due to preservation bias, as some unfused small bovid elements, which are notoriously susceptible to destruction, have been recovered from contemporaneous deposits, hence the main role of cattle in the Roman Iron Age was possibly as plough animals. Measurable bovid and equid specimens mostly fell within the size range for contemporaneous assemblages with few exceptions and the considerably larger Roman Iron Age cattle specimens may have represented male individuals, alternatively - an introduction of an improved stock during that period.

16.10.5 Due to the paucity of ageing data for sheep/goat it is unclear whether they were kept for their primary (meat) or secondary products (wool, milk and manure), however the presence of juvenile individuals during the Roman Iron Age is consistent with dairying and suggestive of breeding the animals on or close to the settlement.

16.10.6 Throughout all phases predating the medieval period pig was a constant, although minor presence in the settlement. A low incidence of pig remains in Romano-British rural sites has been previously noted and interpreted as a possible indication that towns rather than rural sites constituted focal points of relatively easy pork production (Maltby 1994). Dogs were present in the earliest phase of occupation as well as in the Roman Iron Age during which a substantial share of bird remains was also uncovered.

16.10.7 Wild taxa were represented during Iron Age Phase I and in Medieval/Post-Medieval samples by red deer in the form of distal portions of limbs. The presence of butchery marks on a specimen from the latest phase was consistent with the practice of skinning. An absence of red deer elements within the largest sample – the Roman Iron Age phase - is conspicuous and a common characteristic of Romano-British assemblages.

17. PALAEOENVIRONMENTAL ASSESSMENT

by Luke Parker

17.1 Introduction

17.1.1 Palaeoenvironmental analysis was undertaken on samples taken from 74 archaeological features which represented four phases of human occupation of the Sedgefield site. There were two Iron Age phases identified (an earlier Phase I and a later Phase II), as well as a Roman Iron Age phase, and a Medieval/Post Medieval phase. These phases were identified through the stratigraphic interrelationships between features, as well as pottery finds.

17.1.2 40L of fill from archaeological features were sampled wherever possible, unless the feature contained less than 40L of fill, whereupon the entirety of the excavated fill was sampled.

17.2 Methods

17.2.1 Bulk fill samples were processed via water flotation through graduated sieves with

17.2.2 the smallest being 300 µm. Flots were weighed, air dried, and scanned using a low-power binocular microscope (x40). The entirety of the flots were scanned and separated out into charcoal and plant macrofossils.

17.2.3 Where possible up to twenty identifications were made per sample. If the quantity of charcoal present in a sample exceeded 20 pieces, then the sample was dry-sieved through 10mm, 500µm and 300µm sieves. Six pieces of charcoal were then taken randomly from two of the sieves, and eight pieces from another. Charcoal with a size of >2mm was fractured to obtain clean sections on the tangential, transverse, and radial planes. These could then be identified using a high power Leica GXML3030 binocular microscope (up to x600). Species identification was undertaken using plates and guides from Scoch *et al.* (2004) as well as comparison with a modern reference library held by Archaeological Research Services Ltd.

17.2.4 Plant macrofossil identification was undertaken using a low-power binocular microscope (x40). Plant macrofossil identification utilised plates and guides from Martin and Barkley (2000) and Cappers *et al.* (2006). Plant macrofossil nomenclature follows Stace

(1997). Cereal identification utilised the guide by Jacomet (2006). All plant macrofossils present were assessed. Non-charred macrofossils were discounted as being modern contamination and were excluded from this analysis.

17.3 Results

17.3.1 Samples which yielded palaeoenvironmental material are shown in the following tables. These have been sorted into earlier (Phase I) and later (Phase II) phases of Iron Age occupation, and a Roman Iron Age phase of occupation.

Context No.	026	140	158	176	551
Feature No.	14	34	46	30	88
Description	House Drip Gully	Ditch	Ditch	Enclosure Ditch	Enclosure Ditch
Quantity (g)	0.02	0.35	0.03	0.27	4.91
Charcoal					
Quantity					
Corylus avellana L. (hazel)				1	
Alnus sp. (alder)					
Quercus sp. (oak)					19
Acer Campestre L. (field maple)					1
Indet. Twig					14
Plant Macrofossils					
Wild seeds					
Spergula arvensis (corn spurry)	2				
Centarium sp. (genus of flowering plants)		1			
Cereals					
Avena L. (oat) grain		1			
Triticum spelta (spelt wheat) grain		1	1		1
Hordeum vulgare (hulled barley) grain				1	
Indet. Cereal grain			1		
Indet. Cereal rachis		1			
indet. Cereal culm internode					

Table 35. Recovered palaeoenvironmental remains from Phase I Iron Age features. N.B. Green highlight indicates suitable material for ^{14}C radiocarbon dating.

Context No.	447	290	321	323	332	333	282	284	311	312	330	338	347
Feature No.	21	55	55	55	55	55	58	80	59	59	59	59	59
Description	Lowermost Fill of enclosure ditch	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch	Lower pit at entrance to RH2	Upper Pit at entrance to RH2	House Gully (RH2)	House Gully (RH2)	House Gully (RH2)	House Gully (RH2)	House Gully (RH2)
Quantity (g)	0.18	1.30	0.58	0.02	0.56	0.02	1.97	0.54	0.04	4.90	12.53	0.11	0.83
Charcoal													
Salix alba/Populus sp. (willow/poplar)										1	1		
Corylus avellana L. (hazel)										1	3		
Alnus sp. (alder)		1			2					4	3		
Quercus sp. (oak)										4			
Maloideae (stony fruits)											1		
Indet. Twig	1	16			1					>20	>20		10
Plant Macrofossils													
Wild seeds													
Ergagrostis sp. (lovegrass)													2
Carex sp. (sedge)			1										
Rosa arvensis (field rose)							2						
Vicia sp. (wild vetch)							1						
Cereals													
Avena L. (oat) grain							2						
Triticum spelta (spelt wheat) grain	1	1	2	1	3	1	52(6 malt)	16	1	4		1 (malt)	1 (malt)
Hordeum vulgare (hulled barley) grain			1				5	2					1
Triticum dicoccum (emmer wheat) grain							6	3					
Triticum spelta spikelet							1						
Triticum spelta glume base							1						
Triticum spelta rachis node							2						
Indet. Cereal grain							7		1				1
Indet. Cereal culm node		1											

Table 36. Recovered palaeoenvironmental remains from Phase II Iron Age features. N.B. Green highlight indicates suitable material for ^{14}C radiocarbon dating.

Context No.	376	292	294	309	339	463	429	435	436	548	562	528	413
Feature No.	59	61	62	62	62	96	69	73	73	74	74	92	95
Description	House Gully (RH2)	Pit inside RH2	Pit inside RH2	Pit inside RH2	Basal fill of pit inside RH2	Upper IA pit fill inside RH2	Beam slot	Enclosure Ditch Secondary Fill	Enclosure Ditch Third Fill	Enclosure Ditch	Enclosure Ditch	Pit backfill	Posthole
Quantity (g)	3.18	0.04	0.81	0.09	0.07	0.11	0.04	0.16	0.66	1.27	0.18	0.58	5.23
Charcoal													
Corylus avellana L. (hazel)	5								1				
Alnus sp. (alder)	4											1	
Quercus sp. (oak)								2	3	4			>20
Indet. Twig	>40					2	1		1	1	2		7
Plant Macrofossils													
Wild seeds													
Fallopia sp. (buckwheat)		1										1	
Carex sp. (sedge)							1			2	1		
Cereals													
Triticum spelta (spelt wheat) grain		1		1	1	2				1	7 (2 malt)		
Indet. Cereal grain			3		1								
Indet. Cereal			1										

rachis													

Table 37. Recovered palaeoenvironmental remains from Phase II Iron Age features. N.B. Green highlight indicates suitable material for 14C radiocarbon dating.

Context No.	009	138	146	185	178	179	180	258	259	400	556	385
Feature No.	5	33	32	41	41	41	41	19	19	11	19	93
Description	Enclosure Ditch Recut	Pit Fill	Pit	Upper Fill of Pit	Second fill of Pit	Third Fill of Pit	Lowermost fill of Pit	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch	Enclosure Ditch
Quantity (g)	0.06	1.18	0.51	0.16	0.33	0.02	5.92	0.23	12.85	0.37	0.02	0.06
Charcoal												
Quantity												
Corylus avellana L. (hazel)		1										
Alnus sp. (alder)		1										
Quercus sp. (oak)					1		>20 (20RW)	2				
Indet. Vitrified charcoal									3			
Indet. Twig		7	5			1	>20			8		1
Plant Macrofossils												
Wild seeds												
Ergagrostis sp. (lovegrass)				1								
Carex sp. (sedge)					1							
Spergula arvensis (corn spurry)					1							
Cereals												
Triticum spelta grain	3	7	1	2		1	2	3	2	1	1	1
Avena L. (oat) grain		9										
Hordeum vulgare (hulled) grain		3					1		1	5 (1malt)		
Indet. Cereal grain		6	1									
Indet. Cereal culm internode			1									
Molluscs												
Valvata cristata									19			

Table 38. Recovered palaeoenvironmental remains from Roman Iron Age features. N.B. Green highlight indicates suitable material for ^{14}C radiocarbon dating.

17.3.2 The Phase I Iron Age contexts yielded a small variety of charcoal species compared to Phase II Iron Age contexts however a large concentration (19 fragments) of *Quercus sp.* (oak) charcoal was recovered from a fill of one of the Phase I enclosure ditches (551), as well as a single fragment of hazel charcoal. This ditch fill also contained small, charred indeterminate twig charcoal fragments. Other than house gully (F014), charred cereal remains were recovered from all Phase I Iron Age contexts which contained palaeoenvironmental remains. These cereal remains were generally spelt wheat grains but hulled barley, as well as oats were also recovered.

17.3.3 Phase II Iron Age contexts containing palaeoenvironmental remains were related to Roundhouse 2 features (F055, F058, F059, and F062), structure F069, the smaller, rounded enclosure ditch (F055), or the larger enclosure ditches F021 (051), (073), (074) which surrounded both the roundhouse and an adjacent enclosed area. These features contained a somewhat wider array of charcoal, though generally not of a large quantity. The gully contexts of Roundhouse 2 (311), (312), (330), (338), (347), and (376) contained a mixture of hazel, alder, *Salix/poplar sp*. (willow/poplar- distinguishing these based on wood anatomy is not possible), oak, and *Maloideaea sp.* (stony fruits trees/shrubs). Large quantities of indeterminate charred woody twigs were also recovered from the gully contexts of Roundhouse 2; particularly from (312), (330), and especially from (376). Within Roundhouse 2 however, these indeterminate charred twigs were absent, apart from in the upper fill (463) of pit (F096) where two fragments of small indeterminate twigs were recovered. Roundhouse 2 also contained a small number of charred weed seeds, with the lower pit at the roundhouse entrance (context 282) containing two *Rosa arvensis* (field rose) seeds, as well as a single wild vetch (*vicus sp.*) seed. The very small size of the seed suggests it is a wild species of vetch rather than a domesticated form; however species identification was not possible. The smaller enclosure ditch (F055) also contained a quantity of small indeterminate twigs, amounting to 16 fragments in the house gully (F055) fill (290). Single individuals were also found in the smaller enclosure (F055) ditch fill (290). Within ditch (F055) there was also three fragments of alder; two from context (332) and one from (290). Only the beamslot (429) of structure F069 contained palaeoenvironmental remains. These were a single indeterminate twig fragment and a single sedge seed. The larger enclosure ditch fills F021 (051), (073), (074) contained a relatively small number of oak fragments, other than the fill (436) of the enclosure ditch F073 which also contained a single fragment of hazel charcoal. Posthole fill (413) contained a significant concentration of oak charcoal (>20 fragments). This posthole (413), though still considered Phase II Iron Age, was cut into the top of enclosure ditch F073.

17.3.4 Recovery of charred cereal remains from the Phase II Iron Age contexts was significant. Cereal remains were primarily concentrated in and around Roundhouse 2. Roundhouse 2 contained a small number of cereal grains in the fills of the house gully (F059) and a similar number in the pits within the house F061 (062) and (096). What is more significant is the very high concentration of cereal remains recovered from the upper (284) and lower (282) pit fills at the entrance to the house. The upper pit contained lower numbers (though still a relative abundance) of cereal grains, as well as an absence of cereal chaff. The lower pit contained a more significant abundance of cereal remains, with cereal chaff being present in this case. Charred cereal grains

recovered from these contexts was composed of spelt wheat, *Triticum dicoccum* (emmer wheat), and hulled barley, with oats also being present in the lower fill (282). The upper fill (284) contained 16 spelt wheat grains, two hulled barley grains, and three emmer wheat grains. The lower fill contained two oats, 52 spelt wheat, five hulled barley, and six emmer wheat grains. Seven indeterminate cereal grains were also recovered, though species identification was prevented due to heavy wear and fragmentation. This fill also contained four fragments of charred spelt wheat chaff.

17.3.5 The Roman Iron Age contexts containing palaeoenvironmental remains are composed of four enclosure ditches and three pits, one of which contained a succession of four fills. The charcoal assemblages contained within these Roman Iron Age contexts was relatively restricted, with identifiable charcoal only being recovered from four features. One of these was limited to two small fragments of *Quercus sp.* (oak) charcoal which were recovered from the enclosure ditch fill (400). However pit F041 contained a secondary fill (178) containing a single fragment of oak, and a lowermost fill (180) which contained over 20 roundwood oak fragments. Significant quantities (>20 individuals) of small indeterminate twigs were recovered from lowermost fill (180) of the pit (F041). Similarly, the enclosure ditch fill (400) also contained eight small indeterminate twigs. Pit fill (138) contained single fragments of *Corylus avellana L.* (hazel) and *Alnus sp.* (alder) as well as a relatively high concentration of cereal remains including a number of oats (nine grains), as well as seven spelt wheat, and two hulled barley grains. Six indeterminate cereal grains were also recovered, though heavy fragmentation and wear precluded species identification. The small charred twigs found in the Roman Iron Age contexts, as well as similar twigs encountered in contexts of other ages were indeterminate due to their very small diameters which precluded species identification.

17.3.6 Apart from the secondary fill (178) of pit F041, all recovered palaeoenvironmental assemblages from contexts interpreted as Roman Iron Age yielded cereal grains. These cereal grains were composed of *Triticum spelta* (spelt wheat) which was present in the enclosure ditch recut F005 fill (009), enclosure ditch F11 fill (400), the three fills (258, 259, and 556) of enclosure ditch F019, and the four fills (178, 179, 180, and 185) of pit F041. Alongside the spelt, *Hordeum vulgare* (hulled barley) grains which was recovered from the enclosure ditch F019 fills (259) and (400), with the latter containing a relatively high number (five grains) for the site. Chaff was entirely absent from all Roman Iron Age features. The shells of 19 *valvata cristata* molluscs were also recovered from enclosure ditch fill (259). The pit F041 also contained single charred weed seeds of three species: *Ergarostis sp.*(lovegrass), *Spergula arvensis* (corn spurry), and *Carex sp.* (sedge).

17.4 Discussion

17.4.1 All Phase I Iron Age features which yielded palaeoenvironmental remains contained at least a single cereal grain within the assemblage, other than the Roundhouse drip gully (026), which shows a similar agricultural focus for local activity as the later Phase II Iron Age features. Agricultural activity on the site is further supported by the presence within the Phase I Iron Age roundhouse drip gully fill (026) of corn spurry seeds which is an agricultural weed.

17.4.2 The most significant concentration of Iron Age palaeoenvironmental material was focussed around Roundhouse 2, most notably from the pits at the entrance to the house (contexts 284 and 282) and the roundhouse gully (F059). The pits at the entrance are of a shallow depth and have very gently sloping sides, suggestive of them being wear hollows. Cereal grains, chaff, and the wild seeds could have collected in this feature due to it being a hollow. The hollow may have acted as a trap for charred material cleared out of the roundhouse. However, it is also possible that these features may represent threshold deposits. Regardless, the material contained within the pits acts as a proxy for what was utilised by the inhabitants of the house. The material contained in the pits illustrates the variety of different species of cereals that were being used by the inhabitants; two species of wheat, barley, and possibly oats. It is necessary to be cautious when identifying oats as a consumed resource, as they may be wild oats which are an agricultural weed that were not necessarily consumed as a foodstuff. The two species of wheat are typical for the Iron Age, when spelt was gradually replacing emmer as the dominant form of wheat (van der Veen 1992). Indeed, the replacement of emmer by spelt wheat would be desirable for the local inhabitants as the natural clay-rich sediment would be better suited for hardier spelt, than emmer (Cuncliffe, 2005). The charred vetch and field rose seeds represent wild plants which commonly grow in hedgerows adjacent to field systems and were likely imported with the cereals when they were harvested. Field rose hips develop in the autumn which is the same season as when spelt wheat is both harvested and sown (van der Veen, Jones 2006). It is unlikely that Roundhouse 2 was a storage area for grain given the quantity of material retrieved. Rather, the presence and quantity of cereal remains is consistent with a domestic purpose, with the grain being used in food preparation.

17.4.3 The gully of Roundhouse 2 (F059) contained extensive concentrations of small indeterminate charred woody twigs, alongside small fragments of oak, willow, alder and hazel charcoal which may represent hearth sweepings or fragments from what had probably been wood and wattle walls, the ends of which were typically charred to aid in preserving wood that had been placed in the ground.

17.4.4 The nearby enclosure ditch (F055) also contained seventeen fragments of indeterminate twig material.

17.4.5 The small assemblages of charcoal and cereal grains contained within the larger Phase II Iron Age enclosure ditches (F021, 051, 073, 074) are likely to be the result of natural inwash of nearby material. The prevalence of cereal grains (albeit in low concentrations) throughout the ditch fills illustrates the agricultural character of the settlement.

17.4.6 The charcoal assemblages within contexts identified as Roman Iron Age were relatively limited. Narrow-width roundwood oak charcoal, indicative of small branchwood, was found throughout the fills of pit F041. Spelt wheat and/or hulled barley was recovered in low concentrations (single individuals) from most recovered palaeoenvironmental assemblages identified as being Roman Iron Age, illustrating that the importance of agricultural activity continued through into the Roman Iron Age occupation of the site. Pit F033 (138) contained the largest concentration of cereals of the Roman Iron Age features, showing the presence of agricultural products at least in

the form of spelt wheat and hulled barley. Oats are generally believed to be more common towards the latter part of the Iron Age (Cuncliffe 2005) and this is consistent with their presence in the later, Phase II Iron Age contexts at Eden Drive.

18. GEOCHEMICAL ANALYSIS

by Roger Doonan, Louis Lortie and Nicholas Clarke

18.1 Introduction

18.1.1 The use of geochemical survey to identify and delineate activity areas on archaeological sites is well established in archaeology (Oonk *et al*. 2009, Wilson *et al*. 2008, and references therein). The study reported here assessed the potential for in-situ geochemical survey at Eden Drive, Sedgefield (436063, 528540). The time of analysis was after all major archaeological work had been completed with only minor works on-going. This aspect of the study is of interest as undertaking the study at this time meant that no disruptive intervention was created by the analysis.

18.1.2 To explore geochemical variation across the site, a campaign of in-situ geochemical analysis was undertaken using a NITON XL3T HHpXRF (50kV X-ray tube, and an Ag anode with a silicon positive intrinsic negative (Si PiN) detector). Survey involved cleaning the already excavated surface and sampling the area directly with the instrument. All analyses were done with main filter (35 secs) and low filter (15 secs). The following elements were determined Mo, Zr, Sr, Rb, Pb, As, Hg, Zn, Cu, Ni, Co, Fe, Mn, Sb, Sn, Cd, Pd, Ag, Nb, & Bi.

18.2 Analytical Performance

18.2.1 Prior to undertaking field analyses a number of certified reference soils were analysed to determine the accuracy of the instrument under ideal conditions. The performance of HHpXRF is now well established for most heavy metals.

18.3 Sampling strategy

18.3.1 All samples were analysed in-situ on a measured grid with an interval of ~3m.

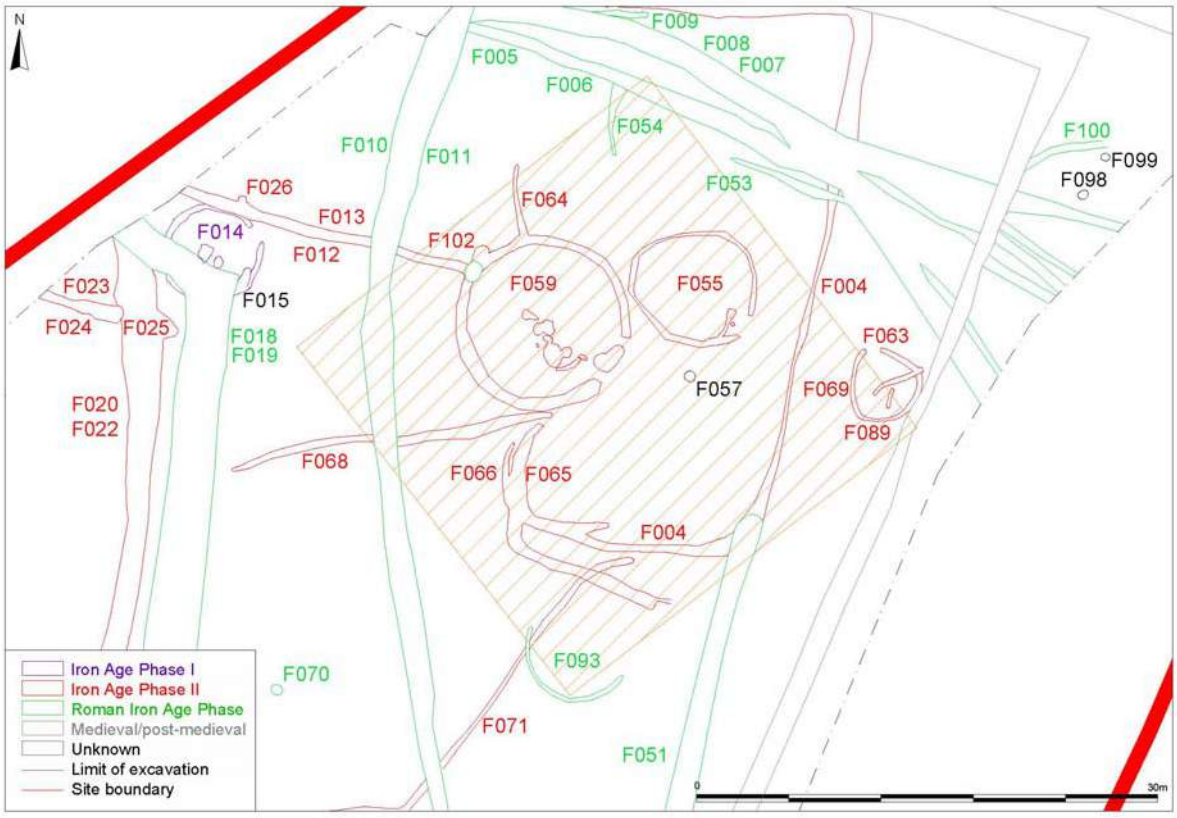


Figure 82. Location of sampling grid (orange hatched area).

18.4 Results

18.4.1 Results for soil chemistry are reported in ppm and associated with a spatial coordinate. The sampling grid corners were established using DGPS. In producing representations of the distribution of soil chemistry no interpolation was employed, instead point data was plotted as a means to best represent the raw data.

18.4.2 The study reported here returns survey values for a range of elements including Zn, Pb, Ca, K, and Fe. Cu returned no values above detection levels and was determined as invalid for spatial analysis. Along with copper, Zinc and Lead are usually associated with anthropogenic activities and may range from 30ppm to 800ppm for routine activities associated with settlement-based activities. The range of results found at Eden Drive were generally low with Pb present from <LOD to 58ppm, Zn ranging from high with results ranging from <LOD to 84ppm. Distinct patterning could be discerned for heavy metals Zn and Pb with some additional structured anomalies for Ca, K and Fe.

18.4.3 The wide area transect showed that geochemical enhancement increased towards the south-west and towards the area of settlement activity and enclosure (note all samples <LOD to north-east of sample grid). While unsurprising it does suggest that the eastern aspect of the excavations where heavy metals were absent represents a real limit of the site.

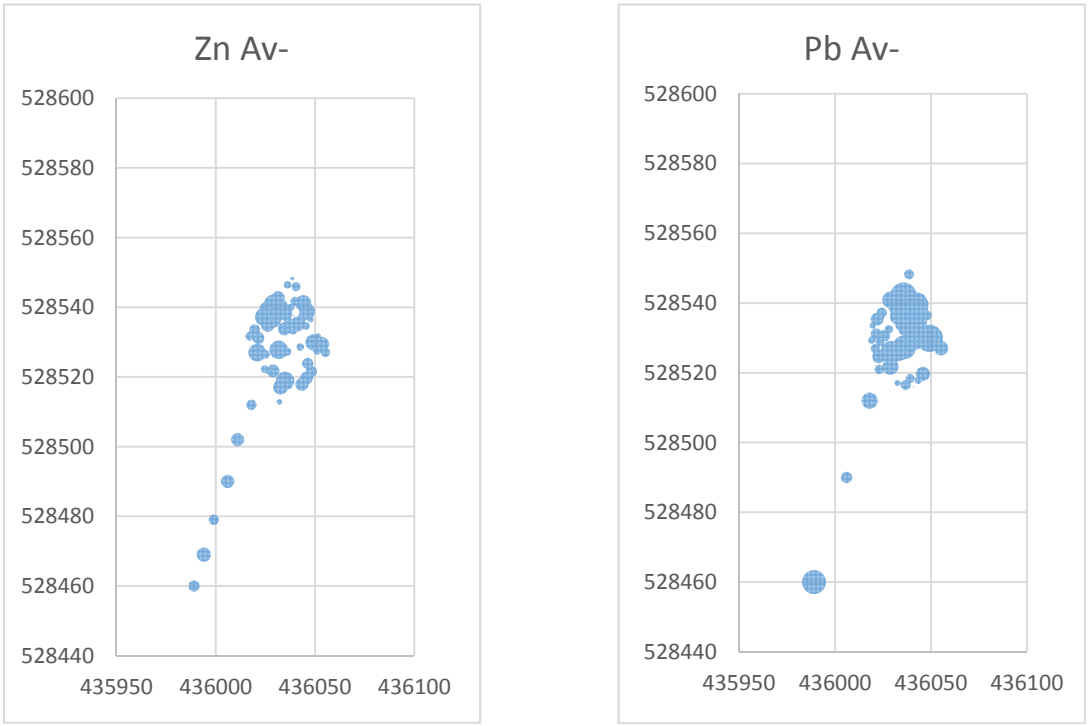


Figure 83. Distributions of Zn and Pb across the site.

18.4.4 The high resolution survey centred on the circular ditches noted two areas of structured anomalies. These were complementary for Zn and Pb showing concentrations to the north-east of the sampling grid for Pb and to the north for Zn. It cannot be determined what the precise activities were that gave rise to these activities but it is possible to assert that these areas were the location of activities that enhanced heavy metals such as disposal or other generic settlement activities. The origin of these anomalies remains ambiguous but it does provide some insight into the differential use of space. At the levels present it is unlikely that these are related to craft-working activities such as metalworking.

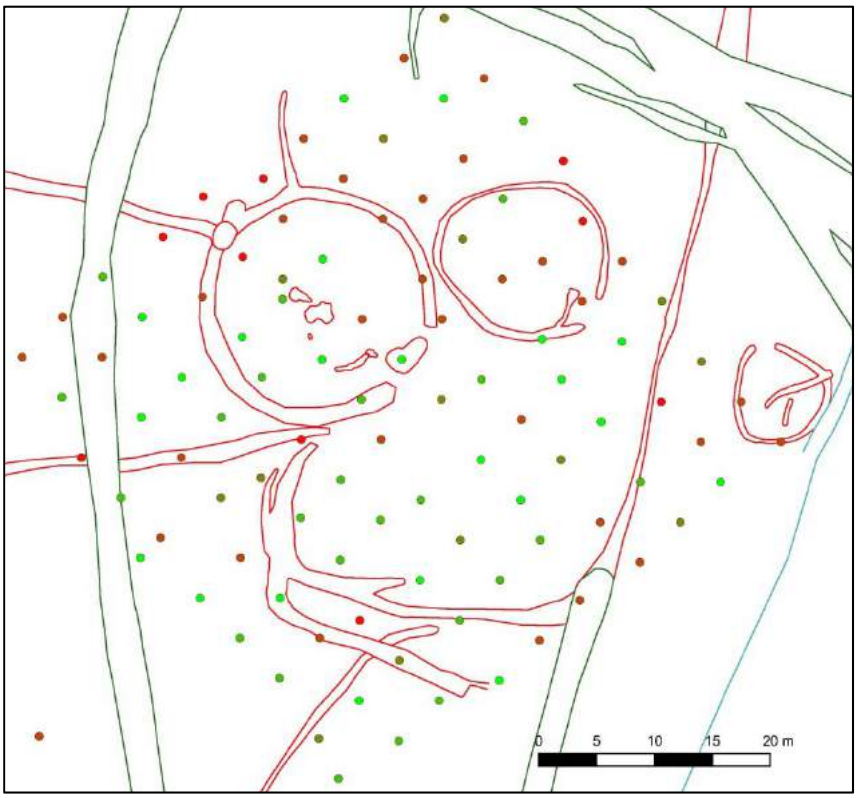


Figure 84. Results of geochemical analysis (Zn).

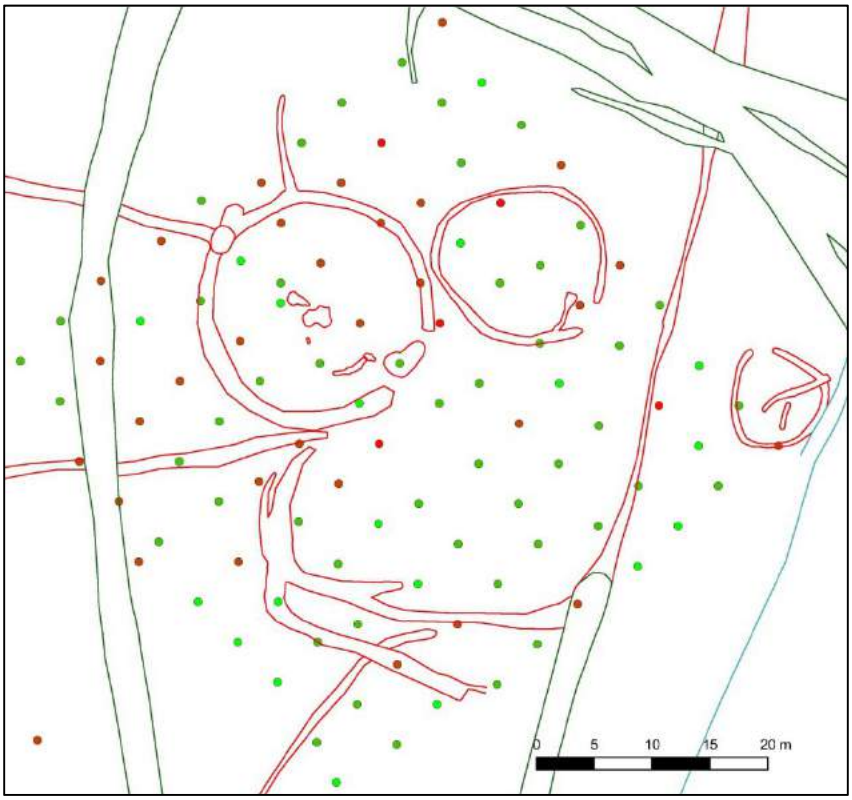


Figure 85. Results of geochemical analysis (Pb).

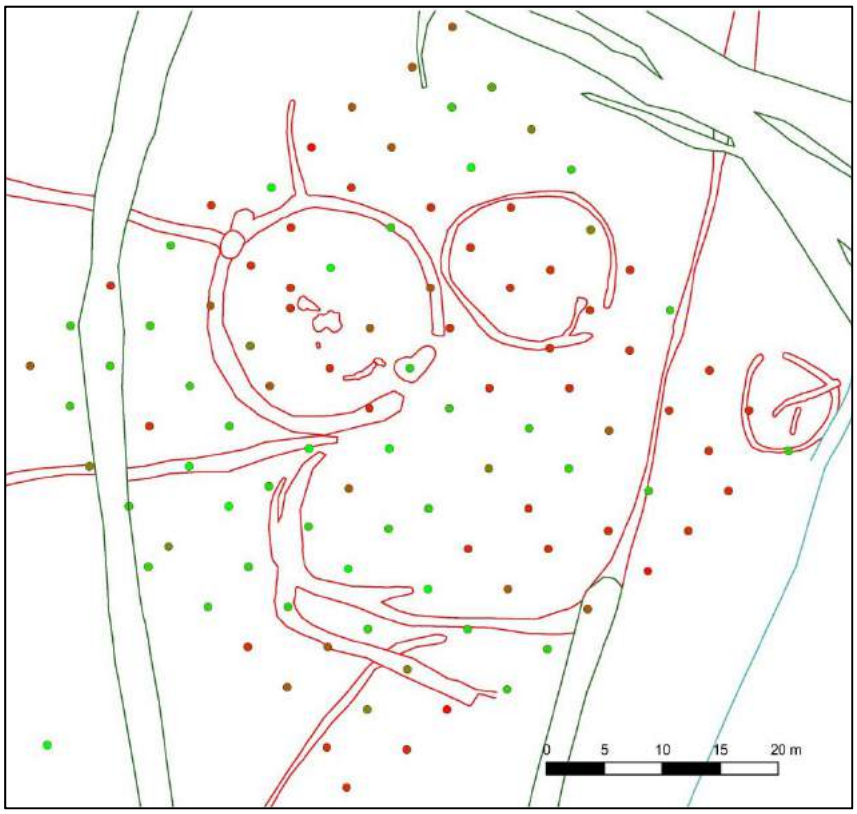


Figure 86. Distribution of K across site (ash disposal?)

18.5 Conclusions

18.5.1 The study employed *in-situ* analysis to determine the degree of variability in soil chemistry across the site of Eden Drive.

18.5.2 The study has provided information on a number of issues. Firstly, it can be established that the variability encountered across the sites is of a magnitude that suggests significant anthropogenic impact on the locality. Preliminary review of a range of elements suggests that Zn and Pb are enhanced with areas of activity to the north and north-east (i.e. downwind from the prevailing wind) of the roundhouses. It is also apparent that geochemical enhancement is noted towards the roundhouse and adjacent pen. This observation in tandem with the detection levels of heavy metals to the north-east suggests that this may represent the limits of the foci of domestic activity during the Late Iron Age occupation of the site.

19. Overall Discussion

Context

19.1 The strip, map and sample excavation revealed evidence for multi-phase activity spanning the Mesolithic to the medieval/post-medieval periods. Whilst the majority of the activity was concentrated in the Late Iron Age and early Roman Iron Age periods, evidence for Mesolithic occupation in the form of chipped flints, and evidence for medieval/post-medieval agriculture highlights the longstanding and repeated use of this area. From the Iron Age onward the features in the excavated area do not form a

discrete and complete settlement site but probably outlying parts of a settlement whose nucleus lay just outside the excavated area, either on the unexcavated higher ground to the north, or to the east, where another concentration of later-Iron Age and Roman period remains has been found at a distance of less than 500m (McKelvey 2016).

Preservation

19.2 Truncation across the site was significant with many features displaying much shallower depths than when they had been in use. In addition, during the beginning of the excavation there was a period of very wet weather followed by extremely dry, hot weather towards the final few weeks. These changing and sometimes extreme conditions affected visibility on the site and often made feature identification difficult. However general preservation of material culture was good, particularly in deeper features, with plentiful environmental evidence and bone, both burnt and unburnt, showing moderate levels of preservation. Glass and metal finds had also survived well, as had the ceramics.

Significance of results

19.3 Regardless of its primary function of a record in advance of development, the excavation site has contributed to the regional research objectives as set out in the *North-East Regional Research Framework* (Petts and Gerrard 2006), particularly those objectives relating to the *Late Bronze and Iron Age* and *Roman.* The excavation revealed information about the settlement form and types, as well as the material culture of the site, both local and imported, during these periods. It has also contributed important evidence suggesting direct continuity of settlement from the Late Iron Age into the early Roman Iron Age prior to abandonment in the Roman period and the changing character of that settlement that came with the arrival of the Roman military to the region in the Flavian and immediate post-Flavian period.

Iron Age Phase I

19.4 The earliest significantly represented phase of activity on the site (Iron Age Phase I) was characterised by an unenclosed roundhouse, Roundhouse 1 (RH1), situated towards the east of the excavation area, as well as a system of droveways and ditches, believed to be associated with this roundhouse, towards its west. While no material culture and no reliable radiocarbon dates were obtained from these features they are believed to be the earliest on the site due to their relationships with other, later features. Roundhouse 1 with its associated central pits was heavily truncated on both its north-east and south-west sides by later Iron Age and Roman Iron Age ditches, F012/F013 and F018/F019 respectively, and as a result very little of it remained by the time of excavation. Nevertheless, the roundhouse was seen to be circular in plan with an internal diameter of *c*.6m and an entrance to the east-north-east. There were no surviving postholes present at the time of excavation and the surviving ring groove was shallow, indicating that it had been heavily truncated, which could also account for the lack of postholes if any had originally existed.

19.5 A comparable example of an unenclosed roundhouse settlement was excavated at Pegswood Moor near Morpeth (Proctor 2009) where four separate roundhouse structures were found, although each was larger than the Sedgefield example.

Structures 1, 2 and 3 at Pegswood were circular and each had east-facing entrances, similar to Sedgefield Roundhouse 1. It is believed that the Pegswood unenclosed settlement represented a farmstead settlement but that only one of the roundhouses was occupied at any one time due to the later roundhouses having been constructed over the footprints of the earlier structures. Structure 4 at Pegswood was the smallest of the four with a diameter of *c*.6.8m, more comparable to Sedgefield Roundhouse 1, although the Pegswood example had its entrance facing west. Structure 4 at Pegswood is not believed to have been used for habitation due to its small size but rather it is thought to have been used for storage, some form of activity or possibly even a sacred function. It is possible, therefore, that Sedgefield Roundhouse 1 was not used for habitation but rather for storage or crafts and that the main settlement associated with it lies beyond the limit of excavation. Additional comparison can be made between Sedgefield Roundhouse 1 and an unenclosed roundhouse that was excavated at Ingleby Barwick near Stockton-on-Tees (Willis and Carne 2013). This unenclosed roundhouse, which has been assigned to the later Iron Age Phase II on the site, had an internal diameter of 5.3m with an entrance to the south-east. It has been suggested that further contemporary structures may well have existed beyond the limit of the excavation, seeing as the structure was encountered at the very south-western corner of the site. At Sedgefield it is probable that the Iron Age Phase I structure recorded is also part of a wider landscape of settlement, since later Iron Age and early Roman period structures and ditches have been recorded less than 500m to the east immediately on the other side of Beacon Lane (AD Archaeology 2015; 2016). It is possible that these structures to the east form a principal settlement nucleus of which the present Eden Drive structures are outliers.

19.6 The series of intercutting gullies and ditches also assigned to the earliest of the Iron Age phases of occupation at Sedgefield, located towards the west, have been interpreted as a droveway system for the corralling and enclosing of livestock such as sheep, goat or pig. These features were placed within this phase due to their truncation by later Iron Age and Roman Iron Age features. The droveway ditches created a roughly rectangular-shaped area measuring *c*.758m^2 with what is thought to have been a gated entrance at the north-eastern corner. From here livestock could have been moved towards the north-west through a series of droveways. Similar droveway systems have been excavated at Pegswood Moor near Morpeth (Proctor 2009) as well as St George's hospital, also near Morpeth (Lotherington 2016). The Pegswood Moor examples have been compared to those excavated at a Bronze Age site in Fengate where they were interpreted as a system for managing and moving herds of sheep (Pryor 1996). The appearance of sheep bone within the Phase I Iron Age assemblage from Sedgefield suggests that the Sedgefield droveway system may have had a similar purpose.

Iron Age Phase II

19.7 The subsequent phase of activity on the site was represented by the Phase II Late Iron Age rectilinear enclosure, with associated enclosures and structures situated beyond. This phase of activity evidently took the site from an unenclosed settlement directly to a larger, enclosed settlement which is a common pattern seen on comparable sites of this date, although it ought to be stressed that he investigated enclosure does not have the compact form of the heavily enclosed rectilinear enclosures containing

roundhouse often a single principal house or group of houses, often referred to as 'Jobey' sites. The ditch of the large enclosure was more suggestive of a stock control function and encompassed an area measuring a minimum of 0.55ha. Investigation of the enclosure did not appear to show any re-cuts or alterations to the main ditch, indicating that it may not have been in use for a long enough period of time to allow it to significantly silt up and require extensive maintenance. The upper fills of the ditch most probably represent deliberate backfilling, presumably carried out immediately prior to the creation of the subsequent Roman Iron Age enclosure. No internal features contemporary with the Phase II Iron Age enclosure were identified during the excavation. This may be due to the fact that the enclosure was primarily used for housing and breeding livestock as opposed to human habitation, while a main residential nucleus may have lain outside the excavated area.

19.8 If the main Phase II Iron Age rectilinear enclosure was used primarily for livestock, it would seem that the smaller enclosure, to the east, was used for human habitation. Roundhouse 2 had an internal diameter of 10.16m and an internal floor area of *c*.83m^2 which would have made it suitable for a small-medium sized family or group. Aside from one off-centre posthole within the roundhouse, no other features were noted that could have held roof supports. It is possible that the posthole helped support an upper mezzanine level which could have been used for storage while the ground floor level was used for cooking and day-to-day living. The central hearth within an Iron Age roundhouse was vitally important for warmth and as a method of cooking and heating food. The possible oven structure that was excavated within Roundhouse 2 with its associated flue and rake pit may indicate that bread was being produced there, which would have demanded a more efficient system than a single hearth.

19.9 The roundhouse's adjacent structure, F055, has been interpreted as a stock pen. The construction slot of this structure had steep sides and a flat base but was fairly shallow in depth, indicating that it would have held a low wall or fence, probably constructed of wattle and daub panels, without being able to support a roof. The irregular shape of this second structure in comparison to the adjacent roundhouse also highlights the obvious different functions of the two structures. The gate at the entrance to the stock pen could have been used for securing livestock before they were slaughtered or for stopping other animals entering the pen while carcases were being skinned and butchered.

19.10 Situated to the east of Roundhouse 2 and the adjacent stock pen, but located beyond enclosure ditch F004 was F063, an irregular, sub-circular enclosure with internal divisions. This structure was much too small to have been used for habitation and was therefore most likely used for craft production or industry. There was no evidence of *in-situ* burning within the structure, and its truncated feature fills only produced small amounts of pottery. The structure had its entrance on the northern side and is therefore believed to have been un-roofed as it did not need to take advantage of maximum daylight hours by having its entrance facing south-east.

19.11 Geochemical analysis carried out on the soil in the vicinity of Roundhouse 2 and the adjacent stock pen F055 displayed geochemical enhancement towards the structures, which is consistent with the use of these areas for anthropogenic activities

associated with mixed farming. However, if the structures had had an industrial purpose associated with metalworking, the levels would have been considerably higher. Instead, the results suggest the disposal of waste and other generic settlement activities. For example, the presence of potassium (K) could indicate the disposal of ash from fires and hearths.

19.12 The additional boundary ditches also assigned to the second Late Iron Age phase of occupation on the site, located to the south and west of Roundhouse 2, may have been used to divide the land for agricultural purposes. The palaeoenvironmental assessment of the charred organic remains, particularly from Roundhouse 2, indicates that high quantities of spelt and emmer wheat were being consumed on the site and these crops may have been cultivated in plots demarcated by these boundary ditches or more widely in the surrounding landscape. Alternatively, however, these boundaries could have been used to guide people and/or livestock towards the entrance to the main rectilinear enclosure. Ditches F071 and F068 were both orientated roughly east-west and, although F071 was truncated by later Roman Iron Age ditch F018/F019, they both appeared to have terminated where the original later Iron Age outer enclosure ditch would have been, in very close proximity to the enclosure's entrance. A lack of archaeological evidence from the enclosure's interior makes it difficult to come to a conclusion on precisely what activities took place within this area. A comparable example of similar enclosures was excavated at the Pegswood Moor site near Morpeth (Proctor 2009) where the unenclosed later Iron Age settlement had been replaced with the enclosed later Iron Age settlement. The site included a habitation area with adjacent stock enclosure, as well as a much larger stock enclosure.

Phase III ('Roman Iron Age')

19.13 The Phase III ('Roman Iron Age') phase of activity on the site was characterised by improvement and expansion of the existing complex. The Late Iron Age enclosure was backfilled and re-cut making it larger towards the south, and the smaller enclosure to the east which encompassed Roundhouse 2 and the adjacent stock pen was also expanded to the south, with ditch F010/F011 created to bisect the area. This ditch respected the location of Roundhouse 2, however, indicating that the structure was likely to still be extant and probably in use at this time, even if the smaller boundary ditches F068 and F071 had been backfilled or allowed to silt up. Investigation of the Roman Iron Age enclosure ditch F018/F019 indicated that on the western side there had been at least two phases of construction with a later re-cut intended to widen the original ditch. The probable continuation of use of the roundhouse and stock pen indicates a continuation in function into the Roman Iron Age period. In addition, four small Roman Iron Age features were identified within the bounds of this enclosure again suggesting direct continuity of use into the Roman Iron Age. The small number of features that were within the Roman Iron Age enclosure and that have been dated to the same phase produced quantities of animal bone. It is at this time that the bone assemblage displayed a modification in animal husbandry with donkey and horse becoming the second most dominant species, behind cattle, an increase on the earlier phase of Iron Age activity. Some examples of these bones displayed butchery marks indicating that donkey and horse meat may have been consumed as well as used for transport. In addition, the presence of immature cattle within the earliest of the Iron

Age phases had suggested a predisposition towards meat and dairy products whereas the presence of older cattle from the Roman Iron Age phase might indicate cattle being used as draft animals to assist with ploughing. Considerably larger cattle specimens from the Roman Iron Age phase could be indicative of an introduction of improved stock while an increase in bird bones could indicate a move towards keeping and breeding domestic fowl.

19.14 The finds assemblage from the site similarly shows a change between the Late Iron Age and Roman Iron Age periods. The Iron Age material was dominated by locally-made coarseware cooking, storage and consumption vessels ('Local traditional wares'). This material continued to predominate in Phase 3 'Roman Iron Age', but is now supplemented with amphorae, Gallo-Belgic ceramics, Samain ware and other Roman imports. A notable piece is the sherd of *terra nigra* platter that was found within a pit cutting Roundhouse 2. This type of pottery is an import from northern Gaul and has been found at other sites such as Thorpe Thewles and Stanwick. At Sedgefield it is likely to be a pre-conquest import as it can be identified as one of a number of types which can date to AD 40-70 but which are not found on Roman military sites established after the conquest of north-east England. The Roman pottery, specifically the BB1 from pit F041 in the large enclosure, takes the occupation of the site into the 120s or beyond, but most of the pottery is immediately pre-conquest or Flavian in date (c. 70-100), with only a small quantity of post-Flavian material identified. Briquetage occurs exclusively in Phase III, mostly in the same context as the latest Roman material.

Chronological interpretation and site significance

19.15 The significance of the site largely lies in that is appears to show direct continuity in occupation from the Late Iron Age into the early-Roman period, although not beyond, at least in the excavated area. The radiocarbon dates from the Iron Age phase II structures (42-85 cal AD and 96 cal BC- 66 cal AD at 95.4% probability) make it reasonably certain that Roundhouse 2 was in use and that this part of the landscape achieved its enclosed form before the Roman conquest (of the 70s AD) and indeed possibly much earlier, in the first century BC or in the earlier first century AD.

9.16 It would be tempting to assume that Iron Age Phase III ('Roman Iron Age') represents a re-organisation of the site following the Roman conquest (i.e. pre-AD71). However, the enlargement and elaboration of Phase III may itself be a pre-conquest development: the specialist report points to a distinct possibility that the sherd of Terra Nigra found was imported before the conquest. No Roman pottery occurred in the backfill of Iron Age Phase II features, which might have been expected if Phase II had lasted into the early years of the Roman occupation of the region.

9.17 Whether commencing occurring before or after the conquest of the region, Phase III ('Roman Iron Age') is very much an organic development from Phase II, the east and west sides of the large enclosure being essentially a redefinition of the ditches of Phase II, and roundhouse 2 apparently continuing in use. It is hard to believe that there was not a direct continuity of the resident community doing the farming, but that does not rule out the possibility that there had been a change of ownership or character of the higher-status settlement nucleus that we have hypothesised to have lain outside the excavated area.

9.18 If the farming landscape to which the Eden Drive remains belonged became part of a villa estate, or if a nearby higher status settlement began to adopt features of Roman lifestyle, that might account for the Roman ceramic building material recovered from the backfill of the Phase III ditches. There were five fragments from Roman roof and wall or floor tiles, the largest being the possible voussoir box tile. The fragments are perhaps rather too numerous to be explained as being brought from a distance and used on the site for constructing hearths or ovens (Allason-Jones and Lowther 2016) or ground up for making pigments or abrasives, and rather hint at the existence of a Roman-style stone building connected to this or a nearby site but lying beyond the limits of the excavation such as a villa or bath-house. The possible voussoir box tile suggests that the building would have had a hypocaust, such as those discovered at the nearby rural sites of Ingleby Barwick (definitely a villa: Willis and Carne 2013) and Faverdale (Proctor 2012).

9.19 The use of the site seems to have ceased and the ditches filled up, not far into the second century AD. The occupation chronology is reminiscent of sites excavated on the Northumberland coastal plain (Hodgson *et al.* 2012) where activity and occupation continued beyond the initial Roman conquest but came to an end during the course of the second century, following the building of Hadrian's Wall, although at Sedgefield a much greater amount of Roman material reaches the site. The fact that the occupation detected less that 500m east, on the other side of Beacon Lane, produced only earlier-Roman period pottery and radiocarbon dates suggests abandonment there also and that there may have been a horizon of widespread landscape re-organisation during the second century AD, which may coincide with the foundation of the roadside settlement at East Park Sedgefield and abandonment of the late Iron Age site and reorganisation of the landscape at Thorpe Thewles. Such landscape re-organisation could hypothetically be connected to the emergence of villa estates, as directly attested at Ingleby Barwick, a possibility at Faverdale, and hinted at here by the presence of building material in the final phase of the Eden Drive settlement.

20. PUBLICITY, COPYRIGHT AND CONFIDENTIALITY

20.1 Any publicity will be handled by the client. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

21. STATEMENT OF INDEMNITY

21.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

22. ACKNOWLEDGEMENTS

22.1 Archaeological Research Services Ltd would like to thank all those who contributed to the outcome of this project, in particular John Foster of Taylor Wimpey and David Mason of Durham County Council.

23. REFERENCES

ABMAP – *Animal Bone Metrical Archive Project*, University of Southampton 2003, accessed on the 20 Sept 2016.

Allason-Jones, L. and Lowther, P. 2016. 'Miscellaneous objects', in Haselgrove, C. (ed.), *Cartimandua's Capital? The Late Iron Age Royal Site at Stanwick, North Yorkshire, Fieldwork and Analysis 1981-2011,* C. B. A. Res. Rep. 175, 268-77.

Allason-Jones, L. and Price, J. 2009. 'Glass objects', in Proctor, J., *Pegswood Moor, Morpeth: a Later Iron Age and Romano-British Farmstead Settlement,* Pre-Construct Archaeology Ltd Mono. 11, 60.

Baker. P, and Worley. F. 2013. *Animal bones and Archaeology: Guidelines for best practice*. English Heritage.

Ben Redjeb, T. 1992. 'Une agglomération secondaire des Viromanduens: Noyon (Oise)', *Revue archéologique de Picardie* 1, pars 2, 37–74.

Bull, G. and Payne, S. 1982. 'Tooth eruption and epiphysial fusion in pigs and wild boar' in Ageing and Sexing Animal Bones from Archaeological Sites, (eds) B. Wilson, C. Grigson, S. Payne. Oxford: BAR 109.

Burgess, C.B. 1995. Bronze Age settlements and domestic pottery in northern Britain. In I. Kinnes and G. Varndell (eds) *'Unbaked Urns of Rudely Shape'. Essays on British and Irish Pottery for Ian Longworth*. Oxford, Oxbow Monograph 55: 145-58.

Burnham, B. 2003. 'Roman Britain in 2002. I. Sites explored. 5. Northern counties', *Britannia* 34, 312–22.

Cappers, R. T., Bekker, R. M., & Jans, J. E. 2012. *Digitale Zadenatlas van Nederland/Digital seed atlas of the Netherlands*. Barkhuis.

Coles, J.M. and J. Taylor. 1970. The excavation of a midden in the Culbin Sands, Morayshire, *Proceedings of the Society of Antiquaries of Scotland* 102: 87-100.

Cool, H. E. M. and Price, J. 1998. 'The glass and frit objects', in Cool, H. E. M. and Philo, P. (eds), *Roman Castleford. Excavations 1974-85 Volume I: the Small Finds,* Yorkshire Archaeology 4, 181-94.

Corder, P. and Davies Pryce, T. 1938. 'Belgic and other early pottery found at North Ferriby, Yorks. With comments on pre-Claudian Romano-Gaulish influence in Britain', *Antiquaries Journal* 18, 262-77.

Crowther, D. and Didsbury, P. 1988. 'Redcliff and the Humber', in (eds), Price, J. and Wilson, P.R., *Recent Research in Roman Yorkshire*, BAR British Series 193, 3–20.

Crummy, N. 1983. *The Roman Small Finds from Excavations in Colchester 1971-9,* Colchester Archaeol. Rep. 2.

Cunliffe, B. 2005. *Iron Age Communities in Britain*. 4th Ed. Routledge, London.

Davies, B., Richardson, B. and Tomber, R. 1994. *The Archaeology of Roman London Volume 5: A Dated corpus of Early Roman Pottery from the City of London*, CBA Research Report No 98.

Davis. S, J, M. 1981. Late Pleistocene and Holocene equid remains from Israel. Zoological Journal of the Linnaean Society, 70, 289-312.

Davis, S. 1992. A rapid method for recording information about mammal bones from archaeological sites. English Heritage Ancient Monuments Laboratory Report 19/92.

Dobney. K, Reilly. K. 1988. A method for recording archaeological animal bones: the use of diagnostic zones. *Circaea*, 5(2), 79-96.

Driesch. A von den. 1976. A Guide to the Measurement of Animal Bones from Archaeological Sites. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Harvard University, Bulletin 1.

Eckardt, H. and Crummy, N. 2008. *Styling the Body in Late Iron Age and Roman Britain: a Contextual Approach to Toilet Instruments,* Monographies *Instrumentum* 36.

Grant, A. 1982. The use of tooth wear as a guide to the age of domestic ungulates *in* Wilson, B, Grigson, C and Payne, S (eds), *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109. Oxford: British Archaeological Reports, 91-108.

Guido, M. 1978. *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*, Rep. Res. Comm. Soc. Antiquaries London 35.

Halliday, S.P. 1988. The pottery. In J.R. Sheriff. A hut circle at Ormiston Farm, Newburgh, Fife. *Proceedings of the Society of Antiquaries of Scotland* 118: 99-110.

Hedges, J. 1975. Excavation of two Orcadian burnt mounds at Liddle and Beaquoy, *Proceedings of the Society of Antiquaries of Scotland* 106: 39-98.

Heslop, D. 1987. *The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982*. CBA Research Report 65.

Hodgson, N., J. McKelvey and W. Muncaster. 2012. *The Iron Age of the Northumberland Coastal Plain.* Leicestershire, Tyne and Wear Archives and Museums.

Hoffmann, B. 2003. 'Roman glass from Newstead and Vindolanda', *Annales du 15e Congrès de l'Association Internationale pour l'Histoire du Verre,* Nottingham, 41-4.

Jacomet, S. 2006. *Identification of Cereal Remains from Archaeological Sites*. IPAS, Basel University. 2nd Edition.

Johnson, B. and C. Waddington. 2008. Prehistoric and Dark Age settlement remains from Cheviot Quarry, Milfield Basin, Northumberland. *Archaeological Journal* 165: 107-264.

Levine, M A. 1982. 'The use of crown height measurements and eruption-wear sequences to age horse teeth' in Wilson, B, Grigson, C and Payne, S (eds), Ageing and Sexing Animal Bones from Archaeological Sites. BAR British Series 109. Oxford: British Archaeological Reports, 223-250.

Lister, A. 1996. 'The Morphological Distinction between Bones and Teeth of Fallow Deer (Dama dama) and Red Deer (Cervus elaphus)'. International Journal of Osteoarchaeology 6, 119-43.

Long, C.D. 1988. The Iron Age and Romano-British settlement at Catcote, Hartlepool. *Durham Archaeological Journal* 4: 13-35.

Lowther, P. 2016. 'Ceramic and other evidence for copper-alloy metalworking', in Haselgrove, C. (ed.), *Cartimandua's Capital? The Late Iron Age Royal Site at Stanwick, North Yorkshire, Fieldwork and Analysis 1981-2011,* C. B. A. Res. Rep. 175, 200-6.

Lotherington, R. 2016. *An Archaeological Excavation at St.George's Hospital, Morpeth, Northumberland*. Archaeological Research Services Ltd Report No. 2016/70.

Maltby, M. 1994. "The meat supply in Roman Dorchester and Winchester," in A. R. Hall and H. K. Kenward (edd.), Urban-rural connexions: perspectives from environmental archaeology (Symposia Assoc. Env. Arch. 12) 85-102.

Martin, A. C., & Barkley W.D. 2000. *Seed Identification Manual*. University of California Press.

Mauduit, C. 2005. 'Contribution à l'étude des céramiques antiques en Pays de Bray: nouvelles données sur l'atelier de potiers d'Aux-Marais (Oise)', *SFECAG, Actes du Congrès de Blois*, 701–12.

McBride, R. 2012. 'Fabrics', in Hodgson, N., McKelvey, and Muncaster, W., *The Iron Age on the Northumberland Coastal Plain. Excavations in advance of Development 2002-2010,* Tyne and Wear Archives and Museums Archaeological Monograph 3, 133.

McKelvey, J. 2016. *Land at Beacon Lane, Sedgefield, County Durham: Archaeological Evaluation.* Unpub. Report, AD Archaeology.

Morris, E. 2007. 'Making magic: later prehistoric and early Roman salt production in the Lincolnshire fenland', in Haselgrove, C. and Moore, T., *The Later Iron Age in Britain and Beyond,* Oxford, 430-43.

Morris, E. 2012. 'Iron Age ceramics: pottery and briquetage', 52-78, in Proctor, J., 'The Needles Eye enclosure, Berwick-upon-Tweed, *Archaeol. Aeliana,* 5 ser. 41, 19-122.

Passmore, D.G. and Waddington, C. 2012. *Archaeology and Environment in Northumberland. Till-Tweed Studies Volume 2*. Oxford, English Heritage and Oxbow Books.

Payne. S. 1973. Kill-off patterns in sheep and goats: the mandibles from Asvan Kale´. *Anatolian Studies* 23, 281–303.

Payne. S. 1987. Reference codes for wear states in the mandibular cheek teeth of sheep and goats. Journal of Archaeological Science 14, 609–614.

Petts, D. and C. Gerrard. *Shared Visions: The North-East Regional Research Framework for the Historic Environment*. Archaeological Services Durham University.

Price, J. 2013. 'Glass' in Willis, S. and Carne, P., *A Roman Villa at the Edge of Empire: Excavations at Ingleby Barwick, Stockton-on-Tees, 2003-04*, C. B. A. Res. Rep. 170, 120-5.

Price, J. 2016. 'Roman glass and obsidian vessels', in Haselgrove, C. (ed.), *Cartimandua's Capital? The Late Iron Age Royal Site at Stanwick, North Yorkshire, Fieldwork and Analysis 1981-2011,* C. B. A. Res. Rep. 175, 262-7.

Price, J. and Worrell, S. 2010. 'Roman glass' in Ferris, I. *The Beautiful Rooms are Empty. Excavations at Binchester Roman Fort, County Durham 1976-1981 and 1986-1991, Part 2,* Durham, 268-332.

Proctor, J. 2009. *Pegswood Moor, Morpeth. A Later Iron Age and Romano-British Farmstead Settlement*. Pre-Construct Archaeology Ltd.

Proctor, J. 2012. *Faverdale, Darlington: excavations at a major settlement in the northern frontier zone of Roman Britain*. Pre-Construct Archaeology Ltd.

Pryor, F. 1996. 'Sheep, stockyards and field systems: Bronze Age livestock populations in the Fenlands of eastern England'. Antiquity, 70, 313-24.

Rigby, V. 1993. 'Early Gaulish imports', in Monaghan, J. 1993 *Roman Pottery from the Fortress*, The Archaeology of York 16/7, 725–8.

Scoch, W., Heller, I., Schweingruber, F., Kienast, F. 2004. Wood Anatomy of Central European Species. Online version: www.woodanatomy.ch.

Scott, J. 2015. *Land to the south of Beacon Lane, Sedgefield, County Durham: Archaeological Geophysical Survey*. Unpub. Report, AD Archaeology.

Sherlock, S. and Vyner, B. 2013. 'Iron Age saltworking on the Yorkshire Coast at Street House, Loftus, Cleveland', *Yorkshire Archaeol. J.* 85, 46-67.

Silver, I A. 1969. 'The ageing of domestic animals', in Brothwell, D and Higgs, E (eds.) Science in Archaeology. London: Thames and Hudson, 283-302.

Stace, C. 1997. *New Flora of the British Isles*. Cambridge. Second Edition.

Swain, H. P. 1987. 'The Iron Age pottery', in Heslop, D. H., *The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982,* C. B. A. Res. Rep. 65, 57-71.

Tomber, R. and Dore, J. 1998. *The National Roman Fabric Collection: a Handbook,* MoLAS Monograph 2.

Tyrrell, R. 2015. 'Salt briquetage', in Atkinson, M. and Preston, S. J., Heybridge: a Late Iron Age and Roman Settlement, Excavations at Elms Farm 1993-5, Internet Archaeology 40. http://dx.doi.org/10.11141/ia.40.1.tyrrell11.

van der Veen, M. 1992. *Plant Husbandry Regimes: An Archaeobotanical Study of Farming in Northern England: 1000 BC - AD 500*, Sheffield Archaeological Monographs 3. J.R. Collis Publications, University of Sheffield.

van der Veen, M., Jones, G. 2006. *A Re-Analysis of Agricultural Production and Consumption: Implications for Understanding the British Iron Age*. Vegetation History and Archaeobotany. 15:217-228.

Waddington, C. 2004. *The Joy of Flint. An Introduction to Stone Tools and Guide to the Museum of Antiquities Collection*. Newcastle-upon-Tyne, Museum of Antiquities of Newcastle upon Tyne.

Waddington, C. 2008. Ceramic Analysis, in Johnson, B. and C. Waddington. Prehistoric and Dark Age settlement remains from Cheviot Quarry, Milfield Basin, Northumberland. *Archaeological Journal* 165: 195-222.

Waddington, C. 2009. A Note on Neolithic, Bronze Age, Iron Age and Anglo-Saxon remains at Lanton Quarry near Milfield, Northumberland. *Archaeologia Aeliana* 5th ser. 38: 23-29.

Willis, S. 1996. 'The Romanization of pottery assemblages in the east and north-east of England during the first century A.D.: a comparative analysis', *Britannia* 27, 179–21.

Willis, S. 2016. 'The Iron Age tradition and Roman pottery', in Haselgrove, C. (ed.), *Cartimandua's Capital? The Late Iron Age Royal Site at Stanwick, North Yorkshire, Fieldwork and Analysis 1981-2011,* CBA Research Report 175, 207-55.

Willis, S. 2016. 'The briquetage containers and salt networks in north-east England', in Haselgrove, C. (ed.), *Cartimandua's Capital? The Late Iron Age Royal Site at Stanwick, North Yorkshire, Fieldwork and Analysis 1981-2011,* C. B. A. Res. Rep. 175, 256-61.

Willis, S. and P.Carne. 2013. A Roman Villa at the edge of Empire. Excavations at Ingleby Barwick, Stockton-on-Tees. Archaeological Services Durham University.

Proctor, J. 2009. *Pegswood Moor, Morpeth. A Later Iron Age and Romano-British Farmstead Settlement*. Pre-Construct Archaeology Monograph 11.

APPENDIX I- CONTEXT REGISTER

Context number	Description	Feature number
001	Topsoil-dark brown sandy clay loam	-
002	Brown sandy clay subsoil	-
003	Natural geology-clay/sand and gravel	-
004	Cut of linear ditch	004
005	Fill of [004]	004
006	Cut of linear ditch	006
007	Fill of [006]	006
008	Re-cut of linear ditch	005
009	Fill of [008]	005
010	Fill of [011]	007
011	Cut of linear ditch	007
012	Fill of [013]	008
013	Re-cut of [012]	008
014	Fill of [015]	009
015	Cut of linear ditch re-cut by [012]	009
016	Cut of linear ditch	012
017	Basal fill of [016]	012
018	Secondary fill of [016]	013
019	Upper fill of [016]	013
020	Cut of plough furrow	001
021	Fill of [020]	001
022	Cut of linear ditch	010/011
023	Primary fill of [022]	010/011
024	Secondary fill of [022]	010/011
025	Cut of RH1 drip ditch	014
026	fill of [025]	014
027	Cut of posthole	026
028	Fill of [027]	026
029	Primary fill of [016]	012
030	Secondary fill of [016]	012
031	Third fill of [016]	012
032	Fourth fill of [016]	012
033	Re-cut of [016]	013
034	Cut of ditch	018
035	Lower fill of [034]	018
036	Upper fill of [034]	018
037	Cut of ditch	020
038	Lower fill of [037]	020
039	Upper fill of [037]	020
040	Cut of ditch	020
041	Fill of [040]	020
042	Fill of [040]	020
043	Fill of [040]	020
044	Fill of [040]	020
045	Cut of ditch	021
046	Re-cut of [045]	022
047	Cut of pit	015
048	Upper fill of [047]	015
049	Cut of pit	016
050	Fill of [049]	016

051	Secondary fill of [049]	016
052	Cut of pit	017
053	Primary fill of [052]	017
054	Secondary fill of [052]	017
055	Cut of large stakehole	017
056	Fill of [055]	017
057	Cut of stakehole	017
058	Fill of [057]	017
059	Cut of stakehole	017
060	Fill of [059]	017
061	Fill of [040]	020
062	Fill of [046]	022
063	Fill of [046]	022
064	Cut of ditch	023
065	Lower fill of [064]	023
066	Upper fill of [064]	023
067	Primary fill of [047]	015
068	Cut of shallow pit	024
069	Fill of pit [068]	024
070	Cut of RH1 drip ditch terminal	014
071	Fill of [070]	014
072	Cut of RH1 drip ditch	014
073	Fill of [072]	014
074	Cut of ditch	011
075	Fill of [074]	011
076	Cut of ditch	010
077	Fill of [076]	010
078	Deposit	-
079	Cut of large ditch	018
080	Cut of ditch	019
081	Upper fill of [079]	018
082	Fourth fill of [079]	018
083	Secondary fill of [079]	018
084	Third fill of [079]	018
085	Basal fill of [079]	018
086	Upper fill of [080]	019
087	Secondary fill of [080]	019
088	Primary fill of [080]	019
089	Cut of pit	025
090	Fill of pit [089]	025
091	Cut of ring gully	014
092	Fill of [091]	014
093	Cut of linear ditch	015
094	Primary fill of [093]	015
095	Secondary fill of [093]	015
096	Cut of linear ditch	019
097	Primary fill of [096]	019
098	Secondary fill of [096]	019
099	Trampled deposit between [045] and [089]	-
100	Cut of ditch	004
101	Fill of [100]	004
102	Cut of ditch	007
103	Fill of [102]	007

104	Cut of ditch, cutting [102]	009
105	Fill of [104]	009
106	Cut of small gully cutting [104]	027
107	Fill of [106]	027
108	Cut of ditch cutting [106]	008
109	Fill of [108]	008
110	Cut of ditch	009
111	Fill of ditch [110]	009
112	Cut of ditch	020
113	Fill of [112]	020
114	Cut of linear ditch	019
115	Primary fill of [115]	019
116	Secondary fill of [115]	019
117	Cut of linear ditch	018
118	Primary fill of [117]	018
119	Secondary fill of [117]	018
120	Cut of ring gully	014
121	Fill of [120]	014
122	Cut of ditch	028
123	Fill of ditch [110]	028
124	Cut of ditch	029
125	Fill of [124]	029
126	Cut of ditch/gully	031
127	Fill of [126]	031
128	Cut of posthole	016
129	Fill of [128]	016
130	Cut of linear ditch	023
131	Lower fill of [130]	023
132	Upper fill of [130]	023
133	Cut of ditch	028
134	Fill of [133]	028
135	Cut of ditch	031
136	Fill of [135]	031
137	Cut of pit	033
138	Fill of [137]	033
139	Cut of linear ditch	034
140	Fill of [139]	034
141	Cut of ditch	045
142	Fill of [141	045
143	Cut of ditch	030
144	Fill of [143]	030
145	Cut of large pit	032
146	Fill of [145]	032
147	Cut of linear ditch	029
148	Fill of [147]	029
149	Cut of pit	029
150	Fill of [149]	029
151	Cut of large pit	035
152	Fill of [151]	035
153	Cut of ditch	034
154	Fill of [153]	034
155	Cut of ditch	036
156	Fill of [155]	036

157	Cut of ditch	046
158	Fill of [157]	046
159	Cut of narrow ditch	037
160	Fill of [159]	037
161	Cut of large pit, same as [145]	032
162	Fill of [161], same as (146)	032
163	Cut of ditch	045
164	Fill of [163]	045
165	Cut of ditch	031
166	Fill of [165]	031
167	Cut of posthole	039
168	Fill of [167]	039
169	Cut of small linear ditch	038
170	Fill of [169]	038
171	Fill of [040]	020
172	Fill of [040]	020
173	Fill of [040]	020
174	Fill of [040]	020
175	Cut of ditch	030
176	Fill of [175]	030
177	Cut of pit	041
178	Secondary fill of [177]	041
179	Third fill of [177]	041
180	Fourth fill of [177]	041
181	Fill of ditch	030
182	Fill of [181]	030
183	Fill of ditch	031
184	Fill of [183]	031
185	Primary fill of [177]	041
186	Cut of linear ditch	049
187	Fill of [187]	049
188	Cut of linear ditch	037
189	Fill of [188]	037
190	Cut of linear ditch	036
191	Fill of [190}	036
192	Cut of linear ditch	034
193	Fill of ditch [192]	034
194	Cut of ditch terminal	042
195	Fill of [194]	042
196	Cut of ditch	028
197	Fill of [196]	028
198	Cut of pit	035
199	Fill of [198]	035
200	Cut of ditch	045
201	Fill of [200]	045
202	Cut of ditch	030
203	Fill of [202]	030
204	Cut of ditch	046
205	Fill of [204]	046
206	Cut of ditch	030
207	Fill of [206]	030
208	Cut of pit	035
209	Fill of [208]	035

210	Cut of ditch	037
211	Fill of [210]	037
212	Cut of ditch	031
213	Fill of [212]	031
214	Cut of ditch	043
215	Basal fill of [214]	043
216	Upper fill of [214]	043
217	Cut of linear ditch	036
218	Fill of [217]	036
219	Cut of linear	037
220	Fill of [219]	037
223	Cut of ditch	043
224	Fill of [223]	043
225	Fill of [223]	043
226	Cut of ditch	043
227	Fill of [226]	043
228	Cut of ditch	043
229	Fill of [228]	043
230	Cut of ditch	047
231	Fill of [230[	047
232	Basal fill of [230]	047
233	Cut of ditch	042
234	Fill of [233]	042
235	Cut of ditch	030
236	Fill of [235]	030
237	Cut of ditch	044
238	Fill of [237]	044
239	Cut of large linear ditch	044
240	Cut of linear ditch	044
241	Upper fill of ditch [240]	044
242	Fill of ditch [240]	044
243	Fill of [240]	044
244	Primary fill of [240]	044
245	Fill of ditch [239]	044
246	Primary fill of [239	044
247	Cut of linear ditch	048
248	Fill of [247]	048
249	Cut of ditch	018
250	Cut of ditch	019
251	Cut of ditch	019
252	Basal fill of [251]	019
253	Fill of [251]	019
254	Fill of [251]	019
255	Upper fill of [251]	019
256	Primary fill of [249]	018
257	Secondary fill of [249]	018
258	Primary fill of [250]	019
259	Secondary fill of [250]	019
260	Cut of large ditch	019
261	Primary fill of [260]	019
262	Secondary fill of [260]	019
263	Third fill of [260]	019
264	Upper fill of [260]	019

265	Cut for ditch	018
266	Primary fill of [265]	018
267	Secondary fill of [265]	018
268	Upper fill of [265]	018
269	Cut for ditch	042
270	Fill of [269]	042
271	Fill of [251]	019
272	Cut of ditch, same as [247]	048
273	Fill of [272], same as (248)	048
274	Cut of ditch, same as [269]	048
275	Fill of ditch [274]	048
276	Cut of posthole	056
277	Fill of [276]	056
278	Cut of short linear ditch	056
279	Fill of [278]	056
280	Heat-affected clay	060
281	Cut of pit	058
282	Fill of [281]	058
283	Cut of pit	080
284	Fill of [283]	080
285	Cut of pit	057
286	Fill of [285]	057
287	Cut of short linear ditch	056
288	Fill of [287]	056
289	Cut of roundhouse ditch	055
290	Fill of [289]	055
291	Cut of pit	061
292	Fill of [291]	061
293	Cut of pit	062
294	Fill of [294]	062
295	Fill of [294]	062
296	Cut of short linear ditch	055
297	Fill of [296]	055
298	Cut of drip gully	055
299	Fill of [298]	055
300	Cut of plough furrow	003
301	Fill of [300]	003
302	Cut of ditch	003
303	Fill of [302]	003
304	Fill of [302]	003
305	Cut of ditch	003
306	Fill of [305]	003
307	Cut of pit	101
308	Fill of [307]	101
309	Fill of [293]	062
310	Cut of drip ditch	059
311	Primary fill of [310]	059
312	Secondary fill of [310]	059
313	Cut of curvilinear gully	055
314	Fill of [313]	055
315	Cut of ditch	006
316	Fill of [315]	006
317	Cut of ditch	011

318	Basal fill of [317]	011
319	Secondary fill of [317]	011
320	Upper fill of [317]	011
321	Primary fill of [313]	055
322	Cut of gully terminus	055
323	Fill of [322]	055
324	Cut of gully	055
325	Fill of [324]	055
326	Cut of drip gully	059
327	Basal fill of [326]	059
328	Fill of [326]	059
329	Fill of [326]	059
330	Fill of [326]	059
331	Cut of gully	055
332	Fill of [331]	055
333	Primary fill of [331]	055
334	Cut of pit	102
335	Fill of [334]	102
336	Cut of ring gully	059
337	Primary fill of [336]	059
338	Secondary fill of [336]	059
339	Basal fill of [293]	062
340	Cut of posthole	103
341	Fill of [340	103
342	Fill of postpipe	103
343	Upper fill of [324]	055
344	Cut of ring gully	059
345	Primary fill of [344]	059
346	Secondary fill of [344]	059
347	Third fill of [344]	059
348	Cut of ring gully	059
349	Primary fill of [348]	059
350	Secondary fill of [348]	059
351	Third fill of [348]	059
352	Cut of linear ditch	097
353	Fill of [352]	097
354	Cut of drip gully	059
355	Original cut of RH 2 drip gully	059
356	Fill of [355]	059
357	Re-cut of [355]	059
358	Primary fill of [357]	059
359	Secondary fill of [357]	059
360	Third fill of [357]	059
361	Re-cut of [357]	059
362	Primary fill of [361]	059
363	Upper fill of [261]	059
364	Cut for posthole	104
365	Fill of [364]	104
366	Cut of posthole	097
367	Fill of posthole [366]	097
368	Cut of posthole	097
369	Fill of posthole [368]	097
370	Cut of posthole	097

371	Fill of posthole [370]	097
372	Fill of [354]	059
373	Fill of [354]	059
374	Fill of [354]	059
375	Fill of [354]	059
376	Fill of [354]	059
377	Cut of ditch	064
378	Fill of [377]	064
379	Cut of ditch	004
380	Fill of [379]	004
381	Cut of gully	068
382	Basal fill of [351]	068
383	Upper fill of [381]	068
384	Cut of roundhouse gully	093
385	Fill of [384]	093
386	Cut of ditch	071
387	Fill of [386]	071
388	Cut of gully	066
389	Fill of [388]	066
390	Cut of gully	004
391	Fill of [390]	004
392	Cut of gully	004
393	Fill of [392]	004
394	Cut of ditch	065
395	Primary fill of [394]	065
396	Secondary fill of [394]	065
397	Third fill of [394]	065
398	Cut of ditch	010
399	Primary fill of [398]	010
400	Fill of [398]	010
401	Re-cut of ditch [398]	011
402	Primary fill of [401]	011
403	Fill of [401]	011
404	Cut of pit	070
405	Redeposited natural in [404]	070
406	Fill of pit [404]	070
407	Upper fill of pit [404]	070
408	Cut of ditch	020
409	Fill of ditch [408]	020
412	Cut of possible posthole	095
413	Fill of [412]	095
414	Cut of ditch	019
415	Fill of [414]	019
416	Cut of gully	071
417	Fill of [416]	071
418	Cut of roundhouse ditch	063
419	Fill of [418]	063
420	Cut for ditch terminus	075
421	Fill of [420]	075
422	Cut for ditch terminus	075
423	Fill of [422]	075
424	Cut of pit	090
425	Fill of [424]	090

426	Cut of roundhouse ditch	063
427	Fill of [426]	063
428	Cut of ditch	069
429	Fill of [428]	069
430	Cut of ditch	073
431	Primary fill of [430	073
432	Secondary fill of [430]	073
433	Cut of ditch	073
434	Primary fill of [433]	073
435	Secondary fill of [433]	073
436	Third fill of [433]	073
437	Cut of ditch	004
438	Basal fill of [437]	004
439	Fill of [437]	
440	Cut of beam slot	089
441	Fill of [440]	089
442	Cut of ditch	021
443	Cut of ditch	022
444	Primary fill of [442]	021
445	Secondary fill of [442]	021
446	Third fill of [442]	021
447	Fourth fill of [442]	021
448	Cut of ditch	018
449	Fill of [448]	018
450	Re-cut	019
451	Primary fill of [450]	019
452	Secondary fill of [450]	019
453	Upper fill of [450]	019
454	Cut of ditch	072
455	Primary fill of ditch	072
456	Secondary fill of ditch	072
457	Upper fill of ditch [454]	072
458	Cut of pit	076
459	Primary, coal fill of [458]	076
460	Upper fill of [458]	076
461	Cut of pit	096
462	Lower fill of [461]	096
463	Upper fill of [461]	096
464	Cut of pit	078
465	Fill of [464]	078
466	Cut of ditch	077
467	Fill of [466	077
468	Cut of ditch	007
469	Fill of [468]	007
470	Fill of [468]	007
471	Cut of gully	007
472	Fill of [471]	007
473	Cut of gully	007
474	Fill of [473]	007
475	Cut of ditch	007
476	Fill of [475]	007
477	Fill of [475]	007
478	Cut of pit	084

479	Fill of [478]	084
480	Cut of ditch	092
481	Fill of [480]	092
482	Cut of ditch	018
483	Fill of [482]	018
484	Cut of ditch	077
485	Fill of [484]	077
486	Cut of pit	087
487	Fill of [486]	087
488	Cut of pit	094
489	Lower fill of [488]	094
490	Upper fill of [488]	094
491	Cut of gully	059
492	Lower fill of [491]	059
493	Upper fill of [491]	059
494	Cut of ditch	012
495	Lower fill of [494]	012
496	Upper fill of ditch	012
500	Cut of ditch	073
501	Cut of gully	077
502	Fill of [500] and [501]	073/074
503	Cut of ditch	074
504	Cut of ditch	105
505	Primary fill of [503]	074
506	Secondary fill of [503]	074
507	Upper fill of [503]	074
508	Primary fill of [504]	105
509	Silty band within [504]	105
510	Slumping within [504]	105
511	Mid fill of [504]	105
512	Mid fill of [504]	105
513	Upper fill of [504]	105
514	Upper fill of [503]	074
515	Cut of ditch	073
516	Fill of [515]	073
517	Fill of [515]	073
518	Fill of [515]	073
519	Fill of [515]	073
520	Fill of [515]	073
521	Cut of gully	059
522	Fill of [521]	059
523	Cut of ditch	064
524	Fill of [523]	064
525	Cut of posthole	091
526	Packing stones in posthole [525]	091
527	Cut of pit	091
528	Backfill of [527]	091
529	Cut of ditch	068
530	Fill of [529]	068
531	Cut of ditch	010
532	Fill of [531]	010
533	Cut of large ditch	018
534	Cut for ditch	074

535	Secondary fill of ditch [537]	073
536	Primary fill of ditch [537]	073
537	Cut of ditch	073
538	Primary fill of [533]	018
539	Mid fill of [533]	018
540	Mid fill of [533]	018
541	Upper fill of [533]	018
542	Primary fill of ditch [534]	074
543	Mid fill of [534]	074
544	Upper fill of [534]	074
545	Cut of ditch	082
546	Fill of ditch [545]	082
547	Cut of ditch	074
548	Fill of [547]	074
549	Cut of ring ditch	088
550	Fill of [549]	088
551	Fill of [549]	088
552	Cut of ring gully	019
553	Fill of [552]	019
554	Cut of ditch	019
555	Primary fill of [554]	019
556	Secondary fill of [554]	019
557	Third fill of [554]	019
558	Fourth fill of [554]	019
559	Primary fill of [547]	074
560	Mid fill of [547]	074
561	Slumping within [547]	074
562	Mid fill of [547]	074
563	Cut for gully	105
564	Fill of [563]	105
565	Cut of ditch	086
566	Fill of [565]	086
567	Cut for ditch terminus	010/011
568	Fill of [567]	010/011
569	Cut of ditch	051
570	Fill of [569]	051
571	Cut of ditch	051
572	Primary fill of [571]	051
573	Secondary fill of [571]	051
574	Third fill of [571]	051
575	Cut of ditch	085
576	Fill of ditch [575]	085
577	Cut of pit	085
578	Fill of pit [577]	085
579	Cut of ditch	085
580	Fill of ditch [579]	085
581	Cut for posthole	099
582	Fill of [581]	099
583	Primary fill of [581]	099
584	Cut of ditch	065
585	Primary fill of [584]	065
586	Secondary fill of [584]	065
587	Cut of gully	

588	Fill of [587]	
589	Cut for posthole	098
590	Fill of [589]	098
591	Cut of ditch	
592	Fill of [591]	
593	Cut of ditch	051
594	Primary fill of [593]	051
595	Secondary fill of [593]	051
596	Third fill of [593]	051
597	Cut of shallow gully	066
598	Fill of [597]	066
603	Cut of gully	100
604	Fill of [603]	100
605	Cut of gully	
606	Fill of [605]	

APPENDIX II- PHOTOGRAPH REGISTER

Shot no.	Direction	Scale	Context no.	Description	Date
1	W	1 m, 2 m		Trench 1, general shot	09/06/2017
2	W	1 m, 2 m		Trench 1, general shot	09/06/2017
3	W	1m, 2 m		Trench 1, general shot	09/06/2017
4	S	2 m		Trench 1, N facing section	09/06/2017
5	S	1 m, 2 m		Trench 2, general	12/06/2017
6	W	1 m, 2 m		Trench 2, section	12/06/2017
7	N	1 m, 2 m		Trench 3, general shot	12/06/2017
8	N	1 m, 2 m		Trench 3, general shot	12/06/2017
9	N	1 m		Trench 3, section	12/06/2017
10	NW	1 m	[004], (005)	SE facing section of ditch [004]	22/06/2017
11	NW	1 m	[004], (005)	Location of section SE [004]	22/06/2017
12	NW	1 m	[006], [008]	SE facing section of ditch	22/06/2017
13	NW	1 m	[006], [008]	Shot of ditch [006], [008]	22/06/2017
14	NW	2 m	[011], [013], [015]	SE facing section of [011], [013], [015]	22/06/2017
15	NW	2 m	[011], [013], [015]	SE facing section of [011], [013], [015]	22/06/2017
16	NW	2 m	[011], [013], [015]	Location of [011], [013], [015]	22/06/2017
17	NW	1 m	[016], (017), (018), (019)	SE facing section of ditch [016]	26/06/2017
18	NW	1 m	[016]	Shot of ditch [016]	26/06/2017
19	NW	2 m	[020]	Furrow	26/06/2017
20	W	2 m	[020]	Furrow	26/06/2017
21	SW	2x2 m		RH1 Pre-excavation	27/06/2017
22	SW	1 m	[022]	Linear relationship	27/06/2017
23	SW	1 m	[016]	Slot and location	27/06/2017
24	NE	1 m	[025]	RH1, drip ditch slot	27/06/2017
25	SE	1 m	[022]	Relationship slot	27/08/2017
26	SE	1 m	[025]	Ditch [022], gully [025]	27/08/2017
27	SE	1 m	[027]	Post-hole [027]	27/06/2017
28	NW	1 m	[034], [037]	Ditches [034], [037]	28/06/2017
29	N	2X m	[034], [037]	Ditches [034], [037]	28/06/2017
30	N	2 m	[040], [045], [046]	S facing section of [040], [045], [046]	28/06/2017
31	N	2 m	[040], [045], [046]	S facing section of [040], [045], [046]	28/06/2017
32	N	2 m	[040], [045], [046]	S facing section of [040], [045], [046]	28/06/2017
33	N	2 m	[040], [045], [046]	S facing section of [040], [045], [046]	28/06/2017
34	N	2 m	[040], [045], [046]	Slot and location	28/06/2017
35	SW	25 cm	[049]	Pit in roundhouse 1	28/06/2017
36	SW	25 cm	[049]	Pit in roundhouse 1	30/06/2017
37	SW	25 cm	[055], [057]	Pair of stake holds within roundhouse 1	30/06/2017
38	SW	25 cm	[055], [057]	Pair of stake holds within roundhouse 1	30/06/2017
39	SW	5 cm	[059]	Stake hole within roundhouse 2	30/06/2017

40	SW	5 cm	[059]	Stake hole within roundhouse 2	30/06/2017
41	SW	25 cm	[052]	Pit in roundhouse 1	30/06/2017
42	SW	25 cm	[052]	Pit in roundhouse 1	30/06/2017
43	SW	2, 1 m	[049] [052]	Pair of pits within roundhouse 2	30/06/2017
44	SW	2, 1 m	[049] [052]	Pair of pits within roundhouse 2	30/06/2017
45	SW	1 m	[025]	RH 1 terminus	30/06/2017
46	SW	1 m	[025]	RH 1 terminus, no board	30/06/2017
47	SE	1 m	[064]	NW facing section	30/06/2017
48	SW	1 m	025, 047	RH 1 drip ditch terminus	30/06/2017
49	SW	1 m	025, 047	RH 1 drip ditch terminus, no board	30/06/2017
50			025, 047	Relationship	30/06/2017
51	SE	1 m	[068]	NW facing section of [068]	30/06/2017
52	SE	1 m	[068]	NW facing section of [068]	30/06/2017
53	SW	2 m	[074]	Ditch [074] cutting smaller ditch [076]	03/07/2017
54	SW	2 m	[074]	Ditch [074] cutting smaller ditch [076]	03/07/2017
55	SW	2 m	[074]	Ditch [074] cutting smaller ditch [076]	03/07/2017
56	SW	2 m	[074]	Ditch [074] cutting smaller ditch [076]	03/07/2017
57	N	2 m	[080], [079]	S facing section of ditch [079], [080]	03/07/2017
58	N	2 m	[080], [079]	S facing section of ditch [079], [080]	03/07/2017
59	N	2 m	[080], [079]	S facing section of ditch [079], [080]	03/07/2017
60	N	2 m	[080], [079]	S facing section of ditch [079], [080]	03/07/2017
61	N	1 m	[089]	S facing section of pit [089]	03/07/2017
62	N	1 m	[089]	S facing section of pit [089], no board	03/07/2017
63	W	1 m	[045]	E facing section of ditch [045]	03/07//2017
64	W	1 m	[045]	E facing section of ditch [045], no board	03/07//2017
65	W	1 m	[045]	E facing section of ditch [045], no board	03/07//2017
66	NE	1 m	[091]	Ring gully	03/07/2017
67	NE	1 m	[093]	Two liners	03/07/2017
68	NE	1 m	[096]	Relationship slot	03/07/2017
69	SE	1 m	[016]	Section of ditch	03/07/2017
70	SE	1 m	[016]	Section of ditch	03/07/2017
71	NE	25 cm	96	Extension for linear	04/07/2017
72	SW	25 cm	96	Corner	04/07/2017
73	SE	1 m	[100]	NW facing section of [100]	04/07/2017
74	SE	1 m	[100]	NW facing section of [100], no board	04/07/2017
75	SE	2 m	[102], [104], [106[, [108]	NW facing section of [102], [104], [106[, [108]	04/07/2017
76	SE	2 m	[102], [104], [106[, [108]	NW facing section of [102], [104], [106[, [108], no board	04/07/2017
77	SE	1 m, 2 m	100, 102, 104, 108, 106	NW facing section of 100, 102, 104, 108, 106	04/07/2017

78	NW	20 cm	[110]	SE facing section of [110]	04/07/2017
79	NW	20 cm	[110]	SE facing section of [110]	04/07/2017
80	NW	20 cm	[110]	SE facing section of [110]	04/07/2017
81	SW	0.50 m	[112]	Ditch F0 21	05/07/2017
82	SW	0.50 m	[112]	Ditch F0 21	05/07/2017
83	SW	0.50 m	[112]	Ditch F0 21	05/07/2017
84	N	1 m	[045], [089]	S Facing section of ditch and pit	05/07/2017
85	N	1 m	[045], [089]	S Facing section of ditch and pit	05/07/2017
86	S	1 m	[045], [046]	N facing section	05/07/2017
87	S	1 m	[045], [046]	Location shot	05/07/2017
88	NW	2 m	[114]	Ring gully [120]	04/07/2017
89	NW	2 m	[117]	Liners [117]	05/07/2017
90	NW	2 m	[120]	[120] section	05/07/2017
91	NW	0.50 m	[122]	SE facing section of ditch [122]	05/07/2017
92	NW	0.50 m	[122]	SE facing section of ditch [122]	05/07/2017
93	NW	0.50 m	[122]	SE facing section of ditch [122]	05/07/2017
94	NW	0.50 m	[122]	SE facing section of ditch [122]	05/07/2017
95	NW	0.50 m	[124]	SE facing section of ditch [124]	05/07/2017
96	NW	0.50 m	[124]	SE facing section of ditch [124], no board	05/07/2017
97	N	0.50 m	[126]	Ditch/Gully	05/07/2017
98	N	0.50 m	[126]	Ditch/Gully	05/07/2017
99	N	0.50 m	[126]	Ditch/Gully	05/07/2017
100	N	0.50 m	[126]	Ditch/Gully	05/07/2017
101	SW	5 cm	[128]	Post-hole within roundhouse 1	05/07/2017
102	SW	5 cm	[128]	Post-hole within roundhouse 1	05/07/2017
103	SW	5 cm	[128]	Post-hole within roundhouse 1	05/07/2017
104	NE	1 m	133, 135	Ditch relationship	05/07/2017
105	NE	1 m	133, 135	Ditch relationship, no board	05/07/2017
106	S	0.50 m	[068]	Post excavation of pit [068]	06/07/2017
107	S	0.50 m	[068]	Post excavation of pit [068], without board	06/07/2017
108	N	1 m, 0.50 m	137	Pit	07/07/2017
109	N	1 m, 0.50 m	137	Pit	07/07/2017
110	N	1 m, 0.50 m	137	Pit	07/07/2017
111	W	0.50 m	139	Linear terminus [139]	07/07/2017
112	W	0.50 m	139	Linear terminus [139]	07/07/2017
113	W		139	Linear terminus [139]	07/07/2017
114	NW	1 m	[141] [143]	SE facing section of [141], [143]	07/07/2017
115	NW	1 m	[141] [143]	SE facing section of [141], [143]	07/07/2017
116	NW	1 m	[141] [143]	SE facing section of [141], [143], no board	07/07/2017
117	N	1 m	[145]	S facing section of [145]	07/07/2017
118	N	1 m	[145]	S facing section of [145], no board	07/07/2017
119	W	0.50 m	[145]	E facing section of [145]	07/07/2017
120	W	0.50 m	[145]	E facing section of [145], no board	07/07/2017
121	W	0.50 m	[145]	E facing section of [145], no board	07/07/2017
122	SE	50 cm	[147], [149]	Pit [149] cutting linear feature [147]	07/07/2017
123	SE	50 cm	[147], [149]	Pit [149] cutting linear feature	07/07/2017

				[147]	
124	SE		[147], [149]	Pit [149] cutting linear feature [147]	07/07/2017
125	E	0.50/ 2 m	[151]	Digger trench	07/07/2017
126	E	0.50 m	[153]	Ditch [153] cutting ditch [155]	10/07/2017
127	E	0.50 m	[153]	Ditch [153] cutting ditch [155]	10/07/2017
128	E	0.50 m	[153]	Ditch [153] cutting ditch [155]	10/07/2017
129	SE	0.50 m	[157]	NW facing section of ditch [157]	10/07/2017
130	SE	0.50 m	[157]	NW facing section of ditch [157]	10/07/2017
131	SE	0.50 m	[157]	NW facing section of ditch [157], no board	10/07/2017
132	NE	1/ 2 m	[130], [40]	SW facing section of [130], [40]	10/07/2017
133	NE	1/ 2 m	[130], [40]	SW facing section of [130], [40], no board	10/07/2017
134	NE	2 m	[159]	Ditch slot	10/07/2017
135	NE	2 m	[159]	Ditch slot, no board	10/07/2017
136	S	1 m	[161]	N facing section of pit [161]	10/07/2017
137	S	1 m	[161]	N facing section of pit [161], without board	10/07/2017
138	E	0.50 m	[161]	W facing section of pit [161]	10/07/2017
139	E	0.50 m	[161]	W facing section of pit [161]	10/07/2017
140	E	0.50 m	[161]	W facing section of pit [161], , without board	10/07/2017
141	N	0.50 m	[163], [165]	Ditches [163], [165]	10/07/2017
142	N	0.50 m	[163], [165]	Ditches [163], [165], no board	10/07/2017
143	E	0.50 m	167	Posthole	10/07/2017
144	E	0.50 m	[167]	Posthole	10/07/2017
145	W	0.50 m	[169]	Linear gully	10/07/2017
146	W	0.50 m	[169]	Linear gully	10/07/2017
147	W	0.50 m	[169]	Linear gully	10/07/2017
148	E	0.50 m	[169]	Linear gully	10/07/2017
149	E	0.50 m	[169]	Linear gully	10/07/2017
150	E	0.50 m	[169]	Linear gully	10/07/2017
151	E	0.50 m	[169]	Linear gully	10/07/2017
152	NE	0.50 m	[175]	SW facing section of ditch [175]	10/07/2017
153	NE	0.50 m	[175]	SW facing section of ditch [175]	10/07/2017
154	NE	0.50 m	[175]	SW facing section of ditch [175]	10/07/2017
155	N	0.50 m	[181], [185]	Ditches [181], [183]	11/07/2017
156	N	0.50 m	[181], [185]	Ditches [181], [183]	11/07/2017
157	SW	2 m, 0.50 m	[177]	Large pit [177]	11/07/2017
158	SW	2 m, 0.50 m	[177]	F041	11/07/2017
159	SW		[177]	F041	11/07/2017
160	S	0.50 m	[186]	Linear terminus	11/07/2017
161	S	0.50 m	[186]	Linear terminus	11/07/2017
162	S		[186]	Linear terminus	11/07/2017
163	NW	0.50 m	[188] and [190]	Pair of linear features	11/07/2017
164	NW	0.50 m	[188] and [190]	Pair of linear features	11/07/2017
165	NW		[190]	Relationship slot	11/07/2017
166	NE	0.50 m	[192]	Terminal of [192]	11/07/2017

167	NE	0.50 m	[192]	Terminal of [192]	11/07/2017
168	NE	0.50 m	[192]	Terminal of [192], no board	11/07/2017
169	NE	1 m	[196], [198]	SW section of [196] and [198]	11/07/2017
170	NE	2 m	[196], [198]	SW section of [196] and [198]	11/07/2017
171	NE	3 m	[196], [198]	SW section of [196] and [198]	11/07/2017
172	SE	1 m	[200], [202], [204]	NW section of [200], [202], [204]	11/07/2017
173	SE	2 m	[200], [202], [204]	NW section of [200], [202], [204], no board	11/07/2017
174	NE	0.50 m	206, 208, 210	Intersection	12/07/2017
175	NE	0.50 m	206, 208, 211	Intersection, no board	12/07/2017
176	NW	1 m	[196], [198]	SE facing section of [196], [198]	12/07/2017
177	NW	2 m	[196], [198]	SE facing section of [196], [198]	12/07/2017
178	E	1 m	[194]	Ditch terminus	12/07/2017
179	E	2 m	[194]	Ditch terminus	12/07/2017
180	E	1 m	[194]	Ditch terminus	12/07/2017
181	S	0.50 m	[212]	Ditch terminus F.31	12/07/2017
182	S	0.50 m	[212]	Ditch terminus F.32	12/07/2017
183	S	0.50 m	[212]	Ditch terminus F.33	12/07/2017
184	S	0.50 m	[212]	Ditch terminus F.34	12/07/2017
185	NW	1 m	[214]	SE facing section of [214]	12/07/2017
186	NW	1 m	[214]	SE facing section of [214], no board	12/07/2017
187	SW	0.50 m	[217]	Linear feature [217] F036	12/07/2017
188	SW	0.50 m	[217]	Linear feature [217] F036	12/07/2017
189	SW		[217]	Linear feature [217] F037	12/07/2017
190	NE	1 m	219	Pit [221] cutting linear [219]	12/07/2017
191	NE	2 m	220	Pit [221] cutting linear [219]	13/07/2017
192	NE		221	Section N overcut	13/07/2017
193	N	1 m	[230]	S facing section of ditch [230]	13/07/2017
194	N	2 m	[230]	S facing section of ditch [230]	13/07/2017
195	N	3 m	[230]	S facing section of ditch [230], no board	13/07/2017
196	N	1 m, 0.50 m	[223], [226], [228]	Ditches x 3	13/07/2017
197	E	1 m	[233]	Ditch cutting [235] and [237] ditches	13/07/2017
198	E	2 m	[233]	Ditch cutting [235] and [237] ditches	13/07/2017
199	E	3 m	[233]	Ditch cutting [235] and [237] ditches	13/07/2017
200	E	4 m	[233]	Ditch cutting [235] and [237] ditches	13/07/2017
201	W	5 m	[233]	Ditch cutting [235] and [237] ditches	13/07/2017
202	NE	2 m	[239], [240]	SW facing section of [239], [240]	13/07/2017
203	NE	3 m	[239], [240]	SW facing section of [239], [240]	13/07/2017
204	NE	4 m	[239], [240]	SW facing section of [239], [240], no board	13/07/2017
205	NE	5 m	[239], [240]	SW facing section of [239], [240]	13/07/2017
206	NE	6 m	[239], [240]	SW facing section of [239], [240]	13/07/2017
207	W	0.50 m	[247]	E facing section of ditch [247]	18/07/2017

208	W	0.50 m	[247]	E facing section of ditch [247]	18/07/2017
209	SW	2 m, 1 m	[249] [250]	Enclosure ditches (poor light)	18/07/2017
210	SW	3 m, 1 m	[249] [250]	Enclosure ditches	18/07/2017
211	SW	4 m, 1 m	[249] [250]	Close up shots	18/07/2017
212	SW	5 m, 1 m	[249] [250]	Poor light	18/07/2017
213	SW	6 m, 1 m	[249] [250]	Enclosure ditches	18/07/2017
214	SW	7 m, 1 m	[249] [250]	Poor light	18/07/2017
215	W	8 m, 1 m	[249] [250]	Poor light	18/07/2017
216	SW		[249] [250]	Enclosure ditches	18/07/2017
217	W		[250]	Poor light	18/07/2017
218	N	2 m	[251]	S facing section of [251], with board	18/07/2017
219	N	2 m	[251]	S facing section of [251], without board	18/07/2017
220	N	2 m	[251]	S facing section of [251], without board	18/07/2017
221	NE	2 m	[251]	S facing section of [251], without board	18/07/2017
222	NW	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
223	NE	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
224	NW	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
225	N	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
226	NE	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
227	NW	2, 1 m	[206]	Ditch [206] cutting ditch [265] to the East	18/07/2017
228	N	1 m	[269]	Ditch	18/07/2017
229	W	1 m	[269]	Ditch	18/07/2017
230	N	1 m	[269]	Ditch	18/07/2017
231	SW	2, 1 m	[249] [250]	Enclosure ditches	19/07/2017
232	SW	2, 1 m	[249] [250]	Enclosure ditches, better light	19/07/2017
233	SW	2, 1 m	[249] [250]	Enclosure ditches, better light	19/07/2017
234	W	2, 1 m	[249] [250]	Enclosure ditches, better light	19/07/2017
235	SW	2, 1 m	[249] [250]	Enclosure ditches, better light	19/07/2017
236	W	2, 1 m	[249] [250]	Enclosure ditches, better light	19/07/2017
237	SW		[249] [250]	Enclosure ditches, better light	19/07/2017
238	W		[249] [250]	Enclosure ditches, better light	19/07/2017
239	W	1 m	[272], [274]	E facing section [272], cuts [274]	19/07/2017
240	W	2 m	[272], [274]	E facing section [272], cuts [274]	19/07/2017
241	NW	2, 1 m		Roundhouse 3	19/07/2017
242	NW	2, 1 m		Threshold features	19/07/2017
243	NW	2, 1 m		Pre excavation shots	19/07/2017
244	NE	2, 1 m		Pre excavation shots	19/07/2017
245	SW	2, 1 m		Pre excavation shots	19/07/2017
246	SE	0.50 cm	[276], [279]	Posthole and short linear	19/07/2017
247	SE	0.50 cm	[276], [279]	Posthole and short linear, no board	19/07/2017
248	S	1 m	280	Heat impacted clay in F (060)	19/07/2017
249	S	2 m	280	Heat impacted clay in F (060), without board	19/07/2017

250	NE	1 m	[281] [283]	Roundhouse 3	19/07/2017
251	NE	1 m	[281] [283]	Threshold pits	19/07/2017
252	NE		[281], [283]	Roundhouse 3, threshold pits	19/07/2017
253	E	0.50 m	[285]	Pit	19/07/2017
254	E	0.50 m	[285]	Pit	19/07/2017
255	E	0.50 m	[285]	Pit	19/07/2017
256	NE	10 cm	[287]	Short linear [287]	19/07/2017
257	NE	11 cm	[287]	Short linear [287], no board	19/07/2017
258	E	0.50 m	[285]	Pit 100% excavated	19/07/2017
259	E	0.50 m	[285]	Pit 100% excavated	19/07/2017
260	NE	0.50 m	281	Roundhouse 3	19/07/2017
261	NE	0.50 m	281	Threshold pit	19/07/2017
262	NE		281	Threshold pit	19/07/2017
263	S	1 m	280	N facing section of (280) F. 060	19/07/2017
264	S	1 m	280	N facing section of (280) F. 060, no board	19/07/2017
265	NW	1 m	[292], [293]	SE facing section of pit [291], [293]	19/07/2017
266	NW	1 m	[292], [293]	SE facing section of pit [291], [293]	19/07/2017
267	NW	1 m	[292], [293]	SE facing section of pit [291], [293], no board	19/07/2017
268	NW	1 m	[292], [293]	SE facing section of pit [291], [293], no board	19/07/2017
269	SE	0.50 m	[296], [298]	Short linear and drip gully	19/07/2017
270	SE	0.50 m	[296], [298]	Short linear and drip gully, no board	19/07/2017
271	ESE	2 m	[300], [302], [305]	Furrow and ditch x 2	20/07/2017
272	ESE	2 m	[300], [302], [305]	Furrow and ditch x 2, no board	20/07/2017
273	NE	1 m	[293],[307]	SW facing section of [293], [307]	20/07/2017
274	NE	1 m	[293],[307]	SW facing section of [293], [307]	20/07/2017
275	NE	1 m	[293],[307]	SW facing section of [293], [307], no board	20/07/2017
276	NE	1 m	[293],[307]	SW facing section of [293], [307]	20/07/2017
277	NE	1 m	[293],[307]	SW facing section of [293], [307]	20/07/2017
278	NW	0.50 m	310	Ring gully of roundhouse 3	21/07/2017
279	NW	0.50 m	310	Ring gully of roundhouse 4	21/07/2017
280	NW		310	Slot includes eastern terminal	21/07/2017
281	N	1,2, 0.50 m	310	Slot includes eastern terminal	21/07/2017
282	N	1,2, 0.50 m	310	Slot includes eastern terminal	21/07/2017
283	S	0.50 m	313	F. 55 gully section	21/07/2017
284	S	0.50 m	313	F. 55 gully section	21/07/2017
285	S	0.50 m	313	F. 55 gully section	21/07/2017
286	W	0.50 m	313	F. 55 gully section	21/07/2017
287	W	0.50 m	313	F. 55 gully section	21/07/2017
288	W		313	F. 55 gully section	21/07/2017
289	N	0.50 m	315, 317	Ditch relationship	21/07/2017
290	N	0.50 m	315, 318	Ditch relationship, no board	21/07/2017
291	NE	0.50 m	322	Gully terminus F.55	21/07/2017
292	NE	0.50 m	322	Gully terminus F.55	21/07/2017
293	NE	0.50 m	322	Gully terminus F.55	21/07/2017
294	S	0.50 m	324	Gully F.55	21/07/2017
295	S	0.50 m	325	Gully F.55	21/07/2017

296	S	0.50 m	326	Gully F.55	21/07/2017
297	NW	0.50 m	[326]	Gulley F.59, SE facing section	21/07/2017
298	NW	0.50 m	[326]	Gulley F.59, SE facing section, no board	21/07/2017
299	NW	0.50 m	[326]	Gulley F.59	21/07/2017
300	SE	0.50 m	[326]	Gulley F.59	21/07/2017
301	SE	2X1 m	(295)	Mid-excavation of oven [293]	21/07/2017
302	SE	2X1 m	(295)	Mid-excavation of oven [293], no board	21/07/2017
303	SE	2X1 m	(295)	Mid-excavation of oven [293], with board	21/07/2017
304	SE	2X1 m	(295)	Mid-excavation of oven [293], no board	21/07/2017
305	SE	1 m	(295)	Mid-excavation of oven [293], no board	21/07/2017
306	SE		(295)	Mid-excavation of oven [293], no board	21/07/2017
307	SE		(295)	Mid-excavation of oven [293], no board	21/07/2017
308	SE		(295)	Mid-excavation of oven [293], no board	21/07/2017
309	NNE	0.50 m	[331]	Gully F.55	21/07/2017
310	NNE	0.50 m	[331]	Gully F.55	21/07/2017
311	NNE	0.50 m	[331]	Gully F.55	21/07/2017
312	NNE	0.50 m	[331]	Gully F.55	24/07/2017
313	NNE	0.50 m	[331]	Gully F.55	24/07/2017
314	NNE	0.50 m	[331]	Gully F.55	24/07/2017
315	SW	1 m	[334], [338]	Ring gully F059, slot 3	24/07/2017
316	SW	1 m	[334], [338]	Ring gully F059, slot 3	24/07/2017
317	SW		[334], [338]	Ring gully F059, slot 3	24/07/2017
318	SW	2, 1, 0.50 m	[334], [338]	Ring gully F059, slot 3	24/07/2017
319	SW	2, 1, 0.50 m	[334], [338]	Ring gully F059, slot 3	24/07/2017
320	SE	2X1 m	[291], [293], [307]	Post-excavation of oven	24/07/2017
321	SE	2X1 m	[291], [293], [307]	Post-excavation of oven, no board	24/07/2017
322	SW	2X1 m	[291], [293], [307]	Post-excavation of oven	24/07/2017
323	SW	2X1 m	[291], [293], [307]	Post-excavation of oven, no board	24/07/2017
324	NW	2X1 m	[291], [293], [307]	Post-excavation of oven	24/07/2017
325	NW	2X1 m	[291], [293], [307]	Post-excavation of oven, no board	24/07/2017
326	NE		[291], [293], [307]	Post-excavation of oven, no board	24/07/2017
327	NE		[291], [293], [307]	Post-excavation of oven, no board	24/07/2017
328	NW	0.0 5 m	[340]	Posthole 1/2 section	25/07/2017
329	NW	0.0 5 m	[340]	Posthole 1/2 section, no board	25/07/2017
330	NW	2x2 m		Enclosure	25/07/2017
331	NE	2x2 m		Enclosure	25/07/2017

332	NE	0.50 m	344	Ring Gully F059	25/07/2017
333	NE	0.50 m	344	Ring Gully F059	25/07/2017
334	NE		344	Ring Gully F059	25/07/2017
335	NE	0.50 m	348	Ring Gully F059	25/07/2017
336	NE	0.50 m	348	Ring Gully F059	25/07/2017
337	NE		348	Ring Gully F059	25/07/2017
338	W	0.50 m	[352]	E facing section of [352]	25/07/2017
339	W	0.50 m	[352]	E facing section of [352], no board	25/07/2017
340	W	0.50 m	[352]	E facing section of [352], no board	25/07/2017
341	NW	1 m	354	SE facing section of [354] F059	25/07/2017
342	NW	2 m	354	SE facing section of [354] F059	25/07/2017
343	NW	3 m	354	SE facing section of [354] F059, no board	25/07/2017
344	NW	4 m	354	SE facing section of [354] F059, with board	25/07/2017
345	NW	5 m	354	SE facing section of [354] F059, with board	25/07/2017
346	SE	6 m	354	SE facing section of [354] F059, without board	25/07/2017
347	SE	7 m	354	SE facing section of [354] F059	25/07/2017
348	NW	1 m	355	RH drip ditch	25/07/2017
349	NW	1 m	355	RH drip ditch, no board	25/07/2017
350	E	0.50 m	364	Posthole 1/2 section, F. 59	25/07/2017
351	E	0.50 m	364	Posthole 1/2 section, F. 59	25/07/2017
352	E	0.50 m	364	Posthole 1/2 section, F. 59	25/07/2017
353	OH	0.50 m	364	100% excavated	25/07/2017
354	W	0.50 m	352, 366	Relationship section	25/07/2017
355	W	0.50 m	352, 366	Relationship section, no board	25/07/2017
356	NW	1 m		Post- excavation 352	25/07/2017
357	NW	1 m	[352]	Post- excavation [352], no board	25/07/2017
358	S	0.50 m	[366], [368], [370]	Post-excavation of postholes	25/07/2017
359	S	0.50 m	[366], [368], [370]	Post-excavation of postholes	25/07/2017
360	S	0.50 m	366, 368, 370	Post excavation postholes, no board	26/07/2017
361	SW	0.50 m	[377]	Ditch section	26/07/2017
362	SW	0.50 m	[377]	Ditch section, no board	26/07/2017
363	SW	0.50 m	[377]	Ditch shot	26/07/2017
364	SW	0.50 m	[377]	Ditch shot, no board	26/07/2017
365	NW	2x2 m		RH 2	27/07/2017
366	NW	2x2 m		RH 2	27/07/2017
367	NW	2x2 m		RH 2	27/07/2017
368	NW	2x2 m		RH 2	27/07/2017
369	N	0.50 m	[379]	Ditch section	27/07/2017
370	N	0.50 m	[379]	Ditch section , long	27/07/2017
371	N	0.50 m	[379]	Ditch section	27/07/2017
372	N	0.50 m	[379]	Ditch section, no board	27/07/2017
373	N	0.50 m	[379]	Ditch section	27/07/2017
374	N	0.50 m	[379]	Ditch section	27/07/2017
375	NE	0.50 m	[381]	SW facing section of [381]	27/07/2017
376	NE	0.50 m	[381]	SW facing section of [381], without board	27/07/2017

377	NE	0.50 m	[381]	Terminus of [381]	27/07/2017
378	NW	0.50 m	[384]	SE facing section of [384]	27/07/2017
379	NW	0.50 m	[384]	SE facing section of [384], no board	27/07/2017
380	W	0.50 m	[384]	Terminus of [384], no board	27/07/2017
381	NW	0.50 m	[386]	Section	27/07/2017
382	NW	0.50 m	[386]	Section	27/07/2017
383	NW	0.50 m	[386]	Section	27/07/2017
384	NW	0.50 m	[386]	Section, no board	27/07/2017
385	SW		388, 390	Pair of inter cutting gullies	27/07/2017
386	SW	0.50 m	388, 390	Pair of inter cutting gullies	27/07/2017
387	SW	0.50 m	388, 390	Pair of inter cutting gullies	27/07/2017
388	SW		388, 390	Pair of inter cutting gullies	27/07/2017
389	NW	1 m, 0.50 m	388, 392, 394	Intercutting ditch and gullies	27/07/2017
390	NW	1 m, 0.50 m	388, 392, 394	Intercutting ditch and gullies	27/07/2017
391	NW		388, 392, 394	Intercutting ditch and gullies	27/07/2017
392	S	1 m, 0.50 m	401, 398	Ditch [401] cutting ditch [398]	27/07/2017
393	S	1 m, 0.50 m	401, 398	Ditch [401] cutting ditch [398]	27/07/2017
394	S	1 m, 0.50 m	401, 398	Ditch [401] cutting ditch [398]	27/07/2017
395	S	1 m, 0.50 m	401, 398	Ditch [401] cutting ditch [398]	27/07/2017
396	S		[401, 398]	Two ditches	27/07/2017
397	NW	0.50 m	[404]	Pit 1/2 section	27/07/2017
398	NW	0.50 m	[404]	Pit 1/2 section, no board	27/07/2017
399	W	1 m	[408], [410]	Ditch x2	27/07/2017
400	W	2 m	[408], [410]	Ditch x2, no board	27/07/2017
401	SW	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
402	SW	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
403	SW	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
404	SW	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
405	SW	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
406	E	2x2 m	[384]	Post excavation of enclosure ditches, no board	28/07/2017
407	E	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
408	E	2x2 m	[384]	Post excavation of enclosure ditches	28/07/2017
409	NE	0.50 m	412	Possible posthole cut into the fill of ditch F073	28/07/2017
410	NE	0.50 m	412	Possible posthole cut into the fill of ditch F074	28/07/2017
411	NE		412	Possible posthole cut into the fill of ditch F075	28/07/2017
412	N	0.50 m	[414]	Ditch cutting [416], gully F19 F71	28/07/2017

413	N	0.50 m	[414]	Ditch cutting [416], gully F19 F71	28/07/2017
414	N	0.50 m	[414]	Ditch cutting [416], gully F19 F71	28/07/2017
415	N	0.50 m	[414]	Ditch cutting [416], gully F19 F71	28/07/2017
416	SE	0.20 m	[418]	NW facing section of [418]	28/07/2017
417	SE	0.20 m	[418]	NW facing section of [418], no board	28/07/2017
418	N	0.50 m	420	Gully terminal F.75 E end	31/07/2017
419	N	0.50 m	420	Gully terminal F.75 E end	31/07/2017
420	N	0.50 m	420	Gully terminal F.75 E end	31/07/2017
421	NW	0.50 m	[424]	Pit 1/2 section	31/07/2017
422	NW	0.50 m	[424]	Pit 1/2 section, no board	31/07/2017
423	S	0.50 m	[426] [428]	Relationship slot [426], [428]	31/07/2017
424	S	0.50 m	[426] [428]	Relationship slot [426], [428], no board	31/07/2017
425	E	0.50 m	[422]	Gully terminal W end F.75	31/07/2017
426	E	0.50 m	[422]	Gully terminal W end F.75	31/07/2017
427	E	0.50 m	[422]	Gully terminal W end F.75	31/07/2017
428	NW	0.50 m	[426], (427)	SE facing section of [426]	31/07/2017
429	NW	0.50 m	[426], (427)	SE facing section of [426], no board	31/07/2017
430	SW	2 m, 0.50 m	[430], [433]	Intercutting ditch terminals	31/07/2017
431	SW	2 m, 0.50 m	[430], [433]	Intercutting ditch terminals	31/07/2017
432	SW		(430), [433]	Intercutting ditch terminals	31/07/2017
433	W	0.50 m	437	E Facing section of [437]	31/07/2017
434	W	0.50 m	437	E facing section of [437], without board	31/07/2017
435	NW	2 m	437	SE facing section of [437]	31/07/2017
436	NW	2 m	437	SE facing section of [437], without board	31/07/2017
437	NE	0.50 m	437	SW facing section of [437]	31/07/2017
438	NE	0.50 m	437	SE facing section of [437], without board	31/07/2017
439	W	0.50 m	[428], (429)	E facing section of [428]	01/08/2017
440	W	0.50 m	[428], (429)	E facing section of [428], no board	01/08/2017
441	SW	0.50 m	[440], (441)	NE facing section of [440]	01/08/2017
442	SW	0.50 m	[440], (441)	NE facing section of [440], no board	01/08/2017
443	NE	1 m, 0.50 m	[442]	Pair of ditch terminals	01/08/2017
444	NE	1 m, 0.50 m	[442]	Pair of ditch terminals	01/08/2017
445	NE		[443]	Baulk shot	01/08/2017
446	NW	1 m	448, 454	Relationship	01/08/2017
447	NW	1 m	448, 454	Relationship, no board	01/08/2017
448	NE	1 m, 0.50 m	[442] [443]	Pair of ditch terminals	01/08/2017
449	NE	1 m, 0.50 m	[442] [443]	Pair of ditch terminals	01/08/2017
450	NE		[442] [443]	Section shot	01/08/2017
451	N	1 m	440	Post excavation of beam slot	02/08/2017
452	N	1 m	440	Post excavation of beam slot, no board	02/08/2017

453	S	2 m	428	Post excavation of beam slot	02/08/2017
454	S	2 m	428	Post excavation of beam slot	02/08/2017
455	SW	2x2 m	426	Post excavation of RH	02/08/2017
456	SW	2x2 m	426	Post excavation of RH	02/08/2017
457	SW	2x2 m	426	Post excavation of RH, no board	02/08/2017
458	S	2x2 m	426	Post excavation of RH, with board	02/08/2017
459	S	2x2 m	426	Post excavation of RH, no board	02/08/2017
460	E	2x2 m	426	Post excavation of RH, no board	02/08/2017
461	NW	0.50 m	458	Pit mid excavation	02/08/2017
462	NW	0.50 m	458	Pit 1/2 section	02/08/2017
463	NW	0.50 m	458	Pit 1/2 section, no board	02/08/2017
464	SE	0.50 m	[461]	Pit 1/2 section	02/08/2017
465	SE	0.50 m	[461]	Pit 1/2 section	02/08/2017
466	SE	0.50 m	[461]	Pit 1/2 section, no board	02/08/2017
467	NW	0.50 m	[464]	Pit 1/2 section	02/08/2017
468	NW	0.50 m	464	Pit 1/2 section, no board	02/08/2017
469	SW	0.50 m	466	Ditch slot	02/08/2017
470	SW	0.50 m	466	Ditch slot	02/08/2017
471	SW	0.50 m	466	Ditch slot	02/08/2017
472	NE	0.50 m	478	Pit 1/2 section	03/08/2017
473	NE	0.50 m	478	Pit 1/2 section, no board	03/08/2017
474	NW	0.50 m	[480]	Terminus of ditch [480]	03/08/2017
475	NW	0.50 m	[480]	Terminus of ditch [480]	03/08/2017
476	NW	1 m, 0.50 m	[482] [484]	Intercutting ditches relationship slot	03/08/2017
477	NW	1 m, 0.50 m	[482] [484]	Intercutting ditches relationship slot	03/08/2017
478	NW	1 m, 0.50 m	[482] [484]	Intercutting ditches relationship slot	03/08/2017
479	NW	0.50 m	[486]	Pit 1/2 section	03/08/2017
480	NW	0.50 m	[486]	Pit 1/2 section, no board	03/08/2017
481	E	0.50 m	[488], [491], [494]	Pit, gully, ditch	03/08/2017
482	E	0.50 m	[488], [491], [494]	Pit, gully, ditch	03/08/2017
483	E	0.50 m	[488], [491], [494]	Pit, gully, ditch, no board	03/08/2017
484	NW	1 m	[496], [498]	SE facing section of [496], cutting [498]	03/08/2017
485	NW	1 m	[496], [498]	SE facing section of [496], cutting [498]	03/08/2017
486	SE	1 m, 0.50 m	[500], [501]	Pair of ditches relationship slot	03/08/2017
487	SE	1 m, 0.50 m	[500], [501]	Pair of ditches relationship slot	03/08/2017
488	SE		[500], [501]	Pair of ditches relationship slot	03/08/2017
489	SE		[500], [501]	Pair of ditches relationship slot	03/08/2017
490	NE	2 m	[503]	Ditch [503] cutting ditch [504]	04/08/2017
491	NE	2 m	[503]	Ditch [503] cutting ditch [504]	04/08/2017
492	NE	2 m	[503]	Ditch [503] cutting ditch [504]	04/08/2017
493	NE	2 m	[503]	Ditch [503] cutting ditch [504]	04/08/2017
494	NE	2 m	[503]	Ditch [503] cutting ditch [504]	04/08/2017
495	NE	1 m	[515]	SW facing section of [515]	04/08/2017

496	NE	1 m	[515]	SW facing section of [515], no board	04/08/2017
497	NE	1 m	[515]	SW facing section of [515], no board	04/08/2017
498	SW	0.50 m	[521], [523]	Ditch relationship	04/08/2017
499	SW	0.50 m	[521], [523]	Ditch relationship	04/08/2017
500	SW	0.50 m	[521], [523]	Ditch relationship , no board	04/08/2017
501	NE	1 m	[525] [527]	SW facing section of [525], [527]	04/08/2017
502	NE	2 m	[525] [527]	SW facing section of [525], [527], no board	04/08/2017
503	SW	0.50 m	529, 531	Ditch relationship	04/08/2017
504	SW	0.50 m	529, 531	Ditch relationship, no board	04/08/2017
505	NW	0.50 m	[537]	SE facing section of [537]	07/07/2017
506	NW	0.50 m	[537]	SE facing section of [537], no board	07/07/2017
507	NE	1 m	[534], [533]	Ditch cut by large ditch [533]	07/07/2017
508	NE	1 m	[534], [533]	Ditch cut by large ditch [533]	07/07/2017
509	NE	1 m	[534], [533]	Ditch cut by large ditch [533]	07/07/2017
510	NE	1 m	[534], [533]	Ditch cut by large ditch [533]	07/07/2017
511	NE	1 m	[534], [533]	Ditch cut by large ditch [533]	07/07/2017
512	SW	1 m	[545]	NE facing section of ditch	07/07/2017
513	SW	1 m	[545]	Post-excavation of terminus	07/07/2017
514	SW	1 m	[545]	Post-excavation of terminus, no board	07/07/2017
515	SW	1 m	[545]	NE facing section of [545], no board	07/07/2017
516	vert.	0.50 m	[525] (526)	Working shot of posthole plus packing stones	07/07/2017
517	vert.	0.50 m	[525] (526)	Working shot of posthole plus packing stones	07/07/2017
518	vert.	0.50 m	[525] (526)	Working shot of posthole plus packing stones, no board	07/07/2017
519	vert.	0.50 m	[525] (526)	Working shot of posthole plus packing stones, no board	07/07/2017
520	NE	0.20 m	[525], [527]	Post- excavation of [525], [527]	08/08/2017
521	NE	2 m	[525], [527]	Post- excavation of [525], [527], no board	08/08/2017
522	NW	0.50 m, 2 m	[525], [527]	Post- excavation of [525], [527], with board	08/08/2017
523	NW	0.50 m, 2 m	[525], [527]	Post- excavation of [525], [527], no board	08/08/2017
524	NE	0.50 m	549	Slot facing section	08/08/2017
525	NE	0.50 m	549	Slot facing section	08/08/2017
526	NE	0.50 m	549	Slot facing section, no board	08/08/2017
527	SW	0.50 m	552	Ring gully terminal	09/08/2017
528	SW	0.50 m	552	Ring gully terminal	09/08/2017
529	SW	0.50 m	552	Ring gully terminal	09/08/2017
530	NW	2 m	[547]	Ditch	09/08/2017
531	NW	2 m	[547]	Ditch	09/08/2017
532	NW	2 m	[547]	Ditch	09/08/2017
533	NW	2 m	[547]	Ditch	09/08/2017
534	NW	2 m	[547]	Ditch	09/08/2017
535	NW	0.50 m, 2 m	554	Enclosure	09/08/2017

536	NW	0.50 m, 2 m	554	Ditch section	09/08/2017
537	NW		554	Ditch section	09/08/2017
538	NW	0.50 m	565	SE facing section	09/08/2017
539	NW	0.50 m	565	SE facing section	09/08/2017
540	NW	0.50 m	565	SE facing section, no board	09/08/2017
541	N	0.50 m	567	Ditch terminal F. 10/11	10/08/2017
542	N	0.50 m	567	Ditch terminal F. 10/11	10/08/2017
543	N	0.50 m	567	Ditch terminal F. 10/11	10/08/2017
544	N	0.50 m	567	Ditch terminal F. 10/11	10/08/2017
545	N	0.50 m	567	Ditch terminal F. 10/11	10/08/2017
546	S	1 m	[569] [571]	Intercutting ditch terminals	10/08/2017
547	S	1 m	[569] [571]	Intercutting ditch terminals	10/08/2017
548	S		[569] [571]	Intercutting ditch terminals	10/08/2017
549	NE	1 m	[575], [579], [577]	SW facing section of [575], [579], [577]	10/08/2017
550	NE	1 m	[575], [579], [577]	SW facing section of [575], [579], [577], no board	10/08/2017
551	SW	1 m	[575], [579], [577]	NE facing section [575], [579], [577]	10/08/2017
552	SW	1 m	[575], [579], [577]	NE facing section [575], [579], [577], no board	10/08/2017
553	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
554	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
555	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
556	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
557	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
558	NW	0.50 m	581	Posthole 1/2 section	10/08/2017
559	N	0.50 m	584	Ditch terminal	10/08/2017
560	N	0.50 m	584	Ditch terminal	10/08/2017
561	N		584	Ditch terminal	10/08/2017
562	S	5 cm	587	Shallow gully	10/08/2017
563	S	5 cm	587	Shallow gully	10/08/2017
564	S		587	Shallow gully	10/08/2017
565	NW	0.50 m	581	Posthole 100% excavated	11/08/2017
566	NW	0.50 m	581	Posthole 100% excavated	11/08/2017
567	NW	0.50 m	581	Posthole 100% excavated	11/08/2017
568	NW	0.50 m	589	Posthole 1/2 section	11/08/2017
569	NW	0.50 m	589	Posthole 1/2 section	11/08/2017
570	NW	0.50 m	589	Posthole 100% excavated	11/08/2017
571	NW	0.50 m	589	Posthole 100% excavated	11/08/2017
572	NW	0.50 m	589	Posthole 100% excavated	11/08/2017
573	NE	1 m, 0.50 m	[591] [513]	Enclosure ditches relationship slot	11/08/2017
574	NE	1 m, 0.50 m	[591] [513]	Enclosure ditches relationship slot	11/08/2017
575	NE		[591] [513]	Enclosure ditches relationship slot	11/08/2017
576	E	0.50 m	599, 601	Relationship slot	11/08/2017
577	E	0.50 m	599, 601	Relationship slot	11/08/2017
578	E	0.50 m	599, 601	Relationship slot, no board	11/08/2017
579	SW	0.50 m	[597], (598)	NE Terminus of [597]	11/08/2017
580	SW	0.50 m	[597], (598)	NE facing section of [597]	11/08/2017
581	SW	0.50 m	[597], (598)	NE facing section of [597], no	11/08/2017

				board	
582	SW	0.50 m	[597], (598)	NE facing section of [597], no board	11/08/2017
583	NW	0.50 m	603	Gully	11/08/2017
584	NW	0.50 m	603	Gully	11/08/2017
585	NW	0.50 m	603	Gully	11/08/2017
586	NW	0.50 m	603	Gully	11/08/2017
587	NW	0.50 m	603	Gully	11/08/2017
588	NW	0.50 m	605	Gully terminal	11/08/2017
589	NW	0.50 m	605	Gully terminal	11/08/2017
590	NW	0.50 m	605	Gully terminal	11/08/2017
591	N	2 m		Machine slot 1	14/08/2017
592		2 m		Machine slot 2	16/08/2017
593		2 m		Machine slot 4	16/08/2017

APPENDIX III- ROMAN IRON AGE CERAMICS CATALOGUE

Find no.	Context no.	Feature	Phase	Fabric	Category	Vessel	Sub-type	Type	Part	Decoration	Weight	Sherd no.	EVE	Diameter	Joins	Same	Dr	Comments
1	54	F17	I	LTW 1	n	unk			bsh, scrap		7	2						oxid surfaces
2	551	F88	I	LTW 1	n	unk			scraps		19	2						worn; oxid surfaces
3	551	F88	I	LTW 6	n	cup?	plain rim, rounded base		rim, base, sh		20	8	21	5			1	patchy oxid ext surfaces, handmade
4	101	F4	II	flag B var	c	flag			bsh		4	1				385?		grey fab, oxid ext; faintly oxid int
5	62	F22	II	LTW 3.2	n	jar	plain rim		rim, bsh		82	3	3					thick-walled
6	333	F55	II	LTW 4.1	n	unk			bsh		11	1						oxid int surface
7	528	F59	II	LTW 1?	n	unk			bsh		3	1						
8	312	F59	II	LTW 1	n	unk			scrap		2	1						
9	312	F59	II	LTW 4.1	n	jar			bsh		18	2						
10	535	F73	II	LTW 4.3	n	cp			bsh		14	1						white margins; thick oxid int surface, buff ext
11	9	F5	RIA	LTW 4.1	n	unk			scrap		4	1						
12	103	F7	RIA	LTW 4.2	n	unk			bsh		5	1						
13	403	F10	RIA	FW: ARG CC	f	beak	cornice rim		rim	clay pellet r/c	8	1	10	9			6	dark brown cc
14	568	F10/11	RIA	LTW	n	cp	everted		rim, bsh		39	2	10	13			12	heavy sooting

				4.2			rim										under rim; and on int of bsh
15	568	F10/11	RIA	flag M	c	flag			bsh		6	1					hard, slightly gritty, oxid, thin grey core
16	75	F11	RIA	fine grey	c	closed			bsh		4	1					
17	75	F11	RIA	sam	s	bowl		37	bsh	dec - basal wreath	5	1					
18	81	F18	RIA	unk OW	c	unk			bsh		4	1					soft orange fab, worn
19	81	F18	RIA	GW 1	c	stor jar			bsh		312	9					
20	81	F18	RIA	LTW 4.1	n	cp	everted rim		rim, bsh		20	2	10	14		2	thin rim, thick body
21	81	F18	RIA	sam	s	bowl		37	bsh	dec - small ovolo	2	1					
22	81	F18	RIA	unk OW	c	unk			bsh		8	1					traces of cream wash on int & ext surfaces
23	81	F18	RIA	LTW 1	n	jar			bsh		89	3					thick-walled; oxid ext
24	82	F18	RIA	LTW 6	n	cup?	flared base?		bsh		8	1					small; oxid, pale grey core
25	119	F18	RIA	unk OW	c	closed			bsh		3	1					sandy, soft
26	256	F18	RIA	hard OW	c	bowl	flange hemi bowl		ir		46	2				3	hard
27	257	F18	RIA	sam	s	bowl			scrap		1	1					
28	257	F18	RIA	amph: BAT AM	a	amph		dr 20	bsh		22	1					sandwich fab

29	88	F19	RIA	LTW 4.2	n	jar			bsh		10	1						thick-walled
30	88	F19	RIA	LTW 4.2	n	cp	upright rim		nearcop		101	6	18	9			4	smoothed ext; some burning on int
31	116	F19	RIA	unk OW	c	closed			bsh		13	1						slightly gritty
32	259	F19	RIA	amph: BAT AM	a	amph		dr 20	bsh		37	1						
33	555	F19	RIA	N Gaul?	c	flag	round rim & 2 rings		rim, bsh, handle		113	4	100	5			5	1 groove on handle
37	146	F32	RIA	N Gaul	c	flag	pulley wheel rim; handle w 2 grooves		rim		185	1	100	7			7	
38	146	F32	RIA	sam	s	bowl		?37	bsh	dec	1	2						
39	146	F32	RIA	BB1 SED	c	b/d			base		2	1						
40	146	F32	RIA	BB1 SED	c	cp			bsh	a.a.l	16	3						brown core
41	146	F32	RIA	amph: BAT AM	a	amph			scraps		14	3						buff
42	146	F32	RIA	LTW 4.2	n	jar			bsh		53	4						var: sparse quartz; thick; oxid surface
43	146	F32	RIA	LTW 4.2	n	unk			bsh		6	1						patchy oxid surfaces
44	146	F32	RIA	LTW 4.1	n	jar			bsh		12	3						black surfaces; 1 sh burnished

45	162	F32	RIA	LTW 4.1	n	bowl			base		28	1	5					smooth/burnished surfaces
46	162	F32	RIA	hard grey	c	cp			base		7	1						
47	162	F32	RIA	BB1 SED	c	cp			bsh	a.a.l	8	1						brown margin
48	162	F32	RIA	LTW 1	n	cp	upright rim		rim		26	1	10	13			8	heavy sooting under rim; var fabric with few incl?
49	195	F42	RIA	unk RW	c	cp			bsh	rust	24	1						soft sandy mic buff fab, grey surfaces
50	195	F42	RIA	amph: BAT AM	a	amph		dr 20	bsh		25	2						buff, burnt
51	178	F41	RIA	BB1 SED	c	b/d			bsh	lattice	16	1						brown margin
52	178	F41	RIA	LTW 1	n	jar			bsh		46	1				180		strong buff surfaces; vertical wipe marks ext and
53	180	F41	RIA	hard grey	c	cp			bsh		7	1						
54	180	F41	RIA	sam	s	b/d			chips		4	4						
55	180	F41	RIA	sam	s	dish		18 or 18/31	bsh		3	1						burnt Central Gaulish?
56	180	F41	RIA	sam	s	b/d			bsh		1	1						Central Gaulish?
57	180	F41	RIA	BB1 SED	c	bowl	flat rimmed		rim, bsh	lattice	104	4	28	21			9	
58	180	F41	RIA	LTW 4.1	n	jar			bsh		34	1						wiped with ?cloth - faint parallel lines; sparse

																		quartz
59	180	F41	RIA	LTW 1	n	jar			bsh		30	1				178		
60	180	F41	RIA	LTW 4.1	n	jar	slightly flared base		base, bsh		100	3					10	groove cut round edge on lower surface
61	180	F41	RIA	LTW 1	n	jar			bsh		12	1						stronge orange int
62	457	F72	RIA	LTW 4.1	n	jar			bsh		48	1						wipe marks on interior; black int w buff patch
63	457	F72	RIA	LTW 4.4	n	bowl?			base/bsh?		10	1						
64	467	F77	RIA	unk OW	c	unk			scrap		1	1						dark orange surface, pale core
65	490	F59	RIA	GAB TN 1	f	dish		Cam 8?	base	groove	19	1					11	
66	385	F93	RIA	flag B var	c	flag	rounded rim, 2 groove handle		rim, handle, bsh		153	10	13	8		101?		
67	303	F3	RIA	flag B var	c	flag			bsh		4	2						
68	162	F32	RIA	LTW 4.4	n	bowl	plain rim		rim		6	1	5					smoothed on interior; thin-walled

APPENDIX IV- WRITTEN SCHEME OF INVESTIGATION

Land south of Eden Drive, Sedgefield, Durham

Written Scheme of Investigation
for Archaeological Works

2017

The Eco Centre, Windmill Way, Hebburn, Tyne and Wear, NE31 1SR

www.archaeologicalresearchservices.com

Prepared on behalf of:	Taylor Wimpey
Date of compilation:	May 2017
Planning reference:	DM/15/03808/OUT
Local Authority:	Durham County Council
Site central NGR:	NZ 29705 14641

1 INTRODUCTION

1.1 Project Background

1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) for Taylor Wimpey (the client). It details a scheme of archaeological works at land south of Eden Drive, Sedgefield, Durham ("Parcel A").

1.1.2 Planning permission has been granted by Durham County Council (Application Reference: DM/15/03808/OUT) for the proposed redevelopment which includes outline planning permission for up to 220 dwellings and full planning permission for 80 dwellings with associated access and landscaping. Condition number 12 of the planning permission requires the following.

"12. No development shall take place in "Parcel A" as identified on Plan SD-00.03 until a programme of archaeological work including an archaeological works phasing plan and mitigation strategy ("the Archaeological Strategy") has been submitted to and approved in writing by the Local Planning Authority. No development shall commence in each phase as defined in the Archaeological Strategy for Parcel A until the relevant mitigation works have been implemented in that phase in accordance with the approved strategy document. The strategy shall include details of the following:

i. Measures to ensure the preservation in situ, or the preservation by record, of archaeological features of identified importance

ii. Methodologies for the recording and recovery of archaeological remains including artefacts and ecofacts;

iii. Post-fieldwork methodologies for assessment and analyses;

iv. Report content and arrangements for dissemination, and publication proposals;

v. Archive preparation and deposition with recognised repositories;

vi. A timetable of works in relation to the proposed development, including sufficient notification and allowance of time to ensure that the site work is undertaken and completed in accordance with the strategy;

vii. Monitoring arrangements, including the notification in writing to the County Durham Principal Archaeologist of the commencement of archaeological works and the opportunity to monitor such works;

viii. A list of all staff involved in the implementation of the strategy, including subcontractors and specialists, their responsibilities and qualifications. The development shall then be carried out in full accordance with the approved details.

Within 6 months of the archaeological works being complete, a copy of any analysis, reporting, publication or archiving required as part of the mitigation strategy shall be deposited at the County Durham Historic Environment Record or the receiving archive (Bowes Museum)."

1.1.3 This WSI confirms the nature of the archaeological works to be undertaken by ARS Ltd at land south of Eden Drive, Sedgefield ("Parcel A"), comprising archaeological trenching, a strip, map and record and monitoring recording of ground works in accordance with guidance from Dr David Mason, the County Durham Principal Archaeologist.

1.1.4 The aim of the programme of works is, in line with the National Planning Policy Framework (NPPF) paragraph 141 (DCLG 2012), to record and enhance understanding of the significance of any heritage assets to be lost during the proposed development in a manner proportionate to their importance, and to make this evidence (and any archived generated) publically accessible.

1.2 Site Description and Location

1.2.1 The proposed development area (PDA) is bounded to the south and south - east by the A689, which links Bishop Auckland with Teesside, to the north-west by Stockton Road, to the north by Thurlow Road, to the north-west by Eden Drive and to the west by The Meadows. The site is centred at NGR NZ 29705 14641 (Figure 1).

1.2.2 The PDA slopes gradually from east to west and north to south.

1.3 Landform and Geology

1.3.1 The underlying solid geology of the PDA is Roxby Formation – Mudstone, Calcareous – a sedimentary bedrock formed approximately 246 to 271 million years ago in the Triassic and Permian Periods. This is overlain by superficial deposits of Till, Devensian – Diamicton formed up to 2 million years ago in the Quaternary Period (BGS 2017).

2 Archaeological and Historical Background

2.1 Archaeological Desk-Based Assessment

2.2.1 A detailed account of the archaeological and historic background of the PDA and surrounding area can be found in a desk-based assessment produced in 2012 (ArcHeritage 2012). A summary is provided below.

The Roman period (AD 70 to 5th century)

2.2.2 Later prehistoric or Romano-British enclosures and field systems are visible as cropmark features to the north-west and south of the town, together with a prehistoric settlement beneath the Roman town to the west of Sedgefield.

2.2.3 Two Roman sites are situated close by. A Romano- British settlement site is located at Hardwick Park (East Park), approximately 1km to the north-west of the PDA. Aerial photography revealed a rectangular enclosure close to the road. Further enclosures and ditches were excavated within the settlement, along with the first Romano-British pottery kilns to be discovered in the region. The settlement was situated in close proximity to Cades Roman road, which connected York and Chester-le-Street. Roman pottery has also been discovered *c.*0.92km to the northwest of the PDA. Further cropmark evidence shows settlement activity near Home Farm to the immediate north of Sedgefield Racecourse. A later

prehistoric/Romano-British enclosure has been investigated at Brakes Farm; here a human inhumation was recorded from within the enclosure ditch.

The medieval period (5th century to 1540)

2.2.4 Sedgefield was first recorded, as 'Ceddesfeld', in AD 915. Anglo-Saxon activity in the area is indicated by the Old English place-name elements, 'Cedds' and 'feld', with the former likely to have been a personal name and the latter meaning a field or area of cleared land. The location and extent of the early medieval settlement is unknown. Sedgefield's historic settlement core contains St. Edmund's Church, which was built *c*.1254, an early 14th-century market place, and the site of a medieval rectory. The latter was a 'castellated edifice' that occupied the site of Ceddesfeld Hall until it was damaged in a fire in 1792.

2.2.5 Levelled ridge and furrow in the north and north-east of the PDA indicates that this area was in agricultural use during this period and so is unlikely to have been the focus of settlement. Ridge and furrow earthworks do not appear to have been present in the areas to the south and south-east of the PDA, which suggests that this area may have been pasture during the medieval period. The PDA may have formed part of the 60 acres of land in this area that were granted to the rector by Richard Foxe, Bishop of Durham, in 1501. In that case, the land would have been glebe land, rather than commons, prior to that date and so may have been farmed by tenants of the Church throughout the medieval period.

2.2.6 Further medieval agricultural activity in the PDA 's immediate vicinity is indicated by upstanding ridge and furrow in fields on the north side of Stockton Road, *c*.60m to the north of the site. Levelled ridge and furrow is also visible on aerial photographs in fields to the northeast, east and south of the PDA. Seven recorded sites from this period are present within a 1km radius of the PDA. Ridge and furrow is present to the east, west and south-east of the PDA; a hospital was constructed shortly before 1195, *c*.0.67km to the southwest of the site; medieval pottery was recovered from Hardwick Park (East Park) *c*.0.92km to the north-west.

The post-medieval period (1541 to 1899)

2.2.7 There is no direct evidence to demonstrate that the PDA formed part of the 1501 grant of 60 acres of glebe land to the rector of Sedgefield. A 19th-century map of the landholdings in Sedgefield, however, shows that the site was freehold land in the ownership of the rector at that date and the land is not listed in the village copy book. In that case, the land is likely to have remained in agricultural use during the early post-medieval period and so is unlikely to have been the focus of settlement.

2.2.8 The earliest known plan of Sedgefield itself was produced in 1769. While this plan was copied to form part of the 1838 Sedgefield tithe map, the original does not appear to have survived and the status of the PDA and the layout of the land within it during the 18th century is unknown. Sedgefield's historic settlement core includes several listed buildings dating from the 17th and 18th centuries: The White House, the Black Lion public house, the Hope Inn Kensington House, Elm House, the Crosshill Hotel, The Square, the Magistrates Court House, and no.s 4 and 10 Rectory Row. A market cross first mentioned in 1569, stood formerly in Sedgefield's market square,

while Ceddesfeld Hall was a purpose built rectory that was constructed by Bishop Barrington following the burning of the previous rectory.

2.2.9 With the exception of the north-west and north-east perimeters, the present-day site boundaries had been established by the time of the 1838 Sedgefield tithe plan. This map shows three fields within the PDA, while the north-west and north-east parts of the PDA formed part of two further fields. The accompanying tithe apportionment indicates that the PDA was not in arable use in 1838. With the exception of the field boundaries and a track that crossed the central area, no features were shown within the PDA on the 1838 map. The footpath is marked 'Foot Road'. No changes were shown to the 1838 site boundaries and field layouts on the 1859 Ordnance Survey map although mature trees were marked along the field boundaries and a ditch, stream or land drain were shown along the southern perimeter at that date. A footpath, ditch and hedge were shown at the north-east of the PDA in 1859; these followed the alignment of the present-day boundary in that area, but were situated several metres to the north of the current boundary. These features were removed when Stockton Road was extended between 1923 and 1939.

The modern period (1900 to present)

2.2.10 Removal of field boundaries had taken place by the time of the 1919 Ordnance Survey map. A new field boundary is shown in the north-west part of the PDA on the 1964 Ordnance Survey map. Housing developments had taken place to the north and west of the PDA by the time of the 1971 Ordnance Survey map, while the A689 had been constructed to the south and east.

2.2 Geophysical survey

2.2.1 A geophysical survey carried out by Trent & Peak Archaeology in January 2014 (Johnson 2014) revealed anomalies which suggest the presence of a series of substantial, interrelated boundary ditches. These probable ditches define a large area which could perhaps be seen as a focus of habitation or activity, perhaps of later prehistoric or Romano-British date.

2.3 Trial trench evaluation

2.3.1 Results from the evaluation trenching undertaken by Archaeological Services Durham University in November 2014 confirmed that a multi-phased enclosure settlement of probable Roman date exists on the northern part of the PDA in the area where the geophysical survey recorded anomalies representing interrelated boundary ditches containing artefacts and ecofacts (Archaeological Services Durham University 2014). The settlement comprises a series of enclosure ditches, with internal and external features including a possible roundhouse. No archaeological deposits were identified in the southern part of the PDA.

3 Aims and Objectives

3.1 Regional Research Aims and Objectives

3.1.1 Research objectives identified in *North-East Regional Framework* (Petts and Gerrard 2006) considered to be the most relevant to the project include:

Late Bronze Age and Iron Age (Petts and Gerrard 2006, 136):

- Iii Settlement
- Iv Material Culture: general
- Ivi Material Culture: ceramics.

Roman (Petts and Gerrard 2006, 146-53):

- Ri The Iron Age to Roman transition
- Riv Native and civilian life
- Rv Material culture
- Rix Landscape and environment.

3.1.2 These research objectives have assisted in informing the aims and objectives for the trenching and strip, map and record outlined in section 3.2 below. It should be noted that other research objectives may come to the fore should any archaeological features from other periods be identified as a result of the mitigation works outlined below.

3.2 Principal Aims and Objectives

3.2.1 The aims of the programme of work are to gather sufficient evidence to establish, supplement, improve and make available information about any archaeological remains existing within the area of investigation, and to provide an appropriate post-excavation assessment, analysis, reporting, archiving and dissemination.

3.2.2 The objectives are as follows.

- To produce a photographic, drawn and descriptive record of any surviving below-ground archaeological remains.
- To produce dating and phasing for any recorded archaeological deposits.
- To establish the character and delimit the extent of archaeological deposits in order to define functional areas on the site, e.g. industrial and domestic.
- To produce information on the economy and local environment.

4 Fieldwork Methodology

4.1 Coverage

4.1.1 Within the southern area of the PDA, a total of three trenches measuring 50m x 2m (Figure 2) will be excavated in accordance with the methodology outlined in section 4.3 below). Should significant archaeological remains be identified in any of these trenches, and in consultation with the County Durham Principal Archaeologist and the client, additional mitigation works may be required in this part of the site, e.g. a strip, map and record in the area(s) adjacent to the trench(es) which may be subject to an addendum to this or a separate Written Scheme of Investigation.

4.1.2 The northern part of the PDA, measuring *c*.3.1Ha (Figure 2), will be subject to strip, map and record in accordance with the methodology outlined in section 4.4 below).

4.1.3 The northernmost part of the PDA where the site compound will be located (Figure 2) will be subject to archaeological monitoring and recording of ground works for the road, services and tree planting due to take place during development works.

4.2 General Statement of Practice

4.2.1 All staff employed on the project will be suitably qualified for their respective project roles and have substantial experience of archaeological excavation and recording.

4.2.2 All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification.

4.2.3 All ground works covered under this specification will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket working in plan.

4.2.4 ARS Ltd will ensure that plant or machinery will not be operated in the immediate vicinity of any archaeological remains until they have been recorded.

4.2.5 Contractors and plant operators will be notified that any observations of archaeological remains must be reported immediately to the archaeologist on site.

4.2.6 Regular contact will be ensured between ARS Ltd and the client's project manager to ensure that ARS Ltd is kept up to date with site works and given the chance to respond appropriately and in line with the County Durham Principal Archaeologist's requirements.

4.2.7 All site operations will be carried out in a safe manner in accordance with ARS Ltd's health and safety policy. A risk assessment will be prepared before commencement on site.

4.3 Trenching

4.3.1 All elements of the archaeological strip, map and record exercise will be carried out in accordance with CIfA's *Code of Conduct* (2014a) and *Standards and Guidance for Field Evaluation* (2014b) and the regional guidance document *Yorkshire, The Humber & the North East: a regional statement of good practice for archaeology in the development process*.

4.3.2 Topsoil will be removed by a mechanical excavator using a toothless ditching bucket to the first significant archaeological horizon.

4.3.3 All trenches will be manually cleaned to an appropriate level to expose the full nature and extent of archaeological features and deposits.

4.3.4 All excavated spoil will be scanned visually to recover small finds. Finds so recovered will be recorded with their location of origin ascribed. Finds will be retained and recorded.

4.3.5 Should archaeological deposits or structures be revealed that are more numerous, better preserved, or of higher status than expected or than which could reasonably be expected consultation will take place with the County Durham Principal Archaeologist to identify and agree further excavation/recording strategy.

4.3.6 Isolated, discrete features such as pits which do not form structural features or are representative of industrial activities will be 50% sampled, if they produce artefacts then provision is made for full excavation.

4.2.7 Archaeological linear features, such as ditches and gullies that are not of a structural nature, will be sampled to a minimum sample size of 25% away from intersections. Intersections will be sampled and excavated in plan with strategic temporary sections located to demonstrate sequence.

4.3.8 Cut features of an archaeological nature which comprise structural units will be completely excavated to and respect the original interface of construction.

4.3.9 Upstanding or positive features of an archaeological nature, following recording, will be either partially or wholly excavated by hand where such excavation facilitates access to lower lying archaeological stratification. Where said features do not represent elements of a physically superimposed sequence and are observed to be truncating natural strata partial excavation, as a representative sample (to demonstrate construction technique, depth of foundation trench, construction materials etc.) will be undertaken.

4.4 Strip, Map and Record

4.4.1 All elements of the archaeological strip, map and record exercise will be carried out in accordance with CIfA's *Code of Conduct* (2014a) and *Standards and Guidance for Archaeological Excavation* (2014c) and the regional guidance document *Yorkshire, The Humber & the North East: a regional statement of good practice for archaeology in the development process*.

4.4.2 The strip, map and record will be carried out over the area where the geophysical survey revealed anomalies which suggest the presence of a series of substantial, interrelated boundary ditches of later prehistoric and/or Romano-British date (Figure 2).

4.4.3 The topsoil will be removed mechanically by a suitable mechanical excavator fitted with a toothless ditching bucket, under continuous archaeological supervision. The topsoil or recent overburden will be removed down to the first significant archaeological horizon in successive level spits.

4.4.4 The areas will be appropriately cleaned using hand tools in order to expose the full nature and extent of archaeological features and deposits.

4.4.5 Once the area has been stripped, cleaned and mapped as outlined above, consultation will take place with the County Durham Principal Archaeologist to agree the features that should be excavated.

4.4.6 All excavated spoil will be scanned visually to recover small finds. Finds so recovered will be recorded with their location of origin ascribed. Finds will be retained and recorded.

4.4.7 Where the settlement in the central part of the northern area is to be directly impacted upon by the development (roads, services, houses, landscaping, and any other form of ground disturbance) 50% of linear features and 100% of discrete features will be excavated. Within the remainder of the settlement area 20% of linear features and 50% of discrete features will be excavated. In all of these areas 100% of ditch intersections and terminals will be excavated.

4.4.8 Limited representative samples of bricks from brick-built structures, and selective products of the brick working process will be retained for specialist analysis where appropriate.

4.5 Monitoring and Recording

4.5.1 All relevant ground works will be undertaken by either a suitable mechanical excavator fitted with a toothless ditching bucket or by hand.

4.5.2 All excavated spoil will be scanned visually to recover small finds. Finds so recovered will be recorded with their location of origin ascribed. Finds will be retained and recorded.

4.5.3 Where archaeological features and/or deposits are identified during the monitoring and recording, then a sufficient quantity of the said features will be investigated by hand to allow their date, nature and degree of survival to be ascribed.

4.5.4 If significant archaeological features are identified during these works, the County Durham Principal Archaeologist will be notified and a decision made as how to proceed.

4.6 Sampling, Faunal Remains and Treasure

4.6.1 This section outlines sampling methodologies to be utilised in all excavation types.

4.6.2 For sealed and stratigraphically secure deposits that have the potential to provide environmental evidence relating to diet and economy, dating evidence or land use regime, a minimum of 40 litres of sample will be taken, or 100% of the sample if smaller. This material will be floated and passed through graduated sieves, the smallest being a 500µ mesh.

4.6.3 In the case of waterlogged or anaerobic deposits, a minimum sample size of 20 litres will be taken,

4.6.4 Should a sequence of superimposed deposits of note be present column sampling may be considered.

4.6.5 In all instances, sampling strategies will be in accordance with guidelines issued by Historic England's *Environmental Archaeology: A Guide to the Theory and Practice Methods, from sampling and recovery to post-excavation* (Campbell *et al.* 2011) and will be targeted in order to explore the levels and types of preservation present.

4.6.6 Should other types of environmental deposits be encountered, appropriate specialist advice will be sought and appropriate sampling strategy devised. Samples will be assessed by a suitable specialist with provision for further analysis as required. Advice from the Historic England Scientific Advisor will be taken as appropriate.

4.6.7 Any human remains will initially be left *in-situ* and, if deemed necessary, removal will be undertaken following once a Coroners licence has been obtained in accordance with the relevant Ministry of Justice regulations and in discussion with the County Durham Principal Archaeologist.

4.6.8 Finds of 'treasure' will be reported to the Coroner in accordance with the Treasure Act (DCMS 2008). The Portable Antiquities Liaison officer will also be notified.

HM Coroner	Finds Liaison Officer
PO Box 282	Archaeology Section, Durham County Council
Bishop Auckland	County Hall
Co. Durham	Durham
DL14 4FY	DH1 5UQ
Tel: 01782 234783	Tel: 03000 267011

4.6.9 The County Durham Principal Archaeologist will also be notified and, if necessary, a site meeting arranged to determine if further investigation in the vicinity of the find spot is required.

4.7 Recording

4.7.1 Site recording will follow standard conventions outlined in the *Site Recording Manual* of Museum of London Archaeology Services (MoLAS) (2002).

4.7.2 The site will be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded using a single context planning system in accordance with the ARS Ltd field recording manual.

4.7.3 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro-forma record sheets and text descriptions appropriate to the work. Accurate measured scale plans and section/elevations will be drawn where required at the appropriate scale and in accordance with best practice. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.

4.7.4 A plan of the excavated areas will be maintained, features notes and section lines recorded. All drawings will be carried out at an appropriate scale and all contexts will be recorded using a single context recording system.

4.7.5 Sample representative levels will be taken to record the maximum depth of excavation and/or natural should no archaeological features be uncovered.

4.7.6 The stratigraphy of the site will be recorded even where no archaeological deposits have been identified.

4.7.7 All heights above sea level will be recorded for all deposits and features in metres above Ordnance Datum (aOD).

4.7.8 A full photographic record will be compiled using a digital camera, a Fuji XP90 with a 16.4 MP resolution, and a register of all photographs will be kept. The photographic record will encompass all encountered archaeological entities. In addition, key relationships between entities, where these help demonstrate sequence or form, will also be photographed. A clearly visible, graduated metric scale will be included in all record shots. A supplementary record of working images will be taken to demonstrate how the site was investigated and what the prevailing conditions were like during excavation.

4.7.9 A stratigraphic matrix will be compiled for all trenches where superimposed archaeological deposits, features or structures are encountered.

5 FINDS PROCESSING AND STORAGE

5.1 All finds processing, conservation work and storage of finds will be carried out in accordance with the CIfA (2014d) *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* and the UKIC (1990) *Guidelines for the Preparation of Archives for Long-Term Storage*.

5.2 Artefact collection and discard policies will be appropriate for the defined purpose.

5.3 Bulk finds which are not discarded will be washed and, with the exception of animal bone, marked. Marking and labelling will be indelible and irremovable by abrasion. Bulk finds will be appropriately bagged, boxed and recorded. This process will be carried out no later than two months after the end of the excavation.

5.4 All small finds will be recorded as individual items and appropriately packaged (e.g. lithics in self-sealing plastic bags and ceramic in acid-free tissue paper).

5.5 Vulnerable objects will be specially packaged and textile, painted glass and coins stored in appropriate specialist systems. This process will be carried out within two days of the small find being excavated.

5.6 During and after the excavation all objects will be stored in appropriate materials and storage conditions to ensure minimal deterioration and loss of information (including controlled storage, correct packaging, and regular monitoring, immediate selection for conservation of vulnerable material). All storage will have appropriate security provision.

5.7 The deposition and disposal of artefacts will be agreed with the legal owner and The Bowes Museum prior to the work taking place. All finds except treasure trove are the property of the landowner.

5.8 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of The Bowes Museum.

6 TIMETABLE AND STAFFING

6.1 The outline timetable for the works is as follows. This will be updated by email as the project progresses.

Proposed Commencement Date	**Task**
Early-mid June 2017	Archaeological trenching and strip, map and record
Late July 2017	Archaeological monitoring and recording, report and archive

6.2 The Project Manager for the archaeological works will be Reuben Thorpe MCIfA, Projects Manager at ARS Ltd. The Fieldwork Project Officer will be Philippa Cockburn ACIfA, Projects Officer at ARS Ltd.

6.3 Specialist analyses will be carried out by appropriately qualified specialists as detailed subject to availability.

Flint and prehistoric pottery:	Dr Clive Waddington MCIfA or Dr Robin Holgate MCIfA
Romano-British pottery:	Alex Croom
Romano-British small finds:	Lindsay Allason-Jones MCIfA
Samian Ware:	Dr Gwladys Monteil
Medieval and post-medieval pottery:	Dr Chris Cumberpatch or Dr Robin Holgate MCIfA
Medieval and post-medieval glass, metalwork and clay pipes:	Mike Wood MCIfA
Plant macrofossils, charcoals and pollen:	Luke Parker
Human and animal bone:	Milena Grzybowska
Radiocarbon dating:	Prof Gordon Cook (SUERC)
Finds conservation:	Vicky Garlick (Durham University)

7 REPORT

7.1 A report on the results obtained will be produced by ARS Ltd and submitted to the County Durham Principal Archaeologist or personnel nominated by him within

8 weeks of the completion of the fieldwork. The report will follow the guidance laid out in the relevant CIfA standards and will include the following as a minimum.

- Non-technical executive summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections
- An objective summary statement of results
- Conclusions
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References
- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the WSI and OASIS form.

7.2 One bound copy of the final report with a digital copy of the report in PDF/A format on disc will be deposited with the County Durham Historic Environment Record (HER). A copy of the report will be uploaded as part of the OASIS record for online access via the Archaeological Data Service.

7.3 At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).

8 ARCHIVE DEPOSITION

8.1 Should the project produce archaeologically significant finds, then the County Durham Principal Archaeologist and The Bowes Museum Curator will be notified at the earliest opportunity, and an accession number will be produced for the site.

8.2 A project archive will be prepared for deposition by ARS Ltd with the Bowes Museum. The archive will comprise of the primary record and synthetic works arising from the project, including documents, plans, sections, photographs, and electronic data and an accompanying metadata statement. The digital archive will be prepared in line with current best practice outlined in *Archaeology Data Service/Digital Antiquity Guides to Good Practice* (ADS/Digital Antiquity 2011).

8.3 The archive will be deposited in line with *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (Brown 2007), CIfA's (2014e) *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*, and Society of Museum Archaeologists (1993) *Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland*. The archive will be deposited within two months of the completion of the report.

8.4 The County Durham Principal Archaeologist and Museum Curator will be notified at the earliest opportunity should the site produce archaeologically significant, unusual, or unexpected finds.

8.5 The County Durham Principal Archaeologist and Museum Curator will be notified in writing on completion of the fieldwork with projected dates for the completion of the report and deposition of the archive. The date for deposition of the archive will be confirmed in the report and the County Durham Principal Archaeologist informed in writing on final deposition of the archive.

8.6 All artefacts and associated material will be cleaned, recorded, properly stored and deposited in the archive.

8.7 A full set of annotated, illustrative pictures of the site, excavation, features, layers and selected artefacts will be deposited with the archive as digital images on a CD ROM.

9 MONITORING ARRANGEMENTS

9.1 At least one week prior notice of the commencement of each phase of ground works to be given to the County Durham Principal Archaeologist:

Dr David Mason
Archaeology Section
Heritage, Landscape & Design Team
Planning & Assets Service
Regeneration and Economic Development
Durham County Council
County Hall
Durham
DH1 5UQ
Tel: 03000 267012
Email: David.Mason@durham.gov.uk

9.2 ARS Ltd will liaise with the County Durham Principal Archaeologist at regular intervals throughout the course of the work.

9.3 The client will afford reasonable access to the County Durham Principal Archaeologist, or his representative, for the purposes of monitoring the archaeological mitigation.

10 General Items

10.1 Health and Safety

10.1.1 All work will be carried out in accordance with The Health and Safety at Work Act 1974. Specific health and safety policies exist for all our workplaces and all staff employed will be made aware of the policy and any relevant issues. The particular risks involved with this project will be assessed, recorded and relevant mitigation measures put in place as part of a full risk assessment, which will be compiled in advance of fieldwork and will be read and signed by all on-site operatives. ARS Ltd retains Citation as its expert health and safety consultants.

10.2 Insurance Cover

10.2.1 ARS Ltd has full insurance cover for employee liability public liability, professional indemnity and all-risks cover.

10.3 Community Engagement and Outreach

10.3.1 Any opportunities for engaging the local community in any archaeological findings should be sought, for example guided site tour(s) and/or dissemination of information via ARS Ltd's website and local media.

10.4 Changes to the Written Scheme of Investigation

10.4.1 Changes to the approved methodology or programme of works will only be made with prior written approval of the County Durham Principal Archaeologist.

10.5 Publication

10.5.1 In consultation with the County Durham Principal Archaeologist, a précis will be produced for *Archaeology: County Durham*. The précis must be no more than 500 words in length and it would be appreciated if TIFF images of 300dpi are also included. The summary must be sent to the County Durham Principal Archaeologist by the beginning of December of the same year in which the work was conducted.

10.5.2 In the event of significant remains being encountered and excavated, there may be the need for a more formal publication than in the summary form. In this instance a suitable programme and timetable for publication and dissemination will be discussed and agreed upon by all stakeholders. This may include a note or short article in an appropriate archaeological journal.

10.6 Publicity and Copyright

10.6.1 Any publicity will be handled by the client. Durham County Council Archaeology Section's contribution to fulfilling the archaeological work should be acknowledged in any and all publicity. ARS Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988), although Durham County Council Archaeology Section will be permitted to use all this material in fulfilling its functions.

11 REFERENCES

ADS/Digital Antiquity. 2011. *Archaeology Data Service/Digital Antiquity Guides to Good Practice.*

Archaeological Services Durham University. 2014. Land off Eden Road, Sedgefield, County Durham. Archaeological evaluation. Report 3622.

ArcHeritage 2012. Stockton Road, Sedgefield, Co. Durham. Desk-based Assessment. Report No. 2012/8.

British Geological Survey 2017. Geology of Britain viewer. Available online at: http://mapapps.bgs.ac.uk/geologyofbritain/home/html [Accessed 12th May 2017].

Brown, D. 2007. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation.* Archaeological Archives Forum.

Campbell, G., Moffett, L. and Straker, V. 2011. *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from sampling and recovery to post-excavation (second edition).* Portsmouth, Historic England.

Chartered Institute for Archaeologists (CIfA) 2014a. *Code of Conduct.* Reading, Institute for Archaeologists

Chartered Institute for Archaeologists (CIfA) 2014b. *Standard and Guidance for Field Evaluation*. Reading, Chartered Institute for Archaeologists.

Chartered Institute for Archaeologists (CIfA). 2014c. *Standard and Guidance for Archaeological Excavation*. Reading, Chartered Institute for Archaeologists.

Chartered Institute for Archaeologists. 2014d. *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*. Reading, Chartered Institute for Archaeologists.

Chartered Institute for Archaeologists. 2014e. *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*. Reading, Chartered Institute for Archaeologists.

Department for Communities and Local Government (DCLG). 2012. *Planning Policy Statement 5: Planning for the Historic Environment*. London, The Stationery Office.

Department of Culture, Media and Sport (DCMS). 2008. *The Treasure Act 1996 Code of Practice (England and Wales).* London, The Stationery Office.

Johnson, P. 2014. Land off Stockton Road, Sedgefield, County Durham. Report on Geophysical Survey conducted in January 2014. TPA Report No. 10/2014.

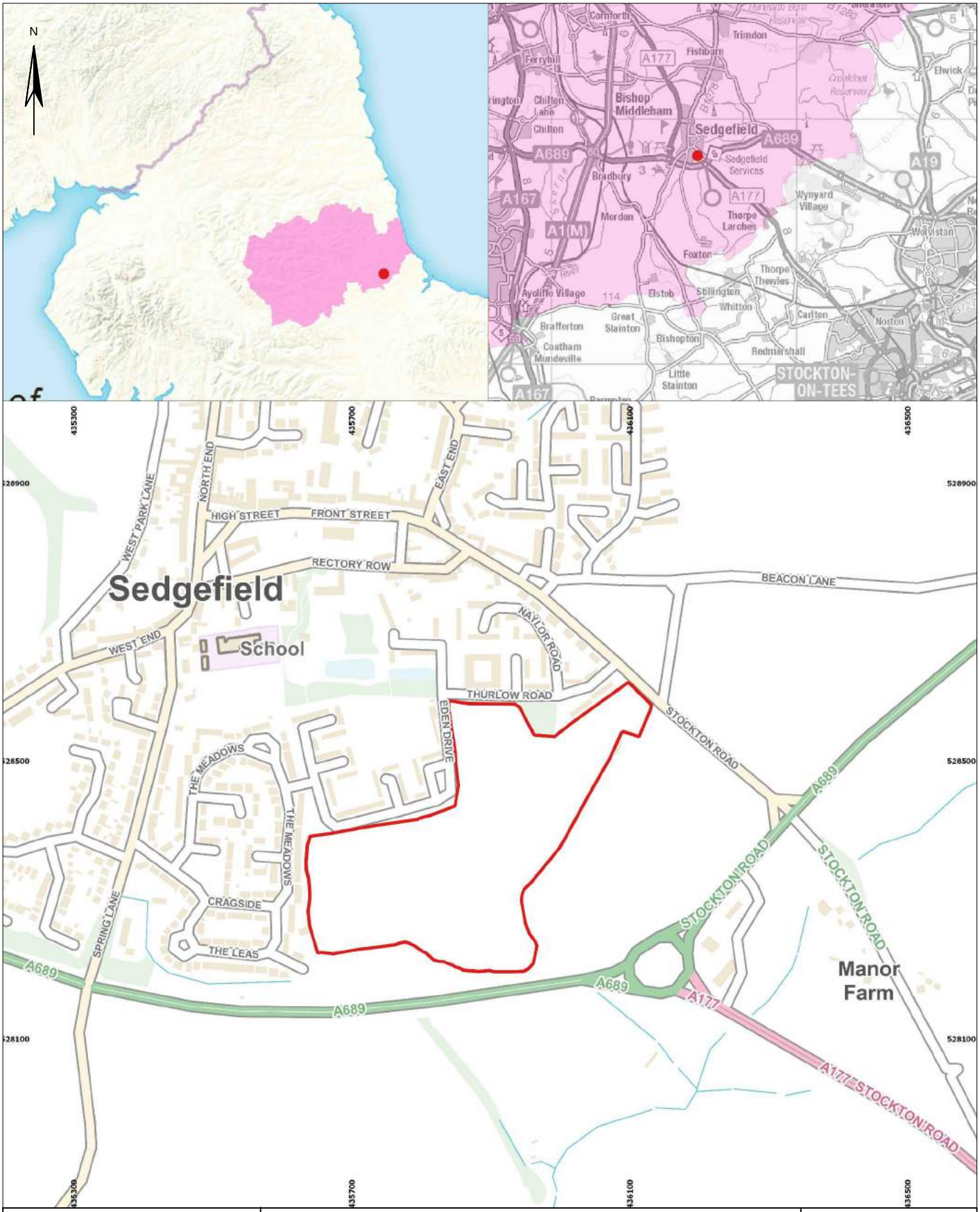
Museum of London Archaeological Services (MoLAS). 2002. *Site Manual.* London, Museum of London.

Petts, D. and C. Gerrard. *Shared Visions: The North-East Regional Research Framework for the Historic Environment.*

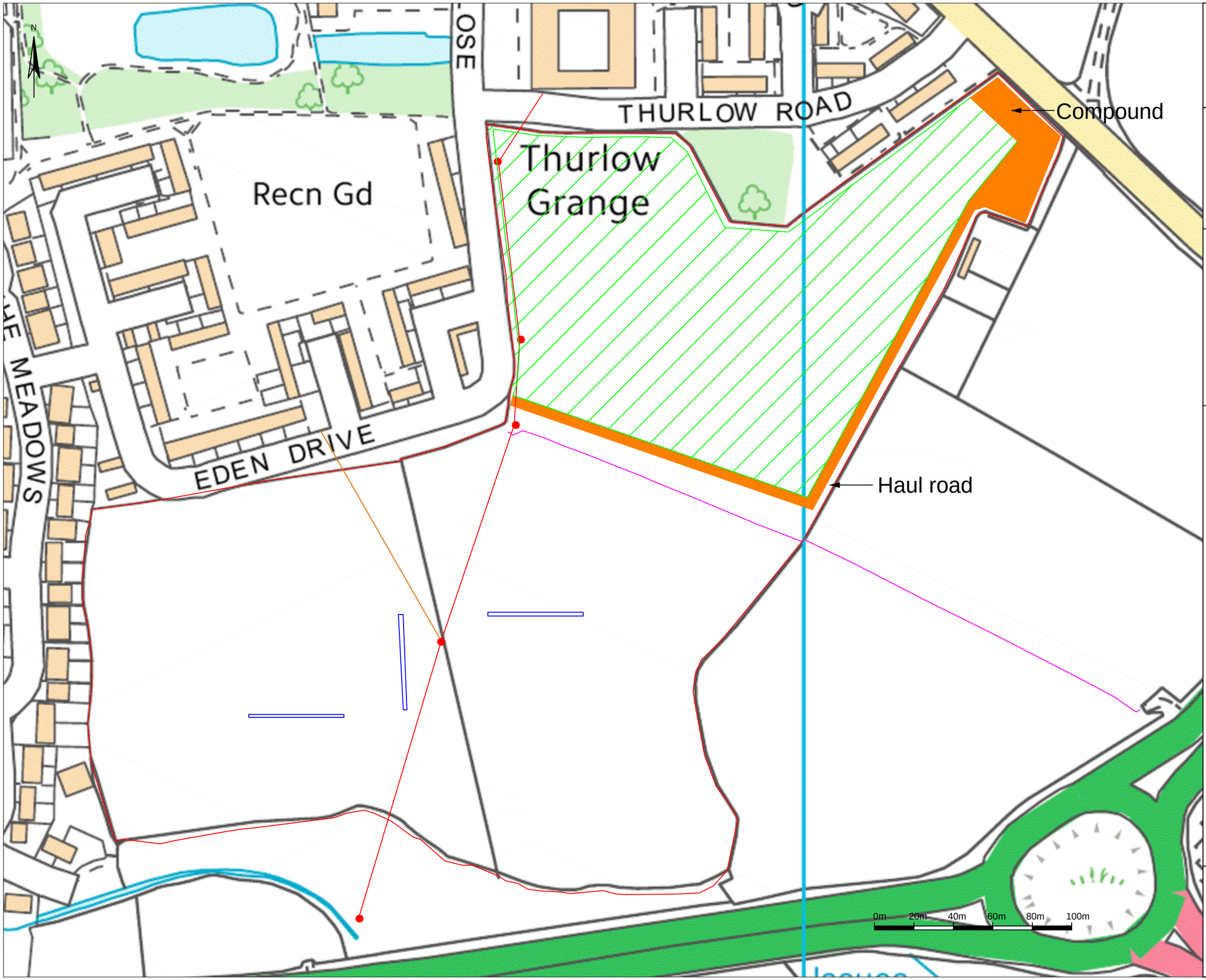
Society of Museum Archaeologists 1993. *Selection, Retention and Dispersal of Archaeological Collections. Guidelines for use in England, Wales and Northern Ireland.* London: Society of Museum Archaeologists.

United Kingdom Institute for Conservation. 1990. *Guidelines for the Preparation of Archives for Long-Term Storage.*

FIGURES



Archaeological Research Services Ltd Angel House Portland Square Bakewell Derbyshire DE45 1HB Site Code: Sedgefield Eden Drive Date: May 2017 Drawn:RD Scale: As shown	**Figure 1** Site Location Key: Site location RLB County Durham	Copyright/Licencing: This drawing © A.R.S. Ltd Ordnance Survey © Crown Copyright 2014. All rights reserved. Licence No. 100022432.



Archaeological Research Services Ltd.
Angel House
Portland Square
Bakewell
Derbyshire
DE45 1HB

Site Code: SED
Drawing Ref. Draft
Date: June 2017
Drawn: RD
Scale: As Shown

Figure 2_v1
Archaeological works and utility services

Key:

- RLB
- Strip, map and sample excavation area
- Compound and haul road
- Approximate location of 22kV electric cable
- Additional 50m x 2m evaluation trenches
- Combined sewer
- Foul sewer

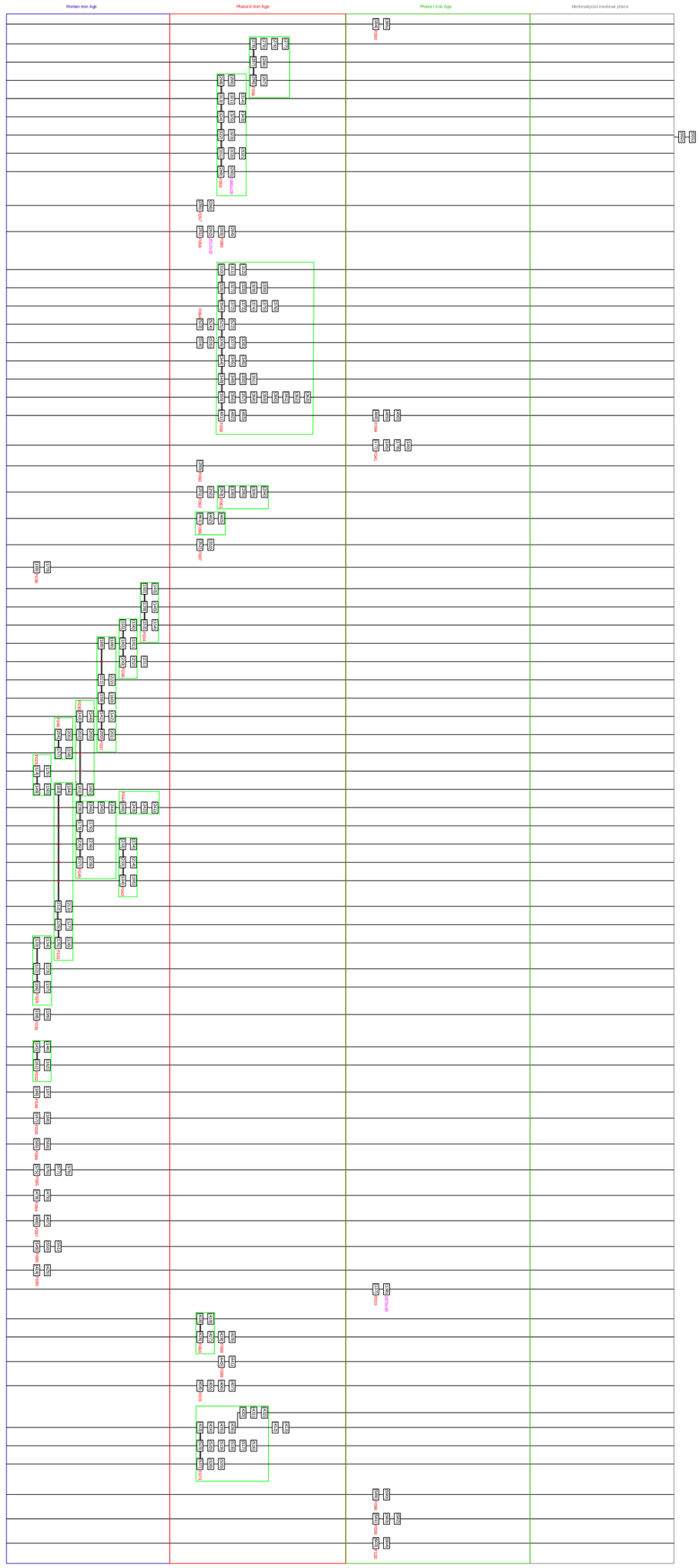
APPENDIX V- HARRIS MATRIX

Roman Iron Age

Phase II Iron Age

Phase I Iron Age

Medieval/post-medieval phase


Roman Iron Age
Phase II Iron Age
Phase I Iron Age
Medieval/post-medieval phase