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AWH-Fieldwork Report for Trial Trench Evaluation at Culworth Road, Northamptonshire AC310: Site Code 1C20CULTT

Document no.: 1EW03-FUS_MHI-EV-REP-CS07_CL13-000004

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1 Executive summary

1.1.1 An archaeological evaluation was undertaken on land designated as C31033, which lies on the north side of Culworth Road, 600m east of the village of Chipping Warden in Northamptonshire (the Site).

1.1.2 The archaeological works took place in response to the critical path enabling works, 1EW03 Central, which are required prior to the main phase of HS2 and form part of a wider programme of archaeological investigation and recording. Specifically, the work was done to enable the establishment of a construction compound and temporary spoil storage.

1.1.3 The site code for the works is 1C20CULTT.

1.1.4 Previous work included geophysical and remote sensing surveys and suggested the presence of prehistoric, Roman and medieval activity.

1.1.5 The evaluation comprised of 42 trial trenches involving cleaning, excavation and recording of all features encountered.

1.1.6 Although many of the artefacts recovered were found in the topsoil, evidence survived of a passing presence in the Neolithic period as well as Iron Age and Roman field systems.

2 Project Background and Scheme Design

2.1.1 The High Speed Two (HS2) railway network has been proposed by the Government to provide a new link between London, the West and East Midlands, South Yorkshire, Leeds and Manchester. Phase One of HS2 entails the construction of a new railway approximately 230km (143 miles) in length between London and Birmingham. Powers for the construction, operation and maintenance of Phase One are conferred by the High Speed Rail (London - West Midlands) Act 2017.

2.1.2 The Site is required to enable the establishment of a construction compound and temporary spoil storage during the main works.

2.1.3 The framework within which archaeological work was undertaken has been detailed in the Environmental Minimum Requirements (EMR), in particular the Heritage Memorandum, the Code of Construction Practice (CoCP) for HS2 Phase One, the Location Specific Written Scheme of Investigation for Trial Trench Evaluation at Culworth Road, Northamptonshire AC310 (LSWSI, 1EW03-FUS_MHI-EV-REP-CS07_CL13-000001 Revision C01) and the HS2 GWSI: HERDS (HS2-HS2-EV-STR-000-000015).

2.1.4 Specific GWSI: HERDS objectives appropriate to the Site were identified in the Project Plan for a Trial Trench evaluation at Culworth Road, Northamptonshire AC 310 (Project Plan, 1EW03-FUS-EV-REP-CS07_CL13-004398) and are listed in Section 6 of this report.

3 Site Location

3.1.1 The Site (NGR centre 450691 248951) consists of a single land parcel, along the north side of Culworth Road (1C20CULTT) comprised of parts of two adjacent fields on a level plateau overlooking the valley of the River Cherwell, which lies c.600m to the south, and covers a total area of 7.53ha.

3.1.2 The Site is located within Community Forum Area 15, Greatworth to Lower Boddington, in the county of Northamptonshire in the historic parish of Chipping Warden. The village of Chipping Warden is located c.600m to the west of the Site (Figure 1).

4 Geology and Topography

4.1.1 The British Geological Survey (BGS 2019) maps the underlying bedrock geology across the Site as ferruginous limestone and ironstone of the Marlstone Rock Formation, having formed approximately 174 to 191 million years ago in the Jurassic Period, in shallow sea environments. Close to the north of the Site, and possibly within the northern boundary, lies an interface with Whitby Mudstone, and interbedded siltstone and mudstone of the Dyrham Formation may be encountered in the south-east corner.

4.1.2 No superficial drift geology has been recorded as overlying the bedrock geology within the Site. The parent material gives rise to slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils across most of the Site. Corresponding with the extent of Marlstone Rock Formation deposits are freely draining slightly acid but base-rich soils in the north-eastern part of the Site (Soilscapes 2019).

4.1.3 Site 1C20CULTT is located on level, well-drained ground on a plateau overlooking the Cherwell Valley to the south at an altitude of c. 128m AOD.

5 Previous Works

5.1 Introduction

5.1.1 The Site is located within Archaeological Sub-Zone (ASZ) 15-28 Rising ground north of Blackgrounds, characterised by a post-enclosure landscape with some areas of remnant medieval ridge and furrow earthworks. This location, on a plateau or upper

slopes of a river valley presents a typical location for prehistoric activity, however, the known presence of nearby settlements, i.e. Blackgrounds (GLB138, 144) and Jobs Hill (GLB149, 155), suggest a lower potential for further settlement to be encountered within such close proximity.

5.1.2 The archaeological character and potential of the Site and its environs is largely suggested by the results of several phases of geophysical survey, supported by remote sensing survey and trial trench evaluation.

5.1.3 The following documents detail works relevant to the archaeology of the Site and are summarised within this section:

- HS2 Phase One Environmental Statement (ES 3.5.2.16.4-7)
- HS2 2013 LiDAR and remote sensing survey report
- HS2 Geophysical Survey Report – Rural South – Northamptonshire – 2016. CW0AA, C252-ETM-EV-REP-020-000264_P01
- HS2 Geophysical Survey Report: CA034 Land at Wills Estate, 2016. 1D037-EDP-EV-REP-040-000020
- HS2 Geophysical Magnetometer Survey at Chipping Warden, Chipping Warden Green Tunnel, 2018. 1EW03-FUS-EV-REP-CS07_CL13-004388
- Trial Trench evaluation, 2018, Chipping Warden relief road, 1EW03-FUS-GL-REP-CS07_CL13-002336
- HS2 Geophysical Magnetometer Survey at Culworth Road, Edgcote Cutting, Northamptonshire. SUMO 2019 - report forthcoming (amalgamating work on the Site itself and on land to the immediate south of Culworth Road).

5.1.4 The Project Plan for the trial trench evaluation (1EW03-FUS-EV-REP-CS07_CL13-004398) contains a detailed archaeological baseline for the Site. A summary of the archaeological background and previous works relevant to the archaeology of the Site is included below.

5.1.5 Following the conclusion of the trial trench evaluation the results of the work were briefly summarised in an interim report, AWH-Interim Report for Trial Trench Evaluation at Culworth Road Northamptonshire AC310 Site Code: 1C20CULTT (1EW03-FUS_MHI-EV-REP-CS07_CL13-000002).

5.2 Prehistoric (950,000BC – 43 AD)

5.2.1 Little in the way of early prehistoric activity has been recorded within the vicinity of the Site. Several flint flakes of possible late Mesolithic/early Neolithic date, along with two Neolithic flint blades were recovered near Edgcote Roman villa, some 500m south

of the site. This evidence, however, is thought to be too slight to indicate any sort of settlement and probably reflects more of a passing presence in this period. A more definite indication of Neolithic activity is a long barrow funerary monument, first partially excavated in 1824 at the north end of Chipping Warden, 600m to the west of the site (MNN17806). Subsequent investigations in the late 19th and late 20th century recovered human remains associated with the use of the long barrow.

5.2.2 Two ring ditches of either roundhouses or barrows and thought to date to the Bronze Age, were first observed by aerial photography c.700m to the west of the Site. These were targeted in an evaluation carried out in 2018, although no dateable material was recovered (1EW03-FUS-GL-REP-CS07_CL13-002336).

5.2.3 Settlements dated to the Iron Age are often located in prominent positions and one such example is to be found at Arbury Camp or Arbury Banks, c.1km west of the site, slightly to the southwest of Chipping Warden (GLB152, MNN214, List UID: 1003893). Its banks had been protected by the establishment of medieval field systems and a windmill had been built on its outer bank in the post-medieval period.

5.2.4 Potential areas for further evidence of Iron Age settlement were thought to lie between Trafford Bridge and Blackgrounds Farm, with Welsh Road as a possible late prehistoric trackway. This proved correct with the results from a geophysical survey showing the presence of rectilinear enclosures, roundhouses and other features c.500m southeast of the site (see Fig 4, ES 3.5.2.16.7).

5.2.5 Further geophysical surveys conducted on the site and on land immediately to the south (SUMO 2019 – forthcoming report) revealed many possible features, mostly in the southern area, that might point to a northern extension to the settlement to the east of Blackgrounds Farm mentioned above. A curvilinear feature seen on the western area of the Site and continuing south could be a boundary ditch representing the northern extent of the settlement.

5.2.6 Cropmarks, whose form and composition suggest a late prehistoric or Romano-British date have been recorded at various locations using aerial photography. These have been observed between Calves Copse and Jobs Barn, between Warden Hill Covert and Horseclose Spinney and at Arbury Banks. Small enclosures and other assorted linear features have been seen on either side of Drunken Meadow Spinney.

5.3 Romano-British (AD 43-410)

5.3.1 The most obvious indication of a Roman presence in the area is the villa complex located near Blackgrounds Farm, almost 600m to the south of the Site (GLB138; List UID: 1006616). Investigations in the 1840's revealed a bath-house, tessellated flooring and several burials. The amount of pottery recovered from the surrounding area is sufficient to indicate a production site. This in turn may suggest the presence of a

small roadside settlement, with Welsh Road to the east as a strong candidate for a Roman road leading to the Roman settlement at Brackley.

5.4 Early medieval (AD 410-1066)

5.4.1 Very little physical evidence relating to the early medieval period has been found in the vicinity of the Site with only a single sherd of Middle Saxon Ipswich ware pottery (AD 660-899) found near the Roman villa complex. Welsh Road is thought to have continued in use and linked the Anglo-Saxon towns of Buckingham and Warwick. The settlements of Edgcote and Trafford are mentioned in the Domesday Book, but Chipping Warden is not and may have been abandoned by the late 11th century.

5.5 Medieval (1066-1539)

5.5.1 The settlement of Chipping Warden developed in the later medieval period and is likely to have been centred around the Grade I Listed Church of St Peter and St Paul (MNN8105, List UID: 1041206), while a moated site (GLB143), likely to represent the location of the manorial seat, has been identified further south. Both of these are c.600m to the west of the Site.

5.5.2 Recent geophysical surveys have identified ridge and furrow remains across the Site (SUMO 2019 – report forthcoming).

5.5.3 Trial trench evaluation undertaken to the immediate south of Culworth Road and the Site encountered numerous remnant furrows, truncating earlier prehistoric and Roman features (1EW03-FUS-EV-REPCS07_CL26-008121).

5.6 Post-medieval (AD 1539-present)

5.6.1 From the 16th century onwards the character of the area remained rural with evidence of gradual enclosure of the landscape becoming more intense in the 18th century. Fragments of the medieval field system survived within the Site and were recorded during the remote sensing survey (see Fig 3, ES 3.5.2.15.7).

6 Aims and Specific Objectives

6.1.1 The full aims and objectives for the archaeological trial trenching can be found in Section 4 of the Project Plan (1EW03-FUS-EV-REP-CS07_CL13-004398). Trial trench investigation provides the most suitable method for the recovery of archaeological evidence to inform the research objectives.

General Aims

6.1.2 The aims of the trial trenching were to:

- Confirm the presence/absence, extent and depth of any surviving archaeological

remains within the Site;

- Determine the nature, date, condition, state of preservation, complexity and significance of any archaeological remains;
- Determine the likely range, quality and quantity of artefactual and environmental evidence present;
- Suggest measures, if appropriate and feasible, for further archaeological investigation to mitigate identified significant impacts; and
- Contribute to the delivery of GWSI: HERDS Specific Objectives.

Specific HERDS Objectives

6.1.3 Through delivery of the works set out in Section 5 and through addressing the aims set out in 4.1, the trial trench evaluation will create knowledge and outputs that would contribute to the following specific objectives in the following ways:

- KC5: Identifying settlement location and developing models for settlement patterns for the Mesolithic, Neolithic and Early Bronze Age.
- KC15: Can we identify regional patterns in the in the form and location of Late Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure?
- KC16: Investigate the degree of continuity that existed between Late Bronze Age and Iron Age communities in terms of population, mobility and subsistence strategies.
- KC18: Explore the evidence for increasing social complexity in the archaeological record in the Late Bronze Age and Iron Age, and identify patterns of intra-regional and regional variation.
- 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?
- KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.
- KC25: Characterise the nature of the Romano British activity in the hinterland to the Edgcote Roman villa, and investigate the possibility that it developed from an Iron Age precursor.
- KC29: Can regional and cultural distinctiveness in the Romano-British period be defined through systematic surface collection?

- KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century.
- KC47: Test and develop geophysical survey methodologies.
- KC49: Ground truth and develop multispectral and LiDAR prospection techniques.

7 Scope and Methodology

7.1 Scope

7.1.1 The archaeological work consisted of the excavation and recording of trial trenches which took place between July and August 2020. The work was undertaken in accordance with a Project Plan (1EW03-FUS-EV-REP-CS07_CL13-004398) and a LSWSI (1EW03-FUS_EV-REP-CS07-CL13-000001).

7.1.2 Guidance for the fieldwork is provided in the Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS, HS2-HS2-EV-STR-000-000015) and the Technical Standard Specification for historic environment investigations (HS2-HS2-EV-STD-000-000035).

7.2 Methodology

7.2.1 The archaeological evaluation of the site was undertaken during July and August 2020 and 42 trenches were excavated as per the Project Plan and LSWSI as follows:

- 3 no. 60m by 2m trenches
- 2 No. 30m by 4m trenches
- 37 No. 30 x 2m trenches

7.2.2 This represents an approximate 3–4% sample of the available areas of the Site.

7.2.3 Exploratory test pits were excavated at each trench location to recover artefacts from the topsoil and upper subsoil horizons. Three test pits were excavated at each trench location: one at either end and one in the centre. This gives a total of 126 test pits. Samples were recovered using the mechanical excavator equipped with a toothless bucket and placed on plastic sheeting adjacent to the pit.

7.2.4 The trial trenching scope included a 400m² contingency equating to c. 4 no trenches measuring 50m (l) by 2m (w). The purpose of the contingency was to investigate any significant or unexpected remains (see Section 6.12 of the LSWSI, Document no. 1EW03-FUS_MHI-EV-REP-CS07_CL13-000001) during the archaeological evaluation. The extension of trial trenches under this contingency was not undertaken.

7.2.5 The trenches were positioned to avoid identified constraints (see Section 2.4 of the LSWSI, Document no. 1EW03-FUS_MHI-EV-REP-CS07_CL13-000001).

Change control

7.2.6 During the archaeological investigation four trenches were moved after consultation with Fusion/HERDS.

7.2.7 Trenches 3 and 4 were realigned slightly to accommodate the installation of track matting for the welfare compound.

7.2.8 Trench 30 was too close to the farmer's fence-line, which ran within the site boundary, so was moved 5m southwest to accommodate a spoil mound on its eastern side.

7.2.9 Trench 41 was realigned so that it ran perpendicular across a set of ridge and furrow to allow for more informative recording.

7.2.10 One trench (Trench 5) was not completed due to the presence of asbestos

7.2.11 A 10m section of Trench 42 was left unexcavated due to the presence of a previously unknown buried service. The service was identified by VISION in advance of trenching but was not indicated in the PAS128 survey. On consultation with Fusion/HERDS a 5m exclusion zone was created either side of the buried service.

Setting out and recording

7.2.12 Trial trenches were located to a horizontal accuracy of ±0.5m and were set out with Global Navigation Satellite System (GNSS) equipment with Real Time Kinematic (RTK) corrections from the Leica Smartnet service.

7.2.13 Trial trench limits, height data and significant archaeology was recorded 'as dug' using RTK GNSS equipment to a 3-dimensional accuracy of ±100mm.

7.2.14 Geochemical and geoarchaeological sampling points were located to a horizontal accuracy of ±0.5m and were set out with Global Navigation Satellite System (GNSS) equipment with Real Time Kinematic (RTK) corrections from the Leica Smartnet service.

Artefact recovery

7.2.15 Prior to the machine excavation of the trenches, exploratory test pits measuring 0.50m x 0.50m were excavated at each end of each evaluation trench to recover any artefacts present in the topsoil.

7.2.16 Metal detecting was undertaken by an experienced member of staff prior to the trench being machine excavated and at 300mm depth intervals where appropriate.

Machine excavation

7.2.17 Trenches were excavated to either the first archaeological horizon or the natural substrate, whichever was reached first, using a mechanical excavator fitted with a toothless ditching bucket under the continuous supervision of a competent archaeologist.

7.2.18 A cable avoidance tool (CAT) was used prior to machine excavation of each trench and then at 300mm excavated spits where required.

7.2.19 Topsoil and the interface between topsoil and the natural substrate were stripped and stored separately on either side of the trench, as per the Technical standard: Route Wide Soil Resource Plan (HS2-HS2-EV-STD-000-000008).

Hand excavation

7.2.20 Archaeological hand excavation was undertaken according to the requirements described in the GWSI: HERDS and the Technical Standard Specification for historic environment investigations (Document No. HS2-HS2-EV-STD-000- 000035; section 4.14 and 4.17). The sufficient sample strategy will be guided by the CIfA Standard and guidance for archaeological field evaluation (2014), as well as, where applicable, Local Planning Authority guidance documents, detailed in the LSWSI. A sufficient sample of the features and deposits encountered were sampled/fully excavated to allow the resolution of the aims and objectives of the work.

7.2.21 All investigation of archaeological levels was undertaken by hand, with cleaning, examination and recording both in plan and section.

7.2.22 Within significant archaeological levels, the minimum number and proportion of features required to meet the aims of the evaluation were hand excavated. Pits and postholes were subject to a 50% sample by volume, at sufficient frequency to characterise the archaeological activity across the Site. Linear features were sectioned as appropriate.

Fieldwork recording

7.2.23 The requirements for fieldwork recording are set out in paragraphs 5.2.25 – 5.2.31 of the Project Plan. All archaeological recording was carried out in accordance with the general requirements as described in the GWSI: HERDS and the HS2 Technical Standard for Historic Environment Investigations (Document No. HS2-HS2-EVSTD-000-000035).

7.2.24 The recording of trenches, the nature and level of all horizons they contain, and all archaeological contexts encountered within them was carried out digitally, on Apple iPad Pro tablets, using pro-forma templates created in i-Auditor that were based on the normal MOLA Fieldwork Recording Manual. All archaeological features display the relevant accession/event number for the site and were given a unique context

number. The digital context sheets include details of the context, its relationships, interpretation and a checklist of associated finds or samples taken. The digital approach ensured that all data collected was backed up to the cloud every 15 minutes in the presence of a signal or cached and backed up as and when a signal was present.

7.2.25 All context numbers consist of the Trench number followed by the context number (e.g. Context 105 = Trench 1, context 05; Context 2311 = Trench 23, context 11). All context numbers ending 01 = topsoil and all context numbers ending 02 = subsoil (e.g. Context 101 = Trench 1 topsoil; Context 2302 = Trench 23 subsoil).

Environmental Sampling

7.2.26 The requirements for developing an environmental sampling strategy are set out in paragraphs 5.2.34 – 5.2.45 of the Project Plan.

7.2.27 In line with the Employer's Technical Standard Specification for Historic Environment Investigations (Document No. HS2-HS2-EV0STD-000-000035) an initial sampling strategy is set out below for the Site. This strategy is based on the existing information about the Site, gathered from nonintrusive surveys and the HERDS objectives.

7.2.28 This sample strategy, along with the HERDS objectives, identified the key elements that should, where present, be sampled during the evaluation. However, there was scope for the strategy to be reviewed throughout the on-site work and, if necessary, revised accordingly and in consultation with the HERDS manager.

7.2.29 The purpose of sampling at the evaluation stage was to identify the range of environmental materials present on site, their preservation, significance and distribution.

7.2.30 The Site had the potential for features associated with late prehistoric/Roman peripheral settlement activity as well as medieval agricultural features, as identified in Section 2. Sampling targeted the following, where present, as a minimum:

- Archaeological features identified as cropmarks or geophysical anomalies which are likely associated with potentially prehistoric, Roman or medieval activity (i.e. ditches, gullies, earthworks) as well as other relevant remains (i.e. pits or postholes); and
- Deposits representing the main phases of activity on site (to assess whether there are changes in rates of deposition or material survival over time).

7.2.31 Sampling was undertaken on those features outlined above, taking into account advice from MOLA's environmental archaeologist. This ensured that samples were recovered from a representative range of contexts, which adequately characterise past activities on site and allowed an assessment to be made of the extent to which they help address palaeoenvironmental and paleoecologic questions.

7.2.32 All samples were taken to address a specific question. The purpose of the sample and the question it addressed will be recorded on a Site-specific sample record sheet.

7.2.33 Samples were taken using ten litre plastic buckets (with lids and handles), or strong polythene bags (double bagged) secured at the neck, for the recovery of bulk 'disturbed' environmental samples. Labelling followed guidance set out in the Technical Standard Specification for Historic Environment Investigations (Document No. HS2-HS2-EV-STD-000-000035).

7.2.34 The preservation state, density and significance of material retrieved was assessed by MOLA's recognised specialist, Sander Aerts. Special consideration shall be given to any evidence for recent changes in preservation conditions that may have been caused by alterations in the site environment.

8 Results of Trial Trench Evaluation

8.1 Stratigraphic report

8.1.1 In total, 42 trenches were excavated across two fields across one land parcel C31033, measuring 7.53 hectares (see Figures 1 and 2). Of the 42 trenches, 14 contained archaeological features, predominantly furrows. Finds from the site included Neolithic and Bronze Age flints, Iron Age, Roman, Medieval and Post-Medieval pottery, in addition to clay building material, clay tobacco pipe and animal bone. The most significant find was part of a musical instrument fashioned from bone that was recovered from subsoil and is probably medieval in date.

8.1.2 The depth at which natural geology or archaeology was encountered varied across the site between 0.1m and 0.7m below ground Level (BGL). The natural geology generally comprised mixed mid-brown or yellowish-brown compacted clay and yellow/brown mudstone over patches and bands of ironstone. Topsoil and subsoil depths varied erratically across the site. Topsoil measured between 0.07m and 0.32m deep and generally comprised mid-brown silty clay loam. Subsoil measured 0.1m to 0.35m in depth and was similar to the topsoil but more compact.

8.1.3 Trenches 2, 4, 5, 7, 9, 11, 12, 14, 19, 20, 25, 26, 27, 30, 33, 34, 37, 38, [illegible] and 42 contained no archaeology or finds.

8.1.4 Prehistoric evidence comprised five pieces of worked flint. The assemblage consisted of three flakes, one blade and one leaf-shaped arrowhead (3702) dating from the Early Neolithic to the Bronze Age. The flints were recovered from a pit in Trench 17 (1708), a pit or gully terminal in Trench 31 (3104; see Figure 4), a ditch in Trench 36 (3606), a furrow in Trench 35 (3504) and from the subsoil in Trench 37 (3702). All but the flint in Trench 31 was residual. The shallow, semi-circular pit/gully terminal [3105] in Trench

31 measured 0.9m wide by 0.25m deep and had a flat base and a single fill of compact clay (3104). It included no other dating evidence.

8.1.5 An Iron Age ditch [1505] was investigated in Trench 15 (see Figure 3). The parallel-sided, linear ditch had a V-shaped profile, a flat base and a single fill (1504) of sandy clay. It was 1.2m wide by 0.5m deep, aligned northwest–southeast and possibly functioned as a field boundary ditch. It contained animal bone and Iron Age pottery (too abraded to date precisely).

8.1.6 A Roman ditch [3209] oriented northeast–southwest was excavated in Trench 32. It had steep sides, a flat base and a single fill (3208) and measured 0.84m wide by 0.24m deep. The ditch possibly marked a field boundary and contained pottery dating c.AD40–410.

8.1.7 Residual Roman pottery dating to AD 150–410 was also found within the subsoil (3702) of Trench 37.

8.1.8 Medieval–post-medieval furrows were found across much of the site. They were aligned north-west to south-east, north to south and north-east to south-west, suggesting they formed parts of at least two ridge and furrow field systems (extant ridge and furrow was present in Field 2, at the eastern end of the site). A sample number of furrows were excavated and survived to depths of 0.1m to 0.25m. The furrows ranged in widths from 0.48m to 2.03m, with the majority between c.0.7 and 1.3m wide.

8.1.9 Medieval and post-medieval pottery was recovered from across the site, in trenches 7, 8, 13, 14, 15, 18, 25, 31, 33, 35, 38 and 42, but no sherds were recovered from secure contexts. This pottery was found redeposited within the topsoil and subsoil and probably derives from manuring scatters associated with agricultural practices.

8.1.10 Finds recovered from test pits through bucket sampling comprised four sherds of post-medieval pottery, two fragments of clay tobacco pipe, one modern drain fragment and two post-medieval brick fragments (Appendix 13).

8.2 Pottery report

8.2.1 Fifteen sherds of Iron Age and Roman pottery weighing 69g were recovered from three contexts. This pottery has been quantified using codes deriving from the fabric recording system under development for MOLA Northampton and is summarised in Appendix 5. The following fabrics have been identified:

Iron Age

8.2.2 SHC – Common voids resulting from leeching of shell inclusions, in sizes up to >2mm in maximum dimension. Mottled firing and probably hand built.

8.2.3 SAM – Common rounded quartz sand inclusions, up to 1-2mm in maximum dimension. Reduced firing. Probably hand built.

8.2.4 MIF – Entirely lacking in inclusions apart from fine white mica. Mottled firing. Hand-built.

Roman

8.2.5 C – unsourced medium sandy greyware.

8.2.6 LNV WH? – Pale cream/white fabric with sparse rounded quartz and rounded red-brown clay pellets. Maybe Lower Nene Valley white ware.

8.2.7 Fabrics are quantified by context in where chronological information is also provided.

Discussion

8.2.8 Fabrics are typical for the period and region. Shelly and sandy wares such as SHC and SAM are common in assemblages of Iron Age date in Northamptonshire. There is only one rim, from a slack-shouldered jar, in fabric MIF; a long-lived type which is characteristic of the Middle Iron Age but could be Early Iron Age. In the absence of a more complete profile it is impossible to date this rim, or any of the group from (1504), more precisely than to the period c.800– 1 BC.

8.2.9 Fabric C is a general category for unsourced Roman greywares. Such finds are common and cannot be dated any more precisely than to the Roman period, c.AD40–410, in the absence of an identifiable form or decoration. The Nene Valley white ware, if correctly identified, would date to the period c.AD 150–410.

8.2.10 All of this pottery is highly fragmentary and abraded and may be entirely residual in the contexts of recovery.

Recommendations

8.2.11 This assemblage has no analytical value other than in establishing the chronology of the evaluation area. Discard is recommended.

The medieval and post-medieval pottery

8.2.12 A total of 22 sherds of medieval and post-medieval pottery, weighing 440gms with an average sherd weight of 20gm, were recovered from the site. The material was examined under a x10 binocular microscope and recorded according to current standards (MPRG 1998, MPRG 2016). An MS Excel workbook was used to record the material by context, fabric code, fabric name, count, weight (g), maximum vessel number, vessel form, vessel part and approximate date range. This is summarised in Appendices 6-8. The Northamptonshire Type-Series was used for the identification of fabrics. The pottery present ranges in date from the 12th century to the 20th century.

8.2.13 The fills that the pottery was recovered from were topsoil and subsoil, suggesting a lack of well-stratified primary deposits. The assemblage was in relatively good condition with a good average sherd weight and minimal levels of abrasion. However, the surviving vessel parts were mainly body sherds and as not many rims survived, limited vessel form identification was possible. The only co-joining sherds were three sherds of iron-glazed coarseware from (4202), leaving the overall maximum vessel count for the assemblage at 20.

8.2.14 The high medieval assemblage consists of fabrics commonly found in the county, and specifically south Northamptonshire. The presence of Brackley whiteware and Banbury ware is unsurprising given the proximity of the site to both towns. Identifiable vessel forms included a jug from (1802) and a jar from (3102). Slightly higher levels of abrasion were noted on the high medieval assemblage compared to the post-medieval assemblage, but this was not extensive and could reflect the soil conditions in trenches 18, 25, and 31.

Discussion

8.2.15 Post-medieval and early modern pottery makes up the majority of the assemblage, accounting for approximately 77% by count and by weight. The post-medieval pottery was all identified as fabrics commonly found across the county and the Midlands. No rims survived from the post-medieval assemblage and no decoration of note was recorded.

8.2.16 Overall, the medieval and post-medieval pottery assemblage was in good condition and was typical for the area. The assemblage could indicate some low-level domestic activity at the site during the post-medieval and early modern period, but this is not conclusive due to the lack of well-stratified deposits. The lack of rims present in the post-medieval assemblage may also indicate that this not a primary deposition. Further excavation could shed more light on this possibility, but no further work is required on this material.

8.3 The clay tobacco pipe

8.3.1 Two stem fragments weighing 6g were recovered from fill (3501) and are summarised in Appendix 9. The fragments were up to 32mm in length and no decoration was recorded on either fragment. Based on the borehole sizes, these fragments date from approximately the 18th to the 19th century. This is due to the reduction in hole diameter over time as techniques changed and finer wire was used.

8.3.2 No further work is required, and discard is recommended.

8.4 The ceramic building material (CBM)

8.4.1 A very small collection of post-medieval to modern brick, tile and drain was recovered. It is unlikely any of the CBM dates before the 18th century. The material comprised:

8.4.2 Context (1301): One modern drain fragment (74g) and a post-medieval brick fragment (174g).

8.4.3 Context (1802): One post-medieval roof tile fragment (44g) in a hard orange full oxidised sandy fabric and one post-medieval brick fragment (55g). 5.5.4 Context (2802): One post-medieval roof tile fragment (117g) in a hard orange fully oxidised sandy fabric.

8.4.4 Context (3001): One post-medieval brick fragment (60g).

8.4.5 Context (3602): One post-medieval roof tile fragment (124g) in a hard orange fully oxidised sandy fabric.

8.4.6 Context (4202): One post-medieval roof tile fragment (37g) in a hard orange fully oxidised sandy fabric

8.5 Animal bone

8.5.1 The Site produced a small assemblage of hand-collected animal bone from four different contexts and are summarised in Appendix 10. The remains are poorly to moderately well preserved, with most showing traces of abrasion.

8.5.2 The primary quantification method was NISP (number of identified specimens per taxon), where identification was attempted on all bone fragments with diagnostic features. Fragments that were not identifiable to species were recorded to size categories large mammal (cattle-sized) and medium mammal (sheep-sized). Due to the similarities in skeletal morphology of sheep and goats the term 'ovicaprid' was employed for both taxa.

8.5.3 Fill (106) produced an ovicaprid distal tibia fragment. Fill (1504) produced most of the remains, including teeth of cattle, horse and ovicaprid. A cattle humerus was also identified, showing traces of carnivore gnawing. Fill (3604) produced a single cattle molar.

8.5.4 A worked bone fragment strongly resembling the bridge of a stringed musical instrument was recovered from subsoil (2502) in Trench 25 (*Image 1*). The fragment is 36mm long, 15mm tall, 5mm wide and weighs 4 grams. It is slightly abraded but appears otherwise complete. Although recovered from subsoil, the object was found along with a ceramic jar fragment dating between AD 1100–1400. The object includes four equally spaced grooves that are visibly polished, which could be explained by the former presence of strings. A number of medieval instruments would have had four

strings. No direct parallels have been identified at this point, but a similar example has been described in Biddle 1990, fig 202.

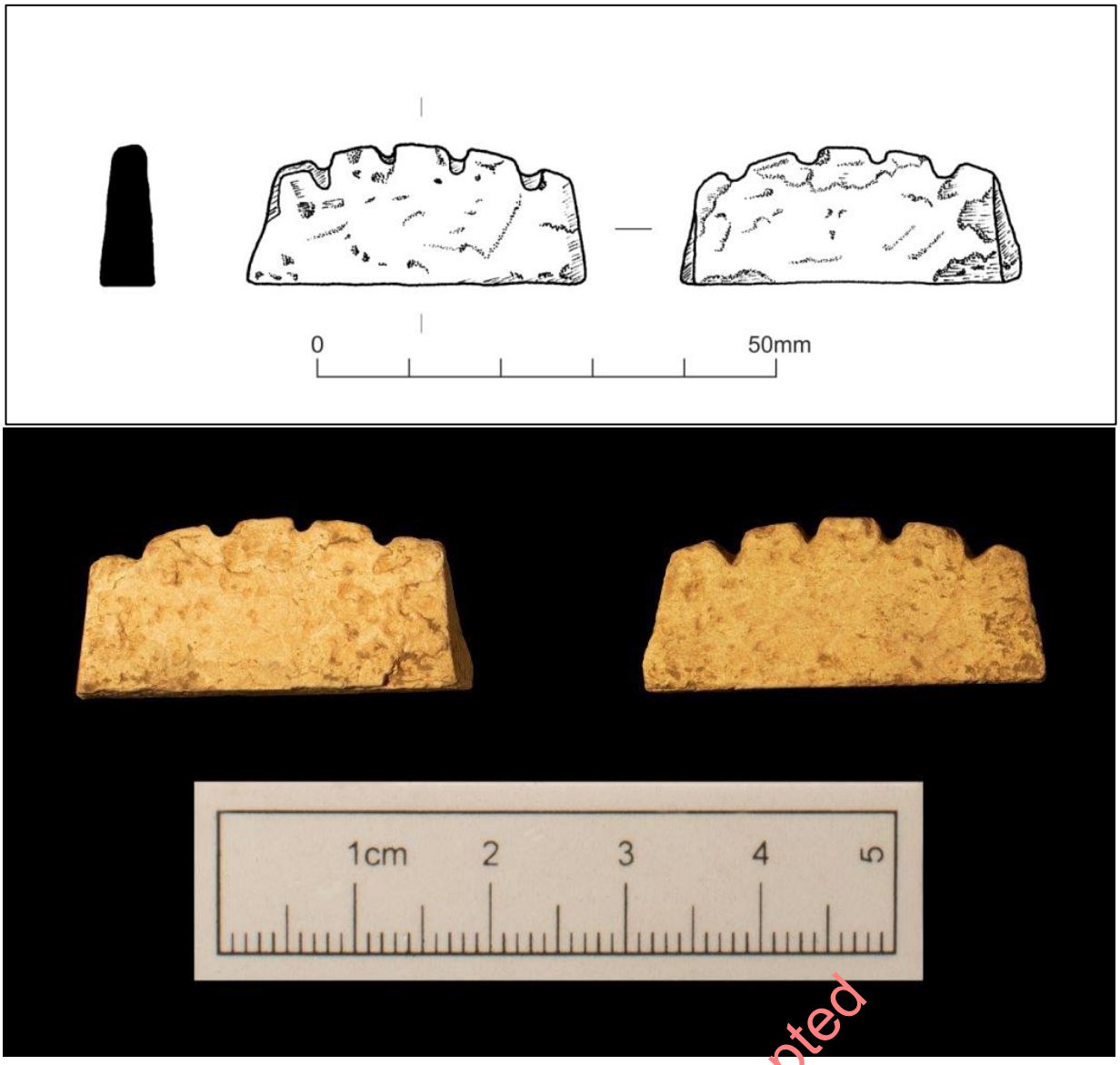

Image 1 The bridge of a musical instrument made of animal bone dating to the medieval period

8.6 Worked flint

8.6.1 In total five pieces of worked flint were recovered from five trenches, and comprised three flakes, one blade and one leaf-shaped arrowhead. The artefacts are summarised in Appendix 11.

Raw material and condition

8.6.2 The condition of the flints was moderate. They had occasional post-depositional edge damage consisting of occasional nicks to the edges or on one occasion some crushing to the edges. The raw material is a mid to dark grey-brown or light grey vitreous flint. The raw material was likely to have originated from local gravel or river deposits.

Assemblage composition

8.6.3 The assemblage comprises of three waste flakes, of which one is broken, one distal portion of a blade, and a leaf-shaped arrowhead.

8.6.4 The only tool form present is the leaf-shaped arrowhead. The arrowhead has bi-facial invasive retouch around one lateral edge and the tip, the other edge is shaped through semi-abrupt retouch.

Discussion

8.6.5 The technological characteristic of the assemblage is not dateable but is generally a Neolithic to early Bronze Age date. The leaf-shaped arrowhead is Early Neolithic.

8.7 Interim Environmental summary

8.7.1 A total of nine environmental soil samples from three different features were submitted for paleoenvironmental analysis and are summarised in Appendix 12. The samples were processed in their entirety at MOLA Northampton using siraf tank flotation. The remains were sorted and identified using a lowpower binocular microscope (Brunel MX1) with a maximum magnification of 40x.

8.7.2 An overview of the identified remains is given. All environmental remains, with the exception of few singular charcoal fragments from trenches 31 and 36, are modern dewatered seeds. These include a fragmented bean-type seed (Fabaceae), grasses (Poaceae) and a fool's parsley seed (Aethusa cynapium).

8.7.3 No work further work is required on this assemblage. It would be recommended to discard the flots as they hold no research value.

9 Assessment and interpretation of results

9.1.1 The natural geology encountered across the Site was confirmed as mixed compacted clay and mudstone overlying bands of ironstone and lay between 0.1m and 0.7m below ground current level.

9.1.2 The recovery of four flint flakes and one flint blade points to a probable passing or marginal presence during the Neolithic to Early Bronze Age period. One flake was recovered from the topsoil whilst the rest of the assemblage was recovered from features. Only one of these, however, was found in a secure context (a small pit or the terminus of a linear feature) but given that it was the only dateable object within the feature, it cannot be presumed that that feature itself can be attributed to that period.

9.1.3 No features or finds dating to the Neolithic or Bronze Age have been recorded to the south of the Site and it is perhaps more likely that activity from that period originates from the area to the west of the Site where a Neolithic long barrow is known to exist (see Section 5.2, above).

9.1.4 An east-west running ditch along the southern area is the only definite Iron Age feature recorded on the Site. It is thought this could represent a field boundary and may define the northern extent of the Iron Age settlement that is known to exist on the southern side of Culworth Road. This has been the focus of archaeological work in and around Blackgrounds Farm (see Document no.: 1EW03-FUS_MHI-EV-REP-CS07_CL26-000003 – forthcoming).

9.1.5 A single feature that is thought to date to the Roman period is located along the northeast limits of the Site. The date is uncertain due to the abraded nature of the pottery and can only be attributed generally to the Roman period. Other Roman pottery fragments were recovered from the topsoil. Given that only four sherds in total were recovered from the Site, it would seem unlikely that this represents an extension northward from the Roman villa site to the south.

9.1.6 Ridge and furrow field systems were recorded across the Site that are indicative of agricultural activity on the Site from the medieval and post-medieval period and on to the present day (extant ridge and furrow was present at the east end of the Site).

9.1.7 Although no pottery was recovered from any excavated features, those from the topsoil and subsoil range in date from the 12th to the 20th century.

10 Consideration of Results in their Wider Context

10.1.1 The Site is located in Northamptonshire, within the Greatworth to Lower Boddington Community Forum Area (CFA15) in an area of identified Romano-British, prehistoric and medieval activity overlooking the valley and floodplain of the River Cherwell to the south.

10.1.2 The results of the archaeological evaluation at Culworth Road can be seen to conform to the pattern of human activity in this general context, although admittedly mostly on the fringes.

10.1.3 The remains identified on site during the archaeological evaluation are primarily of local significance and have a somewhat limited impact on the understanding of human activity on the Site and its environs.

10.1.4 Although human presence on the site has not left a sizeable mark on the landscape, human activity is represented from the early Neolithic almost continuously through to the modern day.

10.1.5 The worked flint representing early Neolithic to Early Bronze Age may point to a link with known areas of occupation in this period further to the west of the Site, possibly based around Chipping Warden, given the previous excavation of the long barrow (MNN17806) at the north end of Chipping Warden and the two possible Bronze Age ring ditches identified c. 700m to the west of the site which were evaluated in 2018 (1EW03-FUS-GL-REP-CS07_CL13-002336).

10.1.6 The Iron Age ditch identified along the southern part of the Site, although appearing rather isolated, could be seen as an indication of the limits of the Iron Age/Romano-British settlement recorded to the south around Blackgrounds Farm. This could play a part when considering patterns of growth of such settlements in similar settings.

10.1.7 The medieval and post-medieval finds, although again of minor significance, can still perhaps assist in understanding the continuation of the rural/agricultural character of an area within the immediate vicinity of the village of Chipping Warden.

11 Scheme Impacts

Given the general paucity of archaeological remains recorded during the evaluation, it is not considered that any impact would prevent future construction works.

12 Evaluation of methodology used

12.1.1 The archaeological evaluation comprised 42 trial trenches across the Site. This represents approximately 4% of the total site area and was judged to be a suitable mitigation.

12.1.2 All the archaeological features and deposits were relatively shallow and the contractor is confident that all the surviving archaeological evidence was successfully identified.

12.1.3 All features and deposits were successfully excavated under the guidance set out in Section 3.3.10 in the Interim Report (Doc no:1EW03-FUS_MHI-EV-REP-CS07_CL13-000002).

12.1.4 Artefactual retrieval was solely by hand excavation, which was successful in providing a small assemblage of dating evidence, largely in the form of ceramics.

13 Statement of Archaeological Potential

13.1.1 The archaeological trial trenching at Culworth Road (C31033) revealed little in the way of archaeological finds or features. Residual lithics from the Neolithic–Bronze Age indicate a prehistoric presence in the area and the Iron Age/Roman ditches and pit potentially represent the northern limits of settlement activity concentrated to the south. The area was clearly used for arable farming in the medieval and post-medieval periods, probably associated with the nearby village of Chipping Warden to the west. The land appears to have continued to be used for agricultural activities to the present day, with a shift from arable to pastoral farming.

13.1.2 The artefactual assemblages spanning the Neolithic to the early modern era are small and predominantly residual. They do, however, indicate that the area has been populated and the land worked over a long, and possibly continuous, timespan.

13.1.3 The one artefact of note was the musical instrument piece made from animal bone and of probable medieval date. This appears to be a rare find of intrinsic value that warrants further research.

13.1.4 The extent to which the evaluation of the site can answer the HERDS objectives as set out in the Project Plan is addressed below (Table 1).

Table 1 Contribution to HERDS objectives

Specific Objective	Contribution	Contribution from Evaluation
KC5: Identifying settlement location and developing models for settlement patterns for the Mesolithic, Neolithic and Early Bronze Age.	Remains associated with Neolithic activity recorded to the south and west of the Site indicates potential for presence of further remains within this landscape. The evaluation, including the artefact collection, could provide evidence of earlier prehistoric activity to	While limited in quantity, the Neolithic– Bronze Age flints recovered from the plough soil indicate prehistoric activity in the area.

	contribute to this objective.	
KC15: Can we identify regional patterns in the form and location of Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure?	Previous geophysical surveys undertaken within and in the vicinity of the Site have identified clusters of rectilinear and sub-circular enclosures, and possible house ring-ditches of late prehistoric, most likely Iron Age/Romano-British date. Evaluation to the west of Chipping Warden and to the immediate south of the Site has attributed an Iron Age date to several features within these locations. Two possible linear features within the Site, one respecting the layout of roundhouses to the south, are likely to date to the later prehistoric or Roman period. As such, the evaluation has the potential to inform our understanding of regional patterns of settlement in the Iron Age, and possibly Late Bronze Age, and offer indication for any differences in organisation and layout.	Residual Bronze Age flints and limited Iron Age/Roman features were identified during evaluation works. These are probably associated with settlement activity to the south of the site, but they shed little light on regional patterns or differences in landscape organisation and enclosure
KC16: Investigate the degree of continuity that existed between Late Bronze Age and Iron Age communities in terms of population, mobility and subsistence strategies.	Evaluation to the south and west of the Site has attributed an Iron Age date to several features. Further evidence suggests a number of nucleated settlements or farmsteads within the vicinity, some of which may exhibit Bronze Age origins and provide an insight into settlement continuity. Bronze Age and Iron Age evidence at the Site may also indicate any differences in activities undertaken during these periods.	Residual Bronze Age flints and limited Iron Age/Roman features were identified during evaluation works. These are probably associated with settlement activity to the south of the site but shed little light on the degree of continuity that existed between Late Bronze Age and Iron Age communities in terms of population, mobility and subsistence strategies.
KC18: Explore the evidence for increasing social complexity in the archaeological record in the Late Bronze Age and Iron Age, and identify patterns of intra-regional	Investigation of the late prehistoric/Roman settlements identified near to the Site and their hinterlands (within which the Site is situated) may provide circumstantial	Residual Bronze Age flints and limited Iron Age/Roman features were identified during evaluation works. These

and regional variation.	evidence of distinct variation in social organisation which may be compared with similar examples along the route.	are probably associated with settlement activity to the south of the site but did not provide evidence for increasing social complexity in the archaeological record in the Late Bronze Age and Iron Age or identify patterns of intraregional and regional variation.
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?	The geophysical survey has highlighted two likely archaeological linear forms within the western part of the Site. The larger of the two continues southwards, dividing a group of Iron Age/Roman roundhouses and has been speculatively interpreted as a trackway. If proven, this route may connect the Iron Age/Roman settlements south of the Site and at Blackgrounds Farm with smaller settlements/farmsteads north of Chipping Warden, offering evidence for the development and use of the landscape during these periods.	There was no physical evidence identified for routes, trackways or roads on the site.
KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.	Although limited Romano-British evidence has been recovered from nearby archaeological sites, a potential exists for such remains to exist amongst the more evident Iron Age assemblages. Any such evidence would contribute to our understanding of regional distinctiveness in the Roman period and help to understand the continuity between Iron Age and Roman settlements.	There was no evidence of regional or cultural distinctiveness in the Romano-British period identified at the site
KC25: Characterise the nature of the Romano British activity in the hinterland to the Edgcote Roman villa, and investigate the possibility that it developed from an Iron Age precursor.	Edgcote Roman villa lay near to the south of the Site, on the banks of the River Cherwell. Compelling evidence provided by the results of several geophysical surveys and intrusive investigation have suggested a	Limited Iron Age/Roman evidence was discovered at the site suggesting that the settlement activity to the south extended northwards to a

	widespread Iron Age presence within the environs of the villa. Evaluation within the Site has the potential to contribute to the understanding of the extent and nature of this pre-Roman settlement and how it may have contributed to the establishment of the villa itself.	small degree.
KC29: Can regional and cultural distinctiveness in the Romano-British period be defined through systematic surface collection?	Although little Roman artefactual evidence has yet been recovered from the Site and its environs, systematic surface collection may be able to highlight areas of denser Roman artefact scatters and contribute to our understanding of the wider Romano-British landscape within the environs of Edgcote Roman villa.	There was a paucity of features and artefactual evidence from the site and test pitting failed to recover any Romano British material. It is unlikely that further systematic surface collection would enhance understanding of regional and cultural distinctiveness in the Romano-British period.
KC40: Identify patterns of change within medieval rural settlement from the 11th to the 14th centuries.	The nearby settlements of Trafford and Edgcote diminished and were eventually abandoned during the medieval period, while Chipping Warden appeared to expand from a possible abandoned Saxon settlement. The Site likely lay within an agricultural hinterland associated with one or more of these settlements and any evidence may be able to contribute to our understanding of settlement change during this time.	Ridge and furrow agricultural activity representing at least two phases was identified above and below ground at the site, and a small assemblage of pottery was recovered dating between c.1100 and the early modern period. The musical instrument piece found with pottery dating between 1100–1400 potentially hints at settlement change during this time.
KC47: Test and develop geophysical survey methodologies.		Not applicable
KC49: Ground truth and develop multispectral and LiDAR prospection techniques.	The Site and its environs have been subject to a series of remote sensing and geophysical surveys, which	The Site and its environs have been subject to a series of remote sensing

	produced varying results including clear concentrations of archaeological features, magnetically enhanced ridge and furrow, but also areas where magnetic noise or uncertain anomalies may be masking any potential archaeological remains. The evaluation has the potential to ground-truth these results and help develop non-intrusive archaeological prospection techniques.	and geophysical surveys, which produced varying results including clear concentrations of archaeological features, magnetically enhanced ridge and furrow, but also areas where magnetic noise or uncertain anomalies may be masking any potential archaeological remains. The evaluation has the potential to ground-truth these results and help develop non-intrusive archaeological prospection techniques.

14 Publication and Dissemination Proposals

14.1.1 Publication of the results of this fieldwork will be undertaken at an appropriate time as determined by HS2 Ltd.

15 Archive Deposition

15.1.1 The Site archive containing original records will be stored in accordance with the Historic Environment Physical Archive Strategy and Procedure (HS2-HS2-EV-STR-000-000018 and HS2-HS2-EV-STD-000-000039). Hs2 has not yet determined how the archive from the fieldwork will be archived, but final deposition of the archive will be determined by HS2 Ltd.

15.1.2 All retained finds and archaeo-environmental samples will be treated and conserved in accordance with the English Heritage guidance document, A Strategy for the Care and Investigation of Finds (1995) and the UKIC's document, Guidelines for the Preparation of Excavation Archives for Long Term Storage (1990).

15.1.3 A summary of information from the project has been entered onto the OASIS online databases of archaeological projects in Britain.

16 Acknowledgements

16.1.1 Thanks to the following MOLA specialists for their reports: Adam Sutton (Iron Age and Roman pottery), Jenny McNulty (Medieval, post-medieval pottery and clay tobacco pipe), Yvonne Wolframm-Murray (Flint), Rob Atkins (Ceramic building material), Sander Aerts (Animal bone and environmental remains), Tora Hilton (small finds).

17 Bibliography

Title	Reference
Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy GWSI: HERDS	HS2-HS2-EV-STR-000-000015
Technical Standard Specification for historic environment investigations	HS2-HS2-EV-STD-000-000035
Technical Standard Specification for historic environment project plans and location specific written schemes of investigation (	HS2-HS2-EV-STD-000-000036
Project Plan for Trail Trenching Evaluation at Culworth Road, Northamptonshire (AC310)	1EW03-FUS-EV-REP-CS07_CL13-004398
Location Specific Written Scheme of Investigation for a Trial Trench Evaluation at Culworth Road, Northamptonshire (AC310)	1EWO3-FUS_MHI-EV-REP-CS07_CL13-000001
Interim Report for Trail Trench Evaluation at Culworth Road, Northamptonshire (AC310: Site Code 1C20CULTT)	1EW03-FUF_MHI-EV-REP-CS07_CL 13-000002
Medieval Pottery Research Group, 1998. A Guide to the Classification of Medieval Ceramic Forms. Medieval Pottery Research Group Occasional Paper 1, London.	
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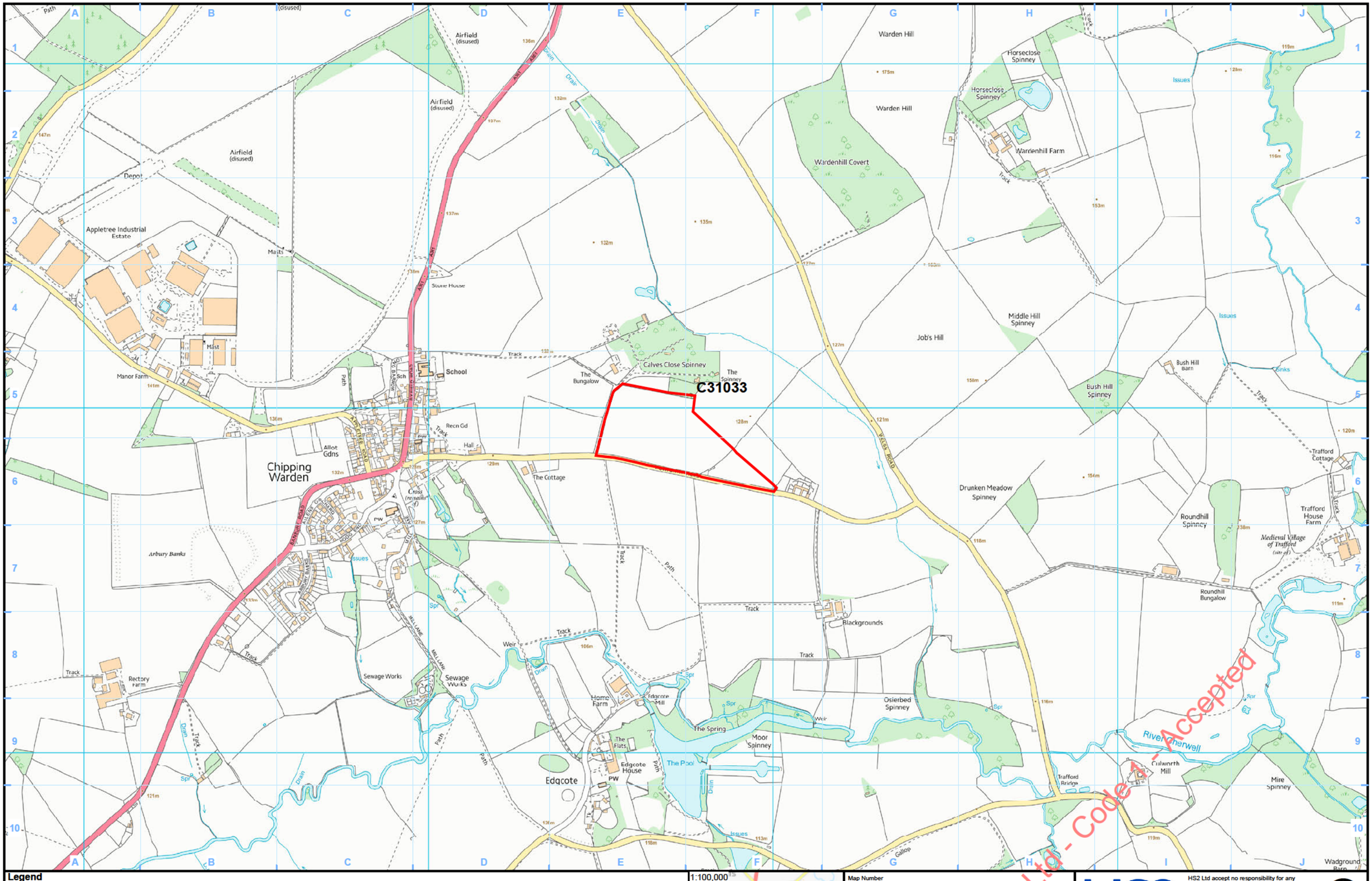
Lawson, G. in Biddle, M, (ed), 1990 Object and economy in medieval Winchester: Artefacts from medieval Winchester, Winchester Studies, 7.2, two vols, Oxford (page 715, fig 202).	

Appendix 1: Figures



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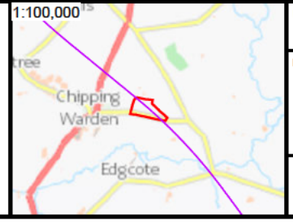

Map Number
1EW03-FUS_MHI-GI-MAP-CS07_CL13-000004

Map Name
Figure 1 Site Location

Community Forum Area 15:
Greatworth to Lower Boddington

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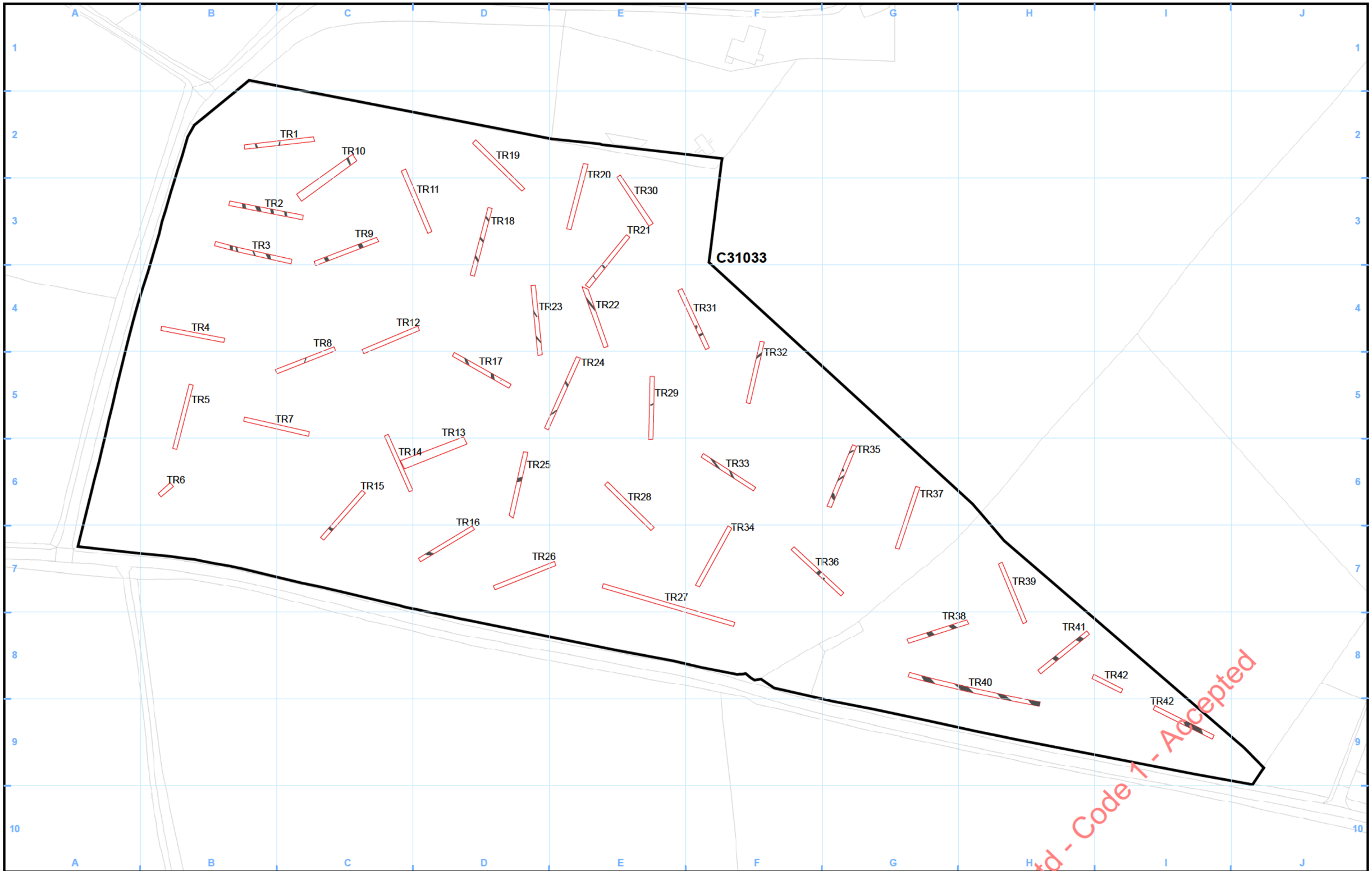

Legend

- Project Plan Area
- trenches as dug
- archaeology context / furrow

Map Number
1EW03-FUS_MHI-GI-MAP-CS07_CL13-000004

Map Name
Figure 2 Culworth Road, trenches as dug

Community Forum Area 15:
Greatworth to Lower Boddington

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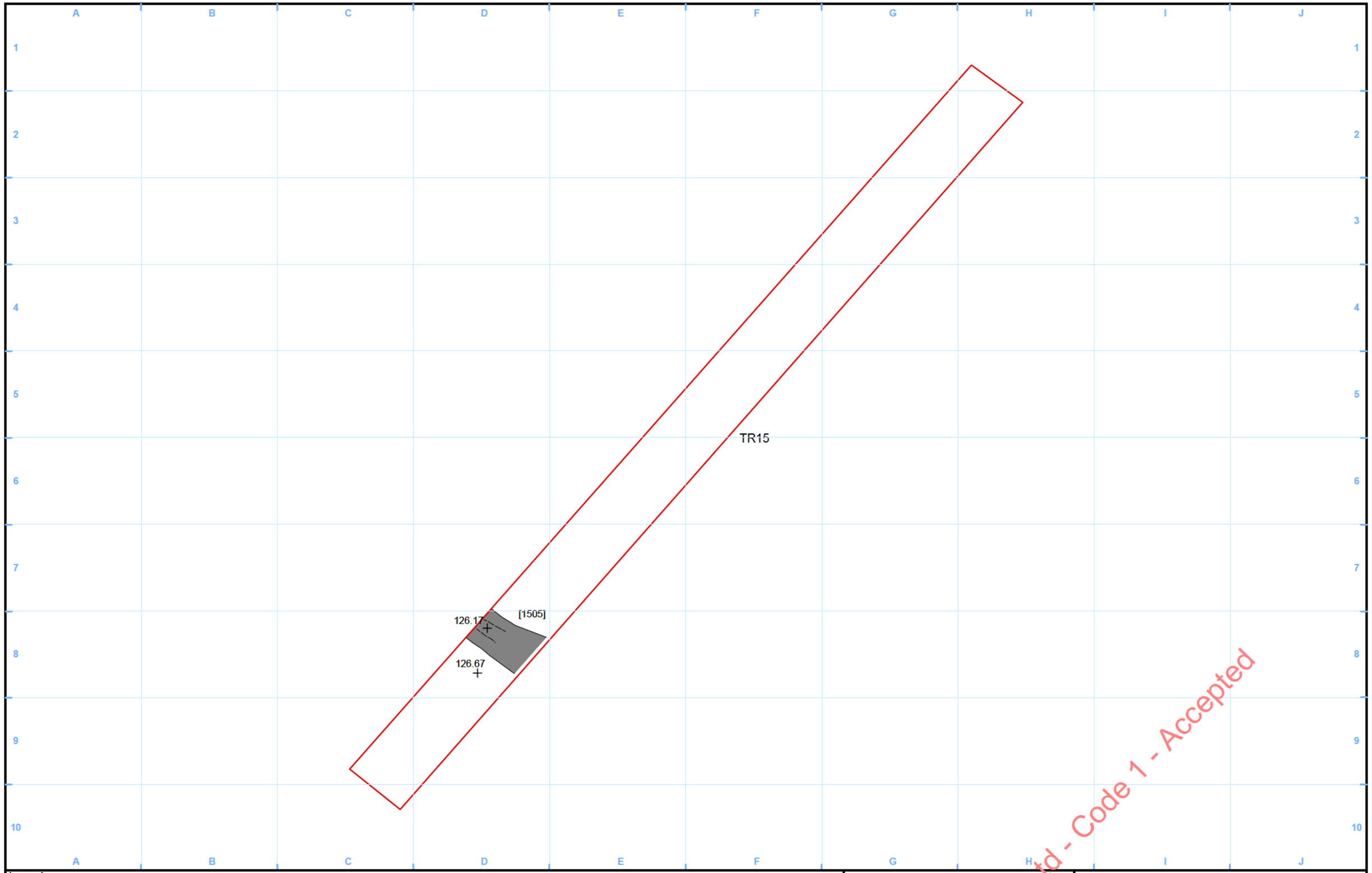

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- Project Plan Area
- trenches as dug
- archaeology context / furrow
- levels mOD

Map Number
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Map Name
Figure 3 Trench 15 with Iron Age ditch

Community Forum Area 15:
Greatworth to Lower Boddington

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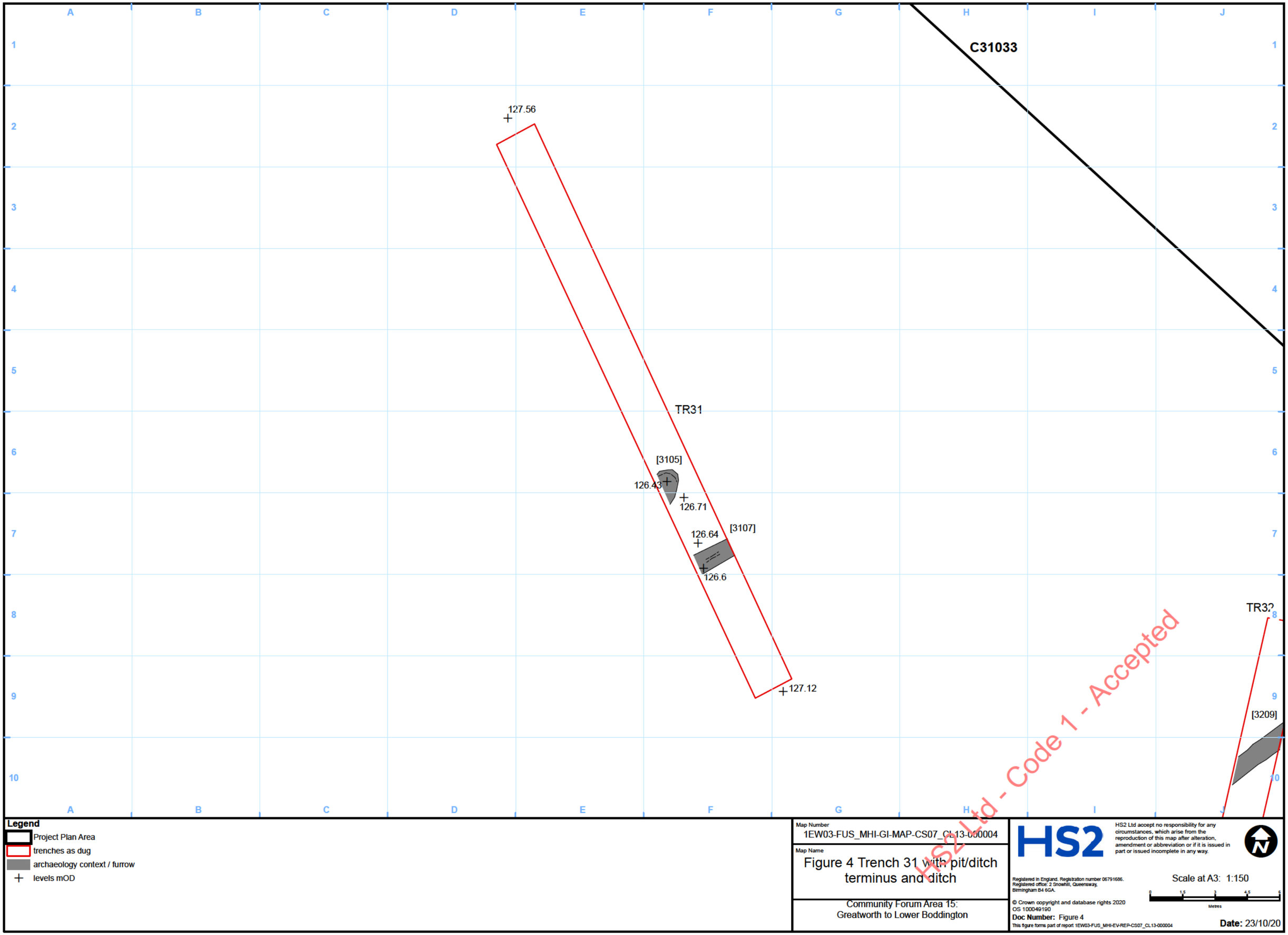
Date: 23/10/20



Legend

- Project Plan Area
- trenches as dug
- archaeology context / furrow
- levels mOD

Map Number
1EW03-FUS_MHI-GI-MAP-CS07_CL13-000004

Map Name
Figure 4 Trench 31 with pit/ditch terminus and ditch

Community Forum Area 15:
Greatworth to Lower Boddington

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Doc Number: Figure 4

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Date: 23/10/20

Appendix 2: Context List

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
104	1	Fill of furrow [105]		0.14			Light grey-brown compact clay
105	1	Cut of furrow		0.14			A shallow, parallel-sided linear feature with a U-shaped profile and a single fill (104). Aligned n-s. Represents a cultivation furrow
106	1	Fill of furrow [107]		0.09	Bone		Light grey-brown compact clay
107	1	Cut of furrow		0.09			A shallow, parallel-sided linear feature with a U-shaped profile and a single fill (106). Aligned n-s. Represents a cultivation furrow
204	2	Fill of furrow [205]		Unknown			Mid brown compact deposit
205	2	Cut of furrow		Unknown			A shallow, parallel-sided linear feature with a U-shaped profile and single fill (204). Aligned nw-se. Represents a cultivation furrow visible in trenches 2 and 3 (same as [308])
206	2	Fill of furrow [207]		Unknown			Mid brown compact deposit
207	2	Cut of furrow		Unknown			A linear feature with fill (206). Aligned e-w, probably represents a cultivation furrow. unexcavated
208	2	Fill of furrow [209]		Unknown			Unknown
209	2	Cut of furrow		Unknown			A linear feature with fill (208). Aligned e-w, unexcavated

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
211	2	Cut of furrow		Unknown			A linear feature with fill (210). Aligned e-w, probably represents a cultivation furrow. unexcavated
303	3	Fill of ditch [304]		0.20			Mid yellow-brown compact silty clay
304	3	Cut of ditch		0.20			A shallow, parallel-sided linear feature with U-shaped profile and single fill (303). Cultivation furrow. Aligned nw-se
305	3	Fill of furrow [306]		0.25			Mid yellow-brown cemented silty clay
306	3	Cut of furrow		0.25			A shallow, parallel-sided linear feature with U-shaped profile and single fill (305). Cultivation furrow. Aligned nw-se
307	3	Fill of ditch/gully [308]		Unknown			Mid yellow-brown cemented silty clay
308	3	Cut of ditch/gully		Unknown			A linear feature with fill (307). Aligned nw-se and probably represents a cultivation furrow. Unexcavated
309	3	Fill of furrow [310]		Unknown			Mid yellow-brown cemented silty clay
310	3	Cut of furrow		Unknown			A linear feature with fill (309). Aligned nw-se, probably representing a cultivation furrow. Unexcavated
804	8	Full of gully [805]		0.10			Mid grey-brown compact clay
805	8	Cut of gully		0.10			A shallow, linear, parallel-sided feature with irregular profile. Aligned n-s, possible gully
904	9	Fill of furrow [905]		Unknown			Unexcavated

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
905	9	Cut of furrow		Unknown			A linear feature with fill (904), aligned n-s, probably representing a cultivation furrow. Unexcavated
906	9	Fill of furrow [907]		Unknown			Unexcavated
907	9	Cut of furrow		Unknown			A linear feature with fill (906), aligned nw-se, probably representing a cultivation furrow. Unexcavated
1004	10	Fill of gully [1005]		0.10			Mid yellow-brown compact silty clay
1005	10	Cut of gully		0.11			A parallel-sided, linear feature with U-shaped profile and single fill (1004), aligned ne-sw. Possible gully
1504	15	Fill of ditch [1505]	?Roman		Animal bone, pottery	Charcoal	Mid yellow-brown firm silty clay
1505	15	Cut of ditch	?Roman	0.50			A parallel-sided linear ditch with V-shaped profile, flat base and a single fill (1504). Aligned nw-se, possible field boundary ditch
1604	16	Fill of ditch [1605]		0.45			Mid yellow-brown compact sandy clay
1605	16	Cut of ditch		0.45			A parallel-sided linear feature with U-shaped profile, irregular base and single fill (1604). Aligned e-w, possible ditch
1704	17	Fill of furrow [1705]		0.19			Light brown-grey compact clay
1705	17	Cut of furrow		0.19			A parallel-sided, linear feature with curving sides, a flat base and single fill (1704). Aligned nw-se, possible cultivation furrow

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
1706	17	Fill of furrow [1707]		Unknown			Mid yellow-brown deposit
1707	17	Cut of furrow		Unknown			A linear feature with single fill (1706). Aligned n-s, probable cultivation furrow, unexcavated
1708	17	Fill of pit [1709]		0.11	Flint	Yes	Dark grey-brown compact clay
1709	17	Cut of pit		0.11			Small circular feature with U-shaped profile and single fill (1708). Pit or posthole
1804	18	Fill of gully [1805]		0.09			Light red-brown compact silty clay
1805	18	Cut of gully		0.10			Shallow linear feature with parallel sides, irregular profile and single fill (1804), aligned nw-se,possible gully
1806	18	Fill of furrow [1807]		Unknown			Light reddish-grey compact sandy clay
1807	18	Cut of furrow		Unknown			A linear feature with single fill (1806), aligned nw-se. Unexcavated.
1808	18	Fill of gully [1809]					Mid yellow-brown compact silty clay
1809	18	Cut of gully		0.23			A linear, parallel-sided feature with U-shaped profile and single fill (1808). Aligned nw-se, possible gully.
2104	21	Fill of gully [2105]		0.20			Mid red-brown compact clay
2105	21	Cut of gully		0.20			A linear, parallel-sided feature with U-shaped profile and single fill (2104). Aligned n-s, possible gully
2106	21	Fill of land drain [2107]		0.10			Mid red-brown compact silty clay

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
2107	21	Land drain		0.10			A linear, parallel-sided feature with vertical sides, flat base and single fill (2106). Aligned n-s, former land drain
2204	22	Fill of furrow [2205]		Unknown			Mid yellow-brown compact deposit
2205	22	Cut of furrow		Unknown			A linear feature with single fill (2204), aligned e-w, unexcavated
2304	23	Fill of furrow [2305]		Unknown			Unexcavated
2305	23	Cut of furrow		Unknown			Linear feature with single fill (2304), aligned ne-sw, probable furrow, unexcavated
2306	23	Fill of furrow [2307]		Unknown			Unexcavated
2307	23	Cut of furrow		Unknown			Unexcavated
2404	24	Fill of furrow [2405]		Unknown			Mid red-brown compact silty clay
2405	24	Cut of furrow		Unknown			Linear feature with single fill (2404), aligned nw-se, probable furrow, Unexcavated
2406	24	Fill of gully [2407]		0.48 x 0.18			Light greyish-orange firm sandy clay
2407	24	Cut of gully		0.48 x 0.18			Linear, parallel-sided feature with steep sides, a flattish base and single fill (2406). Aligned ne-sw, possible gully
2504	25	Fill of furrow [2505]		Unknown			Mid yellow-brown compact clay
2505	25	Cut of furrow		Unknown			Irregular but linear feature, unexcavated
2904	29	Fill of gully [2905]					Light brown-yellow compact clay

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
2905	29	Cut of gully		0.6 x 0.08			A linear, parallel-sided feature. Shallow with steep sides, a flat base and with single fill (2904). Aligned ne-sw, probable terminus of gully
3104	31	Fill of pit/terminus [3105]			Flint	Charcoal	Mid red-brown compact clay
3105	31	Cut of pit/terminus		0.90 x 0.25			Semi-circular shallow feature with short, steep sides and flat base, with single fill (3104). Possible gully/furrow terminus aligned e-w
3106	31	Fill of ditch [3107]		0.90 x 0.32			mid grey-brown compact sandy clay
3107	31	Cut of ditch		0.90 x 0.32			Linear, parallel-sided feature with V-shaped profile and single fill (3106), aligned ne-sw. Probable ditch
3204	32	Fill of [3205]					Unknown
3205	32	Cut of furrow		1.2			Linear, parallel-sided feature with single fill (3204). Aligned nw-se, probable furrow
3206	32	Fill of furrow [3207]		1.0			Unknown
3207	32	Cut of furrow		1.0			Linear, parallel-sided feature, with single fill (3206), aligned ne-sw, possible furrow, unexcavated.
3208	32	Fill of field boundary [3209]		0.84 x 0.24	Pottery		Light grey-brown compact silty clay
3209	32	Cut of field boundary ditch		0.84 x 0.24			Linear, parallel-sided feature with steep sides, flat base with single fill (3208). Aligned ne-sw, possible boundary ditch
3304	33	Fill of furrow [3305]		0.7 x 0.10			Mid yellow-brown compact clay

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
3305	33	Cut of furrow		0.7 x 0.10			Linear, parallel-sided shallow feature with steep sides and irregular base, contains single fill (3304), aligned n-s. Possible furrow.
3306	33	Fill of furrow [3307]		0.60			light yellowish brown compact clay
3307	33	Cut of furrow		0.60			Linear feature with single fill (3306), aligned n-s, unexcavated.
3504	35	Fill of furrow [3505]		0.13		flint	Mid yellow-brown compact clay
3505	35	Cut of furrow		0.13			Linear, parallel-sided feature with U-shaped profile and single fill (3504). Aligned ne-sw, probable furrow
3506	35	Fill of furrow [3507]		0.10			Light grey-brown compact clay
3507	35	Cut of furrow		0.10			Linear, parallel-sided shallow feature with steep sides and flat base. Contains single fill (3506). Aligned ne-sw, probable furrow
3508	35	Fill of furrow [3509]		Unknown			Unexcavated
3509	35	Cut of furrow		Unknown			Linear feature containing single fill (3508), aligned ne-sw, probable furrow
3510	35	Fill of tree bole [3511]		0.18			Light grey-brown compact clay
3511	35	Tree bole		0.18			Cut of tree bole
3604	36	Fill of ditch [3605]		0.35		Animal bone	Light brown-grey compact sandy clay
3605	36	Cut of ditch		0.35			Linear, parallel-sided feature with off-centred V-shaped profile and single fill (3604). Aligned ne-sw , probable

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
							ditch
3606	36	Fill of ditch [3607]		0.28		Sample taken	Mid yellow-brown compact clay
3607	36	Cut of ditch		0.28			Linear, parallel-sided feature with U-shaped profile and single fill (3605). Aligned ne-sw, probable ditch terminus
3804	38	Fill of furrow [3805]		Unknown			Light brown-grey firm sandy clay
3805	38	Cut of furrow		Unknown			Linear feature with single fill (3804). Aligned nw-se, probable furrow, unexcavated
3806	38	Fill of furrow [3807]		Unknown			Light grey-brown firm sandy clay
3807	38	Cut of furrow		Unknown			Linear feature with single fill (3806). Aligned nw-se, probable furrow
4004	40	Fill of furrow [4005]		Unknown			Mid yellow-brown compact silty clay (unexcavated)
4005	40	Cut of furrow		Unknown			Linear feature with single fill (4004). Aligned n-s, probable furrow, unexcavated
4006	40	Fill of furrow [4007]	Post-medieval	Unknown			Mid yellow-brown compact silty clay, unexcavated
4007	40	Cut of furrow	Post-medieval	Unknown			Linear feature with single fill (4006). Aligned n-s, probable furrow, unexcavated.
4008	40	Fill of furrow [4009]		Unknown			Mid grey-brown firm sandy clay
4009	40	Cut of furrow		Unknown			Linear feature, with single fill (4008). Aligned n-s, probable furrow, unexcavated.

Context No. (Feature Id.)	Trench No. (UID)	Feature/Monument Type	Period	Context Depth (m)	Artefactual Remains	Environmental Remains	Description/Comment
4010	40	Fill of furrow [4011]		Unknown			Light brownish-grey firm sandy clay
4011	40	Cut of furrow		Unknown			Linear feature with single fill (4010). Aligned n-s, probable furrow, unexcavated
4104	41	Fill of furrow [4105]		0.12			Mid grey-brown firm sandy clay
4105	41	Cut of furrow		0.12			Linear, shallow feature with parallel sides and uneven base. Contains single fill (4104). Later field drain found within. Aligned n-s, probable furrow.
4106	41	Fill of furrow [4107]	Post-medieval	0.25			Mid yellow-brown compact deposit
4107	41	Cut of furrow	Post-medieval	0.25			Linear and shallow parallel-sided feature with U-shaped profile and single fill (4106). Aligned n-s, probable furrow
4204	42	Fill of furrow [4205]		Unknown			Mid yellow-brown compact silty clay
4205	42	Cut of furrow		Unknown			Linear feature with single fill (4204). Aligned n-s, probable furrow, unexcavated

Appendix 3: OASIS Form

OASIS ID: molas1-406699

Project details

Project name	1EW03-Enabling Works Central Culworth Road
Short description of the project	A trial trench evaluation involving 42 trenches across the site revealed a passing presence in the Neolithic to Bronze Age and peripheral activity in the Iron Age and Roman periods that probably are associated with settlements to the south.
Project dates	Start: 20-07-2020 End: 07-08-2020
Previous/future work	Yes / Not known
Any associated project reference codes	1C20CULTT - Sitecode
Type of project	Field evaluation
Site status (other)	Community Forum Area
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	DITCH Iron Age
Monument type	DITCH Roman

Monument type	FIELD SYSTEM Medieval
Monument type	FIELD SYSTEM Post Medieval
Significant Finds	FLINT Neolithic
Significant Finds	CERAMIC Iron Age
Significant Finds	CERAMIC Roman
Significant Finds	MUSICAL INSTRUMENT Medieval
Significant Finds	CERAMIC Medieval
Significant Finds	CERAMIC Post Medieval

Project location

Country	England
Site location	NORTHAMPTONSHIRE NORTHAMPTON CHIPPING WARDEN 1EW03 Enabling Works Central Culworth Road
Postcode	OX171LZ
Study area	7.53 Hectares
Site coordinates	SP 50691 48951 52.13612024376 -1.259283366033 52 08 10 N 001 15 33 W Point
Height OD / Depth	Min: 126.5m Max: 127.2m

Project creators

Name of Organisation	MOLA
Project brief originator	Fusion
Project design originator	Fusion
Project director/manager	Simon Davis
Project supervisor	James West
Type of sponsor/funding body	HS2
Name of sponsor/funding body	HS2

Project archives

Physical Archive recipient	To be designated
Physical Archive ID	1C20CULTT

Physical Contents	"Animal Bones","Ceramics","Worked stone/lithics"
Digital Archive recipient	To be designated
Digital Contents	"Stratigraphic","Survey"
Digital Media available	"Database","GIS","Geophysics","Survey","Text"
Paper Archive recipient	To be designated
Paper Contents	"Stratigraphic","Survey"
Paper Media available	"Context sheet","Correspondence","Drawing","Map","Matrices","Photograph","Plan","Report"

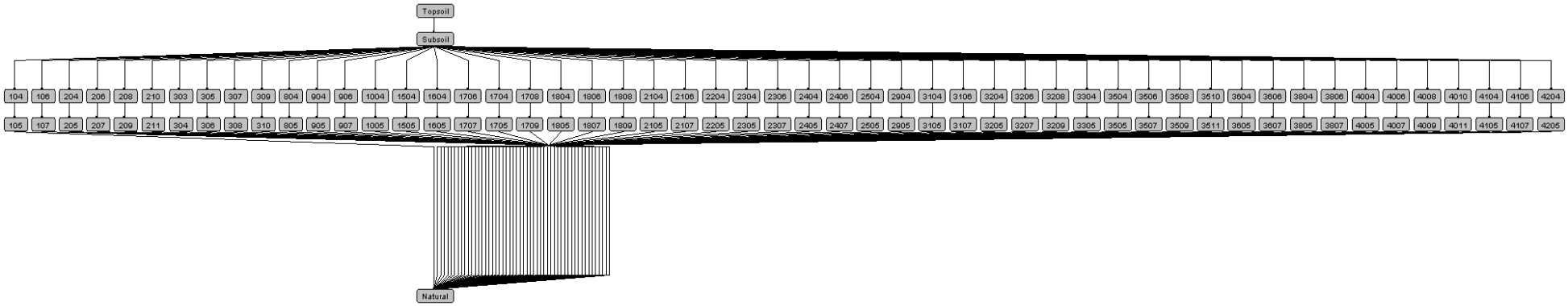
Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	1EW03-Enabling Works Central AWH-Field Report for Culworth Road Northamptonshire AC310Trial Trench Evaluation
Author(s)/Editor(s)	McKenzie, M
Date	2020

Issuer or publisher	MOLA
Place of issue or publication	MOLA
Description	Pro Forma report as per HS2 guidelines
URL	Not online at present
Entered by	Malcolm McKenzie [redacted]
Entered on	26 October 2020

Please e-mail Historic England for OASIS help and advice

Appendix 4: Harris Matrix



Appendix 5: Prehistoric and Roman pottery

	SHC		SAM		MIF		C		LNV WH?		Total			
Context	**Ct.**	**Wt.(g)**	**Ct.**	**Wt.(g)**	**Ct.**	**Wt.(g)**	**Ct.**	**Wt.(g)**	**Ct.**	**Wt.(g)**	**Ct.**	**Wt.(g)**	**Date**	**Note**
1504	8	37	2	10	1	7					11	54	c.800-1 BC	Very abraded
3208							3	7			3	7	c.AD40-410	Very abraded
3702									1	8	1	8	c.AD150-410	Very abraded
Total	**8**	**37**	**2**	**10**	**1**	**7**	**3**	**7**	**1**	**8**	**15**	**69**		

Appendix 6: Medieval and post-medieval pottery: fabric/dating

Fabric Code	Fabric Name	Date Range
Medieval		
316	Calcareous ironstone ware	1100-1400
360	Banbury ware	1100-1400
373	Brackley whiteware	1100-1400
374	Ironstone coarseware	1100-1400
324	Brill/Boarstall ware	1200-1500
Post-medieval		
407	Red earthenware	1450-1550
403	Midland purple	1450-1600
411	Midland blackware	1550-1700
409	Staffordshire slipware	1680-1750
417	Nottingham salt-glazed stoneware	1700-1800
415	Creamware	1740-1820
426	Iron-glazed coarsewares	1700-1900
430	China	1860-1950

Appendix 7: Medieval and post-medieval pottery: vessel parts/sherd count

Context	Fabric Code	Fabric Name	Date	Count	Weight (g)	Part	Max Vessel No.
702	403	Midland Purple	1450-1600	1	7	body	1
802	426	Iron-glazed coarsewares	1700-1900	2	130	body; base	2
1301	409	Staffordshire slipware	1680-1750	1	11	body	1
1401	426	Iron-glazed coarsewares	1700-1900	1	26	body	1
1501	417	Nottingham salt-glazed stoneware	1700-1800	1	13	body	1
1802	360; 374	Banbury ware; Ironstone coarseware	1100-1400	2	14	rim; body	2
2502	316; 324	Calcareous ironstone coarseware; Brill/Boarstall ware	1100-1400	2	32	body	2
3102	373	Brackley whiteware	1100-1400	2	51	rim; base	2
3301	426	Iron-glazed coarsewares	1700-1900	1	4	body	1
3501	407; 430	Red earthenware; China	1860-1950	2	25	base x2	2
3801	403	Midland Purple	1450-1600	1	35	base	1
4202	411; 415; 426	Midland blackware; Creamware; Iron-glazed coarsewares	1700-1900	6	92	body	4
Total				**22**	**440**		**20**

Appendix 8: Medieval and post-medieval pottery forms

Context	Fabric Code/Name	Part	Form
1802	360 Banbury ware	Upright slightly externally thickened rim	Jug
2502	316 Calcareous ironstone coarseware	Body (neck?) with applied and internally thumbed decoration	Jar?

Appendix 9: Clay tobacco pipes

Context	Count	Weight (g)	Bore hole size	Date
3501	1	2	4/64th's	c. late 18th/19th century
3501	1	4	5/64th's	c.18th/19th century
Total	**2**	**6**		

Appendix 10: Animal bone

Context	Cattle	Horse	Ovicaprid (Sheep/Goat)	Large Mammal	Medium Mammal	Undetermined Mammal
106			1		2	
1504	6	2	1	18	1	5
2502				1		
3604	1					
Total	**7**	**2**	**2**	**19**	**3**	**5**

Appendix 11: Worked flint

Context	Flake/Blade	Raw material	Tool	Period	Comment
(1708)	Flake	Light grey vitreous flint	-	Neolithic–Early Bronze Age	Post-depositional edge damage
(3504)	Flake, proximal	Dark grey-brown vitreous flint	-	Neolithic–Early Bronze Age	-
(3702)	Flake	Dark grey-brown vitreous flint	Leaf-shaped arrowhead	Early Neolithic	Bi-facial invasive retouch around one lateral edge, semi-abrupt around the other lateral edge
(3104)	Flake	Mid brown-grey vitreous flake	-	Neolithic–Early Bronze Age	
(3606)	Blade, distal	Mid grey vitreous flint	-	Neolithic–Early Bronze Age	

Appendix 12: Environmental summary

Trench	17	31	31	31	31	36	36	36	36
Context	1708	3104	3104	3104	3104	3606	3606	3606	3606
Sample	1	1	2	3	4	1	2	3	4
Aethusa cynapium					Xdw				
Fabaceae sp.								Xdw	
Poaceae sp.		Xdw		Xdw					
Charcoal				X		X			

Appendix 13: Test pit finds (bucket sampling)

Trench	**Context**	**Material/type**	**Detail**	**Date/period**
13	1301 (topsoil)	Clay Building Material	1 x drain frag.	Modern
13	1301 (topsoil)	Clay Building Material	1 x brick frag.	Post-medieval/ modern
14	1401 (topsoil)	Pottery	1 x body sherd of Iron-glazed coarseware	1700-1900
15	1501 (topsoil)	Pottery	1 x body sherd of Nottingham salt-glazed stoneware	1700-1800
30	3001 (topsoil)	Pottery	1 x brick frag.	Post-medieval/ modern
33	3301 (topsoil)	Pottery	1 x body sherd of Iron-glazed coarseware	1700-1900
35	3501 (topsoil)	Pottery	1 x base sherd of red earthenware and 1 x base sherd of China ware	1860-1950
35	3501 (topsoil)	Clay Tobacco Pipe	2 x stem frags	late 18th/19th century