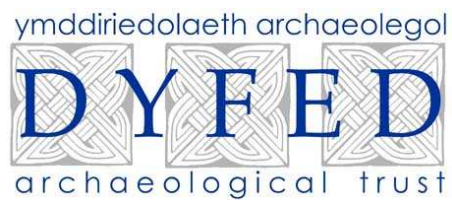


THE PEMBROKESHIRE CEMETERIES PROJECT

EXCAVATIONS
AT PORTHCLEW CHAPEL
FRESHWATER EAST PEMBROKESHIRE
2009

SECOND INTERIM REPORT



DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2010/20
RHIF Y PROSIECT / PROJECT RECORD NO. 99086

Mawrth 2009
March 2009

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EXCAVATIONS AT Porthclew Chapel 2009

INTERIM REPORT

Gan / By

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CONTENTS

SUMMARY	1
ACKNOWLEDGEMENTS	1
INTRODUCTION	2
Project background	2
Project objectives	2
Methodology	3
EXCAVATION RESULTS	4
Trench 7	4
Trench 8	4
Trench 9	6
Trench 10	6
Trench 11	6
FINDS AND SPECIALIST ANALYSIS	7
AMS dating	7
Skeletal analysis	7
Isotopic Analysis	7
Bulk flotation samples	8
Pottery, animal bone, slag etc	8
DISCUSSION	9
Trench 7	9
Trench 8	9
Trench 9	10
Trench 10	10
Trench 11	10
CONCLUSIONS	11
Archaeology	11
Monument management	12
Outreach	12
Archaeological research	13
SOURCES	14
 FIGURES	
Figure 1: Location of Porthclew	15
Figure 2: Site location map	15
Figure 3: Area of geophysical survey	16
Figure 4: Trench locations in relation to geophysical survey	17
Figure 5: Plan of features in Trench 7	18
Figure 6: Plan of earlier features in Trench 8	19

Figure 7:	Plan of later features in Trench 8	20
Figure 8:	Possible extent of Buildings B and C	21
Figure 9:	Plan of features in Trench 9	22
Figure 10:	Plan of features in Trench 10	22
Figure 11:	Plan of features and section in Trench 11	23
Figure 12:	Provisional phasing of the site	24

PHOTOGRAPHS

Photo 1:	Trench 7 looking southeast showing cut 7035 etc	25
Photo 2:	Trench 7 looking north, showing beam slot 7025/7017 (east end of Building A)	25
Photo 3:	Trench 7 looking southeast, showing rubble fill of Building A	26
Photo 4:	Trench 7 looking northwest, showing rubble fill of Building A	26
Photo 5:	Trench 7 looking northwest, showing Building A	27
Photo 6:	North end of Trench 7 looking southeast, showing ditch 7005	27
Photo 7:	Trench 8 looking northwest, showing partly excavated occupation deposit in building B	28
Photo 8:	Trench 8 looking north, showing Building B fully excavated (note backfilled enclosure ditch 8020 beneath scales)	28
Photo 9:	Trench 8 looking southwest, showing detail of hearth 8010	29
Photo 10:	Trench 8 showing possible opening in wall 8006	29
Photo 11:	Trench 8 looking north, showing burials truncated by construction cut for Building B	30
Photo 12:	Trench 8. North end of trench looking east	30
Photo 13:	Trench 8 looking north, showing later pit cutting ditch 8020 and beam slot 8019	31
Photo 14:	Trench 8 looking north, showing truncated burials	31
Photo 15:	Trench 8 looking south, showing truncated burials	32
Photo 16:	Trench 8 Disturbed burial SK9 looking west	32
Photo 17:	Northeast end of Trench 9 (looking south) showing possible features	33
Photo 18:	Trench 10 (looking northeast) showing ditch 1003	33
Photo 19:	Trench 10 (looking southeast) showing ditch 1003	34
Photo 20:	Trench 11 looking south. The stones are within the fill of ditch cut 1113	34

SUMMARY

During the summer of 2009, a second season of excavation was undertaken at the site of Porthclew Chapel, Freshwater East, Pembrokeshire (NGR SS 0208 9861). The aim of the 2009 project was to provide further information about the extent and character of the site, to inform future strategies for the management of the archaeological resource, including the possibility of scheduling the chapel and cemetery site. The project was funded by Cadw grant aid, Pembrokeshire Coastal National Park Authority (PCNPA) and Dyfed Archaeological Trust (DAT).

In 2008, evidence of several phases of enclosures surrounding the chapel and an extensive cemetery were revealed. In 2009 a variety of other features suggested by previous geophysical survey were investigated with the hope of identifying possible settlement evidence, and ascertaining the extent of the site.

A double-ditched enclosure surrounding the chapel appeared to cut earlier cist graves. This may suggest the cemetery was originally unenclosed. Parts of two buildings were excavated. To the east of the chapel, part of a stone walled building appeared to be terraced into or entirely cut below the surrounding ground surface, truncating burials and the double ditched enclosure. Elsewhere part of a timber frame constructed building may suggest more than one phase of settlement at the site.

A sequence of ditches to the northeast of the chapel may indicate a limit to the settlement area and its curtilage.

The excavation was undertaken by staff from DAT, archaeology students, and volunteers from the local community and beyond.

This interim report presents the initial results of the excavation, which will be updated following the results of post excavation specialist analysis of finds and samples.

ACKNOWLEDGEMENTS

Thanks to: Louise Austin, Hayley Nicholls, Richard Jones, Simon Ratty, Hubert Wilson (DAT); Polly Groom (PCNPA); Astrid Caseldine (Cadw); Sid, Annie and Will Howells; Gareth Nicholls, Chris Skinner, Nigel Martin, Heather Martin, Stella Davies, Mags Rickard, Bob Rickard, Barry and Linda Clark, Brian Howells, Martha Bamford, Hazel Wadey, Barbara Fredrickson, Tom Sanville, Annie Partridge, Michael Tapscott, Tom Stanhope, Danielle Newman, Gillian Mines, Anghared Howell, John Llewelyn, Jonathan Harries, Ted Owens and Josie Thomas.

INTRODUCTION

This report presents the initial results of the second season of excavation at Porthclew Chapel. It also presents a summary of the finds and samples recovered during both seasons of excavation, and suggests the scope of post-excavation analysis, outlining the potential of the material to provide an important set of data for the early medieval period in Pembrokeshire.

Project background

This project emerged from the Cadw-funded Early Medieval Ecclesiastical Sites assessment (EMES) undertaken by Dyfed Archaeological Trust since 2002. The EMES formed part of a pan-Wales, Cadw grant-aided project, intended to redress a notable imbalance in the archaeological record for the period (Ludlow 2000).

Porthclew Chapel (PRN 4194) lies at NGR SS 0208 9861 within the Pembrokeshire Coast National Park, and close to the settlement and popular beach of Freshwater East (Figures 1, 2 & 3). Although a standing ruin, the age and history of Porthclew Chapel is uncertain. The history of the wider community of Porthclew and Freshwater East is also little known (James – DRF PRN 38753). Human burials were disturbed during the construction of a house near the chapel in 1964. In 1999, several stone-lined cist graves were encountered during the laying of an electricity cable in the same area (Schlee 2000 – DRF PRN4402). The presence of cist graves suggested that the existing chapel may be a later development of an early medieval burial site. Porthclew chapel is therefore one of 38 known or possible early medieval cemetery sites in Pembrokeshire.

In both seasons, Dyfed Archaeological Trust were grant aided by Cadw with additional support from PCNPA.

Project objectives

The main goal of the project in 2009 was to obtain information about the nature, extent and condition of the site, to inform decisions on the future management of the site (including the possibility of scheduling the site).

The excavation also provided an opportunity to learn more about the character of the site itself and about early medieval sites in Pembrokeshire generally.

Outreach continued to be an important aspect of the project. The majority of the work was undertaken by local volunteers (many of whom participated in the previous season), and archaeology students from Cardiff, Lampeter and Nottingham Universities.

Because the site is located on private property, the excavation was not publicised widely. Daily tours of the site were nevertheless well attended by locals and visitors to Freshwater East.

Methodology

Five trenches were opened using a JCB mechanical excavator with toothless ditching bucket to investigate probable features identified by the geophysical survey (Figures 3 & 4). The constraints of the project, however, meant that it was not possible to sample excavate all features of potential archaeological significance.

Archaeological features were hand-excavated, and recorded using the standard system employed by Dyfed Archaeological Trust. Plans and section drawings were drawn at 1:20 scale and excavated features photographed in digital format. The majority of the fieldwork was undertaken by local volunteers and by university students, all under the supervision of staff from Dyfed Archaeological Trust. All trenches were backfilled at the end of the excavation.

Excavation of human skeletal material was kept to a minimum, but one inhumation was excavated to provide osteological material for analysis and comparison with material from other cemetery excavations recently undertaken in the area, and to provide a well-stratified carbon date. Charcoal samples for AMS dating, bulk soil samples for the recovery of charred plant remains, column samples for pollen analysis, and geomorphology were also taken.

It was not possible to undertake further intended geophysical survey in neighbouring fields.

Local metal detectorists were invited to scan the spoil heaps and plough zone during the excavation.

EXCAVATION RESULTS

The locations of all trenches are represented in Figure 4. Trench numbers in 2009 follow on from the sequence started in 2008. Trenches excavated in 2008 (Trenches 1 to 6) are shown in yellow, while those excavated in 2009 (Trenches 7 to 11) are shown in red.

Trench 7 (Figures 4 & 5; Photos 1 - 6)

Plough zone soil was removed by machine down to the top of the natural shale horizon or a layer of overlying silt. At this level, features cut into the bedrock could be identified.

Pockets and patches of brown silt were investigated. Some of these proved to be post holes and stake holes some of which could be grouped to define possible fence lines or structures; others (7011, 7014, 7007) were little more than shallow depressions containing charcoal, pottery and animal bone. These were subsequently interpreted not as individual cut features, but as pockets of a former external yard activity deposit, surviving below the plough soil, in undulations in the top of the shale horizon.

Wind-blown sand deposit filled linear features 7035 and 7017 (Photos 3 & 4). 7017 is interpreted as a beam slot forming the eastern end of a building (Building A; Photos 3, 4 & 5). Post holes 7016 and 7026 mark the corners of this end of the building, while post hole 7027 is located at the half way point. This point also forms a right-angled intersection with cut feature 7035. Only a small portion of the interior space of the building was revealed within the trench. No internal floor surfaces or occupation deposits were discernable.

7035 is too wide to be a beam slot, but appears to be associated with post holes 7036, 7037 and 7031, and possibly associated with cuts 7033 and 7034. Together these features may represent a later phase of building on a slightly different alignment to Building A.

The geophysical survey suggests that Building A extends further east (as indicated in Figure 4) than was evident from the excavation.

Linear feature 7005 was a shallow and narrow ditch (Photo 6). It was not discernable on the geophysics survey. This feature has been interpreted as a possible property boundary ditch. Linear feature 7004 was ephemeral, shallow and irregular. It was initially interpreted as a possible drip gully, formed by run-off from the roof of a building. Between the two linear features was an area of windblown sand (7009) and shale-derived rubble (7012). Both deposits appeared to fill or overlie cut linear features and post holes.

Trench 8 (Figures 6, 7 & 8; Photos 7 - 16)

The initial machine excavation of plough zone soil was difficult due to the presence of potentially structural stonework, human burials and deposits of wind-blown sand. As a result, different parts of the trench were reduced to different depths. The trench contained a complex sequence of stratigraphy, the interpretation of which is to some extent dependent upon evidence contained in unexcavated areas beyond the limits of the trench, but suggested by the geophysical survey. Several aspects of the sequence are, however, clear.

The latest feature is the northwest corner of a drystone built building (Building B; Figures 7 & 8; Photos 7, 8 & 9) with rounded internal corners. The construction cut for Building B (8049) cuts through all earlier features and deposits, most significantly, several human burials and continuations of the two curvilinear enclosure ditches (8020 and 8050; Photo 8) which were first excavated in Trench

1 in 2008. The building was entirely filled with wind-blown sand (8005).

The building contains numerous interesting structural features. There was no evidence of a formal floor surface, although there was a 5cm thick deposit of dark organic sand (8009) directly above the floor level cut into natural shale bedrock. Analysis of this deposit may provide evidence of an organic floor covering.

The floor level lies below the level of the base of the drystone wall of the building (8006), so that the wall effectively sits upon a 'shelf' cut into the natural bedrock. A similar-looking shelf extending beyond the wallface in the SW corner of the trench may be part of a bed platform against the south wall of the building. There was, however insufficient evidence within the trench to prove this.

There was considerable variation in the character of the stonework of the west and north runs of wall 8006, with a gap between the two sides (Photo 10). This appeared to be an intentional constructed feature and was interpreted during excavation as a 'smoke-hole', although why this would need to be constructed thus is uncertain. To the south of this gap was a circular hearth defined by a charcoal rich deposit (8010) (Photo 9). A large flat stone built into the wall behind the hearth has been interpreted as an intentionally positioned 'fire-back'.

In the north wall, a change in the character of the stonework suggested a possible blocked window or doorway (Photo 10). Removal of the presumed blocking stones did not reveal a formal threshold, but it is possible that the opening consisted of a wooden frame construction. Analysis of iron objects retrieved from this area may offer evidence to support this.

A second hearth (8023) was located towards the centre of the building, on the eastern edge of the trench. Close to each hearth was a flat stone. These may have functioned as 'trivets', or may be pads for posts supporting the roof. Numerous stakeholes were investigated, possibly representing room divisions or temporary structures. One stakehole contained a pierced slate disc, presumed to be a loom weight. Fragments of ceramics lay on the floor, close to hearth 8023.

The southwestern end of Building B truncated several burials (SK4, SK7 and 8041; Figure 6; Photo 11). Some of the burials were excavated to ascertain their positions and stratigraphic relationships, but were not lifted. In addition to truncation by wall 8049, burials in this area appeared to be disturbed (8041), either as a consequence of graves intercutting each other, or plough damage. None of the graves were fully excavated, but, apart from SK8 (a probable neonate burial, contained within a crude cist), none of these burials appeared to have surviving formal cist structures.

The probable continuation of burials to the north (Photo 12) was truncated by a cut for a probable building (Building C) suggested by the geophysical survey (Figure 4 & 8). Possible structural evidence for this building consisted of a possible beam slot (8019) (Photos 13 & 14) and several post holes (8048, 8018 8033, 8031), although no clear structure was apparent. Despite the absence of evidence for a structure, as with buildings A and B, the cut was filled with wind-blown sand. A similar organic rich layer of sand to that present above the floor in Building A was also present in Building C. Within the area of Building C, four burials were exposed. Three of these (SK1, SK2 and SK9; Photos 15 & 16) were in stone cist structures with side slabs and basal slabs, but no surviving evidence of cap stones. The fourth burial (SK5; Photo 15) was not contained within a cist and was cut by SK2. Since it appeared to be the stratigraphically earliest burial, SK5 was lifted for analysis and dating.

The cist burials appear to have been disturbed, presumably during the construction of Building C. It seems unlikely that these burials would have been left exposed in the floor of the Building C. The eastern ends of SK 1, 2 and 5 were all truncated by possible beam slot 8019 (Photo 13). This has unfortunately destroyed the stratigraphic relationship between the burials and enclosure ditch

8020. The potential extents of Buildings B and C are shown on Figure 8.

Trench 9 (Figures 4 & 9; Photo 17)

Trench 9 was located to characterise the archaeology in this part of the site. The geophysical survey in this area, did not show distinct or easily interpretable features, but were provisionally interpreted as indicating an area of possible settlement, perhaps with a track or ditch running towards trench 7 (Figure 4).

In the event, the majority of the trench was found to be devoid of archaeological features. At its north-eastern end, however, a spread of cultural material and several possible shallow cut features were excavated (9003, 9004, 9005; Figure 9).

Trench 10 (Figures 4 & 10; Photos 18 & 19)

Trench 10 was located to characterise an irregular and curiously shaped feature clearly visible on the geophysical survey (Figure 4). Prior to excavation, the feature was assumed to be some form of stock enclosure associated with the nearby settlement, perhaps with a track running along its southern side.

The excavation revealed that the enclosure consisted of a shallow ditch (1003) (Photos 18 & 19). There was no evidence of an associated bank, and no evidence for wooden fence posts, or other more substantial enclosure boundary.

Trench 11 (Figures 4 & 11; Photo 20)

This trench was located to characterise features on the geophysical survey that were thought to suggest a small building and a linear feature (Figure 4). The excavation did not reveal any evidence of a building, but instead identified a sequence of three intercutting ditches (1109, 1110 and 1113) all possibly on the same alignment, and cut by a later pit (1111) (Figure 11; Photo 20). It is possible that an additional trench just beyond the targeted geophysical anomalies, would clarify or alter this interpretation. The full extent of the linear cuts is not apparent on the geophysical survey.

FINDS AND SPECIALIST ANALYSES

AMS Dating

With contingency funding from Cadw, the following carbon samples were sent for AMS dating in 2008:

SAMPLE	Fill	Cut	Trench	AMS dates
1	138	118	1	Cal 570 to 660
3	148	140	1	Cal AD550 to 660
4	206	207	2	Cal AD600 to 680
5	109	116	1	Cal AD810 to 1010
7	103	117	1	Cal AD660 to 810
8	137	139	1	Cal AD880 to 1020

With further contingency funding from Cadw in 2010, five further samples have been sent for AMS dating. These samples are all of skeletal material from the excavated burials. Sample SK001 will be submitted for dating later in 2010.

SAMPLE	Cut	Trench	AMS dates
SK001		4	
SK002	303	3	Cal 530AD-650AD
SK003	203	2	Cal 680AD-900AD
SK004	305	3	Cal 530AD-650AD
SK005	613	6	Cal 650AD-780AD
SK006		8	Cal 430AD-610AD

The significance of these dates will be discussed in the final report in 2010.

Skeletal analysis

An assessment of the excavated skeletal material for age, sex and basic pathology has been undertaken. Interpretation of this analysis will be presented in the final report to be compiled in 2010 following completion of dating evidence and isotopic analysis.

Isotopic analysis

Five individuals excavated from Porthclew were subject to dietary and migratory stable isotope analysis as part of an ongoing doctoral research project by Katie Hemer at the University of Sheffield. A brief summary of the preliminary results is included here.

The overall aim of this doctoral research is to provide a comprehensive study into the health, diet, lifestyles, and mobility of early medieval cemetery populations from Wales and the Isle of Man. The following research is ongoing and the brief discussion below provides only a summary of the isotope results, without consideration of the wider archaeological context.

Isotopic analysis of SK006 has not been undertaken, but will hopefully occur in the future if funding is available.

Samples of rib bone were analysed for carbon and nitrogen isotopes in order to reconstruct each individual's dietary profile. Carbon and nitrogen isotopes are used to identify the primary source of dietary protein by distinguishing between marine and terrestrial foods, and by identifying the consumption of animal vs. plant protein.

Overall, it seems that the individuals from Porthclew had a mixed terrestrial diet, which included the consumption of both meat and plant protein. Isotope values

do not indicate the consumption of marine resources, however one individual (PC 02) has a significantly elevated nitrogen signature suggesting not only the consumption of meat, but potentially the consumption of freshwater fish or omnivore protein e.g. pig meat. Two individuals had relatively low nitrogen values suggesting that meat was not a key component of their diet.

Strontium and oxygen isotopes, which relate to geology and climate respectively, can be used to identify a person's place of childhood residence. Both isotopes are incorporated into the tooth's enamel at the time of tooth formation and do not change subsequently. As such, they provide an indication of where that person lived at the time of their tooth mineralisation.

Whilst these results are only preliminary and have yet to be considered in context, it seems that only one individual (a 35-45 year old male) grew up in the Porthclew region. The results for the four other individuals are still under consideration, however early indications suggest that they were not born locally. It is possible that at least two individuals came from east Wales or the borders, whilst one individual has an oxygen value consistent with a much warmer climate.

These results are currently under consideration and it is necessary to compare them with the oxygen and strontium values for other sites in Wales in order to put them into context (this is ongoing as part of the research). It seems that the strontium and oxygen values for Porthclew indicate some degree of mobility for this early medieval Welsh population. The possible reasons for this mobility and its impact upon early medieval Welsh society will be discussed in Katie's doctoral thesis (forthcoming).

Bulk flotation samples

Bulk flotation samples from both seasons of excavation are currently being processed, for analysis during 2010. It is also hoped to obtain suitable charcoal for additional dating evidence from key features.

Pottery, animal bone, slag etc.

A variety of other excavated material will be submitted for analysis and interpretation during 2010, for inclusion in the final report.

DISCUSSION

Trench 7

Trench 7 contained the east end of a beam-slot and post-hole type building (Building A), with ephemeral evidence of a possible second phase of construction on a slightly different alignment. No internal surfaces were discernable. Surrounding the building were various linear ditches, post-holes and stake-holes, and a spread of material containing charcoal, burnt daub, animal bone and pottery, interpreted as a yard area.

Parts of the features comprising Building A were overlain by a spread of shale rubble of varying size. This material was perhaps either intentionally used to backfill the footings of the building after its abandonment, or has slumped in from a nearby feature (such as a boundary bank?). The remainder of the building footings were overlain by a deposit of windblown sand. A pit containing winkle shells was cut through this sand deposit.

It is difficult to relate this evidence of settlement to a specific phase in the development of the site. Extrapolation from the geophysical survey may suggest that Building A is one of a group of buildings possibly arranged around part of the double ditched enclosure excavated in Trench 1 in 2008. If this were so, it would suggest that these buildings may belong to a different phase or period of settlement to that represented by the buildings in Trench 8, which are demonstrably later than the enclosure ditches, and the vestiges of possible buildings in Trench 1.

Ceramics from the yard area, and from the backfilled beam-slots, may provide a *Terminus Post-Quem* for the age of the building, but it is hoped that charcoal recovered from some of the postholes of the building may provide more secure dating evidence, for comparison with the buildings in Trench 8.

Trench 8

In Trench 8 the latest feature was part of a stone built rectangular building with curved corners (Building B). The building was either 'semi-sunken' or terraced into the slope. Based on the geophysical survey, Building B is considered to measure approximately 11m long by 5m wide. Evidence of part of another building (Building C) is clearly suggested by the geophysics, but was less clear on the ground. Building C may also have been a 'semi-sunken' timber framed structure and is thought to measure approximately 9m long by 4m wide. Both Buildings A and B lie within construction cuts that truncate the earlier cemetery, and both buildings are filled in with wind-blown sand. Unlike Building B, Building C was not cut into bedrock.

Both buildings B and C were stratigraphically later than the continuations of two sub-circular parallel enclosure ditches excavated in Trench 2 in 2008. Charcoal from the inner ditch has been AMS dated to AD 660-810, and charcoal from the outer ditch to AD810-1010.

At least two burials appear to be truncated by the inner enclosure ditch. Human bone is also present in the fill of the inner ditch. This suggests that the ditch post-dates the establishment of the cemetery and may suggest that part of a previously unenclosed cemetery, became enclosed, possibly when a chapel was established on the site (prior to the surviving 13th century stone-built chapel). No burials were discerned to the east of the ditch. There was no evidence of a bank on the inside of the enclosure ditch. Either there was no bank, or it was been truncated by the later settlement activity.

The level at which the truncated burials became apparent corresponds with what must have been the floor level of Building C. Apart from a dark humic sand

deposit, no formal floor deposit was apparent. The cist graves within the footprint of Building C did not have cap stones and had been disturbed, strongly suggesting that they were disturbed when Building C was constructed. It seems unlikely that exposed graves would be retained in the floor of a later building, perhaps suggesting that Building C was either not a habitation, or had a suspended plank floor.

Trench 9

Trench 9 contained a spread of cultural material and several possible cut features suggestive of settlement at its northeastern end (9003, 9004, 9005). Too little of these features was present within the excavated area to allow confident interpretation of their significance. Generally, their presence suggests that settlement related deposits survive in this part of the field.

Although insufficient evidence was located within the trench to identify building structures, the features appear to confirm that evidence of possible settlement features do extend to this part of the site and in some places may survive below the plough soil.

Trench 10

Trench 10 contained a shallow ditch (1003), interpreted from the appearance of the feature on the geophysical survey, as a stock enclosure boundary, with a possible track running along its southern side.

The excavated evidence did not provide any evidence to confirm or refute this interpretation. No evidence of a track was apparent.

Trench 11

Trench 11 revealed a sequence of three intercutting ditches, possibly on the same alignment, cut by a later rubbish pit. The evidence for re-establishment of this boundary several times may suggest that the ditches mark a significant boundary, perhaps defining the limit of the settlement area and its curtilage.

The geophysical survey does not indicate a continuation of the linear feature into Chapel Field, but this need not suggest it does not.

Considering the initial interpretation of the geophysics image as indicating a possible building in the location of Trench 11, it is possible that further excavation of these ditches at other locations might reveal a different sequence of features.

CONCLUSIONS

Archaeology

Despite the limited scope of the investigations, a considerable amount of information on the nature, character and extent of the site has been recovered during the second season of excavations at Porthclew. While this is probably sufficient to inform the future management of the site, from a research perspective, the excavation has perhaps raised more questions, than it has answered.

The stratigraphy in Trench 8 adds a significant chronological complexity to the series of enclosure ditch features excavated in Trenches 1 and 2. A preliminary interpretation of the dates of the enclosure ditches indicates that they all appear to date to the early medieval period, spanning a range from AD550 to AD 1010 at 2 sigma calibration.

These dates suggest that the rectilinear enclosure ditch (118) and the inter-cutting pit group (140-143) are contemporary and are the earliest features, dating to the 6th century (Figure 12). Whatever the original date, form and function of this group of features was, they may have become the focus for the establishment an unenclosed cemetery extending southwards.

The only evidence of burial within the supposed area of this rectilinear enclosure is the slight remains (only teeth) of a presumed infant, and a cist grave (2008 SK5) near the north door of the stone chapel. Both of these are probably later burials.

In the 9th century (Figure 12) two curvilinear ditches may have been cut, possibly to enclose a timber church or chapel. There is, however, no direct evidence for this. The inner ditch (117) is possibly earlier than the outer one (116) but they are more likely to be contemporary.

Burials are known to extend beyond the double ditched enclosure to the south, but the double ditched enclosure may mark the establishment of an enclosed cemetery area to contain all subsequent burials. Within trench 8, no burials were identified on the eastern side of the inner enclosure ditch. The proximity of burials to the inner edge of the inner enclosure ditch suggests either that there was no bank on the inside of the enclosure, or that the ditch is later than at least some of the burials. The presence of human bone in the fill of the ditch may suggests that the ditch cut through earlier burials that then eroded into the ditch, or that bones disturbed as a consequence of continuing use of the cemetery, were thrown into the ditch.

Carbon dating of the excavated burials will hopefully provide evidence that will clarify when burial commenced, how it developed across the site, and when it finished.

In the Twelfth century, a stone chapel was built, possibly replacing an earlier timber structure.

Possibly by the 14th century, the chapel would appear to have gone out of use (it is not mentioned in the Black Book of St David's in 1326). The presence of settlement features, both within and beyond the double ditched enclosure, and cutting into the backfilled enclosure ditches and cemetery also suggests it has lost its ecclesiastical significance by that time.

However, there are significant differences between the styles of the excavated Buildings A and B, and, until the buildings can be dated with more certainty, the possibility remains that more than one phase or period of settlement is present at the site.

All these possibilities raise several questions about what kind of sites the enclosures, cemetery and settlement features at Porthclew represent, and what processes or events led to the apparent changes in the character of the site.

Dating of the excavated burials, enclosure ditches and settlement phases should provide a good understanding of the nature and development of the site, although many questions will no doubt remain. Further speculation is therefore better postponed until the results of further AMS dating, and specialist analyses of a variety of samples and artefacts recovered from the site is completed during 2010.

Monument management

From a monument management perspective, the excavation has demonstrated that significant archaeological features important to understanding the context of the site exist beyond the immediate vicinity of the chapel itself. Better understanding of the character of the buried features has clarified the likely implications of potential future threats. It was not, however, possible to evaluate the character and extent of all the archaeology within the study area, or whether archaeologically significant features extend beyond the study area.

Since 2005, these fields have been subject to a management agreement between PCNPA and the landowners who are sympathetic to and enthusiastic about the conservation and protection of the site. However, the masonry of the chapel will continue to deteriorate if not conserved in the immediate future. At present, scrub growth on and around the building is controlled by the landowners, and Ivy stems have been severed but not removed. Statutory protection will enable applications for Cadw grant aid and advice for the conservation of the chapel to proceed.

The land surrounding the chapel and cemetery is currently sympathetically managed for plant and wildlife conservation, as long as tree planting or the development of scrub in areas of known or suspected archaeological potential is avoided.

The field backing onto the houses along Chapel Lane currently supports a colony of orchids and its management to encourage these plants is unlikely to change. This management is generally also appropriate for conservation of the archaeological remains but is also likely to preclude the possibility of any further archaeological excavation.

The field containing the standing remains of the chapel has been in cultivation more recently, and as a consequence it supports a less complex plant and insect community. While this is the case, if considered desirable it would be possible to undertake further archaeological investigations without unduly compromising the wildlife conservation goals of the current management.

Any original earthwork features surrounding the chapel appear to have been ploughed flat by previous agricultural activity. Cut features and grave structures survive immediately below the plough zone, which varies in depth across the site. Bone preservation on the site is generally fairly good, due to the sandy soil conditions, however, some graves lie close to the present ground surface, and grave structures would be vulnerable to ploughing or other disturbance (as has occurred previously). In addition, the geophysical survey has identified areas of possible settlement with stone-built walls surviving below the plough zone.

Outreach

The project was very successful from the point of view of student training, hands-on public involvement and public outreach generally. Archaeology students from

Lampeter, Nottingham and Bristol universities gained a variety of excavation experience, and, as well as engaging volunteers new to archaeology, participants from previous excavations at West Angle Bay and Maenclochog were also able to pursue and develop their interest in archaeology. Volunteer numbers were generally between 12 and 18 per day. Feedback forms filled in by participants have been overwhelmingly positive about their experiences on the excavation.

Tours of the site during the excavation were successful and well attended by locals and visitors to the area on holiday, from Britain and abroad. Visitor numbers generally varied from between 5 to 15 a day. Wider publicity and larger visitor numbers were not sought due to the site being on private property and difficult to access via narrow lanes. The tours presented the archaeology of the region to a new audience, fostering new interest, understanding and support for the protection, management and enjoyment of cultural heritage in both locals and visitors to the area.

Many visitors in 2009 had also visited the excavations in the previous year and were interested to see how things had developed. Several visitors said that they had been keeping up to date with the trust web-site and dig diary, and would continue to do so.

Participants in Arfordir were given a tour of the site and an introduction to techniques of archaeological recording.

Local metal detectorists were encouraged to participate in the fieldwork by scanning spoil heaps, and the ploughsoil for finds, several of which have been of considerable interest.

Public presentation of the results of the two seasons of excavation at events such as the 'Pembrokeshire Day School', and publication of the results of the excavation, will be undertaken following completion of post excavation analysis and synthesis during 2010.

Archaeological research

Clearly, the site is proving to be unique in terms of excavated early medieval sites in Pembrokeshire. It is providing new and significant information which will greatly increase our understanding of the early medieval period. The site has considerable potential to clarify the local history and development of Porthclew and Freshwater East and offers an opportunity to add to an increasing body of important new information on early medieval ecclesiastical and secular sites in Pembrokeshire resulting from recent excavations at Brownslade, Angle, St Brides, St Ishmaels, West Hook and Maenclochog.

The site may also provide a good example of how small settlements in Pembrokeshire have developed, perhaps in continuity, since the prehistoric period, with early and later medieval phases of occupation and/or ritual or ecclesiastical activity represented on the same site.

The well preserved human skeletal remains have been provided for pathological and isotopic analysis to a PhD thesis on early medieval population studies being undertaken at Sheffield University. This analysis may provide information of national importance to research into the early medieval period in Wales, for comparison with the skeletal assemblage recovered from the recent excavations at Brownslade Barrow.

Specialist analysis of charred plant remains, animal bone, and ceramics will, in conjunction with AMS dating evidence from several features crucial to the interpretation of the site, also provide significant new data for research into the early medieval period in Wales.

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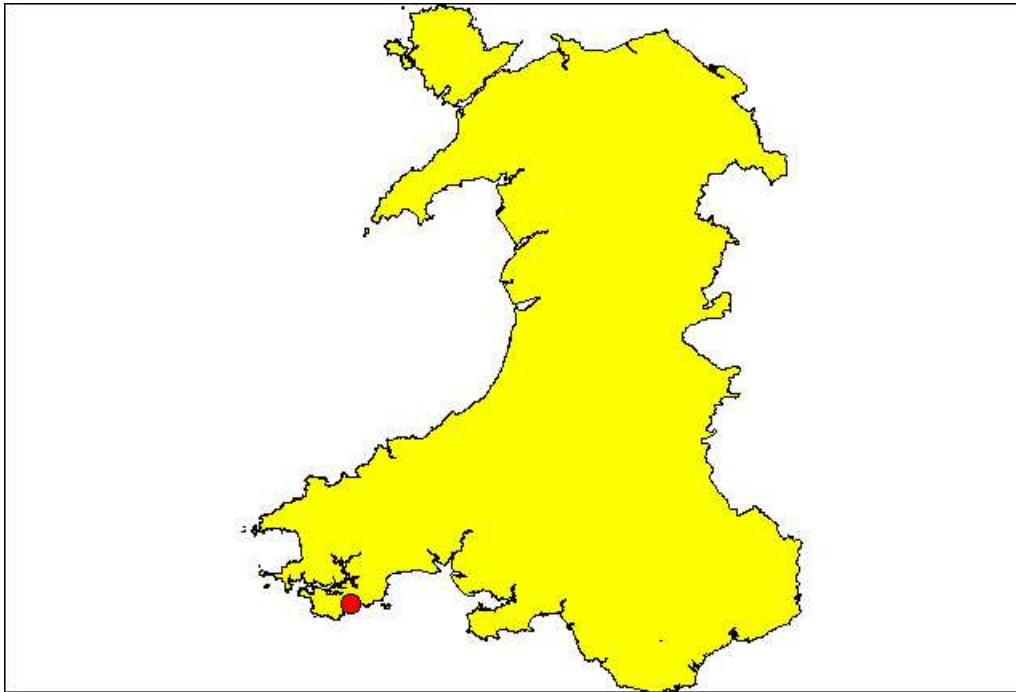
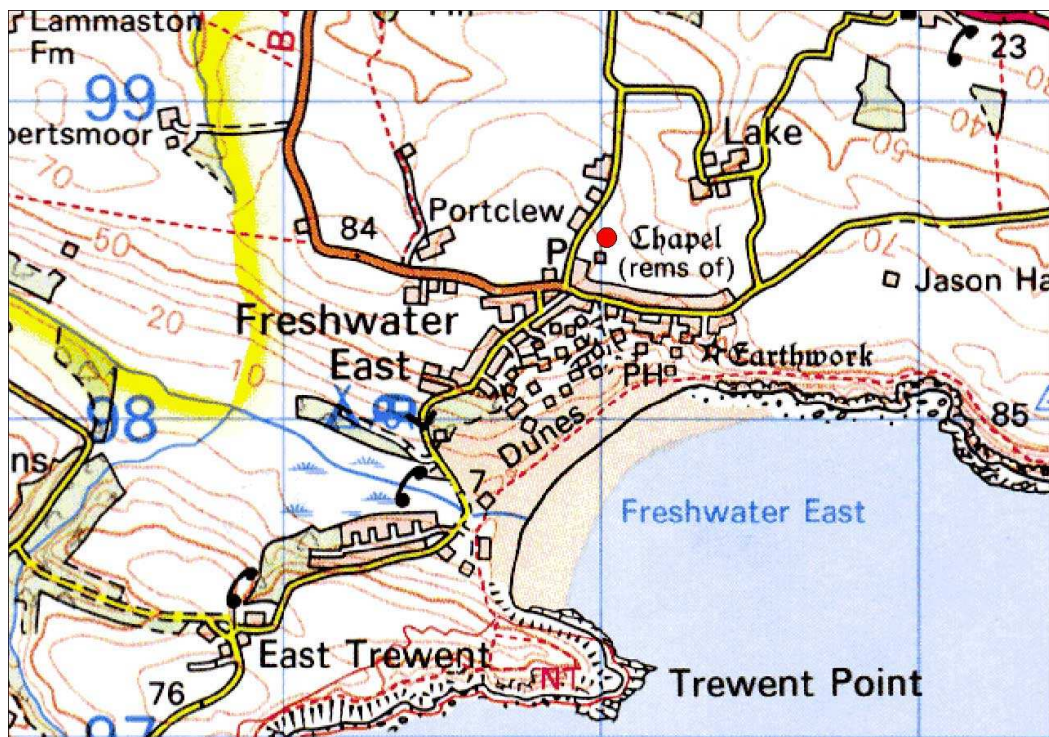


Figure 1: Location of Porthclew



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Figure 2: Site location



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Figure 3: Area of geophysical survey

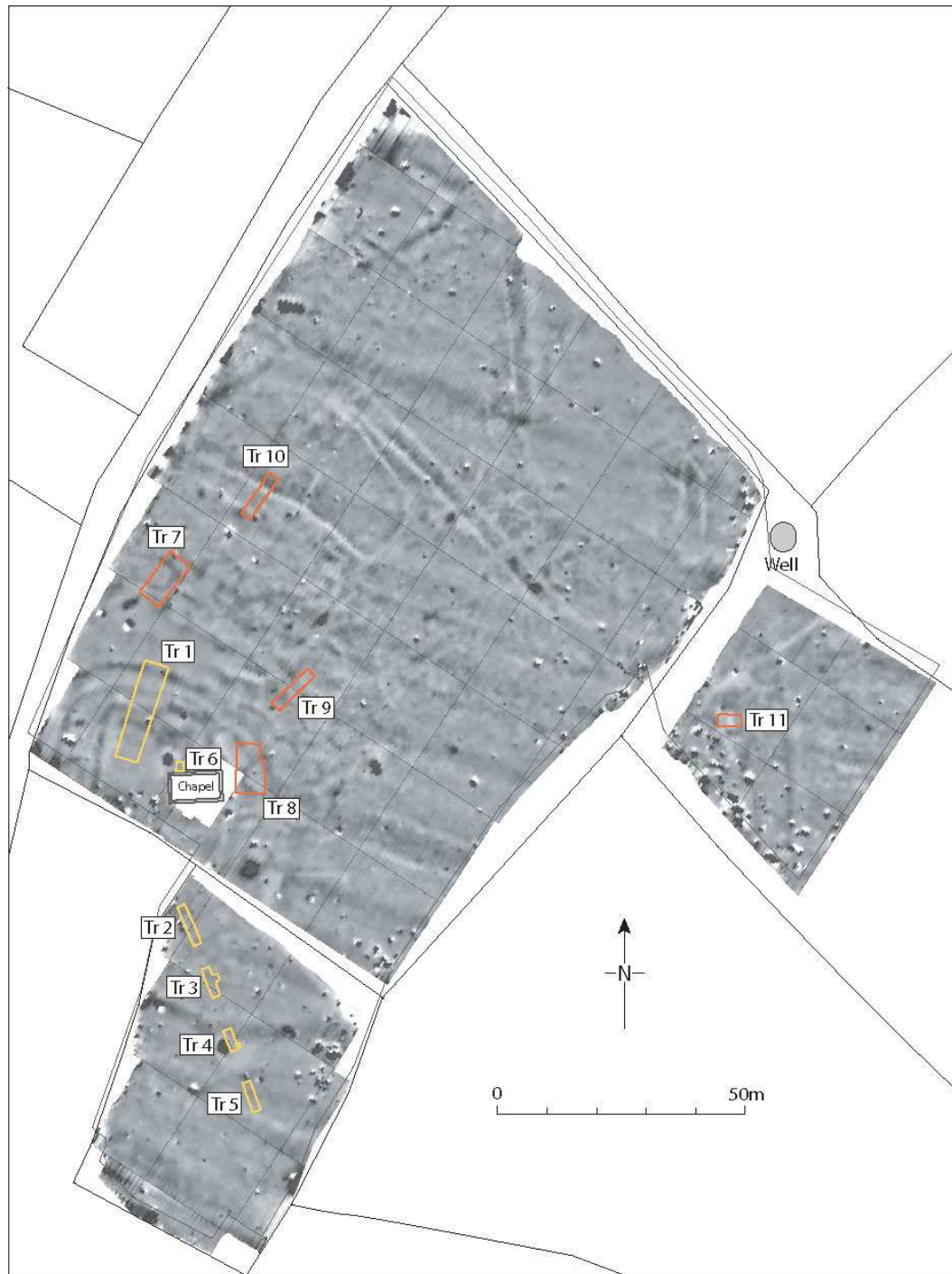


Figure 4: Trench locations in relation to the geophysical survey

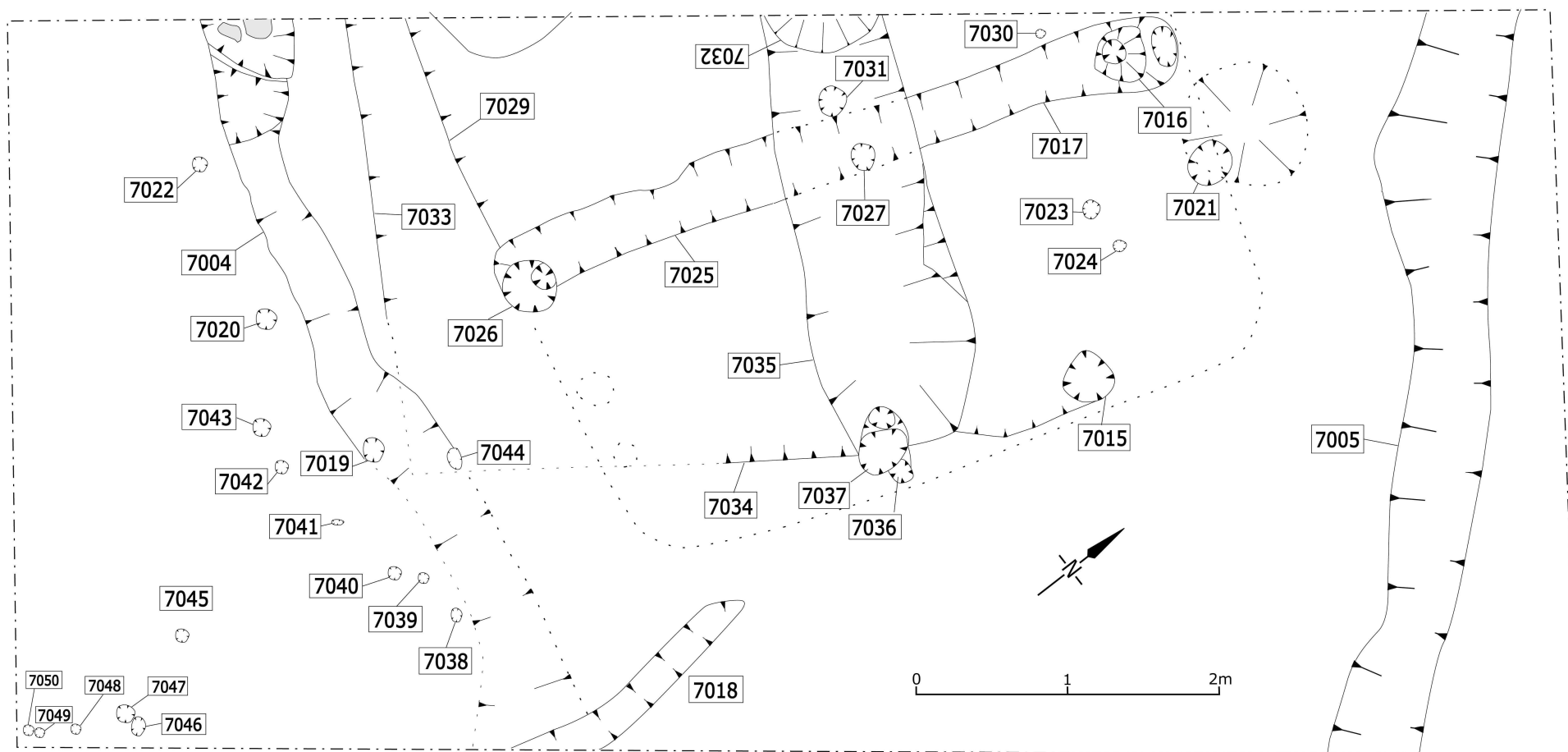


Figure 5: Plan of features in Trench 7

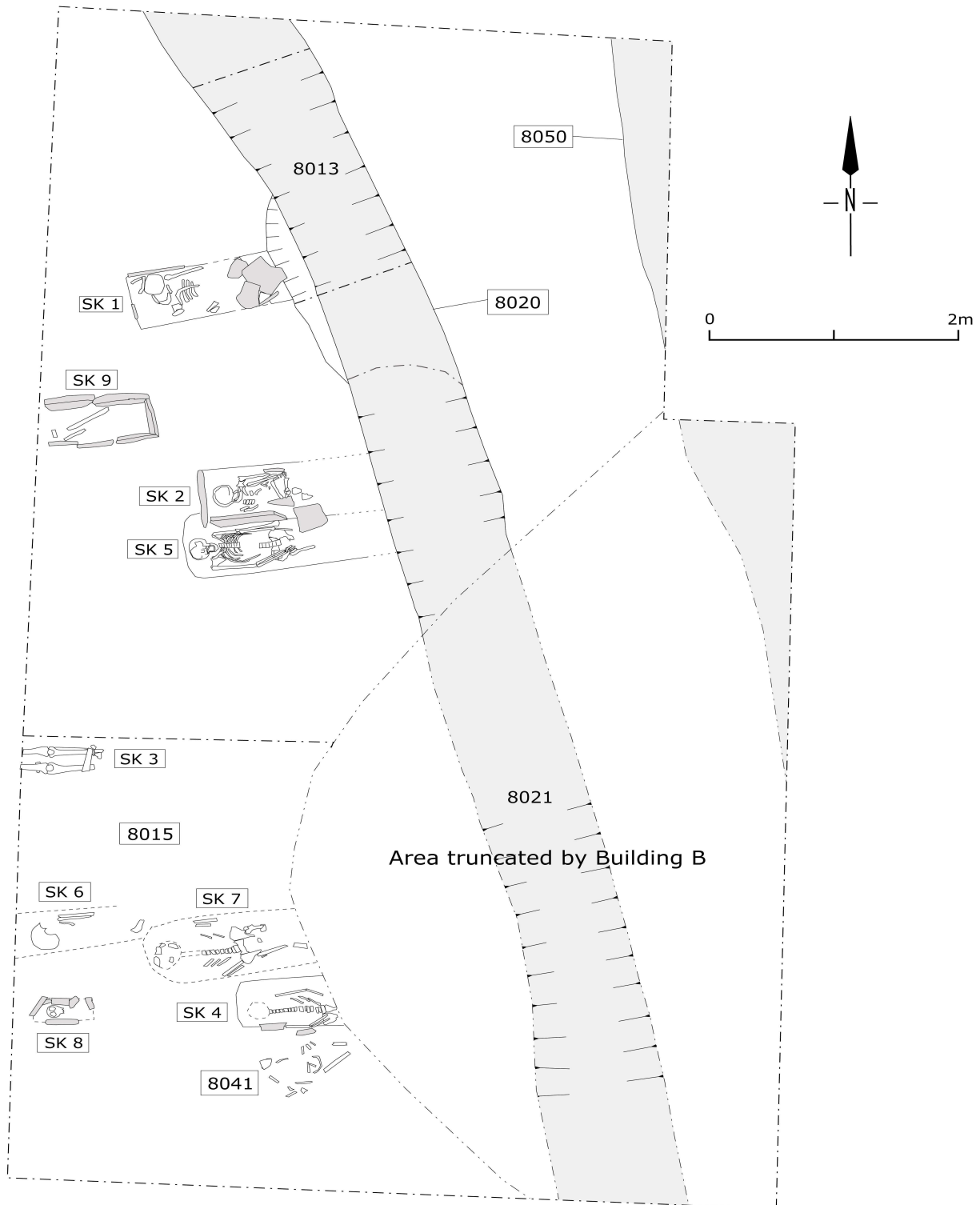


Figure 6: Plan of earlier features in Trench 8

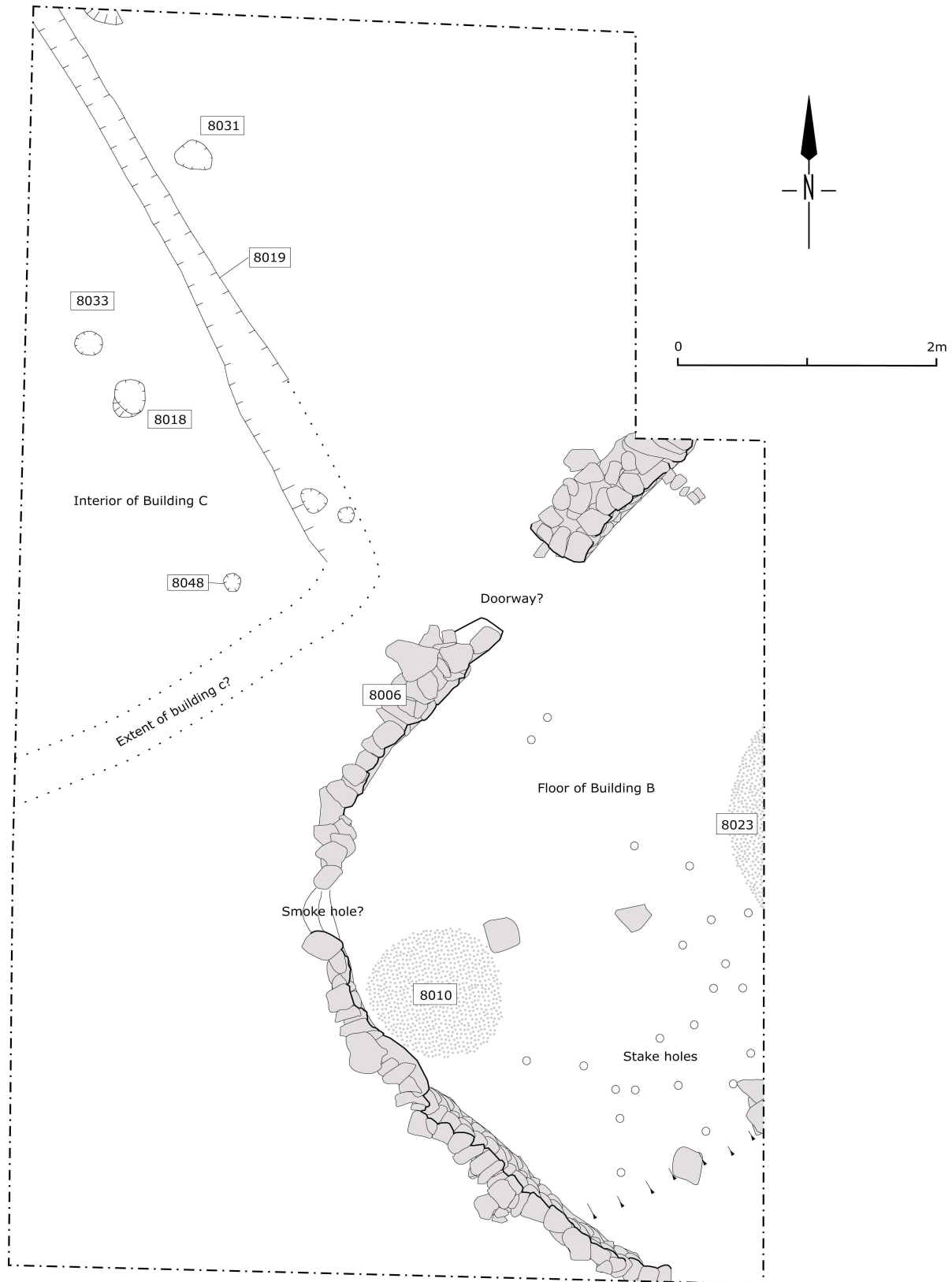


Figure 7: Plan of later features in Trench 8

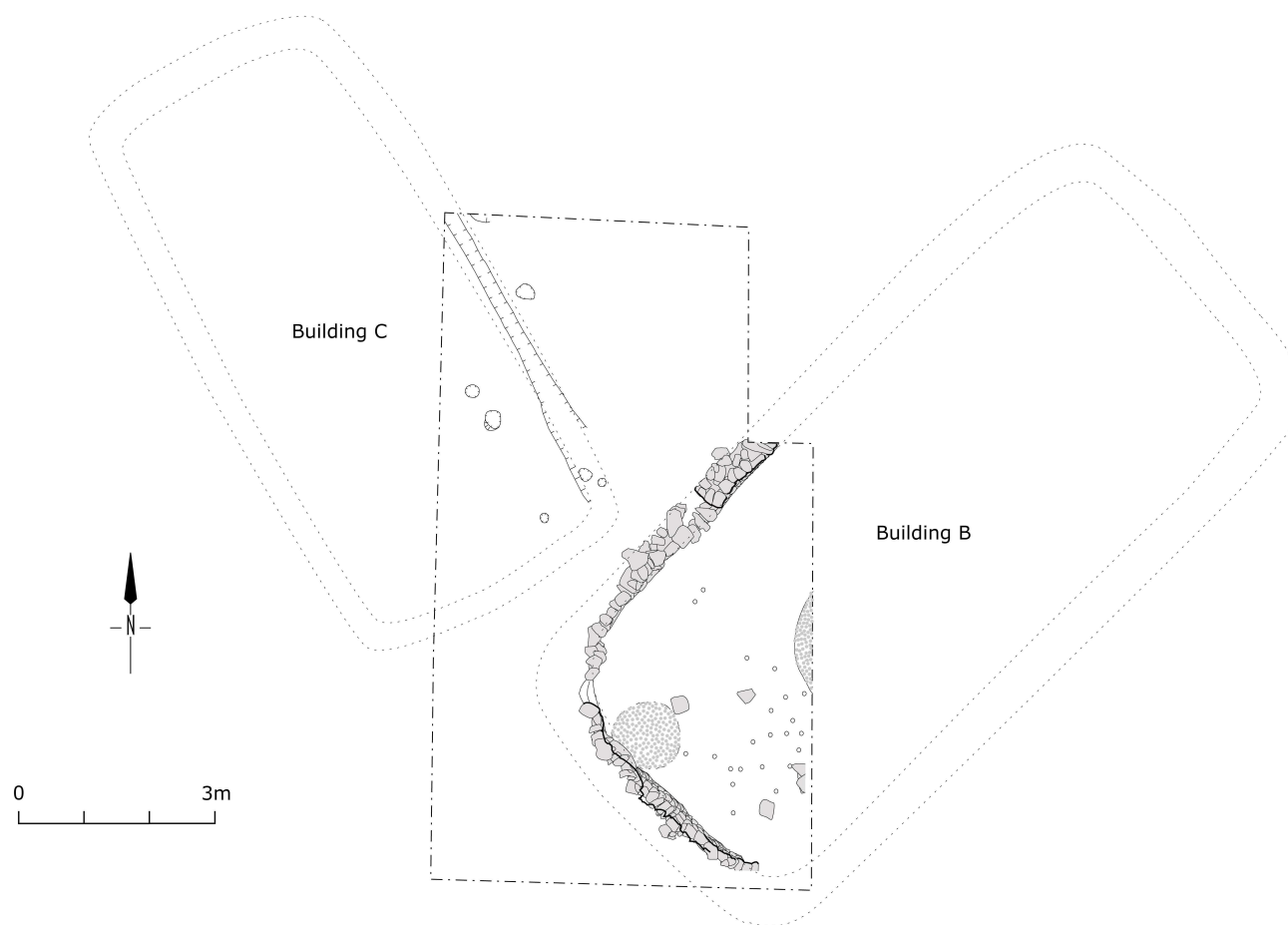


Figure 8: Possible extent of Buildings B and C (based on geophysics survey and partially excavated in Trench 8)



Figure 9: Plan of features in Trench 9



Figure 10: Plan of features in Trench 10

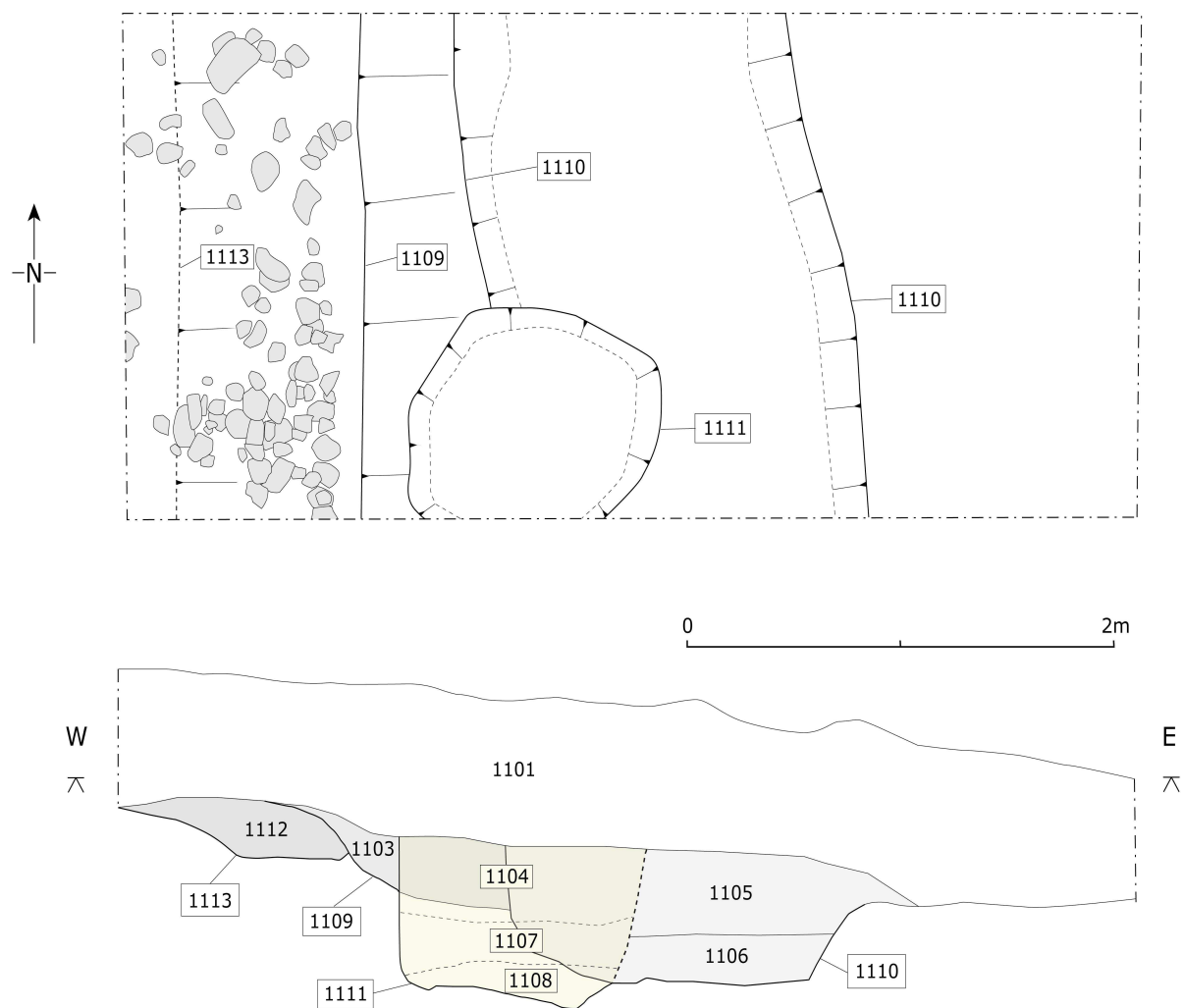


Figure 11: Plan of features and section in Trench 11

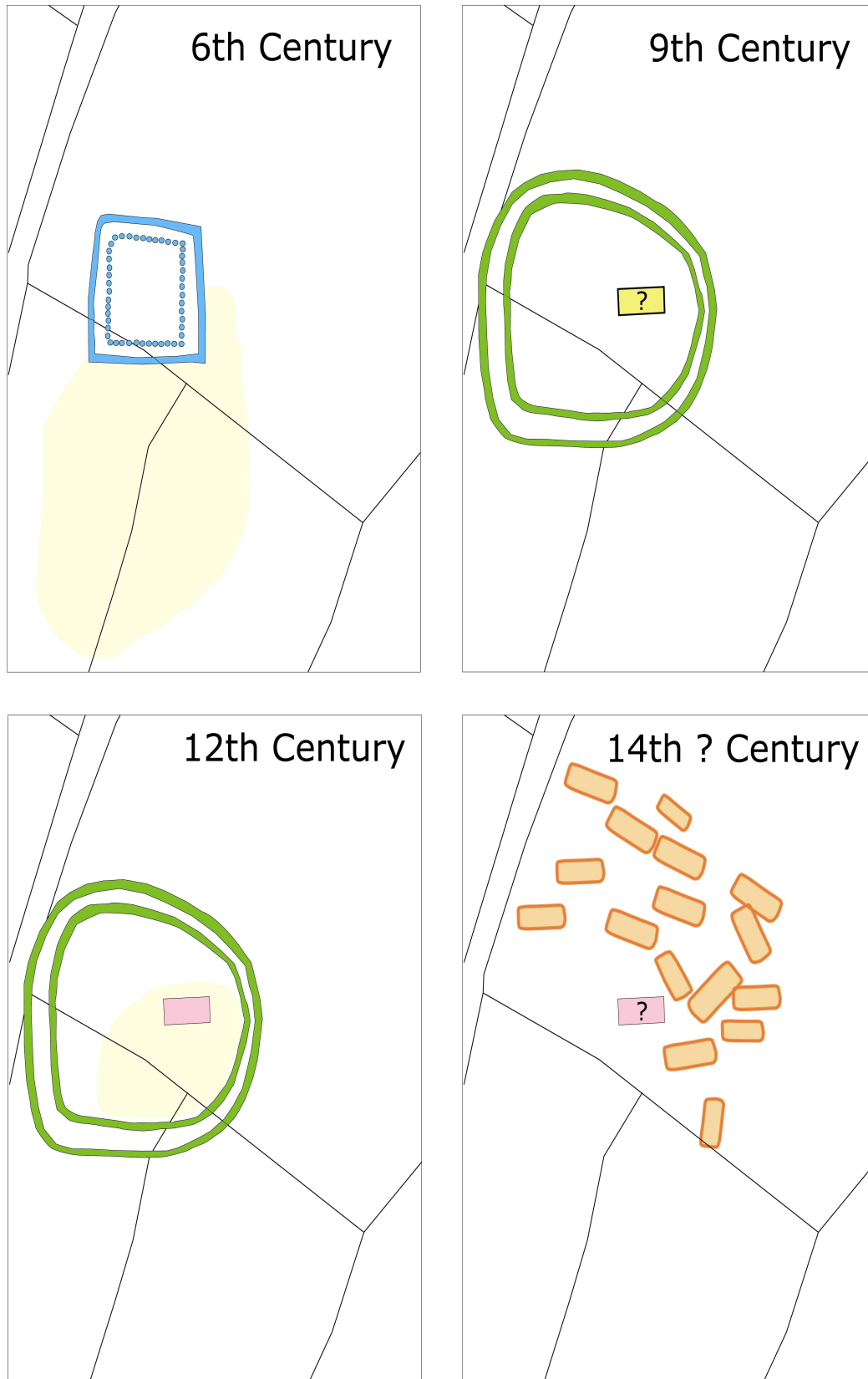


Figure 12: Provisional phasing of the site (cemetery area in yellow)



Photo 1: Trench 7 looking southeast showing cut 7035 etc



Photo 2: Trench 7 looking north, showing beam slot 7025/7017 (east end of Building A)



Photo 3: Trench 7 looking southeast, showing rubble fill of Building A



Photo 4: Trench 7 looking northwest, showing rubble fill of Building A



Photo 5: Trench 7 looking northwest, showing Building A



Photo 6: North end of Trench 7 looking southeast, showing ditch 7005



Photo 7: Trench 8 looking northwest, showing partly excavated occupation deposit in building B



Photo 8: Trench 8 looking north, showing Building B fully excavated (note backfilled enclosure ditch 8020 beneath scales)



Photo 9: Trench 8 looking southwest, showing detail of hearth 8010



Photo 10: Trench 8 showing possible opening in wall 8006



Photo 11: Trench 8 looking north, showing burials truncated by construction cut for Building B



Photo 12: Trench 8. North end of trench looking east



Photo 13: Trench 8 looking south. Detail showing burial SK1 cut by beam slot 8019 (centre) and enclosure ditch 8013 (left)



Photo 14: Trench 8 looking north, showing later pit cutting ditch 8020 and beam slot 8019



Photo 15: Trench 8 looking south, showing truncated burials SK2 and SK5



Photo 16: Trench 8 Disturbed burial SK9 looking west

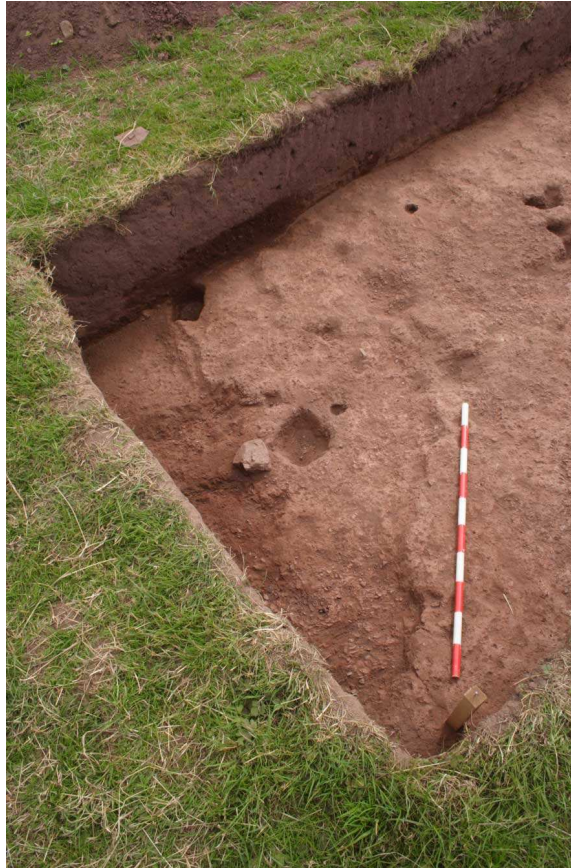


Photo 17: Northeast end of Trench 9 (looking south) showing possible features



Photo 18: Trench 10 (looking northeast) showing ditch 1003



Photo 19: Trench 10 (looking southeast) showing ditch 1003



Photo 20: Trench 11 looking south. The stones are within the fill of ditch cut 1113

THE PEMBROKESHIRE CEMETERIES PROJECT EXCAVATIONS AT PORTHCLEW CHAPEL 2009 Interim Report

RHIF YR ADRODDIAD / REPORT NUMBER 2010/20

**Mawrth 2010
March 2010**

Paratowyd yr adroddiad hwn gan / This report has been prepared by:

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Swydd / Position: Field Services Project Manager

Llofnod / Signature Dyddiad / Date 18/03/2010

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by:

James Meek

ar ran Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Head of Field Services

Llofnod / Signature Dyddiad / Date 18/03/2010

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw
sylwadausydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report