Homes at Tolgus, Redruth Cornwall

Post-excavation Assessment

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Summary

Wessex Archaeology was commissioned by Ward Williams Associates, to undertake archaeological mitigation works comprising a strip map and record excavation covering 0.32 hectares centred on NGR 168850 042150, at Tolgus, Redruth, Cornwall. The works were undertaken in order to mitigate Condition 3 of planning permission PA12/09717 granted by Cornwall County Council for the demolition of farm buildings, and the erection of 370 dwellings, along with associated access and utility arrangements.

The excavation of two areas, Area A and B, located numerous intercutting boundary features comprising ditches and hedgerows likely representing post-medieval Cornish hedges. Backfill material and an 'n'-shaped feature of indeterminate function within Area A, in addition to a cess pit and associated drainage gully in Area B, are believed to relate to mining activity undertaken across the site in the 19th century.

Within Area B evidence of Bronze Age activity was also identified. A ring ditch within the north-eastern corner of the excavation area may relate to an example indicated by cropmarks which are suggested to have given 'Part of Ring Croft' its name as shown on the 1841 Tithe Map. Occurrences of stone rubble confined to the western portion of the ring ditch may indicate the presence of an associated cairn, which, when considered in conjunction with the presence of two entrances and lack of structural postholes, may suggest that the ring ditch was associated with a monument. A pit feature to the west and posthole within its northern entrance are believed to be associated with the ring ditch.

Finds typically comprised pottery sherds of post-medieval date, with Bronze Age sherds located within the ring ditch and pit feature to the west. Post-medieval glass and clay pipes were also among the assemblage.

The works, undertaken in accordance with an approved written scheme of investigation, were carried out between 12 and 26 October 2020.

Acknowledgements

Wessex Archaeology would like to thank Ward Williams Associates, on behalf Treveth Holdings and Cornwall Council, for commissioning the archaeological mitigation works. Wessex Archaeology is also grateful for the advice of HEP Archaeology, Cornwall Council, who monitored the project for Cornwall Council.

Homes at Tolgus
Redruth, Cornwall

Post-excavation Assessment

1 INTRODUCTION

1.1 Project and planning background

1.1.1 Wessex Archaeology was commissioned by Ward Williams Associates, to undertake archaeological mitigation works comprising a strip map and record (SMR) excavation covering 0.32 ha centred on NGR 168850 042150, at Tolgus, Redruth, Cornwall, TR15 3AL (**Fig. 1**).

1.1.2 The proposed development comprises the demolition of farm buildings, and the erection of 370 dwellings, along with associated access and utility arrangements. A planning application (application ref. PA12/09717) submitted to Cornwall County Council, was granted, subject to conditions, one of which relate to archaeological investigation.

1.1.3 A condition (No. 3) attached to the Planning Permission addresses the issue of archaeological work to be undertaken at the development site. It states:

A) No demolition/development shall take place/commence until a programme of archaeological work including a Written Scheme of Investigation has been submitted to and approved by the Local Planning Authority in writing. The scheme shall include an assessment of significance and research questions; and:

1. The programme and a phasing and methodology of site investigation and recording

2. The programme for post investigation assessment

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

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

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

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

B) No demolition/development shall take place other than in accordance with the Written Scheme of Investigation approved under Section (A).

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

Reason: To ensure that provision is made to record finds of archaeological interest in accordance with National Planning Policy Framework paragraph 141.

1.1.4 The excavation was undertaken in accordance with a written scheme of investigation (WSI), which detailed the aims, methodologies and standards to be employed, for both the fieldwork and the post-excavation work (Cotswold Archaeology 2016). Cornwall Council approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing. The excavation was undertaken from the 12 to 26 October 2020.

1.1.5 Following completion of the excavation it was determined that an archaeological evaluation be undertaken. The overarching WSI (Cotswold Archaeology 2016) was revised on this basis in May 2021 (Wessex Archaeology 2021a) and evaluation carried out between 24th May and 3rd June 2021. Numerous boundary features comprising ditches and hedgerows are thought to represent Cornish Hedges with debris related to mining activity carried out during the 19th century also recorded. Neolithic/Bronze Age activity was apparent in the form of a rubble filled ditch, and a sherd of residual Iron Age pottery was recovered, indicating a background of prehistoric activity across the site (Wessex Archaeology 2021b).

1.2 Scope of the report

1.2.1 The purpose of this report is to provide the provisional results of the excavation and to assess the potential of the results to address the research aims outlined in the WSI. Where appropriate, it includes recommendations for a programme of further analysis, outlining the resources needed to achieve the aims (including the revised research aims arising from this assessment), leading to dissemination of the archaeological results via publication and the curation of the archive.

1.3 Location, topography and geology

1.3.1 The site is situated outside of the north-western fringes of Redruth and encloses approximately 29.5 ha in total. The main body of the site comprises a series of arable and pasture fields and lies between the A30 to the north/north-west and the A3047 to the south-east. A minor road runs through the centre of the site and the Tolgus Vean Farmhouse and an industrial depot lie towards the western site boundary.

1.3.2 The area of the A3047 subject to the proposed remodelling and downgrading works runs on a north-east/south-west alignment along the north-western edge of Redruth, with residential areas beyond.

1.3.3 Existing ground levels sloped from 103 to 100 m from north to south.

1.3.4 The underlying geology of the site is mapped as Hornfelsed slate and Hornfelsed siltstone of the Mylor Slate Formation, with a band of Permian Felsite running through the approximate centre of the site on a north-east/south-west alignment. No superficial deposits are recorded in the main body of the site, although a band of alluvial clays, silts, sands and gravels runs along the north-eastern site boundary, cutting across the line of the A3047 in this area (British Geological Survey online viewer 2021).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

2.1.1 The site has been the previous subject of a desk-based heritage assessment (CA 2012) and a geophysical survey (Stratascan 2012). A watching brief was also undertaken by

Cotswold Archaeology during the creation of the site compound (CA 2017). The following text is summarised from these sources.

2.2 Previous works related to the development

Geophysical survey (Stratascan 2012)

2.2.1 The geophysical survey recorded several anomalies within the site. These included ditches forming a series of enclosures in the eastern half of the site, as well as a possible circular ditch with an internal pit by the northern site boundary. These putative enclosures may be related to former settlement activity or farmsteads. Also recorded were several probable former field boundaries, some of which were probably marked by Cornish hedges.

Archaeological Watching Brief (CA 2017)

2.2.2 During groundworks associated with the creation of a compound for the site, archaeological monitoring recorded a number of ditches and two pits. Whilst these remain artefactually undated, several were cut into the natural geology and sealed by subsoil, indicating at least a medieval/post-medieval date for the features. Given the alignment of some of these ditches correlated with the existing field system it is likely that these represent former field boundaries.

2.2.3 Additional field boundaries dating to the post-medieval/modern period(s) were also identified.

2.3 Archaeological and historical context

Prehistoric and Roman (pre-AD 410)

2.3.1 A cupmarked stone lies some 200m north of the site's north-eastern tip.

2.3.2 The cropmarks of a possible round (i.e. a small embanked settlement of late prehistoric or Roman date) have been recorded in the south-eastern part of the site. Additionally, a field in the southern part of the site is recorded as 'Part of Ring Croft' on the 1841 Tithe Map, which might potentially hint at the former presence of a second round.

Early medieval and medieval (AD 410–1539)

2.3.3 The settlement of Tolgus (*c*. 50m east of the A3047) is first recorded in a document of 1280. The settlement of Chyandower (*c*. 50 m south-east of Blowinghouse Roundabout) is first recorded in a document of 1522. It is likely that the application site farmed part of the agricultural hinterland of these settlements.

2.3.4 Tin mining is recorded around Redruth from the medieval period onwards, but there is no known evidence for medieval tin mining at the application site.

Post-medieval and modern (1539–present)

2.3.5 The field boundaries across the site are generally Cornish Hedges, comprising hedges sandwiched between two parallel dry-stone walls. These may be medieval in origin, but they are considered more likely to be a result of post-medieval enclosure patterns. Cornwall Historic Environment Service has carried out a program of Historic Landscape Characterisation across the county, which records the entirety of the site as a mixture of 'Post-medieval Enclosed Land' and '20th-century settlement'.

2.3.6 The post-medieval and early modern periods saw a massive expansion in the copper and tin industry in Cornwall. The Cornwall and West Devon Mining Landscape World Heritage Site lies to the immediate east of the site and mining within the site itself was recorded from

at least the mid-19th-century, as part of the "sett" (area of mineral permissions) of the Great South Tolgus Tin and Mining Co. (formed in 1847; closed 1871). Several associated shafts and above-ground structures are recorded within the site on 19th-century cartographic sources. Several of the mine buildings are still extant at the site, although they were modified extensively in the later 19th and/or 20th centuries for use as farm buildings.

2.3.7 In 1919–1927, Tolgus Mines Ltd operated at the site. A new shaft was excavated in the western area of the site, at the spot now occupied by the industrial depot.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The general aims of the excavation, in compliance with the Chartered Institute for Archaeologists' *Standard and guidance for archaeological excavation* (CIfA 2014a), were to:

- examine the archaeological resource within a given area or site within a framework of defined research objectives;
- seek a better understanding of the resource;
- compile a lasting record of the resource; and
- analyse and interpret the results of the excavation and disseminate them.

3.2 Objectives

3.2.1 The objectives of the archaeological SMR, as detailed within the WSI (Cotswold Archaeology 2016), were to:

- Record any evidence of past settlement or other land use prior to destruction by the proposed development;
- Recover artefactual evidence to date any archaeological remains that may be identified;
- Sample and analyse environmental remains to create a better understanding of past land use and economy; and
- Archive and report on the results at a level appropriate to their significance.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Cotswold 2016) and in general compliance with the standards outlined in CIfA guidance (CIfA 2014a). The post-excavation assessment and reporting followed advice issued by the Association of Local Government Archaeological Officers (ALGAO 2015). The methods employed are summarised below.

4.1.2 The SMR comprised two areas, Area A towards the north-west corner and Area B towards the south-west corner of the Site. These were placed over likely archaeological anomalies identified by the geophysical survey.

4.2 Fieldwork methods

General

4.2.1 The excavation areas were set out using a Global Navigation Satellite System (GNSS), in the same position as that proposed in the WSI (**Fig. 1**). The topsoil/overburden was removed in level spits using a 360º excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. Machine excavation proceeded in level spits until the archaeological horizon or the natural geology was exposed.

4.2.2 Where necessary, the surfaces of archaeological deposits were cleaned by hand. A sample of archaeological features and deposits was hand-excavated, sufficient to address the aims of the excavation. A sample of natural features, such as tree-throw holes, was also investigated.

4.2.3 Spoil derived from machine stripping and hand-excavated archaeological features was visually scanned for the purposes of finds retrieval. A metal detector was also used. Artefacts were collected and bagged by context. All artefacts from excavated contexts were retained, although those from features of modern date (19th century or later) were recorded on site and not retained.

Recording

4.2.4 All archaeological features and deposits were recorded using Wessex Archaeology's pro forma recording system. A complete record of excavated features and deposits was made, including plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid.

4.2.5 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.

4.2.6 A full photographic record was made using digital cameras equipped with an image sensor of not less than 16 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

4.3 Finds and environmental strategies

General

4.3.1 Strategies for the recovery, processing and assessment of finds and environmental samples were in line with those detailed in the WSI (Cotswold Archaeology 2016). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b), *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011) and CIfA's *Toolkit for Specialist Reporting* (Type 2: Appraisal).

4.4 Monitoring

4.4.1 HEP Archaeology monitored the works on behalf of the LPA. Any variations to the WSI, if required to better address the project aims, were agreed in advance with the client and HEP Archaeology.

5 STRATIGRAPHIC EVIDENCE

5.1 Introduction

Summary of archaeological features and deposits

5.1.1 During the course of the SMR, archaeological features were located within both Area A and Area B (**Fig. 1**). Area A (**Fig. 2**) was found to contain a series of linear features, some of which contained large quantities of stone rubble suggestive of the presence of either structures or dry-stone walls. A shallow and irregular feature located within the area was of particular interest, though its precise function remains uncertain, a coin dating to the early 19th century was recovered. The features are thought to broadly relate to the industrial and later agricultural activities known to have taken place across the site from the post-medieval period.

5.1.2 Area B (**Fig. 3**), however, contained features pertaining to earlier use of the site. The main feature comprised a prehistoric ring ditch, possibly a monument feature, with associated pit feature immediately adjacent. A number of post-medieval linear features were identified across the site, along with a possible cesspit likely associated with mining activity. The linear features, from which post-medieval pottery was recovered, were left largely unexcavated in compliance with the WSI which stated *features that are in plan clearly post-medieval and/or modern in date will not be excavated* (Cotswold Archaeology 2016, 6). Where pottery was recovered, the find spots were issued context numbers and subjected to full recording including being surveyed.

5.1.3 A detailed description of the results is presented below, organised by Area and period. **Figure 1** shows the location of the site with archaeological features, and **Figures 2 - 3** show the archaeological results within Area A and Area B, respectively, in more detail.

Methods of stratigraphic assessment and quantity of data

5.1.4 All handwritten and drawn records from the excavation have been collated, checked for consistency and stratigraphic relationships. Key data has been transcribed into a database, which can be updated during any further analysis. Preliminary phasing of archaeological features and deposits was principally undertaken using stratigraphic relationships and the spot dating from artefacts, particularly pottery.

5.2 Soil sequence and natural deposits

5.2.1 Area A was excavated through a dark brownish grey silty clay loam topsoil (1001) with rooting present throughout. Approximately 0.28 m thick, this overlay the natural geology (1002) which comprised a pale yellowish brown clay with stone/shillet inclusions.

5.2.2 Area B, however, was excavated through 0.30 m of topsoil (2001) comprising the same material as (1001) which was found to overlie a subsoil (2002). The mid to light brown silty clay was approximately 0.10 m deep and, due to it sealing post-medieval features, likely derives from 19th century mining and subsequent farming during the 20th century. The subsoil was also found to overlie the natural geology (2003) which, in this area, consisted of a mix of shillet outcrops and reddish-brown clay.

5.3 Area A

Post-medieval – modern (1500 – present)

5.3.1 A series of intercutting linear features were located across Area A with a notable concentration to the east (**Fig. 2**).

5.3.2 Ditch (1003, 1012) aligned approximately east to west was located within the northern extent of the area and seen to continue west beyond the confines of the area. The profile of the ditch varied, appearing to comprise concave sides and irregular base in the west (1003), whilst further east the sides became straighter and the base flatter (1012) (**Pl. 1** and **2**). The presence of posthole 1006 within the base of the western extent (1003) may have contributed to its irregular appearance. The posthole (1006) was found to contain a single deposit (1007) which comprised the same homogenous, dark brownish-grey silty clay as the basal fill (1004) of ditch 1003 (**Pl. 1**). No artefactual evidence was recovered from either of these deposits. Due to the similarity of material within the two features a relationship remains unclear, and the date of the posthole remains indeterminate.

5.3.3 The presence of a small extent of redeposited natural (1005) within the upper portion of the south-south-western edge of ditch 1003, visible only in section, indicates the localised collapse of the ditch side. Found overlying the dark brownish-grey / reddish-brown silty clay secondary fill (1004, 1013) present throughout the remainder of the ditch (1003, 1012), the collapse was caused during later activity. Fully glazed pottery from 1013 is suggestive of a late medieval/post-medieval date. The width and depth of the feature was notably inconsistent, ranging from 0.67 m wide and 0.16 m deep in the east (1003) to 1.83 m and 0.26 m deep in the west (1012) (**Fig. 2**); possibly the result of genuine variation, modern truncation and the presence of a second ditch (1014) to the east.

5.3.4 In plan ditch 1003/1012 appeared to continue along an approximate north-south alignment, with a 90° bend evident (**Fig. 2**). Upon investigation, however, a second ditch (1014) was identified. The fill sequence of ditch (1014), which measured 4 m in length, 1.71 m in width and 0.38 m in depth, was at variance to that of ditch 1003/1012. A dark reddish brown loamy silt deposit (1016) was found to extend the length of the ditch, overlying a small extent of mid yellowish grey clayey silt (1015), observed to be confined to investigated slot 1014 (**Pl. 3**). It is also notable that while the terminus of ditch 1014 is evident, that of 1003/1012 is lacking, suggesting that 1014 truncates 1012.

5.3.5 Aligned parallel to ditch 1003/1012, ditch 1008 was largely truncated by 19th century mining activity resulting in the loss of the western continuation of the feature. Features positioned to the east also appear to truncate the ditch (1008) which was found to comprise steep stepped sides, a flat base, and contained three distinct fills (1009-10) which indicated the natural silting of the ditch through rapid erosion of the ditch edges (1011) and prolonged erosion of the immediate land surface (1010) (**Pl. 4**). Additionally, the presence of a mixed, soft, mid to pale yellow clay with occasional patches of dark brown silty clay and small sub-rounded stone inclusions likely pertains to a backfilling event. No artefactual evidence was observed during the investigation of the feature and no relationship was apparent with any of the features to the east (1024, 1026 and 1031).

5.3.6 Ditch 1008 likely represents the same feature as 1026/1024, a boundary ditch dating to the post-medieval period. Indeed, 1008 and 1026 are both aligned approximately east-west, parallel to 1003/1012, and comprise the same profile. The fill sequence is also similar with a primary fill (1027) deposit located at the base of ditch 1026, sealed by a homogenous secondary fill (1028). Although deposit 1027 within ditch 1026 comprised a bluish grey clay as opposed to the yellow deposit seen within ditch 1008, this is most likely the result of local variation and/or gleying of the natural geology. The lack of deliberate backfill noted within 1026 indicates that the event, represented by 1009 within ditch 1008, was localised.

5.3.7 To the south-west, another post-medieval ditch (1031) was found to truncate ditch 1024/1026. The linear feature (1031), measuring 0.28 m in depth, had a flat base with concave sides and contained two deposits. A noticeably thin mid brownish grey silty clay

deposit (1032), measuring just 0.05 m thick, was seen within the south-western section of the investigated slot. The deposit, recorded as fine and silky, appears to have formed rapidly following the instatement of the ditch and was overlaid by a secondary deposit (1033) of mid/dark brown clay loam with abundant large angular to sub-angular stones (**Pl. 5**). Whilst the precise origin of the stones remains uncertain they likely pertain to the presence of a Cornish hedge or other stone structure which, following demolition or collapse has either been pushed or naturally weathered into the ditch.

5.3.8 Ditch 1031 also appears to have truncated a large pit-like feature (1029). The feature extended beyond the confines of the area and remains of uncertain date due to a lack of artefactual evidence. The irregular feature contained a single deposit comprising greyish brown clay loam of similar appearance to deposit 1033 within 1031. The precise function of the feature remains unclear, in part due to it having only partially been revealed.

5.3.9 To the south of the area, an irregular and shallow feature (1017, 1020, 1022) was identified (**Pl. 6**). Appearing as a 'n'-shape in plan, the feature contained a brown silty clay (1019, 1021, 1023) which had a distinctive gritty fill and contained a single pottery sherd tentatively dated to the post-medieval period. Investigation of the northern end confirmed that the feature terminated in this area, with both north – south projections appearing contemporary. Within the western extension (1017) a second deposit (1018) comprising a dark brown silty clay was observed. This contained a two pence coin (Object 1) provisionally dated to *c.* 1820 and was partially overlain by 1019, the upper deposit. The profile of the feature varied, with irregular sides and base noted to the west (1017) whilst convex sides and a flat base were observed in the north (1020, 1022). The eastern extent of the feature was largely truncated by modern disturbance. Whilst the precise function of the feature remains unknown, the dating evidence recovered indicates that it may be associated with mining activity undertaken across the site during the 19th century.

5.3.10 A modern ditch was found to traverse the south-western area of the site (**Fig. 2**). The ditch, aligned north-west to south-east, appeared to cut disturbed backfill material thought to have derived from the mining activities undertaken on site. As such the ditch was considered modern and therefore remained unexcavated.

5.4 Area B

Prehistoric

5.4.1 The main feature within Area B was a ring ditch (Group 2076: 2012, 2014, 2020, 2028, 2030, 2032, 2038, 2046, 2057, 2064, 2067, 2070 and 2072) which occupied the northern extent of the site (**Fig. 3, Cover**). During investigations of the feature two entrances were identified, one in the north and one in the west. The northern entrance, within which a small posthole (2074; **Fig 4a**) was located, measured 2.40 m, whilst the western entrance measured 1.0 m. The most northerly of the two termini forming the western entrance (2020) appeared to have been heavily truncated by later activity, initially thought to indicate that this entrance may instead represent the truncation of the ring ditch in this area. However, the investigation of its counterpart to the south (2030), the end of which more clearly reflects a terminus to the feature given the steep rise of the cut edge, confirmed the presence of an entrance (**Fig 4b** and **4c**). The two termini forming the northern entrance comprised similar profiles with the eastern most coming to more of a defined end than the western most (2070).

5.4.2 Within many of the investigative slots highlighted the ring ditch comprised concave sides and a flat base, containing a single deposit typically of brown silty clay with some local variations in colour was encountered (**Pl. 7**). Within the north-western extent of the ring

ditch, between the two entrances, however, the fill sequence was seen to comprise a mid-yellowish brown clay silt with fine gravels and cobble sized stone inclusions. This was overlain by a light reddish brown clay silt with the appearance of redeposited natural which did not extend further south. It is also notable that deposits in the western extent of the ring ditch were found to contain a significantly increased volume of stone inclusions with deposit 2065 within slot 2064 mainly comprising large rocks (**Pl. 8**). As such the ditch can be seen to have largely silted up through the natural erosion of the cut edges. However, evidence, largely in the west of the feature, also purports to the collapse of an adjacent stone structure. Indeed, the stones do not appear to occur in the immediate environment and, whilst no tip lines are evident (**Pl. 8**), their presence likely indicates a structure associated with the ring ditch. The presence of two entrances, lack of associated postholes and overall depth of the ring ditch (recorded between 0.07 m and 0.50 m) indicates this is likely a ditch associated with a monument as opposed to a roundhouse, a notion furthered by the presence of a possible cairn. Pottery recovered from the feature suggests a Bronze Age date for the feature. Environmental sampling was not wholly successful in providing closer dating of the feature as none of the cereal grains, heath grasses or charcoal was particularly diagnostic for such purposes. Indeed, a certain degree of later contamination was noted with coal and clinker/cinder also present.

5.4.3 Adjacent to the ring ditch, on its western side, two possible pits (2048 and 2050) were identified. On further investigation these appeared to comprise one larger feature, with flagstones sealing pit 2050 resulting in the feature appearing darker towards the south (**Pl. 9**). The exact purpose and origin of these flagstones remain unclear. It is possible that the pit was used for storage purposes, capped by the flagstones following its use, however the shallow depth, recorded between 0.08 m and 0.15 m, makes this questionable. Pottery recovered is indicative of a contemporaneous date and likely relationship between this and the ring ditch. Environmental sampling of the feature furthers this notion, with charred spelt wheat grains and chaff from the pit being consistent with the main crops exploited during the later prehistoric and Romano-British periods.

Post-medieval – modern

5.4.4 A series of intercutting ditches were also located within Area B (**Fig. 3**). A linear feature believed to represent a field boundary (2006, 2008, 2016, 2024, 2060), approximately 30 m in length, traverses the north-western extent of the site on a north-west to south-east alignment. The feature, varying in width from 0.40 m to 1.0 m, appears to terminate within the south-western extent of ring ditch 2076 (**Pl. 10**). Pottery recovered from deposit 2025 within slot 2024 is indicative of a post-medieval origin, suggesting that the linear cut the ring ditch despite the diffuse nature of soil horizons resulting in a lack of relationship found between the two features.

5.4.5 Investigations undertaken further south provided inconclusive results as to a relationship between the field boundary (2060) and a linear feature orientated east to west (2062). Linear 2062 was found to vary greatly in width and had an undulating base. Positioned on the eastern extent of the intersection of the two linear features, it is believed that rooting has caused the distortion of any relationship, thus indicating that 2062 likely truncated 2060. The presence of such rooting alongside a typically irregular profile has led to the postulation that 2062 represents the line of a former hedgerow.

5.4.6 Further south, the field boundary (2024) clearly truncates a shallow gully (2022) orientated east to west (**Pl. 11**), and a possible hedgerow feature (2004/2010) aligned east to west was found to truncate the central portion of the field boundary (2008). Gully 2022 comprising concave sides and flat base, was found to contain a single deposit (2023) of dark brownish grey silty clay loam. The homogenous deposit was noted as containing common rooting

throughout, and likely derives from natural weathering erosion of the surrounding land surface. No artefactual evidence was observed.

5.4.7 Towards the centre of Area B, further examples of intercutting ditches were observed. A shallow gully (2026/2034) aligned east to west appeared to contain a single secondary deposit containing no artefacts, though pottery found elsewhere along the length of the gully suggests a post-medieval date. Deposit 2037, within 2036, was cut by another ditch (2036) aligned north to south (**Pl. 12**). Ditch 2036 had a concave profile and contained a single deposit (2037) which contained a pottery sherd believed to date to the post-medieval period.

5.4.8 Further ditches to the south and west were identified as post-medieval through finds located within their upper fills during cleaning of the features. As such these features remained unexcavated, in accordance with section 4.7 of the WSI (Cotswold Archaeology 2016), with findspots given context numbers for mapping and recording purposes.

5.4.9 To the west of the ring ditch, a sub-rectangular feature (2055) measuring approximately 3 m long and 1.3 m wide with sloping sides and concave base is believed to comprise the remains of a post-medieval cess pit (**Pl. 13**). Indeed, a small gully (2053) adjoins its southern end and continues south down slope, indicating an overflow drain (**Fig. 3**). Within 2055, deposit 2056 varied in colour from a pale reddish-brown to yellowish-brown silty clay indicating multiple backfill events of cess material. Gully 2053 contained material consistent with the runoff from such cess material. The cess pit is believed to be associated with the mining activities undertaken during the 19th century.

6 FINDS EVIDENCE

6.1 Introduction

6.1.1 A very small assemblage of finds was recovered during the evaluation, consisting largely of pottery. The assemblage ranges in date from prehistoric to post-medieval/modern.

6.1.2 All finds have been quantified by material type within each context, and the results are summarised in **Table 1**.

Table 1 All finds by context

		Pottery		Other finds
Context	**Description**	**No.**	**Wt. (g)**	
1013	Ditch 1012	2	43	
1018	Feature 1017			1 coin
1023	Feature 1022	1	10	
2002	Subsoil	20	55	1 CBM; 1 clay pipe
2019	Ditch 2018	1	1	
2025	Ditch 2024	1	1	1 glass
2029	Ring ditch 2076	3	25	
2031	Ring ditch 2076	1	33	
2037	Ditch 2036	1	9	
2041	Ditch 2040	2	62	5 animal bone
2043	Ditch 2042			3 animal bone; 1 slate
2045	Ditch 2044	4	17	
2051	Pit 2050	2	9	

2061	Hedgerow 2060			2 clay pipe
Total		**38**	**265**	

CBM = ceramic building material

6.2 Pottery

6.2.1 The small pottery assemblage amounts to 38 sherds, weighing 265 g. It includes material of prehistoric and post-medieval/modern date. Condition is fair to good; post-medieval/modern sherds are in better condition although sherd size is still small. Prehistoric sherds have suffered surface and edge abrasion, but on average sherd size is larger. Mean sherd weight overall is 7.0 g; this rises to 11.2 g for prehistoric sherds and falls to 6.2 g for post-medieval/modern sherds.

6.2.2 The pottery has been quantified by ware type, for prehistoric sherds on the basis of predominant inclusion type and using regional and national types for post-medieval/modern wares. Quantification has been by sherd count and weight within each context. Details of vessel form (where known) and other diagnostic features have also been noted. Due to small assemblage size and the scarcity of measurable rim diameters, Estimated Vessel Equivalents (EVEs) have not been used, but rather the Estimated Number of Vessels (ENV), counting conjoining sherds (or non-joining sherds almost certainly from the same vessel) as 1. The total ENV is 32 and most conjoins are on fresh breaks. The level of recording accords with the 'basic record' advocated for the purpose of characterising an assemblage rapidly (Barclay *et al* 2016, section 2.4.5). Details of the pottery by context are given in Table 2.

Table 2 Pottery by context (ENV = Estimated Number of Vessels)

Context	Ware type	No. sherds	Wt. (g)	ENV	Comment
1013	Granite-derived wares	1	30	1	bowl rim, glazed int
1013	Staffs-type slipware	1	13	1	base, hollow ware
1023	White salt glaze	1	10	1	base
2002	Refined whiteware	1	4	1	body sherd
2002	Developed creamware	11	30	11	body, rim & base sherds, all plain
2002	Pearlware	5	10	3	small footring base; flatware rim; body sherd
2002	Bone china	1	6	1	decorative element (lid?)
2002	Feldspathic-glazed stoneware	1	1	1	tiny body sherd
2002	Tin-glazed earthenware	1	4	1	body sherd, flatware; blue dec
2019	Refined whiteware	1	1	1	body sherd, transfer-printed
2025	White salt glaze	1	1	1	tiny body sherd
2029	Iron Age rock-tempered ware	3	25	2	SW Decorated style: body sherds; 2 conjoining with tooled dec; gabbroic fabric
2031	Iron Age rock-tempered ware	1	33	1	base sherd; gabbroic fabric
2037	Creamware	1	9	1	base; plain cylindrical vessel (mug?)

2041	Pearlware	2	62	2	2 bases: 1 footring, plain (bowl or chamberpot); 1 transfer-printed (fluted bowl)
2045	Creamware	1	1	1	flatware rim
2045	Granite-derived wares	3	16	1	unglazed body sherds, conjoining
2051	Late prehistoric rock-tempered ware	2	9	1	body sherds, conjoining; gabbroic fabric

Prehistoric

6.2.3 Six sherds have been dated as prehistoric. All six are in rock-tempered fabrics, the inclusions in each case representing gabbroic-derived fragments. Two conjoining sherds from ring ditch 2076 (fill 2029) are the most diagnostic, as these carry tooled decoration in the South-West Decorated style of the Middle Iron Age. These sherds, and others from the ring ditch (body and base sherds from fills 2029 and 2031) are well finished; all are likely to be of the same date range.

6.2.4 Two conjoining body sherds from pit 2050 are also in a gabbroic-derived fabric although slightly coarser than the sherd from ring ditch 2076. They could also be of Iron Age date, or possibly Late Bronze Age.

6.2.5 A further six prehistoric sherds were recovered from the subsequent evaluation, also all rock-gritted and all undiagnostic. One is broadly comparable to the sherds seen here on grounds of fabric and surface finish and has been broadly dated as Iron Age. The other five are coarser and are tentatively dated as Neolithic/Bronze Age on fabric grounds.

Post-medieval/modern

6.2.6 The remaining 32 sherds are post-medieval/modern. Four sherds are redwares, all in visibly micaceous fabrics which fall within the tradition of 'Granite-Derived' wares (formerly South-West Micaceous wares). Documentary sources indicate production of these wares in 12 Cornish parishes in the 17th and 18th centuries, and the nearest potential source to the current site for which there is archaeological evidence of production is Mawgan-in-Meneage (Allan *et al* 2018, 82). Stonewares are represented by a single tiny body sherd in a feldspathic-glazed stoneware (1830s onwards), and two sherds in white salt glaze (*c.* 1720–80). There is one sherd, from a flatware (probably a plate) with blue painted decoration, in tin-glazed earthenware

6.2.7 The majority of the post-medieval/modern group (24 sherds) are in refined wares (creamware, pearlware, whiteware, bone china) with an overall potential date range of late 18th to 20th century. These represent tea- and tablewares (cups, saucers, plates, serving dishes etc).

6.2.8 Post-medieval/modern sherds serve to date ditch 1012 and feature 1017/1020/1022 in Area A, and ditches 2018, 2024, 2036, 2040 and 2044 in Area B.

6.3 Other Finds

6.3.1 Other finds occurred in negligible quantities. They include one fragment of ceramic roof tile (Area B subsoil), three fragments from clay tobacco pipe stems (Area B subsoil; hedgerow 2060); a tiny fragment of green bottle glass (Ditch 2024); eight small, abraded fragments of animal bone (none identifiable to species; ditches 2040 and 2042); and one fragment of roofing slate (ditch 2042, surface find). All datable finds are post-medieval/modern. In

addition a completely illegible penny (1d) of 19th- or 20th-century date was found in feature 1017.

7 ENVIRONMENTAL EVIDENCE

7.1 Introduction

7.1.1 Nine bulk sediment samples were taken from a prehistoric ring ditch (probable roundhouse) and a pit which were processed for the recovery and assessment of the environmental evidence. Charcoal and charred plant remains recovered from the samples have been assessed.

7.2 Aims and methods

7.2.1 The aim of this assessment is to determine the nature and significance of the environmental remains preserved at the site and their potential to address the project aims (charcoal, charred plant remains). Appropriate recommendations for further work are provided. This assessment follows recommendations from Historic England (English Heritage 2011).

7.2.2 The size of the bulk sediment samples from the ring ditch varied between 29 and 40 litres, with an average volume of approximately 35 litres; the sample from the pit was 7 litres in volume. The samples were processed by standard flotation methods on a Siraf-type flotation tank; the flot retained on a 0.25 mm mesh, residues fractionated into 4 mm and 1 mm fractions. The coarse fractions of the residues (>4 mm) were sorted by eye for artefactual and environmental remains and discarded. The environmental material extracted from the residues was added to the flots. A riffle box was used to split large fine residues into smaller subsamples where appropriate. A subsample of the fine residue fractions and the flots were scanned and sorted using a stereomicroscope (Leica MS5) at magnifications of up to x40.

7.2.3 Different potential indicators of bioturbation were considered, including the percentage of roots, the abundance of modern seeds, alongside the presence of mycorrhizal fungi sclerotia (eg, *Cenococcum geophilum*). The preservation and nature of the charred plant and wood charcoal remains was recorded. Plant remains were identified through comparison with modern reference material held by Wessex Archaeology and relevant literature (eg, Cappers *et al.* 2006). The volume of charcoal (≥2 mm) from the flots and fine residue fractions was recorded, and preliminary classifications were undertaken through examination of the transverse section: oak, non-oak/diffuse porous (heteroxylous) and coniferous (homoxylous). Nomenclature follows Stace (1997) for wild taxa and Zohary *et al.* (2012) for cereals and other cultivated crops (using traditional names). Remains were recorded semi-quantitively on an abundance scale: C = <5 (‘Trace’), B = 5–10 (‘Rare’), A = 10–30 (‘Occasional’), A* = 30–100 (‘Common’), A** = 100–500 (‘Abundant’), A*** = >500 (‘Very abundant’/Exceptional’).

7.3 Results

7.3.1 The results are presented in Appendix 2.

7.3.2 The flots from the bulk sediment samples were small (Appendix 2). Potential indicators of bioturbation were present, and primarily consisted of abundant modern roots and modern seeds, suggesting the possibility of contamination from later intrusive material. Highly fragmented coal and clinker/cinder was noted in all the samples from both ring ditch 2076 and pit 2051, with this material possibly also reflecting later contamination. Environmental evidence comprised plant remains preserved by charring, which were in poor to good condition, as well as wood charcoal. Wood charcoal was noted in generally small quantities,

although it was generally in good condition. No other environmental evidence was preserved in the samples.

Area B

Prehistoric

7.3.3 A total of eight samples were taken from ring ditch 2076. The samples were fairly consistent, with moderate to high numbers of modern roots and seeds, and small quantities of charcoal and charred plant remains. The charred plant remains comprised monocotyledon stems and fragments of tubers/rhizomes in all samples, which likely originate from sedge species (Cyperaceae, such as *Carex* sp.) and/or grasses (Poaceae). Most of the samples contained heath-grass (*Danthonia decumbens*) caryopses. Cereals were also recovered, with single grains of hulled barley (*Hordeum vulgare*) from ring ditch contexts 2033, 2031, 2058, and 2029. Indeterminate cereal (Triticeae) grains and fragments were present, as well as a spelt wheat (*Triticum spelta*) glume base identified in 2031, and a single free-threshing wheat (*Triticum aestivum/turgidum)* grain is noted in 2071.

7.3.4 The charcoal in the samples was also consistent, with both oak (*Quercus* sp.) and non-oak species in all samples, alongside small heather-type (*Calluna vulgaris* tp.) stems. Heather charcoal is difficult to securely identify and some of these stems could derive from a heath (*Erica* sp.) species.

7.3.5 Immediately adjacent to the ring ditch was pit 2051, which contained a small number of hulled wheat (*Triticum spelta/dicoccum*) grains, glume bases, and spikelet forks, including some glume bases which were identifiable as spelt wheat. An array of wild plant taxa was identified, such as grasses, including small-seeded grasses and probable oats (cf. *Avena* sp.), medicks/clovers/trefoils (Trifolieae), seeds of the knotgrass family (Polygonaceae), including knotweeds (*Persicaria* sp.), and seeds of the goosegrass family (Chenopodiaceae). Also present were hazel (*Corylus avellana*) nutshell fragments, monocotyledon stems, and tubers/rhizomes.

7.3.6 The charcoal component of the sample was also comparable to the evidence from ring ditch 2076, with both oak and non-oak species, as well as probable heather-type stems.

7.4 Discussion

7.4.1 The samples from ring ditch 2076, a possible prehistoric roundhouse, contained consistently low concentrations of charred plant remains and charcoal, which likely reflect mixtures of crop-processing debris and fuel waste.

7.4.2 The dating of the ring ditch is uncertain, with both Bronze Age and Iron Age pottery recovered. The barley grains recovered from the ring ditch are unfortunately not diagnostic of any particular period, as hulled barley was exploited in later prehistoric/Romano-British, medieval, and post-medieval periods (Campbell and Straker 2003; Moffett 2006). However, the charred spelt wheat grains and chaff from pit 2051 are consistent with the main crops known to be exploited during the later prehistoric/Romano-British periods (Lodwick 2017). This evidence suggests the cultivation and processing of cereals, likely as part of domestic settlement activities associated with the roundhouse.

7.4.3 Most of the samples produced evidence for the exploitation of grassy, heathland vegetation. Heathland environments expanded from the Bronze Age onwards and were widely exploited between the later prehistoric/Romano-British and medieval/post-medieval periods, as these areas provided valuable sources of construction material (such as roofing), grazing (animal fodder), as well as being exploited for fuel (Forster *et al.* 2011;

Straker et al. 2007; Wilkinson and Straker 2007). In this case, it is likely that heathland vegetation was cut in the form of 'turves' as a fuel source, although old roofing material could also have been burnt (cf. Hall 2003). It is common to recover evidence for the exploitation of heathland habitats in later prehistoric sites and Romano-British sites, although pollen evidence suggests a peak in the expansion of these habitats in West Cornwall in the early medieval period (Forster *et al.* 2011). Consequently, some remains of heather-type stems and other plant species (eg, heath-grass) could have been reworked into the deposits (see below).

7.4.4 All the samples from the ring ditch and the associated pit contained highly fragmented charcoal and cinder/clinker. While there is some evidence for the use of coal as a fuel source in the later prehistoric/Romano-British period, coal was widely exploited during the medieval and post-medieval periods. Therefore, it is possible that some of the material recovered, especially from the ring ditch, may have been reworked through later activity and is not directly related to later prehistoric settlement activities. The presence of a free-threshing wheat grain (*Triticum aestivum/turgidum*) in ring ditch context 2071, is another indicator of possible intrusive material, since this crop is more commonly associated with the medieval and post-medieval periods, although bread wheat (*T. aestivum*) was potentially first introduced in the Late Iron Age (Moffett 2006; Pelling *et al.* 2015).

7.5 Further potential

7.5.1 No further work is required for these samples since this would not significantly add to the information outlined in this assessment report. The results should be updated once final phasing has been established for the site and a summary should be included in any subsequent reports.

7.5.2 Most of the samples contain suitable, short-lived material (charred plant remains, charcoal) for radiocarbon dating which could be used to refine the phasing of the assemblage. The best candidates for dating are an emmer/spelt wheat grain from pit 2051 and wood charcoal from either ring ditch slot 2050 or slot 2057.

8 CONCLUSIONS

8.1 Summary

8.1.1 The excavation of Areas A and B succeeded in locating features pre-dating the post-medieval activity known to have occurred across the development site. Most significantly a ring ditch provisionally dated to the Bronze Age was located within the northern extent of Area B, with associated features comprising a post-hole and pit.

8.1.2 The remainder of features largely indicate an intercutting network of drainage ditches and/or field boundaries dating to the post-medieval period, with evidence of the 19th century mining activity also identified in the form of likely backfill material and a feature of unclear function within Area A and a cess pit in Area B.

8.2 Discussion

8.2.1 The results of the excavation conform to the historical background of the site and, in part, to the earlier geophysical survey which indicated the presence of numerous ditches, across the site. The majority of these ditch features clearly relate to post-medieval boundaries, some of which are the likely remains of Cornish hedges. Despite anomalies pertaining to the presence of a circular ditch within Area A no such feature was identified within this area of the site. Instead, a ring ditch and associated pit and posthole evidencing earlier activity was located within Area B. The function of the ring ditch remains uncertain, though the lack

of postholes and the depth of the feature suggest the ring ditch acted as an enclosure as opposed to a roundhouse. The presence of two possible entrances adds weight to this conclusion, with increased volumes of stone rubble present within its western extent possibly representing the presence of an earlier cairn in the immediate vicinity. The ring ditch, whilst not detected during the geophysical survey of the area, may represent that recorded as cropmarks believed to give the field named 'Part of Ring Croft' on the 1841 Tithe Map its name.

9 STORAGE AND CURATION

9.1 Museum

9.1.1 The archive resulting from the watching brief is currently held in the offices of Wessex Archaeology in Salisbury. The site falls within the collecting area of the Royal Cornwall Museum. The museum is not currently accepting archaeological archives. Every effort will be made to identify a suitable repository for the archive resulting from the fieldwork, and if this is not possible, Wessex Archaeology will initiate discussions with the local planning authority in an attempt to resolve the issue. If no suitable repository is identified, Wessex Archaeology will continue to store the archive, but may institute a charge to the client for ongoing storage beyond a set period.

9.2 Preparation of the archive

Physical archive

9.2.1 The physical archive, which includes paper records, graphics, artefacts and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Royal Cornwall Museum, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011).

9.2.2 All archive elements will be marked with the accession number, and a full index will be prepared. The physical archive currently comprises the following:

- 1 box of artefacts and ecofacts
- 1 file/document case of paper records and A3/A4 graphics

Digital archive

9.2.3 The digital archive generated by the project, which comprises born-digital data (eg site records, survey data, databases and spreadsheets, photographs and reports), will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata. Full details of the collection, processing and documentation of digital data are given in the project Digital Management Plan (available on request).

9.3 Selection strategy

9.3.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, ie the retained archive should fulfil the requirements of both future researchers and the receiving Museum.

9.3.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy: available on request) and follows CIfA's *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (Wessex Archaeology's internal specialists, external specialists, local authority, museum) and fully documented in the project archive.

9.3.3 Detailed selection proposals for the project archive, comprising finds, environmental material and site records (analogue and digital), are made in the site-specific Selection Strategy (Appendix 1). Note that this includes finds from the excavation only; any recommendations for the archive from the subsequent evaluation (and, in the event of any further fieldwork on the site, for any further archive) should be based on these. The proposals are summarised below.

Finds

- Animal bone (8 fragments): Negligible quantity, almost certainly of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Ceramic building material (1 fragment): Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Clay tobacco pipes (3 fragments): Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Coins (1 object): Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Glass (1 fragment): Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Pottery, prehistoric (6 sherds): Negligible quantity, only two diagnostic. Archaeological significance and further research potential very limited but may be of local interest. Retain all.
- Pottery, all other periods (32 sherds): Very small quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.
- Stone (1 slate): Negligible quantity, almost certainly of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.

Environmental material

9.3.4 Some of the material retrieved from environmental samples merit retention with the site archive for future access (Appendix 2).

9.3.5 Assessed flots, while not proposed for further analysis, should be retained in the site archive should radiocarbon dating be undertaken, or further work be conducted in the area.

9.3.6 The residues were discarded after sorting.

Documentary records

9.3.7 Paper records comprise site registers (other pro-forma site records are digital), drawings and reports (Written Scheme of Investigation, client report). All will be retained and deposited with the project archive.

Digital data

9.3.8 The digital data comprise site records (tablet-recorded on site) in spreadsheet format; finds records in spreadsheet format; survey data; photographs; reports. All will be deposited, although site photographs will be subject to selection to eliminate poor quality and duplicated images, and any others not considered directly relevant to the archaeology of the site.

9.4 Security copy

9.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

9.5 OASIS

9.5.1 An OASIS (online access to the index of archaeological investigations) record (http://oasis.ac.uk) has been initiated, with key fields completed (Appendix 3). A .pdf version of the final report will be submitted following approval by the HEP Archaeology on behalf of the LPA. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

10 COPYRIGHT

10.1 Archive and report copyright

10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.

10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

10.2 Third party data copyright

10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of *the Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material

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APPENDICES

Appendix 1 Selection Strategy

229820
Homes at Tolgus, Redruth
version 2, 04/03/22

Selection Strategy

Project Information

Project Management		
Project Manager	Simon Woodiwiss	
Archaeological Archive Manager	Lorraine Mepham	
Organisation	Wessex Archaeology (WA)	
Stakeholders		**Date Contacted**
Collecting Institution(s)	Royal Cornwall Museum (contact: Sarah Lloyd-Durrant) Archaeology Data Service	09/10/20
Project Lead / Project Assurance	Lead: Peter Capps Assurance: Simon Woodiwiis	N/A
Landowner / Developer	Cornwall County Council & Treveth Holdings	
Other (external)	Peter Dudley, Senior Development Officer (Historic Environment), Cornwall Council	
Other (internal)	WA Finds Manager (Rachael Seager Smith) WA Environmental Manager (Sander Aerts) WA Geomatics & BIM Manager (Chris Breeden) WA internal finds & environmental specialists	N/A; briefed as part of standard project process
Resources		
Resources required	WA Finds and Environmental specialists; WA archives team	
Context		

This overarching selection strategy document is based on the CIfA Archives Selection Toolkit (2019) and relates to archaeological project work being undertaken by Wessex Archaeology as defined in the WSIs.

Relevant standards, policies and guidelines consulted include:
General

- *Selection, Retention and Dispersal of Archaeological Collections* (Society of Museum Archaeologists, 1993)
- *Archaeological archives: a guide to best practice in creation, compilation, transfer and curation* (AAF, revised edition 2011, section 4)
- *Royal Cornwall Museum Conditions of Acceptance of Archaeological Archives* (2011)

Relevant research agendas

- South West Archaeological Research Framework [SWARF] 2012 *The Archaeology of South West England* Somerset Heritage Services

Finds

- *Standard Guidance for the collection, documentation, conservation & research of archaeological materials* (CIFA, 2014)
- *A Standard for Pottery Studies in Archaeology* (Prehistoric Ceramics Research Group, Study Group for Roman Pottery, Medieval Pottery Research Group 2016)

Environmental

- *Environmental Archaeology: A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011)
- *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record* (Historic England 2015)
- *Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains* (English Heritage 2008)

Research objectives of the project
Following consideration of the archaeological potential of the site and the regional research framework (SWARF 2012), the research objectives of the excavation are to:

- Record any evidence of past settlement or other land use prior to destruction by the proposed development;
- Recover artefactual evidence to date any archaeological remains that may be identified;
- Sample and analyse environmental remains to create a better understanding of past land use and economy; and
- Archive and report on the results at a level appropriate to their significance.

REVIEW POINTS
Consultation with all Stakeholders regarding project-specific selection decisions will be undertaken at a maximum of three project review points:

- End of data gathering (assessment stage)
- Archive compilation

1 – Digital Data

Stakeholders

WA Project Manager; WA Archives Manager; WA Geomatics & BIM Manager; Senior Development Officer (Historic Environment), Cornwall Council; ADS

Selection

Location of Data Management Plan (DMP)

This document is designed to link to the project Data Management Plan (DMP), which can be supplied on request.

To promote long-term future reuse deposition file formats will be of archival standard, open source and accessible in nature following national guidance from ADS 2013, CIfA 2014c and the requirements of the digital repository.

Any sensitive data to be handled according to Wessex Archaeology data policy to ensure it is stored and transferred securely. The identity of individuals will be protected in line with GDPR. If required, data will be anonymised and redacted. Selection and retention of sensitive data for archival purposes will occur in consultation with the client and relevant stakeholders. Confidential data will not be selected for archiving and will be handled as per contractual obligation.

Document type	Selection Strategy	Review Points
Site records	Most records will be completed digitally on site (with the exception of registers). All will be selected for deposition.	2
Reports	To include WSIs, Interim reports, post-excavation assessment reports, publication reports. Final versions only will be selected for deposition.	1, 2
Specialist reports	Specialist reports will generally be incorporated in other documents with only minimal editing (reformatting, etc), and will be selected only if the original differs significantly from the incorporated version.	1, 2
Photographic media (site recording)	Substandard and duplicate images will be eliminated; pre-excavation images may not be selected where duplicated by post-excavation shots; working shots will be very rigorously selected to include only good quality images with potential for reuse and those integral to understanding features, their inter-relationships and location on site; site condition and reinstatement photos will not be selected.	1, 2
Photographic media (objects)	Images of individual or groups of objects, to include those of significance selected for publication and reporting. Substandard and duplicate images will be eliminated; all others will be selected.	2
Survey data	Site survey data will be used to generate CAD/GIS files for use in post-excavation activities. Shapefiles of both the original tidied survey data, and the final phased drawings will be selected.	1, 2
Databases and spreadsheets	Context, finds and environmental data in linked databases. Final versions will be selected. Any specialist data submitted separately will also be selected.	1, 2

Administrative records	Includes invoices, receipts, timesheets, financial information, email correspondence. None will be selected, with the exception of any correspondence relating directly to the archaeology.	2

De-Selected Digital Data

De-selected data will be stored on WA secured servers on offsite storage locations. The WA IT department has a backup strategy and policies that involves daily, weekly and monthly and annual backups of data as stated in the DMP. This strategy is non-migratory, and original files will be held at WA under their unique project identifier, as long as they remain useful and usable in their final version format. This data may also be used for teaching or reference collections by the museum, or by WA unless otherwise required by contractual or copyright obligations.

Amendments

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

WA Project Manager; WA Archives Manager; Royal Cornwall Museum; Senior Development Officer (Historic Environment), Cornwall Council

Selection

A security copy of all paper/drawn records is a requirement of CIfA guidelines. This will be prepared on completion of the project, in the form of a digital PDF/A file. If the security copy is not required for deposition by Stakeholders, it will be retained on backed-up servers belonging to Wessex Archaeology.

Note that some information may be redacted to comply with GDPR legislation (personal data).

Document type	Selection Strategy	Review Points
Site records	Selected records only will be completed in hard copy on site (registers, some graphics). All will be selected for deposition.	2
Reports	Hard copies of all reports (SSWSIs, Interim reports, post-excavation assessment reports, publication reports). All will be selected for deposition, with the exception of earlier versions of reports which have been clearly superseded.	1, 2
Specialist reports & data	Specialist reports will generally be incorporated in other documents with no significant editing. Supporting data is more likely to be included in the digital archive, but if supplied in hard copy and not incorporated elsewhere, this will be selected.	1, 2

Photographic media	X-radiographic plates: all will be selected.	2
Secondary sources	Hard copies of secondary sources will not be selected.	2
Working notes	Rough working notes, annotated plans, preliminary versions of matrices etc, will not be selected.	2
Administrative records	Invoices, receipts, timesheets, financial information, hard copy correspondence. None will be selected, with the exception of any hard copy correspondence relating directly to the archaeology.	2

De-Selected Documents

De-selected sensitive analogue data will be destroyed (shredded) subject to final checking by the WA Archives team with the remainder recycled. Possible exceptions include records retained for business purposes, including promotional material, teaching and internal WA library copies of reports.

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Material type	Artefacts (bulk and registered finds)	Section 3.	3.1

Stakeholders

WA Archives Manager; WA Finds Manager; WA internal specialists; external specialists; Royal Cornwall Museum; Senior Development Officer (Historic Environment), Cornwall Council; landowner

Selection

Proposals have been made here based on observations made during the appraisal stage.

Find Type	Selection Strategy	Review Points
Animal bone (8 fragments)	Negligible quantity, almost certainly of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2
Ceramic building material (1 fragment)	Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2
Clay tobacco pipes (3 fragments)	Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research	1, 2

	potential; retain none.	
Coins (1 object)	Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2
Glass (1 fragment)	Negligible quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2
Pottery, prehistoric (6 sherds)	Negligible quantity, only two diagnostic. Archaeological significance and further research potential very limited but may be of local interest. Retain all.	1, 2
Pottery, all other periods (32 sherds)	Very small quantity, of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2
Stone, building (1 slate)	Negligible quantity, almost certainly of relatively recent origin. Little or no archaeological significance, no further research potential; retain none.	1, 2

De-Selected Material

Consideration will be given to the suitability for use for handling or teaching collections by the museum or Wessex Archaeology, or whether they are of particular interest to the local community. De-selected material will either be returned to the landowner or disposed of. All will be adequately recorded to the appropriate level before de-selection.

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Material type	Palaeoenvironmental material	Section 3.	3.2

Stakeholders

WA Archives Manager; WA Environmental Officer; WA internal specialists; external specialists; Royal Cornwall Museum; Senior Development Officer (Historic Environment), Cornwall Council

Selection

All environmental sampling has been undertaken following a site-specific sampling strategy or Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011 and Historic England 2015a) and as stated in the relevant WSIs. All environmental samples collected and suitable to address project aims and research objectives, as deemed by Wessex Archaeology's Environmental team, have been processed and assessed.

Env Material Type	Selection Strategy	Review Points
Assessed flots	All assessed samples will be retained. The residues were discarded after sorting.	1, 2

De-Selected Material
De-selected material and finds from samples will be responsibly disposed of after processing and post-excavation recording. All processed material will be adequately recorded to the appropriate level before de-selection.

Amendments			
Date	Amendment	Rationale	Stakeholders

Appendix 2 Environmental Evidence

Area	Phase	Feature Type	Feature	Context	Group	Sample Code	Sample vol. (l)	Flot vol. (ml)	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal >2mm	Charcoal	Other	Preservation
B	Prehistoric	Ring ditch	2032	2033	2076	1	40	13	40%, A**	C	-	*Hordeum vulgare* grain	C	Monocot stems, tubers/rhizomes	2	*Quercus* sp. and non-*Quercus* sp. Good condition.	Coal, fragmented (A*), Clinker/cinder, fragmented (B)	Poor
B	Prehistoric	Ring ditch	2038	2039	2076	2	40	35	40%, A**, F	-	-	-	A	Monocot stems, tubers/rhizomes, *Danthonia decumbens,* Poaceae (small-seeded)	3	*Quercus* sp. and non-*Quercus* sp. (incl. *Calluna vulgaris*-type stems). Good condition.	Coal, fragmented (A), Clinker/cinder, fragmented (A**)	Fair
B	Prehistoric	Ring ditch	2030	2031	2076	3	38	25	30%, A*	C	C	*Hordeum vulgare* grain, *Triticum spelta* glume base	A	Monocot stems, tubers/rhizomes, *Danthonia decumbens,* Poaceae (small-seeded)	8	*Quercus* sp. and non-*Quercus* sp (incl. *Calluna vulgaris*-type stems). Good condition.	Coal, fragmented (A), Clinker/cinder, fragmented (A***)	Heterogeneous
B	Prehistoric	Pit	2050	2051	-	4	7	25	10%, A	B	A	*Triticum spelta/dicoccum* grains, *Triticum spelta/dicoccum* glume bases and spikelet forks, *Triticum spelta* glume bases	A*	Monocot stems, tubers/rhizomes, Poaceae (small-seeded), cf. *Avena* sp., *Corylus avellana* nutshell fragments, Trifolieae, Polygonaceae (incl. *Persicaria* sp.), Chenopodiaceae	13	*Quercus* sp. and non-*Quercus* sp (incl. *Calluna vulgaris*-type stems). Good condition.	Coal, fragmented (A), Clinker/cinder, fragmented (A***)	Heterogeneous
B	Prehistoric	Ring ditch	2046	2047	2076	5	36	12	90%, A*	-	-	-	C	Monocot stems, tubers/rhizomes	1	*Quercus* sp. and non-*Quercus* sp. Good condition.	Coal, fragmented (B), Clinker/cinder, fragmented (A**)	Poor

Area	Phase	Feature Type	Feature	Context	Group	Sample Code	Sample vol. (l)	Flot vol. (ml)	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal >2mm	Charcoal	Other	Preservation
B	Prehistoric	Ring ditch	2057	2058	2076	6	31	20	30%, A, F	C	-	*Hordeum vulgare* grain, Triticeae grain	C	Monocot stems, tubers/rhizomes	15	*Quercus* sp. and non-*Quercus* sp (incl. *Calluna vulgaris*-type stems). Good condition.	Coal, fragmented (B), Clinker/cinder, fragmented (A**)	Heterogeneous
B	Prehistoric	Ring ditch	2070	2071	2076	7	29	10	30%, A*, F	C	-	*Triticum aestivum/turgidum* grain, Triticeae grain	C	Tubers/rhizomes, *Danthonia decumbens*	<1	Indeterminate, fragmented <2mm	Coal, fragmented (B), Clinker/cinder, fragmented (A)	Heterogeneous
B	Prehistoric	Ring ditch	2064	2066	2076	8	30	25	70%, A	-	-	-	C	Monocot stems, tubers/rhizomes, *Danthonia decumbens*	1	*Quercus* sp. and non-*Quercus* sp (incl. *Calluna vulgaris*-type stems). Good condition.	Coal , fragmented (B), Clinker/cinder, fragmented (A)	Heterogeneous
B	Prehistoric	Ring ditch	2028	2029	2076	9	35	15	70%, A	C	-	*Hordeum vulgare* grain, Triticeae grain fragments	C	Monocot stems, tubers/rhizomes, *Danthonia decumbens*	1	*Quercus* sp. and non-*Quercus* sp (incl. *Calluna vulgaris*-type stems). Good condition.	Coal , fragmented (B), Clinker/cinder, fragmented (A)	Heterogeneous

Scale of abundance: C = <5, B = 5–10, A = 10–30, A* = 30–100, A** = 100–500, A*** = >500; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia.

Appendix 3 OASIS record

OASIS ID: wessexar1-417000

Project details

Project name	Homes at Tolgus, Cornwall
Short description of the project	Wessex Archaeology was commissioned to undertake archaeological mitigation works comprising a strip map and record excavation covering 0.32 hectares centred on NGR 168850, 042150, at Tolgus, Redruth, Cornwall. The works were undertaken in order to mitigate Condition 3 of planning permission PA12/09717 granted by Cornwall County Council for the demolition of farm buildings, and the erection of 370 dwellings, along with associated access and utility arrangements. The excavation of two areas located numerous intercutting boundary features comprising ditches and hedgerows likely representing post-medieval Cornish hedges. Backfill material and an 'n' shaped feature of indeterminate function within Area A, in addition to a cess pit and associated drainage gully in Area B, are believed to relate to mining activity undertaken across the site in the 19th century. A ring ditch within the north-eastern corner of Area B has been provisionally dated to the Bronze Age. Occurrences of stone rubble confined to the western portion of the ring ditch may indicate the presence of an associated cairn, which, when considered in conjunction with the presence of two entrances and lack of structural postholes, may suggest that the ring ditch was associated with a monument. A pit feature to the west and posthole within its northern entrance are believed to be associated with the ring ditch. Finds typically comprised pottery sherds of post-medieval date, with Bronze Age sherds located within the ring ditch and pit feature to the west. Post-medieval glass and clay pipes were also among the assemblage.
Project dates	Start: 12-10-2020 End: 26-10-2020
Previous/future work	Yes / No
Any associated project reference codes	229820 - Contracting Unit No.
Type of project	Recording project
Current Land use	Other 15 - Other
Monument type	DITCH Post Medieval
Monument type	POSTHOLE Late Prehistoric
Monument type	RING DITCH Late Prehistoric
Significant Finds	POT Post Medieval
Significant Finds	POT Late Prehistoric
Investigation type	"Open-area excavation"
Prompt	Planning condition

Project location

Country	England
Site location	CORNWALL KERRIER REDRUTH Land at Tolgus
Postcode	TR15 3AL
Study area	0 Hectares

Site coordinates	SW 68850 42150 50.233335292771 -5.241678803442 50 14 00 N 005 14 30 W Point

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Ward Williams Associates
Project design originator	Cotswold Archaeology
Project director/manager	Simon Woodiwiss
Project supervisor	P Capps

Project archives

Physical Archive recipient	No collecting Museum
Physical Contents	"Ceramics","Glass"
Digital Archive recipient	No collecting Museum
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	No collecting Museum
Paper Contents	"none"
Paper Media available	"Miscellaneous Material","Plan","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Homes at Tolgus, Redruth, Cornwall
Author(s)/Editor(s)	Capps, P., Capps, R. and Legg, E
Other bibliographic details	Unppublished report ref. 229820.2
Date	2021
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Salisbury
Description	A4 bound booklet
Entered by	Eleanor Legg (e.legg@wessexarch.co.uk)
Entered on	9 March 2021

Appendix 4 WSI

ADDENDUM TO LAND AT TOLGUS, REDRUTH, CORNWALL. WRITTEN SCHEME OF INVESTIGATION FOR A PROGRAMME OF ARCHAEOLOGICAL RECORDING. PRODUCED BY COTSWOLD ARCHAEOLOGY (PROJECT REFERENCE 880088), APRIL 2016

Simon Woodiwiss (Wessex Archaeology). 8 October 2020

Reasons for this addendum

Wessex Archaeology have been commissioned by Ward Williams Associates on behalf of their clients (Treveth and Cornwall Council) to undertake the archaeological works required by Condition 3 (Written Scheme of Investigation) in respect of decision notice PA12/09717. The addendum is to clarify variations in the original written scheme of investigation. It is understood that these works relate to planning applications PA16/02734.

Variations

The Strip Map and Sample areas are due to commence on 12 October 2020 for a period of two weeks (subject to results). The watching brief will commence on a later date.

Wessex Archaeology intend to follow the specification indicated in the attached Written Scheme of Investigation, though throughout reference to Cotswold Archaeology can be taken as Wessex Archaeology and where reference is made to specific company documents or equipment, the equivalent documents and equipment used by Wessex Archaeology. There are some exceptions detailed as follows.

- 4.10 We are aware that a watching brief on the site of a compound area has already been undertaken.
- 5.1 The project will be under the management of Simon Woodiwiss, MCIfA Project Manager, WA.
- 5.4 Specialist team will be drawn from the attached list. Our team leads are as follows
    - Finds Matt Leivers,
    - Environmental Dave Norcott,
    - Historic Buildings Abigail Bryant.
- 5.5 Specialist list – please see attached list.
- 8.1 WA holds Public Liability Insurance to a limit of £10,000,000, and Professional Indemnity Insurance to a limit of £10,000,000.
- 10.1 WA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists.

Additional information

The Project Director for Wessex Archaeology will be Peter Capps (07714 271 230) and, is supported by Supervisors Mark Stewart and Darryl Freer; profiles are appended. There will be three additional archaeological staff.

APPENDICES

Appendix 1 Specialists

Name	Qualifications	Specialism
Phil Andrews	BSc; FSA; MCIfA	Slag and metal working debris
Pippa Bradley	BA; MPhil; Dip Post Ex; FSA; MCIfA	Prehistoric flint and worked stone, shale and jet
Elina Brook	BA; MA; PCIfA	Later prehistoric and Romano-British pottery, and small finds
Alex Brown	BA; MSc; PhD	Geoarchaeology, palynology
Ceridwen Boston	B.Soc.Sc.; MA; M.Sc.; D.Phil.	Osteoarchaeology; funerary archaeology
Andrew Shaw	BA; MA; PhD	Palaeolithic lithic artefacts and Pleistocene geoarchaeology
Kirsten Egging Dinwiddy	BA; MA; MCIfA	Human remains (inhumations)
Inés López-Dóriga	BA; MA; PhD	Archaeobotanical remains
Erica Gittins	BA; MA; PhD	Prehistoric flint
Phil Harding	PhD	Prehistoric flint, particularly Palaeolithic flint
Lorrain Higbee	BSc; MSc; MCIfA	Animal bone
Grace Jones	BA; MA; PhD; MCIfA	Prehistoric and Roman pottery, ceramic building material, fired clay, and small finds
Matt Leivers	BA; PhD; ACIfA	Prehistoric pottery and flint
Jacqueline McKinley	BTech; FSA	Human remains (inhumations and cremations)
Erica Macey-Bracken	BA; ACIfA	Post-medieval finds, ceramic building material and worked wood
Katie Marsden	BSc	Pottery from prehistoric to post-medieval/modern. Metalwork of all periods, including coins. Small and bulk finds including fired clay, ceramic building material, worked bone
Nicki Mulhall		Geoarchaeology and archaeobotanical remains
David Norcott	BA; MSc; MCIfA	Geoarchaeology
Richard Payne	BSC; MSc; MPhil	Geoarchaeology
Holly Rodgers	BA; MSc	Geoarchaeology
Lorraine Mepham	BA; MCIfA	Pottery and other ceramic finds of all dates, concentrating on later prehistoric and post-Roman;
Sue Nelson	BA; MA; ACIfA	Prehistoric and Romano-British pottery, small finds, glass, and tile
Emma Robertson	BA; MSc	Human remains (inhumations)
Rachael Seager Smith	BA; MCIfA	Pottery with particular emphasis on Roman ceramics; and metalwork, fired clay, ceramic building material, stone, worked bone, shale, glass, and wall plaster
Amy Thorp	BA; MA	Pottery with emphasis on Roman ceramics, small finds

Name	Qualifications	Specialism
Lynn Wooten	BSc; ICON; MIoC	Archaeological conservator
Grace Flood	BA; ACIfA	Historic buildings
Matt Rous	BA; ACIfA	Historic buildings

Cotswold Archaeology

Land at Tolgus
Redruth
Cornwall

Written Scheme of Investigation for a
Programme of Archaeological Recording

for
Percy Williams & Sons Ltd

CA Project: 880088

April 2016

Andover Cirencester Exeter Milton Keynes

Land at Tolgus
Redruth
Cornwall

Written Scheme of Investigation for a Programme of Archaeological Recording

CA Project: 880088

Document Control Grid						
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by
A	11 April 2016	DE	–	Internal review	N/A	DE
B	15 April 2016	DE	–	Internal review	Corrected SMS area size, Para 4.2	DE
C	29 April 2016	DE	–	Curator review	Amendments to Paras 4.12 & 6.10, in line with Curator comments; replaced Curator names with titles throughout	DE

CONTENTS

1. INTRODUCTION

1.1 This document sets out details of a Written Scheme of Investigation (WSI) by Cotswold Archaeology (CA) for a programme of archaeological recording to be undertaken on land at Tolgus, Redruth, Cornwall (centred at NGR: SW 6885 4215). This WSI has been prepared at the request of Percy Williams & Sons Ltd.

1.2 Cornwall Council (the local planning authority) has granted planning permission for a hybrid planning application (planning ref: PA12/09717), comprising:

- full permission for remodelling and downgrading of the A3047 between Tolgus Place Roundabout and Blowinghouse Roundabout and modification of the roundabouts themselves; and
- outline planning permission for the erection of 370 dwellings, plus associated employment space, open space, green infrastructure, footpaths and cycle ways, car parking, and foul and surface water drainage infrastructure.

1.3 A condition attached to the permission requires a programme of archaeological work (condition 3). The scope of this archaeological work was defined subsequently by the Senior Development Officer (Historic Environment) – Archaeologist (SDOHE) and the Development Officer (Historic Environment) – Archaeologist (DOHE), Cornwall Council.

1.4 This WSI has been guided in its composition by *Standard and guidance: Archaeological watching brief* (CIfA 2014), *Standard and guidance: Archaeological excavation* (CIfA 2014), *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015), *Management of Research Projects in the Historic Environment (MoRPHE): Project Manager's Guide* (Historic England 2015) and any other relevant standards or guidance contained within Appendix B.

The site

1.5 The site is situated outside of the north-western fringes of Redruth and encloses approximately 29.5ha in total. The main body of the site comprises a series of arable and pasture fields and lies between the A30 to the north/north-west and the A3047

to the south-east. A minor road runs through the centre of the site and the Tolgus Vean Farmhouse and an industrial depot lie towards the western site boundary.

1.6 The area of the A3047 subject to the proposed remodelling and downgrading works runs on a north-east/south-west alignment along the north-western edge of Redruth, with residential areas beyond.

1.7 The underlying geology of the site is mapped as Hornfelsed slate and Hornfelsed siltstone of the Mylor Slate Formation, with a band of Permian Felsite running through the approximate centre of the site on a north-east/south-west alignment. No superficial deposits are recorded in the main body of the site, although a band of alluvial clays, silts, sands and gravels runs along the north-eastern site boundary, cutting across the line of the A3047 in this area (BGS 2016).

2. ARCHAEOLOGICAL BACKGROUND

2.1 The site has been the previous subject of a desk-based heritage assessment (CA 2012) and a geophysical survey (Stratascan 2012). The following text is summarised from these sources.

Prehistoric and Roman (pre-AD 410)

2.2 A cupmarked stone lies some 200m north of the site's north-eastern tip.

2.3 The cropmarks of a possible round (i.e. a small embanked settlement of late prehistoric or Roman date) have been recorded in the south-eastern part of the site. Additionally, a field in the southern part of the site is recorded as 'Part of Ring Croft' on the 1841 Tithe Map, which might potentially hint at the former presence of a second round.

Early medieval and medieval (AD 410–1539)

2.4 The settlement of Tolgus (*c*. 50m east of the A3047) is first recorded in a document of 1280. The settlement of Chyandower (*c*. 50m south-east of Blowinghouse Roundabout) is first recorded in a document of 1522. It is likely that the application site farmed part of the agricultural hinterland of these settlements.

2.5 Tin mining is recorded around Redruth from the medieval period onwards, but there is no known evidence for medieval tin mining at the application site.

Post-medieval and modern (1539–present)

2.6 The field boundaries across the site are generally Cornish Hedges, comprising hedges sandwiched between two parallel dry stone walls. These may be medieval in origin but they are considered more likely to be a result of post-medieval enclosure patterns. Cornwall Historic Environment Service has carried out a program of Historic Landscape Characterisation across the county, which records the entirety of the site as a mixture of 'Post-medieval Enclosed Land' and '20th-century settlement'.

2.7 The post-medieval and early modern periods saw a massive expansion in the copper and tin industry in Cornwall. The Cornwall and West Devon Mining Landscape World Heritage Site lies to the immediate east of the site and mining within the site itself was recorded from at least the mid 19th-century, as part of the "sett" (area of mineral permissions) of the Great South Tolgus Tin and Mining Co. (formed in 1847; closed 1871). A number of associated shafts and above-ground structures are recorded within the site on 19th-century cartographic sources. Several of the mine buildings are still extant at the site, although they were modified extensively in the later 19th and/or 20th centuries for use as farm buildings.

2.8 In 1919–1927, Tolgus Mines Ltd operated at the site. A new shaft was excavated in the western area of the site, at the spot now occupied by the industrial depot.

Geophysical survey

2.9 The geophysical survey recorded several anomalies within the site (see the attached plan). These included ditches forming a series of enclosures in the eastern half of the site, as well as a possible circular ditch with an internal pit by the northern site boundary (43/44 on the attached plan). These putative enclosures may be related to former settlement activity or farmsteads. Also recorded were several probable former field boundaries, some of which were probably marked by Cornish hedges.

3. AIMS AND OBJECTIVES

3.1 The objectives of the programme of archaeological recording are to:

- record any evidence of past settlement or other land use prior to destruction by the proposed development;
- recover artefactual evidence to date any archaeological remains that may be identified;
- sample and analyse environmental remains to create a better understanding of past land use and economy; and
- archive and report on the results at a level appropriate to their significance.

4. METHODOLOGY

4.1 The programme of archaeological recording will comprise two elements:

- archaeological strip, map and sample (SMS) excavation of two areas (A and B on the attached plan); and
- an archaeological watching brief.

SMS

4.2 The locations of the SMS areas are shown on the attached plan. SMS Area A is approximately 20m x 20m (400m²) in plan; SMS Area B is approximately 50m x 56m (2,800m²) in plan. The SMS areas have been located to sample geophysical anomalies identified by the SDOHE as being of particular potential.

4.3 The boundaries of the SMS areas are not set, and may need to be extended if significant archaeological features are found to run beyond their current limits. The SMS areas may also need to be revised to account for services or other constraints. Any variation to the layout of the SMS areas must be agreed with the SDOHE/DOHE.

4.4 The SMS areas will be set out on OS National Grid (NGR) co-ordinates using Leica GPS and 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*.

4.5 Topsoil and subsoil layers will be stripped from the SMS areas by mechanical excavators equipped with toothless grading buckets. All machining will be conducted under archaeological supervision and will cease when the first archaeological horizon or natural substrate is revealed (whichever is encountered first).

4.6 The generated spoil will be monitored in order to recover artefacts. Hand-cleaning of the stripped surface to better define any archaeological deposits/features will be undertaken where necessary. All archaeological features will be recorded in plan using Leica GPS.

4.7 Examination of archaeological features will concentrate on recovering the plan and any structural sequences. Particular emphasis will be placed upon retrieving a stratigraphic sequence and upon obtaining details of the dating of the site, together with function/purpose. The following excavation strategy will be employed:

- all funerary/ritual activity and domestic/industrial deposits will be 100% excavated;
- all discrete features (post holes, pits) will be hand-excavated (average excavation area unlikely to exceed 50% of each individual feature), unless their common/repetitious nature suggests they are unlikely to yield significant new information;
- all linear features (ditches, pathways, etc.) will be hand-excavated to a maximum of 10% of their lengths, with excavation areas to include all terminals and intersections of features pre-dating the post-medieval period;
- features that in plan are clearly post-medieval and/or modern in date will not be excavated;
- bulk horizontal deposits will as a minimum be 10% by area hand excavated, after which a decision may be taken (in conjunction with the SDOHE/DOHE) to remove the remainder with machinery;
- priority will be attached to features which yield sealed assemblages which can be related to the chronological sequence of the site.

4.8 Any proposed variation to the above methodology must be agreed with the SDOHE/DOHE.

Watching brief

4.9 Groundworks in the remainder of the site will be subject to an archaeological watching brief. The watching brief will comprise the observation by a competent archaeologist of all groundworks. Non-archaeologically significant deposits will be removed by the contractors under archaeological supervision. Where mechanical excavators are used, these will be equipped with toothless buckets.

4.10 The watching brief will be maintained during all intrusive groundworks in the main body of the site. The remodelling and downgrading works to the A3047 will not require monitoring, with the following exceptions:

- road widening works at the junctions (i.e. the new road "spurs"); and
- any stripping works associated with the establishment of a compound within the site.

General

4.11 Archaeological deposits/features will be planned and recorded in accordance with *CA Technical Manual 1: Fieldwork Recording Manual*. Each context will be recorded on a pro-forma context sheet by written and measured description. Principal deposits will be recorded by drawn plans (scale 1:20 or 1:50, or electronically using Leica GPS as appropriate) and drawn sections (scale 1:10 or 1:20 as appropriate). Should detailed feature planning be undertaken using GPS, this will be carried out in accordance with *CA Technical Manual 4: Survey Manual*.

4.12 A digital photographic record of the archaeological works will be compiled in accordance with *Digital Image Capture and File Storage: Guidelines for Best Practice* (Historic England 2015). All excavated features and deposits will be photographed; a selection of representative feature group/area shots will also be taken.

4.13 All finds and samples will be bagged separately and related to the context record. All artefacts will be recovered and retained for processing and analysis in accordance with *CA Technical Manual 3: Treatment of Finds Immediately after Excavation*.

4.14 Due care will be taken to identify deposits which may have environmental potential and, where appropriate, a programme of environmental sampling will be initiated. Samples will be taken, processed and assessed for potential in accordance with *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites*.

4.15 In the event of archaeological deposits being found for which the resources allocated are not sufficient to support treatment to a satisfactory and proper standard or which are of sufficient significance to merit an alternative approach such as contingency excavation or physical preservation, the client and the SDOHE/DOHE will be contacted immediately. Destructive work in the affected area will cease until agreement has been reached on an appropriate archaeological response.

4.16 Where excavation of human remains is required, this will be conducted following the provisions of the Coroner's Unit in the Ministry of Justice.

4.17 CA will comply fully with the provisions of the Treasure Act 1996 and the Code of Practice referred to therein.

5. STAFF AND TIMETABLE

5.1 This project will be under the management of Derek Evans, MCIfA, Project Manager, CA.

5.2 The staffing structure will be organised thus: the Project Manager will direct the overall conduct of the archaeological works as required during the period of fieldwork. Day-to-day responsibility will, however, rest with the Project Leader, who will be on-site throughout the project.

5.3 The field team will consist of a Project Leader, supplemented by additional Archaeologists as required.

5.4 Specialists who may be invited to advise and report on specific aspects of the project as necessary are:

Ceramics	Henrietta Quinnell (freelance)
Metalwork	Ed McSloy (CA)
Flint	Ed McSloy (CA)
Animal bone	Andrew Clarke (CA)
Human bone	Sharon Clough (CA)
Environmental remains	Sarah Wyles (CA)
Building recording	Peter Davenport (CA)

5.5 Depending upon the nature of the deposits and artefacts encountered, it may be necessary to consult other specialists not listed here. A full list of specialists currently used by CA is contained within Appendix A.

6. POST-EXCAVATION, ARCHIVING AND REPORTING

6.1 Following completion of the watching brief fieldwork, any artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with CA Technical Manuals and Royal Cornwall Museum guidelines.

6.2 An illustrated report will be prepared on the watching brief and SMS results. The level of reporting required will depend on the nature of the results.

6.3 A summary statement of results and a survey plan will be issued to the client and the SDOHE/DOHE within a month of the completion of the archaeological fieldwork.

6.4 Should a typescript report be appropriate, then a draft will be issued no more than six months after the completion of the archaeological fieldwork.

6.5 Should the results be significant enough to merit a post-excavation assessment (PXA), then an interim report on the fieldwork results will be issued within six months of the completion of the fieldwork. The PXA will be prepared in accordance with Appendices 1 and 2 of *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015).

6.6 Should the PXA identify the potential for further analysis, an updated project design will be prepared for agreement with the SDOHE/DOHE prior to the commencement of the detailed analysis and reporting. Arrangements will be made for an appropriate level of academic publication of the results of the excavations. A summary report will also be published in *Cornish Archaeology*.

6.7 Copies (hard and pdf as appropriate) of all reports will be distributed to the client, the SDOHE/DOHE and the Cornwall Historic Environment Record (HER).

6.8 An ordered, indexed, and internally consistent site archive will be prepared and deposited in accordance with *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Archaeological Archives Forum 2007).

6.9 A summary of information from the project will be entered onto the OASIS online database of archaeological projects in Britain.

6.10 CA will make arrangements with the Royal Cornwall Museum for the deposition of the site archive and, subject to agreement with the legal landowner(s), the artefact collection (if any). The digital archive will be submitted to the appropriate Trusted Digital Repository (the Archaeological Data Service (ADS)).

7. HEALTH AND SAFETY

7.1 CA will conduct all works in accordance with the Health and Safety at Work Act 1974 and all subsequent health and safety legislation, as well as CA's Health and Safety and Environmental policies and the CA *Safety, Health and Environmental Management System* (*SHE*). A site-specific *Project Health and Safety Plan* (form *SHE 017*) will be formulated prior to commencement of fieldwork.

8. INSURANCES

8.1 CA holds Public Liability Insurance to a limit of £10,000,000 and Professional Indemnity Insurance to a limit of £5,000,000.

9. MONITORING

9.1 Notification of the start of site works will be made to the SDOHE/DOHE so that there will be opportunities to visit the site and check on the quality and progress of the work.

10. QUALITY ASSURANCE

10.1 CA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (RO Ref. No. 8). As a RO, CA endorses the *Code of Conduct* (CIfA 2014) and the *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (CIfA 2014). All CA Project Managers hold either full Member or Associate status within the CIfA.

10.2 CA operates an internal quality assurance system in the following manner: projects are overseen by a Project Manager, who is responsible for the quality of the project. The Project Manager reports to the Chief Executive, who bears ultimate responsibility for the conduct of all CA operations. Matters of policy and corporate strategy are determined by the Board of Directors and, in cases of dispute, recourse may be made to the Chairman of the Board.

11. REFERENCES

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CA (Cotswold Archaeology) 2012 *Land at Tolgus Farm, Cornwall: Heritage Desk-Based Assessment* CA typescript report **12124**

Stratascan 2012 *Geophysical Survey Report: Tolgus Farm, Redruth, Cornwall*

APPENDIX A: COTSWOLD ARCHAEOLOGY SPECIALISTS

Ceramics

Neolithic/Bronze Age	Ed McSloy (CA) Henrietta Quinnell (freelance) Emily Edwards (freelance) Dr Ros Cleal (freelance)
Iron Age/Roman	Ed McSloy (CA) Henrietta Quinnell (freelance)
(Samian)	Gwladys Montell (freelance)
(Amphorae stamps)	David Williams (freelance)
Anglo-Saxon	Paul Blinkhorn (freelance) Henrietta Quinnell (freelance) Dr Jane Timby (freelance)
Medieval/post-medieval	Ed McSloy (CA) Henrietta Quinnell (freelance) Duncan Brown (freelance) Paul Blinkhorn (freelance)
(Clay pipe)	Reg Jackson (freelance)
Ceramic Building Material	Ed McSloy (CA) Phil Mills (freelance)

Other Finds

Small Finds	Ed McSloy (CA)
Metal Artefacts	Dr Jörn Schuster (freelance) Dr Hilary Cool (freelance)
Lithics	Ed McSloy (CA) Jackie Sommerville (CA)
(Palaeolithic)	Francis Wenban-Smith (University of Southampton)
Worked Stone	Ruth Shaffrey (freelance)
Inscriptions	Dr Roger Tomlin (Oxford)
Glass	Ed McSloy (CA) Dr Hilary Cool (freelance) Dr David Dungworth (freelance; English Heritage)
Coins	Ed McSloy (CA) Dr Peter Guest (Cardiff University) Dr Richard Reece (freelance)
Leather	Quita Mould (freelance)
Textiles	Penelope Walton Rogers (freelance)
Iron slag/metal technology	Dr Tim Young (Cardiff University) Dr David Dungworth (English Heritage)

Biological Remains

Animal bone	Andrew Clarke (CA) Matilda Holmes (freelance)
Human Bone	Sharon Clough (CA)

Environmental sampling	Sarah Wyles (CA) Dr Keith Wilkinson (ARCA)
Pollen	Rob Batchelor (QUEST, University of Reading)
Diatoms	Nigel Cameron (UCL)
Charred Plant Remains	Sarah Wyles (CA)
Wood/Charcoal	Sarah Wyles (CA)
Insects	David Smith (Birmingham University) Enid Allison (Canterbury Archaeological Trust)
Mollusca	Dr Keith Wilkinson (ARCA)
Fish bones	Philip Armitage (freelance)
Geoarchaeology	Dr Keith Wilkinson (ARCA)
Scientific Dating	
Dendrochronology	Robert Howard (NTRDL Nottingham)
Radiocarbon dating	SUERC (East Kilbride) Beta Analytic (USA)
Archaeomagnetic dating	Neil Suttie (University of Liverpool) Cathy Batt (University of Bradford)
TL/OSL Dating	Phil Toms (University of Gloucestershire)
Conservation	Karen Barker (freelance) Wiltshire Conservation Services

APPENDIX B: ARCHAEOLOGICAL STANDARDS AND GUIDELINES

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

AAI&S 1988 *The Illustration of Lithic Artifacts: A guide to drawing stone tools for specialist reports.* Association of Archaeological Illustrators and Surveyors Paper **9**

AAI&S 1994 *The Illustration of Wooden Artifacts: An Introduction and Guide to the Depiction of Wooden Objects.* Association of Archaeological Illustrators and Surveyors Paper **11**

AAI&S 1997. *Aspects of Illustration: Prehistoric pottery*. Association of Archaeological Illustrators and Surveyors Paper **13**

AAI&S nd *Introduction to Drawing Archaeological Pottery*. Association of Archaeological Illustrators and Surveyors, Graphic Archaeology Occasional Papers **1**

ACBMG 2004 *Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material. (third edition)* Archaeological Ceramic Building Materials Group

AEA 1995 *Environmental Archaeology and Archaeological Evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England*. Working Papers of the Association for Environmental Archaeology No. **2**

BABAO and IFA, 2004 *Guidelines to the Standards for Recording Human Remains*. British Association for Biological Anthropology and Osteoarchaeology and Institute of Field Archaeologists. Institute of Field Archaeologists Technical Paper 7 (Reading)

Barber, B., Carver, J., Hinton, P. and Nixon, T. 2008 *Archaeology and development. A good practice guide to managing risk and maximising benefit*. Construction Industry Research and Information Association Report C672

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

Buikstra, J.E. and Ubelaker D.H. (eds) 1994 *Standards for Data Collection from Human Skeletal Remains*. (Fayetteville, Arkansas)

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CIfA, 2014, *Standard and Guidance for Archaeological Desk-based Assessment*. Chartered Institute for Archaeologists (Reading)

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

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

CIfA, 2014, *Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures*. Chartered Institute for Archaeologists (Reading)

CIfA, 2014, *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Chartered Institute for Archaeologists (Reading)

CIfA, 2014, *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Chartered Institute for Archaeologists (Reading)

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

Clark, J., Darlington, J. and Fairclough, G. 2004 *Using Historic Landscape Characterisation*. English Heritage (London)

Coles, J.M., 1990 *Waterlogged Wood: guidelines on the recording, sampling, conservation and curation of structural wood.* English Heritage (London)

Cowton, J., 1997 *Spectrum. The UK Museums Documentation Standard*. Second edition. Museums Documentation Association

Cox, M., *2002 Crypt Archaeology: an approach*. Institute of Field Archaeologists Technical Paper 3 (Reading)

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Eiteljorg, H., Fernie, K., Huggett, J. and Robinson, D. 2002 *CAD: A guide to good practice*. Archaeology Data Service (York)

EA 2005 *Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management*. English Heritage/ Environment Agency Science Report P5-077/SR (Bristol)

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EH 1999 *Guidelines for the Conservation of Textiles*. English Heritage (London)

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EH 2002 *With Alidade and Tape: graphical and plane table survey of archaeological earthworks*. English Heritage (Swindon)

EH 2003a *Where on Earth Are We? The Global Positioning System (GPS) in archaeological field survey*. English Heritage (London)

EH 2003b *Twentieth-Century Military Sites. Current approaches to their recording and conservation* English Heritage (Swindon)

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EH 2006b *Archaeomagnetic Dating*. English Heritage (Swindon)

EH 2006c *Science for Historic Industries: Guidelines for the investigation of 17th- to 19th-century industries*. English Heritage (Swindon)

EH 2007a Understanding *the Archaeology of Landscapes. A guide to good recording practice*. English Heritage (Swindon)

EH 2007b *Geoarchaeology. Using earth sciences to understand the archaeological record*. (London)

EH 2008a *Luminescence Dating. Guidelines on using luminescence dating in archaeology*. English Heritage (Swindon)

EH 2008b *Geophysical Survey in Archaeological Field Evaluation. English Heritage Research and Professional Services Guidelines No 1* (second edition). English Heritage (Swindon)

EH 2008c *Research and Conservation Framework for the British Palaeolithic*. English Heritage/Prehistoric Society (Swindon)

EH 2008d *Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use*. English Heritage (Swindon)

EH 2010 *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of archaeological wood*. English Heritage (London)

EH 2011 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. English Heritage Centre for Archaeology Guidelines (London)

EH 2012, *Guidelines for the Care of Waterlogged Organic Artefacts: guidelines on their recovery, analysis and conservation*.

EH 2014 *Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors)*. English Heritage (Swindon)

EH and Church of England, 2005, *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*. English Heritage (London)

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HE 2015b (revised 2008), *Metric Survey Specifications for Cultural Heritage.* Historic England (Swindon)

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FIELD 1

FIELD 2

FIELD 3

FIELD 4

AREA A

AREA B

Track

Tolgus House

Fir Tree Cottage

Great South Tolgus Mine (disused)

Meadowside

TIP (disturbed)

A 3047

110.3m

SMS areas x 2 (approximate extent)

Amendments

Issue No.	Date	Description
-	-	-
-	-	-

KEY

PROBABLE ARCHAEOLOGY

- Positive anomaly / weak positive anomaly - probable cut feature of archaeological origin
- Negative anomaly / weak negative anomaly - probable bank or earthwork of archaeological origin
- Linear anomaly probably related to former field boundary
- Widely spaced curving parallel linear anomalies - probably related to ridge-and-furrow

POSSIBLE ARCHAEOLOGY

- Positive anomaly / weak positive anomaly - possible cut feature of archaeological origin
- Negative anomaly / weak negative anomaly - possible bank or earthwork of archaeological origin
- Moderate strength discrete anomaly - possible thermoremanent feature
- Magnetic spike - probable ferrous object

OTHER ANOMALIES

- Closely spaced parallel linear anomalies - probably related to agricultural activity such as ploughing
- Linear anomaly - probably related to pipe, cable or other modern service
- Linear anomaly - possibly related to land drain
- Magnetic disturbance associated with nearby metal object such as service or field boundary
- Strong magnetic debris - possible disturbed or made ground
- Scattered magnetic debris
- Area of amorphous magnetic variation - probable natural (e.g. geological or pedological) origin

Client

COTSWOLD ARCHAEOLOGY

Project Title — Job No. 3110

GEOPHYSICAL SURVEY - TOLGUS FARM, REDRUTH

Subject

ABSTRACTION AND INTERPRETATION OF ANOMALIES- WHOLE SITE

STRATASCAN™
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E: info@stratascan.co.uk
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SUMO GROUP MEMBER

Scale 1:2000 (0m 20 40 60 80 100)

Plot	Checked by	Issue No.
A3	PPB	01
Survey date	Drawn by	Figure No.
JUNE&OCT 2012	RAJS	17

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Staff Profile

Peter Capps

Project Officer

Area of Expertise and Technical Skills

Field archaeology
GPS survey

Career Details

2011–2013	Various
2013 to present	Wessex Archaeology

Qualifications

2011 BA Archaeology, University of Winchester

Affiliations and Accreditations

Summary History

Peter studied archaeology at the University of Winchester and during this time participated in excavations conducted by various field schools. After graduation he volunteered on the university run excavation of a medieval leper hospital site in Winchester and one of his duties was supervising undergraduates. Afterwards, Peter had gained experience working for a number of units throughout the south of England (Pre-construct Archaeology, Archaeological Solutions, Cambridge Archaeological Unit, Wardell Armstrong and Oxford Archaeology) on various sites and projects.

Peter joined Wessex Archaeology in 2013 and has worked on watching briefs, evaluations and excavations and has supervised project staff as required. He has also gained experience in GPS surveying. Peter has worked on a range of projects covering a variety of periods including Lyde Road, Porton Down, Batsworthy Cross, Witchelstowe, Bulford-Evaluation and the A14.

Selected Projects

Lyde Road, Yeovil, Somerset – Excavation
Porton Down DSTL, Wiltshire – Excavation
Batsworthy Cross, Devon – Excavation
Witchelstowe housing development, Swindon – Evaluation
Bulford, Wiltshire – Evaluation
A14 – Evaluation
Old Sarum, Salisbury, Wiltshire – Watching brief

Staff Profile

Darryl Freer

Project Supervisor

Area of Expertise and Technical Skills

Field archaeology
Machine trenching/site stripping
Digital site survey
Public/Community engagement
QMS Internal Auditor

Career Details

1988–1994	Finance Assistant Wychavon District Council
1994–2002	Payroll Officer Evesham & Pershore Housing Association
2005–2006	O2 (High St, Exeter branch)
2006–2007	Brook St Employment Agency
2007 to present	Wessex Archaeology

Qualifications

2005 BA (Hons) Archaeology, University of Exeter
2006 MA Archaeology, University of Exeter

Affiliations and Accreditations

Construction Skills Certificate Scheme (CSCS) Card
Internal Auditor ISO 9001:2008
HSE First Aider
UKATA (Asbestos Awareness)
N304 Cable Avoidance Tools
N133 Plant Machinery Marshall
SO12A CITB Operatives HS&E Test
SO12B Managers & Professionals HS&E Test
Site Supervisors Safety Training Scheme (SSSTS)

Summary History

Darryl joined Wessex Archaeology in 2007 and was promoted to the position of Project Supervisor in 2015. He has worked on a wide range of evaluations, excavations and watching briefs. His current duties for Wessex Archaeology include supporting Project Officers in the running of large scale evaluations and excavations. His role also involves the running of small evaluations, excavations and watching briefs with responsibility for the Health and Safety of all staff and visitors. His work includes the training of staff in all aspects of field archaeology; excavation, recording, interpretation, survey, AutoCAD, liaison with clients and landowners and engagement with members of the public as well as the responsibility for the compilation and maintenance of a site archive.

Darryl as spent much of his career at Wessex working in Wiltshire including undertaking work on the A303 Longbarrow Roundabout, supervising machine stripping at the Kings Gate Development, Amesbury and undertaking a trial trench evaluation at the Stonehenge Coach Park. Most recently, Darryl has been involved in the machine stripping and hand excavation of a large scale development at Sherford New Community, Plymouth which includes the excavation of two barrow sites.

Selected Projects

Sherford New Community Excavations, Plymouth
Stonehenge Visitor Centre Coach Park Extension, Wiltshire
A303 Longbarrow Roundabout, Wiltshire
Old Sarum Watching Brief, Wiltshire DCTT Lyneham, Solar Array, Wiltshire
Butterfield Drive, Wiltshire
Melksham Town FC, Wiltshire
Salisbury Rd, Marlborough, Wiltshire
Kings Gate Mitigation, Amesbury, Wiltshire

Staff Profile

Mark Stewart

Archaeologist – Supervisor

Area of Expertise and Technical Skills

Field archaeology
Digital site survey
Geoarchaeological recording
Lithhic analysis

Career Details

1995–2002	WA, TVT, Giffords, Winchester Museum Service, CKA, Durham University
2002–2011	WA, Liverpool University
2012	Context One
2012 to present	Wessex Archaeology

Qualifications

1990–1993	BA (Hons) Archaeology, University of Wales
1996–1997	MPhil Later Prehistory and Theory, Cambridge University

Affiliations and Accreditations

NPORS Operator – Plant Marshall
NPORS – Cat and Genny
CSCS – Project Support Function Related Degree
UKATA – Asbestos Awareness
CDK SPTA Yellow Card

Summary History

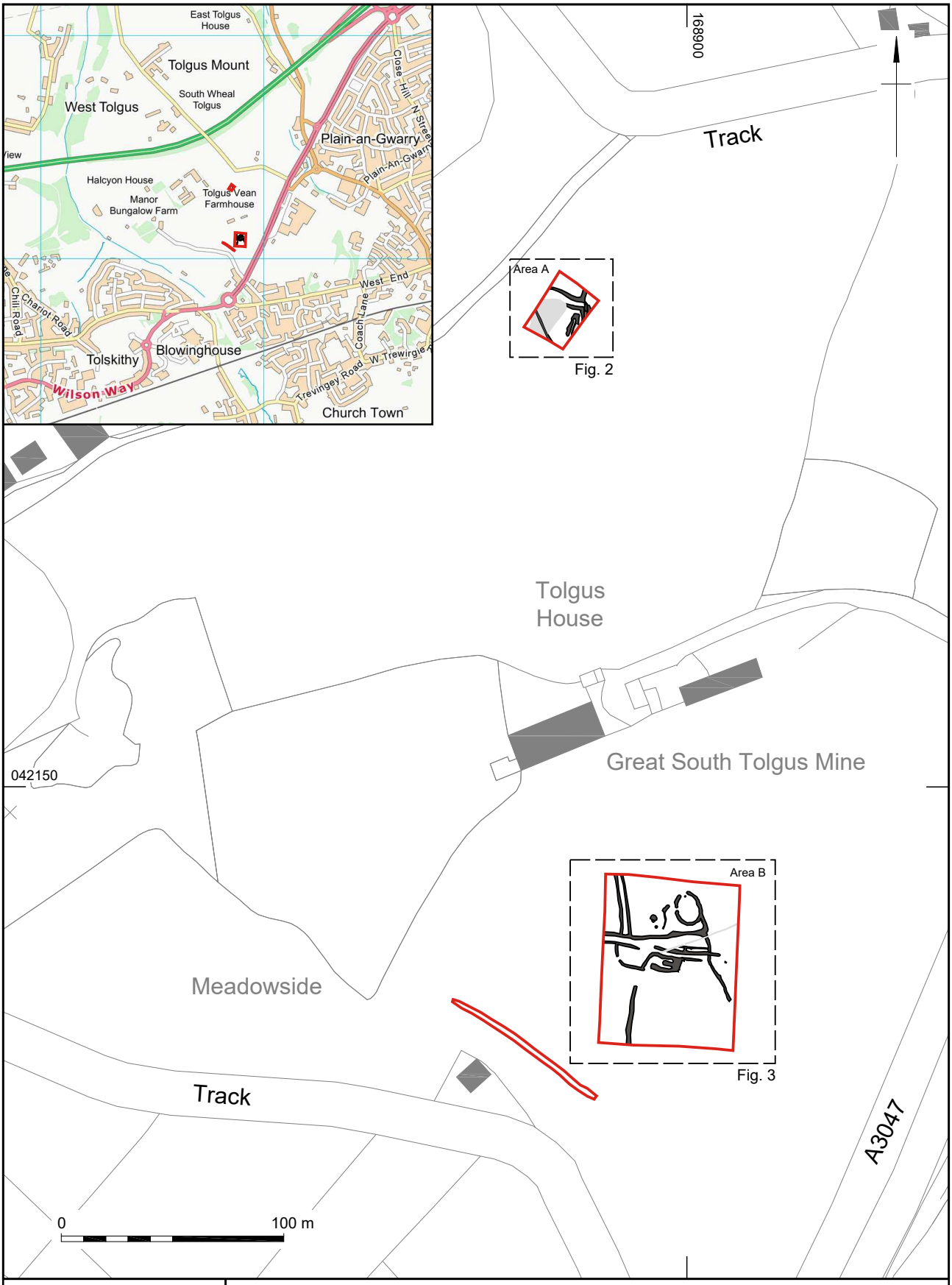
Following university, Mark gained archaeological experience as a volunteer for Test Valley Trust. This led to working with various small units in the UK and supervisory positions on University research excavations in Scotland and the Czech Republic. He returned to university for postgraduate study in prehistory and theory which led to an involvement in the methodological approach for the excavation of Catal Huyuk, Turkey.

Mark began working for Wessex Archaeology on short contracts that led to experience on large scale fieldwork projects in the UK. He now works full time with WA and gained a wide experience in fieldwork ranging from small evaluations to large excavations of all periods, including the excavation of deeply stratified urban sites and lithic scatters, metal detecting surveys and geoarchaeological recording. He also trains new staff in fieldwork methodology.

Mark has gained specialist knowledge in lithic and geoarchaeological analysis and writes lithic specialist reports. This is put to use on long running WA projects based in aggregate quarries as he carries out much of the geoarchaeological investigations, particularly looking for potential Palaeolithic deposits. He has also supervised the excavation of a causewayed enclosure and associated Neolithic features, and acted as the lithic specialist for the site.

Selected Projects

Kingsmead Quarry, Horton – Fieldwork Supervisor for multi-period site with flint scatters
Riding Court Farm Quarry, Datchet – Fieldwork Supervisor on multi-period site with Neolithic causewayed enclosure
Jewry Street, Winchester – Archaeologist on urban site with deep stratigraphy
Cerney, Cotswolds – Fieldwork Supervisor for large evaluation
Heathrow Terminal 5, Perryoaks – Archaeologist on multi-period excavations
Bathgate, Bath – Fieldwork Supervisor for urban site with deep stratigraphy
Konya Plain, Turkey – Assistant Fieldwork Director for multi-period site with deep stratigraphy
Picts Knowe, Scotland – Fieldwork Supervisor for excavation of waterlogged henge



Site boundary
Archaeological feature
Modern disturbance
Structure

Coordinate system: OSGB36

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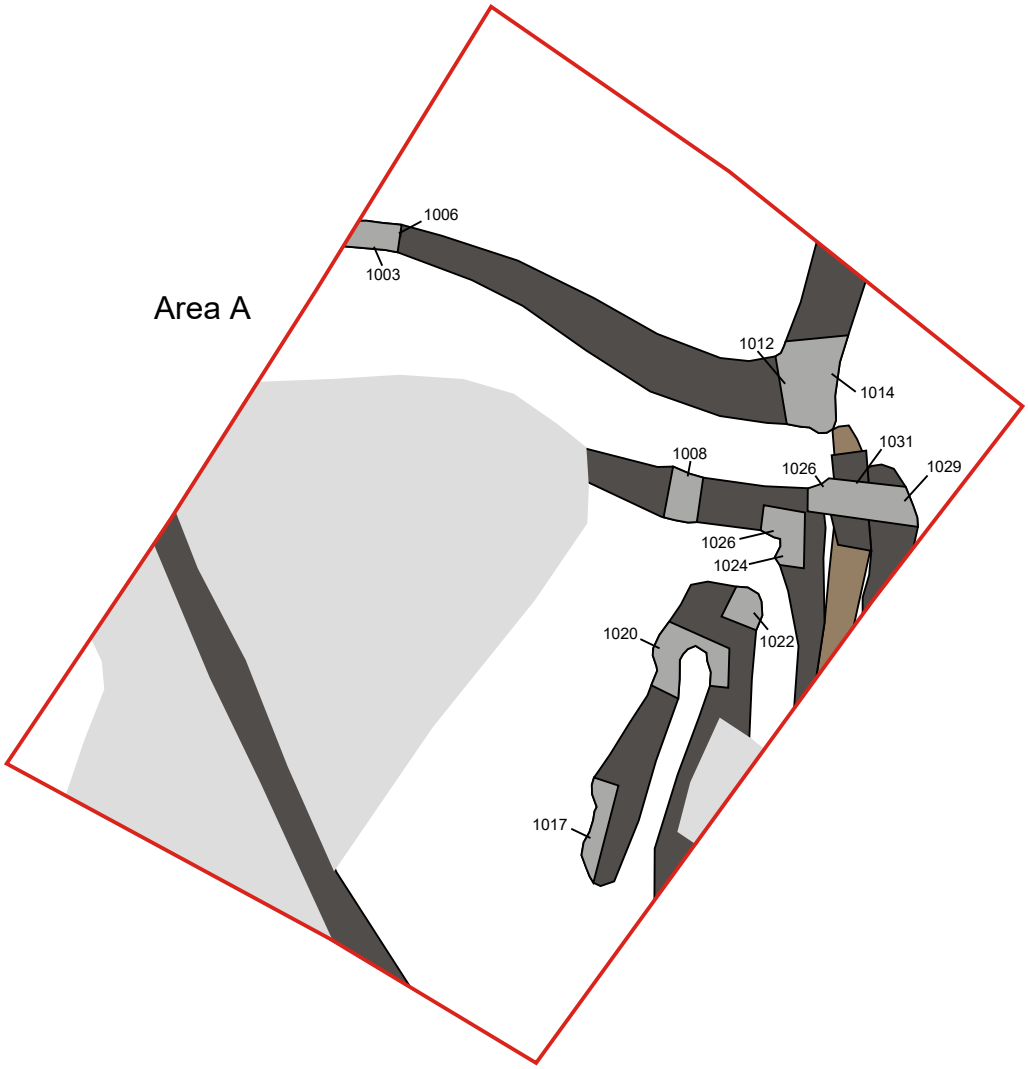
Site location plan with archaeological results

Figure 1



Site boundary
Archaeological feature
Excavated intervention
Modern disturbance
Structure

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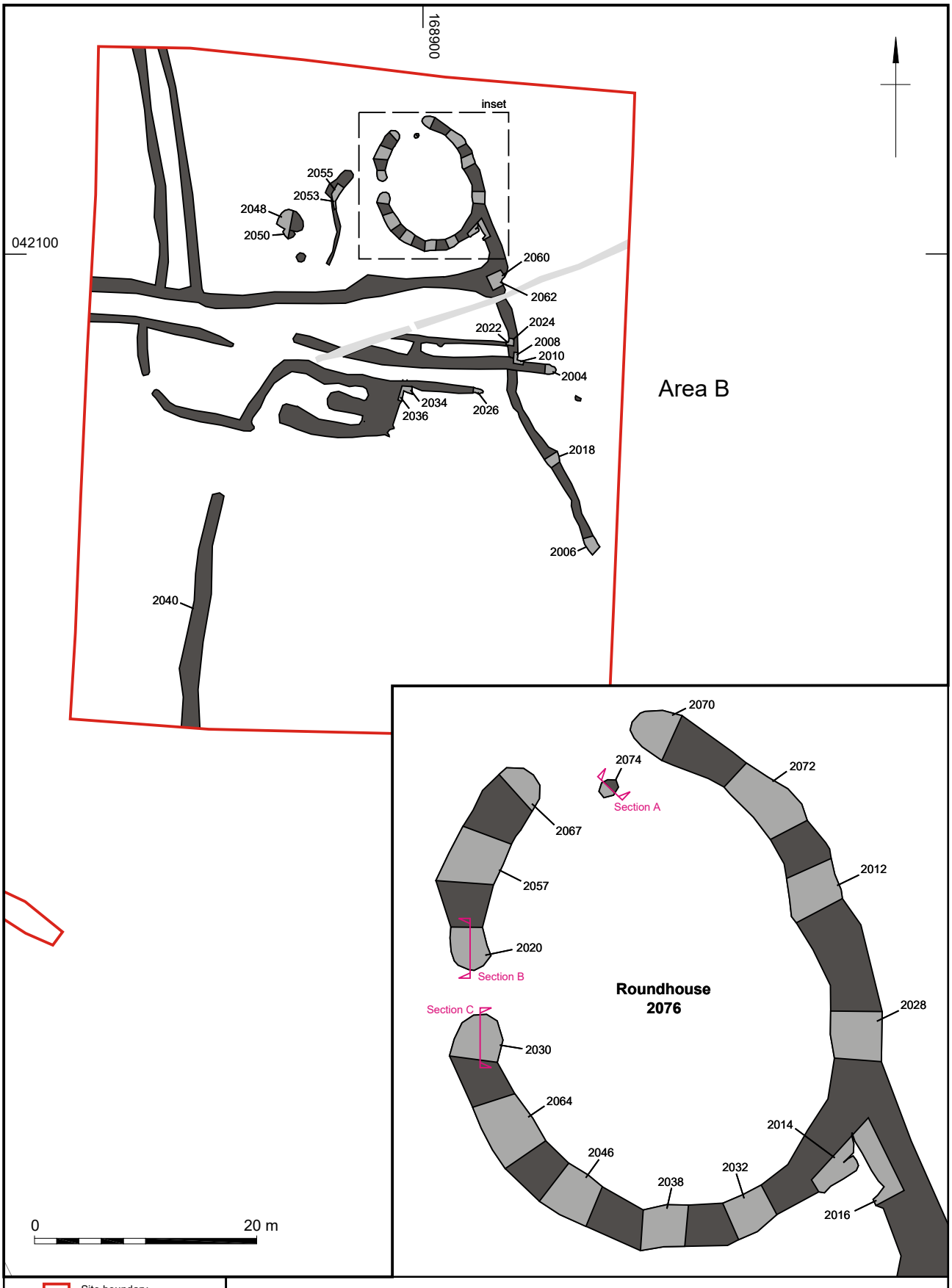
Archaeological results within Area A

Figure 2



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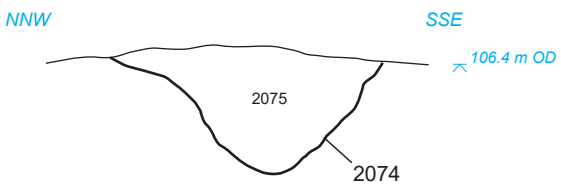
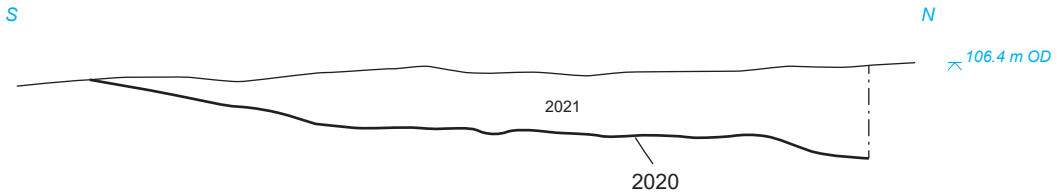
Archaeological results within Area B

Figure 3

Section A. West-south-west facing section of posthole 2074



Section B. East facing longitudinal section of ring ditch terminus 2020



Section C. East facing longitudinal section of ring ditch terminus 2030

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Selected sections

Figure 4

Plate 1: West facing section of ditch 1003 and posthole 1006 (0.5 m scale)

Plate 2: East facing section of ditch 1012 (1 m scale)

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Plate 3: Plan view of ditches 1012 and 1014, view from the south-east (1 m scale)

Plate 4: East facing section of ditch 1008 (1 m scale)

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Plate 5: South-west facing section of ditches 1029 and 1031 (1 m scale)

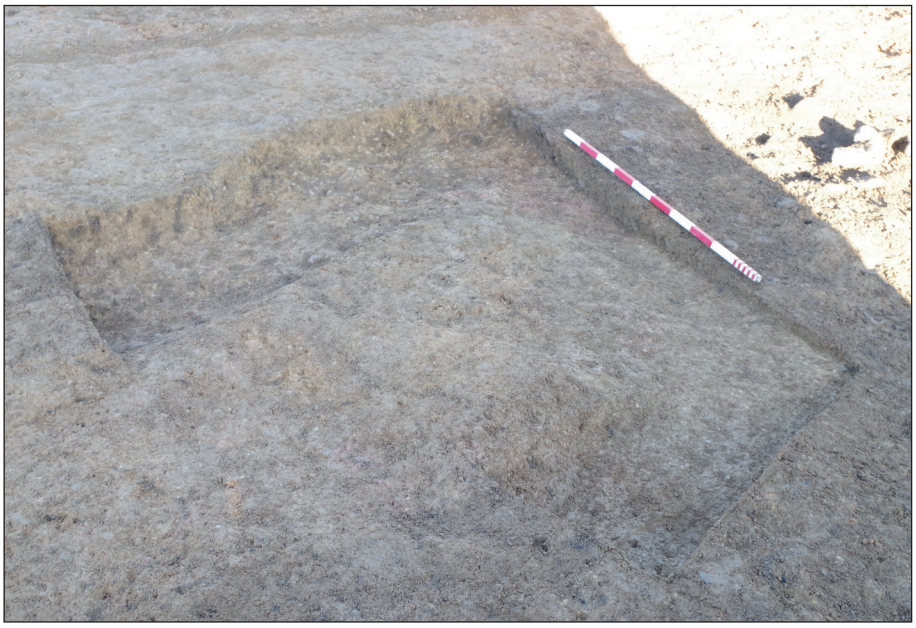

Plate 6: View of 1020 from the south-east (1 m scale)

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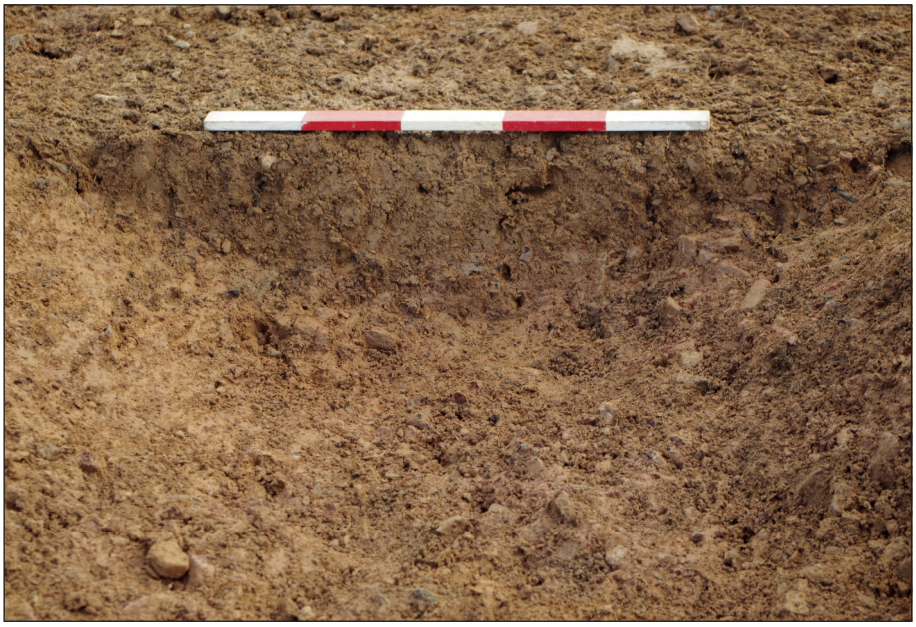

Plate 7: North-north-west facing section of slot 2072 through ring ditch 2076 (0.5 m scale)

Plate 8: South-east facing section of slot 2064 through ring ditch 2076 (0.5 m scale)

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Plate 9: West-north-west facing section of pits 2048 and 250 (2 m scale)

Plate 10: Plan view of slot 2014 through ring ditch 2076 and ditch 2016 from the south (1 m scale)

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Plate 11: North facing section of ditches 2022 and 2024 (0.5 m scale)

Plate 12: South facing section of ditches 2036 and 2034 (0.5 m scale)

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Scale:	Not to scale	Illustrator:	EE
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Plate 13: Plan view of cess pit feature 2055 and associated gully 2053 from the north-east (1 m scale)

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