



Land North of Gloucester Road Tutshill, Tidenham Gloucestershire

Archaeological Excavation



for CgMs Heritage

on behalf of Bellway Homes Wales & West

CA Project: 9723 CA Report: 9273_1

August 2019



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SUMMARY

Project Name: Land North of Gloucester Road

Location: Tutshill, Tidenham, Gloucestershire

NGR: 354360 194810

Type: Excavation

Date: 8 January – 25 January 2018

Location of Archive: To be deposited with Dean Heritage Centre

Site Code: TUT 18

An archaeological excavation was undertaken by Cotswold Archaeology in January 2018 at the request of Bellway Homes Ltd (Wales) and their archaeological consultant, CgMs Heritage, on land north of Gloucester Road, Tutshill, in the parish of Tidenham, Gloucestershire. These works were the final part of phased investigation of the site that followed on from an archaeological evaluation.

The excavation identified a small number of features of principally prehistoric, Late Saxon and medieval date. The earliest find was the truncated and disturbed remains of an Early Bronze Age crouched inhumation burial of an adult male in a possible stone lined cist. Residual finds including a worked flint, and a small quantity of Iron Age and Roman pottery hint at other activity on or near the site. However, the only features that could be dated with any confidence are of late Saxon/medieval and post-medieval date that collectively represent dispersed and small-scale settlement activity and land division associated with

rural settlement. Radiocarbon dating indicates a single pit is of probable late Saxon date, whilst two other pits are assigned a 12th to 14th century date based on a small quantity of pottery. Other small features, mostly pits, are probably of this date. A ditch and other traces of ditches and gullies represent likely field boundaries, whilst an extant low, broad linear bank that crossed the site from north to south is interpreted as a possible field lynchet of late medieval or post-medieval date.

Plant macrofossils were generally sparse with the exception of those found in two of the late Saxon/medieval pits and included grassland and arable weed seeds, cereal grains (free-threshing wheat and barley), oats and garden pea. One of the pits also contained fish scales, perhaps reflecting the proximity of the River Wye.

The excavation produced only a small assemblage of 12th to 13th century pottery, including some non-local wares and part of a jug of Ham Green type. The only other notable artefact is a probable weaver's tool - an antler pin beater or pick, of late Saxon/medieval date.

1. INTRODUCTION

- 1.1 A programme of archaeological investigation was undertaken by Cotswold Archaeology in January 2018 at the request of Bellway Homes Limited (Wales) and their archaeological consultant, CgMs Heritage, on land north of Gloucester Road, Tutshill, Tidenham, Gloucestershire.
- 1.2 Planning permission for residential development, access, parking, public open space, landscaping and associated infrastructure was granted on appeal (ref: APP/P1615/W/15/3003662), following an application to Forest of Dean District Council (FDDC; planning ref: P1530/14/OUT). An Archaeological Desk-Based Assessment (CgMs 2014) and a programme of geophysical survey (Stratascan 2014) were undertaken prior to the planning application being made. The requirement for a further programme of archaeological work, initially comprising an archaeological trial-trench evaluation (OA 2014), was secured by Condition 18 of the planning appeal. Following subsequent consultation between CgMs Consulting and Charles Parry, Archaeologist, Gloucestershire County Council, the archaeological advisor to FDDC, it was determined that an area of archaeological excavation would be required. The archaeological excavation was carried out in accordance with a detailed *Written Scheme of Investigation* (WSI) produced by CA (2017) that was approved by Mr Parry, who also monitored the archaeological works.

The site

- 1.3 The development area was located to the north of Gloucester Road and east of Elm Road in Tutshill, within the parish of Tidenham, Gloucestershire, at NGR 432276 203394 (Fig. 1). It was 6.4ha in extent, and comprised three agricultural fields, bounded by mature hedgerows, with the excavation area located towards the centre of the southernmost of these fields and measuring approximately 0.5ha. The site lies at approximately 59m AOD at its north-western edge, with ground levels gradually sloping down to reach 45m AOD at the south-eastern extent.
- 1.4 The underlying bedrock geology across the western half of the site was Limestone Bay Oolite Sub-group – Limestone of the Carboniferous Period (BGS 2018). The underlying bedrock geology in the eastern half of the site was Mercia Mudstone Group (Marginal Facies) – Conglomerate of the Triassic Period (*ibid*.) with no

- superficial deposits recorded. The natural substrate revealed during excavation was limestone bedrock with light yellow and orange sands and clays.
- 1.5 The overlying soils of the area are recorded as being slightly acid but base-rich freely draining loamy soils (www.landis.org.uk/soilscapes).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site lay within a landscape containing relatively few known archaeological sites, being limited to a few findspots dating to the Prehistoric and Roman periods (CgMs 2014). The projected line of the Roman Road from Newnham to Caerwent, potentially crossed in close proximity to or through the site itself (and for which no evidence was identified).
- 2.2 The place Tutshill gets its name from a stone-built tower of uncertain date and function, suggested to be a watchtower or windmill of either late Saxon or medieval date. The southern end of the 8th century Offa's Dyke, the border between Mercia and the Welsh principalities, runs within a kilometre to the south of the site. The site lies within the former estate of Tidenham, which belonged to the Welsh in the 6th century and was granted to Abbot Wulfgar and the monks of St Peter's, Bath, in the mid-10th century and was subsequently mentioned in the Domesday Survey of 1086. No Saxon evidence is known from the site, although a spearhead was found 470m to the west. Medieval remains are similarly scant, despite the existence of a deserted medieval village some 170m to the northwest. A small number of field boundaries correlating to those on 19th century cartographic sources and a series of closely spaced linear anomalies probably relating to an orchard formerly occupying the north-western field were identified through the geophysical survey.
- 2.3 A subsequent archaeological evaluation (Fig. 2) identified a small pit and ditch dating to the 12th-14th centuries (OA 2017) and the works detailed here were sited on these evaluation features.

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the archaeological mitigation were to:
 - record the nature of the main stratigraphic units encountered;

- assess the overall presence, survival and potential of structural and industrial remains:
- assess the overall presence, survival, condition, and potential of artefactual and ecofactual remains.
- 3.2 The specific aims of the work are to:
 - record any evidence of past settlement or other land use;
 - recover artefactual evidence to date any evidence of past settlement that may be identified;
 - sample and analyse environmental remains to create a better understanding of past land use and economy.
- 3.3 Research aims identified from the South West Archaeological Research Framework (Grove and Croft 2012) that may be relevant to the excavation include:
 - Settlement Sites and Landscapes Research Aim 30: Improve understanding of medieval farming;
 - Environment and Dating Research Aim 19b: Identify changes in Medieval fishing;
 - Environment and Dating Research Aim 21b: Medieval and Post-medieval agriculture.

4. METHODOLOGY

- 4.1 The fieldwork followed the methodology set out within the WSI (CA 2017). The location of the excavation area was agreed with Charles Parry (GCC), informed by the results of the archaeological evaluation (OA 2014a) (Fig. 2). An excavation area measuring 83m by 46m was set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4: Survey Manual. The excavation area was scanned for live services by trained CA staff using CAT and Genny equipment in accordance with the CA Safe System of Work for avoiding underground services.
- 4.2 Fieldwork commenced with the removal of topsoil and subsoil from the excavation area by mechanical excavator with a toothless grading bucket, under archaeological supervision.

- 4.3 The archaeological features thus exposed were hand-excavated to the bottom of archaeological stratigraphy. All features were planned and recorded in accordance with CA Technical Manual 1: Fieldwork Recording Manual.
- 4.4 Deposits were assessed for their environmental potential and five features considered to have potential for characterising the earlier phases of activity were sampled in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites*.
- 4.5 All artefacts recovered from the excavation were retained in accordance with CA Technical Manual 3: *Treatment of finds immediately after excavation*.

5. RESULTS (FIGS 3-9)

- 5.1 This section provides an overview of the excavation results; detailed summaries of the finds and environmental samples (biological evidence) are to be found in Appendices A-H.
- 5.2 The artefact dating and radiocarbon results indicate that the majority of archaeological activity on site dates to the following phases of activity:
 - Period 1: Early Bronze Age (2200 1500 BC)
 - Period 2: Pre-medieval
 - Period 3: Late Saxon/medieval (late 10th to 14th century AD)
 - Period 4: Post-medieval or Modern (16th to 20th century)
- 5.3 Some features could not be confidently assigned to a phase based on stratigraphy and/or spot dating evidence and remain unphased.

Phase 1: Early Bronze Age (2200-1500 BC)

5.4 The partial remains of an isolated Early Bronze Age inhumation burial (1052, grave 1053; Figs 3 and 5), which had been truncated by Ditch B (Period 3), were identified towards the south-east of the site (Fig. 3), approximately 15m north of the Period 2 features. Only the skull, upper torso and fragments of the pelvis, femur and right arm survived but the position of the remains and elevated height of the right arm

suggested that the burial had been placed in a crouched position on the left side with the head oriented north-west (Fig. 5), a position that conforms with many adult male Beaker burials. A fragment of femur was radiocarbon dated to 2280-2030 cal BC (at 95.4% confidence: SUERC-82696: Appendix H) indicating that interment took place during the use of Beakers and at the beginning of the Early Bronze Age.

- 5.5 The grave, 1053, had been cut into the limestone bedrock (Fig. 5) and extended 2m in length and at least 0.8m in width, dimensions which would have allowed for adequate room around a crouched burial for the inclusion of grave goods, although no such items were present (possibly owing to the later truncation). Several stones on both the northern and southern edges of the grave cut appear to be loose from the surrounding bedrock and in upright or slightly slanted positions, a trait not identified at other features across the site, although nearly all do have irregular edges following the bedrock. These stones may represent a lining of the grave cut or base of a cist and/or cairn for which no surface evidence survives and are likely to have originated, at least in part, from the bedrock excavated to create the grave cut. The grave fill 1051 was a mid-yellowish-brown silty clay with frequent stone inclusions, potentially deriving from a former cairn.
- Activity of this date is rare in the surrounding environs (Darvill 2011), although a Middle Bronze Age palstave was recorded 350m to the south and a group of possible Bronze Age barrows are suggested 760m to the south-east (CgMs 2014) (Fig. 1). A further possible Early Bronze Age crouched burial was uncovered approximately 2.6km to the south-east during groundworks in Beachley, Tidenham in the 1960s (Barnett and Savoury 1961-1964). Although no datable material was recovered, the unaccompanied skeleton was in a Beaker-type cist constructed from carboniferous limestone slabs (Monument 198745).

Phase 2: Pre-medieval

5.7 A small number of discrete features were of possible pre-medieval date (Period 2) (Fig. 3 and inset). None contained any datable material. This includes a ditch (A) and a gully, which have been tentatively assigned to this period based on their stratigraphic position underneath medieval bank 1079 and the spatial relationship of the cluster of features, the similar morphology and profiles of the pits and the recovery of a single worked flint that cannot be closely dated.

The cluster of features was identified within the centre of the southernmost limit of the excavation area (Fig. 3). Ditch A appears to have been recut several times (Fig. 4), attesting to some longevity of use and is probably an early boundary ditch. The pits 1032, 1040, 1042, 1059 and 1062 are located immediately north of this ditch and are possible storage or sand extraction pits. They are larger than those encountered elsewhere on the site, and generally measured up to 2m in length and 0.5m in depth. A prehistoric retouched flint flake was recovered from the upper fill of 1032, and whilst it could suggest an early date for these features, it is more likely to be residual. The only environmental remains were a single indeterminate grain and a seed of brome grass (pit 1040), which could simply reflect dispersed material (Appendix G). Ditch A was subsequently truncated or re-cut by a shallow ditch or gully (1026, B) on a slightly different alignment (Figs 3-4), with both features being sealed by the medieval bank associated with the Period 3 Ditch B.

Ditch A

5.9 Ditch A was a north-east/south-west boundary ditch extending for at least 6m with an average width of 1.5m, moderately steep sides and a concave base. The initial ditch 1016/1066 contained up to five fills resulting from a primary slumping of the stones on the sides and a series of gradual silting deposits with a similar basal stone deposit and two overlying natural silting fills present in the terminus. The ditch had two episodes of re-cutting, 1021 and 1023/1070, indicating longevity of use. No artefactual material was recovered. The ditch terminus was later truncated by a gully and both features were sealed by a post-medieval bank 1079 (Bank D), most likely a lynchet, that was still extant within the landscape (Fig. 4: Section BB and Fig. 6: photograph).

Gully B

5.10 A shallow north-south gully (B) truncated the fills of the later recut of Ditch A (Fig. 4: Section BB). The gully extended for at least 4m, measured on average 0.65m in width and 0.14m in depth, had gently to steeply sloping sides and a flat base and contained a single homogenous fill (1027) derived from natural silting. No artefactual material was recovered.

Pits

5.11 A series of five intercutting pits (1040, 1032, 1042, 1059 and 1062) were located immediately north of Ditch A. These pits were generally larger than the other

discrete features identified on the site and were potentially storage pits, although their location in proximity to a sandier natural means they may potentially have been extraction pits. Two of the pits (1042 and 1062) truncated earlier ones (1040 and 1059) and this could be attributable to the natural silting infills, which accumulated gradually over time, being easier to excavate than the surrounding uneven bedrock, as opposed to deliberate recuts of the original pits. Two pits were sampled but were found to contain no artefactual or ecofactual material. A single worked flint was recovered from fill 1039 of pit 1032.

5.12 A fissure like feature (1050) identified as geological and potentially formed by frost cracking was located to the immediate east of the edge of the Early Bronze Age grave (1053) and had later been truncated by Ditch B (Fig. 4: Section CC). Charcoal was identified within the greyish silty fill (1049), which could suggest that the feature was man-made in origin, although this material is equally potentially intrusive from the overlying ditch fill.

Period 3: Late Saxon/medieval (late 10th to 14th century)

5.13 During this period the site was likely to have formed part of the agricultural hinterlands of the settlement at Bishton Farm. A small number of features with an agricultural or domestic origin were identified, comprising a north-south boundary ditch (B) and at least three pits. The earliest pit may have belonged to the late Saxon period based on a single radiocarbon date and an absence of pottery. The other two pits contained pottery of 12th to 14th century date. A reasonable quantity of ecofacts was recovered from the pits of this period and is likely to represent domestic waste.

Ditch B

- 5.14 A wide and shallow ditch (B) was recorded within the southern part of the excavation area. Extending for at least 45m and measuring approximately 0.9m wide and up to 0.2m deep and primarily containing a single homogenous fill, Ditch B probably represents a former field boundary with pottery of a 12th-13th century date retrieved from the fill. A sherd of residual Roman pottery was also recovered.
- 5.15 During the Oxford Archaeology (OA) evaluation phase (T11) a small section of a roughly north-south linear feature (ev1103), containing a sherd of pottery (late 12th-14th centuries), was identified to the east of Ditch B (Fig. 3). This feature was not

identified during the excavation phase, although its position close to Ditch B and just east of Bank D suggests that it could have been related.

Pits

- 5.16 A small number of the pits on the site contained material of late Saxon/early medieval date (Period 3). Two were located approximately 15m apart at the southwestern corner of the site (1005 and an evaluation feature) and the third, 1074, was an isolated feature at the north-western edge of the site (Fig. 3).
- 5.17 Pit 1074 measured 1.1m by 0.95m with a depth of 0.2m (Fig. 4: Section DD). There appeared to be evidence of *in situ* burning with a heat affected natural clay silt deposit at the base and a charcoal rich fill overlying this. A fragmentary worked antler pin beater (a tool used to 'beat' the weft into place on a vertical loom) (Fig. 8) was recovered from the upper fill. Tools of this nature are not common finds in Gloucestershire with the closest examples being recovered from sites in Cheltenham, Lechlade and Fairford (Appendix D). A soil sample from the upper fill returned a small quantity of charcoal, fish scales and the remains of charred barley, the latter of which was radiocarbon dated to 990-1040 cal AD (at 95.4% confidence SUERC-82695), a date that falls towards the end of the late Saxon period.
- The pits at the south-western corner of the site were both dated to the 12th to 14th centuries based on a small assemblage of pottery recovered from their single fills. Within the earlier evaluation pit, measuring 1.1m in width and 0.3m in depth with steep sides and a flat base, was a wide range of both cereal grains and wild plant remains commonly found as crop contaminants. Also recovered was a large quantity of animal and fish bone from a range of species including sheep/goat, pig, house sparrow, salmon or trout and cod or pollock. The identified fish would all have been commonly available in the nearby Bristol Channel at this time, the house sparrows are known to flock in relatively large numbers where cereal crops are being processed, the mammal species suggest these animals were being kept nearby and the presence of canid gnawing on a sheep/goat bone suggest domestic dogs were present on the site. The single sherd of pottery from the fill was datable to the 12th to 14th century.
- 5.19 The small pit 1005 (fill 1006), identified during the excavation, measured 1.16m x 0.93m with a depth of 0.25m and contained a fill which may potentially have been the result of intentional backfilling following the disuse of the feature. Eighteen sherds of 13th to 14th century medieval pottery were retrieved from the fill along with

two fragments of animal bone. Charcoal and iron fragments were identified in a soil sample of this fill.

- 5.20 Given the limited number of late Saxon/medieval features, the site was used on an intermittent basis, initially in the late 10th or early 11th century and, then mainly in the 12th to 14th centuries. The single radiocarbon result for pit 1074 would suggest that this pit was earlier by a century or so than pits 1005 and Trench 10 evaluation pit (ev1003).
- 5.21 A small number of discrete features (Pits 1003 and 1014, pits/gullies 1011 and 1013, posthole 1034, and pit or natural feature 1054) were undated but are likely to belong to this period based on their appearance and general proximity to the other features of Period 3. These include three pits in the south-western corner of the site and a further three pits or postholes located within the central part of the site. Some of these features are potentially of geological origin as they contained very sterile fills and had very weathered bedrock edges or evidence of rooting (Fig. 3).

Period 4: Post-medieval or Modern (16th to 20th century)

- 5.22 Still visible as an earthwork within the landscape was a bank located on the same alignment as Ditch B. At the southern limit of excavation, this bank (1079) sealed the Period 2 Ditch A and Gully B.
- 5.23 No dating evidence was recovered from the bank, which measured 7m in width and 0.48m in height at the southern limit of excavation and was comprised of a mid to dark brown silty clay with occasional small stones (Fig.4: Section BB and Fig. 6: photograph). Its location on the same north-south alignment as Ditch B suggests it may represent a lynchet associated with a former possible field boundary (Fig. 3).

6 DISCUSSION

6.1 The earliest evidence from the excavation was the discovery of an Early Bronze Age (EBA) crouched inhumation burial of a man (over 45 years) found in the remains of a possible stone lined cist (Fig. 5). The man had been placed lying on his left side with the head towards the north-west and in a grave position typical of Beaker/Early Bronze Age burials in southern England. No grave goods were present, although the burial had been heavily disturbed and truncated by a medieval ditch. However, it is

not uncommon to find burials in which grave goods are absent or where nothing survives (Harrison 1980, 85). No evidence for an extant mound or cairn was recovered, although this is perhaps not surprising given the later agricultural use of the site. Inhumation burials of Beaker/Early Bronze Age date are rare in this area and this discovery adds to the small number of Beaker burials known from west Gloucestershire and the Forest of Dean (Darvill 2011; Hoyle 2017), including examples without apparent grave goods. The radiocarbon date for the burial places it at a time when Beaker burials were current during the latter half of the third millennium BC and at the start of the Early Bronze Age (c. 2150 cal BC), and when Food Vessels first appeared along with the beginnings of bronzework.

- 6.2 Apart from the burial there is little trace of any activity at the site other than a few residual finds and a small number of features of an uncertain date. The next tangible phase of activity occurred at the end of the 10th or start of the 11th century AD and involved the digging of a small number of pits, either for the extraction of material or for the burial of domestic refuse, and the laying out of various ditches perhaps associated with fields. The earliest pit was the isolated 1074, which contained an antler point, charred plant remains including weed seeds and cereal, as well as fish scales. The contents indicate arable farming and the consumption of fish in the locality during the late Saxon period. The other pits are slightly later in date and unlike 1074 produced small quantities of medieval pottery (12th-13th century) with the largest group recovered from pit 1005. The latter was also rich in crop remains. A pit found in the evaluation (T10, ev1003) was also relatively rich in plant remains and produced the only notable animal bone assemblage from the site. Again, its primary purpose was for the burial of domestic refuse and it is a likely indicator of low-level and small-scale settlement activity nearby.
- 6.3 From the immediate location of the site, little is known from the late Saxon and medieval period despite the proximity of Offa's Dyke and other extant remains such as the stone tower ('Tut') from which Tutshill probably derives its name, historical documents and the known presence of the Bishton Farm deserted medieval settlement (CqMs 2014).
- 6.4 In the late medieval or post-medieval period a small number of the ditches and pits, as well as the EBA burial, were sealed by a broad shallow bank, which crossed the site from north to south. This feature is the possible extant remains of a strip lynchet

that was associated with the later agricultural use of the land. It is uncertain whether this was associated with the former settlement at Bishton Farm.

7. CA PROJECT TEAM

7.1 Fieldwork was undertaken by. The report was written by Jess Cook. The specialist reports were written by Ed McSloy (pottery), Jacky Sommerville (flint and worked bone), Katie Marsden (metalwork), Sarah Wyles (plant remains, charcoal and fish scales), Andy Clarke (animal bone) and Emily Aitken (radiocarbon). The illustrations were prepared by Tom Brown. The archive has been compiled and prepared for deposition by Hazel O'Neill. The fieldwork was managed for CA by Steve Sheldon and supervised by Alison Roberts. The post-excavation was managed by Tom Brindle.

8. STORAGE AND CURATION

8.1 The archive is currently held at CA offices in Kemble whilst post-excavation work proceeds. Upon completion of the project, and with the agreement of the legal landowners, the site archive and artefactual collection will be deposited with the Dean Heritage Centre, which has agreed in principle to accept the complete archive upon completion of the project. A summary of information from this project, set out within Appendix I, will be entered onto the OASIS online database of archaeological projects in Britain.

9. REFERENCES

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APPENDIX A: POTTERY BY E MCSLOY

Small quantities (17 sherds weighing 392g) of pottery all dating to the medieval period were recorded from four deposits. Recording undertaken for the assemblage accords with standards for archaeological material (Barclay *et al.* 2016, 12-14). Recording was undertaken direct to an Ms Access database and has included quantification according to fabric and by sherd count, weight and rim EVES (estimated vessel equivalents). Where possible vessel form/rim morphology have been recorded, as were decoration and evidence for vessel use or adaptation. The pottery fabric codes used for recording are defined below and a concordance is provided matching types to the Gloucester Pottery (summarised in Vince 1983).

Condition of the pottery is for the most part good – surface loss/abrasion limited to on one sherd from Ditch B (1058). Mean sherd weight is on the high side for a medieval group, though largely as the result of a substantial jug sherd, weighing 159g, from pit 1005 (fill 1006). The latter was the only rim sherd recorded from the assemblage.

Assemblage composition

- CP1 Forest of Dean type unglazed coarsewares. Gloucester fabric TF 49. 15 sherds; 212g.
- GL1 Handmade fine oxidised sandy fabric. Vale of Glamorgan type? 1 sherd; 21g.
- HGR Ham Green glazed ware. Gloucester fabric TF 53. 1 sherd; 159g; 0.30 EVEs.

Summary

A small medieval group was recorded, mostly from a single feature (pit 1005). The large majority consists of bodysherds in a coarse-gritted handmade fabric, a type which is typical of unglazed coarsewares from the area and probably produced across the 12th to 13th centuries and later (Vince 1991). Glazed types noted from Pit 1005 are of non-local origin, from the Bristol area (fabric HGR) and, probably, from the Vale of Glamorgan (GL1). The Ham Green vessel (Fig. 7; no. 1) is a jug typical of the Ham Green 'B' series; with collared rim and 'bridge spouted', and with a thumbed strip applied to its rim/spout. It is a form dateable to the mid or later 12th to the mid 13th centuries (Ponsford 1998).

Illustration catalogue

1. Fabric HGR. Jug with bridge spout. Collared/stepped rim with applied strip below.

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APPENDIX B: WORKED FLINT BY J SOMMERVILLE

A retouched, tertiary flint flake (3g) was recorded from the upper fill of pit 1032. The flint is grey and fine-grained, and features semi-abrupt, regular retouch along the right dorsal edge. This tool cannot be closely dated.

APPENDIX C: METAL ITEMS BY K MARSDEN

Two items of iron were recovered by hand excavation and bulk soil sample of pit 1005 (fill 1006). The assemblage comprises one iron nail fragment and one fragmentary item of uncertain function and date. The nail consists of a shaft portion, which is square in section. Forged iron nails are a Roman introduction and continue in use until industrialisation in the later post-medieval period. Consequently, single and fragmentary examples such as this cannot be reliably dated.

APPENDIX D: WORKED ANTLER BY J SOMMERVILLE (SPECIES IDENTIFICATION BY A CLARKE)

A fragmentary worked antler point, Ra. 1 (3g), Fig. 8.1, was recovered from the upper fill of pit 1074. A late Saxon radiocarbon date was returned for this deposit (990–1040 cal BC at 95.4% confidence, SUERC-82695).

Although worn and cracked, the item displays traces of polish over much of its surface. It is oval in cross-section and is likely to be a cigar-shaped pin beater or 'pick', based on its proportions. This type of tool was probably a weaver's aid, used to push down the weft on a vertical loom or to release knots and tangles (MacGregor 1985, 186–8, Fig. 101 nos. 14-15).

These tools are not common finds in Gloucestershire (McSloy 2010, 8-9). A bone pin beater was recorded from Kings Mead School, Cheltenham (*ibid.*, Fig. 6) and the grave goods at the substantial saxon cemetery at Butler's Field, Lechlade include two examples – one of bone and one of bone/antler (Boyle 2011, 65). Eight pin beaters (seven of bone and one bone/ivory) were retrieved from five sunken-featured buildings at Horcott Quarry, Fairford (Scott 2017, 313–5).

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APPENDIX E: HUMAN BONE BY S CLOUGH

Summary

A single inhumation burial was recovered from Tutshill, near Chepstow and radiocarbon dated to the Early Bronze Age (2280-2030 cal BC, SUERC-82696). The skeleton was lying on the left side with head to the north west, probably in the crouched position, but had been truncated by a ditch in the medieval period.

Methodology

All skeletal material was examined and recorded in accordance with national guidelines (Hillson 1996a; Brickley and McKinley 2004; Mays *et al.* 2004).

Biological Age Assessment

Aging is a highly variable process whose causative factors and biological mechanics are not fully understood (Cox 2000). In addition, 'biological age' does not always equate to 'chronological age' or 'social age' (Lewis 2007) of which adulthood is primarily a culturally defined concept (Cox 2000, Lewis 2007). With this in mind, a multimethod approach was taken (Table 1) to provide a range of estimates. Then each indicator was weighted on reliability. Where only one (less reliable) method was available, then this individual was determined to be only Adult or Subadult.

Table E1: Macroscopic techniques used

Pubic symphysis – Brooks and Suchey 1990					
Auricular surface – Lovejoy et al 1985					
- Buckberry and Chamberlain 2002 (used					
for older adults)					
Dental attrition – Miles 1962					
Cranial suture closure – Meindl and Lovejoy 1985					
Sternal Rib ends – Işcan & Loth 1984 & 1985					
Epiphyseal fusion - McKern and Stewart 1957 and Webb and					
Suchey 1985					
Dental eruption - Moorees, Fanning and Hunt 1963, AlQahtani					
2009					

Sex Estimation

The biological sex of the skeleton was based on examination of standard characteristics of the skull and pelvis (Ferembach *et al.* 1980; Schwartz 1995), with greater emphasis on features of the latter as they are known to be more reliable (Cox and Mays 2000). Measurements of the femoral and humeral heads were employed as secondary indicators (Giles 1970). The adult skeleton was recorded as male, female, probable male (male?), probable female (female?), or indeterminate depending on the degree of sexual dimorphism of features.

Skeletal condition and completeness

The completeness of the skeleton was classified as a percentage of the whole and divided into four groups, 0-25% 25-50% 50-75% and 75+%. The condition of the bone surface of the skeleton was recorded in detail with reference to different anatomical areas (skull, arms, hands, legs and feet) after McKinley (2004, 16) and given an overall summary score.

Metrics

Measurements of long bones were used to estimate the stature of the skeleton (Trotter 1970).

Nonmetric

The presence or absence of frequently recorded non-metrical cranial and post-cranial traits were scored (Berry and Berry 1967; Schwartz 1995; Hillson 1996).

Dental

Dentition was recorded using the Palmer notation. Caries were graded into small (<1mm), medium (2-4 mm) and large (>4 mm). Abscesses were recorded with reference to Dias and Tayles (1997). Periodontal disease and dental enamel hypoplasia were graded using Ogden 2008. Calculus was graded per tooth (flecks, slight, medium, heavy after Brothwell 1981) and recorded as sub and supra gingival.

Pathology

Skeletal pathology and/or bony abnormality was described and differential diagnoses explored with reference to standard texts (Ortner and Putschar 1981; Resnick 1995; Aufderheide and Rodriguez-Martin 1998).

Results

Skeleton 1052 (cut 1053)

This individual was male and probably over 45 years of age at the time of death. This was based on the dental attrition and cranial suture closure only, due to the lack of preservation of the pelvis. There was more than 75% of the skeleton available for observation and the bone surface was grade 3. The skeleton was very fragmented, and some long bone epiphyses were absent. The right hand and most of both feet were completely absent.

There was little bone pathology, only a single Schmorl's node (indentation on the vertebral body) on one thoracic vertebra. Dental disease though was prevalent, out of the 19 teeth available there were five caries, two periapical abscesses and both upper first molars were not present for observation but had the alveolar reduced in height with periodontal disease, suggesting that further caries may have been present. There was some calculus (six teeth, all lower) and the caries were predominantly on the right side. Such a high quantity (26% TPR) on dental

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disease on a Bronze Age skeleton is above the average (4.8% TPR Roberts and Cox 2003, Table 2.27) and may indicate a higher status individual with access to more refined carbohydrate foods.

Despite the very robust and masculine appearance of the skull, the post-cranial skeleton did not have the expected defined muscle attachments and robusticity. There was also no joint disease or degeneration of the joints which would be expected with increase in age. There is therefore the inference that the individual may not have undertaken the usual level of physical activity.

The fragmentation, lack of epiphyses and post mortem damage prevented measurements for stature. However, the anterior posterior flattening of the femur and tibia was measured.

Platymeric index Femur -73 = <85 platymeria (very flattened)

Platycnemic index Tibia - 64 = 63.0-69.9 mesocnemic (moderately flat)

Earlier British populations are more likely to exhibit flattening (Brothwell, 1981: 88-9) and this is consistent with the results.

Discussion

The Early Bronze Age date for the burial places it towards the end of the predominance of inhumation as the burial rite, but firmly in the Beaker period. The lack of evidence for a barrow or any grave goods with the burial, due to the level of truncation, does not exclude the possibility that this was a Beaker burial. These are generally located in barrows and concentrated in low land areas along river valleys (Johnson 2015). They are often single burials, but occasionally in clusters.

West of the Severn in Gloucestershire few burials of this period have been found. A slab-lined cist containing a crouched inhumation of a young male was found at Beachley, Tidenham in 1964. Similarly, this had no grave goods and no traces of a barrow (Darvill 2011, 126).

As such, the recovery of an inhumation dating to the Early Bronze Age in this part of Gloucestershire is an interesting discovery and contributes to the funerary information for the area. A further seven 'flat graves' (those dug into the bedrock with no evidence for a barrow) have been found east of the Severn in the county of Gloucestershire (Darvill 2011), these have all had grave goods accompanying the skeleton. There are also at least five barrows with Beaker burials known.

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Skeleton Number: 1052

Sex: Male

Age: Older adult (45+)

Height: N/A

Completeness: 75 %

Condition: (McKinley 2004) grade 3

Pathology: Schmorl's node Thoracic vertebral body.

Dental: 19 teeth, 9 lost post mortem. 6 caries, 2 periapical lesions, 6 calculus. 2 periodontal disease.

Left and right femur sub trochanter- 22mm AP and 30 ML. Left tibia nutrient foramen 34mm AP, and 22mm ML.

APPENDIX F: ANIMAL BONE BY A CLARKE

A small quantity of animal bone (two fragments weighing 15g) was recovered from deposit 1006, the fill of pit 1005. The material was well preserved but fragmentary, hindering the identification of either the element or species beyond the level of cattle-size mammal.

APPENDIX G: PLANT MACROFOSSILS REPORT BY S WYLES

A series of four bulk soil samples (73 litres of soil) were analysed from Period 2 pits 1040 and 1062 and Period 3 pits 1005 and 1074. It was hoped that any charred remains would provide some limited information on the nature of the local settlement and surrounding landscape, the range of crops and processing techniques and whether this changed over time.

These samples were processed following standard flotation methods, using a 250µm sieve for the recovery of the flot and a 1mm sieve for the collection of the residue. All identifiable charred plant remains were identified following nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary *et al* (2012) for cereals. The results are recorded in Table G1.

Period 2 - Pre-Medieval

A single indeterminate grain and a seed of brome grass (*Bromus* sp.) was recorded from pit 1040 (sample 3) and this assemblage is likely to be reflective of dispersed material. No charred plant remains were noted from pit 1062 (sample 4). There is no clear indication of the dates of these features nor of any settlement activities taking place in the vicinity from the environmental remains in these samples.

Period 3 - Late Saxon/Medieval

A radiocarbon date of 990-1040 cal AD (at 95.4% confidence SUERC-82695) was obtained on barley (*Hordeum vulgare*) from pit 1074 (sample 2). Sample 1 from pit 1005 contained a low number of charred plant remains and small quantity of charcoal fragments greater than 2mm while sample 2 from pit 1074 contained a very large amount of charred plant remains and a high number of charcoal fragments. There were also fish remains (100+ scales) recovered from pit 1074. The assemblage recorded from pit 1005 may be representative of dispersed settlement waste material while that from pit 1074 may be indicative of dumped domestic hearth waste material, possibly derived from both crop processing waste and crops spilt/spoilt during crop processing and food preparation.

The assemblage from pit 1074 was dominated by seeds of vetch/wild pea (*Vicia/Lathyrus* sp.), which represented 35% of the remains. The cereal remains included those of free-threshing wheat (*Triticum turgidum/aestivum* type) and barley (*Hordeum vulgare*). Free-threshing wheat was the predominant wheat species in this part of Britain during this period. Other potential crops within this assemblage were seeds of possible garden pea (*Pisum sativum*) and oats (*Avena* sp.). A number of the oat grains were large and may be those of the cultivated species (*Avena sativa*), but no floret bases were recovered to assist with confirming this. It is also possible that some of the vetches/wild peas, due to the high number recovered, were also grown as a crop rather than being contaminants of the cereals. There were a number of hazelnut (*Corylus avellana*) shells recorded, which may be an indication of the exploitation of the local hedgerows/woodland edge as a wild food resource.

The weed seeds were those of species typical of grassland, field margins and arable environments. The presence of twining species, such as cleavers (*Galium aparine*) and knotgrass (*Polygonum aviculare*), within the weed assemblage may suggest harvesting by sickle (Hillman 1981). There were also a few seeds of stinking mayweed (*Anthemis cotula*) within the assemblage. Stinking mayweed becomes more common in assemblages of Saxon and medieval date (Greig 1991) and this is thought to be linked with the increased cultivation of heavier clay soils (Green 1984) associated with the change to mouldboard ploughs from ards (Jones 1981; Stevens with Robinson 2004: Stevens 2009). It may be an indication that some of the crops from the site were grown on heavier clay soils.

This assemblage is comparable with the assemblage recovered from medieval pit 1003 from the evaluation on this site (OA 2014) and other assemblages from medieval rural settlements in the wider area such as Westward Road, Ebley (Stevens 2000a) and Maidenhill, Stonehouse (Stevens 2000b).

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Table G1: Charred plant Identifications

Phase	2 - pre Medieval 3 - Medieval			edieval	
Feature Type	Pits				
Feature		1040	1062	1005	1074
Context		1041	1065	1006	1076
Sample		3	4	1	2
Vol (L)		18	15	20	20
Flot size (ml)		10	2	40	100
Roots %		50	50	60	25
Cereals	Common Name				
Hordeum vulgare L. sl (grain)	barley	-	-	1	68
Triticum turgidum/aestivum (grain)	free-threshing wheat	-	1	6	126
Triticum turgidum/aestivum (rachis					
frags)	free-threshing wheat	-	-	1	•
Cereal indet. (grains)	cereal	1	1	5	154
Cereal frag. (est. whole grains)	cereal	-	1	2	40
Cereal frags (culm node)	cereal	-	1	1	3
Other Species					
Ranunculus sp.	buttercup	-	-	-	1
Corylus avellana L. (fragments)	hazelnut	-	-	1	34
Chenopodium sp. L.	goosefoot	-	-	-	2
Polygonum aviculare L.	knotgrass	-	-	1	1
Rumex sp. L.	docks	-	-	-	3
Brassica sp. L.	brassica	-	-	-	10
Vicia L./Lathyrus sp. L.	vetch/wild pea	-	-	2	309
Pisum sativum L.	pea	-	-	cf. 1	cf. 3
Galium sp. L.	bedstraw	-	1	1	1
Galium aparine L.	cleavers	-	-	-	1
Anthemis cotula L. (seeds)	stinking mayweed	-	1	1	4
Avena sp. L. (grain)	oat grain	-	1	1	35
Avena L./Bromus L. sp.	oat/brome grass	-	1	2	85
Bromus sp. L.	brome grass	1	-	-	11
Charcoal > 4/2mm	*/*	-/*	**/**	**/***	
Fish scales	-			****	

Key: * = 1-4 items; ** = 5-19 items; **** = 20-49 items; ***** = 50-99 items; ****** = >100 items,

APPENDIX H: RADIOCARBON DATING BY E AITKEN

Radiocarbon dating was undertaken in order to confirm the date of pit 1074 and Skeleton SK1082. The samples were analysed during October/November 2018 at Scottish Universities Environmental Research Centre (SUERC), Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow, G75 0QF, Scotland. The methodology employed by SUERC Radiocarbon Laboratory is outlined in Dunbar *et al.* (2016).

The uncalibrated dates are conventional radiocarbon ages. The radiocarbon ages were calibrated at 68% and 95% confidence using the intercept method with the end points rounded out to the nearest 10 years and using the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.3.2 (2017) (Bronk Ramsey 2009) and the IntCal13 curve (Reimer *et al.* 2013).

The results are presented in Table H1 and in the form of calibration plots generated from OxCal. SUERC-82695 returned a date on charred barley that is consistent with the late Saxon period (Fig. 9:B, 990-1040 cal AD at 95% confidence), whilst the date on a sample of human bone taken from skeleton 1052 confirms the date of the burial as Early Bronze Age (Fig. 9:A, 2280-2030 cal BC at 95% confidence). The carbon/nitrogen ratio (3.3) for SUERC-82696 (Table H1) indicates a terrestrial diet and the probable absence of a dietary offset. Such offsets, when present, can make the radiocarbon measurement seem significantly older than the true age of the sample.

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Table H1: Radiocarbon dating results

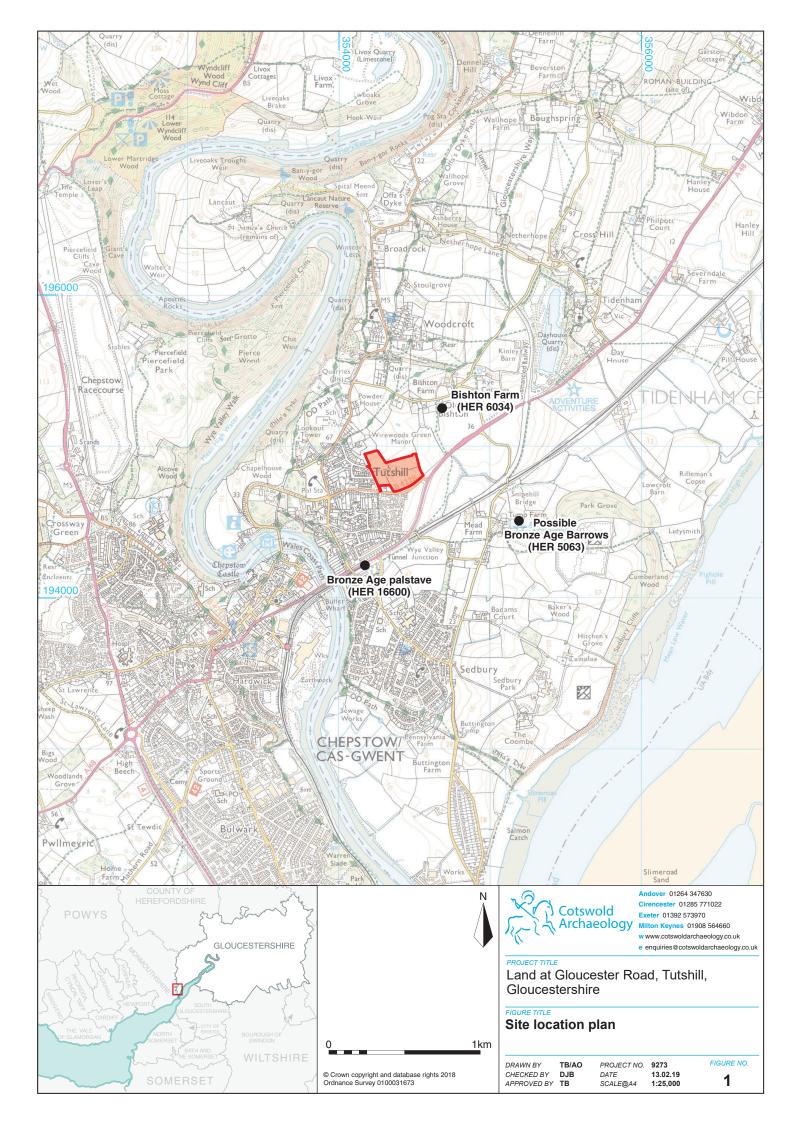
Feature	Lab No.	Material	Radio-carbon age uncal BP	δ ¹³ C ‰	δ ¹⁵ N ‰	ratio	radiocarbon age	Calibrated radiocarbon age 95.4% confidence
1076 Pit 1074	SUERC-82695	Charred plant remains Barley (Hordeum vulgare)	1006±24	-22.9			1010–1030 cal AD	990-1040 cal AD
SK1082	SUERC-82696	Human bone Femur	3745±32	-20.6	10.8	3.3	2210- 2060 cal BC	2280–2030 cal BC

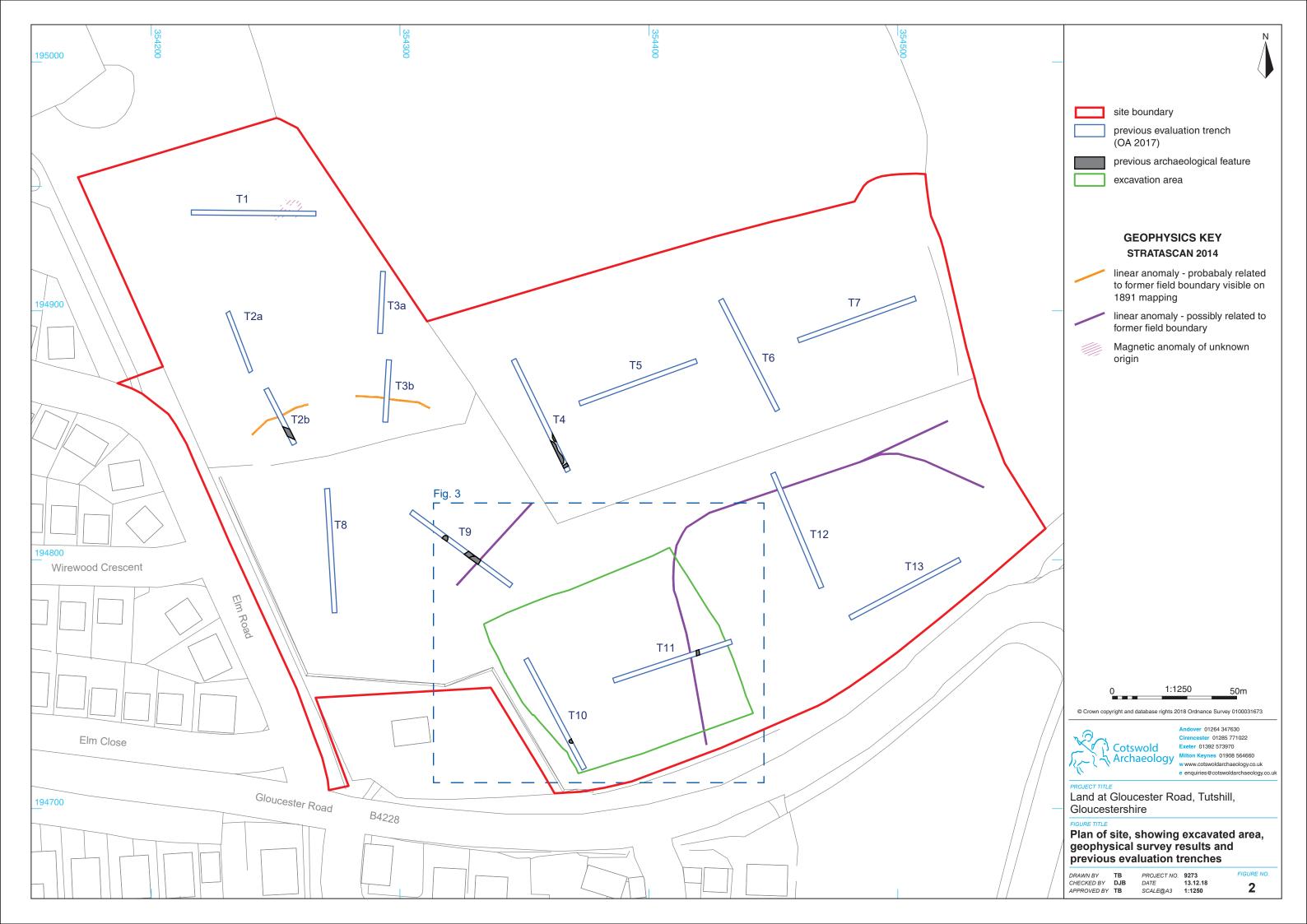
APPENDIX I: OASIS REPORT FORM

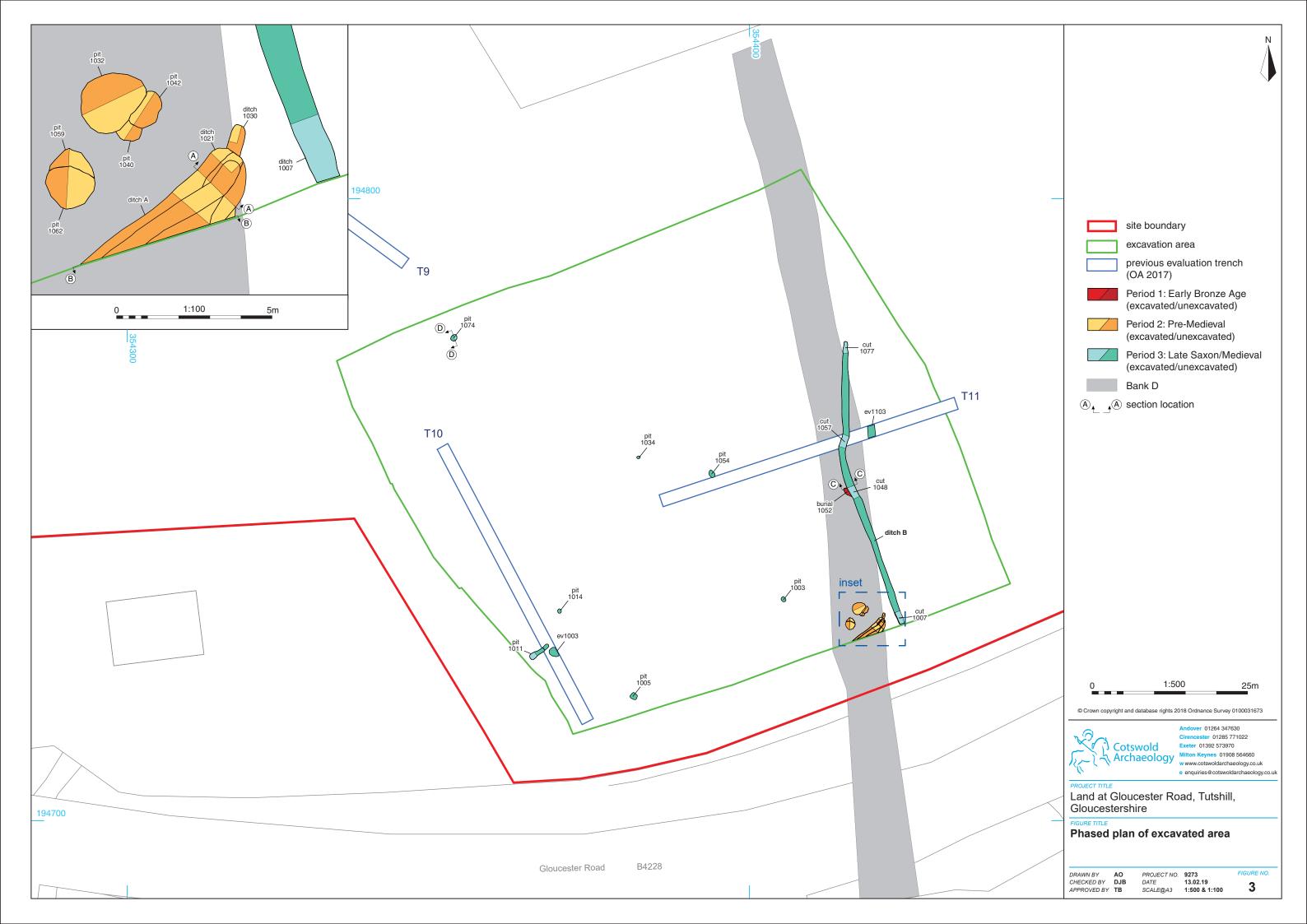
PROJECT DETAILS					
Project Name	Land North of Gloucester Road, Tutshill, Gloucestershire				
Short description	An archaeological excavation was undertaken by Cotswold Archaeology in January 2018 at the request of Bellway Homes Ltd (Wales) and their archaeological consultant, CgMs Heritage, on land north of Gloucester Road, Tutshill, Gloucestershire.				
	The excavation identified a small number of features of principally prehistoric, Late Saxon and medieval date. The earliest find was the truncated and disturbed remains of an Early Bronze Age crouched inhumation burial of an adult male in a possible stone lined cist. Residual finds including a worked flint, and a small quantity of Iron Age and Roman pottery hint at other activity on or near the site. However, the only features that could be dated with any confidence are of late Saxon/medieval and post-medieval date that collectively represent dispersed and small-scale settlement activity and land division associated with rural settlement. Radiocarbon dating indicates a single pit is of probable late Saxon date, whilst two other pits are assigned a 12th to 14th century date based on a small quantity of pottery. Other small features, mostly pits, are probably of this date. A ditch and other traces of ditches				
	and gullies represent likely field boundaries, whilst an extant low, broad linear bank that crossed the site from north to south is interpreted as a possible field lynchet of late medieval or post-medieval date.				
Drainet dates					
Project dates Project type	8th to 25th of January 2019 Excavation				
Previous work	Desk Based Assessment (CgMs 2014) PC/RAJS/16716 Field evaluation (OA 2017) OATUCOEV				
Future work	Unknown				
PROJECT LOCATION					
Site Location	Land North of Tutshill, Tidenham, Gloucestershire				
Study area (M²/ha)	07.5400.0404				
Site co-ordinates	ST 5430 9481				
PROJECT CREATORS					
Name of organisation	Cotswold Archaeology				
Project Brief originator Project Design (WSI) originator	CgMs Heritage Cotswold Archaeology				
Project Manager	S Sheldon				
Project Supervisor	A Roberts				
MONUMENT TYPE	None				
SIGNIFICANT FINDS	None				

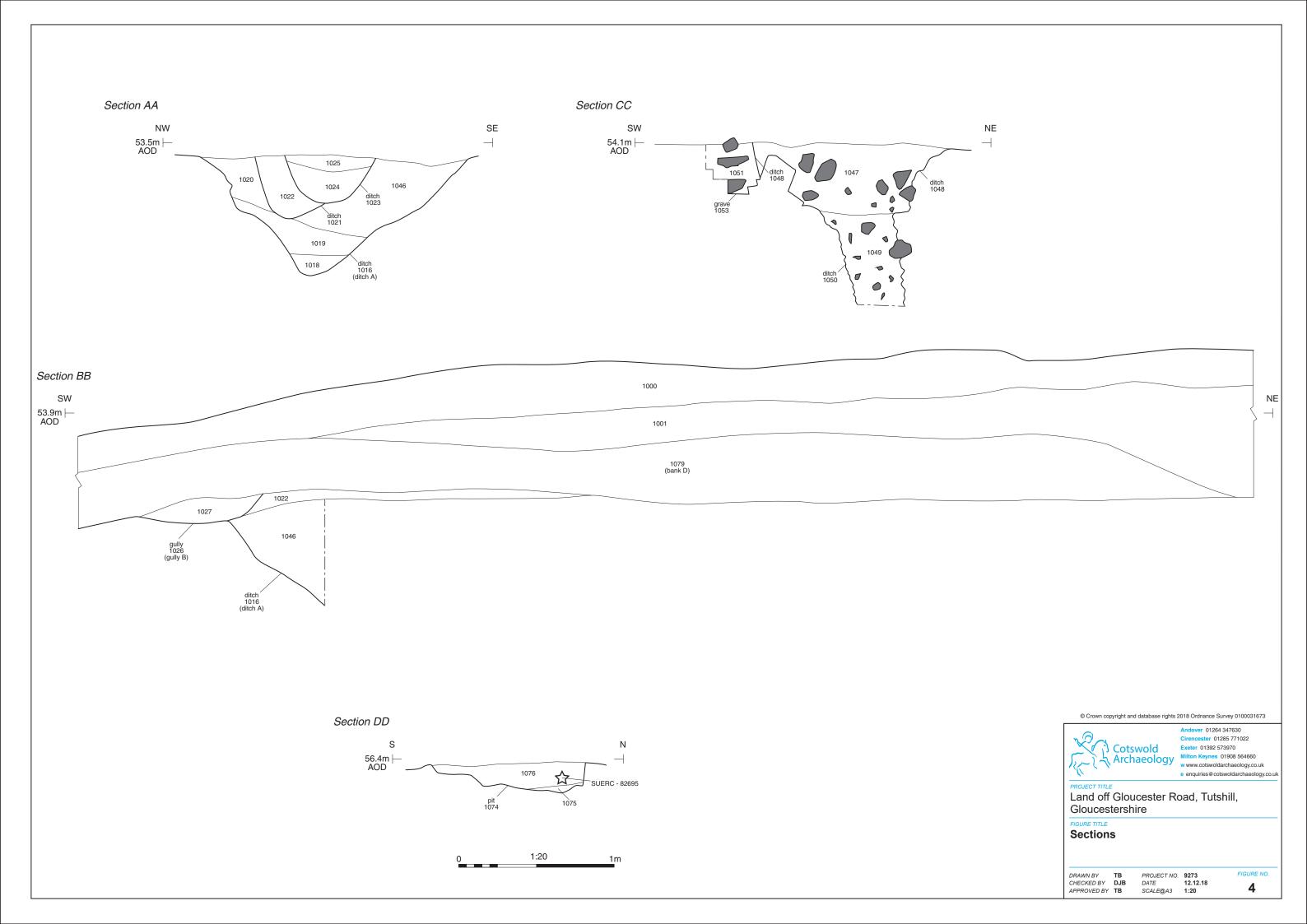
PROJECT ARCHIVES	Dean Heritage Centre	Content (e.g. pottery, animal bone etc)
Physical		Ceramics, Metalwork, Animal Bone, Lithics, Human Bone
Paper		Context Records, Plans, Sections, Sample Records, Matrices, Reports
Digital		Reports, Database, Photographs, Plans
BIBLIOGRAPHY		

CA (Cotswold Archaeology) 2019 Land North of Gloucester Road, Tutshill, Gloucestershire: Archaeological Excavation. CA typescript report **9273_1**











Truncated burial 1052, looking north-east (1m scale)



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PROJECT TITLE

Land at Gloucester Road, Tutshill, Gloucestershire

FIGURE TITLE

Photograph

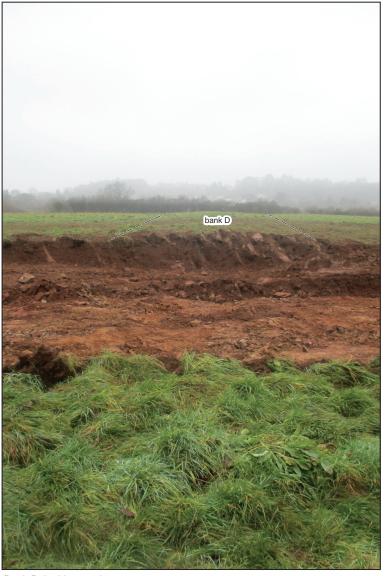
 DRAWN BY
 TB
 PROJECT NO.
 9273

 CHECKED BY
 DJB
 DATE
 14.12.18

 APPROVED BY
 TB
 SCALE@A4
 NA

FIGURE NO.

5



Bank D, looking north



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PROJECT TITLE

Land at Gloucester Road, Tutshill, Gloucestershire

FIGURE TITLE

Photograph

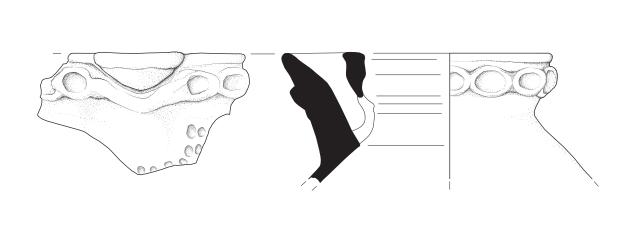
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FIGURE NO.





1:2 100mm



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Land at Gloucester Road, Tutshill, Gloucestershire

Medieval jug with bridge spout

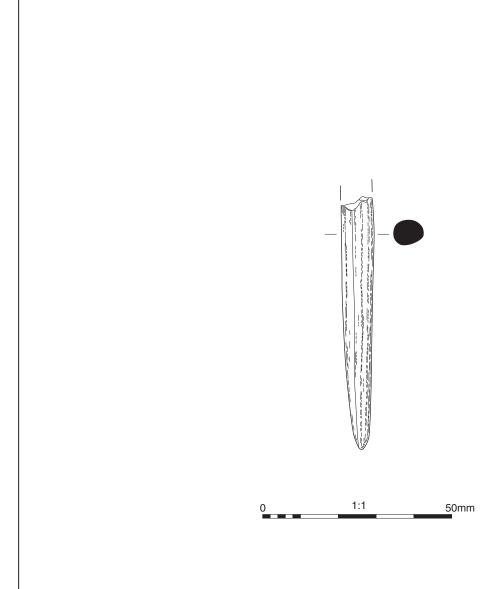
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PROJECT NO. 9273

DATE 18/01/2019

SCALE@A4 1:2

FIGURE NO. 7





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Land at Gloucester Road, Tutshill, Gloucestershire

FIGURE TITLE

Worked antler point

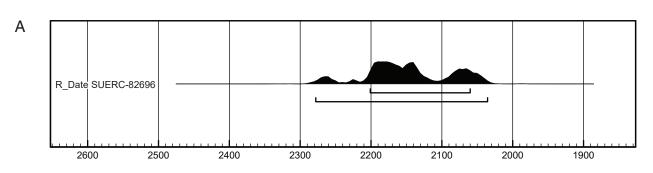
 DRAWN BY
 AO
 PROJECT NO.
 9273

 CHECKED BY
 DJB
 DATE
 13.02.19

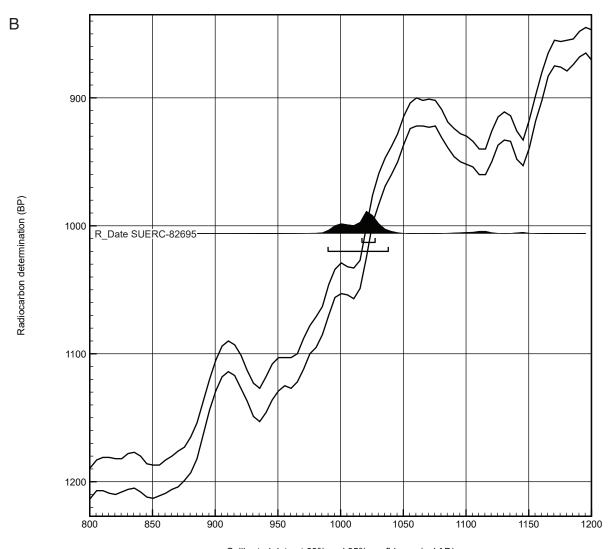
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 SCALE@A4
 1:1

FIGURE NO.

8



Calibrated date at 68% and 95% confidence (cal BC)







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Land at Gloucester Road, Tutshill, Gloucestershire

FIGURE TITLE

Calibrated radiocarbon dates. A, SUERC-82696 from burial 1052 and B, SUERC-82695 from pit 1074

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PROJECT NO. 9273
DATE 13.02.19
SCALE@A4 NA

FIGURE NO.



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