

1MC12 – Stage 2 – Main Works Civils for C2 and C3 Sectors

Fieldwork Report for Construction Integrated Recording at C31079 and C31080 Blackgrounds Farm Northamptonshire

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Contents

1	Executive Summary	6
2	Introduction	7
2.2	Project Background and Objectives.....	7
2.3	Assumptions and Limitations	7
2.4	Site Location and Description	7
2.5	Archaeological Background and Previous Work	8
2.6	Geology and Topography	8
2.7	Specific Aims and Objectives	8
3	Methodology	9
3.2	Site Works.....	9
3.3	Recording.....	10
3.4	Reporting and Archives	11
4	Stratigraphic Report C31079 and C31080	11
4.2	Results of Construction Integrated Recording for C31079	11
4.3	Results of Construction Integrated Recording for C31080	13
5	Finds Report	15
5.1	Later Iron Age & Romano-British pottery	15
5.2	Metalwork.....	20
5.3	Ceramic Building Material.....	20
5.4	Fired clay.....	21
5.5	Industrial waste	21
5.6	Conservation Report	21
5.7	Site Archive	22
5.8	Part B Assessment of potential.....	24
5.9	Proposals for future research	24
6	Environmental Report	25
6.1	Zooarchaeological assessment	25

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Results.....	26
6.2 Discussion.....	29
6.3 Summary.....	29
6.4 Scientific dating potential.....	29
6.5 Recommendations for further research	29
6.6 Archaeobotanical assessment.....	30
6.7 Results	30
7 Conclusions	31
7.1 Interpretation of results against the original expectations and specific objectives	31
8 Recommendations and Research Aim for Further Investigation.....	34
8.1 Assessment and Interpretation of Results	34
8.2 Potential for further stratigraphic analysis.....	34
8.3 Potential for further analysis on the finds and environmental assemblages	34
9 Evaluation of the methodology employed, and results obtained.....	34
10 Publication and Dissemination Proposals	35
11 References	36
12 Glossary of Terms.....	38
13 Appendices.....	39
13.1 Appendix 1: List of artefact specialists consulted.....	39
13.2 Appendix 2: Context registers.....	40
13.3 Appendix 3: Drawing registers.....	44
13.4 Appendix 4: Photographic registers.....	45
13.5 Appendix 5: Sample registers.....	50
13.7 Appendix 6: Zooarchaeological catalogue	51
13.8 Appendix 7: Figures	53

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List of Tables

Table 1 Potential Contribution to HERDS Specific Objectives	9
Table 2 Romano British pottery	15
Table 3 Later Iron Age and Romano-British pottery	22
Table 4 Metalwork	22
Table 5 CBM	23
Table 6 Fired clay	23
Table 7 Industrial waste	23
Table 8 Summary of retention/discard proposals	25
Table 9 C31079. Elements identified to species/species group/size category from hand-collected mammal bone	27
Table 10 C31079. Number of hand-collected bone fragments affected by butchery, gnawing, burning and excavation damage	27
Table 11 contribution to GWSI HERDS Specific Objectives	32

List of Figures

Figure 1 C31079 and C31080 Site location	53
Figure 2 Plan of areas C31079 and C31080 in relation to previous excavations	53
Figure 3 Plan of areas C31079 with previous archaeology	53
Figure 4 Plan of areas C31080 with previous archaeology	53
Figure 5 North facing section of post-hole [0024]	53
Figure 6 Overall shot of demolition layer (0008)	53
Figure 7 South-west facing section of foundation cut [0003]	53
Figure 8 Plan shot of [0003] and [0005]	53
Figure 9 North-west facing section of oven, showing [0013], [0015], [0017]	53
Figure 10 North facing section of oven [0020]	53
Figure 11 Plan of oven [0020]	53
Figure 12 Section of post-hole [0029]	53
Figure 13 Section of Pit [0031]	53
Figure 14 Plan of ditch [0033]	53

1 Executive Summary

- 1.1.1 Headland Archaeology (UK) Ltd was commissioned to undertake Construction Integrated Recording (CIR) works at Blackgrounds Farm (CrID: C31079 and C31080; site code 1C22BLCCI) located in Northamptonshire, toward the eastern edge of Blackgrounds Roman settlement, to the north of the Spinney Brook, a small tributary to the River Cherwell.
- 1.1.2 The works were undertaken in advance of Phase One of High Speed Two (HS2) in Northamptonshire, to assess further the archaeological potential of the site as shown by previous archaeological recording conducted in 2021-2022. During earlier works the remains of a large and complex Iron Age and Romano-British settlement were identified (1MC12-EKF-EV-REP-CS10-000256). The programme of works described in this report focused on investigation of two areas, which could not be undertaken in earlier phases due to utility exclusion zones.
- 1.1.3 The CIR yielded contributing information for the GWSI: Historic Environment Research and Delivery Strategy (HERDS) Objectives (HS2-HS2-EV-STR-000-000015).
- 1.1.4 The earliest activity in C31079 comprised two stake holes and a ditch, all cut into the natural geology. These were sealed by a dark earth deposit containing occasional Roman finds, which covered the entire site. Cutting the dark earth deposit which sealed the earlier late Iron Age and early Roman features were structural features dated as early to late Roman. These Roman features included the remnants of two possible wall foundations which likely relate to structural remains previously recorded in C31059B. A small oven, possible wall foundation, and ditch were also recorded within C31079.
- 1.1.5 Excavation in area C31080 uncovered a ditch, a post-hole, and an irregular pit, all cut into the natural geology. As in C31079, these features were overlain by a dark earth deposit. No further features were identified within this layer, which was ultimately sealed by topsoil.
- 1.1.6 The CIR at Blackgrounds Farm followed the plan and methodologies set out in the Location Specific Written Scheme of Investigation (LSWSI) (1MC12-EKF-EV-REP-CS10-000105) which was prepared in accordance with the standards and guidance provided by the GWSI: HERDS (HS2-HS2-EV-STR-000-000015), the Route-wide Project Plan for Archaeological monitoring and Construction Integrated Recording (1EW03-FUS-EV-REP-C000-009812), the Technical Standards for Specification for historic environment project plans and location specific written schemes of investigation (HS2-HS2-EVS-TD-000-000036), Specification for Historic Environment Investigations (HS2-HS2-EV-STD-000-000035), Technical Standards for Historic Environment Physical Archive Procedure (HS2-HS2-EV-STD-000-000039) and Technical Standards for Historic Environment Digital Data Management and Archiving Procedure (HS2-HS2-EV-STD-000-000040). All works were undertaken in line with current industry best practice and guidance as set out in the Code of Conduct (ClfA 2022a) Standard and Guidance for Archaeological Excavation (ClfA 2020a),

Toolkit for Selecting Archaeological Archives (ClfA 2022b), Toolkit for Specialist Reporting (ClfA 2021) and Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (ClfA 2020b).

2 Introduction

- 2.1.1 The Construction Integrated Recording (CIR), which was undertaken by Headland Archaeology (UK) Ltd, was located in two small areas, one to the north-east and the other centre to the Blackgrounds Farm Roman settlement, Northamptonshire in parcels C31079 and C31080 (also referred to as the “CIR Areas”) (Figure 1).
- 2.1.2 This work was commissioned by EKFB (the Principal Contractor) on behalf of HS2 Ltd (the Employer). Fieldwork took place between 28th October and 13th November 2024.

2.2 Project Background and Objectives

- 2.2.1 High Speed Two (HS2) is a railway network proposed by the UK Government to provide a new rail link between London and the West Midlands. Phase One of HS2 will involve the construction of a new railway route approximately 230km (143 miles) in length between London and the West Midlands. Powers for the construction, operation, and maintenance of Phase One are conferred by the High-Speed Rail (London - West Midlands) Act 2017.
- 2.2.2 The CIR Areas are required for utility diversions, temporary and permanent works. Any archaeological remains present are threatened with destruction as a result of these works.
- 2.2.3 The overall framework within which archaeological work will be undertaken is set out in the Environmental Minimum Requirements (EMR), in particular the Heritage Memorandum, the Code of Construction Practice (CoCP) for HS2 Phase One, and the GWSI: HERDS (HS2-HS2-EV-STR-000-000015). Accordingly, the nominated undertaker or the ‘Enabling Works Contractor’ is required to implement appropriate and reasonable measures to identify, avoid or, where practicable, reduce impacts to the significance of heritage assets prior to the start of construction.

2.3 Assumptions and Limitations

- 2.3.1 C31079 was stripped in two phases. The first phase revealed the stone rubble covering the probable wall foundations and ditches as well as the oven in the eastern part of the site, which were cut into the dark earth deposit. The second phase removed the dark earth deposit, uncovering earlier features that were cut into the natural geology.
- 2.3.2 C31080 was stripped in a single phase to remove the topsoil, revealing the dark earth deposit that sealed the ditch, post-hole, and pit cut into the natural geology.

2.4 Site Location and Description

- 2.4.1 The site is located in Northamptonshire, within the Greatworth to Lower Boddington Community Forum Area (CFA15) and OS NGR SP 51385 48255, on the border between

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the historic parishes of Chipping Warden, Edgcote and Culworth. It lies c. 0.7km north-east of Edgcote village and c. 2.6km north-west of Culworth. Within the southeast of the settlement is the Registered Battlefield of Edgcote (d.1469) where metal detecting recovered several finds dateable to the period of the Battle of Edgcote. It is unclear, however, whether these finds are directly related to the battle itself (1EW03-FUS-EV-REP-CS07_CL26-008136). Area C31079 and C31080 are located to the south-east of Blackgrounds Farm Roman settlement (1MC12-EKF-EV-REP-CS10-000256).

2.5 Archaeological Background and Previous Work

2.5.1 Sites C31079 and C31080 are located to the centre and south-east of a long-lived multi-phase Iron Age and Romano-British settlement which was potentially used for industrial- or other activity. The Roman settlement is thought to date between the 1st and 5th centuries AD. The occupation recorded during excavations conducted by MOLA Headland Infrastructure comprised at least 31 structures or industrial areas as well as seven metalled roads. Evidence such as ovens and kilns were the main indicators for industrial activity, with a substantial role expected for metal working (1MC12-EKF-EV-REP-CS10-000256) (Figure 2) Archaeological features included potential rectilinear enclosures were identified at C31079 and C31080 by the geophysical survey (1EW03-FUS-EV-REP-CS07_CL26-008106). Sites 31079 and C31080 held overhead electrical pylons which were required to be diverted prior to any excavation works.

2.6 Geology and Topography

2.6.1 The British Geological Survey (NERC 2023) indicates that the underlying solid geology is relatively complex, situated within interbedded siltstone and mudstone of the Dyrham Formation. This is a geology of sedimentary rocks formed in the Jurassic in shallow marine environment.

2.7 Specific Aims and Objectives

2.7.1 The programme of Construction Integrated Recording is required to record any archaeological remains identified within the vicinity during the geophysical survey and confirmed by trial trenching.

2.7.2 The specific aims of the Construction Integrated Recording are to:

- Fully expose, excavate, and record any archaeological remains within the areas of C31079 and C31080.
- To contribute to the delivery of GWSI: HERDS Specific Objectives, as specified in Table 1.

Table 1 Potential Contribution to HERDS Specific Objectives

Specific Objective	Contribution
KC23: Identify evidence for late Roman occupation and attempt to identify any continuity in settlement patterns between the end of the Romano-British period and the Early Medieval period.	Examination of deposit sequences within deposits may provide Palaeoenvironmental evidence that can demonstrate continuity or discontinuity in patterns of local/regional land use.
KC25: Characterise the nature of the Romano-British activity in the hinterland of the Edgcote Roman Villa and investigate the possibility that it developed from an Iron Age precursor.	From previous works in the wider Blackgrounds area, it has become clear that the site represents a nucleated Iron Age settlement which develops into a Roman settlement. The Roman evidence includes traces of industrial activity. Discoveries in the course of the works may enhance current understanding of the level of industrial activity in the area and increase current knowledge of connectivity. It may also shed a light on the transition between Iron Age and Roman occupation and any changes to the nature of the settlement and surrounding landscape associated with this change.

3 Methodology

3.1.1 The CIR areas have been assigned unique identifiers C31079 and C31080 in accordance with the Employer’s Asset Information Management System (AIMS).

3.2 Site Works

- 3.2.1 Fieldwork was undertaken between the 28th October and 13th November 2024.
- 3.2.2 The CIR comprised two areas (C31079 and C31080) of c. 0.011ha and 0.014ha respectively, laid out using reconnaissance information gathered during ES, remote sensing and geophysical surveys and the subsequent phases of evaluation and investigation. Specific construction impacts (e.g. the temporary and permanent works required in the area) were considered. This evidence-led approach also drew upon site-specific and local topographical and geological information as well as known areas of past human activity within the immediate vicinity.
- 3.2.3 The extent of the area for CIR was determined based on designs for the permanent works.
- 3.2.4 Headland Archaeology ensured that the archaeological investigations were undertaken in an organised, efficient, and professional manner and had full regard for the safety of all personnel and visitors on site. This included but was not limited to any effects the archaeological evaluation had on the daily operations of the landowner, other contractors engaged in the construction of HS2 Phase One and members of the public.

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3.2.5 The on-site archaeological recording and recovery techniques were in line with the methods set out in the Project Plan, the LSWSI and current industry best practices and were fully understood by all.

3.2.6 All paper and digital records created during the course of the archaeological works and the treatment of artefacts and environmental remains thereafter were reviewed continuously. Record checking and collation were completed at regular intervals, as appropriate, and before the area was considered complete, abandoned, backfilled or the site closed.

3.3 Recording

3.3.1 Areas were located to a horizontal accuracy of $\pm 0.5\text{m}$ and were set out with Global Navigation Satellite System (GNSS) equipment with Real Time Kinematic (RTK) corrections. Surface heights were recorded using RTK GNSS. Ordnance Survey Benchmarks (OSBM) were not used.

3.3.2 Where features were found, they were sufficiently sampled to meet the requirements of the GWSI: HERDS and in accordance with the dialogue and advice from the HERDS archaeologist, Northamptonshire Local Planning Archaeologist and Historic England.

3.3.3 Archaeological recording included as a minimum:

- The written record of individual context descriptions on appropriate pro-forma.
- Sections (1:10 or 1:20 scale) of cut features and significant deposits.
- Plans at appropriate scales (1:10, 1:20 or 1:50).
- Single context planning used only if appropriate (e.g. where there is a complex sequence).
- Digital photographs of every excavated feature.
- A site location plan prepared at 1:1250, including north indicator.
- A plan prepared at 1:200 (or 1:100) showing the location of the archaeology investigated in relation to the investigation area.

3.3.4 The stratigraphy of all areas was recorded (even where no archaeological deposits were identified) by means of a representative section.

3.3.5 A Harris Matrix stratification diagram was produced to record stratigraphic relationships where appropriate (Harris 1989). This record was compiled and fully checked during the excavations.

3.3.6 A full record of the site and context registers can be found in Appendix 2.

3.4 Reporting and Archives

- 3.4.1 All post-excavation archaeological reporting was completed by Headland Archaeology in accordance with Section 4 of the Technical Standard for Historic Environment Investigations (HS2-HS2-EV-STD-000-000035), HS2 Technical Standard: Historic Environment Physical Archive Procedure (Document No. HS2-HS2-EV-STD-000-000039) and relevant ClfA standards and guidance.
- 3.4.2 Where appropriate, features have been grouped and assigned to provisional phases. These phases are relatively broad at present as more detailed sub phasing was not possible at this stage.
- 3.4.3 The physical and digital archive will contain records, drawings and photographs. It will be collated in line with the London Archaeological Archive and Research Centre (LAARC) and Museum London Standards for the Deposition of Archaeological Archives. Until the final location of the project archive has been confirmed by the Employer, the site archives will be secured and suitable stored.
- 3.4.4 All data will be in accordance with the Geographical Information System Standards (HS2-HS2-GI-STD-000-000002).
- 3.4.5 Headland Archaeology will deliver all reports, including illustrations, in accordance with the HS2 Document Management Procedure (HS2-HS2-IM-PRO-000-000004).

4 Stratigraphic Report C31079 and C31080

- 4.1.1 The results for C31079 (Figure 3) and C31080 (Figure 4) are presented below, with the digital archive included in Appendices 2 to 6. Deposits are indicated in round brackets e.g. (0001), while cuts and structural features are shown in square brackets e.g. [0002].
- 4.1.2 Both areas were sealed by modern topsoil, which overlay a dark earth deposit (0002) from which approximately 1kg of Roman pottery was recovered from in C31079. Additionally, a rubble or levelling layer (0008) was present in C31079 but absent in C31080. The natural geological substrate across both sites consisted of mid-brownish yellow fine sandy clay with pockets of limestone brash (0001).

4.2 Results of Construction Integrated Recording for C31079

Late Iron Age and early Roman

- 4.2.1 The earliest activity in C31079 comprised two stake holes and a ditch, all cut into the natural geology. These features, provisionally dated to the late Iron Age to early Roman period, were overlain by a dark earth deposit (0002) which covered the entire site. The deposit was composed of a loose, dark greyish-black fine sandy silt with inclusions of fired clay and a single fragment of slag.
- 4.2.2 The stake holes, [0024] and [0026], were excavated near the northwestern corner of C31079. Stake hole [0024] measured 0.19m x 0.15m x 0.13m, with steep, nearly

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vertical sides and a concave base (Figure 5). It was naturally filled with a compact, stony, mid-greyish-blue fine sandy silt (0025), containing a moderate number of sub-rounded stones and a small amount of charcoal. Stake hole [0026], located c. 0.4m to the east of [0024], measured 0.24m x 0.21m x 0.09m, with similarly steep sides and a concave base. It contained a sterile, homogenous fill (0027), similar to (0025), indicating natural siltation. These stake holes could be related to Pit Group 95 recorded within C31059B B2 (1MC12-EKF-EV-REP-CS10-000256).

- 4.2.3 Drainage ditch [0012], located c. 6m to the south-east of the stake holes, was oriented north-west to south-east. It measured 1.02m wide, 0.06m deep, and was visible for 1.7m in length before being truncated by possible foundation cut [0009] to the north-east and ditch [0015, 0003] to the south-west. The ditch was filled with a dark greyish-brown clayey silt (0013). No dating evidence was recovered from this feature.

Early to late Roman

- 4.2.4 Features dating the early to late Roman period were found cutting the dark earth deposit (0002), which sealed the earlier late Iron Age and early Roman features. The excavated Roman features included the remnants of two possible wall foundations, [0017] and [0005], likely relating to structural remains previously recorded in C31059B. In addition a northeast to southwest ditch [0015, 0003], a small oven [0020] and further possible wall foundation [0009] were recorded within C31079.

- 4.2.5 Overlying the structural remains was a rubble or demolition layer (0008) similar in character to those previously recorded within C31059B C2 (1MC12-EKF-EV-REP-CS10-000256). The rubble layer consisted of loose, dark greyish-black fine sandy silt, with a mix of angular and rounded stones, likely derived from collapsed surrounding structures (Figure 6). It also included frequent pieces of charcoal, marine shell, bone and Romano-British pottery fragments, occasional small metal debris and a single bronze coin dating between AD343-348.

Underneath this rubble layer a probable foundation cut was identified, [0017], this cut corresponded with the line of [6755/7218] associated with ST79 in C31059B C2 (1MC12-EKF-EV-REP-CS10-000256). The cut was traced for a length of 0.5m and measured 0.45m wide, and 0.15m deep. The fill of the cut comprised a friable, mid-greyish brown silt (0019) containing occasional inclusions of animal bone and pottery fragments, and rare amounts of fired clay. Along the southern and northern edges of the cut were several small, unfinished sandstone fragments (0018), which likely reflect rubble rather than extant elements of walling. The foundation cut itself was truncated at both ends by agricultural activity.

- 4.2.6 Aligned parallel to [0017] was ditch [0015, 0003] (Figure 7, Figure 8, and Figure 9), which was recorded for a length of 5.8m and did not clearly correspond to any previously recorded features within C31059B C2. The ditch cut measuring 0.57m wide, and 0.32m deep, appeared to have been backfilled with the upcast soil and limestone. Fragments of animal bone and Romano-British pottery were recovered from this feature. No clear relationship between the ditch and the wall was established but it could represent a later drainage ditch respecting the line of the wall.

- 4.2.7 Towards the southern end of the possible ditch was a short section of north-east to south-west walling, [0005]. This appeared to abut ditch [00003], although its relationship to the north-west to south-east wall, [0017] was uncertain. The foundation cut, [005] comprised a steep sided cut with a concave base, which measured 0.6m wide and 0.29m deep. It contained a loose dark greyish-fine sandy silt (0007) containing frequent large fragments of animal bones and pottery. Within this fill a number of limestone blocks were noted, (0006) potentially denoting the lower course of a wall, which could represent an internal division within the previously recorded ST79.
- 4.2.8 Located c. 1.7m north-east of ditch [0015, 0003], was a further shallow cut, [0009] aligned north-north-west to south-south-east and measured 2.70m in length, 0.90m in width, and 0.10m in depth. Within the irregular steep sided cut were a number of rough medium and small size fragments of limestone, (0010), and sandstone packed together, potentially representing a denuded wall foundation or surface. From the friable mid-brownish grey silt fill (0011) fragments of animal bone, pottery and charcoal were recovered.
- 4.2.9 Toward the northwestern corner of site, c. 2.1m north-west of [0009], a small oven [0020] was identified (Figure 10 and Figure 11). The north-east to south-west flue measured approximately 0.74m in length, 0.24m in width, and 0.61m in depth. The stone-built chamber, cutting into the natural geology had a horseshoe shape in plan and measured 0.62m in width, 0.75m in length, and 0.61m in depth. Three courses of limestone survived [0021], made of a single skin of heat-affected stones. Four deposits were found within the oven. The basal fill (0022) consisted of a thin charcoal layer, 0.02m thick, located in the central part of the flue, leading towards the entrance of the chamber. Fill (0023), associated with the disuse of the oven was a firm, dark brownish fine sandy silt, 0.42m thick, containing frequent sub-angular and sub-rounded small and medium-sized stones, charcoal, and an occasional medium fragments of animal bone, Romano-British pottery sherds, and a Roman tegula (CBM). The oven was, like the remains to the west, overlain by rubble layer (0008).

4.3 Results of Construction Integrated Recording for C31080

- 4.3.1 Archaeological works in excavation area C31080 revealed a post-hole, an irregular pit and a ditch. No subsoil was observed, and these features were cut into the natural geology. They were overlain by dark earth deposit (0002), which measured up to 0.20m thick and was noticeably thinner than the equivalent deposit recorded in C31079.
- 4.3.2 Post-hole [0029] measured 0.39m × 0.27m × 0.14m and was located near the southern LOE. It was rectangular in plan with a regular, squarish profile, vertical sides, a sharp break of slope at the base, and a flat bottom (Figure 12). No packing material or datable artefacts were recovered. The post-hole was deliberately backfilled with a homogeneous, light friable greyish-brown silt (0030) containing a sparse distribution of small angular stones.

- 4.3.3 Pit [0031] was located partially beneath the southern bulk of the stripped area, approximately 0.8m south-west of post-hole [0029]. The pit measured 1.11m in length, 1.23m in width, and 0.18m in depth (Figure 13). It had an irregular shape with moderately sloping sides and a flat base. The pit was deliberately backfilled with a firm, mid-greyish-brown silty fine sand (0032), containing frequent heat-affected small subangular and subrounded stones. This pit may have functioned as a refuse pit.
- 4.3.4 Ditch [0033] was oriented north-northeast to south-southwest, measuring 1.23m in width and 0.18m in depth. It extended beyond the LOE to both the north-east and south-west. The ditch had a regular profile, with steep, nearly vertical sides and a flat base (Figure 14). It was backfilled with a natural infill comprising loose mid-yellowish brown fine sandy silt (0034), containing a moderate amount of small angular stones, occasional fragments of animal bone (104g – cattle scapula), and a single sherd of Romano British pottery.

5 Finds Report

5.1 Later Iron Age & Romano-British pottery

Sara Machin BSc MA PhD

Introduction and quantification

5.1.1 The Romano-British pottery assemblage comprised 90 sherds with a total weight of 2591g representing a minimum of 55 vessels (MNV) equating to 2.1 EVE (Table 2) with a high mean sherd weight of 28.78g.

Methodology

The pottery was examined, using 10x magnification, and divided into fabric groups. The material was recorded by context, recording the weight and count, minimum number of vessels (MNV) and estimated vessel equivalent (EVE). Full pottery catalogue is included in the archive. National Roman Fabric Reference Collection (Tomber and Dore 1998) codes were used for recognised regional Roman wares. The Northamptonshire fabric series derived from Ashton (Aird and MacRobert 1987) was used for local wares. Details of form, decoration, and preservation were also recorded in the database. Forms were assigned to type series devised by MOLA Northampton. This enables concordance with previous reports on pottery from Blackgrounds (see recommendations for further work).

Results and observations

Romano-British pottery

5.1.2 The majority of the pottery was recovered from area c31079 with a single sherd (8g-Fabric:C) recorded from c31080.

Table 2 Romano British pottery

Fabric code	Fabric name	Early Date	Late date	Ct	Wgt (g)	MNV	EVE
Black-burnished							
DOR	Dorset BB1	120	4	6	48	2	-
BB1			10				
Calcareous							
B	General shelly ware	-100	410	8	201	5	0.58

B1	A fairly soft, open-bodied fabric with frequent fine shell, and sparse medium to large shell inclusions	40	4 1 0	2	61	2	0. 2 6
Colour-coated wares							
CNG BS	Central Gaulish black-slipped ware	160	2 2 0	4	37	3	0. 0 7
D15	Local? Colour-coated w/buff fabric	40	4 1 0	2	11	1	-
D21	Orange ware with orange or brown slip;	40	4 1 0	1	8	1	-
LNV CC	Lower Nene Valley colour-coated ware	150	4 1 0	6	128	4	-
NFO CC	New Forest colour-coated ware	c3rd	c 4 t h	1	9	1	-
OXF RS	Oxford red-slipped ware	240	4 1 0	4	144	2	0. 1 6
Grog-tempered wares							
PNK GT	Soft pink grog-tempered ware	150	4 1 0	1 4	610	4	-
Oxidised							
D16	Sandy oxidised ware, with brown slip	40	4 1 0	1	20	1	-
Reduced							
C	General reduced ware	40	4 1 0	6	83	5	-
C9	A fairly hard, close-bodied fabric with very small, rounded microfossils	40	4 1 0	1	17	1	-
C10	Hard fabric, frequent medium to large quartz; grey surfaces;	40	4 1 0	1 8	625	9	0. 6 1

C11	Coarse greyware with darker grey/metallic surfaces - ?local product	70	3 0 0	3	38	3	-
C15	Grey surface; oxidised core	40	4 1 0	3	145	3	0. 1 2
C24	Oxidised surface, reduced core	40	4 1 0	1	25	1	
C28	Coarse, dark grey sandy; may be burnished, not imitation BB	40	4 1 0	1	17	1	-
C33	Fairly fine, soft, light grey fabric, well sorted quartz and sparse FeO pellets	40	4 1 0	3	38	2	-
LVN RE	Lower Nene Valley greyware	120	3 0 0	2	91	1	-

Whitewares

OXF	Oxfordshire white ware	100	4 1 0	3	235	3	0. 3
WH							
	TOTAL			9 0	259 1	5 5	2. 1

Fabric code	Fabric name	Early Date	Late date	Ct	Wgt (g)	MNV	EVE
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Black-burnished

DOR BB1	Dorset BB1	120	410	6	48	2	-
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Calcareous

B	General shelly ware	-100	410	8	201	5	0.58
B1	A fairly soft, open-bodied fabric with frequent fine shell, and sparse medium to large shell inclusions	40	410	2	61	2	0.26

Colour-coated wares

CNG BS	Central Gaulish black-slipped ware	160	220	4	37	3	0.07
D15	Local? Colour- coated w/buff fabric	40	410	2	11	1	-
D21	Orange ware with orange or brown slip;	40	410	1	8	1	-
LN V CC	Lower Nene Valley colour- coated ware	150	410	6	128	4	-
NFO CC	New Forest colour-coated ware	c3rd	c4th	1	9	1	-
OXF RS	Oxford red- slipped ware	240	410	4	144	2	0.16

Grog-tempered wares

PNK GT	Soft pink grog- tempered ware	150	410	14	610	4	-
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Oxidised

D16	Sandy oxidised ware, with brown slip	40	410	1	20	1	-
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Reduced

C	General reduced ware	40	410	6	83	5	-
C9	A fairly hard, close-bodied fabric with very small, rounded microfossils	40	410	1	17	1	-
C10	Hard fabric, frequent medium to large quartz; grey surfaces;	40	410	18	625	9	0.61
C11	Coarse greyware with darker grey/metallic	70	300	3	38	3	-

	surfaces - ?local product						
C15	Grey surface; oxidised core	40	410	3	145	3	0.12
C24	Oxidised surface, reduced core	40	410	1	25	1	
C28	Coarse, dark grey sandy; may be burnished, not imitation BB	40	410	1	17	1	-
C33	Fairly fine, soft, light grey fabric, well sorted quartz and sparse FeO pellets	40	410	3	38	2	-
LNV RE	Lower Nene Valley greyware	120	300	2	91	1	-
Whitewares							
OXF WH	Oxfordshire white ware	100	410	3	235	3	0.3
	TOTAL			90	259 1	55	2.1

- 5.1.3 The assemblage is dominated by reduced wares, accounting for 42.2% by count and 41.6% by weight. The assemblage largely comprises local, unsourced reduced wares, including fabric C11, which exhibited a highly burnished surface with a metallic quality, potentially a result of a post-depositional reaction. All identified form are jars. Regional wares identified comprise two sherds (91g) of Lower Nene Valley greyware (LNV RE), dating from cAD120-AD300. A single sherd of oxidised ware was recorded.
- 5.1.4 Pink-grog tempered wares are present, 14 sherds weighing 610g. This represents a mean sherd weight of 43.57g for this fabric. The assemblages comprise solely body sherds, assumed to have derived from storage vessels which are typical for this fabric. Black-burnished wares comprise six sherds (48g) all of which can be identified as from the Dorset industry (DOR BB1).
- 5.1.5 Colour-coated wares are composed of a range of fabrics including local ware (D15) and miscellaneous colour-coated fabrics (CC). Regional colour-coated wares include an example of a Young C100 (M22) mortaria, comprising a large rim sherd with spout in Oxfordshire red-slipped ware (OXF RS) dating from AD300-400 (Young 2000, 174). Lower Nene Valley colour-coated wares (LNV CC) are present, six sherds (128g), including joining body and base sherds with graffito in the form of an "X" to the base. A single sherd of New Forest colour-coated ware was also recorded. Continental

imports are represented by four sherds (37g) of Central Gaulish black-slipped ware, including fragments of at least two beakers, one with rouletted decoration.

- 5.1.6 Calcareous/shelly wares make up 11.2% of the assemblage by count (9.7% by weight), the whole assemblage comprised unsourced shelly fabrics, derived from a range of medium mouthed jars. Oxfordshire whiteware (OXF WH) is the only whiteware recorded. All sherds derived from mortaria including examples of Young M21 and M22, including a large rim sherd with spout.
- 5.1.7 A total of eight examples of decoration were noted, including burnished lattice, rouletting and incised decoration.

Distribution

- 5.1.8 Pottery was recorded from six features across the two sites. The largest assemblage 31 sherds (1017g) were recorded from dark earth deposit (0002) with a further 30 sherds (994g) recorded from rubble layer (0008). A further eleven sherds each were recorded from fill (0023) of oven [0021], and wall foundation [0004].

5.2 Metalwork

Rebecca Sillwood BA, MSc

Introduction and quantification

- 5.2.1 A single copper alloy coin (SF1) was recovered from C31079 rubble layer (0008).

Methodology

- 5.2.2 The metalwork was catalogued by count and weight and the resultant data input into a MS Excel database.

Results & observations

- 5.2.3 The only metalwork from this site comprised a copper alloy coin from rubble layer (0008) (SF1). The coin was a nummus of the House of Constantine dating to between AD343-348.

5.3 Ceramic Building Material

Sara Machin Bsc MA PhD

Introduction and quantification

- 5.3.1 A single fragment of ceramic building material (CBM) was recorded, weighing 316g. The assemblage is Roman in date.

Methodology

- 5.3.2 The CBM was examined using a 10x hand lens and brief fabric descriptions made. A description of the fragments was noted by fabric and form with quantification by weight and count recorded. All Roman forms were recorded according to the typology described in Brodrigg (1987).

Results & observations

- 5.3.3 The single fragment of CBM was recorded from fill (0023) of Oven [0021]. It is a fragment of tegula with upper cutaway present. Roman CBM is largely chronologically insensitive and as such can only be broadly dated to the Roman period.

5.4 Fired clay

Sara Machin Bsc MA PhD

Introduction and quantification

A total of four fragments of fired clay were recorded, with a total weight of 49g.

Methodology

- 5.4.1 The fired clay was examined using a 10x hand lens and brief fabric descriptions made. A description of the fragments was noted by fabric and form with quantification by weight and count recorded.

Results & observations

- 5.4.2 The fired clay comprised four amorphous pieces of fired clay in a sandy iron rich fabric. The material was recovered from dark earth deposit (0002).

5.5 Industrial waste

Julie Franklin MA (Hons), MCIfA, FSA (Scot)

Introduction and quantification

- 5.5.1 A single piece (7.4g) of slag was recovered.

Methodology

- 5.5.2 The industrial waste was counted and weighed and examined by eye, identifying it by broad type.

Results and observations

- 5.5.3 The slag is ferrous but is not diagnostic of any particular process. It may relate to smithing or smelting but as an isolated find does not necessarily relate to activity on site. It was found in a dark earth deposit (0002) where it was associated with Roman pottery and is potentially of the same date.

5.6 Conservation Report

Julie Franklin MA (Hons), MCIfA, FSA (Scot)

Introduction and quantification

- 5.6.1 The finds assemblage was reviewed with reference to material types, condition and stability in regard to future long-term storage, analysis and illustration requirements.

Methodology

- 5.6.2 The assessment was based on visual examination. The needs of each object were considered based on their condition, dating, significance and requirements for further identification, analysis and illustration.

Work required for analysis and illustration

- 5.6.3 Most of the finds are in stable condition and do not require conservation. The only find which requires further conservative work was the copper alloy coin, which should be cleaned and packaged for long-term storage.

Preparation for deposition in archive

- 5.6.4 Most of the finds archive is packaged appropriately to the various material types but is otherwise stored in temporary containers needed for transport to specialists. The copper alloy coin will require repackaging in an airtight container with silica gel. The assemblage also requires packaging in the specific containers required by the relevant receiving body. This work will be undertaken after assessment reporting is completed.

5.7 Site Archive

Quantification and characterisation of the site archive

Finds assemblages

Table 3 Later Iron Age and Romano-British pottery

Count	90
Weight	2.591kg
Current location	Headland Archaeology, Silsoe
Packaging	6 x ziploc bags labelled with permanent marker, boxed within temporary containers
Format	Sherds
Current condition	Stable
Processing	Wet-washed
Recording	Recorded to PXA level
Dating	LIA/RB
Indexing	To be done
Marking	To be done

Table 4 Metalwork

Count	1
Weight	2g
Current location	Headland Archaeology, Silsoe
Packaging	1 x ziploc bags labelled with permanent marker, boxed within a temporary container
Format	Small finds
Current condition	Stable

Processing	Dry bagged
Recording	Recorded to PXA level
Dating	Roman
Indexing	To be done
Marking	To be done

Table 5 CBM

Count	1
Weight	316g
Current location	Headland Archaeology, Silsoe
Packaging	1 x ziploc bags labelled with permanent marker, boxed within temporary container
Format	Sherds
Current condition	Stable
Processing	Wet-washed
Recording	Recorded to PXA level
Dating	Roman
Indexing	To be done
Marking	To be done

Table 6 Fired clay

Count	4
Weight	49g
Current location	Headland Archaeology, Silsoe
Packaging	1 x ziploc bags labelled with permanent marker, boxed within temporary container
Format	Sherds
Current condition	Stable
Processing	Wet-washed
Recording	Recorded to PXA level
Dating	Undated
Indexing	To be done
Marking	-

Table 7 Industrial waste

Count	1
Weight	7g
Current location	Headland Archaeology, Silsoe
Packaging	1 x ziploc bags labelled with permanent marker, boxed within temporary container
Format	Finds – small

Current condition	Stable
Processing	Dried
Recording	Recorded to PXA level
Dating	Undated
Indexing	To be done
Marking	-

5.8 Part B Assessment of potential

Assessment and interpretation of results

Later Iron Age & Romano-British pottery

- 5.8.1 This assemblage is small but varied in terms of fabric, it has the potential to inform as to the function and dating of the site, when combined with the wider assemblage from previous phases of works. This could contribute to objectives in the East Midlands Historic environment Research frameworks, including 5A, 5B, 5E, and 5G (Knight et al 2012).

Metalwork

- 5.8.2 The metalwork from the site comprised a single find, but the find was of some significance being a closely dateable coin which was present within a demolition layer, where it provided a date for this event.

Ceramic building material

- 5.8.3 The CBM assemblage is of little further potential in isolation. It should be considered alongside the CBM from other areas of the Blackgrounds excavations.

Fired clay

- 5.8.4 The assemblage is of no further potential.

Industrial waste

- 5.8.5 The assemblage is of no further potential.

5.9 Proposals for future research

Further work on finds assemblages

- 5.9.1 The following are site specific broad proposals based on the potential of the assemblage. These may vary depending on priorities later identified in the UPD.

Later Iron Age and Romano-British pottery

- 5.9.2 The assemblage should be revisited along with stratigraphic grouping and phasing data to support dating of the features and activity across the site facilitating changes in fabric, form and function over time to be analysed. The assemblage should be considered alongside that from other areas of Blackgrounds along with contemporary settlements in the region.

- 5.9.3 One sherds (grafitto) from this assemblage have been identified for illustration.

5.9.4 A large scheme of analysis work has been proposed on the assemblage from Blackgrounds Central and East (Sutton et al 2023), the assemblage from C31079/80 should be incorporated into these future works. In addition to the above these works include petrographic analysis of coarsewares, including fabric D16 in particular.

Metalwork

5.9.5 The small amount of metalwork from this site precludes much further analysis. The coin has been identified and dated and should be included in any publication using the assessment report as a basis. Cleaning of the coin for long-term storage is recommended.

CBM

5.9.6 No further work is recommended on the CBM.

Fired clay

5.9.7 No further work is recommended on the fired clay.

Industrial waste

5.9.8 No further work is recommended on the industrial waste.

Retention and discard proposals

5.9.9 Retention and discard proposals are recorded in the finds data tables. The proposals are summarised here (Table 8).

Table 8 Summary of retention/discard proposals

Material	Total count	Total weight (g)	Retain	Discard
Late Iron Age – Romano-British pottery	90	2591	All	None
Metalwork	1	2	All	None
CBM	1	316	All	None
Fired clay	4	49	None	All
Industrial waste	1	7	None	All

6 Environmental Report

6.1 Zooarchaeological assessment

6.1.1 This report details the assessment of animal bone recovered from two sites during mitigation works at Blackgrounds Farm (site code 1C21BLCCI) as part of Phase One of High Speed Two (HS2). Site CrID C31079 produced approximately 2.2 kg of hand-collected animal bone from 7 deposits, and 9.5 g of vertebrate remains from one whole-earth bulk sample; site CrID C31080 produced 104 g of hand-collected animal bone recovered from 1 deposit.

- 6.1.2 The aims of this assessment are to determine the presence and preservation of any vertebrate remains, and to evaluate their significance and potential for enhancing the environmental and economic interpretation of the site.

Methodology

Hand collected vertebrate remains

- 6.1.3 Subjective records were made of the state of preservation, and the bones were examined for evidence of gnawing, burning, butchery and fresh breaks, which were noted where applicable.
- 6.1.4 Where pieces of the same bone could be refitted the pieces were recorded as a single element. Where articulated remains (or disarticulated bones appearing to be from the same individual) were recovered from a single context these were recorded as a single associated bone group (ABG). These associated bone groups excluded mandibles with loose, refitted teeth. Where possible, fragments were identified to species or species group using modern comparative reference material and published works (e.g., Schmid 1972; Cohen and Serjeantson 1996).
- 6.1.5 Remains that could not be identified to species were grouped into categories: large mammal (assumed to be cattle, horse or large deer (cervid)), medium-sized mammal 1 (assumed to be sheep/goat (caprine), pig or small deer), medium-sized mammal 2 (from a cat or hare-sized mammal) and completely unidentifiable. No attempt was made at this assessment stage to distinguish between post-cranial sheep and goat bones, or horse/donkey/mule remains, and these have been recorded as sheep/goat and equid respectively. Counts were made of measurable elements and those with recordable epiphyseal fusion and tooth wear stage data.

Vertebrate remains from samples

- 6.1.6 The bone extracted from each sample residue was weighed and counts made of identified elements of larger taxa and small vertebrates (small mammals, amphibians etc.) and fish. Identifications were made to species or species group where possible using modern comparative reference material together with published works. Additional notes were made regarding the general condition of the material, including the incidence of burnt fragments.

Results

C31079 - Hand collected vertebrate remains

- 6.1.7 A total of 80 bone fragments, representing 57 elements (2.208kg) were recovered from 7 deposits, including the fills of ditches and an oven, a large spread of black, industrial material and a drain. The material seemed well-preserved, with the surfaces of almost all of the fragments appearing to be in good condition (although cracking and abrasion was observed on some pieces). However, fragmentation was common and excavation damage was recorded in virtually all of the deposits, affecting 50% of the material and suggesting that chemical processes in the burial environment had weakened the structure of the bones. A few fragments from contexts (0002) and (0023) were recorded

as less well-preserved ('moderate'). Three of the bones showed signs of gnawing, indicating that they had been accessible to scavenging carnivores – probably dogs – prior to incorporation in the deposits. Butchery evidence was seen on four cattle and large mammal fragments. Seven of the elements would be useful for estimating age-at-death (including two mandibles) and three would provide metrical data. A summary of species identified and taphonomic information is presented in Tables 1 and 2 below: a more detailed record of the assemblage can be found in the zooarchaeological catalogue in Appendix 7. Tables A (the bone catalogue) and Table B (weights from each context).

Table 9 C31079. Elements identified to species/species group/size category from hand-collected mammal bone

Species	NISP
Cattle	23
Sheep/goat	1
Equid	3
Pig	1
Large mammal	21
Medium mammal 1	6
Chicken	1
Unidentified	1
Total	57

Table 10 C31079. Number of hand-collected bone fragments affected by butchery, gnawing, burning and excavation damage

	Hand collected
Butchery	4
Gnawing	3
Burning	0
Fresh breaks	24

- 6.1.8 The hand-collected assemblage was dominated by the remains of cattle and large mammal, most of which were also likely to be cattle (Table 9). The remainder of the mammal bones were of equid (probably horse), pig and caprine (sheep or goat). A single chicken femur was the only bird bone present. There was no evidence for wild mammals.
- 6.1.9 A total of 23 cattle bones (after refits) were recovered from five contexts. Most of the identified elements were from the head or lower legs/feet, with only four derived from meat-bearing long bones. This is not unexpected as teeth (either in situ or loose), mandibular bone and metapodia are robust elements most likely to be preserved and identified. The head elements included parts of a very fragmented skull with several permanent maxillary teeth from the fill (0019) of stone drain [0017]/[0018]; a mandible with an ageable tooth row and another with sockets for permanent dentition from

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dark earth deposit (0002); an additional toothless mandible from Foundation wall [0004] associated with a cut [0003]; and a small, fragmented piece of cattle skull and horn core from the demolition layer (0023) of an oven [0020]. Butchery marks consisted of chops to a proximal radius shaft recovered from rubble layer (0008), and several light chops/cuts around the distal shaft of a tibia recovered from dark earth deposit (0002).

- 6.1.10 Caprine remains were limited to a single mandible from a mature adult recovered from the fill (0013) of ditch [0012].
- 6.1.11 Equids were represented by an ulna recovered from dark earth deposit (0002), an axis from foundation wall [0004], and the small and porous radius shaft of a juvenile from rubble layer (0008), which had been gnawed at both the proximal and distal ends.
- 6.1.12 The only evidence for pigs in the assemblage was a single fragment of maxilla from a sub-adult individual, found with the fragmented cattle skull in stone drain [2017]/[2018].
- 6.1.13 The sole evidence for birds was a complete and well-preserved femur from a skeletally mature chicken was recovered from deposit (0002) which would provide metrical data.
- 6.1.14 The cattle mandible recovered from foundation wall [0004] was notable for the swelling around the first molar. None of the teeth remained in situ, but the empty sockets indicated this would have been an adult individual with complete permanent dentition. Bone loss (and subsequent damage) had reduced the alveolar margins, but it seems likely that this animal was suffering from periodontal disease caused by gingivitis and tartar build-up (Bartosiewicz and Gál 2013). The resulting enlarged sockets around the affected area meant the tooth would have been loose and vulnerable to loss during life.
- 6.1.15 None of the hand-collected bones showed signs of burning or charring.
- 6.1.16 Seven elements could provide mandibular tooth wear and epiphyseal fusion data suitable for estimating age-at-death. In addition to those described above (the cattle and sheep/goat mandibles), five cattle and equid bones with recordable fusion stages were present in dark earth deposit (0002) and rubble layer (0008) – it is of interest that the metacarpal shaft of a young calf was found in the same layer (0008) as the immature equid radius. Further detail can be found in the Appendix 7.
- 6.1.17 The distal ends of a cattle tibia and metatarsal was recovered from dark earth deposit (0002) were the only measurable fragments from domestic mammals. No bones were present which could provide a withers height estimate, although metrics from the chicken femur could be compared with modern reference bones from known breed chickens to estimate size and morphology.

C13079 - Vertebrate remains from samples

- 6.1.18 Animal bone (9.5g) was recovered from one environmental sample residue <001>, taken from demolition layer (0023) of oven [0020].
- 6.1.19 Most of the fragments seemed to be further small pieces of the cattle frontal and horn core which was hand collected from this fill. A few were calcined, which was not unexpected given the nature of the deposit.

C31080 - Hand collected vertebrate remains

- 6.1.20 Five fragments, representing one cattle scapula (104g) were recovered from fill (0034) of ditch [0033]. As with the bone from C31079, surface preservation appeared superficially good, albeit with a little erosion, but the element had fragmented during recovery suggesting a weakened structure. The scapula was not measurable and showed no signs of butchery, gnawing or burning.

C31080 - Vertebrate remains from samples

- 6.1.21 No bone was recovered from environmental samples.

6.2 Discussion

- 6.2.1 Vertebrate remains from sites C31079 and 31080 were mainly of moderate preservation, with a few deposits producing more poorly preserved fragments. Identifications were limited to the main domestic animals: cattle, sheep/goat, horse, pig and chicken, with no evidence for wild species.

6.3 Summary

- 6.3.1 The assemblage from Site C31079 represents a small suite of domestic species dominated by the remains of cattle and large mammal bone. Most of the large mammal fragments are also likely to be cattle bone.

6.4 Scientific dating potential

- 6.4.1 Elements with scientific dating potential consist of well preserved, dense elements or teeth. Any of the cattle mandibles or teeth from contexts (0002), [0004] and (0008), or the sheep mandible from context (0013) would be suitable (see Appendix 7, Bone catalogue for details).

6.5 Recommendations for further research

- 6.5.1 The assemblage is too small to provide meaningful data for analysis in isolation. However, due to the proximity of the site to the remains of the large and complex Iron Age and Romano-British settlement (1MC12-EKF-EV-REP-CS10-000256), the bone should be retained for the present until all phases of the work are complete, in case any integration of results is appropriate. Consultation with an experienced zooarchaeologist should take place prior to any decisions made relating to discard.
- 6.5.2 A copy of this report should be included in any further publications.

6.6 Archaeobotanical assessment

- 6.6.1 This report details the results of the assessment of environmental material from one bulk sample recovered during construction integrated recording (CIR) works at Blackgrounds Farm, Northamptonshire (CrID: C31079; site code 1C21BLCCI).
- 6.6.2 The aims of the assessment are to determine the presence and preservation of any archaeobotanical remains, and to evaluate their significance and potential for enhancing the economic interpretation of the site.

Methodology

- 6.6.3 The sample was processed using a Siraf-style water floatation system. The floating material (flot) was collected using a 250µm mesh and the residue (retent) a 1mm mesh. Both fractions were air-dried, and the heavy residue was sieved at 10mm, 5mm and 1mm and then sorted for the recovery of finds and environmental remains. Once dried, the flots were scanned using a binocular microscope at magnifications up to x60.
- 6.6.4 Macro-botanical identifications were carried out with reference to standard catalogues (Cappers et al 2012 and Jacomet 2006) and using modern reference material. Nomenclature for economic plants follows Van Zeist (1984) and for other plant taxa follows Stace (1991).

6.7 Results

Area C31079

- 6.7.1 Two cereal grains, a grain of spelt wheat (*Triticum spelta*) and a wheat grain (*Triticum* sp.), were recovered from demolition layer (0023). The sample also contained individual charred seeds of poppy (*Papaver* sp.) and ivy-leaved speedwell (*Veronica hederifolia*). Untransformed plant remains included fool's parsley (*Aethusa cynapium*), goosefoot/orache (*Chenopodium* sp./ *Atriplex* sp.) and thistle (*Cirsium* sp./ *Carduus* sp.).
- 6.7.2 A small amount of charcoal was recovered from the sample. Most of the charcoal was Comminuted, with fragments measuring less than 3mm, however, a sizeable fragment of non-oak charcoal measuring 27mm was also recorded. The charcoal was well-preserved and unabraded.
- 6.7.3 The sample contained a small number of puparia and arthropod fragments that are likely modern intrusions.

Discussion

- 6.7.4 The environmental remains recovered from the bulk sample provide limited information on the site's economy. The two cereal grains were likely incidentally incorporated into the feature by natural mechanisms such as windblow. The untransformed plant remains and insects are likely modern intrusions.

Scientific Dating potential

- 6.7.5 The environmental remains recovered from the bulk sample provide limited information on the site's economy. The two cereal grains were likely incidentally incorporated into the feature by natural mechanisms such as windblow. The untransformed plant remains and insects are likely modern intrusions.

Recommendations for further research

- 6.7.6 No further work is recommended on the environmental assemblage at this stage, however the assemblage should be considered during any further works on site. The sample should be retained until all phases of work are complete, at which point decisions relating to its discard can be made.
- 6.7.7 A copy of this report should be included in any further publications.

7 Conclusions

7.1 Interpretation of results against the original expectations and specific objectives

- 7.1.1 The excavation of areas C31079 and C31080 revealed a small number of archaeological features. The results of the fieldwork are consistent with archaeology identified during previous phases of work at the wider Blackgrounds site.

Area C31079

Late Iron Age and early Roman

- 7.1.2 Area C31079 was located in the centre of the wider Blackgrounds site and contained the majority of the archaeology discovered during this phase of works. The earliest remains, comprising two stake-holes, [0024] and [0026] and a drainage ditch [0012], have been provisionally dated to the late Iron Age to early Roman period, although no artefacts or other datable material was recovered.

- 7.1.3 Drainage ditch [0012] could not be closely related to any features within the previous C31059B excavation, but the two stake-holes could be related to Pit Group 95 recorded within C31059B B2, dated to the Iron Age (1MC12-EKF-EV-REP-CS10-000256). All archaeological activity dating to this phase of was overlain by a deposit of 'dark earth', it is possible that this deposit is related to the bedding layers noted previously in C31059B, which preceded the construction of the Roman buildings.

Early to late Roman

- 7.1.4 Cut into the dark earth deposit were structural remains dating to the early to late Roman period, elements of which relate to the previously recorded Structure 79. The structural features within C31079 were covered by a layer of rubble likely derived from collapsed surrounding structures and is comparable to previously recorded rubble layers within C31059B. Among the rubble were frequent pieces of charcoal, marine shell, bone and Romano-British pottery fragments, occasional small metal debris and a single bronze coin dating between AD343-348.

7.1.5 Of note within this area was a small oven with a stone-built superstructure. During excavations in C31059B, a possible kiln floor Structure80 was noted. This feature alongside the oven from C31079 suggest some small-scale industrial activity, although the general absence of industrial waste and pottery wasters suggests it could have been associated with bread making or as a drying oven, although evidence for cereal processing on site was very limited.

Area C31080

7.1.6 Area C31080 was located in the east of the wider Background site, in an area of sparse archaeological remains. Archaeological works in excavation area C31080 revealed one ditch, a post-hole, and a single irregular pit. All three archaeological features were overlain by the dark earth deposit, which was significantly thinner in C31080 than C31079.

7.1.7 The archaeological features identified in C31080 are likely a continuation of the activity seen across the backgrounds site, beneath the dark earth deposit. By looking at the wider Blackground site, the activity at C31080 appears to represent the periphery of the archaeological activity, with activity ceasing in this area after the deposition of the dark earth deposit.

7.1.8 The CIR results have contributed to the delivery of GWSI HERDS Specific Objectives as specified in Table 11.

Table 11 contribution to GWSI HERDS Specific Objectives

Specific Objective	Contribution
KC19: The Romano-British period saw the beginning of a more established infrastructure network. Can we investigate the development of these routes, trackways and roads and the influence they had on landscape change?	Although not directly related to roads, the pottery has the potential to inform on trading links and communications in the region. The presence of different types of pottery from various sources is direct evidence for trade and commerce across Britain. Multiple roads are known in the wider area, including two recorded during previous excavations and links to the river. Adjacent Welsh road is also likely to have been a Roman Road.
KC23: Identify evidence for late Roman occupation and attempt to identify any continuity in settlement patterns between the end of the Romano-British period and the Early Medieval period.	Evidence for late Roman occupation within C31079 and C31080 is not distinct. Structural remains of walls and an oven were recorded in the area, but it is unclear as to when these structures ceased to be used. Artefactual evidence recovered from across the area spans the Roman period from the 1st-late 4th – 5th Centuries suggesting some form of activity present at the site during the late Roman period.
KC25: Characterise the nature of the Romano-British activity in the hinterland of the Edgcote Roman Villa and	Previous phases of work at the wider Blackgrounds site confirmed the existence of an Iron Age predecessor to

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Specific Objective	Contribution
investigate the possibility that it developed from an Iron Age precursor.	<p>the large Roman nucleated settlement. In the part of Blackgrounds covered by the current works, evidence from the Iron Age was limited and the landscape was likely dominated by agricultural practices.</p> <p>Given the early excavation date for the Roman villa (1840), dating of the site is not specific enough to link the villa to a particular phase in the life of the nucleated settlement. Previous geophysical survey, however, has brought to light a general yet direct connection between Edgcote Roman Villa and the Blackgrounds site.</p> <p>The current works provided some evidence for land division, likely for agricultural purposes, dating to the transition period between the Iron Age and Roman period. Evidence from the later Roman period suggests a potential small cluster of habitation. Interesting in relation to the remainder of the Blackgrounds site is the absence of clear evidence for industrial activity.</p>

The wider Blackgrounds site

- 7.1.9 The excavation of areas C31079 and C31080 form part of the wider Blackgrounds site, which includes excavation area C31072, excavated by Headland Archaeology (1MC12-EKF-EV-REP-CS10-000185; 1MC12-EKF-EV-REP-CS10-000495) and areas C31048, C31049 and C31059B previously excavated by MOLA Headland Infrastructure (1MC12-EKF-EV-REP-CS10-000257 and 1MC12-EKF-EV-REP-CS10-000256).
- 7.1.10 The Blackgrounds site as a whole can be interpreted as an agglomerated Iron Age settlement which developed into a large nucleated Roman settlement on the edge of the Cherwell River Valley. Based upon previous works in the northern section (Areas C31048 and C31049) of Blackgrounds (1MC12-EKF-EV-REP-CS10-000257), it is clear that the core of the settlement shifted over time in a southward direction. Whilst Areas C31048 and C31049 contained most of the Iron Age activity, the central and southern parts of Blackgrounds were dominated by evidence from the Roman period, mainly suggesting industrial activity. In Area C31059, this activity was mainly focussed on metalworking, including blacksmithing, as well as on woodworking and textile working. Within C31072, on the south-eastern periphery of the settlement there was evidence for probable leatherworking.
- 7.1.11 As evidenced by the geophysical survey, it is probable that a relationship existed between the Blackgrounds landscape and the nearby Roman villa at Edgcote, located to the south-west (1MC12-EKF-EV-REP-CS10-000256). During the Iron Age period, this area of the agglomerated settlement seems to have been dominated by agriculture and/or animal husbandry which continued into the Roman period. During the course of the Roman period, stone structures were erected with a potential

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habitational use. It is likely that this habitation was closely linked to the industrial activities to its east and south-east, but potentially more closely to the villa in the south-west.

8 Recommendations and Research Aim for Further Investigation

8.1 Assessment and Interpretation of Results

- 8.1.1 Basic stratigraphic analysis of the sites is complete. The features have been described and the evidence from the artefactual and environmental assessments was incorporated into the conclusions.
- 8.1.2 All records have been digitised and processed in line with HS2 Standards and Guidance.
- 8.1.3 All finds and environmental samples have been processed and assessed. No further processing work is required. Individual material-specific methodologies are detailed below.

8.2 Potential for further stratigraphic analysis

- 8.2.1 There is limited potential for further stratigraphic analysis on the remains from C31079 and C31080. Instead, the remains from these two small areas should be examined in relation to the wider Blackgrounds site, including elements previously recorded in C31059B, including Structure 79 and Structure 80.

8.3 Potential for further analysis on the finds and environmental assemblages

- 8.3.1 Potential for further analysis and future research on the finds and environmental assemblages is outlined in Sections 5 and 6.

9 Evaluation of the methodology employed, and results obtained

- 9.1.1 The Construction Integrated Recording (CIR) at C31079 and C31080 successfully established the extent, nature, and complexity of the archaeological features. The comparative assessment of the excavation data to that gathered from previous phases of work was essential to evaluate the extent and nature of the archaeology.
- 9.1.2 The soil horizons throughout the stratigraphic sequence were generally clear and well defined. It is unlikely that any archaeological features were not identified during CIR. The excavation methodology is judged to have been a suitable method of recording in this landscape.

- 9.1.3 All archaeological remains uncovered within the Site (C31079 and C31080) were investigated and recorded in line with the project plan and LSWSI.
- 9.1.4 The assessment of the artefactual and environmental assemblages has provided insights into the date and nature of activities having taken place on the Site. Proposals for further analysis have been presented in Sections 5 and 6.
- 9.1.5 The stratigraphic assessment combined with the results of the assessment of the artefactual and environmental assemblages has allowed for the complexity, relationships, and significance of the surviving archaeological remains to be determined.

10 Publication and Dissemination Proposals

- 10.1.1 Publication of the results of this fieldwork will be undertaken in a method and at an appropriate time as determined by HS2 Ltd.
- 10.1.2 All archaeo-environmental samples have been treated and conserved in accordance with the UKIC's document, Guidelines for the Preparation of Excavation Archives for Long Term Storage (Walker, 1990). Should further work be required, this archive along with any further archive will be compiled into an ordered, indexed and internally consistent Site archive that will be prepared and deposited in accordance with Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation – Revised Edition (Brown 2011). A summary of information from the project has been entered onto the OASIS online databases of archaeological projects in Britain.

11 References

Title	Reference
AWH -Project Plan for Archaeological Monitoring and Construction Integrated Recording – Route Wide	1EW03-FUS-EV-REP-C000-009812
AWHb Final Report for Geophysical Magnetometer Survey at (AC310/3) Trafford Bridge, Edgcote Viaduct, Northamptonshire	1EW03-FUS-EV-REP-CS07_CL26-008106
AWHe Close Resolution Metal Detector Survey for Edgcote Battlefield, Culworth Embankment and Edgcote Viaduct, Northamptonshire (AC310/8): Fieldwork Report	1EW03-FUS-EV-REP-CS07_CL26-008136
Location Specific Written Scheme of Investigation for Construction Integrated Recording at C31079-81 Blackgrounds Farm Northamptonshire	1MC12-EKF-EV-REP-CS10-000105
Fieldwork Report for Construction Integrated Recording at C31072 Blackgrounds Farm Northamptonshire.	1MC12-EKF-EV-REP-CS10-000185
Post Excavation Assessment Report for Archaeological Recording at Blackgrounds Central and East (MOLA Headland Infrastructure).	1MC12-EKF-EV-REP-CS10-000256
Post Excavation Assessment Report for Archaeological Recording at Blackgrounds Central and East	1MC12-EKF-EV-REP-CS10-000256
AWHi - Post Excavation Assessment Report for Archaeological Recording at Blackgrounds North Northamptonshire AC310 Site Code 1C20BLGAR	1MC12-EKF-EV-REP-CS10-000257
Fieldwork Report for Construction Integrated Recording at C31073 and C31081 Blackgrounds Farm Northamptonshire	1MC12-EKF-EV-REP-CS10-000495
Aird, P and MacRobert, E, 1987 The Roman pottery from Ashton, Northants.: Level 3 report, Northamptonshire County Council Archaeology Unit report	Aird and MacRobert 1987
Bartosiewicz, L and Gál, E, 2013 Shuffling nags, lame ducks: The archaeology of animal disease. Oxford: Oxbow Books	Bartosiewicz and Gál 2013
Brindle, T, Smith, A T, Allen, M G and Fulford, M G, 2016 The Rural Settlement of Roman Britain. Malet Street: Society for the Promotion of Roman Studies.	Brindle et al 2016.
Brodribb, G, 1987 roman brick and tile. Cirencester: Alan Sutton publishing	Brodribb 1987
Brown, D H, 2011 <i>Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation</i> . Second Edition. Archaeological Archives Forum	Brown 2011
Butler, C, 2005 Prehistoric Flintwork, Reading: Tempus	Butler 2005
Cappers, R T J, Bekker, R M and Jans, J E A, 2006 <i>Digital seed atlas of the Netherlands</i> . Barkhuis: Groningen	Cappers et al 2006
Chartered Institute for Archaeologists (ClfA) 2020a <i>Standard and Guidance for Archaeological Excavation</i>	ClfA 2020a
Chartered Institute for Archaeologists (ClfA) 2020b <i>Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives</i>	ClfA 2020b

Chartered Institute for Archaeologists (CIfA) 2021 <i>Toolkit for specialist reporting</i>	CIfA 2021
Chartered Institute for Archaeologists (CIfA) 2022a <i>Code of Conduct</i>	CIfA 2022a
Chartered Institute for Archaeologists (CIfA) 2022b <i>Toolkit for selecting archaeological archives.</i>	CIfA 2022b
Cohen, A and Serjeantson, D, 1996 A manual for the identification of bird bones from archaeological sites. From: Archetype Books	Cohen and Serjeantson1996.
Harris, E C, 1986 <i>Principles of Archaeological Stratigraphy</i> , 2 nd edition. London: Academic Press	Harris 1986
HS2 Technical Standard: Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy	HS2-HS2-EV-STR-000-000015
HS2 Geographical information systems standards	HS2-HS2-GI-STD-000-000002
HS2 Documents management procedure	HS2-HS2-IM-PRO-000-000004
HS2 Technical Standard: Specification for historic environment investigations	HS2-HS2-EV-STD-000-000035
HS2 Technical Standard: Specification for Project Plans and Location Specific Written Scheme of Investigations	HS2-HS2-EV-STD-000-000036
HS2 Technical Standard: Historic Environment Physical Archive Procedure	HS2-HS2-EV-STD-000-000039
HS2 Technical Standard: Historic Environment Digital Data Management and Archiving Procedure	HS2-HS2-EV-STD-000-000040
Jacomet, S, 2006 <i>Identification of cereal remains from archaeological sites</i> . Basel: Basel University	Jacomet 2006
Knight, D, Vyner, B and Allen, C, 2012 <i>East Midlands Heritage, an updated research agenda and strategy for the historic environment of the East Midlands</i> (Nottingham Archaeological monographs no 6) Nottingham: University of Nottingham and York Archaeological Trust	Knight et al 2012
Monckton, A, 2006 'Environmental synthesis' in East Midlands Historic Environment Research Framework. https://researchframeworks.org/emherf/regional-overview/environmental-synthesis .	Monckton 2006
Schmid, E, 1972 <i>Atlas of Animal Bones: Knochenatlas: für Prähistoriker, Archäologen und Quartärgeologen</i> . Amsterdam: Elsevier.	Schmid 1972
Stace, C, 1997 <i>New Flora of the British Isles</i> (2nd edn) Cambridge: Cambridge University Press	Stace 1997
Sutton, A, Hewson, L and Rebisz-Niziolek, A, 2023 'Iron Age and Roman pottery' <i>MOLA: Post Excavation Assessment Report for Archaeological Recording at Blackgrounds Central and East</i>	Sutton et al 2023
Tomber, R and Dore, J, 1998 <i>The National Roman Fabric Reference Collection: A Handbook</i> London: Museum of London Archaeological Services	Tomber and Dore 1998
van der Veen, M, 2016 'Arable farming, horticulture, and food: expansion, innovation, and diversity in Roman Britain' in Millett, M, Revell, L and Moore, A (eds) <i>The Oxford handbook of Roman Britain</i> . Oxford: Oxford University Press	van der Veen 2016
Walker, K, 1990 <i>Guidelines for the preparation of excavation archives for long-term storage</i> , London: United Kingdom Chartered Institute for Conservation	Walker 1990
Young, C J, 2000 <i>The Roman pottery industry of the Oxford Region</i> (British Archaeological Reports British Series 43) Oxford: Archaeopress.	Young 2000
van Zeist, W 1984 'List of names of wild and cultivated cereals' <i>Bulletin on Sumerian agriculture</i> , 1 8-15	van Zeist 1984

12 Glossary of Terms

12.1.1 The following terms may have been used in this report:

- **Archaeological Contractor** – the organisation undertaking the specific historic environment works for the Contractor.
- **Contractor** – the organisation undertaking the Enabling Works on behalf of the Employer.
- **Detailed Desk Based Assessment (DDBA)** – analytical document that builds on the information gathered previously in the Environmental Statement to address particular issues, questions or uncertainties within a given area. It may be developed to provide a more detailed understanding of the resource in an area to inform design development or construction programming.
- **Employer** – HS2 Ltd, the organisation responsible for delivery of HS2 Phase One Scheme and all terms and conditions, policies, procedures, and payments
- **Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS)** – the framework for delivering all historic environment investigations undertaken as part of the HS2 Phase 1 programme.
- **Location** – a specific HS2 worksite or group of worksites that are being addressed as a combine historic environment investigation programme of assessment, evaluation and investigation.
- **Project Plans** – specification document for each specific package of activity (e.g. a survey, desk-based assessment, excavation, recoding project). The plans would respond to the Specific Objectives set out in the GWSI: HERDS and be delivered within an agreed budget.
- **Works** – the specific historic environment assessment, evaluation or investigation works at each location.

13 Appendices

13.1 Appendix 1: List of artefact specialists consulted

Roman pottery, CBM, Fired clay	Headland Archaeology	Sara Machin	BSc (Hons) MA PhD	[REDACTED]
Metalwork	Headland Archaeology	Rebecca Sillwood	BA (Hons) MSc	[REDACTED]
Industrial Waste	Headland Archaeology	Julie Franklin	MA (Hons), MClfA, FSA (Scot)	[REDACTED]

13.2 Appendix 2: Context registers

Area C31079 Context Register

Context	Interpretation	Description	Dimensions
1	Geological subsoil	Mid brownish yellow fine sandy clay	
2		Dark greyish black fine sandy silt	
3	Construction cut	Linear, aligned NW-SE with regular profile with curved base and sides	1.02x0.57m, 0.32m deep
4	Deliberate backfill	Dark brownish grey fine sandy silt. Inclusions: frequent other organic, frequent fired clay/cbm	0.32m thick
5	Construction cut	Linear, aligned E-W with regular profile with curved base and sides	1.90x0.60m, 0.29m deep
6	wall	Linear, aligned	1.90x0.60m, 0.29m deep
7	Bonding	Dark greyish black fine sandy silt. Inclusions: frequent other organic, frequent fired clay/cbm	0.29m thick
8	Rubble	Dark greyish black fine sandy silt. Inclusions: frequent angular stones, frequent rounded stones, frequent plant remains, frequent bone, frequent other organic, frequent fired clay/cbm, frequent ctp, occasional industrial waste	

9	construction cut	Irregular in plan with irregular profile with flat base and curved sides	0.60x1.00m, 0.06m deep
10	Foundation	Foundation	0.60x1.00m, 0.1m deep
11	Deliberate backfill	Mid brownish grey silt. Inclusions: moderate plant remains, moderate other organic, moderate fired clay/cbm	
12	Ditch	Linear, aligned E-W with irregular profile with flat base and curved sides	1.00x0.75m, 0.16m deep
13	Deliberate backfill	Linear, aligned	1.00x0.75m, 0.16m deep
14			
15	Construction cut	Linear, aligned E-W with regular profile with flat base and curved sides	1.00x0.75m, 0.15m deep
16	Deliberate backfill	Dark greyish brown silty fine sand. Inclusions: moderate angular stones, rare rounded stones, moderate other organic, moderate fired clay/cbm	0.15m thick
17	Drain	Linear, aligned E-W with regular profile with flat base and vertical sides	0.50x0.47m, 0.15m deep
18	drain lining	drain lining	0.50x0.47m, 0.15m deep

19	Deliberate backfill	Mid greyish brown silt. Inclusions: occasional other organic, occasional fired clay/cbm, rare ctp	
20	construction cut	Other in plan with flat base and steeply sloping sides	1.15x0.61m, 0.42m deep
21	bread oven	bread oven	1.51x0.61m, 0.42m deep
22	in situ burning	Other in plan	0.68x0.50m
23	Demolition	Dark brownish black fine sandy silt. Inclusions: frequent angular stones, frequent rounded stones, frequent plant remains	0.42m thick
24	stake-hole	Sub-Circular in plan with irregular profile with curved base and vertical sides	0.19x0.15m, 0.13m deep
25	Natural infilling	Mid greyish blue fine sandy silt. Inclusions: moderate rounded stones, rare plant remains	0.13m thick
26	stake-hole	Sub-Circular in plan with regular profile with curved base and vertical sides	0.24x0.21m, 0.09m deep
27	natural infilling	natural infilling	0.13m thick

Area C31080 Context Register

Context	Interpretation	Description	Dimensions
29	post-hole	Rectangular in plan with flat base and vertical sides	0.39x0.27m, 0.14m deep
30	deliberate backfill	Light greyish brown silt. Inclusions: rare angular stones	
31	Pit	Sub-Circular in plan with regular profile with flat base and gently sloping sides	1.37x1.05m, 0.27m deep
32	Natural infilling	Mid greyish brown silty clay. Inclusions: frequent angular stones, frequent rounded stones	0.27m thick
33	Ditch	Linear, aligned N-S with regular profile with flat base and undercut sides	1.11x1.23m, 0.18m deep
34	Natural Infilling	Mid yellowish brown fine sandy silt. Inclusions: moderate angular stones, occasional other organic, rare fired clay/cbm	0.18m thick

13.3 Appendix 3: Drawing registers

Area C31079 Drawing Register

Site	Drawing	Description
C31079	0001	Photogrammetry of wall in C31079
C31079	0002	wraparound section of two foundation walls
C31079	0003	wraparound section of two foundation walls and drain
C31079	0004	north facing section of bread oven
C31079	0005	bread oven structure

13.4 Appendix 4: Photographic registers

Area C31079 Photographic Register

Site	Photo Number	Description	Facing
C31079	0001	ID shot. Working shot.	-
C31079	0002	Pre-excavation stripped site. Working shot.	W
C31079	0003	Pre-excavation stripped site. Working shot.	NW
C31079	0004	Pre-excavation stripped site. Working shot.	SW
C31079	0005	Pre-excavation stripped site. Working shot.	NW
C31079	0006	Pre-excavation stripped site. Working shot.	S
C31079	0007	ID shot. Working shot.	-
C31079	0008	Context [0008], south facing section.	S
C31079	0009	Context [0008], south facing section.	S
C31079	0010	Context [0008], east facing section.	E
C31079	0011	Context [0008], north facing section.	N
C31079	0012	Context [0008], north facing section.	N
C31079	0013	Context [0008], overall site shot.	SE
C31079	0014	Context [0008], west facing section rubble.	W
C31079	0015	Context [0017], animal skull in situ.	-
C31079	0016	Pre-ex.	S
C31079	0017	Pre-ex.	-
C31079	0018	Context -0008, south facing section of rubble layer.	S
C31079	0019	Context -0008, south facing section of rubble layer.	S

Site	Photo Number	Description	Facing
C31079	0020	Context -0008, rubble layer.	SE
C31079	0021	Context -0008, rubble layer.	N
C31079	0022	Context -0008, rubble layer.	S
C31079	0023	Context -0008, rubble layer.	S
C31079	0024	Context -0008, rubble layer.	E
C31079	0025	Context -0008, animal skull.	E
C31079	0026	Context -0008, animal skull.	E
C31079	0027	Context -0008, rubble layer.	E
C31079	0028	Context -0008, rubble layer.	SE
C31079	0029	Context -0008, rubble layer.	S
C31079	0030	Context -0008, rubble layer.	SE
C31079	0031	Context -0008, rubble layer.	SE
C31079	0032	Context -0008, rubble layer.	SE
C31079	0033	Context STR06, pre-ex plan.	N
C31079	0034	Context STR06, oblique pre-ex.	NW
C31079	0035	Context [0024], plan of post-hole.	N
C31079	0036	Context [0024], north facing section of post-hole.	S
C31079	0037	Context [0026], north facing section of post-hole.	S
C31079	0038	Context [0026], plan of post-hole.	S
C31079	0039	Context Natural feature, plan shot.	S
C31079	0040	Context Natural feature, north facing section.	S
C31079	0041	Context [0024], group shot. Also shows Contexts [0026].	S
C31079	0042	Context [0003], pre-ex shot. Also shows Contexts [0005].	SW
C31079	0043	Context [0003], pre-ex shot. Also shows Contexts [0005].	SW

Site	Photo Number	Description	Facing
C31079	0044	void.	-
C31079	0045	Context [0020], north-west facing section of oven.	SE
C31079	0046	Context [0020], section of chute.	SE
C31079	0047	Context [0020], plan of oven.	W
C31079	0048	Context [0020], overall of oven.	NW
C31079	0049	Context [0020], overall of oven.	NW
C31079	0050	Context [0020], plan shot of structure.	-
C31079	0051	Context [0020], plan shot.	W
C31079	0052	Context [0020], oblique shot of oven.	SW
C31079	0053	Context [0020], location shot .	S
C31079	0054	Context [0003], south-west facing section.	NE
C31079	0055	Context [0003], south-west facing section.	NE
C31079	0056	Context [0005], north-west facing section of oven.	SE
C31079	0057	Context [0003], plan sot. Also shows Contexts [0005].	NE
C31079	0058	Context [0003], south facing section.	N
C31079	0059	Context [0003], south facing section.	N
C31079	0060	Context [0003], location shot . Also shows Contexts [0005].	N
C31079	0061	Context Sondage, north facing section.	S
C31079	0062	Context Sondage, north facing section.	S
C31079	0063	Context Sondage, oblique shot.	SW
C31079	0064	Context Sondage, oblique shot.	SW
C31079	0065	Context Sondage, oblique shot.	NE
C31079	0066	Context Sondage, south facing section.	N
C31079	0067	Context Sondage, south facing section.	N

Site	Photo Number	Description	Facing
C31079	0068	Context Sondage, south facing section.	N
C31079	0069	Context Sondage, south facing section.	N
C31079	0070	Context Sondage, west facing section.	E
C31079	0071	Context [0020], oven fully excavated.	N
C31079	0072	Context [0020], plan of oven.	E
C31079	0073	Context [0020], plan of oven.	E
C31079	0074	Context [0020], plan of oven.	S
C31079	0075	Context [0020], plan of oven.	S
C31079	0076	Context [0020], plan of structure.	S
C31079	0077	Context [0020], plan of structure wide shot.	W
C31079	0078	Context [0020], plan of oven.	W
C31079	0079	Context [0020], plan of oven.	E
C31079	0080	Context [0020], plan of oven.	S
C31079	0081	Context [0013], north-west facing section of oven. Also shows Contexts [0015], [0017].	SE
C31079	0082	Context [0013], north-west facing section of oven. Also shows Contexts [0015], [0017].	SE
C31079	0083	Context [0020], plan shot of oven.	E
C31079	0084	Context [0020], plan of structure.	-
C31079	0085	Context [0020], plan of structure.	-
C31079	0086	Context [0020], plan of oven.	-

Area C31080 Photographic Register

Site	Photo Number	Description	Facing
C31080	0087	ID shot.	-
C31080	0088	Context [0029], post-hole section.	-
C31080	0089	Context [0029], post-hole plan.	-
C31080	0090	Context [0031], pit section. Also shows Contexts (0032).	-
C31080	0091	Context [0031], pit plan. Also shows Contexts (0032).	-
C31080	0092	Context [0031], pit section. Also shows Contexts (0032).	-
C31080	0093	Context [0031], pit section. Also shows Contexts (0032).	-
C31080	0094	Context [0031], pit plan. Also shows Contexts (0032).	-
C31080	0095	Context [0031], pit plan. Also shows Contexts (0032).	-
C31080	0096	Context [0033], plan of ditch.	E
C31080	0097	Context [0033], south facing section of ditch.	N
C31080	0098	Context [0033], south facing section of ditch.	N
C31080	0099	Context [0033], south facing section of ditch.	N
C31080	0100	Context [0033], location shot .	S

13.5 Appendix 5: Sample registers

Area C31079 Sample Register

Site	Sample	Context	Volume
C31079	0001	0023	16 litres

13.7 Appendix 7: Figures

Reference: -

1MC12-EKF-EV-MAP-CS10-000041	Map for Fieldwork Report for Construction Integrated Recording at C31079 and C31080 Blackgrounds Farm Northamptonshire
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Figure 1 C31079 and C31080 Site location

Figure 2 Plan of areas C31079 and C31080 in relation to previous excavations

Figure 3 Plan of areas C31079 with previous archaeology

Figure 4 Plan of areas C31080 with previous archaeology

Figure 5 North facing section of post-hole [0024]

Figure 6 Overall shot of demolition layer (0008)

Figure 7 South-west facing section of foundation cut [0003]

Figure 8 Plan shot of [0003] and [0005]

Figure 9 North-west facing section showing [0015] and [0017]

Figure 10 North facing section of oven [0020]

Figure 11 Plan of oven [0020]

Figure 12 Section of post-hole [0029]

Figure 13 Section of Pit [0031]

Figure 14 Plan of ditch [0033]

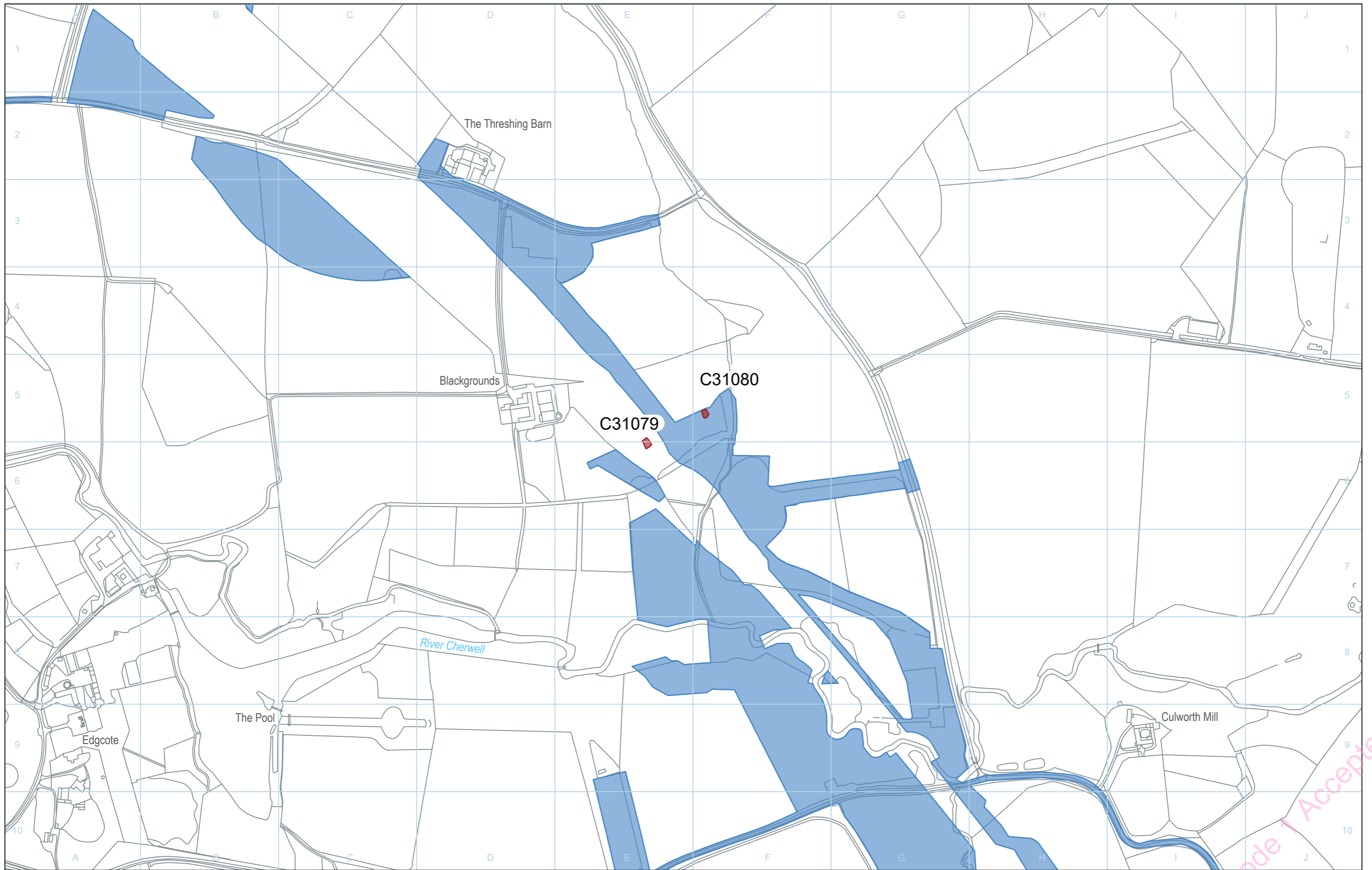
1MC12 - Stage 2 - Main Works Civils for C2 and C3 Sectors

Map for Fieldwork Report for Construction Integrated Recording at C31079 and C31080 Blackgrounds Farm Northamptonshire

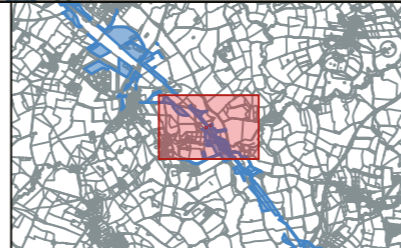
Document no: 1MC12-EKF-EV-MAP-CS10-000041

Revision	Date	Author	Checked by	Approved by	Revision details	EKFB Reviewer (EKFB Contractors only)
C01	28/05/2025	Marc Zubia-Pons	Beata Wieczorek-Oleksy	Ailsa Westgarth	First Issue	Matthew Bolton
C02	08/07/2025	Tom Watson	Beata Wieczorek-Oleksy	Ailsa Westgarth	Revised in Line with comments	Matthew Bolton

Stakeholder review required (SRR)	Purpose of SRR
<input type="checkbox"/> County / District / London Borough Council	<input type="checkbox"/> Acceptance
<input type="checkbox"/> LOV	<input type="checkbox"/> Approval
<input type="checkbox"/> LUL	<input type="checkbox"/> No Objection
<input type="checkbox"/> NRL	<input type="checkbox"/> Consent
<input type="checkbox"/> TFL	
<input type="checkbox"/> Utilities Company	
<input type="checkbox"/> Other (please specify)	



- Legend**
- LLAU
 - limit of excavation



Map Number	Figure 1
Map Name	C31079 and C31080 Site Location
HS2 Phase 2 EKFB	

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- Legend**
- LLAU
 - limit of excavation
 - Headland excavation area
 - MOLA excavation area
 - sondage
 - archaeological feature
 - natural
 - modern
 - structure
 - colluvial deposit
 - alluvial deposit



Map Number
Figure 2

Map Name
**Plan of areas C31079 and C31080
in relation to previous excavations**

HS2 Phase 2 EKFB

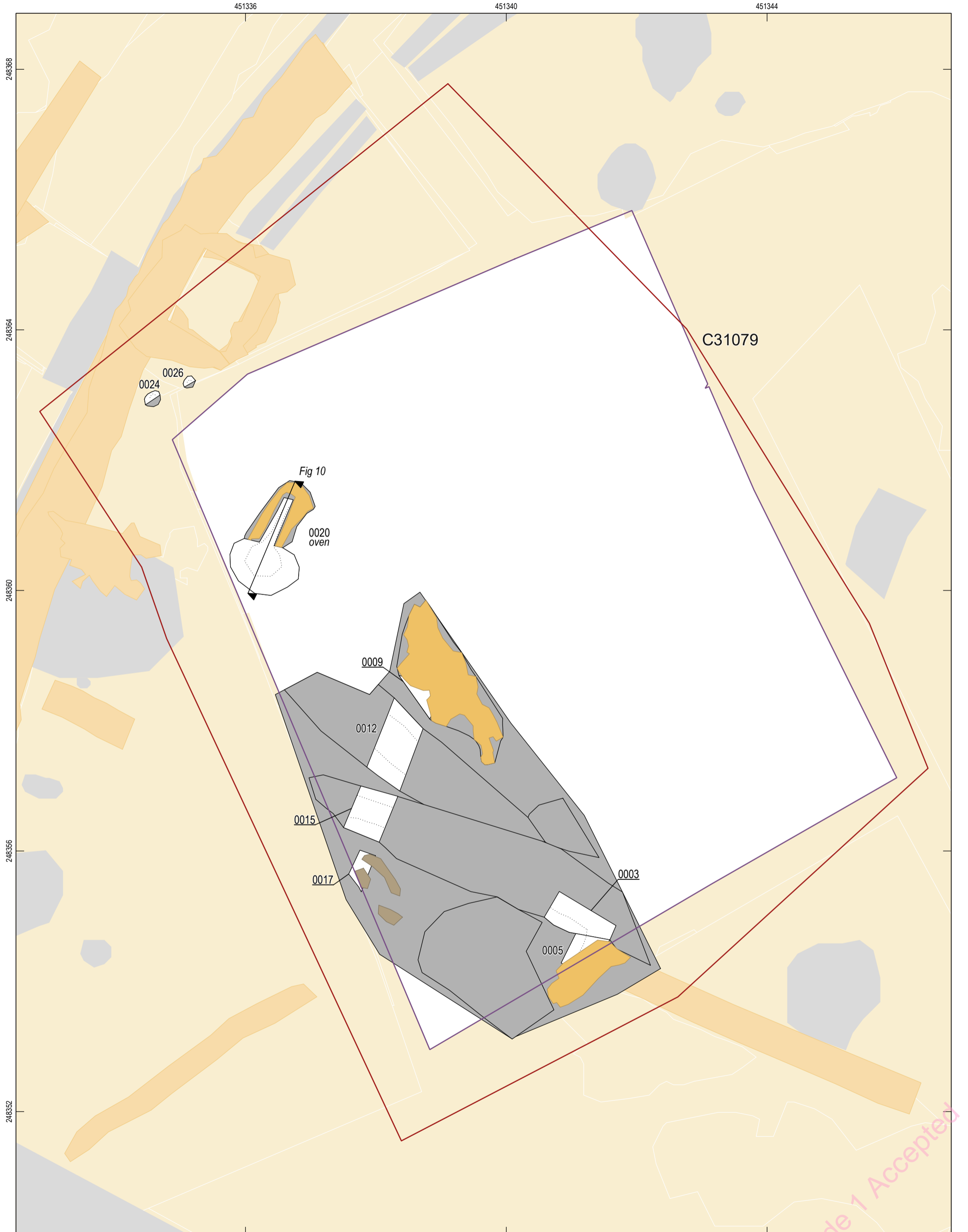
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Legend	
	limit of excavation
	MOLA limit of excavation
	sondage
	MOLA excavated archaeology
	MOLA excavated structure
	colluvial deposit
	archaeological feature
	structure
	rubble

Map Number	Figure 3
Map Name	Plan of C31079 with previous archaeology
HS2 Phase 2 EKFB	

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248408

248404

248400

248396

C31080

0033

0029

0031

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Legend	
	LLAU
	limit of excavation
	MOLA limit of excavation
	archaeological feature
	modern feature
	colluvial deposit


Map Number	Figure 4
Map Name	Plan of C31080 with previous archaeology
HS2 Phase 2 EKFB	



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Map Name	South facing shot of stake hole [0024]	

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Map Name	Overall shot of demolition layer (0008)	

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Map Name	North-east facing shot of ditch [0003]	
		Doc Number: 1MC12-EKF-EV-MAP-CS10-000041_C02 Date: 08/07/25

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Map Number	Figure 8
Map Name	Plan shot of [0003] and [0005]

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Map Number	Figure 9
Map Name	South-east facing shot of [0015] and [0017]

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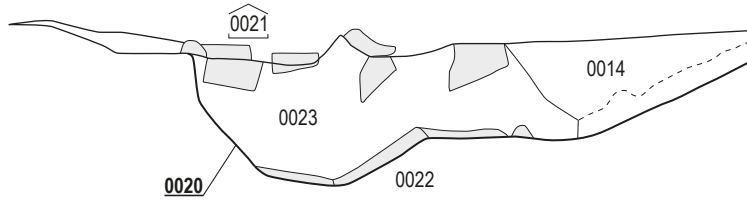
Doc Number: 1MC12-EKF-EV-MAP-CS10-000041_C02 **Date:** 08/07/25

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10
NE

0 1:10 @ A4 1m

75.36m AOD
SW



Legend

 stone

Figure Number

Figure 10

Figure Name

North facing section of oven [0020]

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Map Number	Figure 11
Map Name	Plan shot of oven [0020]

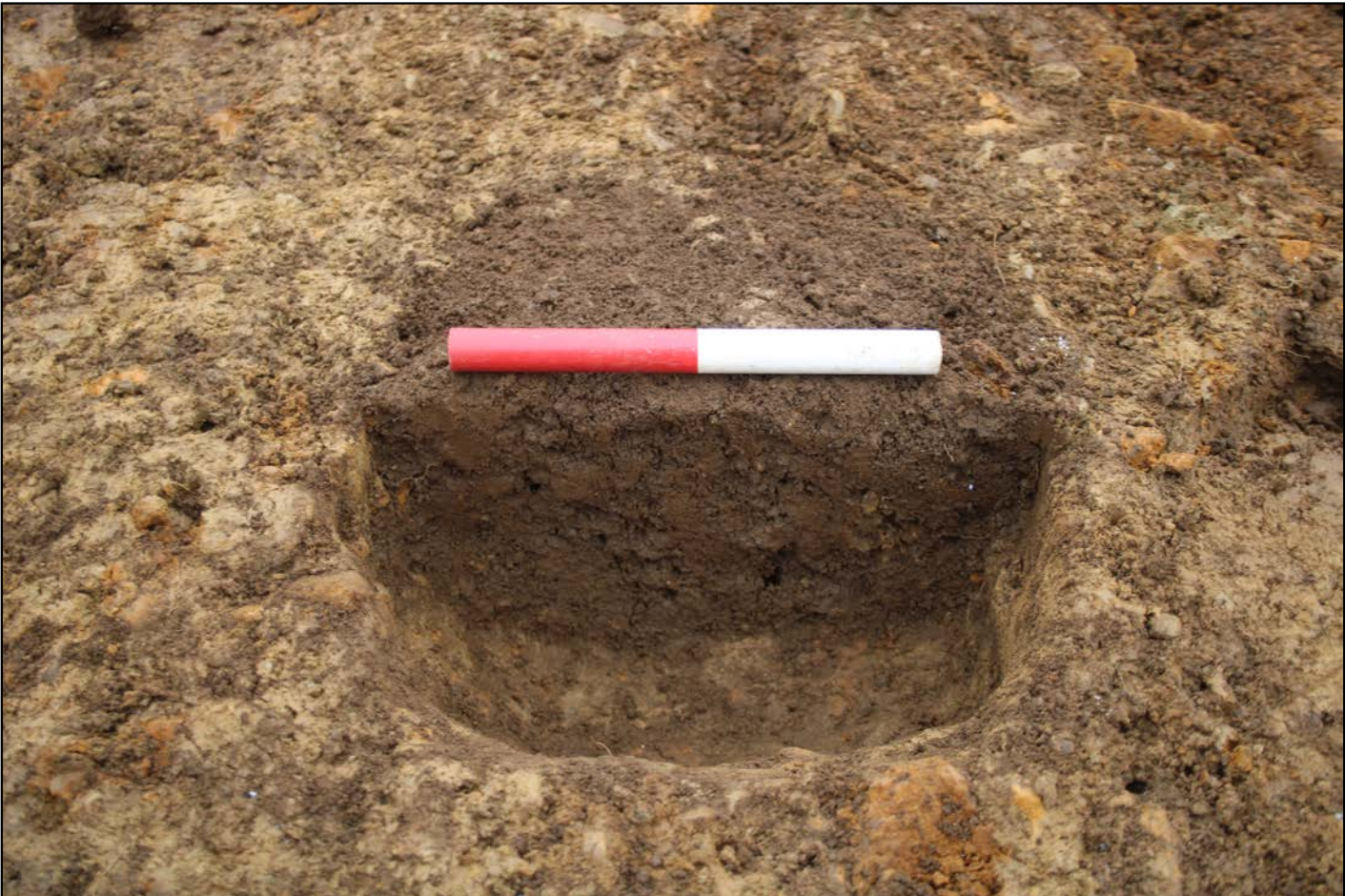
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Map Name	East facing shot of post-hole [0029]	


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Map Name	South facing shot of pit [0031]	

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Map Name	Plan shot of ditch [0033]	

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