

Archaeology Wales

Land adjacent to Imble Lane, Pembroke Dock, Pembrokeshire

Archaeological Evaluation



By

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Report No. 1184a



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Prepared For: Pembrokeshire Housing

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March 2014



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Unexcavated features possible structures

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Summary

In January 2014, Archaeology Wales carried out an Archaeological Evaluation ahead of a proposed housing development at Imble Lane, near Pembroke Dock, Pembrokeshire (planning application number 12/0708/PA). The aim of the evaluation was to investigate the possibility that archaeological remains associated with the use of the area during World War II survived.

A desk-based assessment, carried out in 2012, revealed that the site was located close to a wartime RAF radio station and within a part of Pembroke Dock containing barrage balloon sites, camps and air raid shelters. A site visit revealed the presence of concrete features thought to be associated with World War II activities. The site also lies within a landscape of known historic and archaeological interest, and consequently Dyfed Archaeological Trust – Heritage Management (DAT-HM) requested that a geophysical survey and an evaluation be carried out to investigate the potential for further wartime, and earlier, features surviving on the site. The geophysical survey identified several anomalies of potential archaeological interest, and the subsequent evaluation methodology was devised to test these possible features.

Five trenches were excavated, positioned over the geophysical anomalies. Three of the concrete structures and associated features were examined. These appear to be the bases for dismantled wireless masts used by the nearby RAF Radio Station occupied during World War II. No other features of archaeological significance were identified within the evaluation trenches. The remains of a possible nineteenth century structure were identified within the field – these had been overgrown with brambles at the time of the previous site visit and geophysical survey. The exact form of the remains was not established, but they appear to be a small building.

1. Introduction

In January 2014 Archaeology Wales was commissioned by Pembrokeshire Housing Association to carry out an Archaeological Evaluation on a proposed housing development site (NGR: SM 9715 0268; fig. 1). The site of the proposed housing development (planning application number 12/0708/PA), comprising approximately 80 dwellings and associated infrastructure, lies around 1km south-east of Pembroke Dock on the north-eastern side of Imble Lane (fig. 3).

The site lies within the Milford Haven Waterway Registered Historic Landscape (RHL HLW (D) 3) with known archaeological remains dating from the prehistoric period to the twentieth century. A previous archaeological Desk-Based Assessment (Pannett 2012) had identified potential archaeological features within the site including those associated with possible WWII military use of the area. Dyfed Archaeological Trust – Heritage Management (DAT - HM) in their capacity as archaeological planning advisors to Pembrokeshire County Council, recommended that a geophysical survey be carried out. The geophysical survey was conducted by Archaeology Wales in November 2013 (Poucher 2013: fig. 2). Although most of the field was surveyed, heavily overgrown or disturbed ground in the north-eastern and south-western sections of the field were not included. In addition to modern services the fluxgate gradiometer survey showed a number of anomalies of potential archaeological interest. These included a curvilinear feature, a drainage channel, iron posts set in concrete bases and a possible U-shaped feature on the western side of the

field. A number of north-west to south east linear anomalies were also present in the centre of the site. Clear interpretation of the site was made more difficult by the presence of a number of horse jumping structures incorporating partly buried large rubber tyres.

The geophysical survey revealed that there were possible archaeological features within the proposed development site that required evaluation. To this end a Written Scheme of Investigation was prepared by Archaeology Wales (Pannett 2013) and approved by DAT - HM in January 2013. The evaluation was designed to excavate five 30m long and 2m wide trenches set over specific targets identified during the geophysical survey (fig. 2). The evaluation was carried out between the 20th and the 23rd of January 2014.

2. Site Description

Location, Topography, Geology

The site lies on gently sloping south-facing ground at 48m AOD, 1km to the south-east of the centre of Pembroke Dock. The field is bounded on its western and southern limit by Imble Lane whilst to the north a hedgerow defines the southern end of a raised cricket field. The eastern side of the site is separated from adjacent fields by overgrown hedgerows and wire fencing. A number of detached houses are built on the western edge of Imble Lane. Water issues are located on the eastern side of the field and a number of springs are located in the field to the east. The 1953 OS map also shows a spring located towards the eastern section of the northern field boundary and the current field is marshy towards its south-eastern end. An area of overgrown raised rubble on the western side of the site may represent the remains of a building.

The northern part of the site lies on Devonian Milford Haven Formation Sandstone whilst the southern part comprises Devonian Ridgeway Formation Conglomerate (BGS 2014).

3. Historical Background

The site lies within the Carew, Milton and Nash Historic Landscape Character Area. This area, comprising almost 2000 hectares, lay within the medieval Lordship of Pembroke. The area can be described as mainly agricultural with a pattern of small fields and dispersed settlements. Some of these, such as Carew and Milton, are medieval in origin (DAT 2014). The area's association with shipping is well attested with Pembroke Dock evolving from a small fishing village named Paterchurch and expanding rapidly in the nineteenth-century after the construction of the Royal Naval Dockyard in 1814. Following the closure of the Dockyard in the 1920s the town became the base for the RAF's Southampton II flying boats during the 1930s and 1940s. It remained an important base during World War II and was targeted for attack by the Luftwaffe. The Dock contained several key RAF sites. One of the key sites associated with the RAF in the area was located adjacent to this development site. The cricket ground located to the immediate north of the site was RAF Pembroke Dock Site No. 2 and contained a Communications and Wireless Transmission Station including eight wireless masts, WAAS ablutions and latrines and timber huts RAF (Archwilio: HER).

4. Evaluation Results

All of the trenches were 30m long and 2m wide and were machine and hand excavated.

4.1 Trench 1

Trench 1 was 30m long and 2m wide, aligned east-west and was located to investigate the U-shaped anomaly and possible structure on the western side of the site. The upper deposit (top soil) was a loose mid-brown sandy-silt (101) that was an average depth of 0.20m throughout the trench. Underlying this deposit was a thin but compact orangey-brown silty-clay deposit (102) that contained some small stones (less than 0.05m in diameter). This deposit varied in depth between 0.10m and at least 0.70m throughout the trench and overlay in the shallower sections a degrading grey bedrock that was gravelly in places (103).

The main feature that was immediately apparent prior to excavation was the top of a concrete structure. To minimize damage to this visible feature it was not included in the main trench and therefore not machine excavated. Once the trench had been opened it was hand excavated as an extension to the trench. Upon examination it was found to be a square 2.10m by 2.10m and 0.75m deep concrete structure with sloping sides, an uneven lipped edge and a square moulded base (105) (fig. 4; fig. 5a, b, c). A sondage at the northern end of the structure established that it was built on top of bedrock (fig. 5d). It possessed a central 0.45m by 0.45m square depression with a flat smooth base into which were set three 0.025m diameter threaded iron shanks or bolts (fig. 5c). Two asymmetrical hollow sockets (0.05m by 0.04m) were also located on the southern and eastern edge of the depression. This central feature resembles a base for a metal bolted plate attachment that has been removed in the past.

This concrete structure is one of at least two, but more likely four, spaced approximately 3m (10 feet) apart. Probing the earth where a third would be expected suggested another buried structure to the north-west. The structure to the west of the excavated example is partly visible on the ground surface whilst the others remain buried (Fig. 6a). The likely interpretation for these structures is bases for a radio communications mast associated with the nearby World War II RAF base.

The second feature was located 8.4m east of the west end of trench 1 and was aligned west-northwest to east-southeast. It presented as a grey-reddish gravelly sub-rectangular feature with a rounded north-western end that was 1m by 1.6m (fig. 6b). It was hand excavated and found to be looser but stonier than the surrounding compact orangey brown silty-clay. The cut (106) for the feature had square and straight sides on all but the eastern side, which was slightly sloped. It was partly hand excavated as a sondage to a depth of 0.7m but may have been deeper (fig. 6c, d). The homogenous fill of this feature (107) had no artefacts and resembled quickly re-deposited natural as a result of cutting through the silty clay and possibly the degrading bedrock below. There was no organic matter in the excavated deposits but it may be tentatively interpreted as a possible latrine pit.

The third feature within this trench was observed in south-facing section only and was located 14.3m east of the western end. This deposit consisted either of a demolished brick structure or of a dump of rubble in the form of broken red/orange air bricks and mortar immediately below the mid-brown silty top soil and turf (101) (fig. 7a,c) . Only 0.25m deep by 0.90m of this deposit was visible in the section and it is likely that the remainder of this rubble lies to the north, although there are no surface indications of this.

4.2 Trench 2

Trench 2 was aligned north-west to south east and was positioned to investigate the possible curvilinear anomaly, the linear anomaly and the concrete settings. The upper deposit (200) was identical to that in Trench 1, a 0.4m deep loose mid-brown sandy-silt with some small stones. Some small sherds of mid-twentieth century pottery were recovered from within this deposit. This deposit overlay a 0.10m deep, compact orange-brown silty clay (201), again similar to that in discovered Trench 1. This deposit contained frequent (approximately 25%) stones (smaller than 0.03m in diameter). The friable pinkish-grey bedrock (202) below this deposit turned into gravel when scraped by the machine. The only features observed within this 30m long trench were located in the eastern end.

The south-eastern end of Trench 2 was, like Trench 1, extended to examine the western end of concrete structure (205) partly visible on the ground surface. This was excavated on its western side and can be described as a 1.10m by 1.10m and 0.60m deep square concrete structure with splayed or sloping sides and a domed 0.75m by 0.75 square upper surface (fig. 4; fig. 8a,b,c). The centre of the upper surface contained two L shaped iron insets forming an incomplete square measuring 0.15m by 0.15m. This resembled a fitting for a metal structure, possibly a mast leg that had been removed sometime in the past. The fringes of the upper domed surface appeared to have had a lighter cement applied along its upper surface, possibly as a later repair. In the upper deposit to the east of this concrete structure three cables (possibly copper) were located running north to south. A further two broken copper cables were located on the north-western side of the structure (fig. 8c).

The northwest corner of an identical structure (206) was partly excavated in the north-facing section along the southern edge of the trench 1.9m to the south-west of structure 205. The central upper metal fitting was more pronounced on this structure. These two partly excavated structures are aligned in a square pattern (1.9m apart base to base) with another two identical structures visible above ground level to the south. It is likely that they form the bases for a communications mast (fig. 8a,b,d) .

A 0.20m deep and 0.20 by 0.23m sub-rectangular post-hole was located cut through the gravel and bedrock 1m to the north-west of structure 206 and 0.25m from the southern edge of the trench (Fig. 9a, b,c). This post-hole possessed a flat base and contained what appeared to be re-deposited top soil. Although no dating evidence was present it is likely that it dates from a similar time to the construction of the concrete bases.

No evidence was found to confirm the presence of the curving feature highlighted within the geophysical survey and it is possible that this may have been underlying geology.

4.3 Trench 3

This trench was aligned north-west to south-east and positioned to investigate a faint linear feature (possibly geology) through the centre of the site. The upper 0.4m deep mid-brown deposit (300) was identical to that encountered within the first two trenches. Within this deposit (0.20m deep) six steel wires spaced approximately 1 to 1.5m apart were located running east to west in the southern most 9m of the trench (Fig. 10a,b). Although no other archaeological features or artefacts were encountered within this trench it is interesting to note the differential geology within the trench. The lower deposit (301) comprising a compact reddish gravelly-clay deposit derived from the sandstone bedrock was visible in the northern 6.5m half of the trench, whereas it was a compact brownish gravelly-clay deposit (302) in the southern half of the trench (Fig. 10c,d).

4.4 Trench 4

This trench was aligned south-west to north-east and positioned to investigate an anomaly (possibly metal) at the northern end of the site (Fig. 11a, b, c). The upper mid-brown deposit (400) was on average 0.2m deep and overlay a compact brown-red gravelly-clay subsoil. One steel wire was observed running north to south 0.8m from the north-eastern end of the trench (Fig. 11b). No other features or artefacts of an archaeological nature were encountered within this trench.

4.5 Trench 5

Trench 5 was positioned to investigate the south-eastern side of the site and was aligned north-west to south-east. Unfortunately this trench was located within boggy ground and flooded quickly (Fig. 12a). The only features encountered as the machine excavated was a 0.7m deep north to south aligned land drain 10m from the north-western end. The upper mid-brown deposit encountered elsewhere was also present within this trench and was on average 0.20m deep. This deposit overlay a 0.4m deep compact reddish-brown gravelly clay overlying degrading bedrock (Fig. 12b). No archaeological features or artefacts other than the wire were observed within this trench.

5. Discussion and Conclusions

The main features of an archaeological interest within this site are undoubtedly the concrete bases and wire. It is likely that they represent the bases of two communications or radio masts that were used here during the 1940s as part of the RAF Pembroke Dock Site No. 2. Although the HER suggests that the cricket club to the north housed the Station and associated buildings it is likely that at least two of the eight reported masts were located within this field. The masts appear to be slightly different based on the different types of metal fixings on the concrete bases and may represent different types of masts or modified versions of the same mast. The steel cables on the site may have been used to stabilize the towers whilst the copper wires may have been utilized to carry radio signals. The possible latrine pit and post-hole may represent other uses of the site during World War II, perhaps a location for a military camp. The demolished brick structure within Trench 1 may represent more recent use of the site although this was difficult to confirm. An 'L' shaped 8m x 7m raised area of stone rubble, tyres and bricks covered in undergrowth on the western side of the site seems to represent the demolished remains of a building (Fig. 13a,b,c,d). Given the findings of this evaluation any clearance of this deposit should be conducted under a watching brief to determine its function, date and significance.

6. Acknowledgements

Archaeology Wales would like to thank the digger driver and Pembroke Dock Cricket Club for their kind cooperation during the evaluation.

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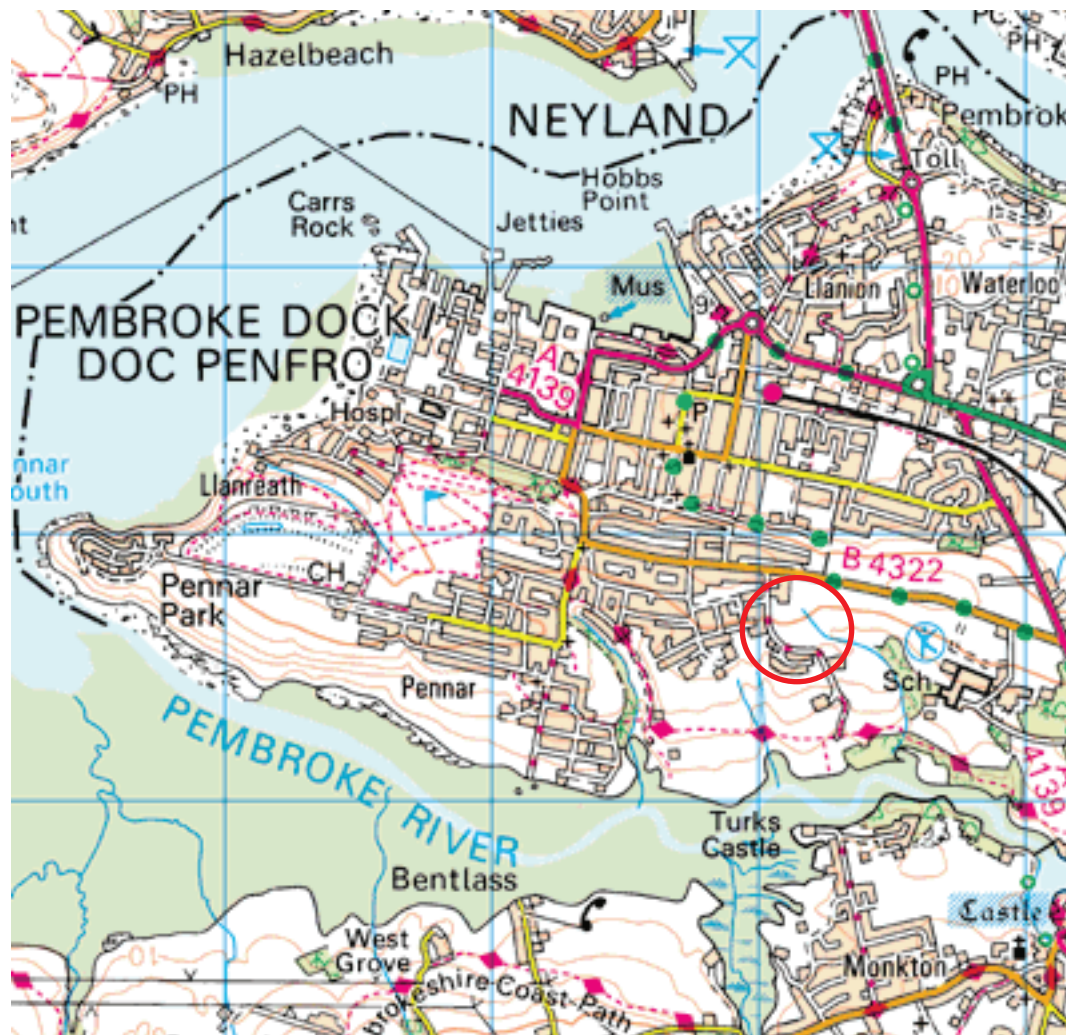
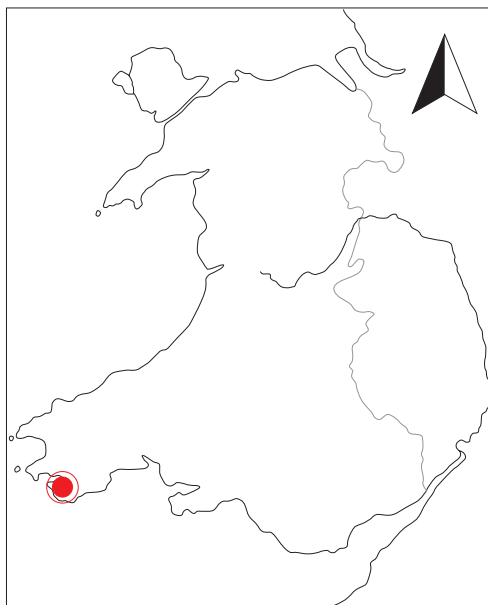


Fig. 1
Location of
site



Fig. 2:
Proposed trench
locations overlain
on processed
geophysical survey
results

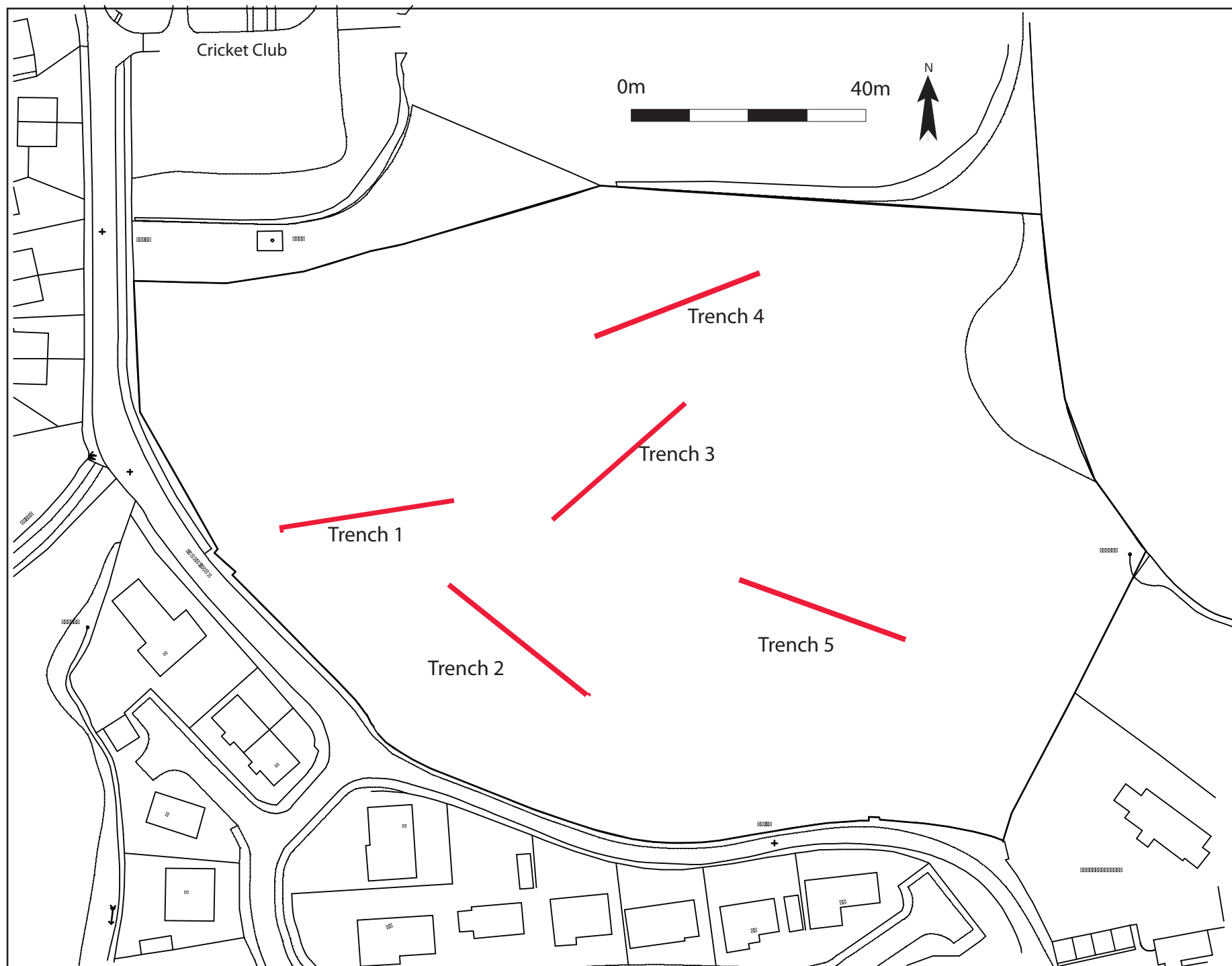
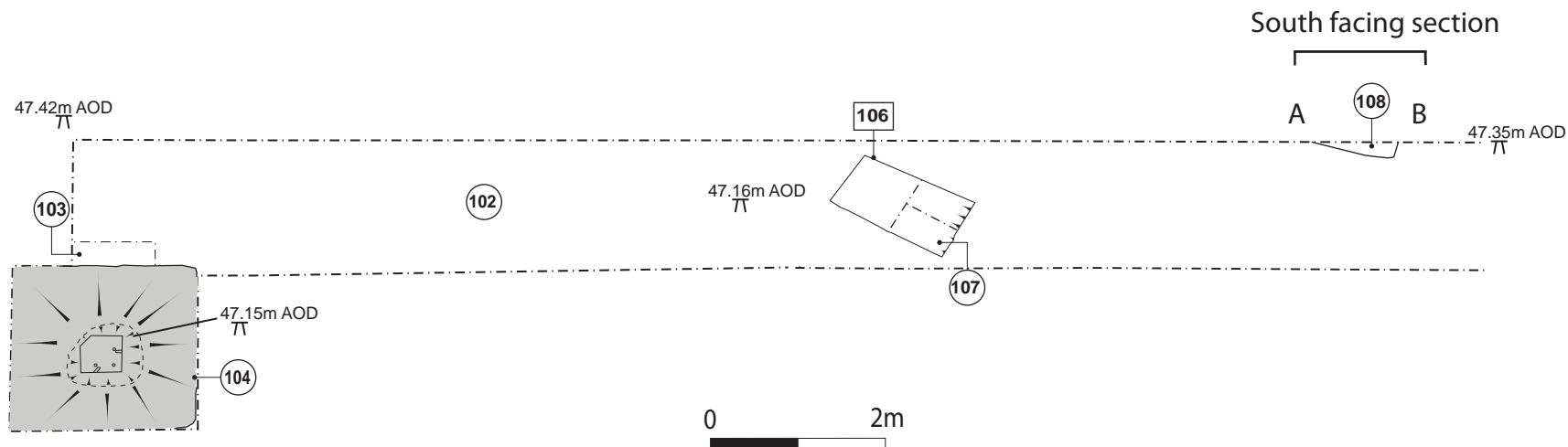


Fig. 3:
Trench Locations



Trench 1 (western end)



Trench 2 (eastern end)

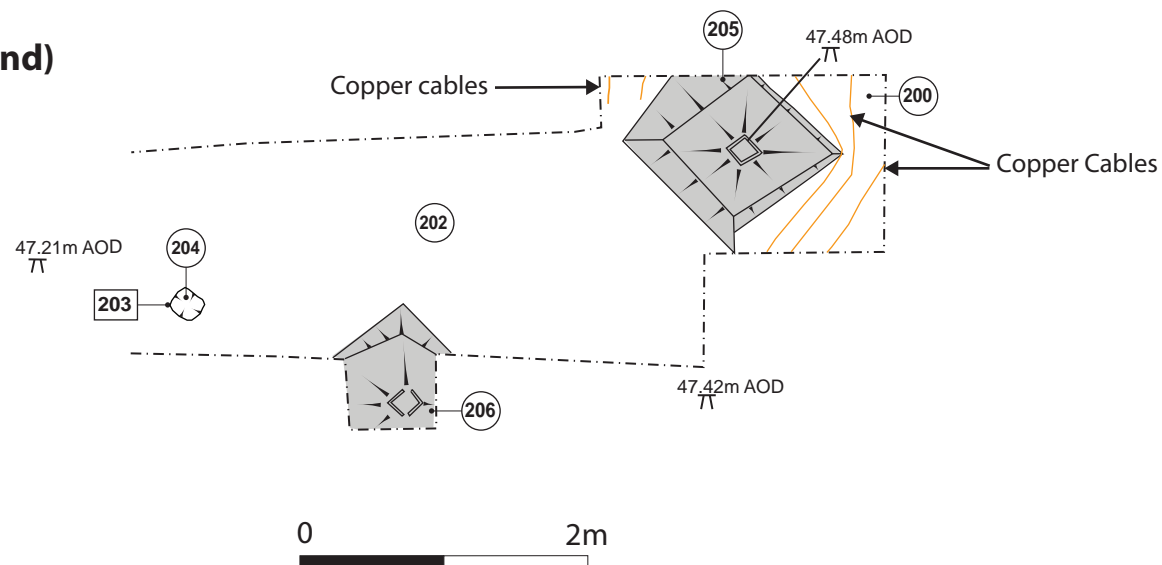


Fig. 4
Plans of features
within Trenches
1 and 2



5a. Trench 1 concrete structure (105):
looking north



5b. Trench 1 concrete structure (105):
looking south



5c. Closer image of top of concrete
structure (105) showing bolts.



5d. Sondage near eastern base of concrete
structure (105) showing bedrock.

Fig. 5
Trench 1: images
of concrete
structure



6a. Trench 1 with visible buried structure in foreground: looking north-east.



6b. Pre-excavation view of subrectangular pit (106) in Trench 1: looking west.



6c. Partly excavated pit: looking east



6d. Sondage in northern section of pit (106): looking north

Fig. 6

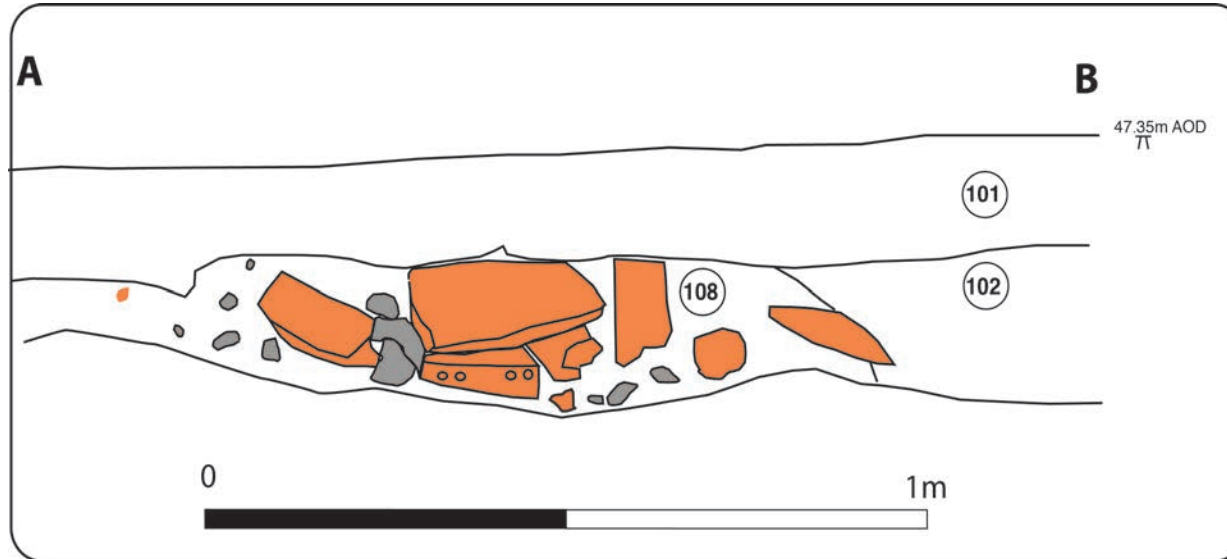
Trench 1 images



7a. Rubble (108) visible in south-facing section: looking



7b. South facing section, Trench 1: looking north



7c. Section A-B of drawing of 108 (A- west, B-east)

Fig. 7
Trench 1 section
and brick rubble
(108)



8a. Concrete structures in Trench 2 (205 in foreground with copper cable in front): looking north-west



8b. Concrete structures in Trench 2: looking south



8c. Concrete structure 205 with copper cable on both sides: looking east



8d. All four concrete structures in and around Trench 2 : looking south

Fig. 8
Trench 2 structures



9a. Pre excavation image of post-hole in Trench 2: looking east



9b. Section image of post-hole: looking east



9c. Fully excavated post-hole



9d. South facing section in Trench 2: looking north

Fig. 9

Images of Trench 2



10a. Trench 3 with visible wires: looking north-west



10b. Steel wires in west facing section of Trench 3: looking



10c. Northern end of Trench 3 showing red subsoil: looking south-west



10d. Trench 3 interface between red (right) and browner

Fig.10
Trench 3 images



11a. North facing section in Trench 4: looking south



11b. Trench 4 with steel wire in eastern end: looking south-west



11c. Trench 4: looking north-east

Fig.11
Images of Trench
4



12a. Trench 5 (flooded): looking south-east



12b. Degrading bed rock within Trench 5

Fig. 12

Trench 5



13a. Unexcavated possible structure in western area of field: looking north-west



13b. Unexcavated possible structure: looking north



13c. Closer image of unexcavated possible structure: looking north-west



13d. Brambles covering northern side of possible structure: looking south-west

Fig.13:
Unexcavated
Possible
Structure

Archaeology Wales



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