

Archaeological Excavations at Mercia Marina, Willington, Derbyshire



View northwest of pit alignment.

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**Archaeological Excavations at Mercia Marina,
Willington, Derbyshire**

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ARS Ltd Report 2018/28

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Executive Summary

Project Name: Archaeological Excavation at Mercia Marina, Willington, Derbyshire

Site Code: MMW 17

Planning Authority: South Derbyshire District Council

Planning Ref: 9/2016/0066

Location: Mercia Marina, Findern Lane, Willington, Derbyshire DE65 6DW

Geology: Gunthorpe Mudstones overlain by Findern clays, silts and sands

NGR: SK 2981 2964

Date of Fieldwork: 9th October–1st November 2017

Date of Report: September 2018

In October 2017, Archaeological Research Services Ltd was commissioned by Mercia Marina Ltd. to undertake an archaeological excavation on land at Mercia Marina, Willington, Derbyshire. The site lies in the middle of the Trent valley, a landscape rich in archaeological remains. Archaeology is a material concern within the planning process and a condition of planning consent for the construction of 32 wood clad holiday lodges and associated wildlife pond on the site required that a programme of archaeological works be undertaken and concluded prior to occupation.

Previous works on this site by Archaeological Research Services Ltd encompassed Heritage Impact Assessment (HIA) (Burpoe, 2015) and archaeological trial trenching (Thorpe, 2016).

The excavations discussed here were focussed toward six areas across the two fields that would be impacted by the construction of lodge cabins, a haul road and a wildlife pond. The archaeological work was undertaken between the 9th October and the 1st November 2017 and revealed a prehistoric pit alignment, previously identified in the Historic Environment Record for Derbyshire later confirmed by archaeological evaluation trenching (Thorpe, 2016). Other features were also identified on the site, including a Medieval boundary ditch, partial remains of an undated enclosure, pits, postholes and evidence relating to Medieval/post medieval agriculture.

1 Introduction

1.1 Circumstances of the Project

Planning consent (9/2016/0066), subject to condition, has been granted to Mercia Marina by South Derbyshire District Council for the development of 32 holiday lodges, associated landscaping, wildlife pond and access at Mercia Marina, Findern Lane, Willington, Derby, Derbyshire (Figure 1).

Archaeology is a material consideration in the planning process under the provisions of the *National Planning Policy Framework* (NPPF) (DCLG 2012). Paragraph 141 of NPPF outlines a requirement 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 archive generated) publicly accessible*.

Planning condition 13, attached to planning consent, required a pre-commencement phase of archaeological works as well as adequate provision for post-excavation analysis, archiving and publication.

Archaeological Research Services Ltd was commissioned by Mercia Marina in March 2016 to undertake a scheme of archaeological works including Heritage Impact Assessment (HIA), Archaeological Evaluation trenching and subsequent excavation on land at Mercia Marina, Willington, Derbyshire in advance of redevelopment.

1.2 Site Location

The site lies some 12km to the southwest of Derby, in the middle of the Trent Valley, between the villages of Findern to the north and Willington to the south-west. The development area covers 5.85ha and is centred at SK 2981 2964.

1.3 Land Form, Geology and Soils

The site comprises of two fields, Field 1 to the south of the PDA and Field 2, to the north of the Development Area (DA). (Figure 2).

Field 2 is triangular in shape, and sloped from the north-west corner from a high point at c.57m above Ordnance Datum (aOD) towards the east to c.52m aOD and towards the south east to c.49m. The land levels off and rises slightly to c. 49.8m aOD before dropping off again to 49m aOD at the hedge line. The levelling off of the land was characterised during the archaeological evaluation, as being the result of levelling up of the land during recent quarrying (Thorpe, 2016).

Field 1 is trapezoidal in shape and slopes down from west to east from c.53m aOD to 48m in the middle of the field and levels off and even rises slightly to c. 49m at the

eastern edge. Like field 2, the area of rising ground is a result of the quarrying of the area (Thorpe, 2016).

The underlying solid geology of the site comprises Mudstone of the Gunthorpe Member, with overlain deposits of Findern clays, silts and sands and Beeston sand and gravels, with the sand and gravels being the uppermost across the proposed development area (PDA) and is the material which the archaeological remains are cut (BGS, 2015).

The soils of the DA are classified as belonging to the ARROW soil Association (543)-gleyic brown earths (SSEW 1983), characterised as deep permeable, coarse loamy soils affected by the groundwater and form as glaciofluvial drift. (CU 2015).

1.4 Historical and Archaeological Background

Archaeological remains spanning the Earlier and Later Prehistoric periods are well attested in the immediate vicinity (Burpoe 2015, 5) and the surrounding area has been subjected to sustained investigation over the last 30 years (Taylor 1990; Beavit 1990; TPAT 1992; Philpott 1993; Hughes 1995; Hughes & Jones 2001; Brightman 2008; Brightman and Waddington 2012).

A Heritage Impact Assessment (HIA) undertaken by ARS Ltd in 2015 (Burpoe 2015) highlighted the presence of non-designated archaeological remains within the PDA (Burpoe 2015, 9) in Field 2. These remains, namely Neolithic and Bronze Age features and a Late Prehistoric pit alignment, are identified in the Historic Environment Record for Derbyshire (HER nos. MDR4333, MDR14504) and the National Record of the Historic Environment (NRHE nos. 1516179 & 313191, 1516192).

The presence of relict Medieval field terraces to the northern end of Field 2 was also highlighted in the HIA. These are clearly visible in Google Earth (Figure 2) but were initially identified in the Derbyshire and the Peak District Aggregates Assessment Resource Assessment (Brightman and Waddington 2011, 154).

Previous archaeological evaluations (Hughes 1995) within the DA, though limited in scope, revealed relatively little in terms of preserved archaeology (Burpoe 2015, 7). This absence of evidence does not necessarily constitute evidence of absence and Hughes (1995) notes that natural site formation processes within the site may have obscured the archaeology visible to aerial photography. Excavations further to the east (Brightman and Waddington 2012) revealed archaeological remains dating from most periods of Prehistory previously unknown from cropmarks and aerial photography (Brightman 2008, 3 and 106).

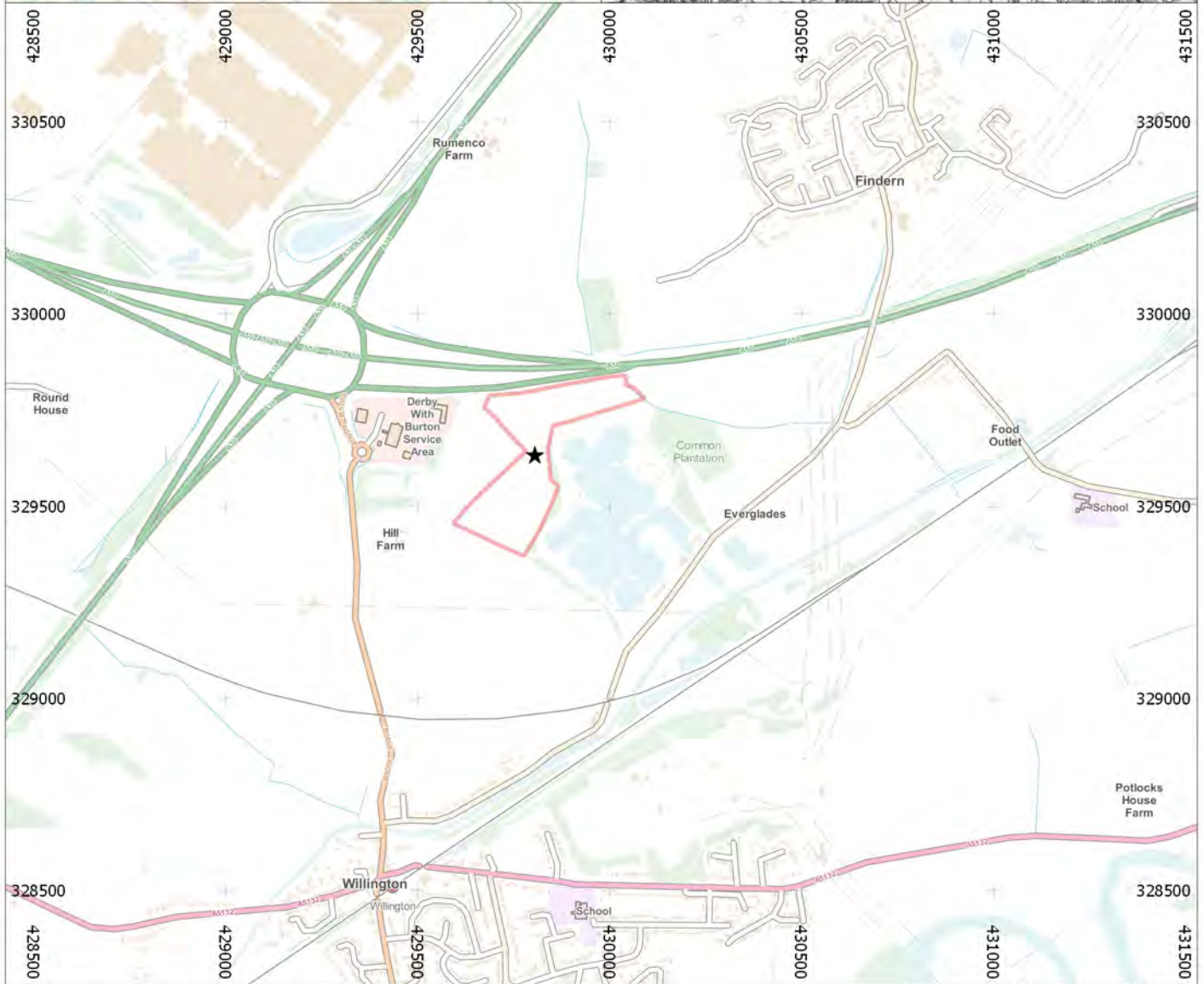
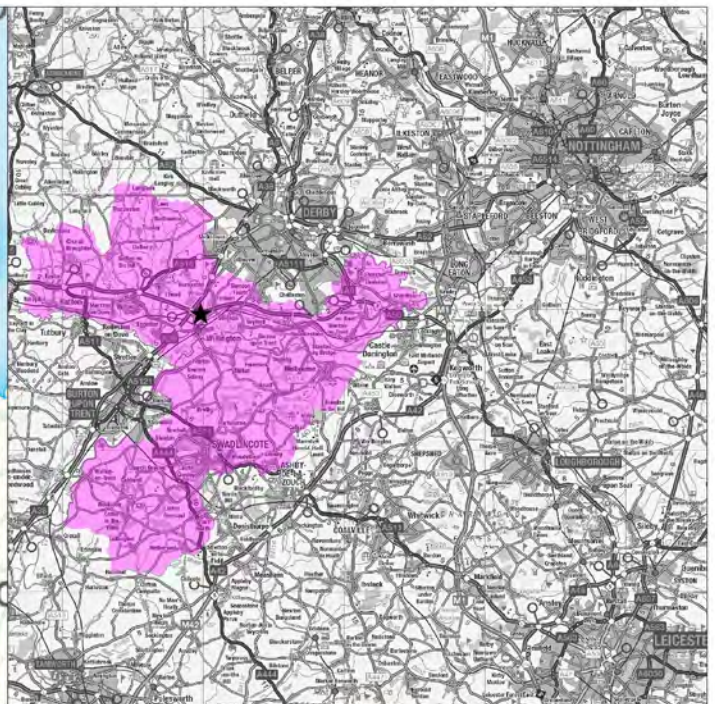
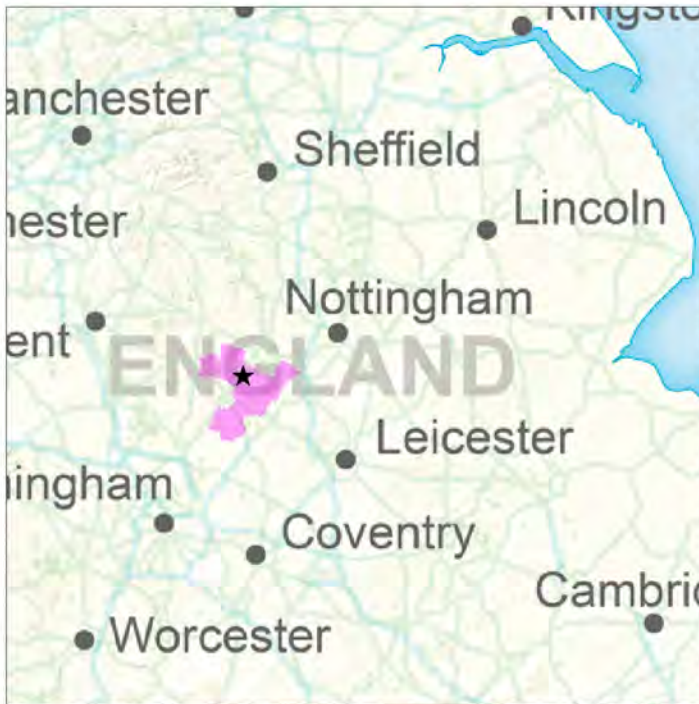
A more recent tranche of evaluation (Thorpe 2016) confirmed the location and survival of the Later Prehistoric pit and ditch alignment and the presence of ridge and furrow features in Field 1. In Field 2 a single feature of potential archaeological origin was also recorded comprising postholes, a slot and associated wear hollow.

1.5 Previous Archaeological Work

Previous archaeological works, undertaken by ARS Ltd comprised a Heritage Impact Assessment (Burpoe 2015) and an archaeological trial trench evaluation (Thorpe 2016).

The heritage impact Assessment (Burpoe 2015) identified buried archaeological remains within the PDA, namely pit alignment HER MDR4333, MDR14504, that would be impacted by development.

Subsequent archaeological evaluation trenching, undertaken in March 2016 (Thorpe 2016), confirmed the presence of archaeological remains identified in the HIA (Burpoe 2015), and demonstrated the remains of a Prehistoric boundary, Medieval or earlier post-medieval ridge and furrow in Field 1 and the survival of archaeological features in Field 2.



Site name: Mercia Marina
 Date: April 2016
 Drawn by: RXT
 Scale: Varies

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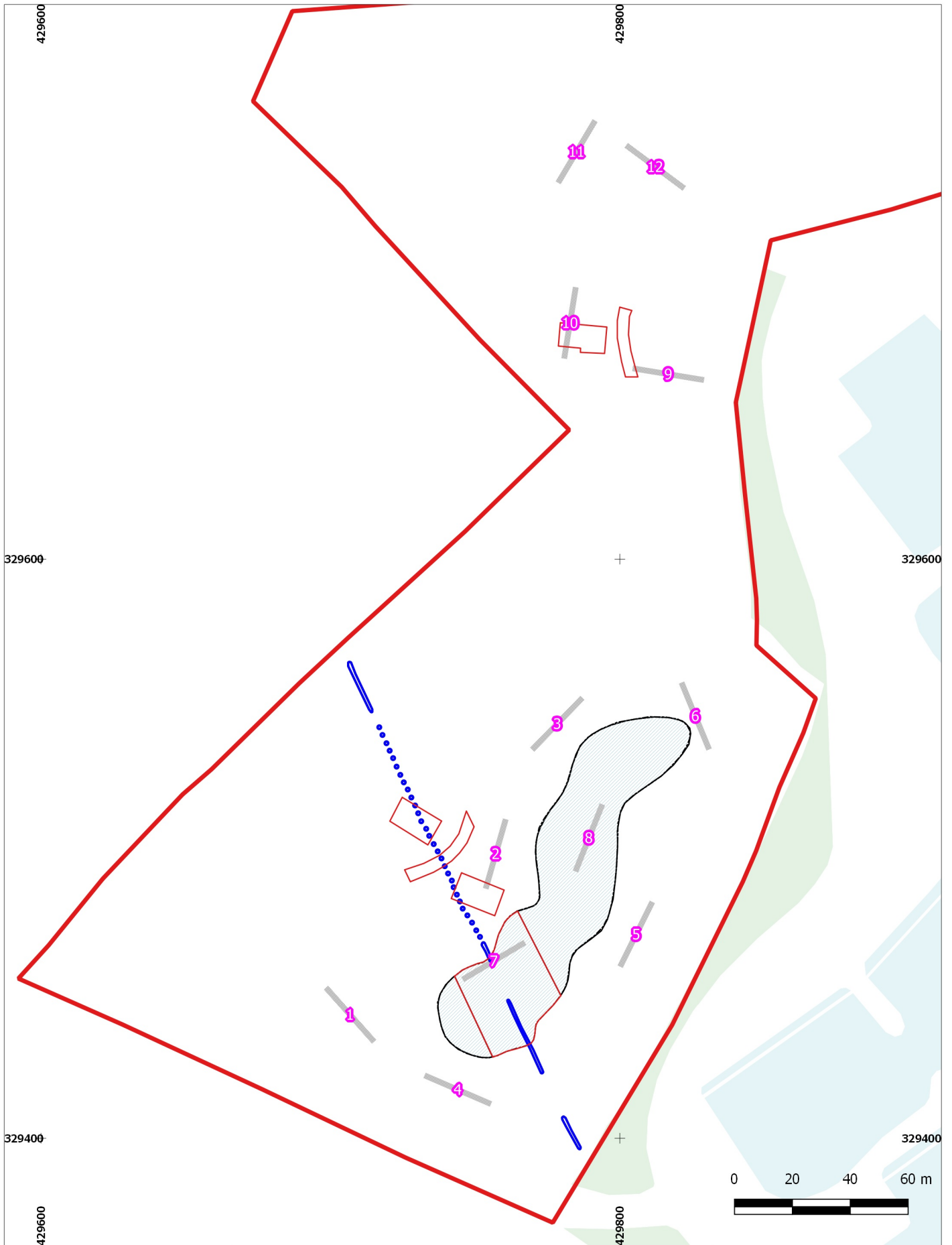
South Derbyshire District
 Site boundary
 ★ Site centre

**Figure 1:
Site location**

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Site name: Mercia Marina, Willington
 Date: June 2018
 Drawn by: MB
 Scale: 1:1750 @ A4

Figure 2: Phases of Archaeological Works at Mercia Marina



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- Site Boundary
- Pit Alignment
- Evaluation Trenches
- Open Area Excavation
- Scalable Watching Brief

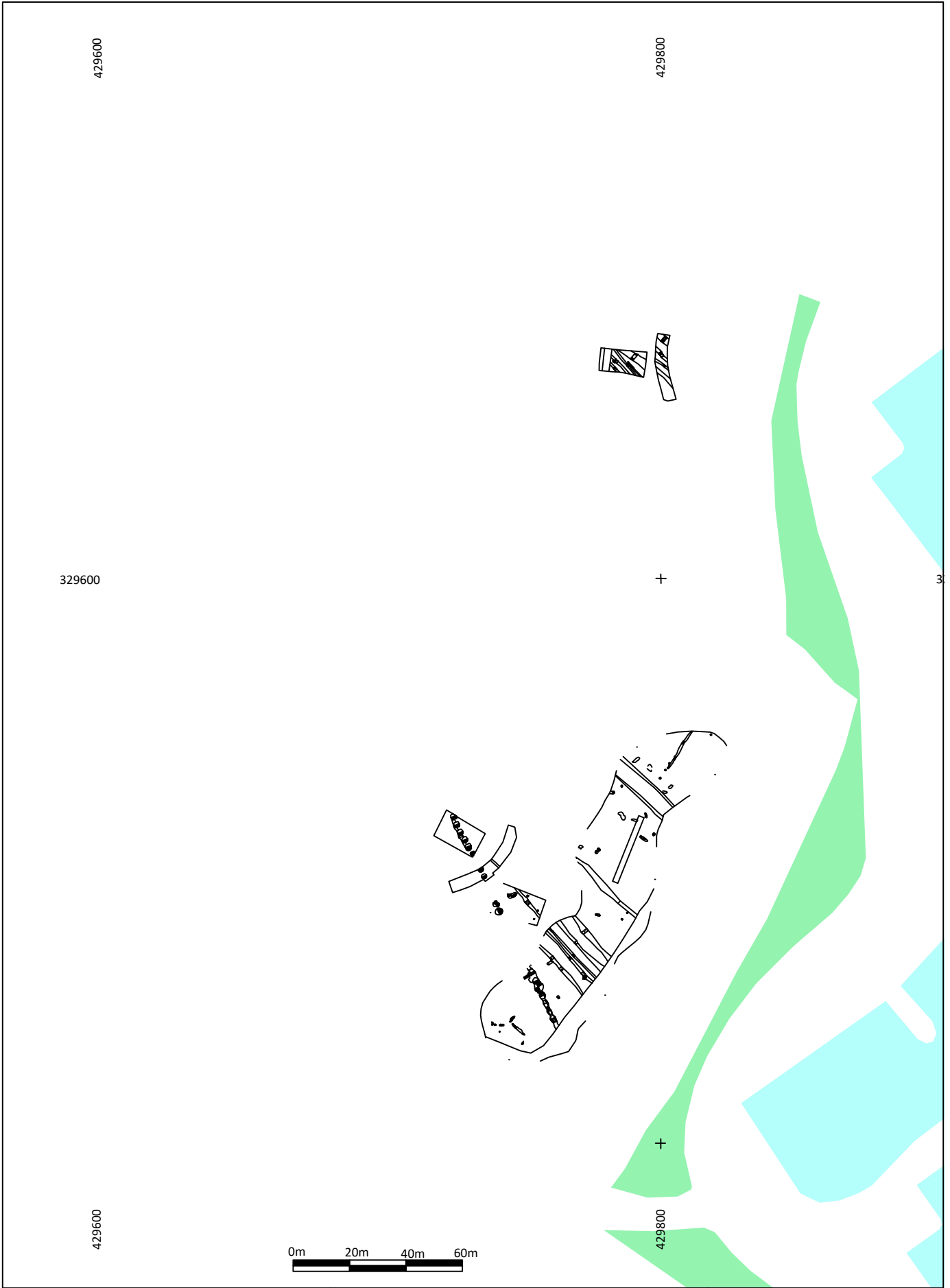


Figure 3: All Features Plan
Scale: As shown as A4

Key:

 Site Boundary



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2 Project Aims and Objectives

2.1 Regional Research Aims and Objectives

Initially the archaeological works were adjudged to have the potential to address research objectives and overarching research themes identified in *Updated Research Agenda for the East Midlands* (Knight *et al.* 2012), notably for the Neolithic – Early Bronze age periods and for the Post-Medieval (1485-1790) and Modern (1750 to present) periods. Namely:

Objective 3A: Dating

3.1.2 Improve seriation and dating of Neolithic and Bronze Age Pottery. (Knight *et al.* 2012, 47)

Objective 4C: Characterise the Late Bronze Age – Early Iron Age (LBA-EIA) settlement resource and investigate intra-regional variability.

4.6.1; 4.6.2; 4.6.3. Development of field systems, political and socio-economic role of pit alignments and ditch systems and changes in agrarian landscape.

(Knight *et al.* 2012, 59)

Objective 4F: Investigate Intra-regional variations in the development of field boundaries.

4.6.1; 4.6.2; 4.6.3. Development of field systems, political and socio-economic role of pit alignments and ditch systems and changes in agrarian landscape.

4.8.1 – 4.8.4. The examination of agricultural change over time.

(Knight *et al.* 2012, 59).

2.2 Strip, Map and Record Excavation

The objectives of the Strip, Map and Record Excavations were to:

- Identify the archaeological features and deposits within the areas opened up.
- Excavate and record all archaeological features and deposits encountered.
- Establish the relative sequence and likely dating of encountered archaeological features and deposits.
- Recover samples appropriate for scientific dating aimed to achieving 3.1.2.
- Establish the character, extent, form, function and likely status of surviving archaeological deposits to inform the research aims outlined in section 3.1.

3 Method Statements

3.1 Introduction

The updated Written Scheme of Investigation (WSI), complete with the addenda that encompassed all stages of fieldwork, is appended to this report in Appendix II, for ease of reference a summary of the methods used in each of the phases of work is presented here.

3.2 General Standards

All archaeological fieldwork was undertaken in accordance with ClfA's *Code of Conduct* (2014a), *Standards and Guidance for Archaeological Evaluations* (2014b) and *Standards and Guidance for Archaeological Excavations* (2014c).

A full risk assessment was undertaken before commencement of each stage of the work and was continually reviewed.

3.3 Excavation

Topsoil and subsoil were removed by a mechanical excavator, with a toothless ditching bucket, in level spits, to the first archaeological horizon under continuous archaeological supervision.

All excavation areas were hand cleaned to expose the full nature and extent of archaeological features.

All features/deposits were excavated by hand in the reverse order in which they had been formed/deposited and were recorded in accordance with the practices and principles of modern stratigraphic excavation (Harris 1979, 1993) and to industry standards, outlined in the *Archaeology Recording Manual* of the Museum of London (Roskams 1980, Spence 1990; 1993; Westman 1994, MOLA 2002).

Linear features such as ditches and gullies were sampled to a minimum of 10% of their length in hand excavated sections away from intersections and terminals. Discreet features such as pits and post holes were sampled to a minimum sample size of 50%.

3.4 Recording

The site was tied to Ordnance Survey using a Leica survey grade GPS.

A full and proper record (written, graphic and photographic) was compiled for all work on pre-printed record sheets.

Each excavated unit of stratigraphy was ascribed a unique, individual, context number.

Finds recovered during hand excavation were recorded and stored separately, by the unique context from which they came, and were identified to that context by unique context number.

A full, measured, drawn record was compiled, with all archaeological features drawn in plan at a scale of 1:50 or 1:20 and/or 1:10 if recorded in section/profile/elevation.

The cardinal points of all section lines were coordinated in to the Ordnance Survey X,Y,Z datum.

The level above Ordnance Datum (aOD) of all archaeological deposits and features was recorded and transferred to the drawn record.

A full photographic record of the excavations was compiled using a 14.2 megapixel DSLR Nikon D3100 camera. The photographic record encompasses all archaeological entities encountered. In addition key relationships between entities, where these helped to demonstrate sequence or form, were also recorded. A clearly visible, graduated, metric scale is included in all record shots.

A supplementary record of working images has also been taken/made to demonstrate how the site was investigated and what the prevailing conditions were during excavation.

A stratigraphic matrix was compiled for all excavations where superimposed archaeological deposits, features or structures were encountered.

3.5 Sampling

Environmental sampling was targeted, on a judgement basis, toward those deposits which were sealed and stratigraphically secure that had the potential to provide environmental evidence, evidence relating to diet and economy, dating evidence, or evidence on human health or land use regime. Here either a minimum sample size of 40 litres was taken or the entire deposit was collected as a bulk sample if smaller.

In all instances sampling was undertaken in accordance with guidance outlined by English Heritage in *Environmental Archaeology: A Guide to the Theory and Practice Methods, from sampling and recovery to post excavation* (Campbell *et al.* 2011).

3.6 Finds Processing and Storage

All finds processing, conservation work and storage of finds has been carried out in accordance with the ClfA (2014c) *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*.

All collected artefacts have been cleaned, processed, identified and bagged by material type and by context and a record and an archive comprising an index of their type and quantity by context made.

All objects have been stored in appropriate materials in appropriate storage conditions to ensure minimal deterioration and loss of information.

3.7 Post-Excavation

All artefacts were cleaned air dried, quantified, appropriately packaged and indexed.

Palaeo-environmental samples were processed, and the resulting residues dried in air and then analysed and quantified (See Section 5.2).

All finds processing, conservation work and storage of finds has been carried out in accordance with the ClfA (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*.

All objects have been appropriately stored to ensure minimal deterioration and loss of information.

4 Results

4.1 Introduction

The following section provides a detailed narrative of the excavated sequence related by phase. Summary tables in the appendices provide detailed contextual information.

The archaeological works spanned six excavation areas over two fields. In Field 1 excavations targeted a known pit alignment identified in the Historic Environment Record for Derbyshire (HER MDR14504) in the areas where it would be affected by the proposed development namely the site of two cabins the haul road and the wild life pond (Figure 2).

In Field 2, excavations encompassed two areas where development of a lodge and the haul road (Figure 2) might impact on features identified in the evaluation, namely an undated structural feature which retained evidence of post sockets at its base.

The topsoil (1301, 1304, 1307, 1320, 1410, and 1413) over the site characteristically comprised a dark or very dark greyish/brown clay silt with occasional small spherical water rolled pebbles in its matrix. It overlay a subsoil or colluvial layer (1302, 1305, 1308, 1321, 1411, and 1414) of dark yellowish/brown or brownish yellow clay silt with sparse or occasional small water rolled pebbles in its matrix. The geological natural was encountered between 0.34m and 0.57m below ground level (BGL).

4.2 Prehistoric Activity

(Figures 4 - 16)

<i>Pit alignment</i>	<i>Pits [1359; 1398; 1385; 1388; 1402; 1440; 1444; 1392; 1323; 1336, 1360, 1408;1470; 1469; 1465; 704]</i>
?Wear Hollow	[1396]

The earliest datable activity in Field 2, typologically ascribed to later prehistory, comprised an alignment of broadly contemporary pits [1359; 1398; 1385; 1388; 1402; 1440; 1444; 1392; 1323; 1336, 1360, 1408; 1506, 1470, 1469;1465, 704] and a wear hollow [1396].

Pit Alignment and Wear Hollow

Seventeen sub-circular pits, between 0.9m and 1m apart, aligned north-west to south-east, were excavated. These pits extended across the area of excavations for a distance of 83m (Figure 10). The pits were uniformly c. 2m in diameter and up to 0.98m deep.

Though the pit alignment forms a coherent landscape feature there is clear evidence of a stratigraphic sequence in their respective construction and infilling and this is demonstrated by their relationship with a linear wear hollow or path [1396], which can be seen to overlie some of the pits while being cut by or respected by others.

The earliest of the excavated pits [1385; 1388; 1402; 1440; 1444], Pit Group 1, lay toward the northern extent of the excavated areas. Several of these pits had a distorted U shaped basal profile which widened as it rose upwards where their angle of slope was gentler. This distorted profile, which was manifest in only one other pit, [1359] to the north, may indicate that these pits [1385; 1388; 1402; 1440; 1444] represent post-extraction pits, and may originally have been excavated to receive wooden posts up to 0.5m in diameter. Further these pits all appear to have been infilled from the south-west as a deliberate action, with the upper horizon of their penultimate fill all either rising up to the north-east or with a clear dump/tip interface lying to the south-west. It is of note that these pits are overlain by the basal interface of a shallow north-west to south-east aligned linear depression [1396; 1558; 711] which contained a mixed fill of frequent well sorted small waterworn pebbles in a matrix of dirty mid brown silty sand (1397). It is suggested that this depression and its mixed infill rather than represent a specific “cut” *per-se* instead attests an horizon on which people or animals may have trodden, creating the mixed infill and the depression.

To the south of Pit Group 1, pits forming Pit Group 2, pits [1323] [1336] and [704] show a concentration of small rounded pebbles in brown silt sloping down and silting over the second most upper fills (1351, 1352, 1334, 713) of the pits and this pattern is repeated in pit [704] and the stony interface (712) on the upper interface of the penultimate fill (713) (see Thorpe 2016, 10). This demonstrates that Pit Group 2 was at least partially open at the time that the wear hollow [1396; 1558; 711] was in use, though Pit Group 1 had by that time gone out of use.

To the north of Pit Group 1 three pits [1359, 1398, 1392], which form Pit Group 3, cut through the final use/disuse horizons of wear hollow infill (1397).

At the very southern end of the excavated pit alignment, within the area of the wildlife pond, the pit alignment, represented by pits [1460; 1454; 1470; 1469; 1465; 704] were truncated by a later ditch [1546]. This ditch is provisionally dated to the Medieval period.



Figure 4. View north west of pit alignment (scale = 2 x 2m in 0.5m graduations).



Figure 5. View northwest of pits [1440] and [1444] in the proposed haul road (scale = 2 x 1m in 0.5m graduations).



Figure 6. View northwest of pit alignment in the 'wildlife pond' truncated by later Medieval ditch (scale = 2 x 2m in 0.5m graduations).



Figure 7. South-east facing section of Pit [1336] (scale = 1 x 2m in 0.5m graduations)



Figure 8. South-east facing section of Pit [1359] (scale = 1 x 1m in 0.5m graduations).



Figure 9. South east facing section of Pit [1388] (scale = 1 x 1m in 0.5m graduations)

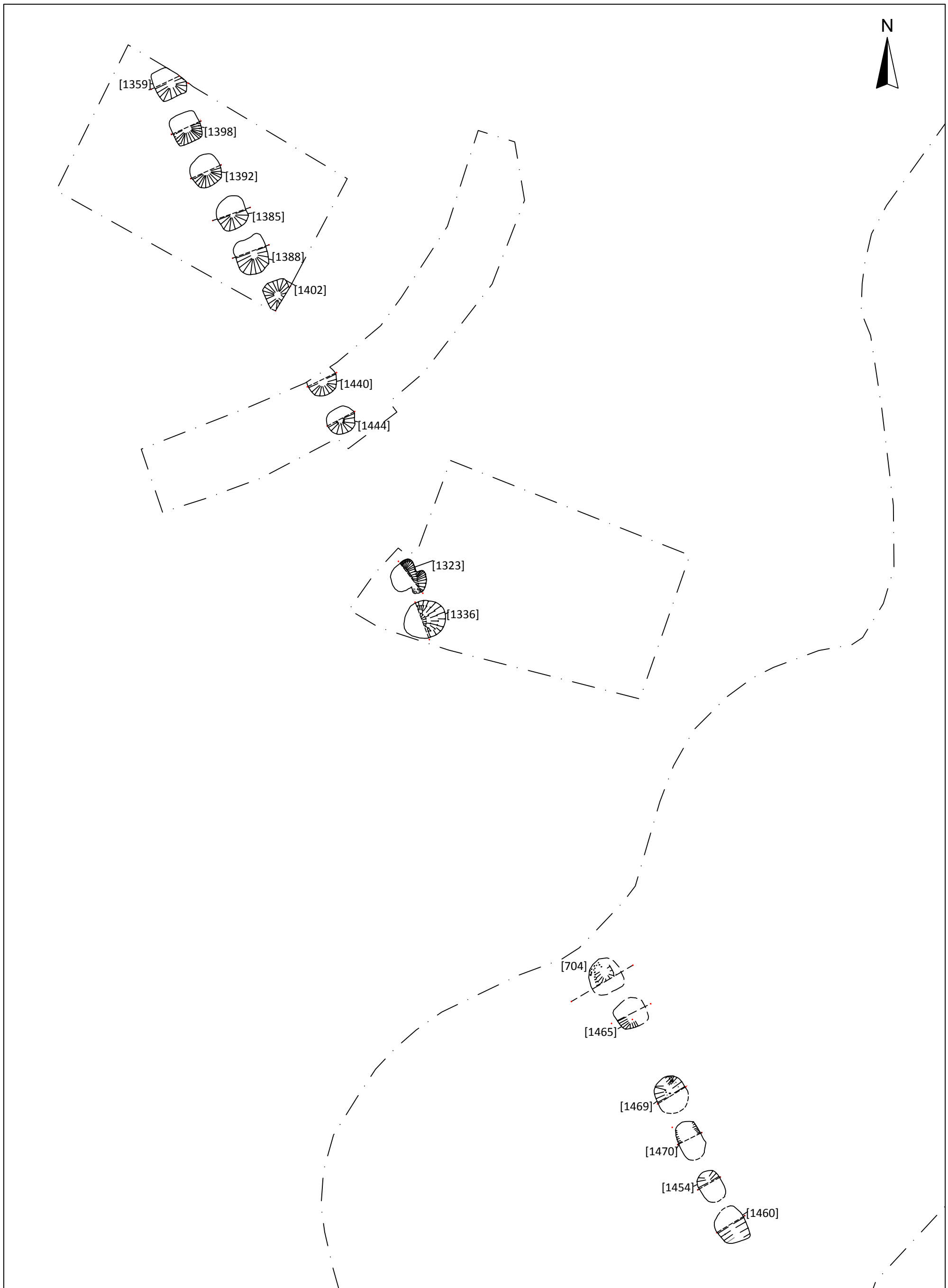
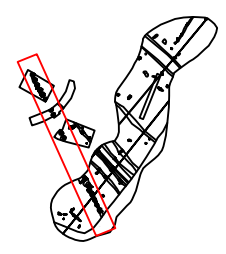


Figure 10. Pit alignment
 HER MDR4333, MDR14504
 Scale: As shown @A3

Key:
 - - - Edge of excavation
 - - - Proposed edge of pit



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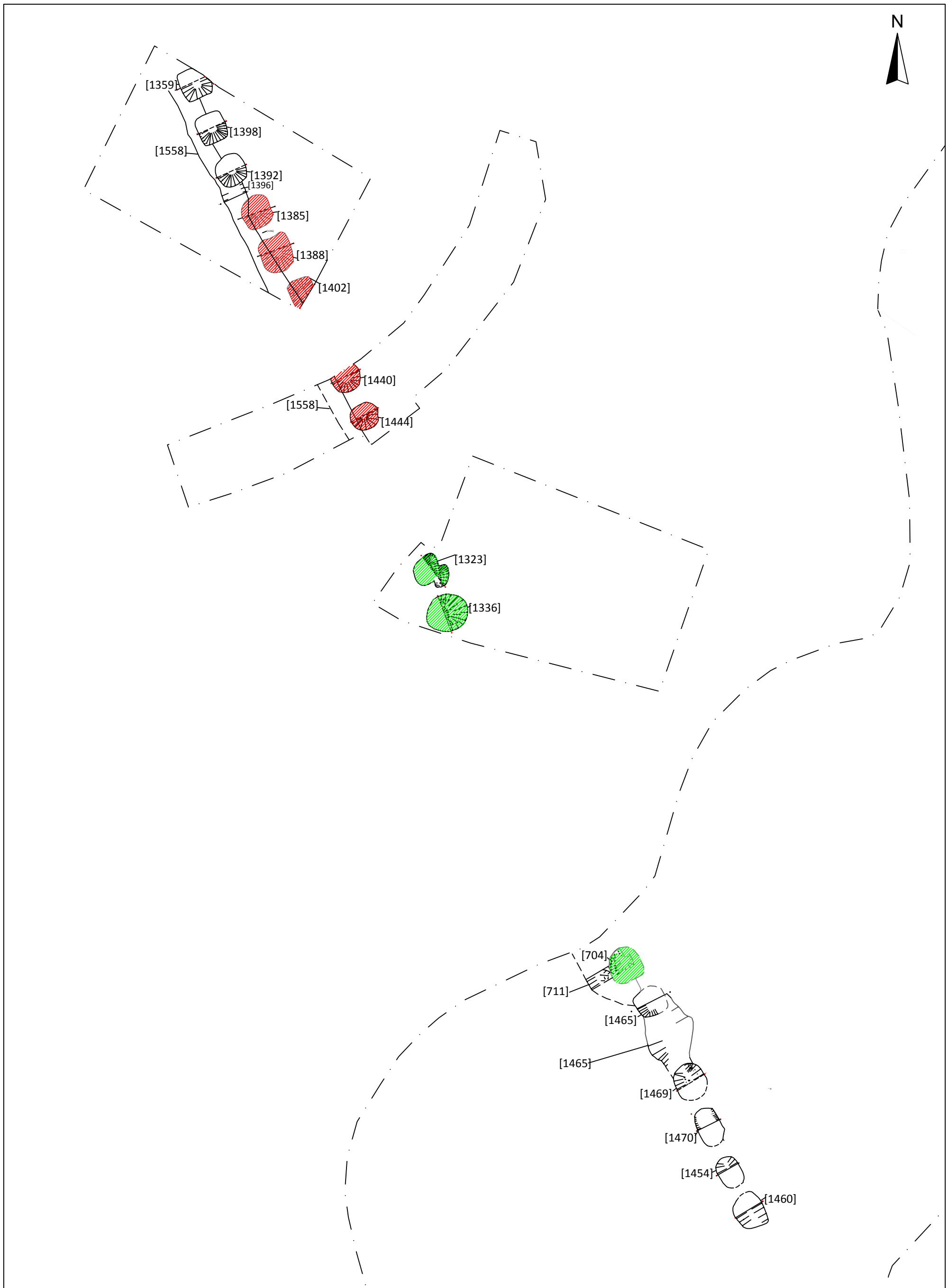
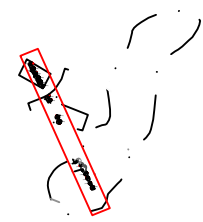


Figure 11. Phasing of the Pit Alignment (Pit Group 1, Pit Group 2, Pit Group 3) and wear hollow

Scale: As shown @A3

- Key:
- - - Edge of excavation
 - · - Proposed edge of pit
 - [Red hatched box] Pits not truncated by wear hollow (1559)
 - [Green hatched box] Pits open at the time of the wear hollow in use



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Figure 12. North west facing section of hollow [1396] (scale = 1m in 0.5m graduations).



Figure 13. South facing section of wearing hollow [1396] truncating pit [1385] on the western edge (scale = 1m in 0.5m graduations)



Figure 14. North west facing section of pit [1402] with wear hollow [1396] truncating the western edge (right) (scale = 1m in 0.5m graduations)



Figure 15. Shallow depression go wear hollow [1554] cut by ditch 1546 (scale = 1x 1m and 1x2m in 0.5m graduations)

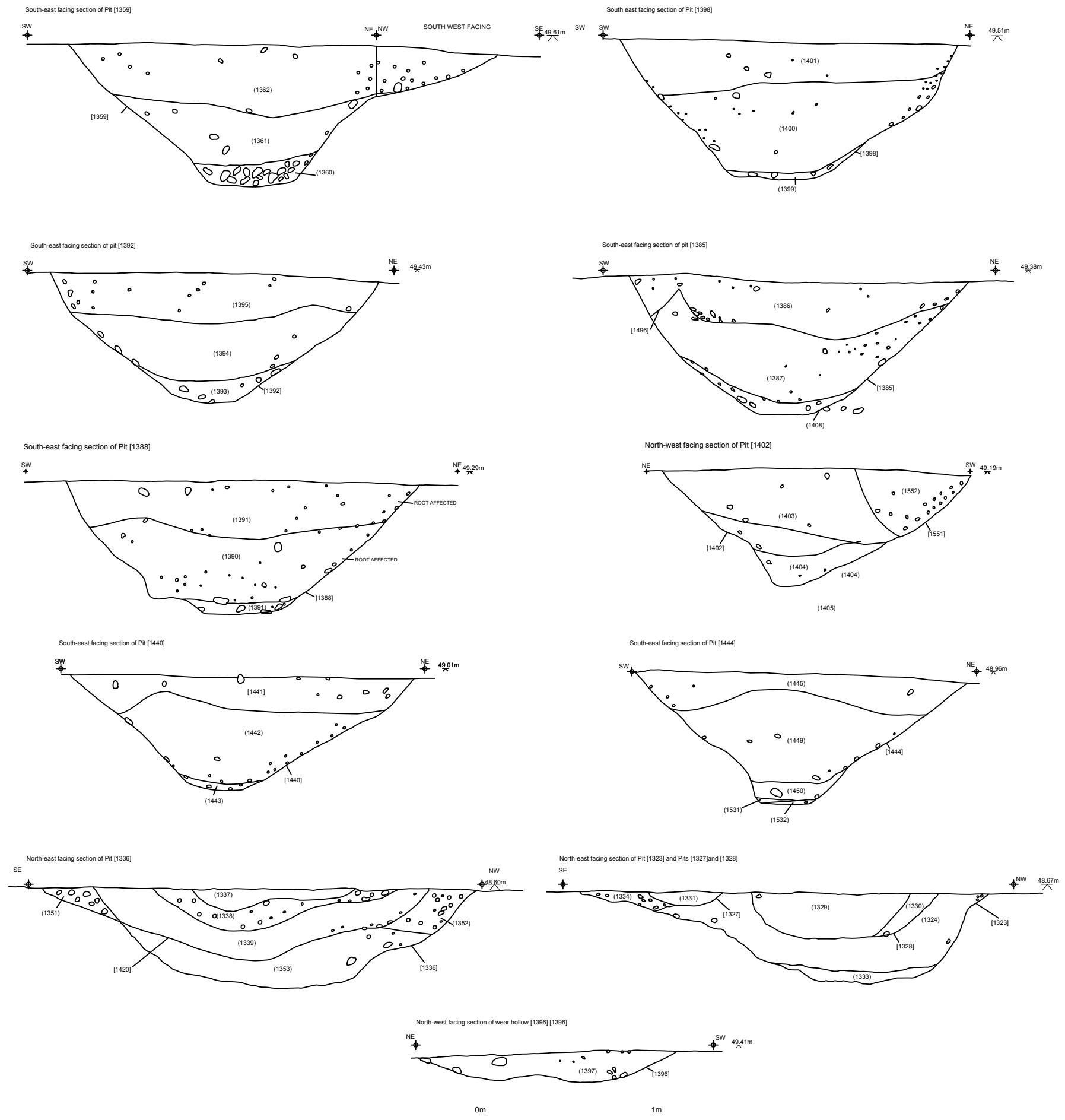


Figure 16 Sections from Prehistoric phase
Scale: As shown @A3

Key:

- ∧ aOD
- ⊕ Section point

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4.3 Medieval

(Figures 17-28)

<i>Boundary ditch. Construction/use</i>	<i>Construction: [706; 1547; 1446; 1451; 1471; 1468; 1462] Use: (1464, 1489, 1453, and 1534) Disuse: (1463, 1488, 1452, and 1467)</i>
Ridge and Furrow	[1369; 1372; 1367; 1358; 1365; 1501; 1480; 1478; 1423; 1421; 1418; 1409; 1416; 1435; 1431; 1427]

Medieval activity is characterised by a north-west to south-east aligned field boundary ditch [1547] which lay at the western edge of the ‘wildlife pond’. This ditch extended from the edge of the northern edge of the excavated wildlife pond to the south-east for a distance of c.23m and truncated the eastern edge of the southern extent of the prehistoric pit alignment. Ditch [1547] had steep sides and rounded base and contained two fills. The primary fill (1464, 1489, 1453, and 1534) of silty clay, represents initial silting during the use life of the ditch probably caused by weathering. This basal fill was then overlain by an upper fill (1463, 1488, 1452, and 1467) of greyish brown clay silt which contained a heavily abraded sherd of 12th-14th century pottery.

Ditch 706; 1547; 1446; 1451; 1471; 1468; 1462 was only present within the area of the wildlife pond.



Figure 17. View north-west of ditch 1547 (scale = 2 x 2m in 0.5m graduations)

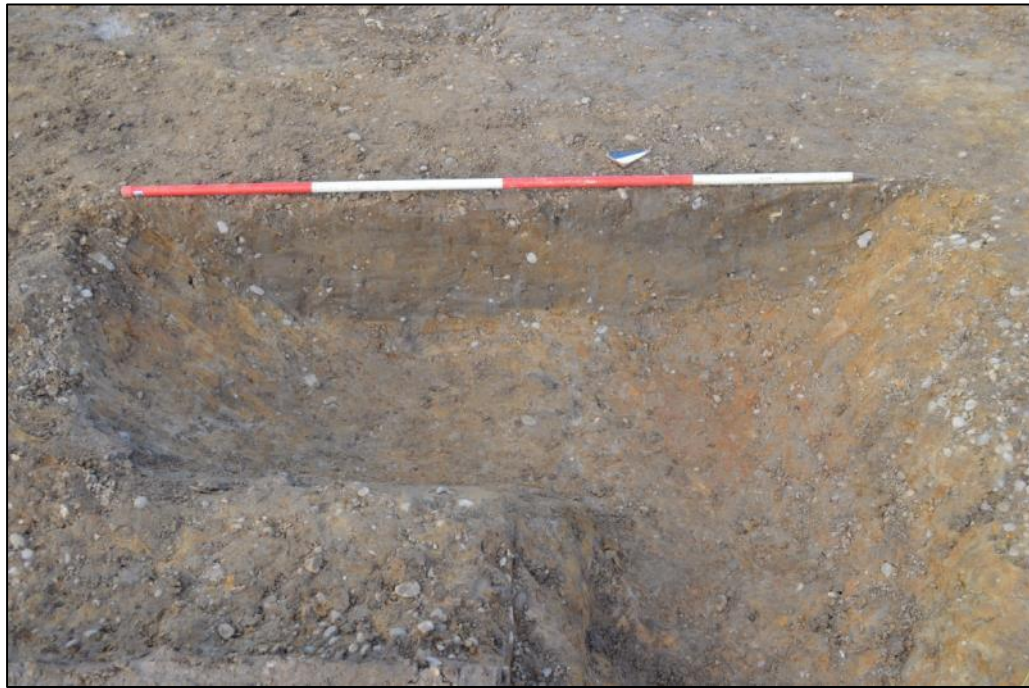


Figure 18. South east facing section of ditch [1462] (scale = 2m in 0.5m graduations).

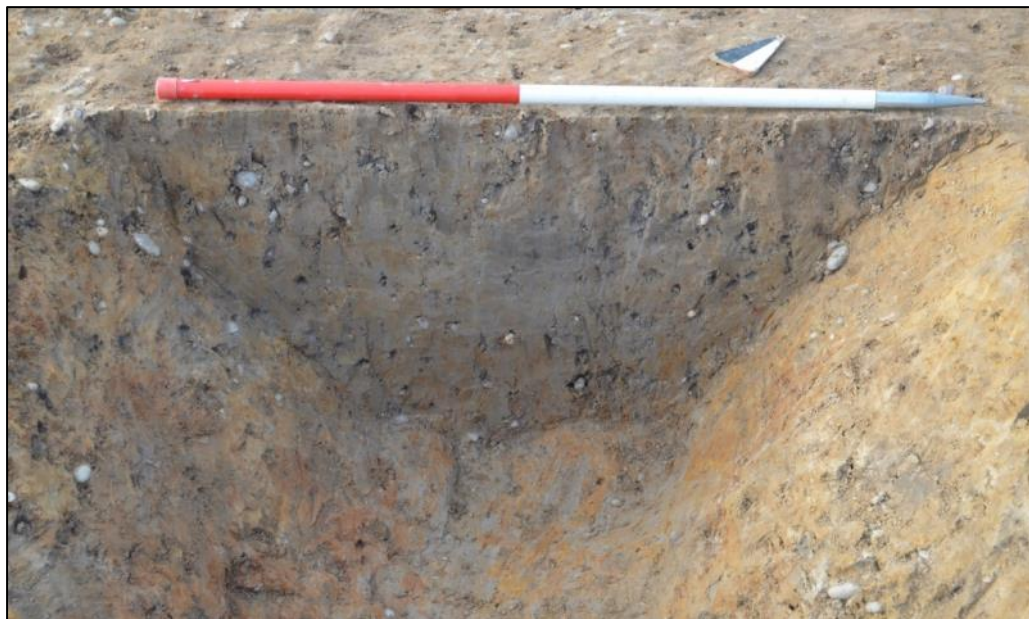


Figure 19. South east facing section of ditch [1468] (scale = 1m in 0.5m graduations).



Figure 20. North west facing section of ditch segment [1446] (scale = 1m in 0.5m graduations).



Figure 21. North west facing section showing ditch segment [??] truncating pit [1469] (scale = 1m in 0.5m graduations)

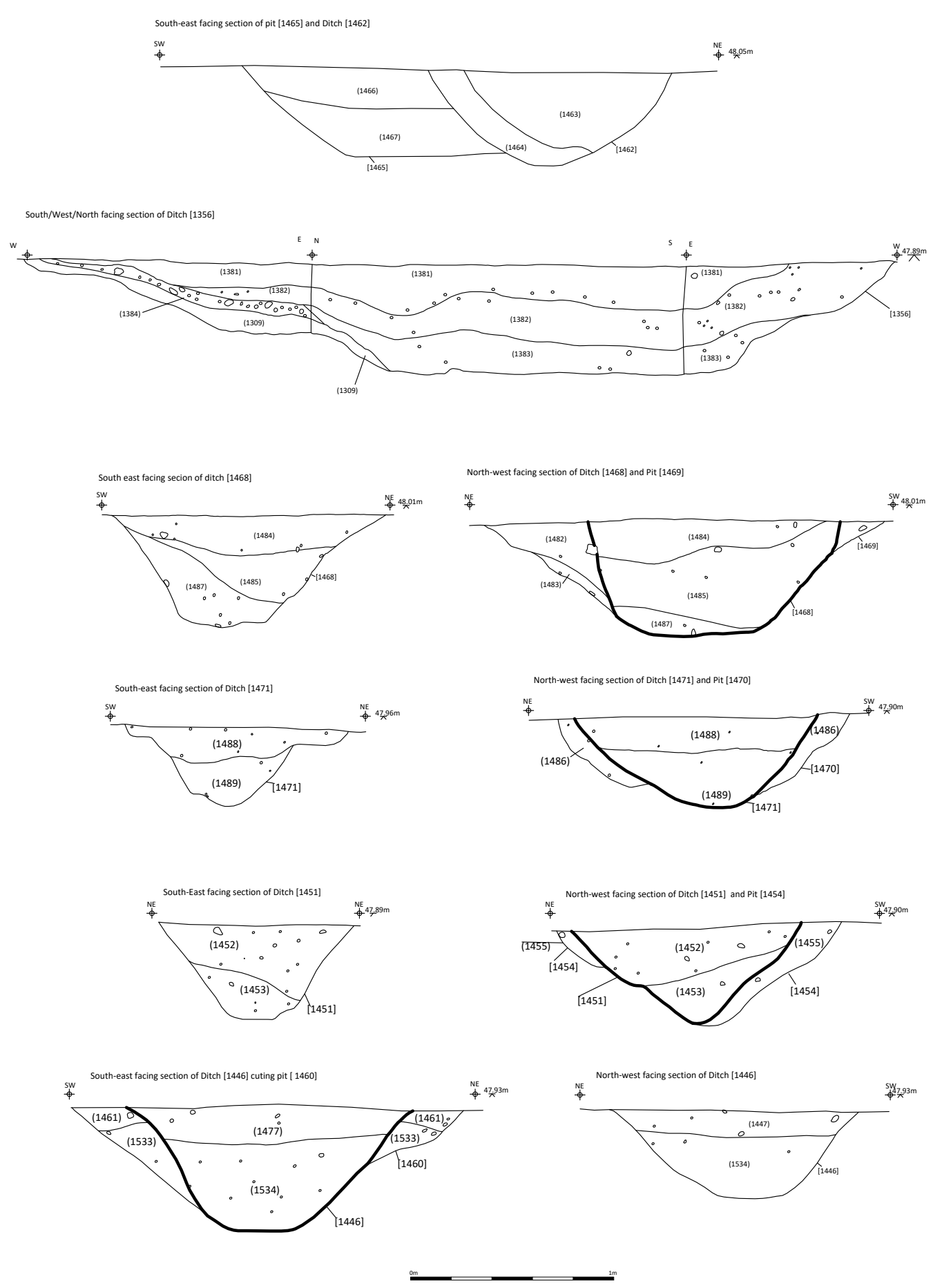
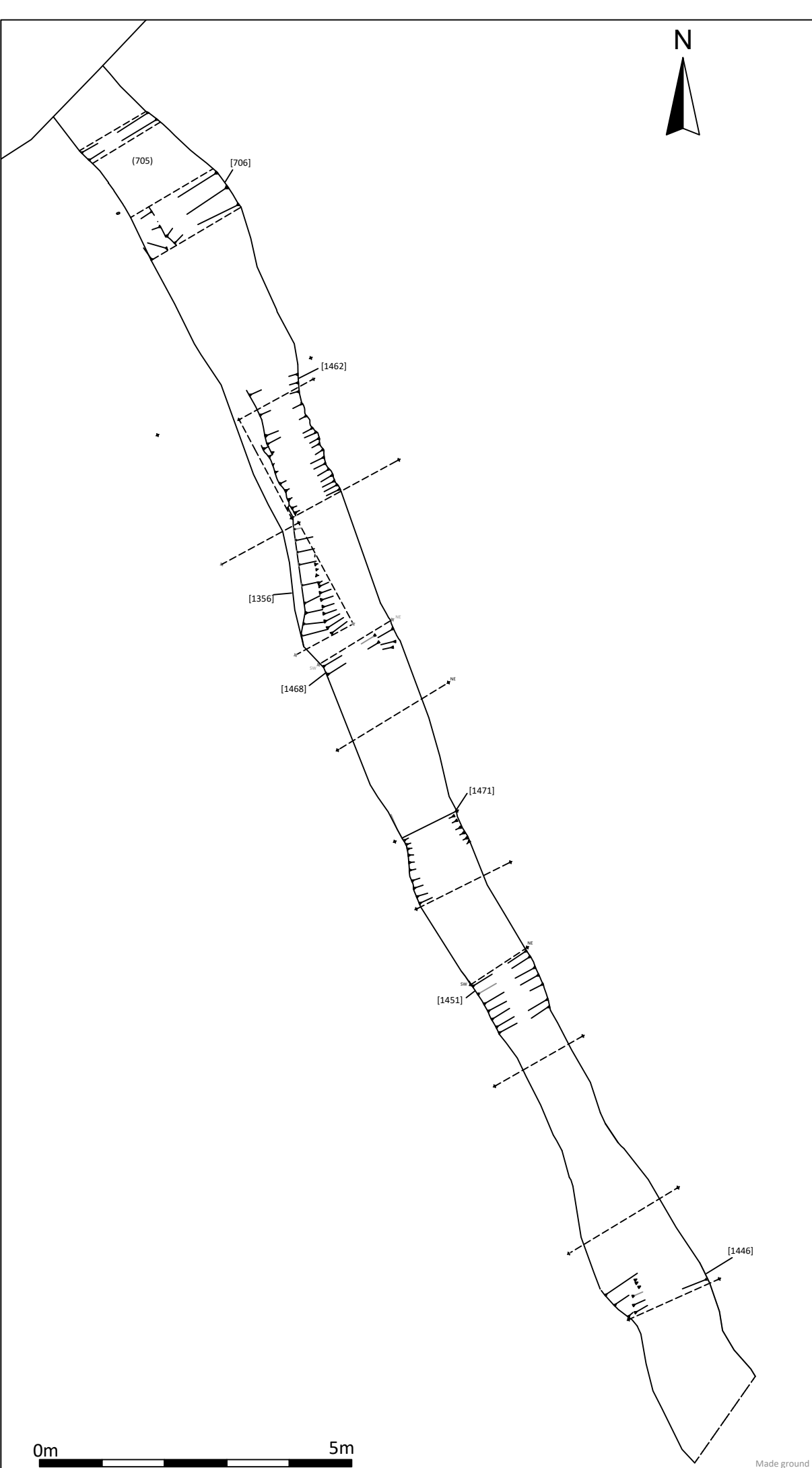
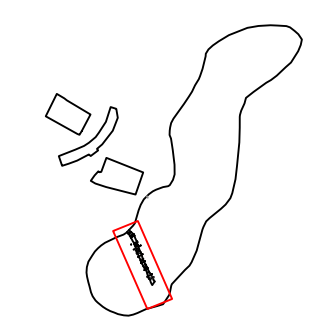


Figure 22. Ditch alignment accompanied by section drawings. As shown @A3

- Key:
- aOD (m)
 - Section points
 - Section line
 - Other features not related to this phase.



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To the east of ditch [706; 1547; 1446; 1451; 1471; 1468; 1462] lay 15 shallow linear furrows which were also aligned on a north-west to south-east axis. These probably represent the remnants of Medieval cultivation.



Figure 23. View south east of ridge and furrow 1371 and 1372 (scale = 2 x 2m in 0.5m graduations)



Figure 24. View northwest of furrow [1421] (scale = 0.5m in 0.1m graduations)

In Field 2 to the east evidence of Medieval ridge and furrow, oriented north-west to south-east was also encountered in seven shallow linear features (1423; 1424; 1421; 1422; 1418; 1419; 1416; 1435; 1436; 1431; 1432; 1427) (Figure 28).

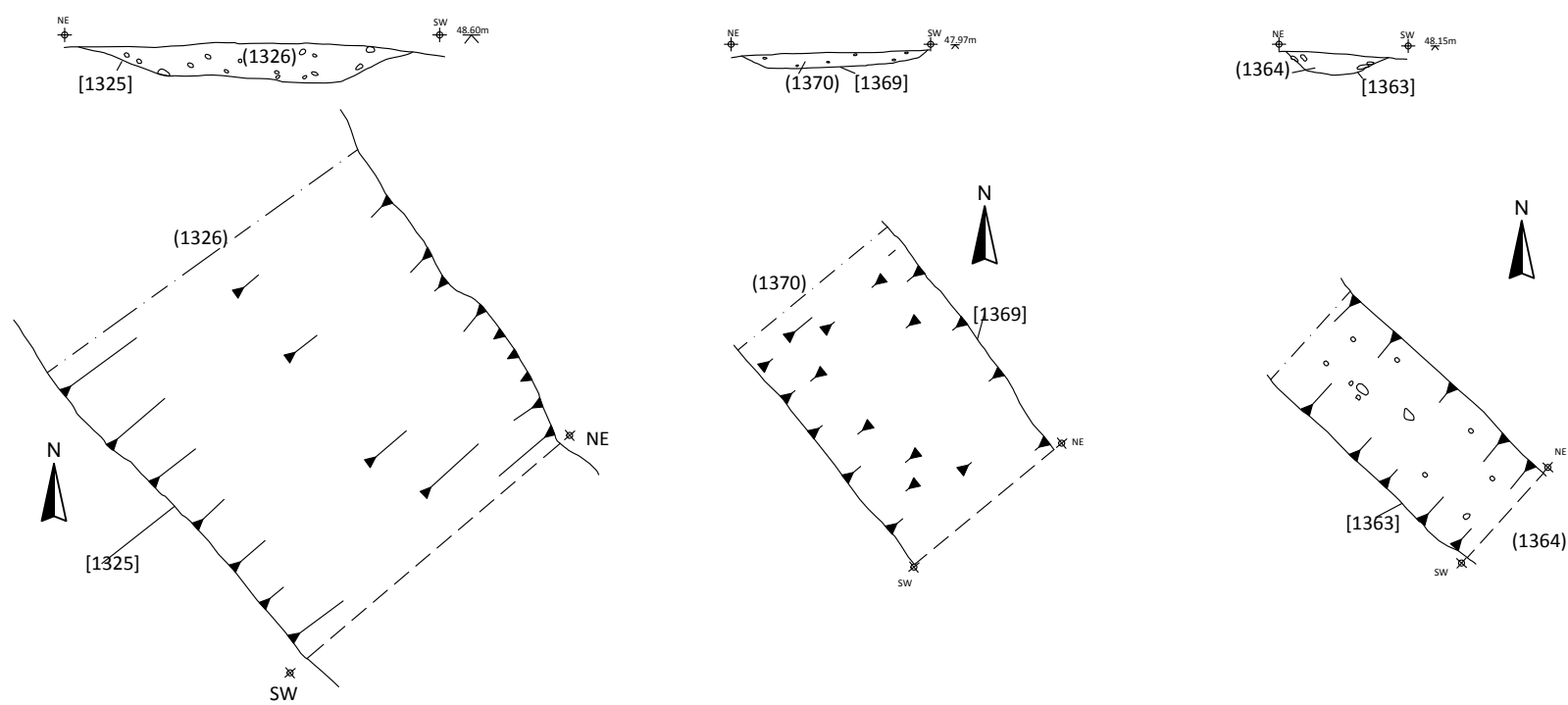


Figure 25. View northwest of furrow [1416] (scale = 2m in 0.5m graduations)

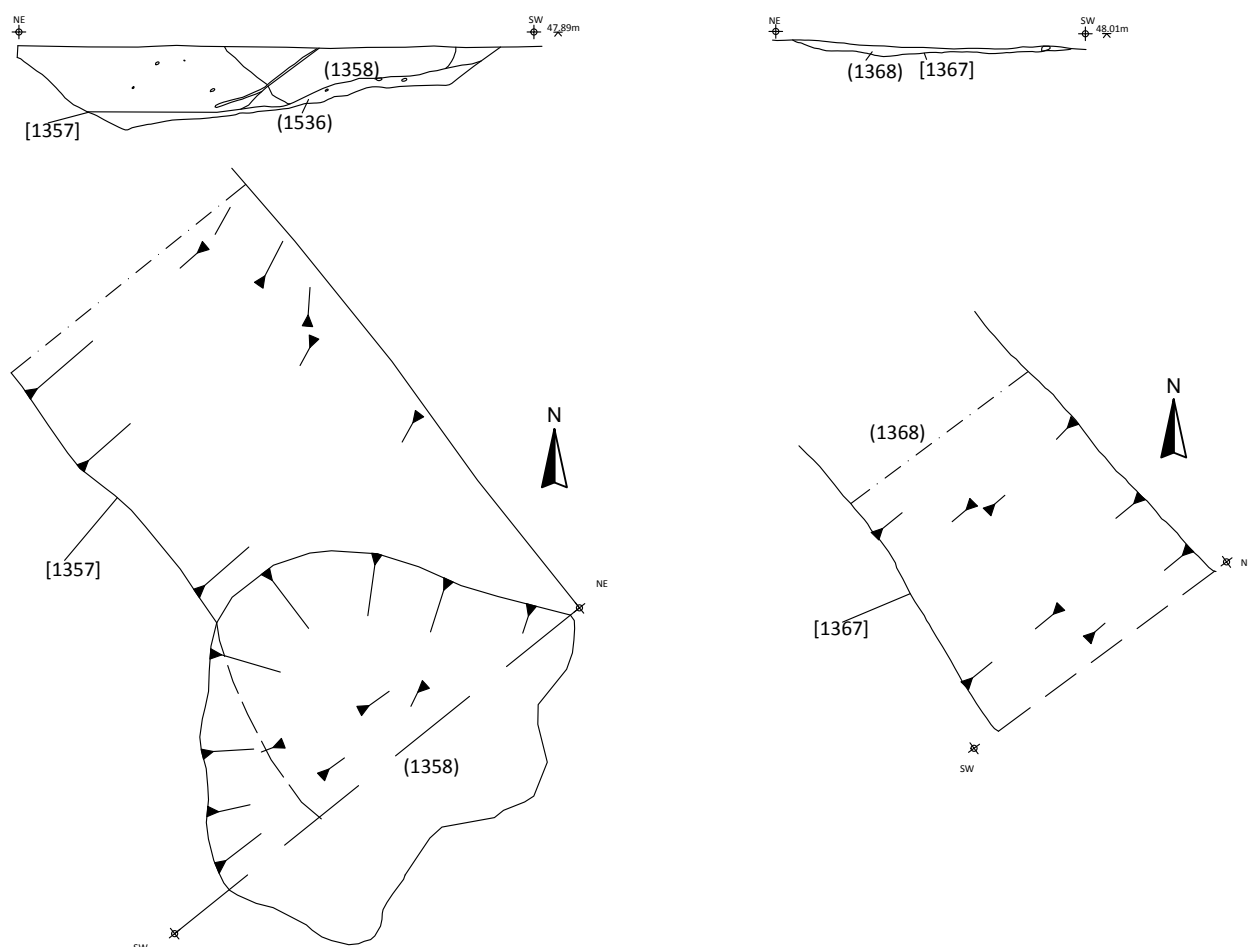


Figure 26. South facing section of [1427] and land drain [1425] (scale 2m in 0.5m graduations).

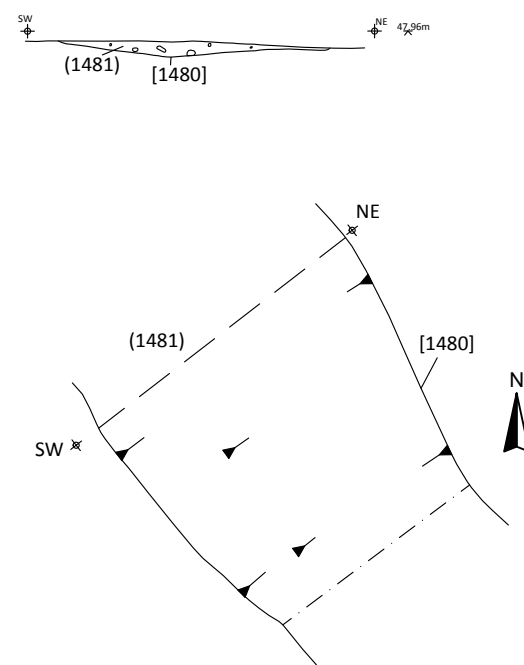
North west facing sections and plans of Furrow 1371 [1325;1369; 1363]



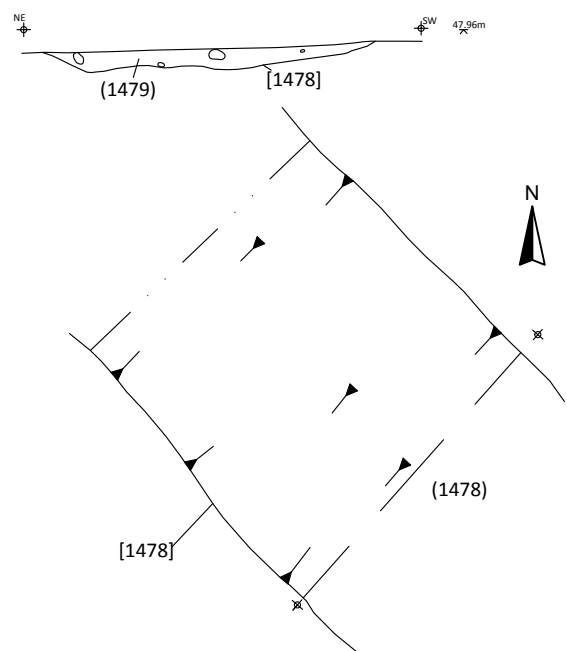
North West facing section and plan of tree bole (1358) and Furrow 1372 [1357; 1367]



South-east facing section and plan of Furrow [1480]



North-west facing section of Furrow [1478]



North-west facing section and plan of Furrow [1501]

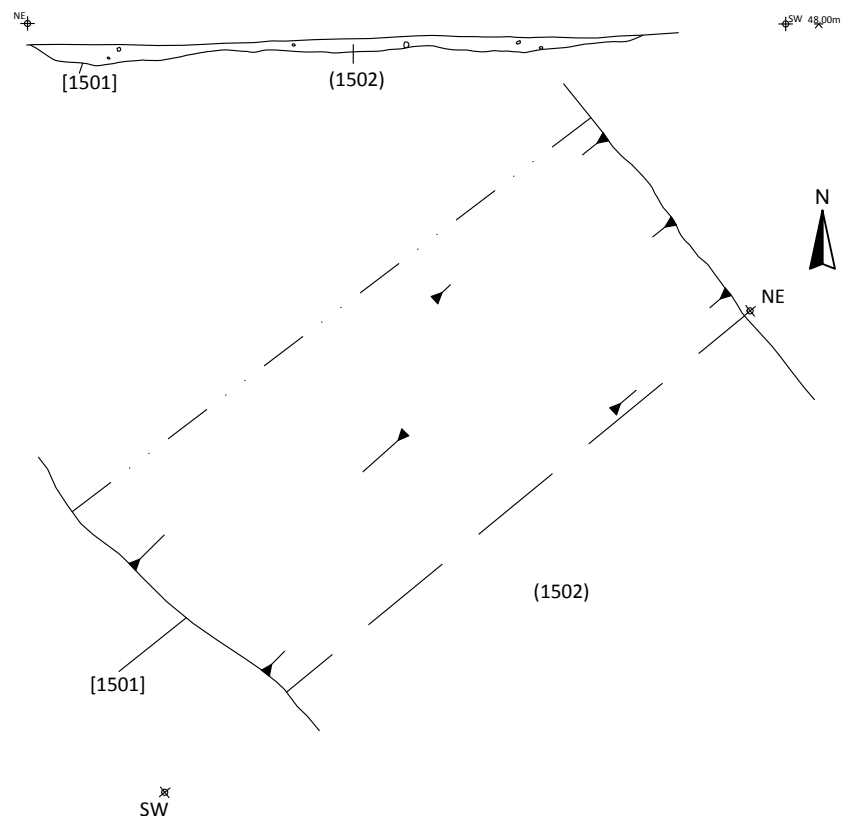


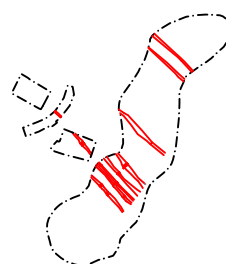


Figure 27. Plans and sections of Ridge and Furrow in Field 1
Scale: As shown @A3

Key:
 aOD (m)
 Section points



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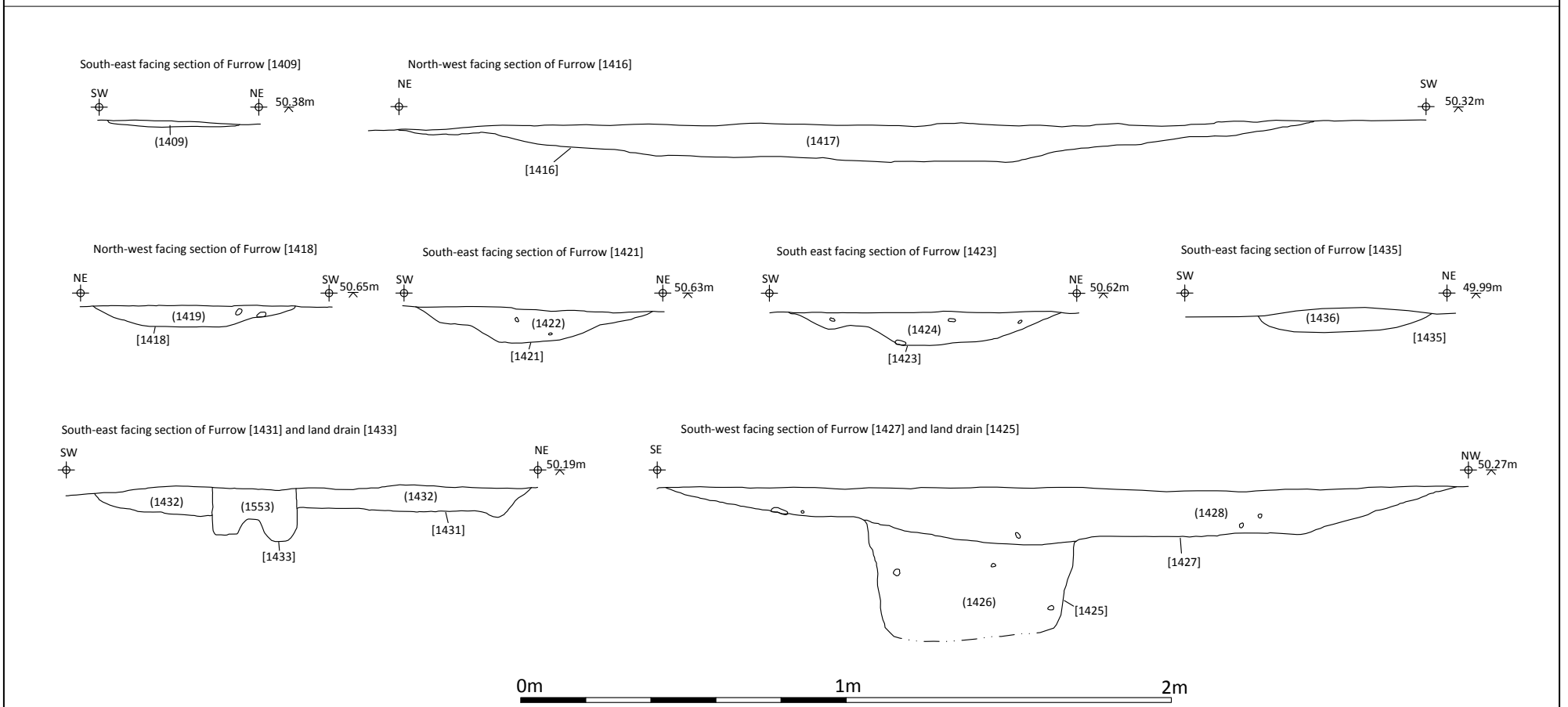
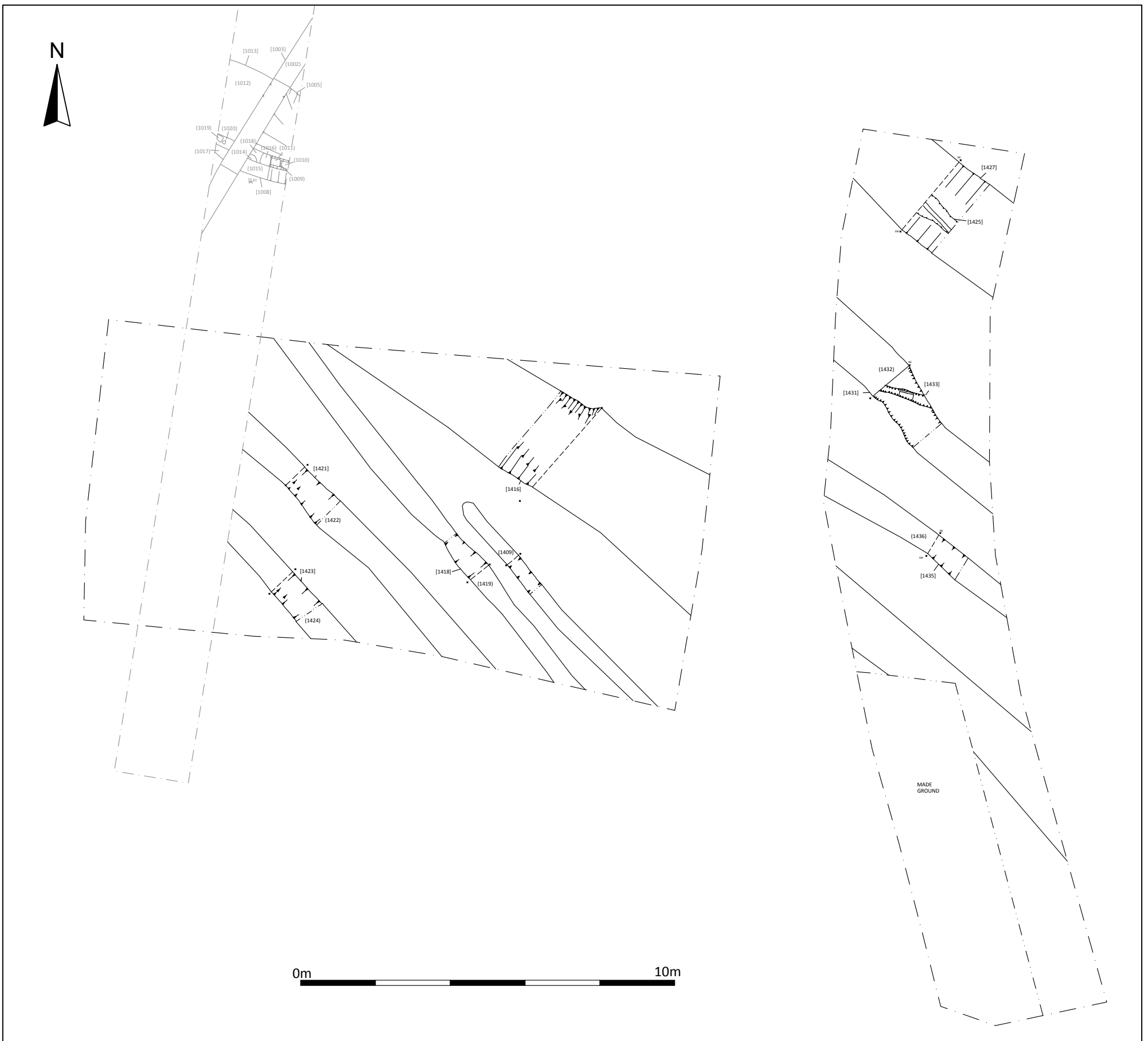


Figure 28. Plan of Field 2 with sections of Ridge and Furrow
Scale: As shown @A3

Key:
 ✕ aOD (m)
 ⊕ Section points
 ▭ Evaluation Trench (Thorpe, 2016)

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4.4 Post-medieval

(Figure 26, 27, 28)

<i>? Boundary Hedge</i>	[1363; 1370; 1427]
<i>Field Drainage</i>	[1425]

A single gully [1363; 1370; 1427], which traversed the site on a north – south alignment, lay between furrows [1480] to the east and [1367] to the west. This gully truncated the backfill of field drain [1425] and probably represents the post medieval enclosure of land.

4.5 Unphased features.

(Figures 29-60)

<i>Western Enclosure 1548</i>	<i>Ditch 1348 [1344, 1346, 1342] Ditch 1545 [1472, 1340, 1354]</i>
<i>Pits</i>	<i>[1327; 1328; 1525; 1507; 1505; 1510; 1374; 1349; 1477; 1319; 1310; 1503; 1537]</i>
<i>Postholes</i>	<i>[1515; 1376; 1378; 1521; 1523; 1312]</i>
<i>Eastern Enclosure</i>	<i>Ditch [1527]; Gully 1559 [1498, 1517, 1519]; Postholes [1490; 1496; 1492]</i>

A substantial number of features, 26 in total, could not be dated as no finds were associated with them. These include; a truncated enclosure to the west of the pit alignment, eleven pits and nine six postholes, and an enclosure to the east of the pit alignment (Figures 32, 43, 50, 51)

Western Enclosure

(Figures 29-32)

Immediately to the west of the pit and ditch alignment, excavated within the wildlife pond, lay, two sides of what may have been a small enclosure, 1548. This enclosure was aligned north-west to south-east the northern and western side of which was

preserved to 5.8m metres long and 2.54 metres wide. It was defined to the north-west by ditch [1348] and to the south-west by ditch [1545].

Ditch 1348 was sample excavated in three segments [1344, 1346, 1342], was excavated in 3 segments, and was up to 0.54m with steeply sloping upper break of slope which became vertical before reaching a rounded base.

To the south ditch, 1545 was also excavated in three segments [1472; 1340; 1354] and was between 60mm-0.28m deep.



Figure 29. View south west of enclosure ditch 1348 (scale = 2m in 0.5m graduations)



Figure 30. [1354] terminus of enclosure ditch [1545] (Scale = 1m in 0.5m graduations).



Figure 31. North west facing section of enclosure ditch 1545 (scale = 0.5m in 0.1m graduations).

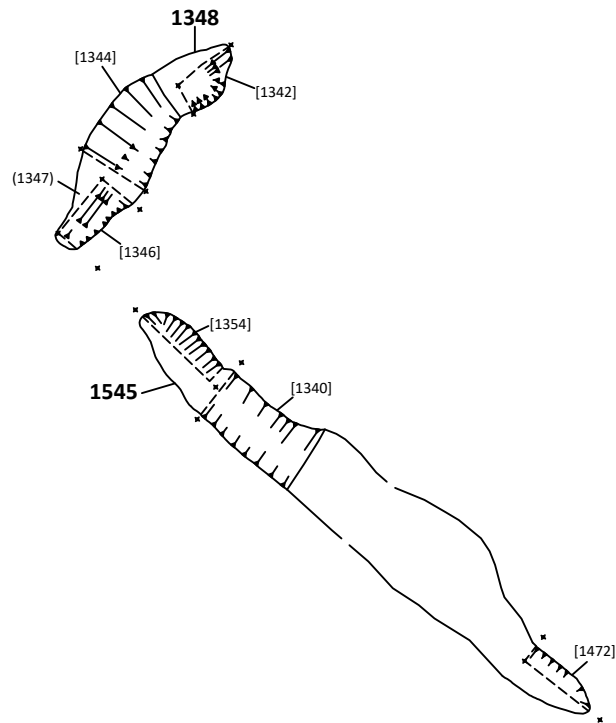


Figure 32. Plan of possible enclosure ditch 1348 and 1545. with associated sections.
As shown @ A4

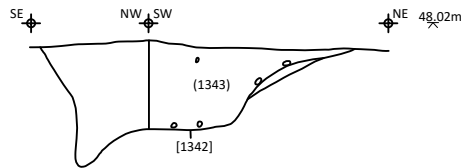
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∩ aOD (m)

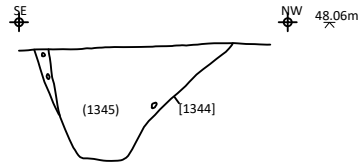
--- Section



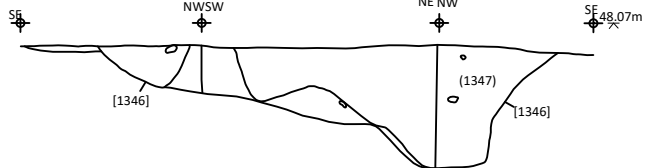
North-east and South-east facing section of ditch [1342]



North-east facing section of ditch [1344]



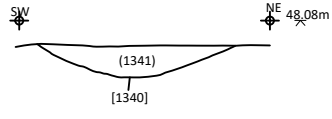
North-east, South-east and South-west facing section of ditch [1346]



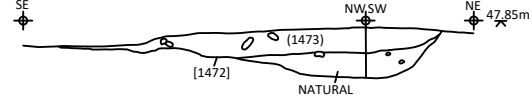
North-west and North-east facing section of ditch terminus [1354]



South-east facing section of [1340].



North-east and South-east facing section of ditch terminus [1472]



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It is possible that the enclosure represented by [1545] and [1538], being half as wide as it was long, may represent the remnants of a building or the drainage gully around a building. Equally it may represent a temporary stock enclosure. In either event it seems to respect or pre-figure the alignment of the ridge and furrow to the east and may date to the Medieval period.

Pits

A total of 13 undated pits were uncovered and excavated across the stripped area (Figure 43). Toward the north of the excavated area Pits [1327] and [1328] cut earlier pit [1323] (part of the prehistoric pit alignment). Oval Pit [1327] was 80mm deep with gradually sloping sides to a rounded base (Figure 33), while to the north, pit [1328] had steep sloping sides and rounded base (Figure 33). The primary fill (1330) comprised of light brown silty sand represents weathering of the northern edge which slumped in. The upper fill (1329), comprised a grey brown silty sand attesting gradual silting rather than deliberate backfilling.

To the east Pits [1319] and [1310] lay between Pit Group 2 and ridge and furrow [1371], [1325] (Figure 34). Pit [1310] was oval in plan and was truncated by later pit [1319] that also appears to have been open for a time and to have silted up, a basal primary fill (1318) representing slope wash while an upper fill (1318) was represents redeposited material, presumably created from the cutting of pit [1319]. The Primary fill (1311) of pit [1319] was naturally derived.

Two pits [1374] and [1349] lay in close proximity to enclosure (1548) and had infilled through natural silting.

Pit [1474], lay to the east of the southern extent of pit/ditch alignment 1547 and 1546. It was oval in plan with steep sides and rounded base and had been truncated from above surviving to a depth of 70mm (Figure 37).

A further Pit [1503] (Figure 38), lay to the north-east of ridge and furrow [1501], this pit was 1.57m long, 0.59m wide and 0.1m deep and its single fill of greyish brown sandy silt seems to have weathered in from the sides.

At the north-eastern extent of the pond lay three intercutting circular pits [1505], [1510] and [1537] (Figure 39). The earliest pit, [1505], was circular in plan 0.97m in diameter and up to 0.3m deep. It contained a grain of spelt and five grains of barley incorporated into a single fill (1506) which had weathered in. Pit [1510] lay to the east of pit [1537]. It was circular in plan, was 1.07m in diameter and 0.39m deep. Pit [1537] truncated both pit [1505] and pit [1510] (Figure 44) this shallow pit had gradually

sloping sides which led to a rounded base and was filled by a naturally derived fill of greyish brown clay silt (1538).

Pit [1507], which was linear in plan with rounded corners lay 8 metres to the east of pit [1507] and was oriented on a north-west to south-east alignment. It was 3.12m long, 0.8m wide and 0.31m deep (Figure40). The lower fill comprised an organic rich clay silt (1509) which contained several charred fragments of alder, oak, willow and hazel as well as grains of emmer/spelt wheat and barley.

Oval pit [1525] (Figures 41-42), was located c.2.8m east of pit [1507], and was backfilled with medium sized water worn stones and fire cracked peddles in sandy silt (1526). The basal interface of pit [1527] was demarcated by a thin layer of burning c.10mm thick. This pit probably represents a hearth clearance pit.



Figure 33. East facing section of pit [1327] and pit [1328] (scale 2m in =0.5m graduations).



Figure 34. View north west of pits [1319] and [1310] (scale 1m in = 0.5m graduations)



Figure 35. East facing section of pit [1374] and pothole [1376] (scale 1m in = 0.5m graduations).



Figure 36. South west facing section of pit [1474] (scale = 1m in 0.5m graduations).



Figure 37. West facing section of pit [1503]. Scale = 0.5m in 0.1m graduations.



Figure 38. View south of pit [1515], pit [1505] truncated by posthole [1537] (Scale = 2m in 0.5m graduations).



Figure 39. View south-east of pit [1507] (scale 0.5m = 0.1m graduations).



Figure 40. Pre-excitation shot of pit [1525] (scale 0.5m = in 0.1m graduations).



Figure 41. West facing section of pit [1525] (scale 1m = in 0.5m graduations)

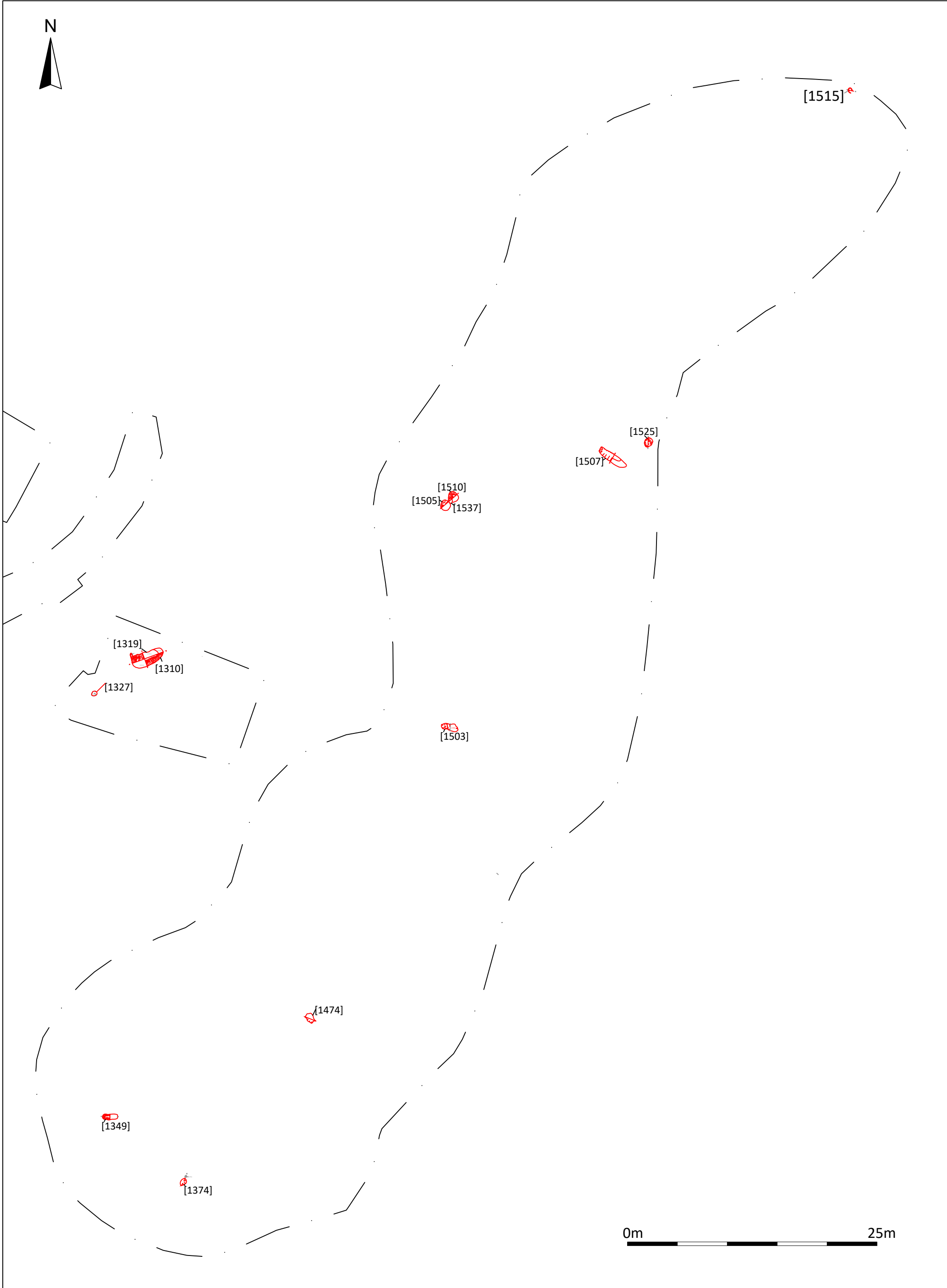


Figure 42. Plan showing undated pits
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Key:

○ Undated Postholes

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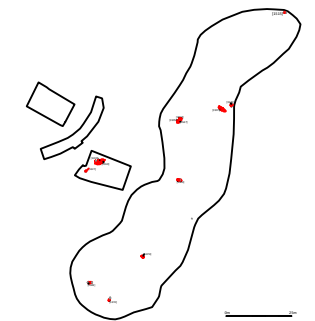
Figure 43. Undated pit sections

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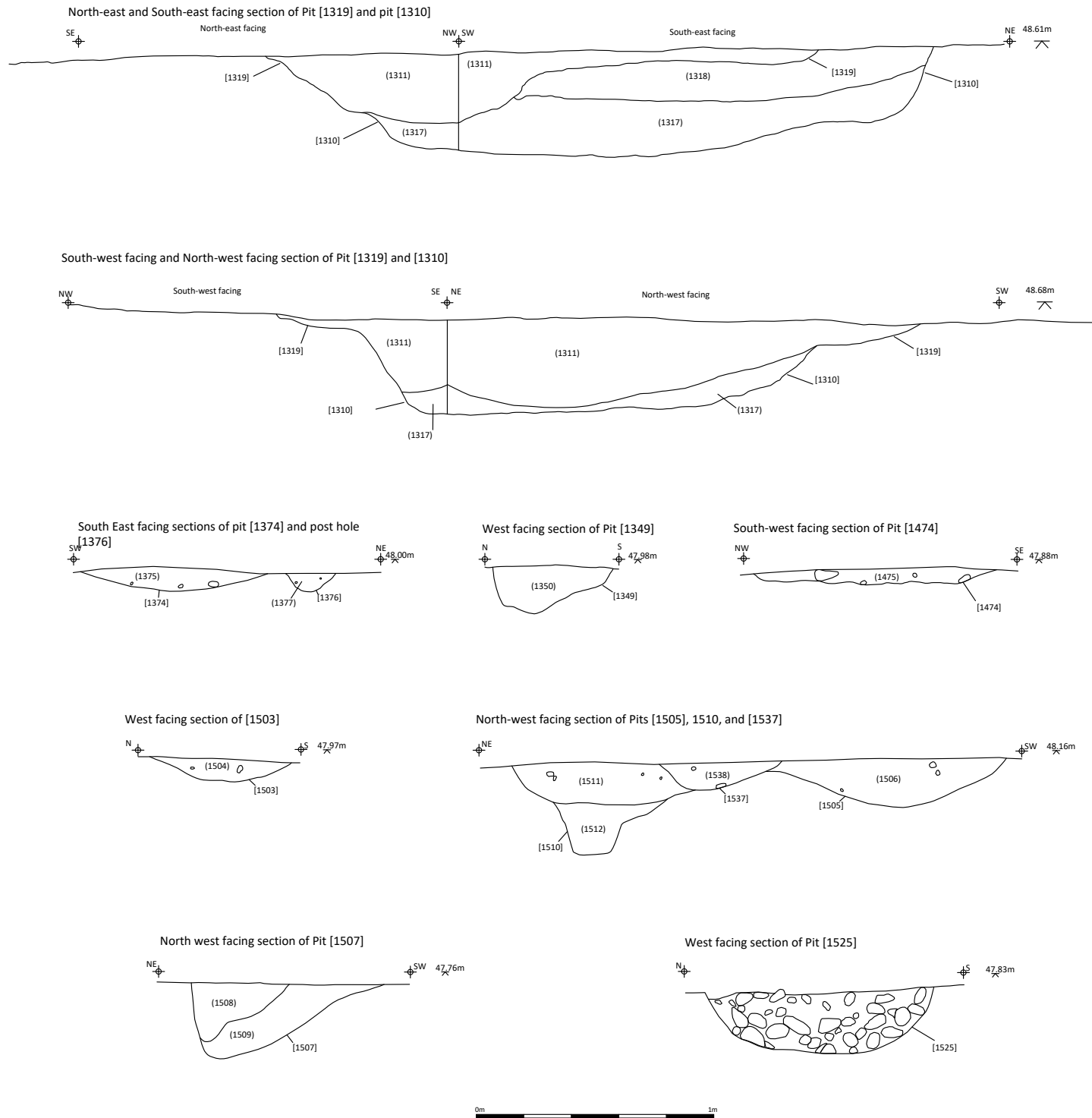
⌵ aOD (m)

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Eastern Enclosure

(Figure 45 - 50)

At the eastern edge of the area stripped for the wildlife pond lay a further possible enclosure which was defined to the south by a gully [1559] and an alignment of postholes [1492; 1496; 1490] and to the west by a ditch and its southern terminal [1527].

Gully [1559] was excavated in three segments [1498; 1517 and 1519] and extended from the north-eastern edge of excavation to the south for c.16m before terminating. The gully had a shallow 'U' profile and its fills (1499, 1518, 1520) comprised primary silting of dark grey sandy silt. A lens of redeposited sandy clay (1500) was identified sloping down the eastern edge of the ditch terminus [1498] and represents weathering of side. Noticeably, the gully is respected by an alignment of square postholes [1490; 1492; 1496] suggesting that this enclosure line was maintained either by a fence or its alignment demarcated by posts.

Postholes [1490; 1496; 1492] were aligned north-west to south-east east and appeared to respect the western edge of gully 1559 (Figures 44-51). Postholes [1490] and [1496] were sub-rectangular with rounded edges, while posthole [1492] was oval. All had near vertical sides with a flat base and were between 70mm and 0.14m deep. Two grains of bread wheat and five grains of barley were recovered from the fill (1491) of the most westerly posthole [1490].



Figure 44. Gully 1559 looking north-east (Scale = 2 x 2m in 0.5m graduations).



Figure 45. South-west facing section of gully 1559, terminus [1498] (scale = 0.2m in 10mm and 0.1m graduations)



Figure 46. South-west facing section of gully 1559 slot [1519] (scale = 0.05m in 0.1m graduations).

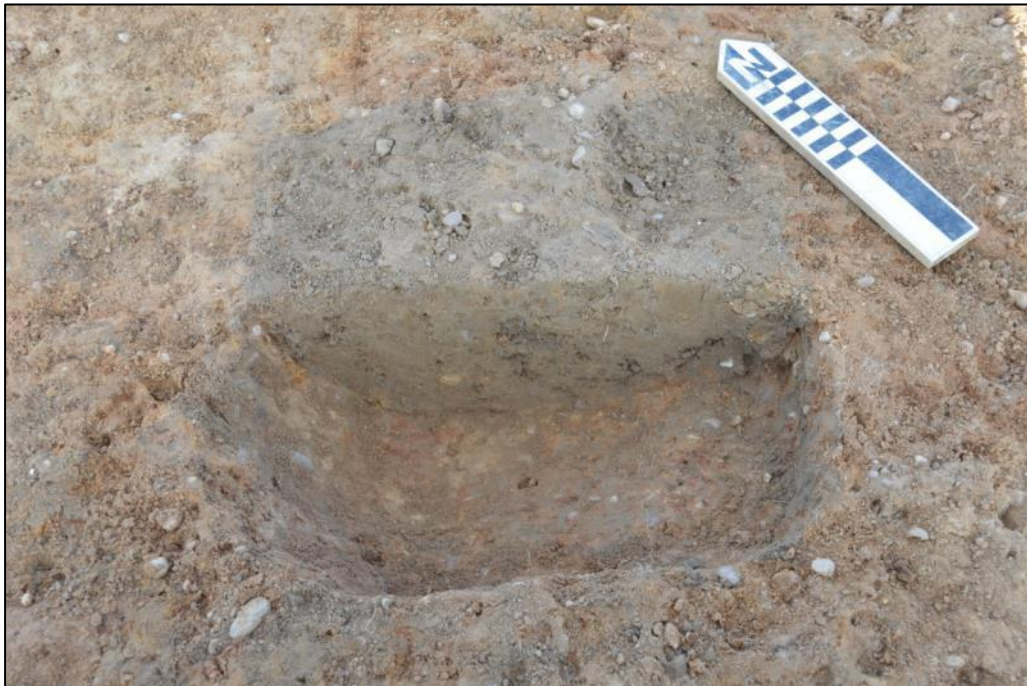


Figure 47. South west facing section of posthole [1496] (scale = 0.25m).



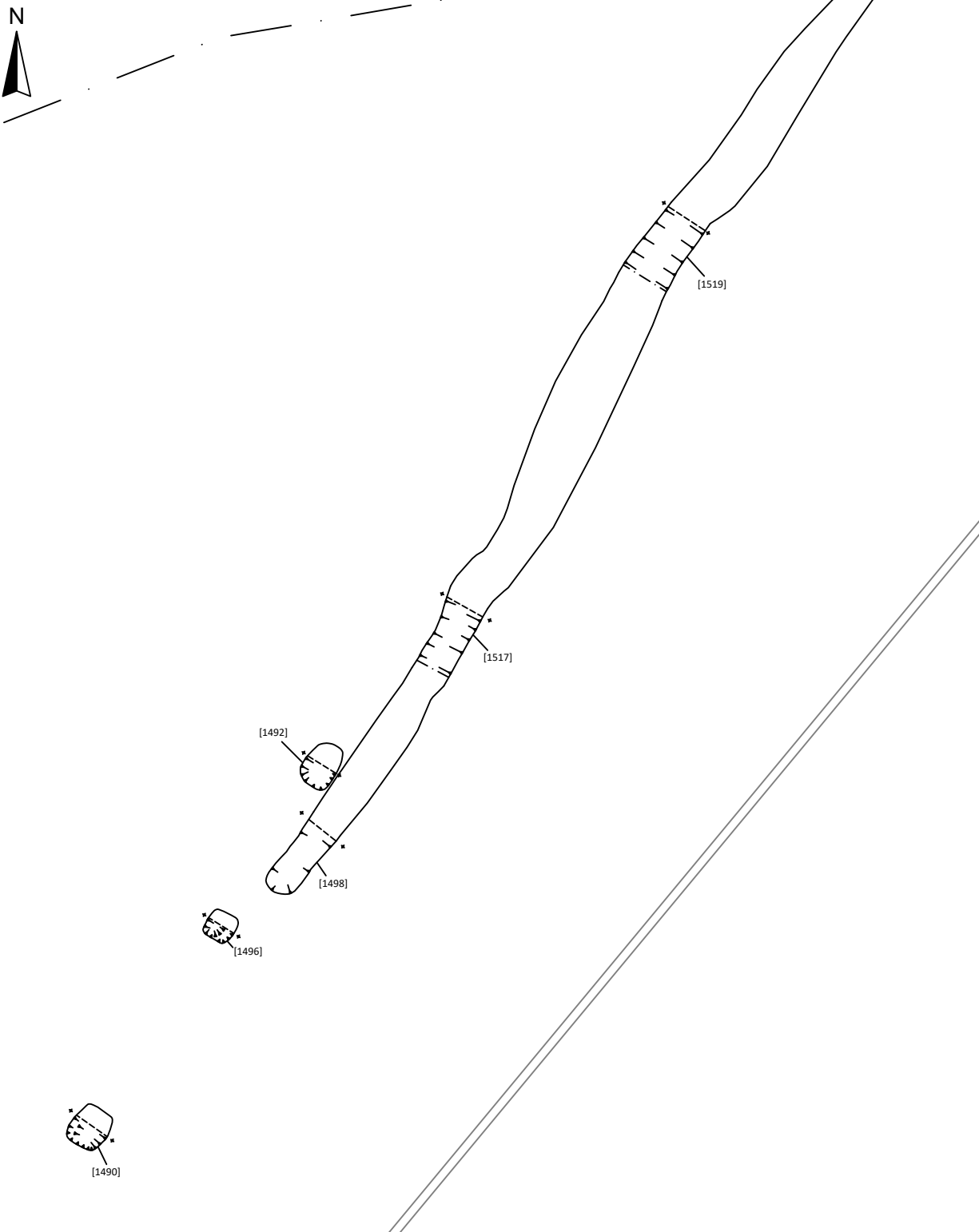
Figure 48. South west facing section of posthole [1490] (scale = 0.2m in 10mm and 0.10m graduations).



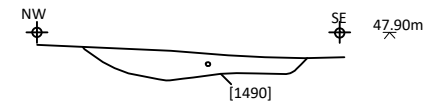
Figure 49. South west facing section of posthole [1496] (scale = 0.2m in 10mm and 0.1m graduations)



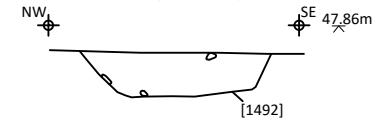
Figure 50. East facing section of ditch [1527] (scale = 1m in 0.5m graduations).



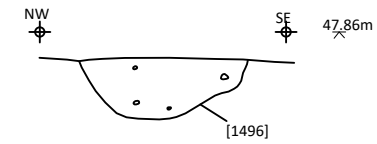
South-west facing section of posthole [1490]



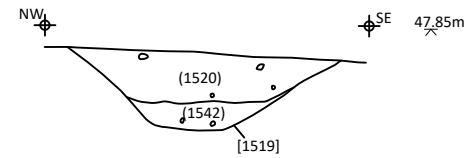
South-west facing section of posthole [1492]



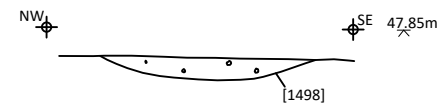
South-west facing section of posthole [1496]



South-west facing section of ditch [1519]



South-west facing section of ditch terminus [1498]



South-west facing section of ditch [1517]

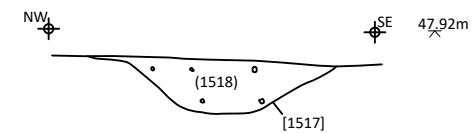
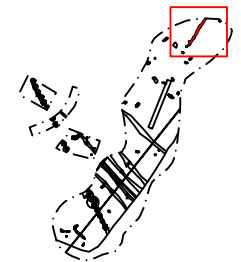


Figure 51. Plan of Gully 1546 and Postholes [1496], [1492] and [1490].

Key:

⊕ aOD (m)

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Postholes

(Figures 52 – 60)

A total of five undated postholes were identified and excavated within the strip map and sample area of field 1, none were identified in field 2.

Posthole [1312] was located in the southern corner of the strip of lodge cabin 7. It had steep sloping sides and rounded base (Figure 52). The remnant of a wooden post/stake was identified in the posthole indicating a recent date.

Postholes [1378] (Figure 53) and [1376] (Figure 35) lay to the west of the Western Enclosure 1548. Both were circular in plan, 0.2m and 0.27m in diameter 80mm deep. Both had steep sloping sides and a rounded base. These postholes were probably associated with the 1548.

Postholes [1523] and [1521] were located in the in the central area of the area excavated for the wildlife pond toward its southern edge (Figures 54 -55). They were similar in shape, 0.29m in diameter and between 50 - 70mm deep.

Posthole [1515] lay at the very north-eastern corner of the area excavated for the wildlife pond, to the east of the Eastern Enclosure and gully 1546. This posthole had steeply sloping sides to a rounded base (Figure 59), was 0.45m in diameter.



Figure 52. East facing section of posthole [1312] (scale = 0.2m in 10mm and 0.1m graduations).

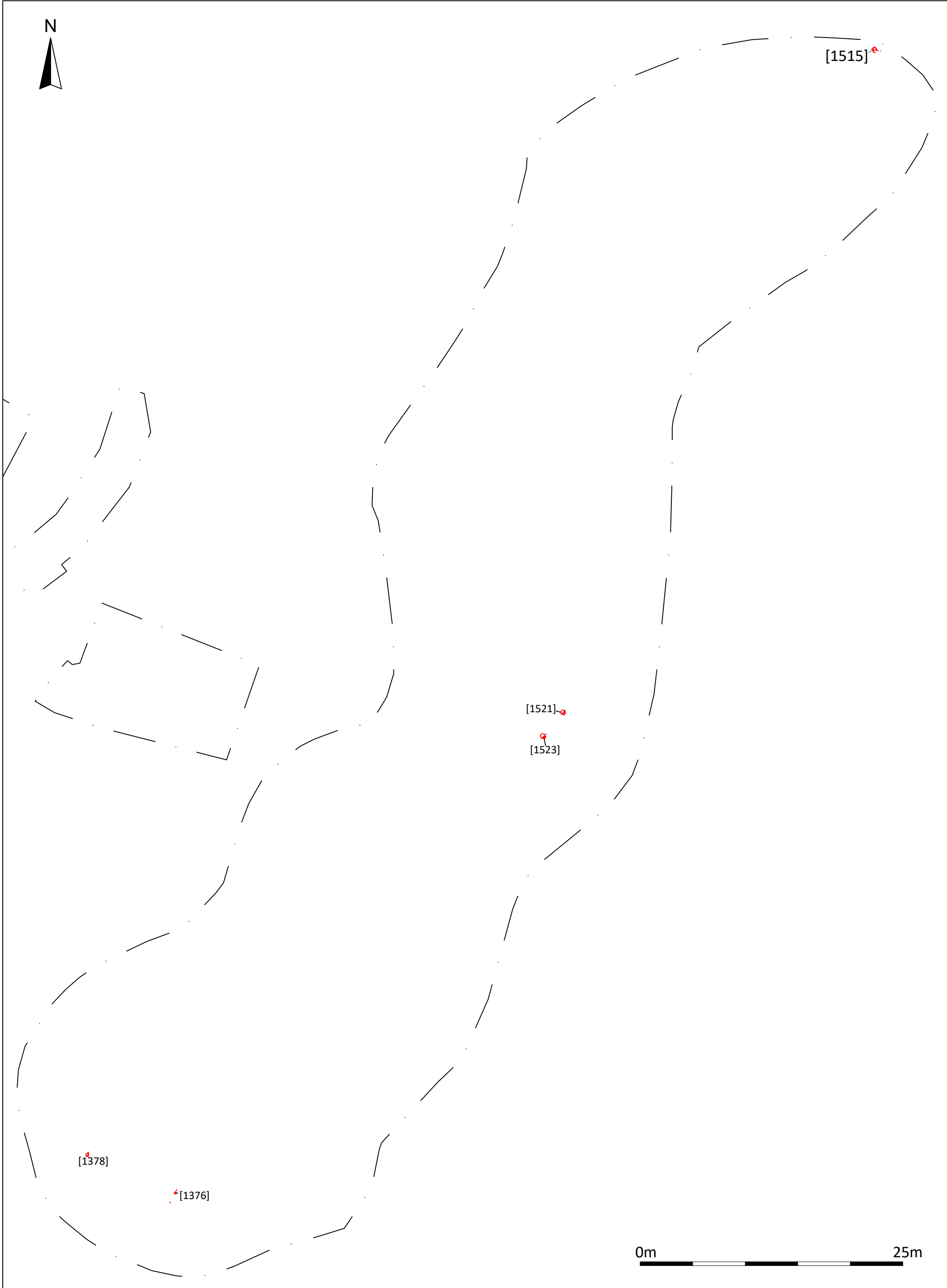


Figure 53. Plan showing undated postholes
Scale: As shown @A3

Key:

○ Undated Postholes

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Figure 54. South east facing section of posthole [1378] (scale = 10mm graduations)



Figure 55. South east facing section of posthole [1523] (scale = 10mm graduations)

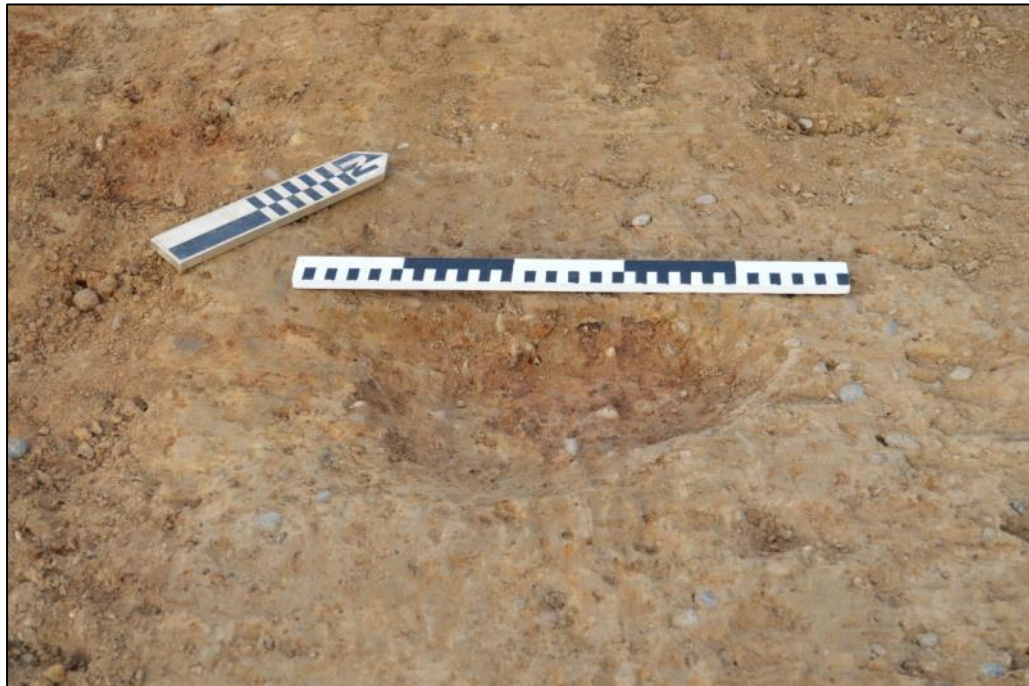


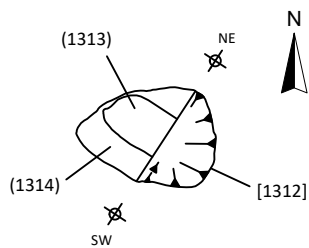
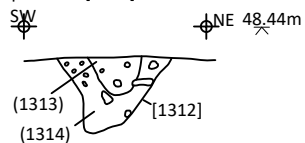
Figure 56. South east facing section of posthole [1521] (scale = 10mm graduations).



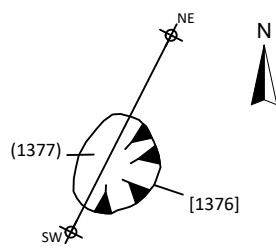
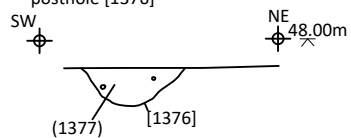
Figure 57. South west facing section of posthole [1515] (scale = 10mm graduations).

Figure 58. Section and Plans of undated postholes.
Scale: As shown @A4

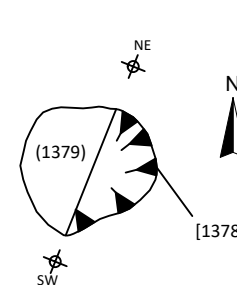
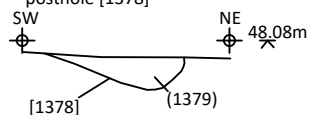
South-east facing section of posthole [1312]



South-east facing section of posthole [1376]



South-east facing section of posthole [1378]

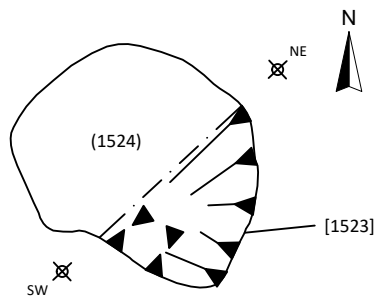
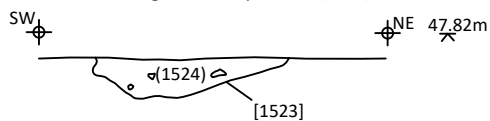


Key:

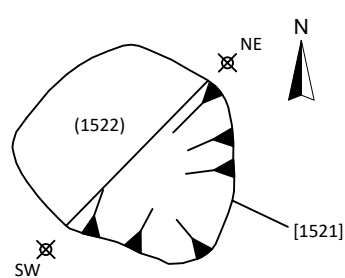
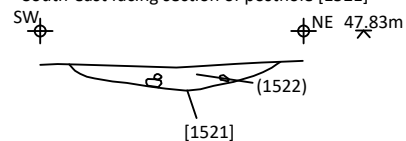
∩ aOD (m)

⊕ Section points

South-east facing section of posthole [1523]

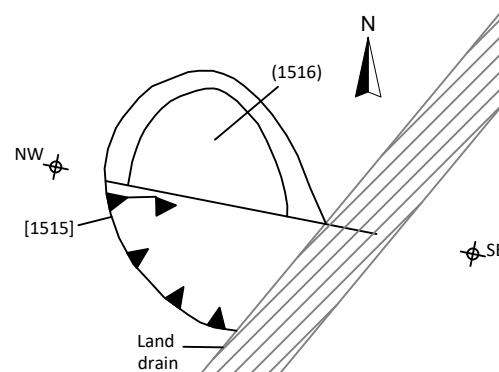
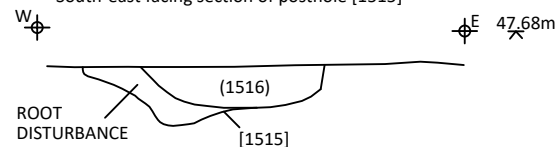


South-east facing section of posthole [1521]



0m 0.5m

South-east facing section of posthole [1515]



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5 Specialist Reports

5.1 The Pottery

Dr Chris Cumberpatch

Introduction

The pottery assemblage consisted of four sherds of pottery weighing 33 grams. The data are summarised in Table 1 below.

The Pottery

The earliest sherd of pottery in the assemblage was small, heavily abraded sherd in a buff sandy fabric from context (1447). Although not attributable to any specific local industry, the general characteristics of the sherd suggest a date range between the later 12th and early 14th century. Given the condition of the sherd, it is possible that it had lain on the surface of the ground for some considerable time before its incorporation into the fill of the ditch, implying that the feature post-dates the sherd by some considerable time.

The sherds from contexts (1304) and (1307) are of a considerably later date than the Medieval sherd. Cane Coloured ware was manufactured from the early 19th century onwards although the sherd in question appeared to be of a relatively late date, probably the later 19th or early 20th century. Part of a maker's mark survives on the underside of the sherd; this probably read '*Oven Proof*' and is found quite commonly on pie dishes and similar vessels.

The sherds from context (1307) were both pieces from Brown Glazed Coarseware pancheons, typically glazed internally only, but with a red slip finish externally. Dating Brown Glazed Coarsewares with any accuracy is virtually impossible and a broad date range within the later 18th to 19th century is the best that is possible.

Curation and Archiving

The bulk of the assemblage derives from un-stratified topsoil deposits (1304; 1307) while a single abraded sherd provides the dating evidence for the disuse of a ditch. While unremarkable these finds could either be deposited in the appropriate local museum or finds depository where they will be available for further research in the future or become part of a handling collection.

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1304	Cane Coloured ware	1	9	1	BS	Oven dish	U/Dec	MC19 th – EC20 th	Part of maker's mark on underside
1307	Brown Glazed Coarseware	2	19	2	BS	Bowl/pancheon	Brown glaze int only, thin red slip ext	LC18 th – C19 th	Pale orange fabric w/ sparse white rock frags
1447	Buff Sandy ware	1	5	1	BS/Rim	Hollow ware	U/Dec (heavily abraded)	LC12 th – EC14 th	Soft buff fabric w/ common, well-sorted sub-rounded quartz up to 1mm, mainly around 0.5mm, rarely up to 2mm
Total		4	33	4					

Table 1. Pottery

5.2 Palaeoenvironmental Remains

Luke Parker

Introduction

Fills of archaeological features from the Mercia Marina were sampled on a judgement basis with contexts targeted for sampling where it was adjudged evidence relating to diet, economy, land use patterns, dating or environment may be retrieved.

At least 40L of each sampled context was collected as a whole earth sample unless the volume of the context was less than 40L, whereupon the entirety of the excavated context was sampled.

Methods

Bulk samples were floated and broken down in water with the residue passing through graduated sieves, 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.

Up to twenty identifications were made per sample, if the quantity of charcoal 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 were then identified to type using a high power Leica GXML3030 binocular microscope (up to x600). Species identification was undertaken in accordance with Scoch *et al.* (2004) as well as the reference library held by ARS Ltd.

Plant macrofossil identification was undertaken, using a low-power binocular microscope (x40), with reference to Martin and Barkley (2000) and Cappers *et al.* (2006). Plant macrofossil nomenclature follows Stace (1997). Cereal identification was undertaken in reference to Jacomet (2006). All plant macrofossils were assessed. Non-charred and non-mineralised macrofossils were discounted as modern contamination and were excluded from this analysis.

Paleoenvironmental Remains

Table 2 below quantifies the palaeoenvironmental remains recovered from the Mercia Marina excavations.

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context No.	1391	1399	1466	1467	1491	1506	1508	1509	1511	1516	1526
<u>Description</u>	Primary fill of pit. <i>Pit Gp 3</i>	Primary fill of pit <i>Pit Gp 3</i>	Upper fill of pit	Fill of ditch 1468	Fill of square PH	Primary fill of pit	Upper fill of pit	Lower fill of pit	Pit	Posthole	Modern PH
	Pit Alignment						Pit [1507]				
Charcoal											
<u>Quantity</u>											
<i>Alnus glutinosa</i> Gaertn. (alder)							2				
<i>Corylus avellana</i> L. (hazel)							4 (3RW)				
<i>Quercus</i> sp. (oak)							7	2			8
cf. <i>Salix</i> sp. (willow)							7 (6RW)			1 (1RW)	
<i>Prunus</i> sp. (stony fruits)								1			
Indet. twig			1				4	1			
Indet. charcoal							3				
Plant Macrofossils											
<u>Wild seeds</u>											
<i>Galium</i> sp. (bedstraw)										1	
<i>Carex</i> sp. (sedge)	1										
<i>Corylus avellana</i> L. (hazelnut)							2				
Poaceae (grass) tuber		1									
<u>Cereals</u>											
<i>Triticum dicoccum</i> /spelta (emmer/spelt wheat)				1		1	2 (1 With glume)	1			
<i>Triticum</i> cf. <i>aestivum</i> (bread wheat)					2						
<i>Triticum</i> sp. (wheat grain)					1						
<i>Hordeum</i> sp. (hulled)					5 (1 with glume)	2 (With glume)	1	3 (With glume)			
<i>Avena</i> sp. (oat)											
Indet cereal grain					3	3			1		

Table 2. Identified palaeoenvironmental remains.

Description and Interpretation

Pit Alignment

Pit Group 1

A single *Carex* sp. (sedge) seed was found in the lowermost fill (1391) of Pit [1388] which is the central pit in Pit Group 1. This is not diagnostic of any specific palaeoenvironmental conditions or activities. Similarly, the indeterminate grass tuber from (1399) in Pit [1398] of Pit Group 3 is uninformative.

Unphased pits

The upper (1508) and lower (1509) fills of an undated pit [1507], which lay between the Western and Eastern enclosure, contained charcoal fragments that could be identified to species. The lower fill (1509) contained Oak (*Quercus* sp.) and soft stony fruit (*Prunus* sp), while the upper fill (1508) contained Oak, Willow (*Salix* sp), Hazel, (*Coryus avellana* L.) and Alder (*Alnus glutinosa* Gaertn.), the bulk of the majority of the Willow and Hazel charcoal being Roundwood.

Based on the assumption that the charcoal assemblage is likely to reflect the composition of local woodland, the recovered charcoal assemblage from the upper fill (1508) of pit [1507] indicates a predominantly wetland tree environment - not dissimilar to the present day. As Willow is a poor choice for firewood, the abundance of roundwood fragments might indicate the opportunistic gathering of windfall firewood, the presence of hazel roundwood also suggests windfall wood gathering rather than coppicing.

A small number of charred cereal grains were recovered from both of the fills of Pit [1507]. Emmer or spelt wheat is represented as well as hulled barley. All the barley grains recovered from the lower fill (1509) and one grain from the upper fill (1508) retained their glume. In the absence of chaff, it is difficult to identify the species of wheat grains found in the pit [1507], however these grains do not possess the characteristic dorsal 'hump' of emmer wheat, though that does not necessarily discount them as being emmer but sadly renders this sample undiagnostic to period.

The hazelnut shell recovered from the upper fill (1508) of pit [1507] demonstrates rodent gnawing. The round hole, coupled with tooth marks along the edge but not on the surface of the nut, is suggestive of gnawing by a bank vole or rat. The presence of the shell may indicate the human disposal of seasonally collected food stuffs during selection for consumption, either immediately following collection or possibly after storage. It is difficult to make significant judgements as to potential subsistence strategies of local inhabitants based purely on the relatively small quantity of palaeoenvironmental remains from this feature. However the presence both of cereal grains and hazelnut shells might suggest a combination of agriculture and the selection of seasonal fruits and nuts to supplement diet. The presence of cereal grains still surrounded by their glumes demonstrates cereal processing, though the lack of chaff suggests that this processing was being undertaken somewhere else. Their presence in

the fills (1508 and 1509) of the pit [1507], though not in great abundance, is probably due to instances of accidental deposition.

The fill (1506) of the pit [1505] contained a single grain of emmer/spelt and two grains of barley resembling the assemblage of the upper (1508) and lower (1509) fills of pit [1507] to the east.

Medieval Ditch

The fill (1467) of ditch [1468] contained a single emmer/spelt grain. Hulled wheat species such as these had been replaced as the primary form of wheat cultivation by the Medieval period. It is likely that this emmer/spelt grain represents earlier material from the pit alignment which had been reworked by the construction of the Medieval ditch.

Eastern Enclosure

The fill (1491) of posthole [1490] associated with the Eastern Enclosure contains cereal grains identifiable as hulled barley and bread wheat. The identification of the bread wheat cannot be absolutely certain because spelt wheat, when heated and charred, can look very similar to charred bread wheat.

Bread wheat grains recovered from the fill (1491) are highly suggestive of a different period of deposition to pit [1507] (see below). Free-threshing bread wheat only became widespread in Britain during the Anglo-Saxon period (Hamerow, Hinton & Crawford, 2011), meaning that post-hole fill (1491) can be no earlier than the Anglo-Saxon period.

6 Discussion, Interpretation and Conclusions

Archaeological excavations at Mercia Marina have augmented and developed our understanding of human occupation and landscape change in this part of the Trent Valley. The wider Trent valley has formed an important focus of human activity/occupation since the earliest post glacial period, about 10,000 years ago, to the present day. Previous excavations within the immediate and adjacent area, (Hughes 1995, Hughes and Jones 1995, Brightman 2008, Brightman and Waddington 2012) demonstrated a palimpsest of occupation within the landscape encompassing finds of upper Palaeolithic stone tools, Neolithic midden pits, Early Bronze Age buildings, Bronze Age ring ditches, pit alignments and late prehistoric land boundaries and enclosures and it is within this palimpsest that the excavations reported on here fit.

Pit alignment

One of the key outcomes of this work is the establishment of a relative chronology of use and disuse of the prehistoric pit alignment (HER MDR14504) previously identified in aerial photography in the 1990s (Taylor 1990). Pit alignment (HER MDR14504), is one of

at least 74 known monuments of this type within Derbyshire and Nottinghamshire. Such monuments are associated with the 1st millennium BC, typically Late Bronze Age/Early Iron Age activity, and are thought to reflect social, political and agricultural change within Prehistoric Britain demonstrated by division of the landscape.

Excavation of the pit alignment here at Mercia Marina has demonstrated a nuanced sequence of three or four phases of construction, use and renewal of the boundary line. The earliest observed phase of this boundary, Pit Group 1, may have incorporated wooden upright posts, 0.45m in diameter, in post pits up to 2m wide. The absence of any post-ghosts in these pits may demonstrate that posts were subsequently removed intimating that that this boundary was managed.

Subsequently a wear hollow, probably denoting a path, seems to have respected the alignment of Pit Group 1 and this was in use at the same time that the pits in Pit Group 2 were open. The establishment of Pit Group 3, which postdates the use/disuse infills of the wear hollow, but which form a coherent line of evenly spaced pits, with similar dimensions as Pit Group 1 and 2, suggests deliberate replication of the earlier pits.

The sequencing of the pit alignments demonstrates consistency while the perseverance of the alignment of this boundary, and the consistency of the form of the pits, suggests continuity in the purpose of its use; reinforcing a clear demarcation of land boundaries within the changing landscapes. The clearest comparisons can be seen to the south west, some 1.2km from this site (Brightman, 2011) where an undated pit alignment and associated ditch feature interpreted as representing land division have been excavated. Further comparisons are Willington Quarry (Wheeler 1979, Beamish 2001, 2009), Willington Power Station (Parker, forthcoming) and Swarkestone Lowes (Knight 1992; Whimster 1989; Losco-Bradley 1993).

Enclosures and Pits

Though it is impossible to phase the Western and Eastern enclosures, or the postholes excavated within the site, it is possible that the features to the west of the pit alignment may also represent heavily truncated pre-historic features. Previous excavations in the immediate vicinity have attested successive enclosures. Here the fact that the eastern enclosure seems to underlie Medieval or even post-medieval ridge and furrow may point to a later prehistoric date. The isolated pits and postholes, likewise, cannot be phased as they lack any clear associations by which they might be grouped together. These features also illustrate a background noise of human activity within the development area from the prehistoric period to the present day.

Medieval Boundaries

Medieval ditch [1446; 1451; 1471; 1468] cut the pit alignment represented by Pit Group 3 in the southern area of excavation. However, though later, the Medieval Ditch continues the alignment established by Pit Group 3. Importantly the continuation of a previously established boundary alignment is in evidence and this may suggest either that the pit alignment was still visible in the landscape, but more certainly demonstrates the longevity of previously established delineations of landscape space until the 12th century.

The presence of ridge and furrow, to the east of, and respecting Medieval ditch [1446; 1451; 1471; 1468] demonstrates Medieval agricultural land use of cultivated open fields. Noticeably they do not extend west of the Medieval boundary ditch suggesting that his boundary remained present at this time.

7 Archive

One bound copy of the report with a digital copy in PDF/A format on disc will be deposited with the Derbyshire Historic Environment Record (HER). A PDF version of the entire report will also be uploaded as part of the OASIS record (Oasis ID archaeo15-320875). This project has produced archaeologically significant results as such a digital archive will be deposited with the Archaeology Data Service, in line with the Museums of Derbyshire (2016) *Procedures for the Deposition of Archaeological Archives from Derbyshire at Derby Museums*.

The digital archive will comprise a PDF version of all primary site records from this 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).

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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.

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Appendix I: Context record

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1301	Deposit/ Topsoil	A fine textured mid black brown clay silt. <i>Represents topsoil overlying Area A.</i>	0.5m depth	
1302	Deposit	A fine textured light orange brown silty sand with frequent small pebbles. <i>Represents subsoil below topsoil (1301) in Area A</i>	80mm	
1303	Deposit	A medium textured deposit comprised of a light orange brown sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>	-	
1304	Deposit/ Topsoil	A fine textured mid black brown clay silt. <i>Represents topsoil overlying Area B.</i>	0.5m depth	
1305	Deposit	A fine textured light orange brown silty sand with frequent small pebbles. <i>Represents subsoil below topsoil (1301) in Area B</i>	80mm	
1306	Deposit	A medium textured deposit comprised of a light orange brown sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>	-	
1307	Deposit/ Topsoil	A fine textured mid black brown clay silt. <i>Represents topsoil overlying Area C.</i>	0.3	
1308	Deposit	A fine textured light orange brown silty sand with frequent small pebbles. <i>Represents subsoil below topsoil (1301) in Area C</i>	40mm	
1309	Deposit	A medium textured deposit comprised of a light orange brown sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>		47.87m
1310	Cut	An oval shaped cut, aligned east-west, with sharp sloping sides, sharp break of slope and a flat base. <i>Represents an oval shaped pit.</i>	3.6 x 1.5 x 0.45m	48.58m
1311	Fill	A fine textured light grey brown, sandy silt fill with water worn pebbles. <i>Represents the sedimentary fill of pit [1319]</i>	3 x 1.5 x 0.45m	48.54m
1312	Cut	Sub oval shaped feature with sharp break of slope, steep convex	0.28 x 0.22 x 0.15m	48.37m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
		sides with a rounded base. <i>Represents a probable stake hole of modern date and contained fills (1314) and (1313)</i>		
1313	Fill	A fine textured brownish black, charcoal rich silt. <i>Represents the remains of a wooden take which likely rotted insitu.</i>	0.24m x 0.15m x 90mm	48.37m
1314	Fill	A fine brown grey silty sand with infrequent smooth, rounded stone inclusions. <i>Represents the lower fill of posthole/stake hole [1312], in the form of slumping.</i>	0.28 x 0.22 x 0.14m	
1315	Cut	Sub rectangular feature with rounded edges, a sharp break in slope and vertical sides with an uneven base. <i>Represent the remains of a plant/tree bole</i>	0.47 x 0.26 x 0.1m	48.41m
1316	Fill	A fine tectured, dark grey brown silt sand with infrquent well sorted stones. <i>Reepresent fill of trre bole [1315]</i>	0.47 x 0.26 x 0.1m	48.41m
1317	Fill	A fine textured, light grey brown sand silt with occasional small water worn pebble inclusions. <i>Represents colluvial sopewash and fill of [1310]</i>	0.2m	48.35m
1318	Fill	A medium textured fill comprised of light yellow brown clay sand with occasional inclusions of small water worn pebbles. <i>Represents the upper fill of pit [1310] in the form of backfill</i>	0.18m	48.58m
1319	Cut	An oval, shallow feature with concave sides and flat base. <i>Represents the cut of a pit which cuts an earlier pit, [1310], on the same alignment.</i>	0.15m	48.54m
1320	Deposit/ Topsoil	A fine textured mid black brown clay silt. <i>Represents topsoil overlying Area D.</i>		
1321	Deposit	A fine textured light orange brown silty sand with frequent small pebbles. <i>Represents subsoil below topsoil (1301) in Area D</i>		
1322	Deposit	A medium textured deposit comprised of a light orange brown sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>		

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Context Number	Type	Context description	Measurements	aOD
1323	Cut	A sub circular feature with steep sloping, concave sides and rounded base. <i>Represents the cut of a pit</i>	0.5m	48.61m
1324	Fill	A medium textured light brown grey sand silt with occasional small water worn pebbles. <i>Represents the upper most visible fill of [1323] and was formed by silting.</i>	2m diameter x 0.25m	48.61m
1325	Cut	North-south aligned feature with gradual-steep sloping sides and an undulated but flat base. <i>Represents ridge and furrow</i>	1.45+ x 1.2 x 0.13m	48.58m
1326	Fill	A coarse textured, grey brown silt sand with frequent poorly sorted inclusions. <i>Represents the fill of Ridge and Furrow [1325]</i>	1.45+ x 1.2 x 0.13m	48.58m
1327	cut			48.63m
1328	Cut	A circular feature with concave sides, rounded base and cuts pit [1324]. <i>Represents the cut of a pit .</i>	c.0.8m diameter x 0.3m	48.62m
1329	Fill	A fine tectured, mid black brown loamy clay silt with occasional inclusions of very small water worn pebbles. Represents the fill of pit [1327].	c.0.8m diameter x 0.3m	48.62m
1330	Fill	A mid grey brown sandy silt with occasional, small water worn pebbles. <i>Represents slumping on the northern edge of pit [1328]</i>	0.2 x - x 0.15m	48.62m
1331	Fill	A fine textured mid red brown, clay silt with moderate inclusions of small water worn pebbles. <i>Represents the fill of small pit/posthole [1327]</i>		48.63m
1332	void	void		48.56m
1333	Fill	A fine textured light grey brown clay with occasional small water worn pebbles. <i>Represents a sedimentary deposit accumulated over a considerable period of time.</i>	c.0.4m diamter x 0.1m	48.22m
1334	Fill	A medium textured dark red brown sand silt with 40% inclusions of smmall water worn pebbles. <i>This deposit forms a narrow and distinctive linear band, aligned north-south. It may represent this use/disuse of the wear hollow. No finds were recovered.</i>	?- x 2 x 0.1m	48.63m

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Context Number	Type	Context description	Measurements	aOD
1335	Deposit	A fine grey brown silt sand deposit with infrequent, well sorted pebbles. <i>Represents a natural tree bole.</i>	0.7 x 0.45 x 0.13m	48.55m
1336	Cut	A sub circular feature with concave sides and a pointed base. <i>Represents the cut of a pit filled by (1337, 1338, 1339 and 1353)</i>	2m diameter x 0.55m	48.57m
1337	Fill	A fine textured mid grey brown clay silt. <i>Represents the upper most, sedimentary fill of pit [1336]</i>	0.1m d	48.57m
1338	Fill	A medium textured, dark grey brown sand silt with frequent small - medium water worn pebble inclusions (50%). <i>Possibly represents the remenants of a laid surface which has been repaired or is the remaking of an earlier, similar surface (1351) and (1352)</i>		48.57m
1339	Fill	A fine textured , friable, light grey brown clay silt with moderat numbers of small pebbles. <i>Thought to represents a tip layer of redeposited natural or backfill</i>		48.57m
1340	Cut	Parrelle sided, shallow feature on a northwest-southeast alignment, with gradual concaving sides and rounded base. <i>Potentially represents part of an enclosure in th form of a shallow ditch.</i>		48.02m
1341	Fill	A fine textured fill of ditch [1440], compried of orange brown clay silt with infrequent, well sorted water wor inclusions. <i>Represents disuse of ditch [1440] in the form of silting.</i>		48.02m
1342	Cut	Cut of a ditch terminus aligned east-west with a round edge, sharp break of slope, near vertical sides and rounded base. Evidence of leeching and bioturbations were identified within the cut. <i>Represent the terminus of a possible north western enclosure ditch (same as 1344,1346).</i>	0.4 x 0.33 x 0.31m	47.96m
1343	Fill	A fine brown grey clay silt with orange inclusions and contained small infrequent, rounded pebbles. <i>Represents disuse of the feature in the form of silting.</i>	0.4 x 0.33 x 0.31m	47.96m
1344	Cut	A steep sided, parrellel ditch feature with a sharp break of slope to the flat base. <i>Represents the cut of a ditch on an northeast-</i>	0.86 x 0.7 x 0.32m	48.00m

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Context Number	Type	Context description	Measurements	aOD
		<i>southwest alignment. PART Of GROUP 1438.</i>		
1345	Fill	Fill of ditch [1344], comprised of a fine textured, light brown grey clay silt with well sorted small pebble inclusions. <i>Represents the disuse of ditch [1344] in the form of silting.</i>	0.86 x 0.7 x 0.32m	48.00m
1346	Cut	Cut of a ditch terminus aligned east-west with a round edge, sharp break of slope, near vertical sides and rounded base. Evidence of leeching and bioturbations were identified within the cut. <i>Represent the terminus of a possible north-western enclosure ditch (same as 1344,1346).</i>	0.65 x 0.18 x 0.33	48.01m
1347	Fill	A fine brown grey clay silt with orange inclusions and contained small infrequent, rounded pebbles. <i>Represents disuse of the feature in the form of silting.</i>	0.65 x 0.18 x 0.34	48.01m
1348	Group	Group number for the north-western side of ditch enclosure, comprised of cuts [1346, 1344, 1342]		
1349	Cut	Cut of feature, ovoid in shape, with irregular (varying, vertical-gradual) concave sides and an uneven base. <i>Irregularity of the sides and base is suggestive of a tree bole.</i>	1.5 x 0.54 x 0.2m	47.95m
1350	Fill	A coarse textured, dark black grey silt clay with frequent small-medium water worn pebble inclusions and evidence of rooting. <i>Represents the fill of tree bole [1349].</i>	1.5 x 0.54 x 0.2m	47.95m
1351	Fill	A small patch of dark grey brown silt sand with 50% medium to small water worn pebbles.It is cut by [1336]. <i>Represents the remains of a surface, same as (1352). And predates (1338).</i>	0.15m d	48.57m
1352	Fill	A small patch of dark grey brown silt sand with 50% medium to small water worn pebbles.It is cut by [1336]. <i>Represents the remains of a surface, same as (1351). And predates (1338).</i>	0.25m d	48.57m
1353	Fill	A fine textured light grey brown silt clay with occasional small water worn pebbles. <i>Represent the disuse of [1336] in the form of silting.</i>	0.25m d	48.35m

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Context Number	Type	Context description	Measurements	aOD
1354	Cut	Cut of a northeast-southwest aligned ditch, with gradual concaving sides and gradual break of slope to a flat base. <i>Represents the terminus on the southern ditch of the enclosure.</i>	0.92 x 0.50 x 0.28m	48.00m
1355	Fill	A fine textured fill of ditch [1440], comprised of orange brown clay silt with infrequent, well sorted water worn inclusions. <i>Represents disuse of ditch [1440] in the form of silting.</i>	0.92 x 0.50 x 0.28m	48.00m
1356	Cut	Sub oval cut with sharp break of slope, concave sides and a pointed base. Filled by (1381) (1382) and (1383). <i>Represents the cut of a pit.</i>	0.3m	47.86m
1357	Cut	Parallel sided feature with a sharp break in slope, steep convex sides and an uneven base. Filled by (1535) <i>Represents medieval ploughing.</i>	1.5 x 1.9 x 0.3	47.84m
1358	Deposit	A fine textured, brown black organic silt. <i>Represents decayed tree roots/remains.</i>	1.2 x 1.1 x 0.17m	47.84m
1359	Cut	Large, sub circular pit with steep sloping sides, and a sharp break of slope to a flat base. <i>Represents a pit which is part of the north-south alignment of pits through the site.</i>		49.56m
1360	Fill	A fine textured, light orange grey sandy clay with frequent rounded pebbles. Underlies fill (1361) and (1362). <i>Represents the basal fill of pit [1359].</i>	0.54m diameter x 0.22m	48.96m
1361	Fill	A medium textured, mid grey silty clay with occasional rounded pebbles. Identified below fill (1362). <i>Represents the initial disuse of pit [1359] in the form of silting.</i>	1.56 (w) x 0.27m	49.27m
1362	Fill	A fine textured, mid grey orange sandy clay with occasional angular and rounded pebbles. <i>Represents the upper most fill of pit [1359] and the disuse of the feature in the form of silting.</i>	1.96 (w) x 0.37m	49.56m
1363	Cut	Parallel sided feature with gradual concave sides and uneven base, on a northwest-south alignment. Part of Group 1371. <i>Represents medieval ridge and furrow.</i>	1m + x 0.44mx 60mm	
1364	Fill	A fine textured fill comprised of a mid brown grey clayey silt with poorly sorted pebble inclusions. <i>Represents the fill of ridge and</i>	1m + x 0.44mx 60mm	

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Context Number	Type	Context description	Measurements	aOD
		<i>furrow.</i>		
1365	Cut	Parallel sided feature with gradual concave sides and uneven base, on a northwest-south alignment. Part of Group 1372. <i>Represents medieval ridge and furrow.</i>	1m + x 0.35m x 35mm	
1366	Fill	A fine textured fill comprised of a mid brown grey clayey silt with poorly sorted pebble inclusions. <i>Represents the fill of ridge and furrow .</i>	1m + x 0.35m x 35mm	
1367	Cut	Parallel sided feature with gradual concave sides and uneven base, on a northwest-south alignment. Part of Group 1372. <i>Represents medieval ridge and furrow.</i>	1m+ x 0.95m x 50mm	
1368	Fill	A fine textured fill comprised of a mid brown grey clayey silt with poorly sorted pebble inclusions. <i>Represents the fill of ridge and furrow .</i>	1m+ x 0.95m x 50mm	
1369	Cut	Parallel sided feature with gradual concave sides and uneven base, on a northwest-south alignment. Part of Group 1371. <i>Represents medieval ridge and furrow.</i>	1m+ x 0.75m x 60mm	
1370	Fill	A fine textured fill comprised of a mid brown grey clayey silt with poorly sorted pebble inclusions. <i>Represents the fill of ridge and furrow.</i>	1m+ x 0.75m x 60mm	
1371	Group	Group number for north-west to south-east aligned Ridge and Furrow. Comprised of [1369] and [1363].	-	
1372	Group	Group number for north-west to south-east aligned Ridge and Furrow. Comprised of [1367], [1358] and [1365].	-	
1373	Deposit	Coarse orange clay with frequent, moderately sorted stone inclusions. <i>Represents made up ground, likely associated from the quarrying during the construction of the A50 road.</i>	-	
1374	Cut	A shallow, oval shaped feature, on a north-east to south-west alignment, with gradual concave sides and rounded base. <i>Represents</i>	0.77m x 0.53m x 90mm	47.96m

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Context Number	Type	Context description	Measurements	aOD
		<i>a shallow oval pit.</i>		
1375	Fill	A fine textured, brown grey clay silt with infrequent stone inclusions. <i>Represents the disuse of oval pit [1374] in the form of silting.</i>	0.77m x 0.53m x 90mm	47.96m
1376	Cut	Sub rounded feature with steep sides and rounded base. <i>Represents a posthole, likely associated with [1378]</i>	0.23m x 0.17m x 80mm	47.95m
1377	Fill	A fine textured, light brown grey clay silt with infrequent stone inclusions. <i>Represents the disuse of posthole hole [1376] in the form of silting.</i>	0.23m x 0.17m x 80mm	47.95m
1378	Cut	Sub rounded feature with near vertical sides and a rounded base. <i>Possible post hole.</i>	0.29m x 0.25m x 80mm.	48.06m
1379	Fill	A fine textured, light brown grey clay silt with infrequent stone inclusions. <i>Represents the disuse of posthole hole [1376] in the form of silting.</i>	0.29m x 0.25m x 80mm.	48.06m
1380	Cut	Sub circular feature with sharp break of slope, steep concave sides and a rounded base. <i>Represents the cut of a pit.</i>	1.01+m x 1.31+m x 0.60m d	47.87m
1381	Fill	A fine textured, light brown clay silt with a moderate assortment of small water worn pebble inclusions. <i>Represents the final disuse of pit [1380] is the form of silting.</i>	1.01+ x 1.31+ x 0.3m	47.86m
1382	Fill	A fine textured mid orange brown clay silt with frequent small water worn pebble inclusions. <i>Represents disuse of the feature in the form of backfill.</i>	1.01+ x 1.31+ x 0.2m	47.86m
1383	Fill	A fine textured mid grey brown silty clay with occasional small water worn pebble inclusions. <i>Sedimentary fill of pit [1356].</i>	1.01 x 0.59 x 0.16m	47.56m
1384	Deposit	A fine textured mid grey brown silty clay with 90% inclusions of small-medium water worn pebbles which overlies natural (1322). <i>Represents the fill of a wear hollow slumping into pit [1380]</i>	40mm deep	47.87m
1385	Cut	A sub circular feature with steep concaving sides, and rounded base. <i>Contained three fills; (1386)(1387) and (1408). Cut of pit.</i>	2.04 x 1.88 x 0.72m	49.36m

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Context Number	Type	Context description	Measurements	aOD
1386	Fill	A fine textured mid black brown clay silt with occasional inclusions of small water worn pebbles. <i>Represents the upper most fill of pit [1380] and the final disuse, in the form of silting.</i>	0.98+ x 1.88 x 0.31m	49.36m
1387		A fine textured, light grey brown sandy silt with frequent water worn pebble inclusions. <i>Represents secondary fill of pit [1389], naturally derived.</i>	0.73 + x 1.58 x 0.41m	49.19m
1388	Cut	A square cut feature with rounded edges, steep sloping sides and a sharp break of slope base with a flat base. <i>Represents the cut of a pit on the northeast-southwest alignments of pits traversing through the site. Previously identified as a prehistoric pit alignment.</i>	2.04 x 1.74 x 0.77m	49.19m
1389	Fill	A fine textured mid black brown clay silt with occasional inclusions of small water worn pebbles. <i>Represents the upper most fill of pit [1380] and the final disuse, in the form of silting.</i>	2.04m x 1.74 x 0.35m	49.19m
1390	Fill	A fine textured, light grey brown sandy silt with frequent water worn pebble inclusions. <i>Represents secondary fill of pit [1389], naturally derived.</i>	0.74 + x 1.63 x 0.3m	49.19m
1391	Fill	A fine textured dark grey brown silty clay with frequent inclusions of medium sized, water worn pebbles. <i>Represents the basal fill of pit [1388] in the form of silt in/weathering.</i>	0.28m + x 0.55m x 60mm	48.69m
1392	Cut	A square cut feature with rounded edges, steep sloping sides and a sharp break of slope base with a flat base. <i>Represents the cut of a pit on the northeast-southwest alignments of pits traversing through the site. Previously identified as a prehistoric pit alignment.</i>	1.96 x 1.94 x 0.28m	49.43m
1393	Fill	A fine textured mid black brown clay silt with occasional inclusions of small water worn pebbles. <i>Represents the upper most fill of pit [1392] and the final disuse, in the form of silting.</i>	0.76 + x1.56x 0.31	48.92m
1394	Fill	A fine textured, light grey brown sandy silt with frequent water worn pebble inclusions. Fill of [1392]. <i>Represents disuse in the form of silting.</i>	0.34+ x 0.9 x 0.12m	49.23m

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Context Number	Type	Context description	Measurements	aOD
1395	Fill	A fine textured dark grey brown silty clay with frequent inclusions of medium sized, water worn pebbles. <i>Represents the basal fill of pit [1392] in the form of silt in/weathering.</i>		49.41m
1396	Cut	Steep sided linear feature, aligned North to south. Truncated pits [1398]. <i>Represents wear hollow</i>	0.5 + x 1.52 x 0.17	49.37m
1397	Fill	A coarse textured, dark grey gravel and sand fill. Fill of [1396]. <i>Represents use/disuse of wear hollow [1396]</i>	0.5+ x 1.52 x 0.18	49.37m
1398	Cut	A square cut feature with rounded edges, steep sloping sides and a sharp break of slope base with a flat base. <i>Represents the cut of a pit on the northeast-southwest alignments of pits traversing through the site. Previously identified as a prehistoric pit alignment.</i>		49.48m
1399	Fill	A medium textured dark blue grey silty clay fill, with frequent inclusions of large rounded pebbles. <i>Represents the basal fill of pit [1398], formed through weathering of the sides.</i>		48.91m
1400	Fill	Coarse dark grey brown silty clay fill with frequent gravel inclusions. <i>Represents the initial disuse of pit [1398] in the form of silting.</i>		49.31m
1401	Fill	The upper most fill of [1398], comprised of a medium textured brown grey clay silt with frequent well sorted pebble inclusions. <i>Represents the final disuse of pit [1398] in the form of natural silting.</i>		49.48m
1402	Cut	Sub rectangular cut feature with rounded corners, sharp break in slope, steep concaving sides and flat base. <i>Represents the cut of a pic associated with the north-south pit alignment.</i>	1.36 x 1.7 x 0.75m	49.23m
1403	Fill	A fine textured, mid grey brown clayey silt fill with infrequent small, rounded water worn pebbles. <i>Upper fill of [1402], represents disuse in the form of silting.</i>	1.36 x 1.7 x 0.46m	49.23m
1404	Fill	A fine textured, mid blue grey silt with infrequent small well sorted inclusions. <i>Secondary fill of pit [1402]. Represents the initial disuse of the pit, in the form of silting.</i>	1+ x 0.67 x 0.22m	48.75m

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Context Number	Type	Context description	Measurements	aOD
1405	Fill	A medium textured orange brown silty clay fill with frequent well sorted stone inclusions. <i>Basil fill of pit [1402, formed through weathering.</i>	0.48 x 0.4 x 0.1m	47.81m
1406	void	void	void	-
1407	void	void	void	-
1408	Fill	A medium textured orange brown silty clay fill with frequent well sorted stone inclusions. Basil fill of pit [1385], formed through weathering.		48.65m
1409	Deposit	A fine grey brown sandy silt with infrequent small rounded stones. <i>Represents the remains of a plough scar which cuts subsoil (1321)</i>	1m + x 0.38m x 30mm	50.34m
1410	deposit	A fine textured fill comprised of a mid blackish brown clay silt with frequent small stone inclusions. <i>Represents topsoil in area E</i>		
1411	Deposit	A fine textured mid orange brown silty sand with frequent, well sorted stone inclusions. <i>Represents subsoil in area E.</i>		
1412	Deposit	A medium textured deposit comprised of a light orange, gravel rich sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>		
1413	deposit	A fine textured fill comprised of a mid-blackish brown clay silt with frequent small stone inclusions. <i>Represents topsoil in area F</i>		
1414	Deposit	A fine textured mid orange brown silty sand with frequent, well sorted stone inclusions. <i>Represents subsoil in area F</i>		
1415	Deposit	A medium textured deposit comprised of a light orange, gravel rich sand with small - medium sized pebbles (40%). <i>Represents Glacial Till deposit, forming the local superficial geological formation overlying the natural mudstone.</i>		
1416	Cut	A board, shallow, parallel sided feature with gradual concave sides and flat base. <i>Ridge and furrow field system of medieval or post</i>	1+ x 2.5 x 0.1m	50.26m

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Context Number	Type	Context description	Measurements	aOD
		<i>medieval date.</i>		
1417	Fill	A fine textured light grey brown clay silt with occasional, very small pebbles. <i>Fill of ridge and furrow [1416].</i>	1+ x 2.5 x 0.1m	50.26m
1418	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1.2m + x 0.62m x 60mm	50.61m
1419	Fill	A fine textured, grey orange brown sandy silt fill with occasional small rounded water worn pebbles. <i>Fill of ridge and furrow [1416]</i>	1.2m + x 0.62m x 60mm	50.61m
1420	Cut	A sub circular feature with sharp break of slope, concave sides and rounded base. Cuts surface layer (1351/1352) and pit [1355]. <i>Cut of pit.</i>	0.2m d	48.57m
1421	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1.3 x 0.76 x 0.1m	50.58m
1422	Fill	A fine textured orange grey brown sandy silt with infrequent well sorted rounded pebbles. <i>Fill of ridge and furrow [1421]</i>	1.3 x 0.76 x 0.1m	50.58m
1423	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1.15+ x 0.9 x 0.1m	50.56m
1424	Fill	A fine textured, grey orange brown sandy silt fill with occasional small rounded water worn pebbles. <i>Fill of ridge and furrow [1423]</i>	1.15+ x 0.9 x 0.1m	50.56m
1425	Cut	Parallel sided ditch like feature with vertical sides and flat base. <i>Cut of field drain. Excavation ceased when clay field drain was identified</i>	1+ x 0.24 x 0.18m	50.11m
1426	Fill	A fine textured mid brown red clay sand with a clay drain pipe near the base (drain dimensions: 320 x 90 x -mm). <i>Fill of field drain [1425], represents backfill.</i>	1+ x 0.63x 0.34m	50.11m
1427	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1+ x 2.4 x 0.18m	50.21m

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Context Number	Type	Context description	Measurements	aOD
1428	Fill	A fine textured, grey brown sandy silt fill with occasional small rounded water worn pebbles. <i>Fill of ridge and furrow [1427]</i>	1+ x 2.4 x 0.18m	50.21m
1429	Cut	Oval shaped feature with irregular edges, sharp break in slope, vertical sides and an undulated rounded base. <i>Probable tree bole</i>	?- x 0.5 x 0.2m	50.23m
1430	Fill	A fine textured, light greyish brown silt with no inclusions. <i>Sedimentary fill of probable tree bole [1429]</i>	?- x 0.5 x 0.2m	50.23m
1431	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1.85 x 1.04 x 0.1m	50.14m
1432	Fill	A fine textured, light brown grey clay silt fill with occasional small rounded water worn pebbles. <i>Fill of ridge and furrow [1431]</i>	1.85 x 1.04 x 0.1m	50.14m
1433	Cut	Parallel sided ditch like feature with vertical sides and flat base. <i>Cut of field drain. Filled by (1553). Excavation ceased when clay field drain was identified</i>	1.3 x 0.3 x .43m	50.13m
1434	Deposit	A fine mid brown clay silt with frequent poorly sorted stone inclusions, contain deposits of scrap metal and brick inclusions. <i>Represents made up ground in area F, likely from the development of the marina.</i>		50.13m
1435	Cut	Parallel sided, shallow feature aligned NNW-SSE, with gradual sloping sides and rounded base. <i>Ridge and furrow field system of medieval or post medieval date.</i>	1m+ x 0.65m x 80mm	49.94m
1436	Fill	A fine textured, grey brown sandy silt fill with occasional small rounded water worn pebbles. <i>Fill of ridge and furrow [1431]</i>	1m+ x 0.65m x 80mm	49.94m
1437	Cut	Parallel sided features n a northwest-southeast alignment with gradual sloping shallow sides and slightly uneven base. Filled by (1448), (1438) and (1439). <i>Cut for ditch which cuts pit [143?].</i>	1.8 x 1.30 x 0.54m	47.88m
1438	Fill	Upper most fill of ditch [1437] comprised of a fine textured grey brown clay silt with infrequent stone inclusions. <i>Represents final disuse of ditch [1437 in the form of natural silting.</i>	1.8 x 1.30 x 0.54m	47.88m

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Context Number	Type	Context description	Measurements	aOD
1439	Fill	Secondary fill of ditch [1438] comprised of a fine textured mid grey brown clay silt with occasional water worn pebbles. <i>Represents silting of ditch [1438].</i>	1.8 x - x 0.24m	47.83m
1440	Cut	Circular shaped pit with steep concaving sides and rounded base. Filled by (1441), (1442) and (1443). <i>Circular pit, part of prehistoric pit alignment. Cut by wear hollow.</i>	1.4 x 1.9 x 0.64m	48.97m
1441	Fill	A fine textured upper fill of pit [1440], comprised of a mid orange grey brown clay silt with infrequent small rounded pebbles. Final disuse of the feature in the form of silting.	1.37 x 1.81 x 0.6m	48.97m
1442	Fill	A fine textured grey silt with infrequent small water worn pebbles. <i>Represents the second upper most fil of pit [1440], formed through a low energy process; silting.</i>	0.8 x 1.5 x 0.4m	48.77m
1443	Fill	A fine textured pale yellow orange silty clay with medium sized rounded, water worn pebble inclusions. <i>Basal fill of pit [1440] formed by weathering/slumping of the sides</i>	0.34 m x 0.43 x 40mm	48.42m
1444	Cut	Circular shaped pit with steep concaving sides and rounded base. Filled by (1450), (1449) and (1445). <i>Circular pit, part of prehistoric pit alignment. Cut by wear hollow.</i>	1.80 x 1.60 x 0.7m	48.96m
1445	Fill	A fine textured upper fill of pit [1440], comprised of a mid orange grey brown clay silt with infrequent small rounded pebbles. Final disuse of the feature in the form of silting.	1.8 x 1.6 x 0.3m	48.96m
1446	Cut	Parallel sides ditch aligned northwest-southeast, with steep concaving sides and rounded base. Filled by (1534) and (1447). <i>Cut of ditch which post dates pit alignment</i>	0.8+ x 1.19 x 0.42m	47.85m
1447	Fill	Upper most fill of ditch [1446], comprised of a dark grey brown silty clay with occasional small, rounded and well sorted pebbles. Same as (1461). <i>Represents the disuse of ditch [1447] in the form of silting.</i>	0.8+ x 1.18 x 0.13m	47.85m
1448	Fill	A fine textured light grey brown silt mixed with orangey brown clay. Contained frequent small, rounded water worn pebbles. <i>Basal fill of ditch [1437]. Represents disuse in the form of silting.</i>	1.8 x ?- x 0.22m	47.82m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1449	Fill	A fine textured, grey silt fill of pit [1444]. <i>Represents the second most upper fill of pit [1444], formed by silting.</i>	0.82 x 1.35 x 0.38m	48.72m
1450	Fill	A fine orange, mid brown clay fill. <i>Basal fill of [1444]. Represents a water borne deposit.</i>	0.35+ x 0.54 x 0.11m	48.42m
1451	Cut	Circular shaped feature with steep concaving sides and rounded base. One of several pits on a northwest-southeast alignment. Cut by ditch [1454] and contained fills (1453) and (1452). <i>Circular pit.</i>	1.4 x 0.92 x 0.47m	47.87m
1452	Fill	A fine textured, grey brown sandy clay silt with small occasional water born pebbles. <i>Upper most fill of pit [1451], represents disuse in the form of silting.</i>	1.4 x 0.92 x 0.2m	47.87m
1453	Fill	A fine textured, grey orange silty clay with infrequent, small water worn pebbles. <i>Lower fill of pit [1451], represents disuse in the form of silting.</i>	1+ x 0.58 x 0.27m	47.69m
1454	Cut	Parallel sided features on a northwest-southeast alignment, with near vertical sides and a flat base. Filled by (1455) and (1456). <i>construction cut of a ditch.</i>	1.6 x 1.45 x 0.58m	47.85m
1455	Fill	A fine textured, grey brown sandy clay silt with small occasional water born pebbles. <i>Upper most fill of pit [1454], represents disuse in the form of silting.</i>	1.6 x 1.45 x 0.24m	47.85m
1456	Fill	A fine blue grey silty clay with occasional small-medium water worn pebbles. <i>Basal fill of ditch [1454]. Represents disuse in the form of silting.</i>	1.6 x 1.1 x 0.24m	47.58m
1457	void	void	void	-
1458	void	void	void	-
1459	void	void	void	-
1460	Cut	Circular shaped feature with varying sides- concave - stepped and a flat base. <i>Cut of circular pit.</i>	1.86 x 1.95 x 1.10m	47.88m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1461	Fill	A fine textured, dark grey brown silt clay with occasional small, rounded water worn pebble inclusions. <i>Upper fill of pit [1460], represents the final disuse of the feature in the form of silting.</i>	1.86 x 1.95 x 1.10m	47.88m
1462	Cut	Parallel sided feature, on a northwest-southeast alignment, with sharp break of slope, steep concaving sides and a rounded base. <i>Cut of ditch which truncates pit [1465].</i>	2.20 x 1.2 x 0.45m	47.97m
1463	Fill	A fine textured, yellow mid grey sandy silt with occasional small water worn pebbles. <i>Fill of ditch [1462]. Represents final disuse in the form of silting.</i>	2.2 x 1.02 x 0.36m	47.97m
1464	Fill	A fine textured orange silt with occasional water worn pebble inclusions. <i>Lower fill of ditch [1462]. Represents slumping of the edge.</i>	2.2 x 0.18 x 0.47m	47.97m
1465	Cut	A truncated oval shaped feature with a sharp break of slope, steep concave sides and a flat base. <i>Oval shaped pit, part of the northwest-southeast pit alignment.</i>	0.87 x 1.3 x 0.45m	47.97m
1466	Fill	A fine textured, mid brown grey silt with occasional water worn pebbles. <i>Upper fill of pit [1465]. Represents disuse in the form of silting.</i>	0.87 x 1 x 0.2m	47.97m
1467	Fill	A fine textured, mid grey clay silt with occasional water worn pebble inclusions. <i>Basal fill of pit [1465]. Represents initial disuse of the pit in the form of silting.</i>	0.87 x 1.2 x 0.23m	47.79m
1468	Cut	Parallel sided ditch on a northwest-southeast alignment, with steep convex sides and flat base. <i>Cut of ditch which truncates the northwest-southeast pit alignment.</i>	0.3+ x 1.35 x 0.55m	47.96m
1469	Cut	Circular shaped feature with a sharp break of slope, steep sloping sides and flat base. Filled by (1483) and (1482). <i>Cut of pit associated with prehistoric pit alignment.</i>	2.10 x 1.5 x 0.55m	47.92m
1470	Cut	Circular/oval? Shaped feature with a sharp break of slope, steep, possibly stepped, sloping sides and rounded base. Filled by (1487) and (1486). <i>Cut of pit, associated with prehistoric pit alignment</i>	1.12 x 1.5 x 0.46m	47.89m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
		<i>(northwest-southeast). Cut by later ditch [1471]</i>		
1471	Cut	Parallel sided ditch with sharp break of slope, steep, uneven sloping sides and a rounded base. Cuts pit [1470] and is filled by (1488) and (1489). <i>Cut of ditch, post dating prehistoric pit alignment.</i>	1.77 x 1.10 x 0.40m	47.91m
1472	Cut	Parallel sided shallow feature on a northwest-southeast alignment. Represents by a rounded terminus, gradual concave sides and uneven base. Part of gully [1340, 1354]. <i>Shallow terminus of a gully.</i>	0.79m+ x 0.19m x 60mm	47.83m
1473	Fill	A fine textured grey brown sandy silt with infrequent, small stone inclusions. <i>Represents the disuse of gully [1472] in the form of silting.</i>	0.79m+ x 0.19m x 60mm	47.83m
1474	Cut	Oval shaped feature with gradual sloping sides and flat base. Filled by (1475). <i>Cut of pit</i>	0.84m x 1.0m ² x 70mm	47.84m
1475	Fill	A fine textured grey brown clay silt with small stone inclusions. <i>Represents disuse of pit [1475] in the form of silting.</i>	0.84m x 1.0m ² x 70mm	47.84m
1476	Fill	Irregular shaped features with irregular stepped sides and uneven base. Filled by (1549) <i>Tree bole</i>	0.59 x 0.35 x 0.13m	48.01m
1477	Fill	Irregular, oval shaped feature identified on the north western edge of wildlife pond. Characterised by steep sloping/stepped sides and undated/irregular base. Filled by (1550) <i>Tree bole</i>	0.82+ x 0.62 x 0.23m	47.98m
1478	Cut	A parallel sided feature with gradual sloping sides and uneven base. <i>Cut of ridge and furrow, likely medieval or post medieval in date</i>	1.18m x 1.23m x 70mm	
1479	Fill	A fine textured grey brown sandy silt fill with infrequent small water worn pebbles. <i>Fill of medieval/post-medieval ridge and furrow [1478].</i>	1.18m x 1.23m x 70mm	
1480	Cut	A parallel sided feature with gradual sloping sides and uneven base. <i>Cut of ridge and furrow, likely medieval or post medieval in date</i>	1m+ x 0.98 x 60mm	
1481	Fill	A fine textured grey brown sandy silt fill with infrequent small water worn pebbles. <i>Fill of medieval/post-medieval ridge and furrow [1480].</i>	1m+ x 0.98 x 60mm	

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1482	Fill	A fine textured brown grey sandy silt with well sorted stone inclusions. <i>Upper fill of pit [1469]. Represents disuse in the form of silting.</i>	0.8 x 2.02 x 0.22m	47.92m
1483	Fill	A fine textured light brown grey sandy silt with infrequent small, rounded pebbles. <i>Basal fill of pit [1469]. Represents disuse of pit in the form of natural silting.</i>		47.80m
1484	Fill	A fine textured brown grey sandy silt with well sorted stone inclusions. <i>Upper fill of pit [1468]. Represents disuse in the form of silting.</i>	0.48 x 1.33 x 0.25m	47.96m
1485	Fill	A fine textured light brown grey sandy silt with infrequent small, rounded pebbles. <i>Basal fill of [1468]. Represents disuse in the form of natural silting.</i>	0.54 x 0.86 x 0.32	47.85m
1486	Fill	A fine textured, dark grey brown silt clay with occasional small, rounded water worn pebble inclusions. <i>Upper fill of pit [1470], represents the final disuse of the feature in the form of silting.</i>	1.12 x 1.5 x 0.22m	47.89m
1487	Fill	A fine textured light yellow grey silty clay with occasional small, rounded pebbles. <i>Basal fill of [1470]. Represents disuse in the form of natural silting.</i>	1.12 x 1.5 x 0.24m	47.76m
1488	Fill	A fine textured, dark grey brown silt clay with occasional small, rounded water worn pebble inclusions. <i>Upper fill of pit [1470], represents the final disuse of the feature in the form of silting.</i>	1.77 x 1.10 x 0.28m	47.91m
1489		A fine textured light yellow grey silty clay with occasional small, rounded pebbles. <i>Basal fill of [1470]. Represents disuse in the form of natural silting.</i>	1.77 x 1.10 x 0.25m	47.78m
1490	Cut	Square shaped feature with rounded edges, steep concaving sides and flat base. <i>Cut of posthole</i>	0.6m x 0.54m x 70mm	47.87m
1491	Fill	A fine textured mid grey sandy silt with infrequent waterworn stone inclusions. <i>Disuse of posthole [1490] in the form of silting.</i>	0.6m x 0.54m x 70mm	47.87m
1492	Cut	Sub oval feature with sharp break of slope, steep sides and flat base. Filled by (1493). <i>Cut of posthole.</i>	0.68 x 0.45 x 0.10	47.82m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1493	Fill	A fine textured mid grey sandy silt with infrequent waterworn stone inclusions. <i>Disuse of posthole [1492] in the form of silting.</i>	0.68 x 0.45 x 0.11	47.82m
1494	Void	VOID	VOID	-
1495	Void	VOID	VOID	-
1496	Cut	Square cut feature with rounded corners, steep concaving sides and rounded base. <i>Cut of posthole</i>	0.42 x 0.4 x 0.14m	47.8m
1497	Fill	A fine textured mid grey sandy silt with infrequent waterworn stone inclusions. <i>Disuse of posthole [1496] in the form of silting.</i>	0.42 x 0.4 x 0.14m	47.8m
1498	Cut	Parallel sided feature on a northeast-southwest alignment, with gradual sloping sides and flat base. Filled by (1499). <i>Terminus of gully in the eastern area of area D.</i>	1.11m x 0.48m x 50mm	47.73m
1499	Fill	A fine textured dark grey sandy silt with infrequent, small stone inclusions. Same as (1520) and (1518). <i>Fill of gully [1498], represents disuse in the form of silting.</i>	1.11m x 0.48m x 50mm	47.73m
1500	Fill	A fine textured yellow orange clay sand. Basal fill of gully terminus [1498]. <i>Represents weathering of the eastern side</i>	30mm deep	47.73m
1501	Cut	A parallel sided feature with gradual sloping sides and uneven base. <i>Cut of ridge and furrow, likely medieval or post medieval in date</i>	1m+ x 2.18m x 20-40mm	
1502	Fill	A fine textured grey brown sandy silt fill with infrequent small water worn pebbles. <i>Fill of medieval/post-medieval ridge and furrow [1501].</i>	1m+ x 2.18m x 20-40mm	
1503	Cut	Irregular shaped feature with gradual sloping sides and an uneven base. <i>Possibly represents the remains of a pit.</i>	1.57 x 0.59 x 0.1m	
1504	Fill	A fine textured orange grey brown clayey silt fill with infrequent stone inclusions. <i>Represents disuse of feature in the form of silting.</i>	1.57 x 0.59 x 0.1m	
1505	Cut	Circular shaped feature with steep concaving sides and rounded base. Filled by (1506) and is cut by pit [1537]. <i>Cut of pit.</i>	1m diameter x 0.22m	
1506	Fill	A fine textured brown grey clay silt with occasional stone inclusions	1m diameter x 0.22m	

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
		(water worn). <i>Fill of pit [1503]</i>		
1507	Cut	A long, sub oval shaped feature with varying sides; gradual-near vertical and a rounded base. Contained fills (1509) and (1508). <i>Elongated pit</i>	3.12 x 0.8 x 0.31m	
1508	Fill	A fine textured, light grey silt fill of pit [1507]. <i>Upper fill; represents natural silting.</i>	2.34 x 0.4 x 0.26m	
1509	Fill	A fine textured, grey black silt fill. <i>Lower fill of [1507]. Thought to represents a build up of organic material on the western edge of pit [1507].</i>	3.12 x 0.4 x 0.18m	
1510	Cut	Oval shaped feature with steep, stepped sides, sharp break of slope to a flat base. Filled by (1511) and (1512). <i>Cut of pit, truncated by pit [1537]</i>	1.05 x 0.8 x 0.4	
1511	Fill	A fine textured mid orange grey silt with occasional small water worn, well sorted stone inclusions. <i>Represents disuse in the form of silting.</i>	1.05 x 0.8 x 0.16m	
1512	Fill	A fine textured grey clay silt with orange inclusions. <i>Lower fill of [1510]. Represents disuse in the form of silting.</i>	1.05 x 0.45 x 0.24m	
1513	Cut	Sub oval shaped feature with steep-gradual sloping sides and undulated base. Filled by (1541), (1539) and (1514) and cut by modern land drain [1540]. <i>Possible tree bole.</i>	1.62 x 0.54 x 0.24m	
1514	Fill	A fine textured, grey black organic fill with tree root inclusions. <i>Represents the remains of a tree throw?</i>	1.62 x 0.18 x 0.1m	
1515	Cut	Sub oval shaped feature with steep sloping sides and rounded base. Root disturbance is evident on the western edge. <i>Probable posthole.</i>	0.52 x 0.46 x 0.16m	
1516	Fill	A fine textured, dark grey fill of [1515]. Naturally derived fill of posthole [1515]	0.52 x 0.46 x 0.16m	
1517	Cut	Parallel sided feature on a northeast-southwest alignment, with gradual sloping sides and flat base. Filled by (1518). <i>Cut of a gully in the eastern area of area D.</i>	1 x 0.58 x 0.14m	

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1518	Fill	A fine textured dark grey sandy silt with infrequent, small stone inclusions. Same as (1520). <i>Fill of gully [1517], represents disuse in the form of silting.</i>	1 x 0.58 x 0.14m	
1519	Cut	Parallel sided feature on a northeast-southwest alignment, with gradual sloping sides and flat base. Filled by (1542) and (1520). <i>Cut of a gully in the eastern area of area D.</i>	1 x 0.54 x 0.14	
1520	Fill	A fine textured dark grey sandy silt with infrequent, small stone inclusions. Same as (1518). <i>Fill of gully [1517], represents disuse in the form of silting.</i>	2 x 0.54 x 0.14	
1521	Cut	Sub oval, shallow feature gradual concave sided and rounded base. Filled by (1522). <i>Possible posthole.</i>	0.5m x 0.4m x 60mm	
1522	Fill	A fine textured, mid brown clay silt fill with black silt inclusions and frequent stone inclusions. <i>Fill of possible posthole [1521]</i>	0.5m x 0.4m x 60mm	
1523	Cut	Sub oval, shallow feature with irregular undercutting sides and undulated base. Filled by (1524) <i>Tree bole</i>	0.56m x 0.37m x 70mm	
1524	Fill	A fine textured, grey orange brown clay silt with angular stone inclusions. <i>Fill of tree bole [1523]</i>	0.56m x 0.37m x 70mm	
1525	Cut	Sub circular shaped cut with steep concaving sides and rounded base. Filled by (1526). <i>Cut of pit.</i>	0.92 x 0.8 x 0.26m	
1526	Fill	Dark grey sandy silt fill with medium sized stones (50%). Possible burning layer at the base. Stones appeared to be cracked towards the base. <i>Fill of pit [1525], represents disuse in the form of backfill.</i>	0.92 x 0.8 x 0.26m	
1527	Cut	Steep sided, rounded ditch terminus with a concave base. Filled by (15430 and (1528)	0.74+ x 0.98 x 0.46m	
1528	Fill	A fine textured brown grey sandy silt with occasional, well sorted small water worn stone inclusions.	0.74+ x 0.98 x 0.30m	
1529	VOID	VOID	-	-
1530	VOID	VOID	-	-
1531	Fill	A fine textured blue grey clay with no inclusions. <i>Represents disuse in</i>	0.35m x 0.44m x 20-30mm	48.25m

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
		<i>the form of silting; likely caused by weathering.</i>		
1532	Fill	A fine white grey clay with occasional small stone inclusions (<10mm). <i>Basil fill of [1444], formed by weathering after the pit was opened.</i>	0.35m x 0.44m x 20mm	48.24m
1533	Fill	A fine textured, light orange grey silty clay with occasional, well sorted stone inclusions. <i>Lower fill of pit [1460], represents initial disuse of pit in the form of silting.</i>	1.86 x 1.62 x 0.43m	47.72m
1534	Fill	A fine textured, light orange grey silty clay with occasional, well sorted stone inclusions. <i>Lower fill of ditch [1446], represents initial disuse of pit in the form of silting.</i>	0.93 x 0.3m	47.73m
1535	Fill	A fine pale brown grey lens of sandy silt below (1358). <i>Represents root disturbance.</i>	1.2m x 1.1m x 60mm	47.84m
1536	Fill	A fine textured grey brown sandy silt fill of [1357]. <i>Represents the fill or medieval/post-medieval ridge and furrow.</i>	1.5 x 1 x 0.3m	47.84m
1537	Cut	Sub oval shaped pit, with gradual concaving sides and rounded base. <i>Cut of pit, post dates pits [1510] and [1505].</i>	0.44m diameter x 0.12m depth	
1538	Fill	A fine textured mid grey brown clay silt with infrequent stone inclusions. <i>Represents disuse of pit[1537] in the form of silting.</i>	0.44m diameter x 0.12m depth	
1539	Fill	A fine textured, grey brown clay silt. <i>Fill of possible tree bole [1513]. Represents disuse in the form of silting.</i>	1.62 x 0.36 x 0.16m	
1540	Cut	Cut of modern land drain. Aligned east-west.	-	
1541	Fill	A pale grey silt with root disturbance. <i>Lower fill, represents silting of [1513]</i>	1.62m x 0.27m x 70mm	
1542	Fill	A pale, yellow orange silty sand. <i>Slumped natural likely caused by weathering.</i>	1m+ x 0.36m x 70mm	
1543	Fill	A fine textured grey silt with infrequent small stone inclusions	0.4+ x 0.41 x 0.16m	
1545	Group	Group number fore northwest-south east aligned ditch of enclosure. Comprised of [1472], [1340,] [1354]	5.9m x 0.77m x 80mm - 0.28m	-

Archaeological Excavations at Mercia Marina, Willington, Derbyshire

Context Number	Type	Context description	Measurements	aOD
1546	Group	Group number for boundary ditch; comprised of cuts [1446, 1451, 1471, 1468, 1462]	23 x 0.95 x 0.45m	-
1547	group	Pit alignment	84.5 x c.2 x 0.98m	-
1548	Group	Enclosure, encompasses ditches 1348 and 1545	-	-
1549	Fill	A fine textured, light grey clay silt fill. <i>Fill of tree bole [1476]</i>	0.59 x 0.35 x 0.13m	48.01m
1550	Fill	A fine textured, light grey clay silt fill. <i>Fill of tree bole [1477]</i>	0.82+ x 0.62 x 0.23m	47.98m
1551	Cut	Steep sided and rounded base cut of wear hollow. Cuts pit [1402], filled by (1552). <i>Wear hollow</i>	0.64+ (w) x 0.37m (d)	49.15m
1552	Fill	fill of [1551]	0.64+ (w) x 0.37m (d)	49.15m
1553	fill	A fine textured mid brown red clay sand with a clay drain pipe near the base (drain dimensions: 320 x 90 x -mm). <i>Fill of field drain [1432], represents backfill.</i>	1.3 x 0.3 x .43m	50.13m
1554	Cut?	Wear hollow		
1555	Fill	Fill of wear hollow		
1556	Fill	Fill		
1557	VOID			
1558	Group	Wear hollow, encompasses [1396], [1554] tims first cut		
1559	Group	Group of shallow gully [1498] [1517] and [1519]	15.7 x 0.72 x 14m	-

Appendix II: Written Scheme of Investigation

Mercia Marina, Willington Derbyshire

Written Scheme of Investigation for Excavation and Watching Brief

September 2016



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Prepared on behalf of: Mercia Marina

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1 INTRODUCTION

1.1 Project and Planning Background

1.1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Research Services Ltd (ARS Ltd) on behalf Mercia Marina. It details a scheme of works for strip, map and sample excavations and an archaeological watching brief in satisfaction of a condition of planning consent 9/2016/0066 for the erection of 32 holiday lodges and associated landscaping, wildlife pond, car parking and access at Mercia Marina, Findern Lane, Willington, Derby, Derbyshire (Figure 1).

1.1.2 The site is situated in the middle of the Trent valley and lies within a landscape rich in archaeological remains.

1.1.3 A Heritage Impact Assessment (HIA) was produced by Archaeological Research Services (ARS) Ltd for the proposed development area (PDA) in 2015. This identified both known remains and the potential for archaeological remains that may be adversely impacted by any development on the site (Burpoe 2015, 12).

1.1.4 A subsequent phase of archaeological evaluation trenching revealed part of what is thought to be a discontinuous late pre-historic ditch and pit alignment and other archaeological features (Thorpe 2016).

1.1.5 Archaeology is a material consideration in the planning process. Condition 13 of planning consent states:

a) No development shall take place until a Written Scheme of Investigation for archaeological work has been submitted to and approved by the local planning authority in writing, and until any pre-start element of the approved scheme has been completed to the written satisfaction of the local planning authority. The scheme shall include an assessment of significance and research questions; and

1. The programme and methodology of site investigation and recording

2. The programme for post investigation assessment

3. Provision to be made for analysis of the site investigation and recording

4. Provision to be made for publication and dissemination of the analysis and records of the site investigation

5. Provision to be made for archive deposition of the analysis and records of the site investigation

6. Nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.



b) No development shall take place other than in accordance with the archaeological Written Scheme of Investigation approved under condition (a).

c) The development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the archaeological Written Scheme of Investigation approved under condition (a) and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

1.1.6 The following WSI describes the objectives and the methods to be employed in the excavation and watching brief in accordance with guidance provided by the Derby and Derbyshire Development Control Archaeologist (DDCA).

1.1.7 This WSI has been prepared to fully comply with the stipulations of planning consent in consultation with the Derby and Derbyshire Development Control Archaeologist. It describes the objectives and the methods to be employed and has been approved, in its final issued form, by the Derby and Derbyshire Development Control Archaeologist.

1.2 Site description

The 'red line boundary' of the PDA is outlined in Figure 1 and encompasses an area of approximately 5.85ha. The site comprises of two fields bounded to the north by open fields and the A50, to the east by the existing Mercia Marina complex and to the south and west by open fields. The site is centred at NGR SK 2981, 2964 (Figure 1).

1.3 Landform, Geology and Soils

1.3.1 The site covers 5.85ha and comprises two fields, Field 1 and Field 2, which are bounded to the north by open fields and the A50, to the east by the existing Mercia Marina complex and to the south and west by open fields.

1.3.2 Field 2, which lies to the north of the PDA and is triangular in shape, slopes from a high point at c.57 m above Ordnance Datum (aOD) in the north-west corner toward the east and south-east. The fall of slope to the east is relatively gentle, dropping to c.52m aOD over 142m, but is more pronounced to the south-east where there is a fall of 7m over a distance of 153m to 49m aOD. The land at the eastern edge and south-eastern corner of Field 2 levels off and even rises slightly to c.49.8m aOD before dropping off again to the 49m aOD at the hedge line. Archaeological evaluation characterised this levelling off, at the east of the Field 2, as being a result of levelling up of this land during recent quarrying (Thorpe, 2016. 7, 8, 11, Figure 3).

1.3.3 Field 1, to the south, is trapezoidal in shape and slopes down from west to east from c.53m aOD to 48m aOD in the middle of the field before levelling off and even rising slightly to c.49m aOD at the eastern edge of the field. The underlying fall of the land is also from the south-west toward the north-east, where a fall of slope



from 53m to 49m aOD over a linear distance of 264m was observed. As with Field 2, this area of rising ground is as a result of levelling up within this field during quarrying of the area to the east (Thorpe, 2016. 7, 8, 11, Figure 3).

1.3.4 The underlying solid geology of the PDA consists of mudstone of the Gunthorpe Member, formed during the Triassic Period when the local environment was dominated by hot deserts. This is overlain by superficial deposits of Findern clays, silts and sands and Beeston sand and gravels, with the sand and gravels being uppermost across the PDA and being the material into which the archaeological remains are cut (BGS 2015). The soils of the PDA are classified as belonging to the ARROW Soil Association (543), which are gleyic brown earths (SSEW 1983). These soils form as glaciofluvial drift and are characterised as deep, permeable, coarse loamy soils affected by groundwater (CU 2015).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Archaeological remains spanning the Earlier and Later Prehistoric periods are well attested in the immediate vicinity (Burpoe 2015, 5) and the surrounding area has been subjected to sustained investigation over the last 30 years (Taylor 1990; Beavit 1990; TPAT 1992; Philpott 1993; Hughes 1995; Hughes & Jones 2001; Brightman 2008; Brightman and Waddington 2012).

2.2 A Heritage Impact Assessment (HIA) undertaken by ARS Ltd in 2015 (Burpoe 2015) highlighted the presence of non-designated archaeological remains within the PDA (Burpoe 2015, 9) in Field 2. These remains, namely Neolithic and Bronze Age features and a Late Prehistoric pit alignment, are identified in the Historic Environment Record for Derbyshire (HER nos. MDR4333, MDR14504) and the National Record of the Historic Environment (NRHE nos. 1516179 & 313191, 1516192).

2.3 The presence of relict medieval field terraces to the northern end of Field 2 was also highlighted in the HIA. These are clearly visible in Google Earth (Figure 2) but were initially identified in the Derbyshire and the Peak District Aggregates Assessment Resource Assessment (Brightman and Waddington 2011, 154).

2.4 Previous archaeological evaluations (Hughes 1995) within the PDA, though limited in scope, revealed relatively little in terms of preserved archaeology (Burpoe 2015, 7). This absence of evidence does not necessarily constitute evidence of absence and Hughes (1995) notes that natural site formation processes within the PDA may have obscured the archaeology visible to aerial photography. Excavations further to the east (Brightman and Waddington 2012) revealed archaeological remains dating from most periods of prehistory previously unknown from cropmarks and aerial photography (Brightman 2008, 3 and 106).

2.5 A more recent tranche of evaluation (Thorpe 2016) confirmed the location and survival of the Later Prehistoric pit and ditch alignment and the presence of ridge and furrow features in Field 1. In Field 2 a single feature of potential archaeological origin was also recorded comprising putative postholes, a slot and associated hollow.



3 AIMS AND OBJECTIVES

3.1 Regional Research Aims and Objectives

3.1.1. There is potential for research topics identified in *East Midlands Heritage. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight *et al.* 2012) to be addressed namely:

Objective 3A: Dating.

- 3.1.2. Improve seriation and dating of Neolithic and Bronze Age pottery.

Objective 4C: Characterise the Late Bronze Age – Early Iron Age (LBA-EIA) settlement resource and investigate intra-regional variability.

- 4.6.1; 4.6.2; 4.6.3. Development of field systems, political and socio-economic role of pit alignments and ditch systems and changes in agrarian landscape.

Objective 4F: Investigate Intra-regional variations in the development of field boundaries.

- 4.6.1; 4.6.2; 4.6.3. Development of field systems, political and socio-economic role of pit alignments and ditch systems and changes in agrarian landscape.
- 4.8.1 – 4.8.4. The examination of agricultural change over time.

3.2 Strip, Map and Record Excavation Objectives

3.2.1. The objectives of all archaeological monitoring and excavation will be to:

- ♦ Identify the archaeological features and deposits within the areas opened up.
- ♦ Excavate and record all archaeological features and deposits encountered.
- ♦ Establish the relative sequence and likely dating of encountered archaeological features and deposits.
- ♦ Recover samples appropriate for scientific dating aimed to achieving 3.1.2.
- ♦ Establish the character, extent, form, function and likely status of surviving archaeological deposits to inform the research aims outlined in section 3.1.

4 EXCAVATION AND WATCHING BRIEF METHODOLOGY

4.1 Coverage

4.1.1 In Field 1 a scalable watching brief (scalable up to strip map and sample excavation) will be maintained during the stripping of the entire footprint of the wildlife pond (Figure 3). However, strip, map and sample excavation of the Late



Prehistoric ditch/pit alignment within the monument boundary will be undertaken, prior commencement, both in the wildlife pond, in the haul road to the north and where the construction of the footprint of residential lodges may impact on identified archaeological resources. In these areas the depth of development, at 0.3m BGL, is higher than the level of archaeological survival. However, because the archaeology lies c. 0.4m BGL, stripping to the level of archaeological survival is required from which height hand excavation of revealed archaeological features will be undertaken.

4.1.2 In Field 2, a pre commencement strip, map and sample excavation of the footings for cabin 29 and the creation of the adjacent haul road will be undertaken. Stripping will proceed to the level of the buried archaeology from which level hand excavation will be undertaken in line with that appropriate for strip, map and sample excavation.

4.1.3 In all areas of archaeological sensitivity (4.1.1, 4.1.2 above) service provision for the cabins will be routed across the site where the haul road runs and impacts will be mitigated during the works described above.

4.1.4 The client will plant low impact, shallow root-ball, species in areas of archaeological sensitivity, namely where the line of the late prehistoric pit and ditch alignment cross site obviating the need for mitigation works.

4.2 Methodology

General

4.2.1 All elements of the archaeological works will be undertaken in accordance with the Chartered Institute for Archaeologist (CIfA) *Code of Conduct* (2014a) and will follow the CIfA's *Standards and Guidance for Archaeological Watching Briefs* (2014b) and *Standards and Guidance for Archaeological Excavations* (2014c).

4.2.2 All staff employed on the project will be suitably qualified for their respective project roles and have substantial experience of archaeological excavation and recording. 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 specified to be done by machine will be undertaken by a suitable mechanical excavator fitted with a toothless ditching bucket. If significant archaeological features are identified the Derby and Derbyshire Development Control Archaeologist will be notified and a decision taken as to the best method of proceeding.

4.2.4 ARS Ltd will ensure that heavy 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. Regular contact will be ensured between ARS Ltd and the site 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 Derby and Derbyshire Development Control Archaeologist requirements.

4.2.6 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.

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

Excavation

Strip, Map and Sample Excavation

4.2.8 The footprint of the wildlife pond (see Figure 1) is to be excavated down to the level of any surviving archaeological horizon or depth of development whichever is the shallower under the supervision of a suitably qualified and experienced archaeologist. No machinery will track over areas that have previously been stripped until the area has been signed off by ARS Ltd.

4.2.9 All spoil removed during groundworks will be scanned visually to recover small finds. Any finds so recovered will be recorded and their location noted on a site plan at a relevant scale. The finds will be retained and recorded.

4.2.10 The area will be appropriately cleaned using hand tools to expose the full nature and extent of archaeological features and deposits.

4.2.11 Archaeological features will be mapped/drawn using suitable equipment and tied into Ordnance Survey supplemented with a photographic record.

4.2.12 Once the area has been stripped, cleaned and recorded consultation, if necessary, will take place with the Derby and Derbyshire Development Control Archaeologist to identify and agree further excavation/recording strategy.

4.2.13 All archaeological features will be planned and sectioned

4.2.14 Isolated, discrete features such as pits not belonging to structures or industrial activities will be 50% sampled initially, away from truncations, provision is made for full excavation.

Watching Brief

4.2.15 Once the area covered by scalable watching brief has been stripped, the Derby and Derbyshire Development Control Archaeologist will be informed of levels of archaeological survival. Should areas of archaeological survival be encountered which have not been identified and where survival is of a profusion, quality and/or complexity that is unexpected the Derby and Derbyshire Development Control Archaeologist will be consulted to agree an excavation/recording strategy.

4.2.16 The archaeologist will be given the opportunity to stop site work in order to investigate potential archaeological features and adequate time will be allowed at the attendant archaeologists request for recording any such features.



4.2.17 Where archaeological features and/or deposits are identified during watching brief then a sufficient quantity of the said features will be investigated/sampled by hand to allow their date, nature and degree of survival to be ascribed. In all other respects the procedures and standards as laid out elsewhere in this WSI will be followed.

4.2.18 All spoil removed during groundworks will be scanned visually to recover small finds. Any finds so recovered will be recorded and their location noted on a site plan at a relevant scale. The finds will be retained and recorded.

Sampling

4.2.19 For sealed and stratigraphically secure deposits that have the potential to provide environmental evidence relating to diet and economy, dating evidence or landuse regime, a minimum of 40 litres of sample will be taken, or 100% of the sample if smaller.

4.2.20 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).

4.2.21 Should other types of environmental deposits be encountered, appropriate specialist advice will be sought and an 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.

Human Remains and Treasure

4.2.22 Any human remains will initially be left in-situ and, if deemed necessary, removal will be undertaken once a Coroners licence has been obtained in accordance with the relevant Ministry of Justice regulations and in discussion with the Derby and Derbyshire Development Control Archaeologist.

4.2.23 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

Dr Robert Hunter
St Katherine's House
St. Mary's Wharf
Mansfield Road
Derby
Derbyshire
DE1 3TQ
Tel: 01332 613014

PAS Finds Liaison Officer

Alastair Willis
Museum and Art Gallery
The Strand
Derby
Derbyshire
DE1 1BS
Tel: 01332 641 903



4.2.24 The Derby and Derbyshire Development Control 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.

5 RECORDING

5.1 The site will be tied into the National Grid and located on a 1:2500 or 1:1250 map of the area. The site will be recorded in accordance with the ARS Ltd. field recording manual.

5.2 A full, proper and appropriate record (written, graphic and photographic) will be made for all work, using pre-printed record sheets with text descriptions appropriate to the work.

5.3 Measured scale plans and sections/elevations will be drawn where required at appropriate scales and in accordance with current best practice. In addition to relevant illustrations, provision for rectified photographic recording shall be made, if deemed necessary.

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

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

5.5 A full photographic record will be compiled using a digital camera, a Fuji XP90 with 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.

6 FINDS PROCESSING AND STORAGE

6.1 All finds processing, conservation work and storage of finds will be carried out in compliance with the ClfA (2014e) *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* and Museums Derbyshire (2016) *Procedures for the Transfer of Archaeological Archives*.

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

6.3 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.



6.4 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). 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 finds being excavated.

6.5 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.

6.6 The deposition and disposal of artefacts will be agreed with the legal owner and the repository for the archive prior to the work taking place. All finds except treasure trove are the property of the landowner.

6.7 All retained artefacts and ecofacts will be cleaned and packaged in accordance with the requirements of the recipient museum.

7 MONITORING ARRANGEMENTS

7.1 At least five working days notice, prior to the commencement of works, will be given to the Derby and Derbyshire Development Control Archaeologist.

Steve Baker
Derby and Derbyshire Development
Control Archaeologist
Derbyshire County Council
Shand House
Dale Road South
Matlock
Derbyshire
DE4 3RY
Tel: 01629 539773

7.2 ARS Ltd will liaise at frequent intervals with the Derby and Derbyshire Development Control Archaeologist during the course of the work.

7.3 The client will afford reasonable access to the Derby and Derbyshire Development Control Archaeologist or their representative, for the purposes of monitoring the archaeological mitigation.

8 TIMETABLE, STAFFING AND RESOURCES

8.1 The Project Manager for the works described herein will be Reuben Thorpe MCIfA, FSA, Project Manager at ARS Ltd. The Fieldwork Project Officer will be Alvaro Mora-Ottomano Archaeological Project Officer at ARS Ltd. An outline timetable for project implementation is presented below.



Task	Task Description	Commencement date
1	Agree WSI	
2	Enabling works and undertake Strip map and sample excavation	Week 1
3	Specialist reporting	Commence within 2 weeks of completion of fieldwork
3	Full report preparation and submission	Within 8 weeks of completion of fieldwork dependent on Task 3
4	Archive Deposition	Within 6 months of completion of fieldwork

Table 1. Outline timetable for project implementation

8.2 Finds analysis will be carried out by appropriately qualified specialists as detailed subject to availability.

- ◆ Flint and prehistoric pottery: Dr Clive Waddington MCIfA/Dr Robin Holgate MCIfA
- ◆ Romano-British pottery: Ruth Leary/Ian Rowlandson
- ◆ Samian ware: Dr Gwladys Monteil
- ◆ Medieval and post-medieval pottery: Dr Chris Cumberpatch/Dr Robin Holgate MCIfA
- ◆ Medieval and Post-Medieval glass, metalwork and clay pipes: Mike Wood MCIfA
- ◆ Plant macrofossils and charcoals: Elise McLellan
- ◆ Human and animal bone: Milena Grzybowska
- ◆ Radiocarbon dating: Prof Gordon Cook (SUERC)
- ◆ Finds conservation: Vicky Garlick (Durham University)



9 REPORT

9.1 Following completion of the excavations and watching brief, Archaeological Research Services Ltd will produce a report which will include:

- ◆ Non-technical 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
- ◆ A synthetic summary statement of results
- ◆ Conclusions
- ◆ Supporting data – tabulated or in appendices to include
 - ◆ Specialist Reports
 - ◆ Structural and Stratigraphic details
- ◆ Index to archive and details of archive location
- ◆ References
- ◆ Statement of intent regarding publication
- ◆ Confirmation of archive transfer arrangements
- ◆ A copy of the OASIS form.

9.2 One bound copy of the final report with a digital copy of the report in PDF/A format on disk will be deposited with the Derbyshire Historic Environment Record (HER). A copy of the report should be uploaded as part of the OASIS record.

9.3 One bound copy of the final report with a digital copy of the report in PDF/A format on disk will be deposited with the Derbyshire 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.

10 ARCHIVE DEPOSITION

10.1 Should the project produce no archaeologically significant finds, then it is not necessary to deposit an archive with the repository museum, which in this case is Derby Museums and Galleries. This is in line with the Museums of Derbyshire (2016) Procedures for the Deposition of Archaeological Archives from Derbyshire at Derby Museums



10.2 If the project produces archaeologically significant finds, then the Derby & Derbyshire Development Control Archaeologist and Museum Curator will be notified at the earliest opportunity and an accession number produced for the site.

10.3 A digital, paper and artefactual archive will be prepared by ARS Ltd. This will consist of all primary written documents, plans, sections, photographs and electronic data.

10.4 The archive will be deposited in line with the ClfA (2013e) *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*, Society of Museum Archaeologists (1993) *Selection, Retention and Dispersal of Archaeological Collections*. Guidelines for use in England, Wales and Northern Ireland and Museums of Derbyshire (2016) *Procedures for the Transfer of Archaeological Archives* and will be deposited within two months of the completion of the report. The Derby & Derbyshire Development Control 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 Derby & Derbyshire Development Control Archaeologist informed in writing on final deposition of the archive.

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

10.6 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.

10.7 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).

11 GENERAL ITEMS

11.1 Health and Safety

11.1.1 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 out 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. ARS Ltd retains Peninsula as its expert health and safety consultants.



11.2 Insurance Cover

11.2.1 ARS Ltd has full insurance cover for employee liability (£10 million) public liability (£5 million), professional indemnity (£2 million) and all-risks cover.

11.3 Changes to the Written Scheme of Investigation

11.3.1 Changes to the approved methodology or programme of works will only be made with prior written approval of the Derbyshire Development Control Archaeologist.

11.4 Publication

11.4.1 If significant archaeological remains are recorded, a summary of the project with, if appropriate, selected drawings, illustrations and photographs will be submitted within 2 years of the completion of the project to Derbyshire Archaeological Journal for publication. ARS Ltd has full insurance cover for employee liability public liability, professional indemnity

11.5 Copyright

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

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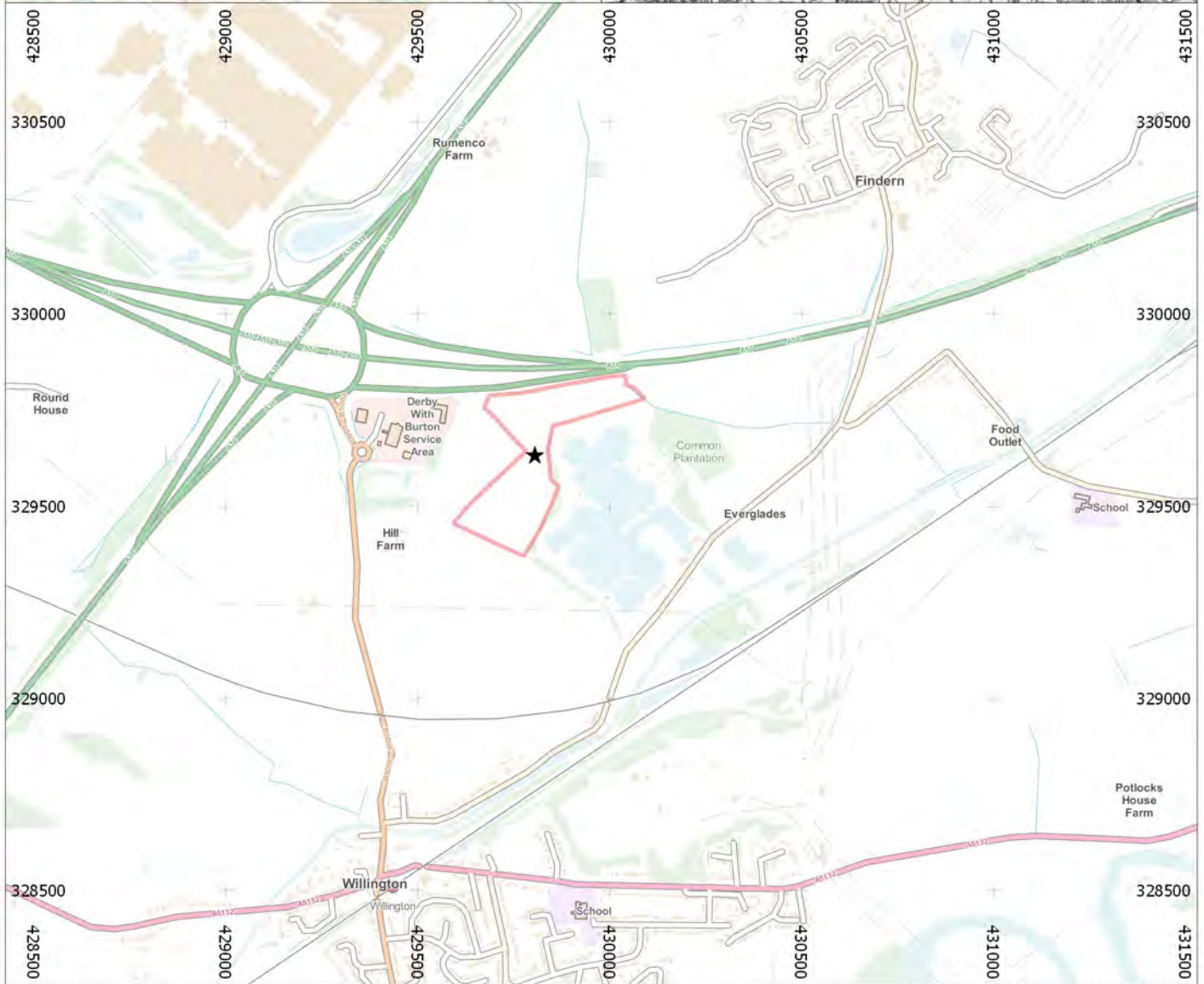
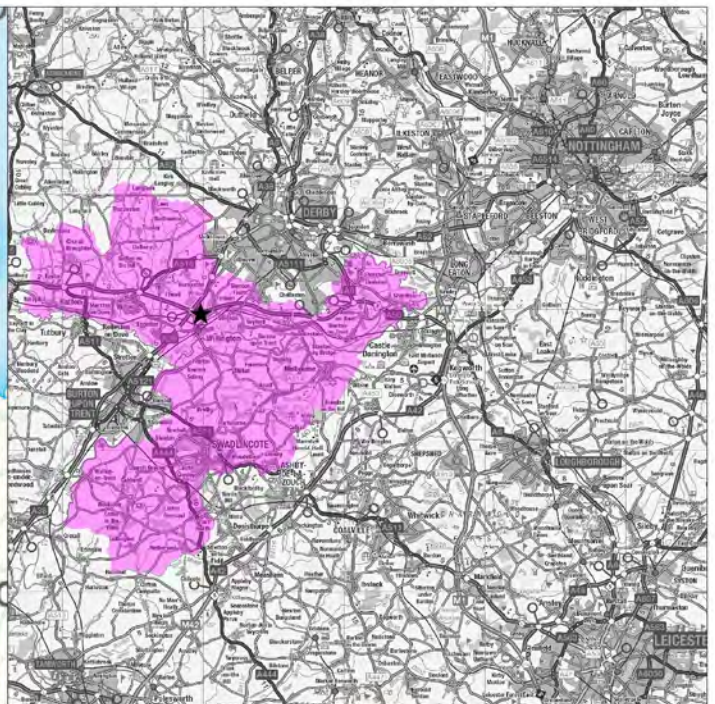
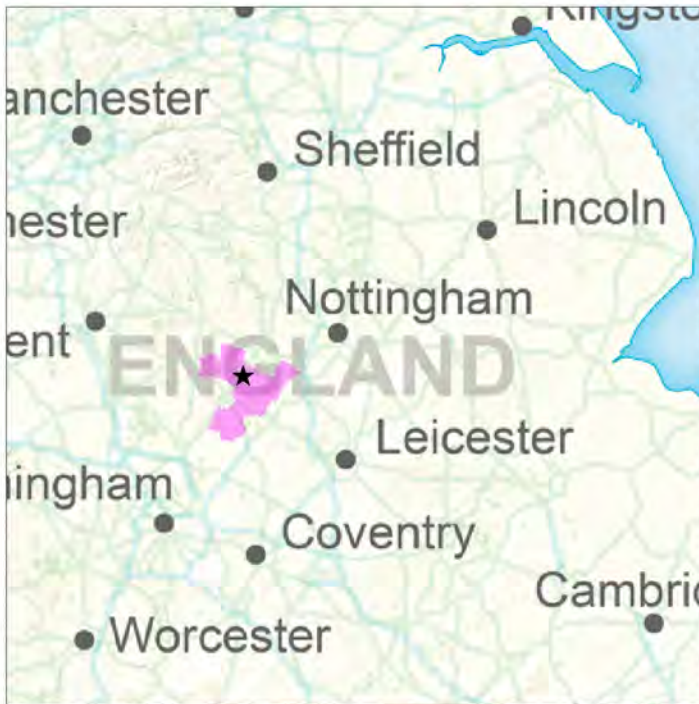


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FIGURES





Site name: Mercia Marina
 Date: April 2016
 Drawn by: RXT
 Scale: Varies

This drawing: © ARS Ltd
 Contains Ordnance Survey data.
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South Derbyshire District
 Site boundary
 Site centre

**Figure 1:
Site location**

Archaeological Research Services Ltd

Angel House
 Portland Square
 Bakewell
 Derbyshire
 DE45 1HB

Tel: 01629 814540
www.archaeologicalresearchservices.com



Site name: Mercia Marina, Willington
 Date: May 2016
 Drawn by: MFC
 Scale: As shown

Figure 2. Location of trenches with highlighted ridge and furrow and area of levelling up.

0 20 40 60 80 100 m



- Site Boundary
- Ridge and Furrow
- Built up ground

Archaeological Research Services Ltd

Angel House
 Portland Square
 Bakewell
 Derbyshire
 DE45 1HB



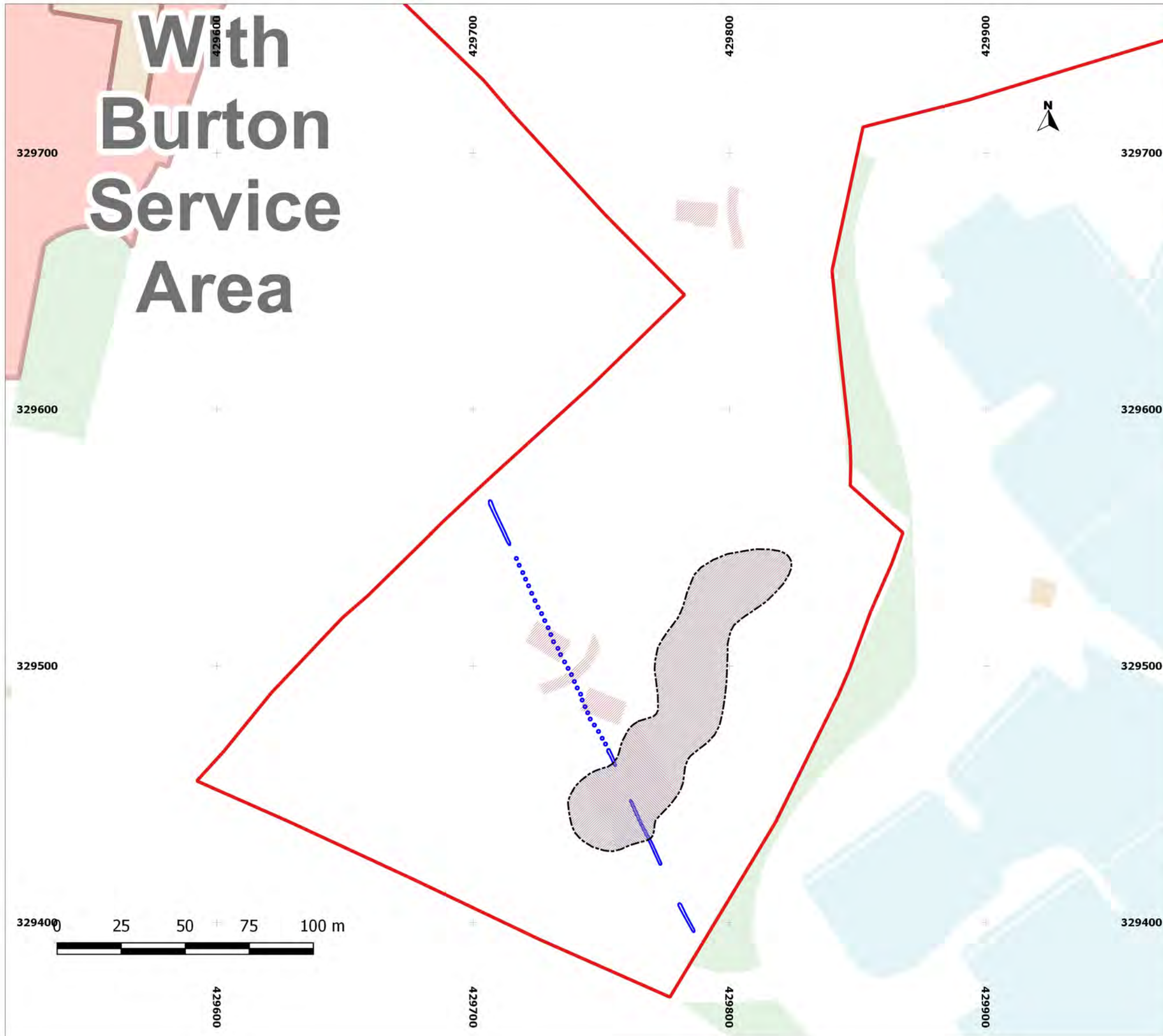
Tel: 01629 814540






www.archaeologicalresearchservices.com

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With Burton Service Area

Figure 3: Location of Excavation Areas



-  Site boundary
-  Wildlife pond
-  Ditch and pit alignment
-  Strip, map and sample (SMS) excavation area
-  Initial watching brief, scalable to SMS excavation

Site name: Mercia Marina
 Date: July 2016
 Drawn by: RXT
 Scale: as shown

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MUSEUM NOTIFICATION FORM



Notification Form – Archive Transfer

**Derby Museum & Art Gallery
Notification of Fieldwork/ Transference of Archaeological Archive**

Field Unit: Archaeological Research Services Ltd.....

Anticipated Start Date: 18 April 2016.....Anticipated Deposition Date: September 2016

Type of Fieldwork (*please circle*): evaluation/ **trenching**/ watching brief/ field walking/
excavation/ historic buildings survey

Site Manager: Reuben Thorpe.....English Heritage Code:.....

Site Name: Mercia Marina, Willington, Derbyshire

Civil Parish: Willington.....

Unit Reference Code...MMW'16.....

Type of Site Expected (*please circle*) **Prehistoric**/ Roman/ Medieval/ Post-Medieval

Quantity of Material Expected (boxes): **<10**/ <20/ <30/ <40/ <50/ >50

Conservation Problems Anticipated: None.....

Waterlogged Material Anticipated: YES/ **NO**

To be Completed by the Museum on Notification

Site Accession Number:.....Signed:.....

Labels despatched:.....Date:.....

To be Completed by the Field Unit on Transference of Archive

Archive for Site Transferred (see attached sheets)

Number of Boxes.....Signed:.....

Date:.....

Landowner(s):.....

Address(es):.....

Consent Request Letter Sent (date):.....Consent Received: YES/ NO

Developer (Contact name and address):.....

The excavating unit must also send a copy of this form to Derbyshire Archaeological Services for addition to the SMR at the time of deposit.

To be Completed by the Museum on Receipt of Archive

Archive received in Satisfactory Form

Signed:.....Date:.....

Notes - Field Unit

Notes - Museum

Appendix III: Oasis form

OASIS DATA COLLECTION FORM: England

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OASIS ID: archaeol5-320875

Project details

Project name	Archaeological Excavations at Mercia Marina. Willington.
Short description of the project	Archaeological Research Services undertook an archaeological excavation on land at Mercia Marina, Willington, Derbyshire. The site lies in the middle of the Trent valley. Previous works by Archaeological Research Services Ltd encompassed Heritage Impact Assessment (HIA) (Burpoe, 2015) archaeological trial trenching (Thorpe, 2016). The excavations were focused toward six areas across the two fields that would be impacted by the construction of lodge cabins, a haul road and a wildlife pond. The archaeological work was undertaken between the 9th October and the 1st November 2017 and revealed a prehistoric pit alignment, previously identified in the Historic Environment Record for Derbyshire later confirmed by archaeological evaluation trenching (Thorpe, 2016). Other features were also identified on the site, including a Medieval boundary ditch, partial remains of an undated enclosure, pits, postholes and evidence relating to Medieval/post-medieval agriculture.
Project dates	Start: 09-10-2017 End: 01-11-2017
Previous/future work	Yes / Not known
Any associated project reference codes	MMW16 - Contracting Unit No.
Type of project	Recording project
Current Land use	Cultivated Land 1 - Minimal cultivation
Monument type	PIT ALIGNMENT Iron Age
Monument type	DITCH Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	POTTERY Medieval
Investigation type	"Open-area excavation"
Prompt	Planning condition

Project location

Country	England
Site location	DERBYSHIRE SOUTH DERBYSHIRE WILLINGTON Mercia Marina
Postcode	DE65 6DW
Study area	5.85 Hectares
Site coordinates	SK 2981 2965 52.863183641091 -1.557160990285 52 51 47 N 001 33 25 W Point
Height OD / Depth	Min: 47.16m Max: 49.1m

Project creators

Name of Organisation	Archaeological Research Services Ltd
Project brief originator	Archaeological Research Services Ltd
Project design originator	Archaeological Research Services Ltd
Project director/manager	Reuben Thorpe
Project supervisor	Caitlin Halton
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Mercia Marina
Entered by	Reuben Thorpe (reuben@archaeologicalresearchservices.com)
Entered on	26 June 2018

OASIS:

Please e-mail [Historic England](#) for OASIS help and advice

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