LAND AT HOLMBUSH ROAD, ST AUSTELL, CORNWALL

(Centred on NGR SX 04240 52580)

Results of an archaeological watching brief

Cornwall Council Planning Ref. PA13/09195, Appeal Ref. APP/D0840/A/14/2223630

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On behalf of: Redrow Homes

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Summary

An archaeological watching brief was carried out by AC archaeology in August 2015 on land at Holmbush Road, St Austell, Cornwall (NGR SX 04240 52580). The watching brief was carried out during a geotechnical investigation ahead of construction of a mixed use development.

The majority of the features identified related to post-medieval mining activity. This included five mine shafts, one of which was previously unrecorded, and ten surface working pits, the majority following the lines of lodes. Several small pits of unknown function but clearly related to the mine workings were also identified. Two former hedge boundaries known from historic mapping were also identified. There were no finds and the archaeological evidence confirmed the presence of former mining activity on the site, which in the longer term, before and after the mining activity, was the location of agricultural fields.

1. INTRODUCTION (Fig.1)

This report presents the results of an archaeological watching brief carried out on land at Holmbush Road, St Austell, Cornwall (NGR SX 04240 52580) by AC archaeology during August 2015. The recording was commissioned by Redrow Homes Ltd following Planning Permission granted on appeal and undertaken during a geotechnical investigation in advance of redevelopment of the site for a "mixed use development to include up to 190 residential units, employment floorspace (B1a, b and c) up to 600 sq m (GFA) and family restaurant/public house (A4) up to 650 sq m (GFA); creation of vehicular access arrangements, internal road layout, car parking, open space, landscaping, services and infrastructure and all other associated development" (Planning reference APP/D0840/A/14/2223630).

1.1 The site has been subject to a prior desk-based archaeological assessment (Meaton 2013), which indicated the presence of several mine shafts and waste tips within the site along with former field boundaries. A mound in the south of the site was also thought to relate to previous mining activity, although that it represented a Bronze Age barrow could not be ruled out.

2. THE SITE (Fig. 1; Plate 1)

- **2.1** The application area forms an irregular block of land comprising seven discrete fields in the parish of St Austell. Following a previous geoenvironmental and geotechnical survey the fields were designated as Fields 1-7 (Thomas 2015); these numbers are used here. The total area encompassed by the proposed development is approximately 8.5 hectares. The site is situated on a natural spur, occupying both north and east facing slopes at between *c*. 55m and 35m OD. To the north it is bordered by Holmbush Road (A390), to the west by residential development and to the south by the main line railway, beyond which there is further housing. To the east there is the Cuddra plantation and Pine Lodge Gardens and Nursery.
- **2.2** The underlying solid geology comprises a mixture of sedimentary slate, siltstone and sandstone of the Meadfoot Formation. These were laid down during the Devonian Period, between 391 and 412 million years ago. No Quaternary drift deposits are recorded (British Geological Survey Online Viewer 2015).

2.3 The 19th and early 20th century historic maps show the application area to form a relatively static rural landscape on the edge of the St Austell conurbation, with the majority and extent of field boundaries having remained unaltered. In addition, the site is thought to encompass anciently enclosed land, and as such may represent a partly fossilised early medieval and potentially prehistoric landscape (Meaton 2013).

3. AIMS AND METHODOLOGY

- **3.1** The aim of the watching brief was to preserve by record any archaeological features or deposits exposed during geotechnical investigation.
- **3.2** All excavations were undertaken with a 360° tracked mechanical excavator. Where possible all features and deposits revealed were recorded using the standard AC archaeology pro-forma recording system, comprising written, graphic and photographic records, and in accordance with AC archaeology's *General Site Recording Manual, Version 2* (revised August 2012). Detailed sections or plans were produced at a scale of 1:20 or 1:50 as appropriate.

4. **RESULTS** (Fig. 2; Plates 2-7)

4.1 Introduction

The monitored works for the site comprised the excavation of trenches by Mining Searches UK in order to investigate the extent and nature of mining remains on the site to provided baseline data and advice in preparation for residential development. The findings of Mining Searches UK investigation have been fully reported elsewhere (Moyle 2015). The trenches were placed to provide sample coverage of the site and to investigate known mining features. The trenches generally measured 0.60m wide, and were excavated down to a typical depth of 1.2m, although the area of trenching was expanding to investigate specific features. All excavations were monitored. All of the archaeological features observed were recorded where possible in plan and section, although due to the depth of excavation, some of the trenches were inaccessible due to health and safety protocol.

Across the site the following soil sequence was recorded: topsoil, which measured between 0.30m to 0.60m thick, and comprised dark brown silty clay and gravel that overlaid the natural which consisted of mixed orange, red and brown silty clay and gravel.

Archaeological features were identified in fields 1-3 and 6-7 and are described below. There were no finds.

4.2 Field 1

Field 1 sloped gently to the northeast and contained a modern horse ménage in the southeast corner. Two approximately north-south aligned trenches (11 and 12) were excavated. Trench 12 on the east side of the field was blank. Trench 11 contained a china clay quarrying waste dump (1100) and is described below.

The waste dump (1100) was a clear mound on the surface and was exposed in the trench for a distance of 23.90m north to south with a surface indication that it spread 18m east to west. It consisted of light greyish brown clayey silt up to 0.70m thick. It covered a buried soil (1101) which was up to 0.40m thick and consisted of brown clayey silt on top of natural (1102). The buried soil was exposed as topsoil (1103) outside of the bounds of the mound.

4.3 Field 2 (Section Fig. 8a; Plates 2-3)

Field 2 sloped steeply down towards the main road to the north, but levelled to the south end. Three trenches (1-3) were excavated in this field with Trench 1 a continuous excavation along the north and east edges of the field. Trench 2 was located along the west edge. Trench 3 was 3m long and tested a surface depression which was found to be natural. A linear feature (F101/F201) representing a single ditch was observed in trenches 1 and 2.

Ditch F101/F201 was on an east-west alignment and represents the position of a former field boundary known from historic mapping. It measured 1.60m wide and 0.84m deep. It had a homogeneous fill (100/200) of light brownish grey clayey silt which had the appearance waste from china clay quarrying.

4.4 Field 3 (Plans Figs 3-4, 5a and 6a, Sections Figs 5b-c, 6b-d and 10c; Plates 4-5)

Field 3 sloped to the north and west. Four trenches (13-17) were excavated, with two (trenches 13 and 14) targeting mine shafts known from historic mapping. Trench 15 was excavated along the northwest and north edge of the field and Trench 16 was aligned north-south across the length of the field. Trench 17 targeted surface depressions in the southeast corner of the field. In the areas of trenches 16 and 17 were several made ground layers (1605/1608, 1606/1703, 1607/1706 and 1713). Three mine shafts (F1303, F1403 and F1705), six surface working pits (F1403, F1407, F1507, F1611, F1617, F1619, F1702 and F1712) and pits of unknown function (F1503, F1505, F1509 and F1709) were identified in the trenches and are described below.

Mine shafts

Mine shaft F1303 in Trench 13 was located within a mound (1302) measuring up to 20m wide beneath which was a buried topsoil (1304). The shaft measured approximately 3.70m east to west and 2.50m north to south and was excavated to a depth of 5.00m but not bottomed. It contained a single fill (1301) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Mine shaft F1403 in Trench 14 was located within a mound (1402) measuring up to 10m wide beneath which was a buried topsoil (1404). The shaft measured approximately 2.00m east to west and 3.00m north to south and was excavated to a depth of 4.70m but not bottomed. It contained a single fill (1401) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Mine shaft F1705 in Trench 17 was located within a depression which was filled with a mix of modern building waste (1703). The shaft measured approximately 2.30m east to west and 2.00m north to south and was excavated to a depth of 3.70m but not bottomed. It contained a single fill (1704) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Surface working pits

Surface working pit F1507 in Trench 15 was revealed over a length of 6.00m and was 2.60m deep. It contained a single fill (1506) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Surface working pit F1611 in Trench 16 was revealed over a length of 7.50m and was 1.70m deep. It contained two fills (1609 and 1610). Primary fill (1610) consisted of abundant small to medium sub angular stones in a red clayey silt matrix. Upper fill (1609) consisted of light grey clayey silt.

Surface working pit F1617 in Trench 16 was revealed over a length of 3.50m and was 3.20m deep. It contained two fills (1615 and 1616). Primary fill (1616) consisted of abundant small to medium sub angular stones in a brownish red clayey silt matrix. Upper fill (1615) consisted of light grey clayey silt.

Surface working pit F1619 in Trench 16 was revealed over a length of 6.30m and was 1.80m deep. It contained a single fill (1618) consisting of abundant small to medium sub angular stones in a dark brown clay matrix.

Surface working pit F1702 in Trench 17 was revealed over a length of 8.20m and was a minimum of 4.00m deep but not bottomed. It contained a single fill (1701) consisting of abundant small to medium sub angular stones in a brownish grey clayey silt matrix. It was clear from the collapsing sections that the pit continued for an unknown distance to the east, west and south.

Surface working pit F1712 in Trench 17 was revealed over a length of 1.80m and was 2.60m deep. It contained a single fill (1711) consisting of abundant small to medium sub angular stones in a brownish red clayey silt matrix.

<u>Pit</u>

Pit F1509 was only seen in section, measured 0.68m wide by 0.34m deep with straight sides and a flat base. It contained a single fill (1508) consisting of greyish brown clayey silt.

Pit F1604 was only seen in section, measured 1.90m wide by 0.75m deep with steep sides and a flat base. It contained two fills (1602 and 1603). Primary fill (1603) consisted of greyish brown clayey silt; the upper fill (1602) consisted of yellow silty clay.

Pit F1710 was only seen in section, measured 2.10m wide by 0.70m deep with straight sides but was not bottomed. It contained three fills (1707-9). Lowermost fill (1709) consisted of brownish red silty clay. Above this was fill 1708 which consisted of abundant small to medium sub angular stone in a grey clayey silt matrix. Upper fill 1707 consisted of brownish red silty clay.

Linear features

Ditch F1503 was on a north-south alignment. It measured 2.30m wide and 0.70m deep and contained a single fill (1502) consisting of light greyish brown clayey silt.

Ditch F1505 was on a north-south alignment. It measured 2.40m wide and 0.90m deep and contained a single fill (1504) consisting of greyish brown clayey silt. This and ditch F1503 probably relate to a former field boundary present on historic mapping.

4.5 Field 6 (Plans Fig. 7, Sections Figs 8c, 9 and 10a-b; Plates 6-7)

Field 6 sloped gently to the east. Five trenches (4-8) were excavated, with two (trenches 4 and 5) targeting mine shafts known from historic mapping. Trenches 6 and 7 were aligned north-south and both excavated in the northwest corner of the field. Trench 8 targeted a mound in the southeast corner of the field. Two mine shafts (F404 and F502), three surface working pits (F603, F702 and F704), five pits (F402, F606, F610, F612 and F615) and a mining waste mound (801) were identified in the trenches and are described below.

Mine shafts

Mine shaft F404 measured 2.00m by 2.00m and excavated to a depth 4.20m below ground surface but not bottomed. It contained a single fill (403) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Mine shaft F502 measured at least 5.90m by 3.80m and although excavated to a depth 4.70m below ground surface was not fully defined or bottomed. It contained a single fill (501) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Surface working pits

Surface working pit F603 was revealed in Trench 6 over a length of 7.65m and was 3.00m deep. Its full extent is unknown. It contained a single fill (602) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Surface working pit F708 was seen in the east section of Trench 7 over a length of 3.40m by 0.90m deep. It contained three fills (705-7). Primary fill (707) consisted reddish grey silty clay. Secondary fill (706) consisted of dark greyish brown clayey silt. Upper fill (705) consisted of brownish red clayey silt. All of the fills had been cut by a pit (F704) at the north end (see below).

Surface working pit F719 measured 18.50m long north to south and at least 6.00m wide east to west, it was irregular shape but the full extent of this feature was not exposed and it continued to the east and west in a series of tunnels or exploratory trenches (F710, F712, F714, F716 and F718). The base was found at 2.70m below ground surface. The feature and its extensions were largely filled of abundant medium to large sub angular stones in a greyish brown clayey silt matrix.

<u>Pits</u>

Pit F402 was only seen in section, and measured 1.10m wide by 0.73m deep with straight sides and a flat base. It contained a single fill (401) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

Pit F606 was only seen in section, and measured 1.70m wide by 0.62m deep with moderately sloping sides and a rounded base. It contained two fills (604 and 605). Primary fill (605) consisted of dark brown silty clay. Upper fill (604) consisted of mixed orange/yellow and greyish brown silty clay.

Pit F610 was only seen in section, and measured 1.60m wide by 0.80m deep with a bowl shaped profile. It contained a single fill (609) consisting of dark greyish brown silty clay. Pit F610 cut a made ground layer (613) consisting of dark grey silty clay.

Pit F612 was only seen in section, and measured 1.50m wide by 0.46m deep with a bowl shaped profile. It contained a single fill (611) consisting of dark greyish brown silty clay.

Pit F615 was only seen in section, and measured 1.90m wide by 0.70m deep with an asymmetrical profile having a vertical north edge and sloping south edge and flat base. It contained a single fill (614) consisting of dark greyish brown silty clay.

Pit F704 cut surface working pit F708. It was seen in section only and measured 2.34m long by 0.80m deep. It contained two fills (702-3). Primary fill (703) consisted of brown silty clay. Upper fill (702) consisted of light brownish yellow silty clay.

Mining waste mound

Mining waste mound (801) was revealed in Trench 8 over a length of 25.50m and maximum height of 1.40m. It consisted of abundant medium to large sub angular stones in a grey clayey silt matrix.

4.6 Field 7

Field 7 sloped gently to the east. Two trenches (9-10) were excavated. Trench 10 was excavated along the east edge of the field and contained no archaeological features. Trench 9 targeted a surface depression which was identified as a surface working pit (F902) and is described below.

Surface working pit F902 measured 4.20m long and was excavated to a depth of 1.90m. It contained a single fill (901) consisting of abundant small to medium sub angular stones in a greyish brown clayey silt matrix.

5. COMMENTS

- **5.1** The five mine shafts and ten surface working pits identified are consistent with the historic maps which show the development area as a location for mining activities. A lack of dating evidence makes it difficult to ascertain their exact chronology but all activity most probably falls within the post-medieval period. Adjacent to the east of the site is the former location of Cuddra Mine which was mined for copper and tin between 1815 and 1872 (Cornwall HER no. 20476). The surface working pits may be of earlier date than the shafts or indicate the position of prospecting pits; the majority of these surface working pits follow the lines of two lodes identified in the geotechnical survey (Moyle 2015). No structures related to mining activities were identified, nor any masonry features associated with the shafts.
- **5.2** A large mound investigated in Trench 8 appears to be consistent with a waste heap from a further shaft, but the shaft was not identified. The mine shaft in Trench 14 was previously unrecorded.
- **5.3** A mound in Field 1 was shown to be a waste dump derived from China Clay quarrying and a number of features elsewhere were filled with material derived from China Clay deposits. This material may have been imported to the site from nearby China Clay quarries for the purpose of providing made ground. China Clay extraction is a predominantly 20th century industry indicating that these deposits are late post-medieval or modern in date.
- **5.4** Two former field boundaries known from historic mapping were identified. The first, originally dividing Field 2, had a ditch (F101/F201) in trenches 1 and 2. The second is represented by ditches in Trench 15 (F1503 and F1505) which relate to a boundary which formerly divided Field 3; its continuation was not identified within the heavily disturbed deposits in Trench 16.
- **5.5** None of the features identified during the watching brief produced finds, other than modern dumped material which was not collected, and no finds were recovered from elsewhere on the site. Other than mining features no previously unrecorded archaeological features were recorded and this, along with the lack of finds, indicates that when not in use for mining the site has most probably been in use historically for agricultural purposes with no evidence of previously unknown settlement located.

6. ARCHIVE AND OASIS ENTRY

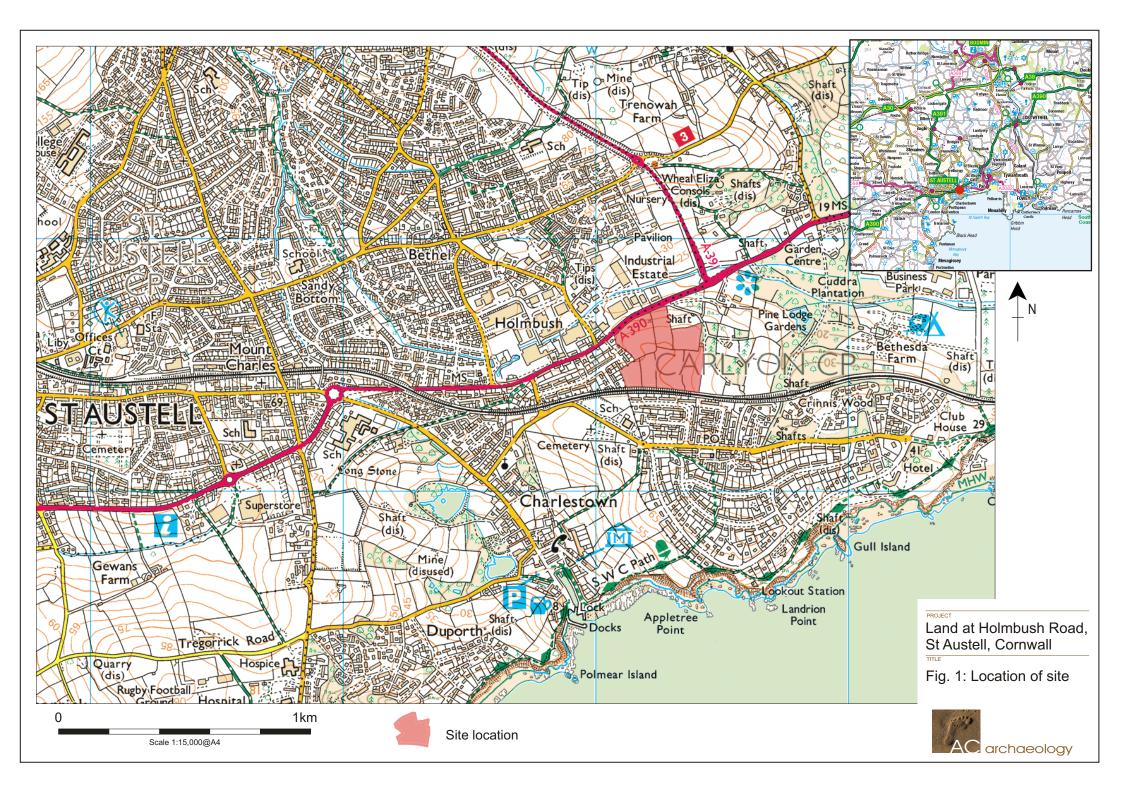
- **6.1** The archive is currently held at the offices of AC archaeology in Bradninch under the project number ACD1199. On completion of works the site archive will be offered to the Royal Cornwall Museum and the Cornwall Record Office under their current accessions policy.
- **6.2** An entry to the OASIS database, which will include a digital copy of this report, has been created using the unique identifier 225010.

7. ACKNOWLEDGEMENTS

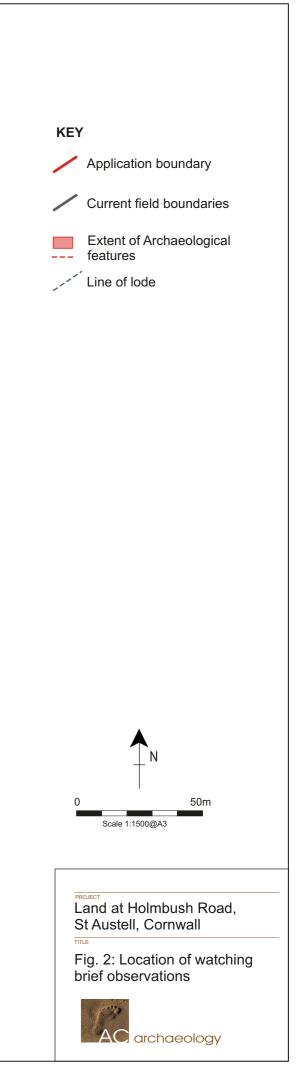
7.1 This project was commissioned by Redrow Homes Ltd and was managed for AC archaeology by Andrew Passmore. The watching brief was carried out by Abigail Brown. The illustrations were prepared by Elisabeth Patkai.

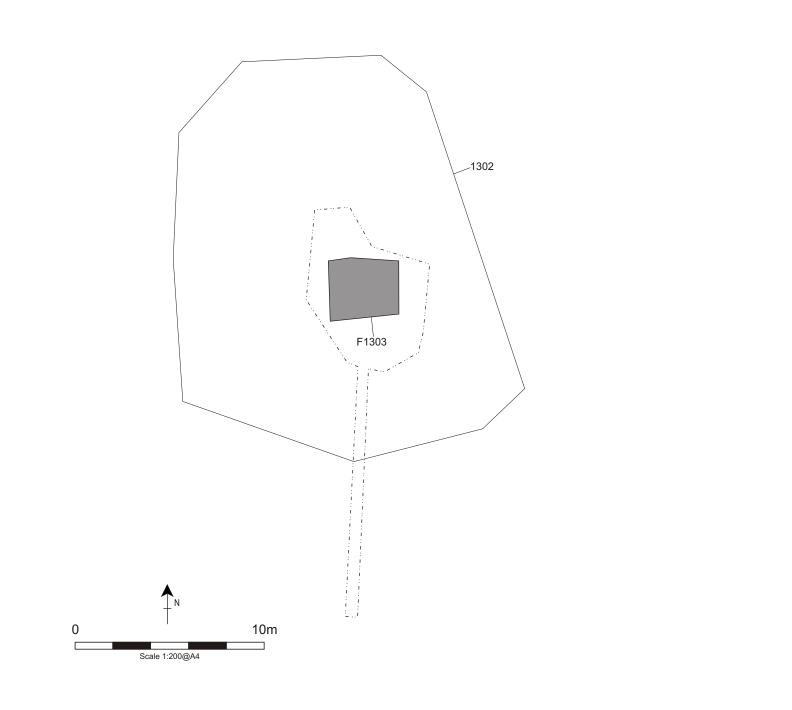
8. SOURCE CONSULTED

- Cornwall Council Interactive Map, Accessed October 2015 http://map.cornwall.gov.uk/website/ccmap/?zoomlevel=6&xcoord=203232&yc oord=53421&maptype=basemap&wsName=ccmap&layerName=Sites%20an d%20monuments%20record%20-%20points
- Meaton, C. 2013, Land off Holmbush Road, St Austell, Cornwall: Historic Environment Assessment. Unpublished AC archaeology report no. ACD559/2/0.
- Moyle, A. 2015, *Mining Investigation Report: Land South of Holmbush Road, St Austell, Cornwall.* Unpublished Mining Searches UK report no. 76750.MSI
- Thomas, A. 2015, *Holmbush, Holmbush Road, Cornwall: Geoenvironmental and Geotechnical Interpretative Report*. Unpublished Card Geotechnical Ltd report no. CGE/065851.





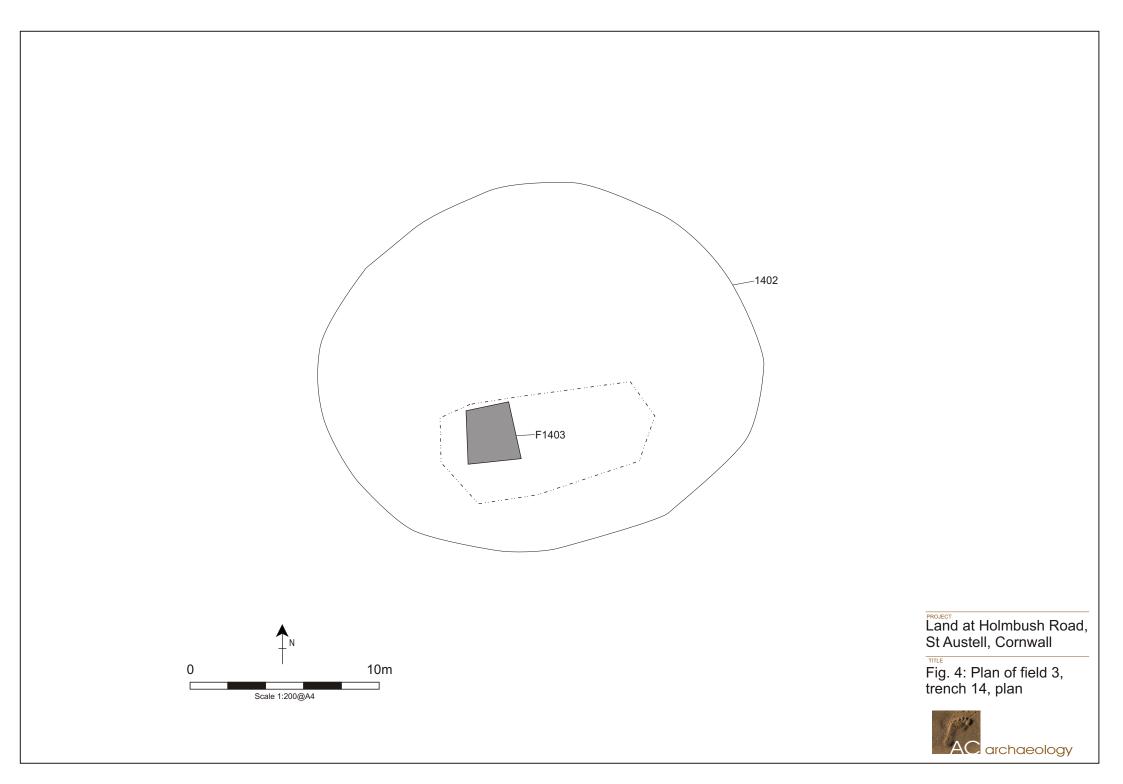


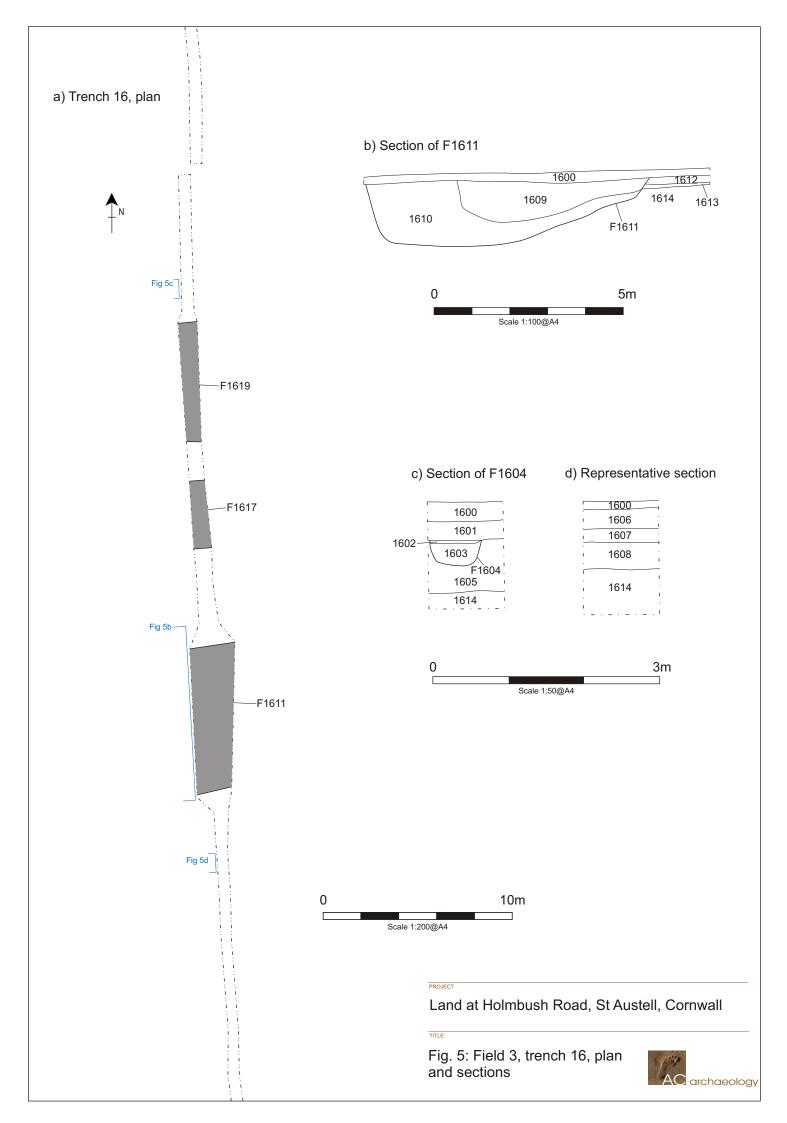


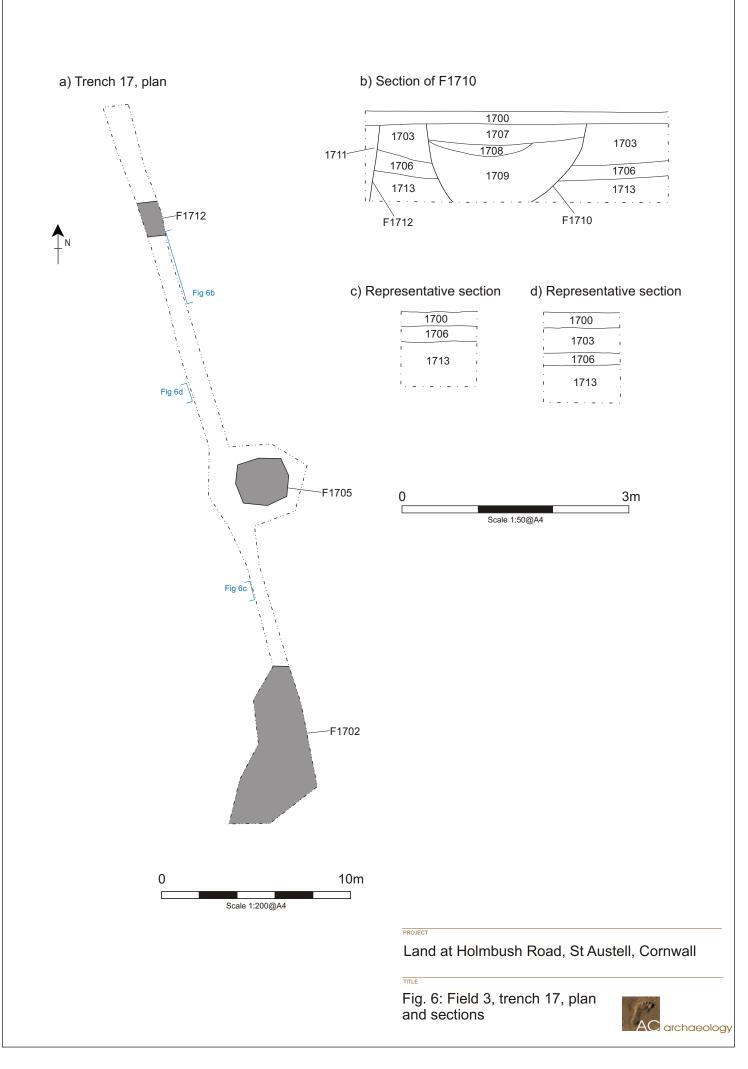
Land at Holmbush Road, St Austell, Cornwall

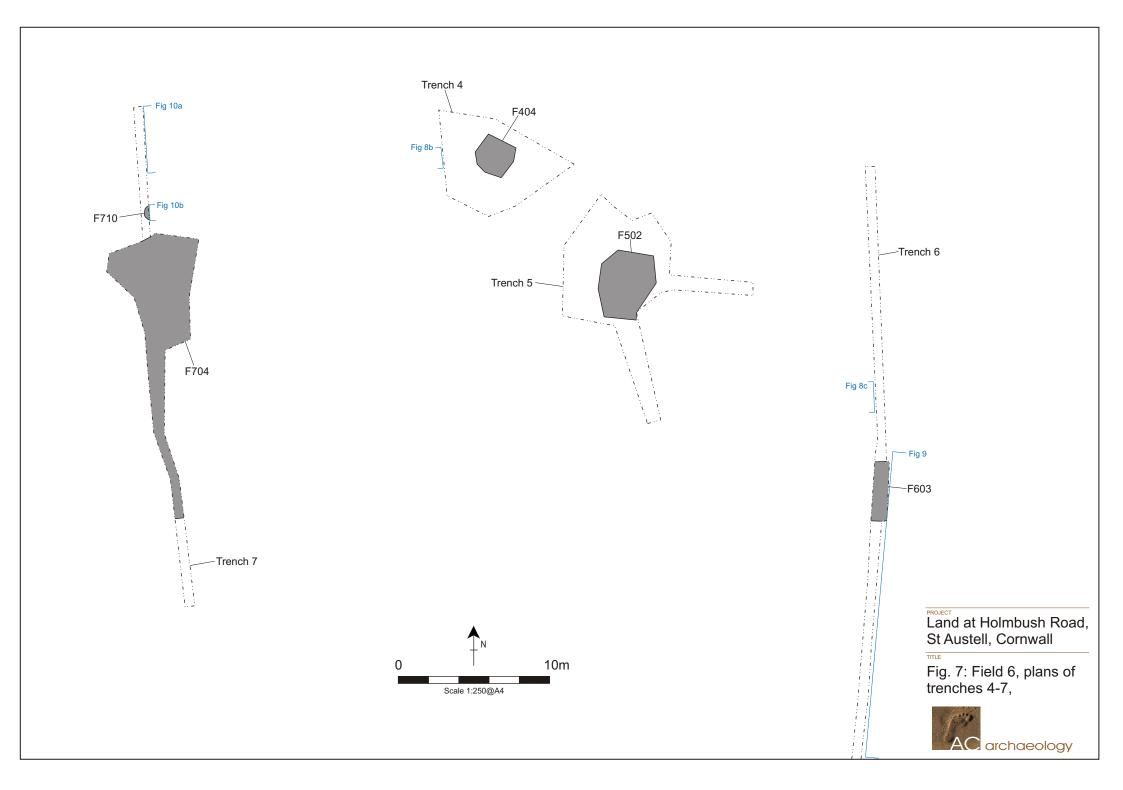
Fig. 3: Plan of field 3, trench 13, plan



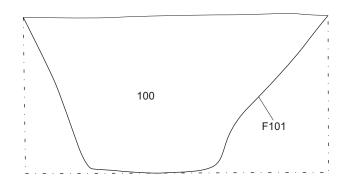




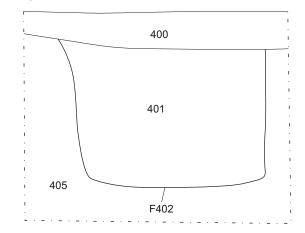




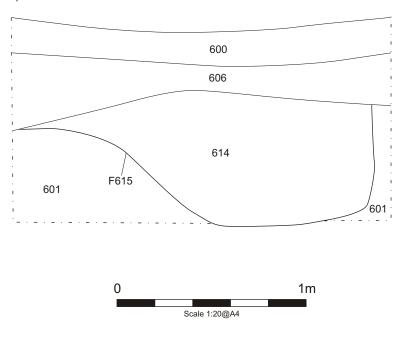
a) Section of F101



b) Section of F402



c) Section of F615

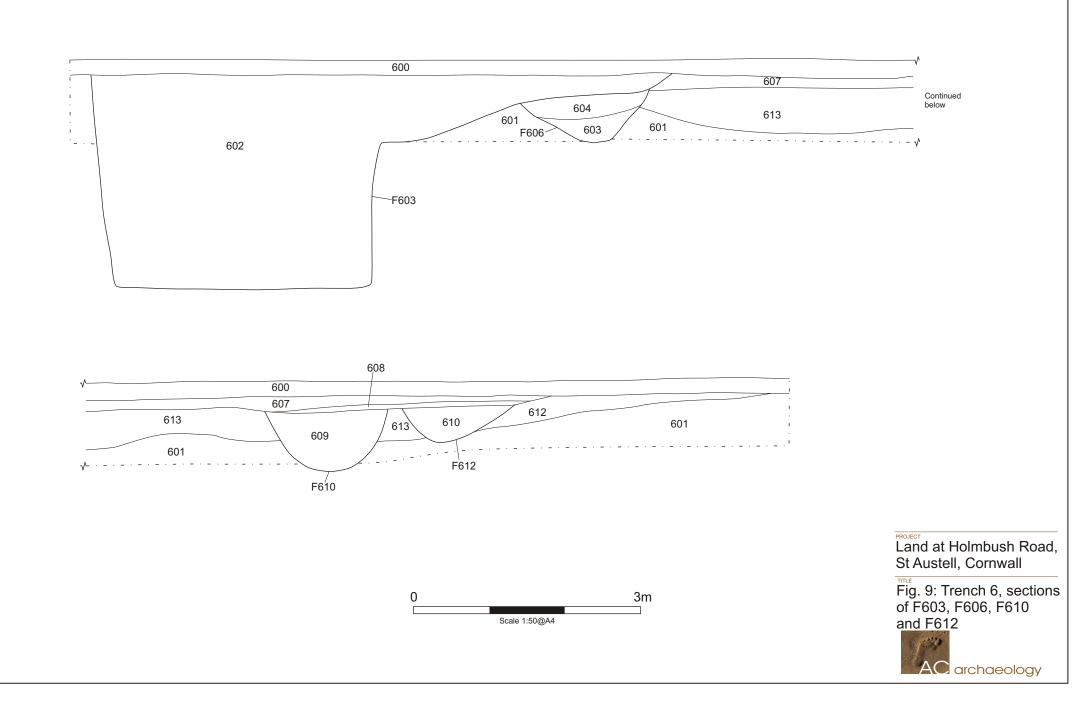


Land at Holmbush Road, St Austell, Cornwall

Fig. 8: Trenches 1, 4 and 6, sections

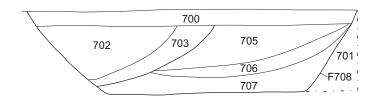
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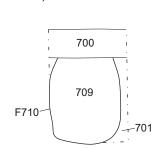






b) Section of F710





c) Section of F1503, F1505, F1507 and F1509

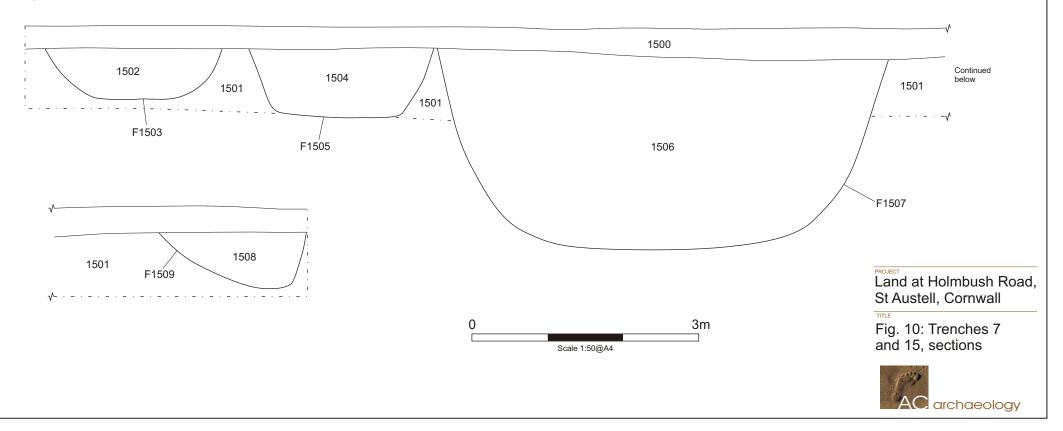




Plate 1: General view of Field 3, view from the east



Plate 3: Field 2, Trench 1, west-facing section of field boundary ditch F101 (scale 1m)



Plate 2: Field 2, Trench 1, view from the northwest



Plate 4: Field 3, Trench 14, mound 1402, view from the east





Plate 5: Field 3, Trench 14, mine shaft F1403, view from the southwest



Plate 6: Field 6, trenches 4 and 5, mine shafts F404 and F502, view from the west



Plate 7: Field 6, Trench 8, west-facing section of mound 801 (scale 1m)



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