CPAT REPORT No. 1115

A483 Four Crosses Bypass, Powys

INTERIM REPORT ON EXCAVATIONS IN 2010

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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INTERIM REPORT ON EXCAVATIONS IN 2010

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November 2011

Report for Powys County Council

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CPAT Report Record

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Summary

A programme of excavation and archaeological monitoring was undertaken in 2010 in advance of the construction of the A483(T) Four Crosses Bypass in northern Powys which uncovered evidence for multiperiod activity ranging in date from the Neolithic to the 19th century. The work was conducted on behalf of Powys County Council and with the cooperation and assistance of Alun Griffiths (Construction) Ltd.

The northern end of the road corridor crossed the line of a pit alignment (SJ 2684 1913) which was previously known from geophysical survey and cropmark evidence. Nine complete pits lay within the excavated area, forming an east/west alignment. The pits varied in size and shape, but were generally around 2.5m long, 1.8m wide and up to 1.1m deep. Several of the pits produced sherds of pottery from the upper fills and radiocarbon dates have been produced from charcoal retrieved from the mid and upper fills of two pits, indicating activity between 1070 and 400 cal. BC. These do not provide evidence for the date at which the pits were excavated but rather reveal that a degree of infilling had already taken place by the late Bronze Age or early Iron Age. The dates are, however, comparable with those from two linear ditches which are assumed to be part of a later prehistoric field system further to the south.

Perhaps the most significant discovery during the monitoring of soil stripping was a ring-ditch, of which just over half lay within the stripped area; this was subject to careful excavation. The ring-ditch had an external diameter of around 23m and was defined by a relatively small ditch, measuring 0.7m across and up to 0.6m deep. Two small sherds of prehistoric pottery were recovered from the basal fill of the ditch, which also produced charcoal which has provided a radiocarbon date of 2140-1900 cal. BC. Although the central pit contained no skeletal remains a small quantity of cremated bone was concentrated in a limited area towards one end, possibly in association with two small flints. A sample of the bone has been dated to 2030-1770 cal. BC.

Evidence for medieval activity was presented by two features towards the northern end of the scheme. A small corn-drying kiln was uncovered close to a rectangular, post-built structure, both of which have been dated to around AD 1450-1640. In addition, a number of small pits were recorded in the same area which contained sherds of medieval pottery. Although no direct evidence was produced for medieval dwellings there are clear indications of activity in this area, which lies just to the south of St Tysilio's church.

Later activity was represented by a group of three brick kilns at the southern end of the scheme, each of a type known as a clamp kiln, as well as a number of adjacent clay pits. This type of kiln was common before the advent of large-scale, industrial brick-making. Excavations in this area also identified roadside ditches flanking a predecessor of Canal Road which is likely to have been in use until this area was enclosed in 1799. The kilns appear to have been arranged alongside the road, on what would have been common land. Although the kilns have not been dated they are likely to belong to the late 18th century, possibly being associated with the construction of the Montgomeryshire Canal in the late 1790s.

Post-excavation analysis and specialist reporting is still on-going and further radiocarbon dates are anticipated for the main features.

1 INTRODUCTION

1.1 A programme of excavation and an intensive watching brief was undertaken by the Clwyd-Powys Archaeological Trust (CPAT) in association with the construction of the A483 Four Crosses Bypass in Powys (SJ 2680 1830 to SJ 2685 1930; Fig. 1). The work was conducted on behalf of Powys County Council and in conjunction with the initial groundworks for the bypass, which was constructed by Alun Griffths (Contractors) Ltd of Abergavenny. The nature and extent of the archaeological works was detailed in a curatorial brief (INV 767), prepared by Mr M Walters, Development Control Officer for the Curatorial Section of CPAT.

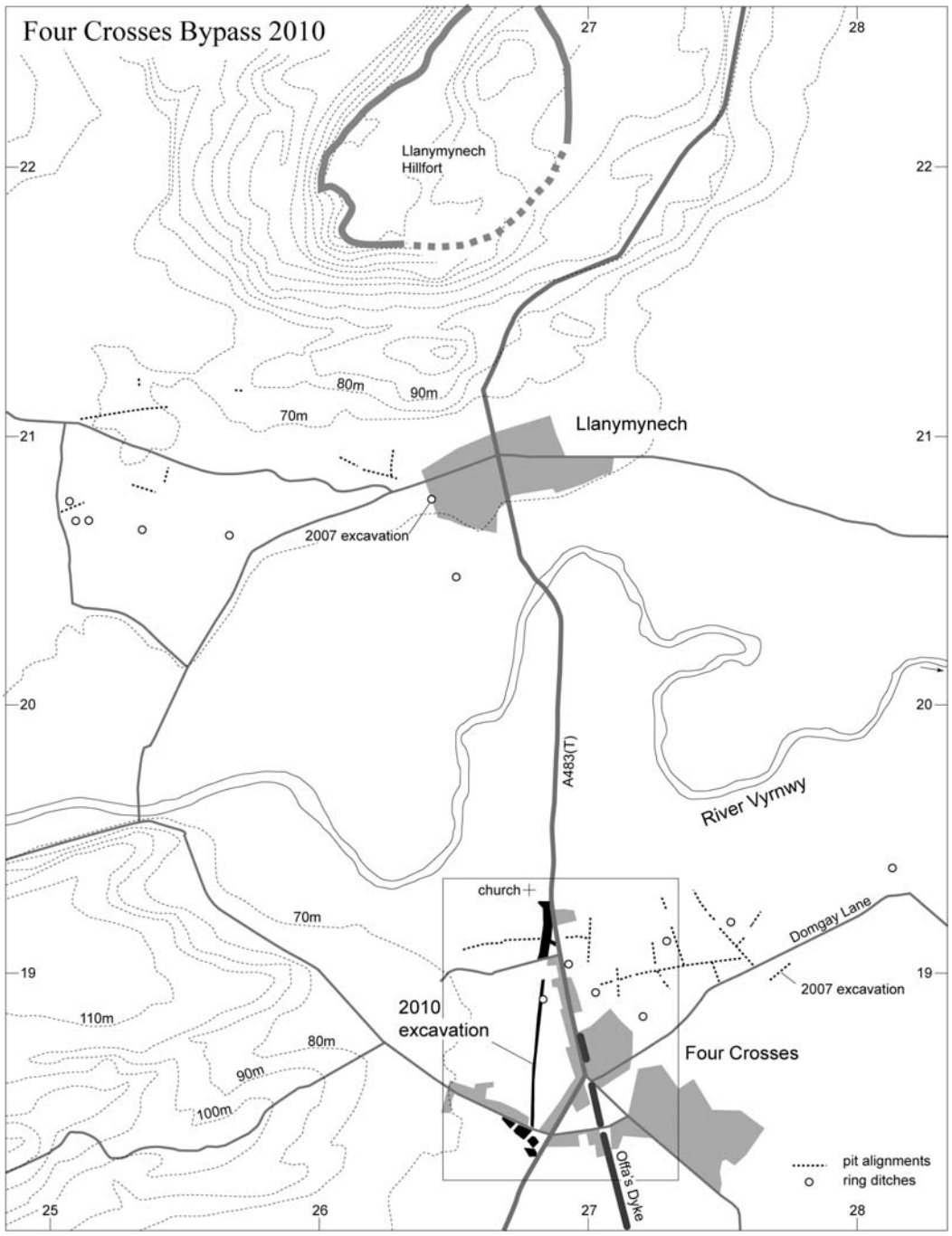

Fig. 1 Location plan showing the position of the excavations

1.2 The archaeological works were conducted between March and July 2010 in advance of the road construction. Initially, full area excavation was required at either end of the bypass, covering areas to the south of Canal Road (Area A) and north of Parsons Lane (Area C), although monitoring of soil stripping within Area B1-5 also revealed significant archaeological remains which were then the subject of appropriate levels of investigation and recording.

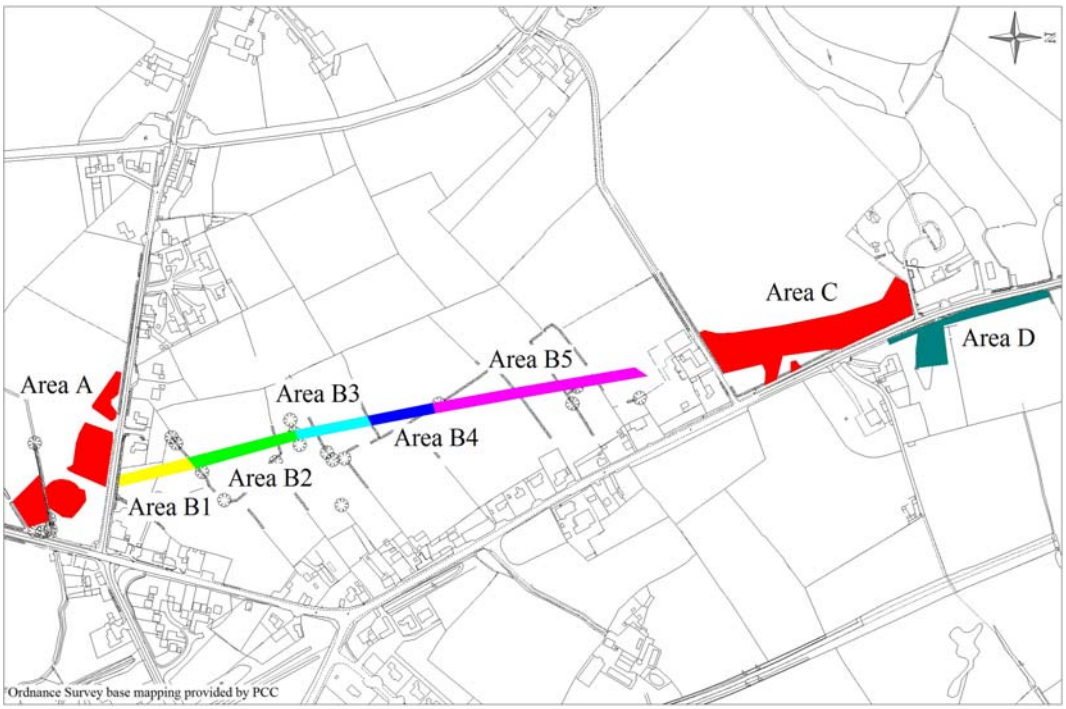

Fig. 2 Location of excavation areas

1.3 The following summary has been divided into those areas depicted in Fig. 2, while the location of the main features is depicted in Fig. 3.

2 EXCAVATION

2.1 Area A

2.1.1 A group of brick kilns had previously been identified during the initial phases of assessment and these, together with the surrounding area, were the subject of full area excavation (Fig. 4). This revealed three brick kilns, each of which was of a type known as a clamp kiln, as well as a number of adjacent clay pits. This type of kiln was common before the advent of large-scale, industrial brick making. Two of the kilns were roughly circular, measuring around 8m across, while the largest kiln was rectangular, measuring around 17.5m by 7m. A series of parallel flues were identified within each of the kilns, while the surrounding area contained a number of large, irregular pits which were presumably the source of the clay for manufacturing the bricks.

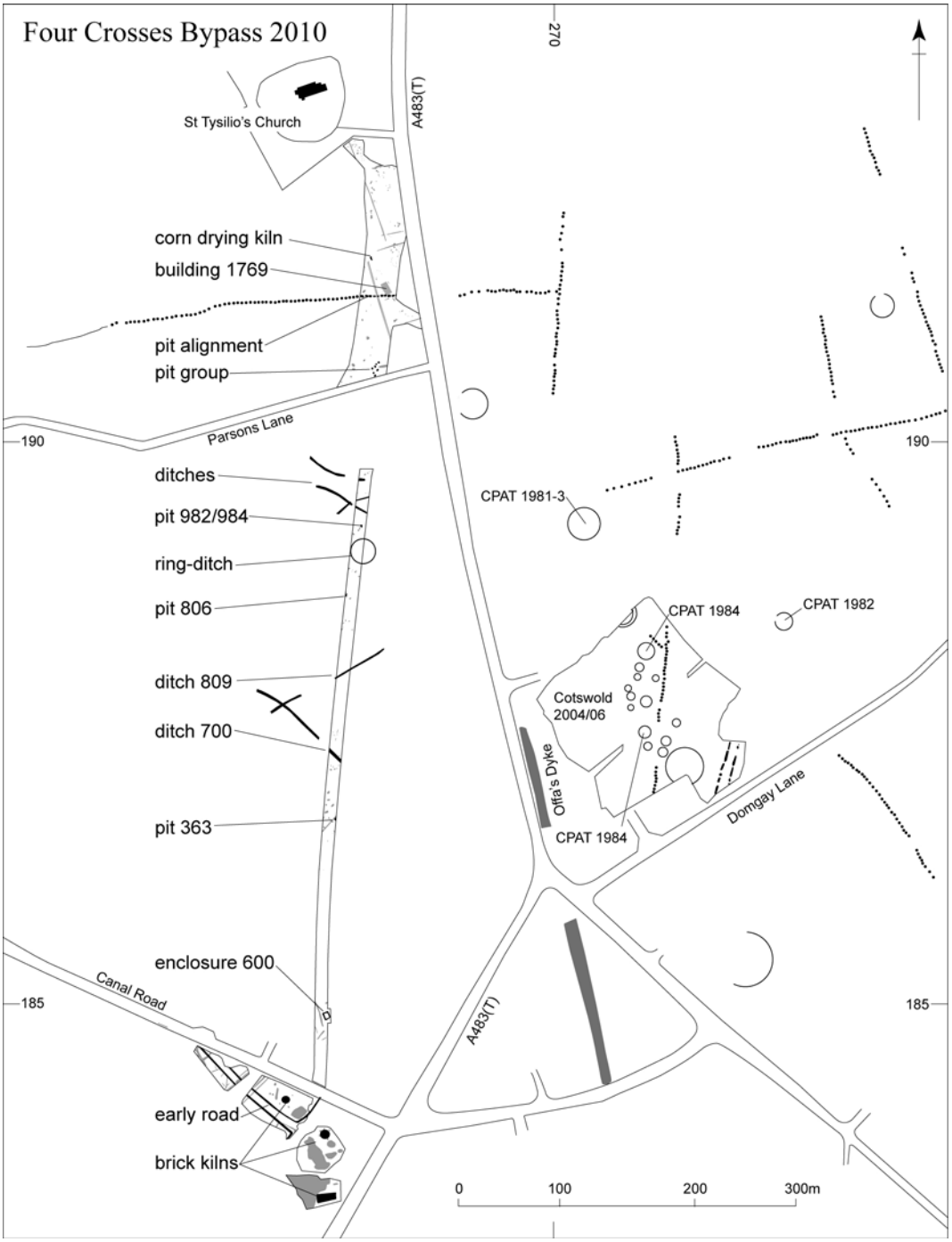

Fig. 3 Overall plan of the excavations showing the location of the main features and the position of earlier excavations between 1981 and 2006

2.1.2 The excavations also identified roadside ditches flanking a predecessor of Canal Road which is likely to have remained in use until this area was enclosed in 1799. The kilns appear to have been arranged alongside the road, on what would have been common land. Although the kilns have not been dated they are likely to belong to the late 18th century, possibly being associated with the construction of the Montgomeryshire Canal in the late 1790s.

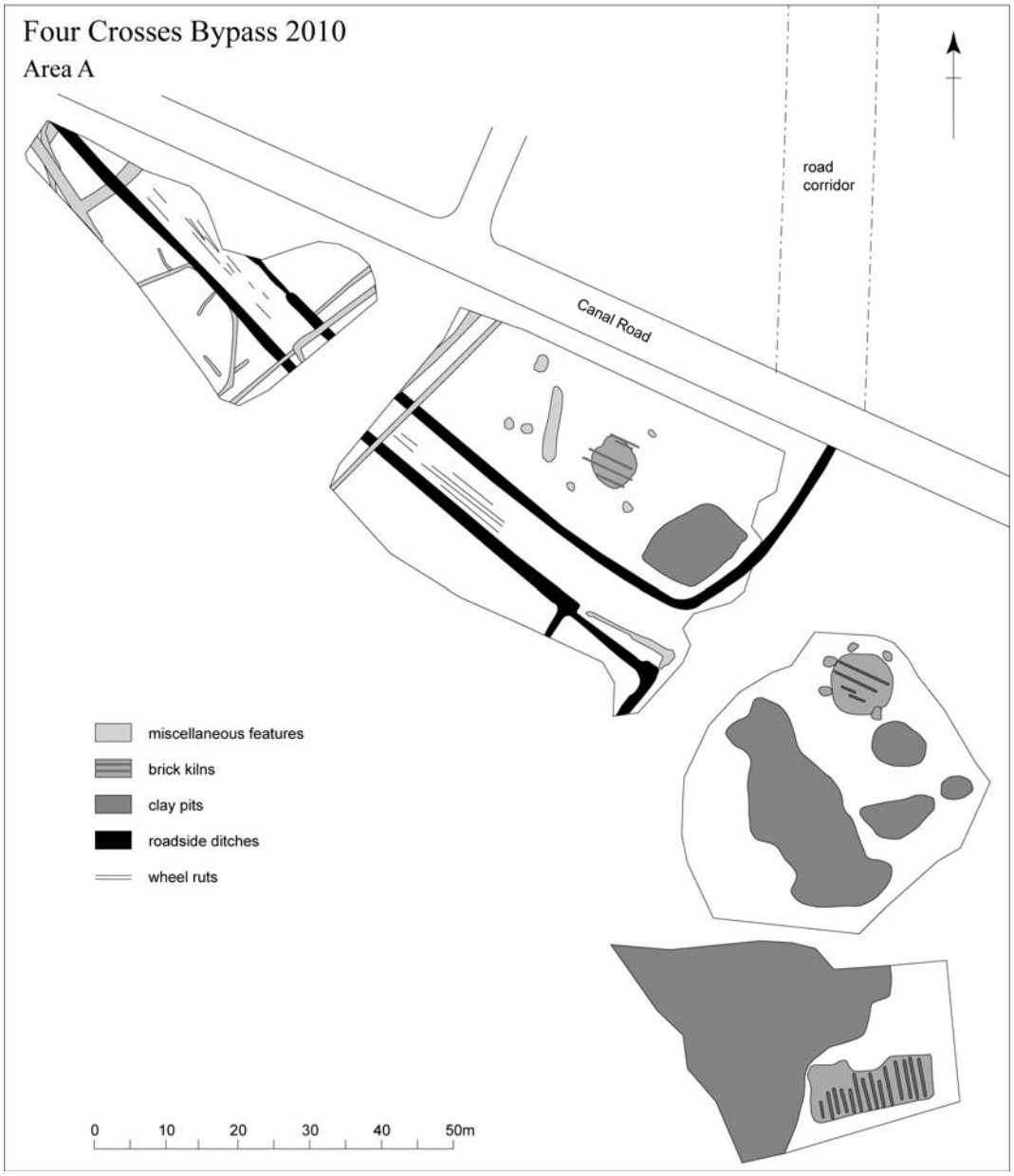

Fig. 4 Plan of Area A showing the brick kilns and post-medieval road

2.1.3 A number of shallow gullies or boundary ditches were also identified, none of which produced any dating evidence, although some clearly pre-dated the roadside ditches.

Fig. 5 View of one of the brick kilns, cut by later field drains.
Photo CPAT 3072-0031

2.2 **Area B1**

2.2.1 The archaeological monitoring of soil stripping operations revealed a number of potentially significant features which were subsequently investigated by hand-cleaning and sample excavation.

Rectangular enclosure

2.2.2 A small, sub-rectangular, ditched enclosure (600) was identified during soil-stripping operations to the north of Canal Road. The enclosure measured 6.4m by 5.4m overall and was aligned north-north-west to south-south-east (Figs 6-7). The shallow ditch had been recut on two occasions, each following a slightly different course and with differing depths.

2.2.3 The enclosure was originally defined by a narrow ditch (600) up to 0.75m wide and 0.35m deep enclosing an area of around 4.7m by 3m, with an entrance 0.5m wide on the west side. The ditch was filled with firm, bluish-grey clay (601) which had been truncated by a recut (602) which was shallower but broader, measuring up to 0.95m wide and 0.3m deep, which also cut across the original entrance. A probable second recut is represented by a shallow ditch (604) which cut through the fill of the earlier recut (602), although this was only recognised clearly on the eastern side where it followed a more easterly line. The final phase ditch (604) may have been continuous around the entire circuit of the enclosure, although during the excavation it was not possible to differentiate between the fills of this and the earlier recut.

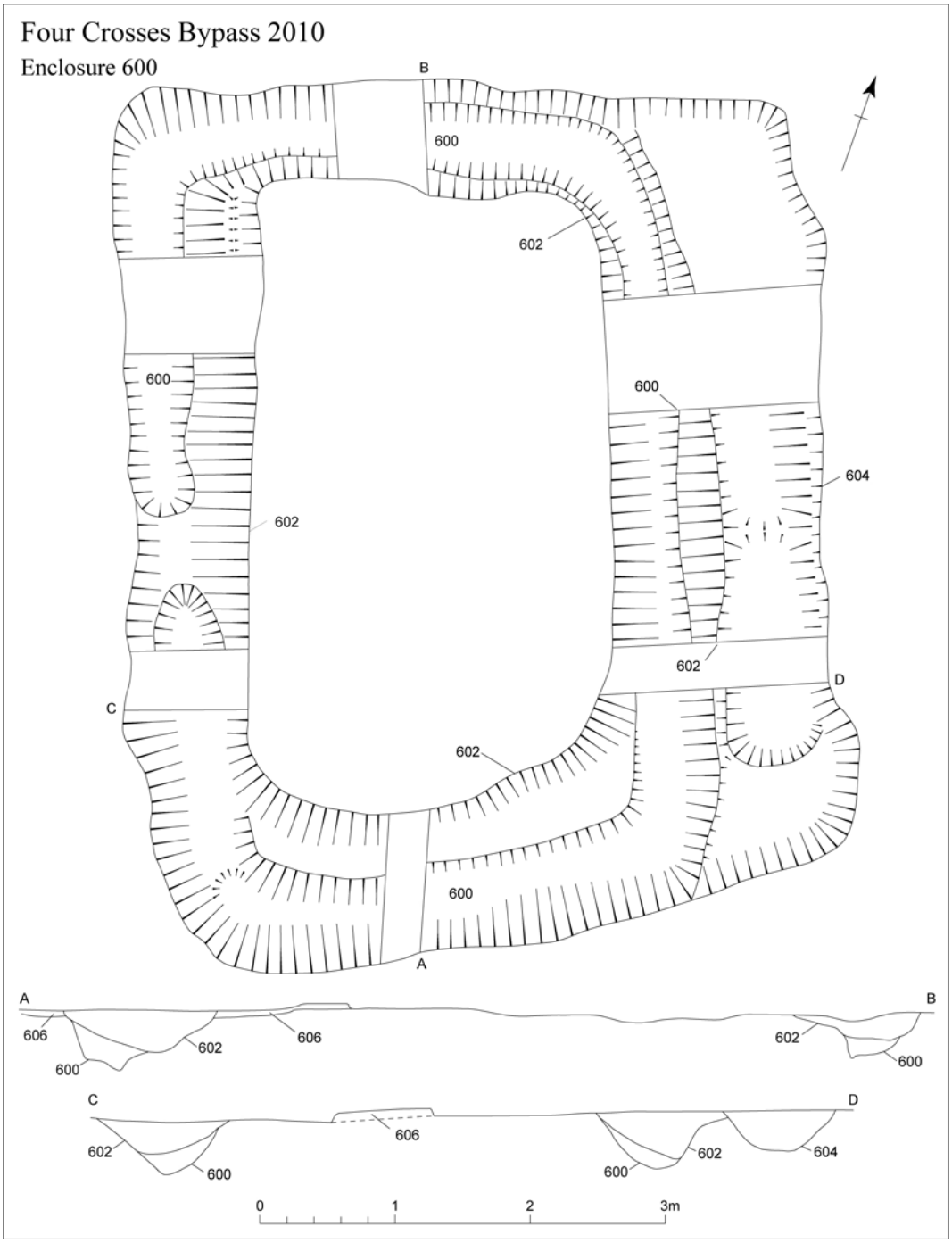

Fig. 6 Plan and sections of Enclosure 600

2.2.4 No features were identified in the interior and the date and function of the enclosure is uncertain. Although no cultural material was recovered from any of the deposits, fragments of charred remains of alder/hazel, recovered from the primary fill (601) of the earliest phase of the enclosure (600), have been submitted for AMS dating.

Fig. 7 The rectangular ditched enclosure in Area B1 under excavation

Miscellaneous features

2.2.5 A number of linear features were revealed west of the enclosure (600), all of which were either modern drainage gullies or relict field boundaries. The exception was a butt-ended gully (608) just to the north, measuring 0.66m wide and only 60mm deep, which followed a similar alignment to the enclosure. No material suitable for dating was recovered from this feature.

2.3 **Area B2**

2.3.1 The soil-stripping operations were undertaken under close supervision but revealed no evidence of potentially significant archaeological features or deposits and consequently no excavation was conducted in this area.

2.4 **Area B3**

2.4.1 Topographically this area defined the start of a gentle slope northwards towards Llantysilio, coupled with a gradual change in the underlying subsoil from silty clay to river gravels. This coincided with a marked an increase in the number and general density of archaeological features. The area was characterised by a number of large pits and isolated post-holes, none of which produced any dating evidence with the exception of a single sherd of mid/late Neolithic (Mortlake) pottery (Find No. 6011) from a pit, or possible ditch terminal (363), attesting to prehistoric activity in the immediate vicinity.

2.4.2 The fire-cracked and charred remains of a small hearth (317) were uncovered around 3m south-west of the pit, measuring 0.76m in diameter and 90mm in depth. The hearth was partially truncated by a narrow linear gully (321) which extended across the road corridor

orientated north-east to south-west. Neither of these features produced any cultural material.

2.5 **Area B4**

Prehistoric ditches

2.5.1 A large linear ditch (700, 759), around 2.8m wide and 1.55m deep, was identified running roughly north-west to south-east across the road corridor (Fig. 8). The ditch had a causeway or entrance around 3.5m across, which was occupied by a narrower ditch (761) 2m wide and 0.6m deep, although it was not possible to determine whether this was part of an earlier feature or whether the entrance had been blocked at a later date. Small fragments of prehistoric pottery (Find 6023-4) were found within the fill of the main ditch (700) and bulk soils samples and fragments of charcoal were also recovered which will hopefully provide palaeoenvironmental evidence. Samples of charcoal from two fills in the ditch (700) have provided radiocarbon dates of 760-400 and 1000-830 BC cal. BC (respectively SUERC 34214 and 34215). Two further samples (Find 6026-7) of charred remains from the base of the ditch (759) have also been submitted for dating. Further to the north a second, narrower ditch (809) was identified, aligned north-east to south-west, which had previously been revealed by geophysical survey; this measured 1.15m wide and up to 0.45m deep. Charcoal recovered from the basal fill of the ditch produced a radiocarbon date of 800-540 BC cal. BC (SUERC 34219).

Fig. 8 Ditch section 759 and 761 under excavation. Photo CPAT 3169-0021

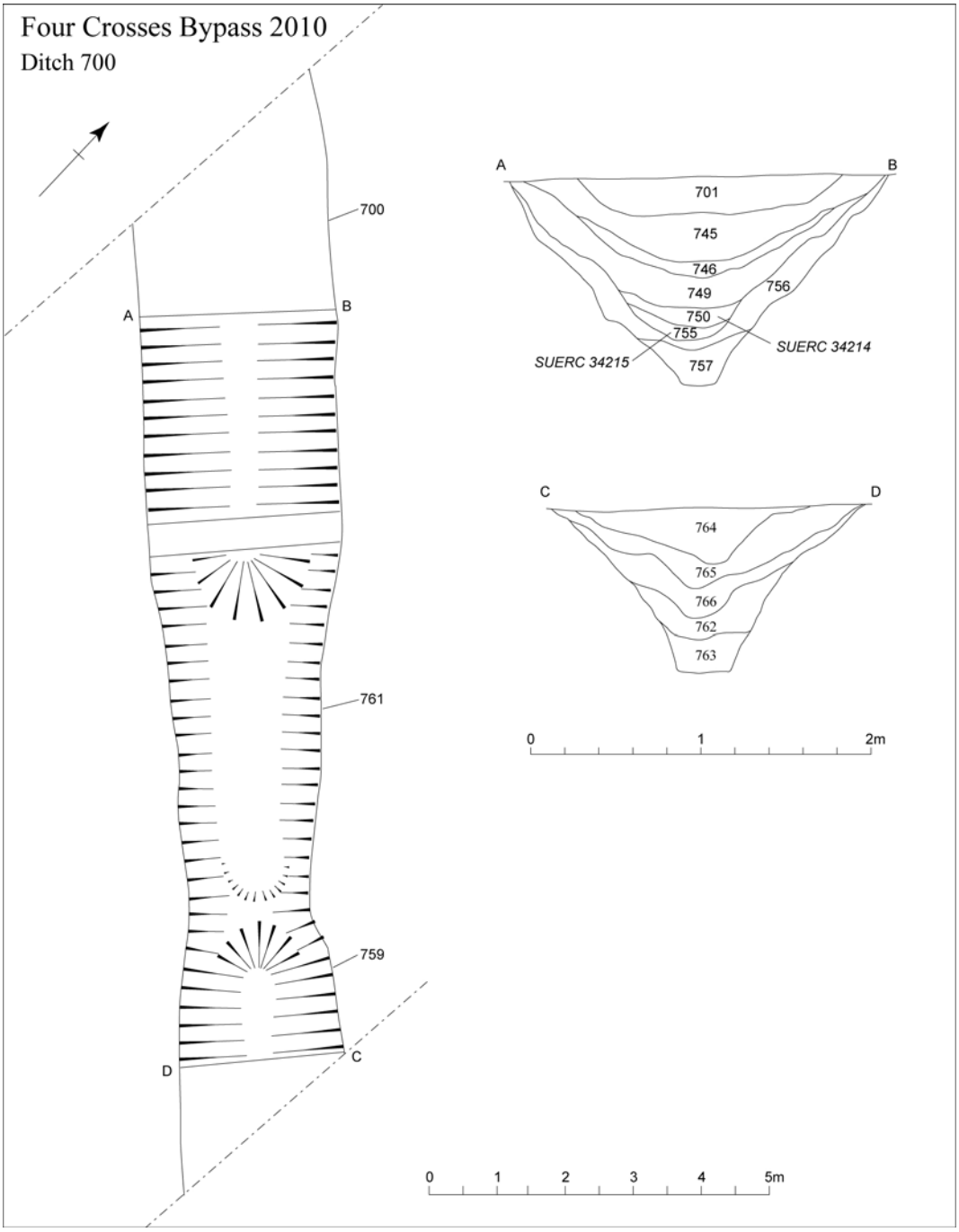

Fig. 9 Plan and sections of ditch 700

Miscellaneous features

2.5.2 Numerous small pits, narrow linear gullies and postholes were also identified on either side of ditch 700. Their form and distribution does not suggest any obvious pattern or dating and no further specialist analysis is proposed.

2.6 **Area B5**

Ring-ditch

2.6.1 Perhaps the most significant discovery during the monitoring of soil stripping was an early Bronze Age ring-ditch which was revealed some 120m south of Parsons Lane (SJ 2683 1890). Just over half of the site lay within the stripped area and this was subject to careful excavation (Figs 10-11).

Fig. 10 Aerial view of the ring-ditch

2.6.2 The ring-ditch (898) had an external diameter of around 23m and was defined by a relatively small ditch measuring 0.7m across and up to 0.6m deep, with fairly steeply-sloping sides and a flat base. Approximately 55% of the available ditch was excavated in a series of sections averaging 2m in length, providing regular cross-sections of the ditch and its fill. Two small sherds of prehistoric pottery were recovered from the basal fill of the ditch, which also produced fragments of charcoal that provided a radiocarbon date of 2140-1900 cal. BC (SUERC 34216). The central pit was aligned north-north-west to south-south-east and measured 2.9m long and 1.2m wide. Although no skeletal remains survived, organic staining at the base of the feature suggested the former presence of a coffin, measuring around 2m in length and up to 0.6m wide. The pit also contained a small quantity of cremated bone which was concentrated in a limited area towards the north-western end of the pit, and may be associated with two flints (Finds 6065-6) found nearby. A sample of the cremated bone has been dated to 2030-1770 cal. BC (SUERC 34217), while a fragment of hazel charcoal from the fill of the pit produced a date of 6500-6400 cal. BC and must therefore be considered to be residual within this context. A second pit (1051) was identified immediately to the east of the central burial, although this extended beyond the limits of excavation and its date and function remain uncertain (Fig. 11).

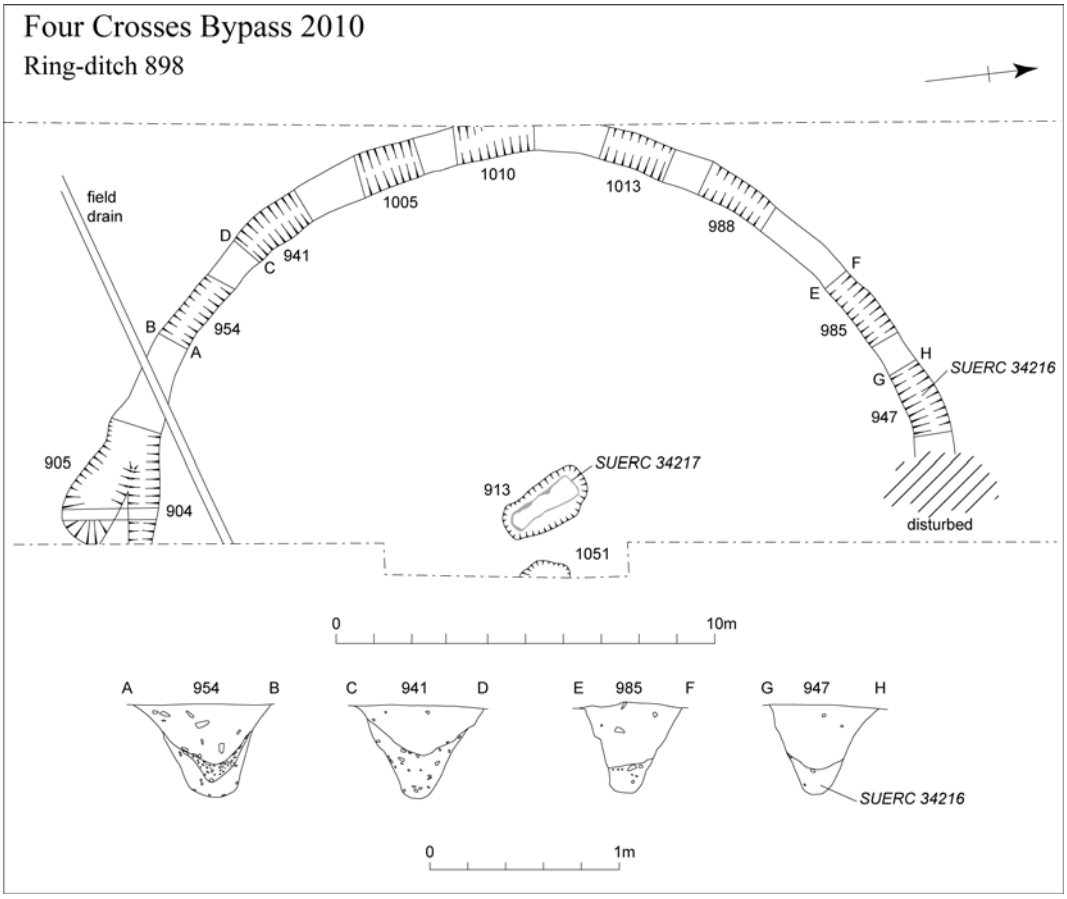

Fig. 11 Ring-ditch 898

Prehistoric pits

2.6.3 A large pit (806) located to the south of the ring-ditch produced a rim sherd of mid-late Neolithic pottery (Find no 6028) and also fragments of charcoal that provided a radiocarbon date of 3970- 3790 cal. BC (SUERC 34223). To the north of the ring-ditch several more large pits were uncovered, including one (982/984) containing the remains of charred timbers, which may have formed a box, as well as sherds of mid-late Neolithic pottery (Find no 6053) and fragments of burnt bone (Find no 6080). A sample (Find 6070) of charred oak from the 'box timber' (1060) has been submitted for AMS dating.

Linear ditches

2.6.4 Three linear ditches (928, 940 and 1048) were identified to the north of the ring-ditch, the alignments of which suggest that they are unlikely to be associated with the medieval field system and could therefore represent earlier land divisions of potential Romano-British or prehistoric date (Fig 12). Ditch 928 was 1m wide and 0.5m deep while ditch 940 measured 1.5m wide and 0.65m deep. At the northernmost end of area B5 was a larger ditch (1048), measuring 2m wide and 0.95m deep. Bulk soil samples from the ditches are being analysed for their possible palaeoenvironmental content, and samples of charred hazel from the basal fills of the ditches 940 (Find 6047) and 1048 (Find 6090) have been submitted for radiocarbon dating.

Fig. 12 Ditches 940 and 928 viewed from the north-east.
Photo CPAT 3170-0105

2.7 **Area C**

2.7.1 The area north of Parsons Lane was already known to contain significant archaeology and was the subject of detailed area excavation. The main focus of interest was part of a pit alignment, comprised of large, closely spaced, elongated pits (Figs 13-15). Several pit alignments have been recognised within the Four Crosses area, and a number of them have been excavated. Although they have not been dated securely, current evidence suggests that they are likely to be part of a prehistoric field system.

Fig. 13 The pit alignment viewed from the east.
Photo CPAT 3220-0016

2.7.2 Nine complete pits (1129, 1133, 1137, 1141, 1145, 1149, 1153, 1157 and 1161) lay within the excavated area, aligned east to west along the long axis, together with one further pit (1165) extending beyond the area to the east. The pits vary in size and shape, but were generally around 2.5m long, 1.8m wide and up to 1.1m deep. The space between the pits was fairly regular, between 0.5m and 1m, with no other archaeological features, such as smaller posts and pits, present (Fig 14).

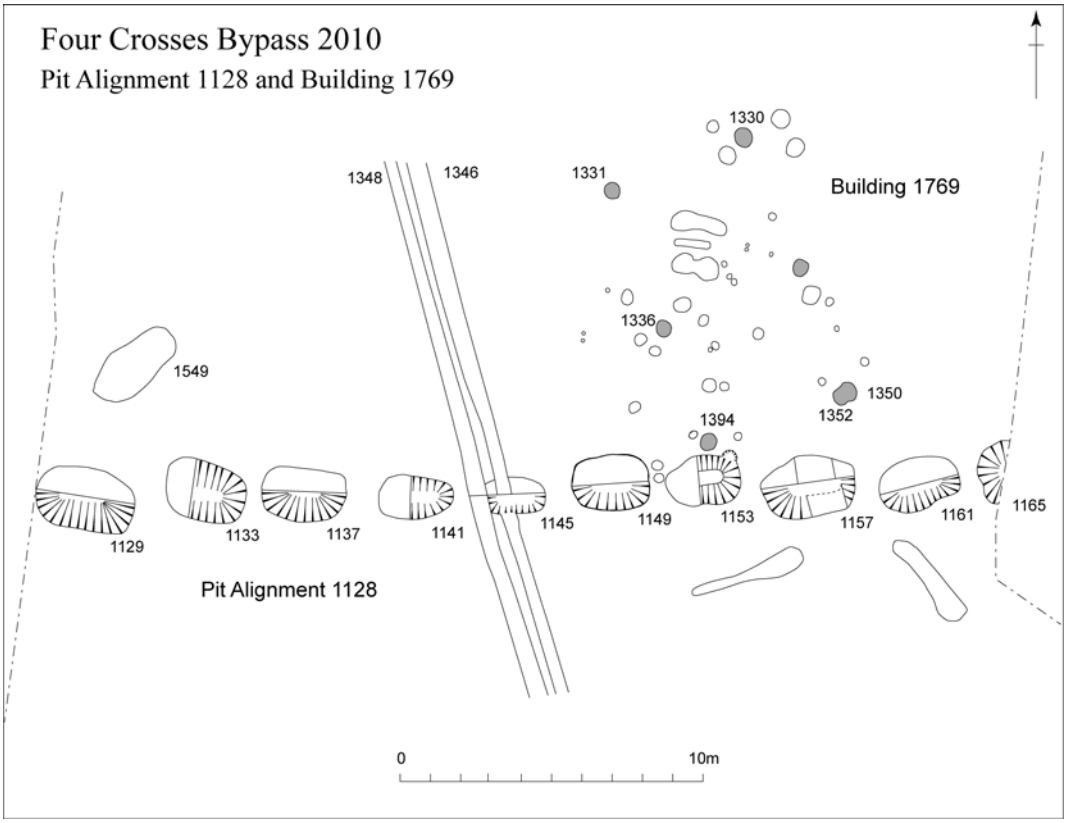

Fig. 14 Plan of the Pit Alignment

2.7.3 The nature of the fills within the pits appeared fairly consistent across the group, and at least three obvious phases of backfilling were evident. A series of fine silts and pea-gravels formed the earliest phase of natural weathering and erosion, followed by a series of fills which contained a larger percentage of stony material. The final phase, clearly visible in all of the pits, consisted of a thick deposit of reddish brown silty clay sealed by a very compact light brown silty clay (Fig 15), perhaps resulting from periods of more intensive ploughing within the general vicinity.

2.7.4 A series of radiocarbon dates have been produced from charcoal retrieved from the middle and upper fills of two pits (1129, 1153), indicating activity between 1070 and 400 cal. BC (SUERC 34224-6, 34233). These do not provide evidence for the date at which the pits were excavated but rather indicate that a degree of infilling had already taken place by the late Bronze Age or early Iron Age. The dates are, however, comparable with those from two linear ditches (700 and 809) which are assumed to be part of a later prehistoric field system further to the south.

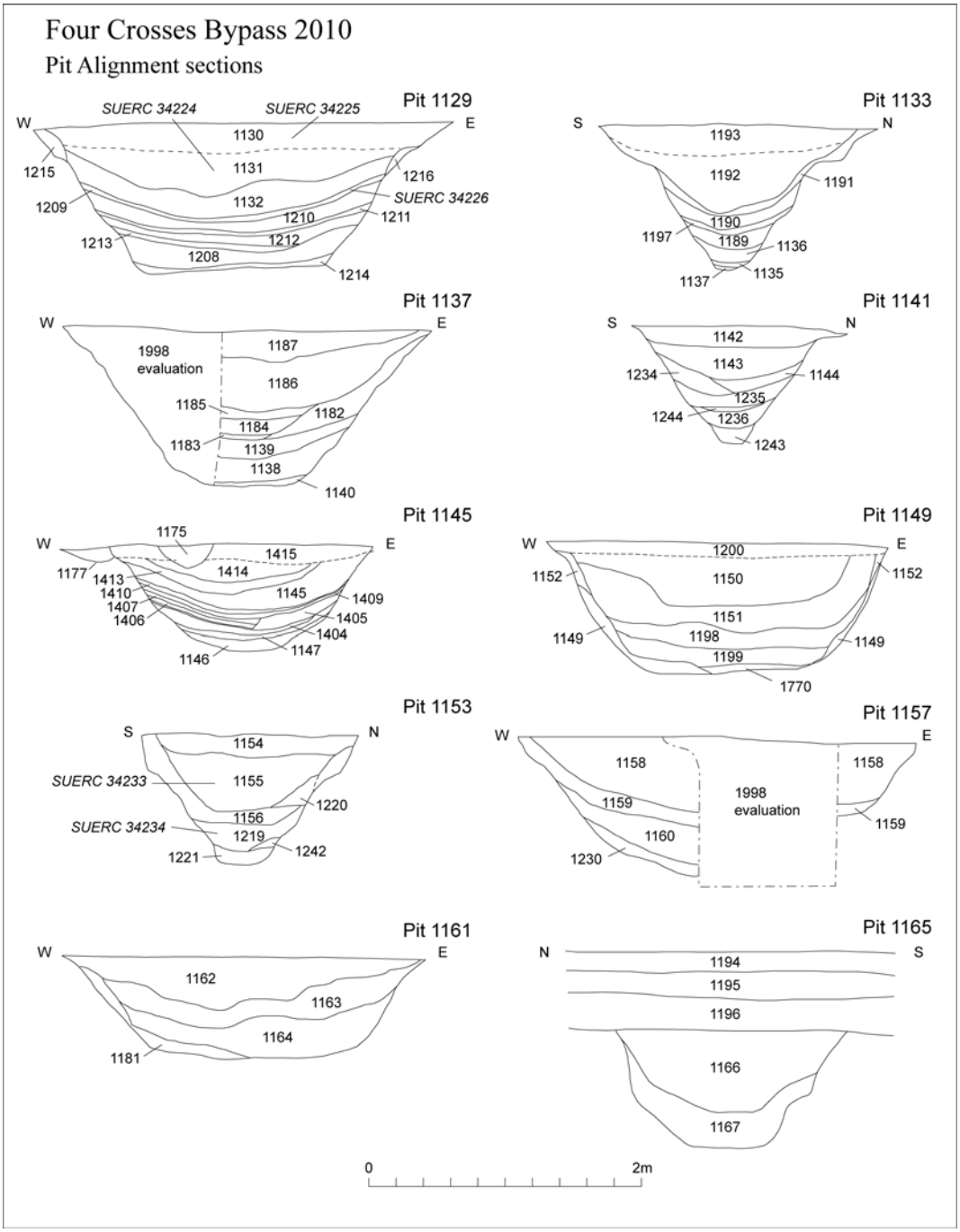

Fig. 15 Sections of the pits within the pit alignment, showing the location of the radiocarbon dates

2.7.5 A further radiocarbon date of 3950-3700 cal. BC (SUERC 34234), from the lower fill (1219) of pit 1153 is anomalous, alluding to Neolithic activity. In order to corroborate the initial results further samples of charcoal from several pits have now been submitted for radiocarbon dating, and it is hoped that specialist analysis will be able to provide information on the vegetation in the surrounding area at the time the pits were originally excavated.

2.7.6 Seven fragments of pottery (Finds 7000, 7002, 7005, 7007, 7015 and 7019) were recovered from the pit alignment which, with the exception of a single body sherd (Find 7019), was recovered from the upper pit fills. The pottery assemblage, which has been tentatively attributed to the late Bronze Age or early Iron Age, contained both rim and body sherds from several vessel forms.

2.7.7 At the western end of the pit alignment, and located just to the north, was a single oval pit (1549), 1.9m long, 1.35m wide and 0.35m deep. Pottery (Find 7166) recovered from the upper fill (1551) of the pit has been identified as being of mid to late Neolithic date, similar to the Peterborough Wares found elsewhere on site. This area contained a number of undated features and it is possible that this pit was part of a group of features which may have extended to the west of the excavated corridor.

Pit Group 1265 (Fig. 16)

2.7.8 A distinct group of features was uncovered immediately north of Parsons Lane, including five probable post-pits (1256, 1266, 1272, 1284 and 1289), together with four small pits (1237, 1240, 1276 and 1281) and one shallow gully (1294). No cultural material was forthcoming from any of the features, although samples of charcoal from post-pits 1256 and 1289 have been submitted for radiocarbon dating.

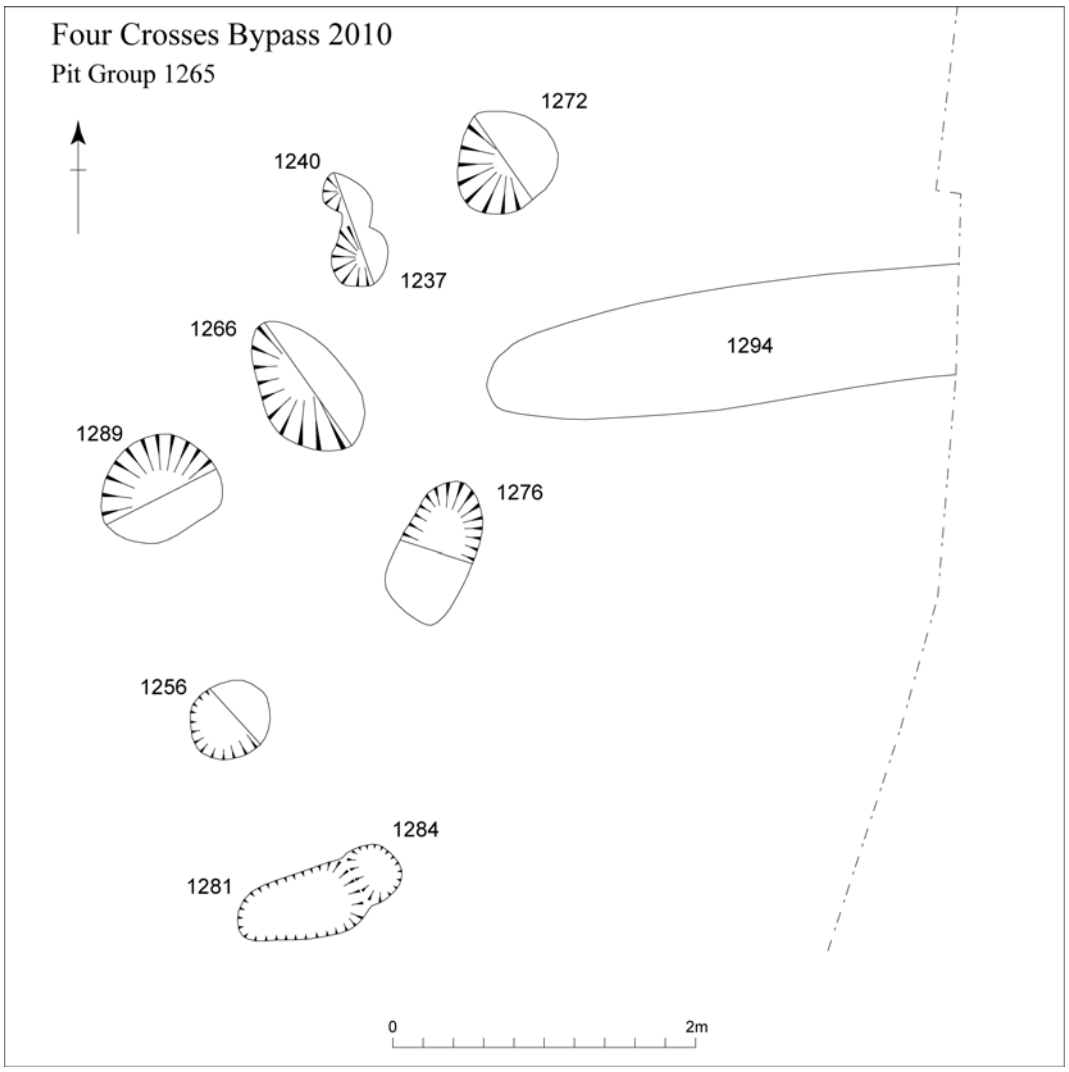

Fig. 16 Pit Group 1265

Medieval activity and Post-medieval

2.7.9 A small, pear-shaped corn drying kiln (1360) was revealed to the north of the pit alignment, measuring 3.5m by 1.55m overall and with a drying chamber at its north-north-eastern end (Fig. 17). There was no evidence for any associated structure, although the base of the flue and chamber contained significant quantities of charred grain which have produced radiocarbon dates indicating a period of use between cal. AD 1450-1640 (SUERC 34227-9 and 34235). Specialist analysis of the grain will be undertaken to identify the range of cereals being processed, and also perhaps the type of wood which was used for fuel.

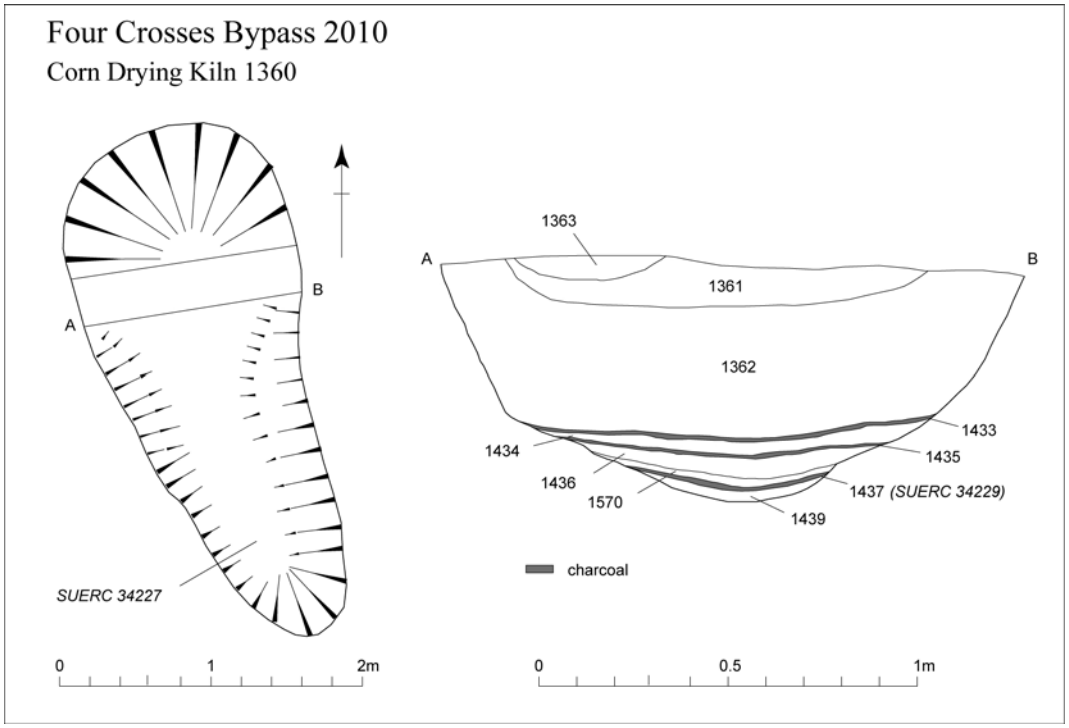

Fig. 17 Plan and section of Corn Drying Kiln 1360

2.7.10 A rectangular structure (1769) was also uncovered nearby, founded on six postholes (1330, 1331, 1336, 1338, 1350/1352 and 1394), and measuring 9m by 5m, and aligned north-north-west to south-south-east (Fig. 18-19). The postholes were around 0.45 to 0.55m across and 0.3m to 0.5m deep, and the posts, evidence of which survived as dense charcoal fragments, had been packed with burnt, angular stones. Numerous smaller postholes and shallow pits were also revealed, some of which may be associated with the structure, although there was no evidence for surviving floor levels or any obvious domestic activity. Radiocarbon dates from two of the post-holes (1330, 1331) indicating a period of use between cal. AD 1460-1640 (SUERC 34228, 34235) suggest that the structure was contemporary with the kiln.

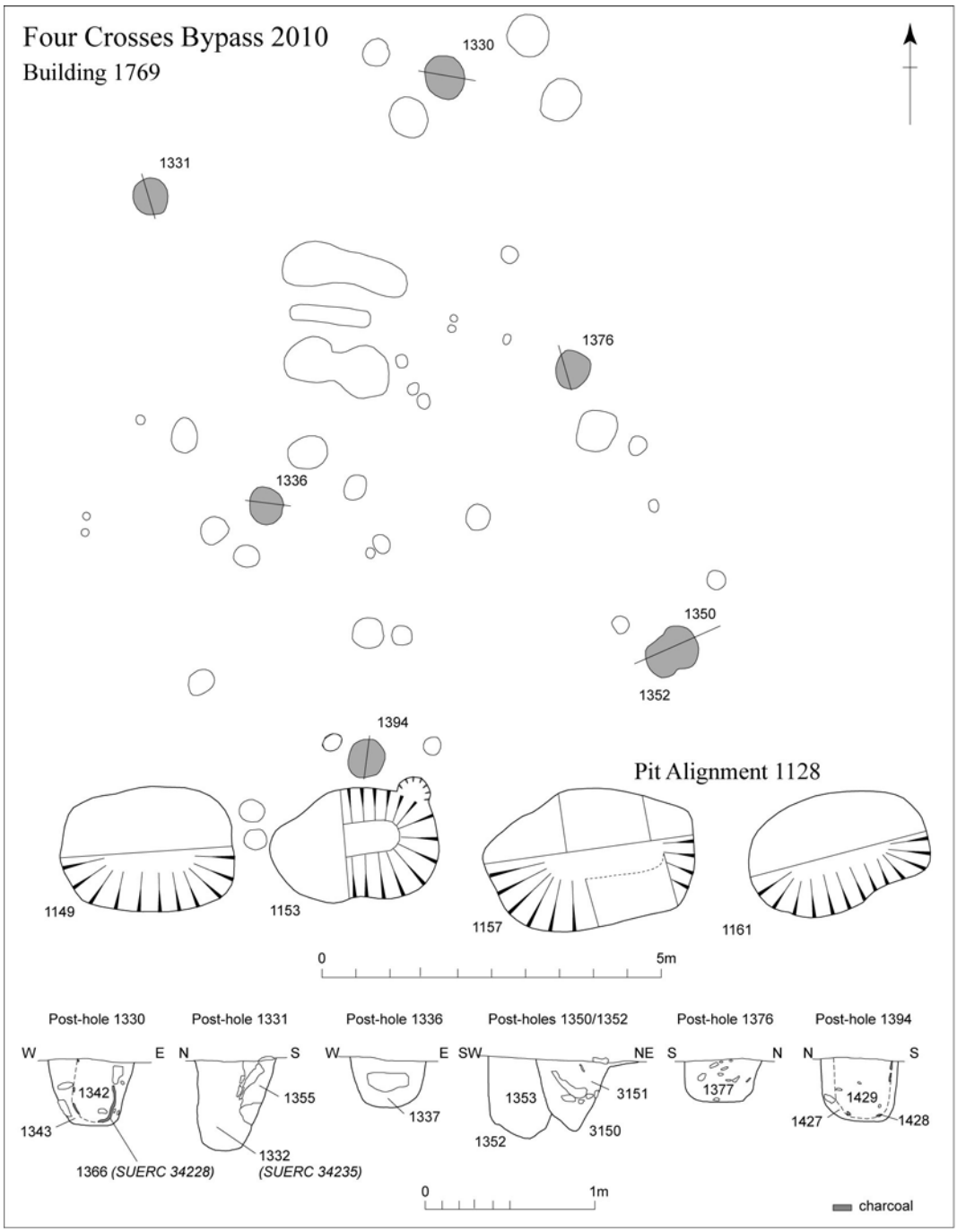

Fig. 18 Plan of Building 1769 and sections of the post-holes

2.7.11 The corn-drying kiln and the post-built structure may be associated with a series of linear boundary ditches, presumably forming enclosed fields, two of which (1106, 1661) contained sherds of medieval pottery, while a third (1102) contained pottery of late-medieval or early post-medieval date (Fig. 20). The kiln may therefore have been deliberately sited in the corner of one field. Two other linear ditches further to the north are probably of post-medieval date, as not only do they coincide with boundaries known to have been in existence in 1799, but pottery recovered from the fills is exclusively of 18th- and early 19th-century origin.

Fig. 19 The rectangular post-built structure (1769) viewed from the north.
Photo CPAT 3221-0068

2.7.12 Given the proximity of the northern end of the scheme to St Tysilio's Church it had been expected that evidence for medieval activity would be forthcoming. During the initial watching brief phase of the excavations, it was noted that several sherds of medieval pottery were recorded as surface finds from the general area north of the boundary ditch 1661.

2.7.13 Potential areas of medieval activity were then identified centred on a number of small dateable hearths (1388, 1426 and 1618). One area around hearth 1618 included a pit (1317) containing large sherds of medieval pottery and a possible sharpening stone (Find 7050). However, evidence for any settlement activity proved elusive and the only potential structure consisted of a group of four undated post-holes (1380, 1382, 1384 and 1386) forming a square around 2.1m across. The post-holes were part of a larger group of features centred around a pit (1474) that also contained medieval pottery. The group was located at the north-west corner of the site, just south of the church (Fig. 20).

Miscellaneous features

2.7.14 Numerous clusters of small pits and postholes were located on the peripheries of the aforementioned hearths and linear boundaries, although their form and distribution did not suggest any obvious pattern or dating.

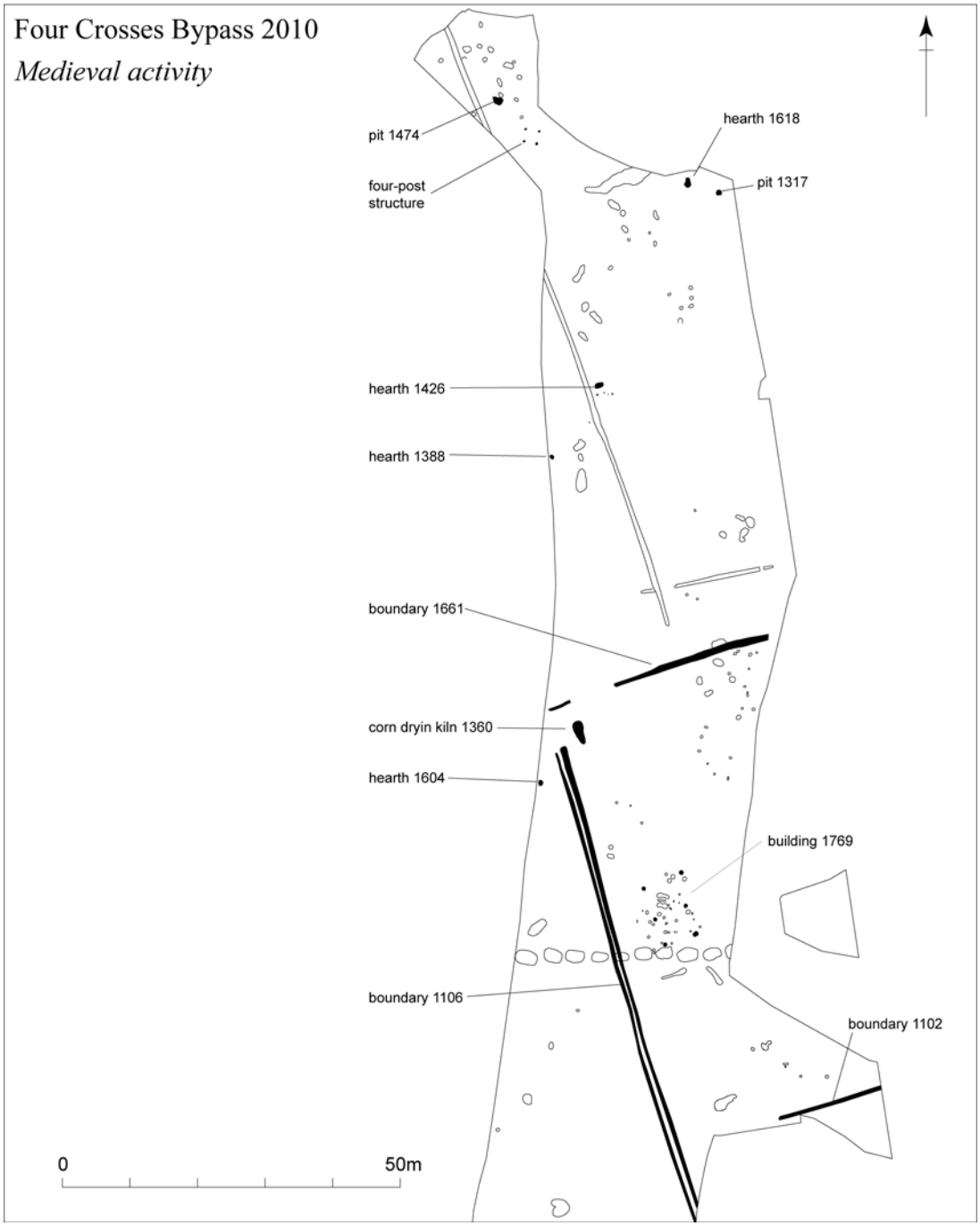

Fig. 20 Plan of medieval and post-medieval activity in Area C

2.8 **Area D**

2.8.1 A watching brief was maintained during soil stripping at the northern end of the scheme, on the east side of the A483. The projected line of Offa's Dyke runs along, or largely beneath the present road. It was clear that the road had been cut into the edge of the river terrace as it descended onto the flood plain of the Afon Vyrnwy, where in turn it had been constructed on an embankment. Consequently, soil stripping revealed no evidence for the course of Offa's Dyke. Stripping of an area further to the east did, however, reveal an

extensive area of peat, surviving up to a depth of 1m which had been partly sealed by material dumped over the edge of the river terrace. This included metal working debris, possibly suggesting smithing activity further to the south. The peat deposits suggest that the immediate area north of the river terrace would have been an expanse of wetland habitat bordering the Afon Vyrnwy.

3 THE FINDS

3.1 **Prehistoric Pottery** by Frances Lynch

Area B3

Find 6011, context 312, fill of pit 311. One abraded crumb of hard pottery, orange/grey in colour with a good deal of medium angular stone grit. Broadly similar to the Peterborough Ware, Find 6028.

Find 6013, context 312, fill of pit 311. One abraded crumb of pottery with a similar fabric to Find 6011.

Area B4

Find 6023, contexts 701/749, fill of ditch 700. One fragment of pottery with a hard, bright red surface and a brown core with frequent small, angular, quartz grit inclusions which break onto both surfaces. Similar to, but not the same as, the fabric of the Beaker vessel, Find 7123.

Find 6024, contexts 701/749, fill of ditch 700. One fragment and a small crumb similar to Find 6023 but with more varied grits and no visible brown core.

Area B5

Find 6028, context 807, fill of pit 806. Four sherds from a Peterborough (Mortlake) bowl, including three joining pieces from the rim and neck. The joining pieces make a segment of a bowl 220mm in diameter at the shoulder. The fabric is hard and apparently well-fired but has lost much of the outer surface; it contains frequent medium-sized angular stone grit including quart which is visible on the surface. The rim is triangular in cross section and is decorated on the outside with three grooves/ridges, seemingly without added impressions, except light diagonal nicks at the lower edge. On the more gently sloping inner side there are four shallower grooves containing regular impressions, but it is impossible to say how these were created. The concave neck has a line of sharp diagonal slashes above a ridged body of which only two ridges survive, the rest of the surface having been lost presumably at a badly joined coil. It is impossible to say whether there had been impressions or nicks on these ridges, but a pattern of sooting might suggest so.

Find 6053, context 981, fill of pit 982. Two segments of a flat base with a very slight foot, less than 100mm in diameter; the thickness of the base varies from 13-17mm between the two segments and the interior profile is more concave in one segment than the other, but they are undoubtedly the same pot. The fabric is poorly fired and contains a lot of stone grit (both angular and rounded), together with flecks of conspicuous red grog. The inner surface is a red-beige and the outer surface and core are dark grey. Where the outer surface survives it is smooth and without decoration. There are also two body sherds, 12 fragments and numerous crumbs in the same fabric. The narrow, thick, flat base and the heavy use of stone temper and the inclusion of grog would suggest that this pot belongs to the Peterborough tradition.

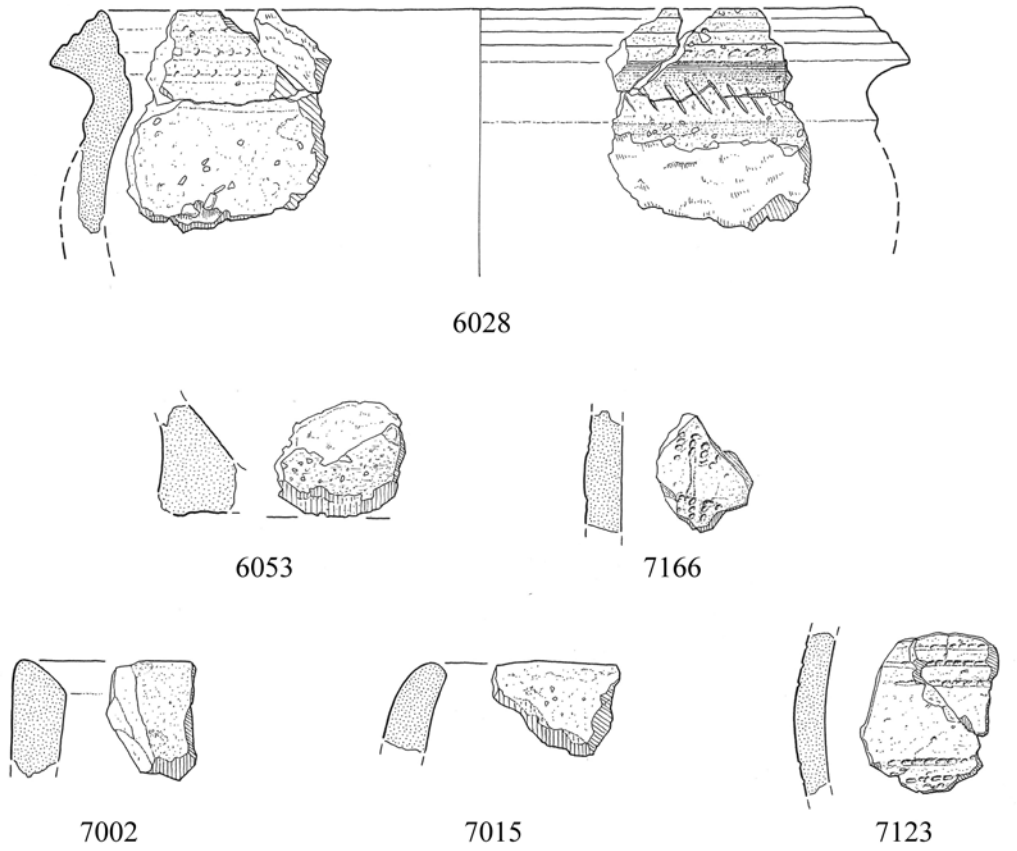

Fig. 21 Prehistoric pottery, scale 1:2

Area C Pit Alignment

Find 7000, context 1150, fill of pit 1149. A single sherd, possibly part of a rim, in a light, abrasive fabric with a brown core.

Find 7002, contexts 1130, fill of pit 1129. A rim sherd in hard, very compact uniformly grey fabric which is strangely light in weight. The surviving surfaces are well smoothed but abrasive and it is likely that there is much minute grit in it though this is difficult to see. The presumably upright rim is bevelled, but there is so little curvature that it is difficult to know whether the bevel is on the outside or inside. The vessel clearly had a large diameter, although the sherd is too small for this to be estimated.

Find 7007, context 1132, pit 1129. A small, featureless sherd of a similar fabric to Find 7002, but without the abrasive surface and a much browner core. There are some visible grits, mostly very small. This is unlikely to be part of the same pot, but probably belongs to the same tradition.

Find 7015, context 1155, fill of pit 1153. One rim sherd, together with four crumbs, from a large pot perhaps more than 300mm in diameter. The rim is rounded and curves inward. The fabric is hard and smooth but slightly abrasive on the outside, and mainly black throughout. It contains both minute glittering inclusions and some medium-sized angular pieces. It is clearly similar to the other pieces from the pit alignment.

There is also a single body sherd in a different fabric which is equally hard but containing larger angular grits which protrude through both surfaces. The outer colour is pale beige, the inner is dark grey. The section is equally divided between black and beige.

Find 7019, context 1147, fill of pit 1145. A small sherd in a hard beige/black fabric with small and medium grits and a very slightly abrasive outer surface. This is a less coarse version of the body sherd in Find 7015.

Find 7005, context 1193, Fill of pit 1133. One very abraded fragment of pottery in a hard, pink/grey, slightly sandy/abrasive fabric with sparse very tiny grits. Because of its colour this does not look much like the other sherds from the pit alignment, but it is equally compact and contains similar tiny grits.

Area C Miscellaneous

Find 7092, context 1429, fill of post-hole 1394, part of building 1769. One crumb of hard, brown/grey pottery with abrasive surfaces, in a compact paste with sparse minute grits. It is similar in fabric and colour to the material from the pit alignment, but the thinness is not found in those pots. It is most likely to be contemporary with these later prehistoric pots and does not look like the Neolithic material here.

Find 7130, unstratified. A small sherd of pottery in a hard, compact fabric, brown/black in colour with small angular grits. Similar to the pottery from the pit alignment.

Find 7123, context 1541, soil deposit forming the upper fill of a palaeochannel. A sherd and two small crumbs from the belly of a zoned Beaker decorated with neat comb stamping. The fabric is hard and well smoothed, brick red on the outside and dark grey inside, with a black, compact core with relatively sparse small angular grit. The diameter of the pot is 100-120mm (more probably 120mm) and the height perhaps 140mm.

Find 7166, context 1551, fill of pit 1549. A sherd and two crumbs of pottery in a hard, pink fabric with a black core and inner surface. The clay is compact and contains some small-medium stone grits. The surface is decorated with two rows of close-set cord impressions (either twisted or whipped – possibly both). There is little curvature but it probably comes from the body of a Mortlake bowl.

3.2 **Flints** by Philippa Bradley

3.2.1 Three pieces of worked flint were recovered from two contexts. Unfortunately it is difficult to date such sparse material but the flake and retouched flake are probably of Neolithic or Bronze Age date, which would not be out of place given their context of recovery (the central pit of the ring ditch).

Find 6059, Context 981, fill of prehistoric pit 982, Area B5. A small chip or flake fragment.

Find 6065, Context 1057, fill of central pit 913 within ring-ditch 898. A broken retouched flake fragment with minimal retouch along one edge, and distal and proximal breaks.

Find 6066, Context 1057, fill of central pit 913 within ring-ditch 898. A hard-hammer struck flake, broken at proximal end.

3.3 **Medieval Pottery** by Nigel Jones

3.3.1 The excavations produced only a small collection of medieval pottery which came almost exclusively from the northern end of Area C. A total of 32 sherds (477g) were recovered from a number of small pits and gullies, of which the most notable was pit 1317 which produced a small number of rim and body sherds from two cooking pots.

3.3.2 Although the fabrics showed some variations, particularly between the finer fabrics of the jugs/jars and the coarse fabric of the cooking pots. The pottery in general all appeared to be similar to the Siltstone Tempered Ware from Montgomery Castle, where a 14th-century date was suggested (Knight 1986, 8), as well as pottery from Pool Road, Montgomery, which produced cooking pots with similar rim forms to those from Four Crosses (Britnell and Jones 1989, 69). Based on the Clwyd-Powys Medieval Fabric Type Series (Courtney and Jones 1989), the sherds may be broadly assigned to Fabric MB, which is common throughout mid-Wales and is assumed to have been produced locally. This group typically has Ordovician or Silurian inclusions, characteristically with quartz, muscovite, biotite, micaceous sandstone, siltstone and fine-grained igneous inclusions. The only exception was a single, small sherd from a jug or jar in a sandy, white fabric.

3.4 **Worked Stone**

Find 7033, context 1225, fill of pit/post-hole 1223, Area C. A small fragment from a probable rotary quern made from a vesicular igneous rock, measuring 60mm by 56mm and 41-51mm thick. Upper and lower surfaces survive, together with one edge which is very slightly concave.

Find 7050, context 1318, fill of medieval pit 1317, Area C. A micaceous mudstone 175mm long, broken at either end, and 42mm thick. At its widest point the stone is 63mm wide, tapering to 25mm at one end and 38mm at the other. One edge is flat and smooth, with a polished surface and a number of incised marks, possibly having been used as a whetstone. The upper and lower surfaces each have two circular hollows 18mm to 22mm across and up to 7mm deep and there is another hollow on one edge. It is possible that the hollows are associated with use as a small pivot stone, although if this were so it is unclear why there are multiple hollows on several surfaces.

3.5 **Metal Detector Finds**

3.5.1 A metal detector survey was conducted by members of the Wrexham Heritage Society during the stripping of topsoil along the majority of the road corridor. The majority of finds were located with a hand-held GPS and a full catalogue is presented in Appendix 2. All of the identifiable finds were post-medieval in date, including a small number of 18th and 19th-century coins.

4 RADIOCARBON DATING

4.1 Sixteen samples were submitted for AMS dating to SUERC in East Kilbride, following the identification of charcoal by Archaeological Services, University of Durham. The calibrated dates are calculated by OxCal v3.10 (Bronk Ramsey 2005) using the IntCal09 atmospheric calibration curve with Atmospheric data from Reimer et al. (2004).

SUERC-34214
Context 750, fill of ditch fill 700
Material: charcoal, cherry
Conventional radiocarbon age: 2440±30 BP
Calibrated results at 68.2% probability:
740–410 BC
Calibrated results at 95.4% probability:
760–400 BC

SUERC-34215
Context 755, tertiary fill of ditch fill 700
Material: charcoal, Maloideae
Conventional radiocarbon age: 2765±30 BP
Calibrated results at 68.2% probability:
970–840 BC
Calibrated results at 95.4% probability:
1000–830 BC

SUERC-34216
Context 948, primary fill of ring ditch 898
Material: charcoal, alder
Conventional radiocarbon age: 3635±35 BP
Calibrated results at 68.2% probability:
2120–1940 BC
Calibrated results at 95.4% probability:
2140–1900 BC

SUERC-34217
Context 1057, cremation deposit in central pit 913 within ring ditch 898
Material: cremated bone
Conventional radiocarbon age: 3570±30 BP
Calibrated results at 68.2% probability:
1960–1880 BC
Calibrated results at 95.4% probability:
2030–1770 BC

SUERC-34218
Context 1059, fill of central pit 913 within ring ditch 898
Material: charcoal, hazel
Conventional radiocarbon age: 7595±35 BP
Calibrated results at 68.2% probability:
6465–6430 BC
Calibrated results at 95.4% probability:
6500–6400 BC

SUERC-34219
Context 810, primary fill of ditch 809
Material: charcoal, hazel
Conventional radiocarbon age: 2540±35 BP
Calibrated results at 68.2% probability:
800–590 BC
Calibrated results at 95.4% probability:
800–540 BC

SUERC-34223
Context 808, primary fill of pit 806
Material: charcoal, hazel
Conventional radiocarbon age: 5100±30 BP
Calibrated results at 68.2% probability:
3960–3810 BC
Calibrated results at 95.4% probability:
3970–3790 BC

SUERC-34224
Context 1131, fill of pit 1129, part of pit alignment
Material: charcoal, hazel/alder
Conventional radiocarbon age: 2420±30 BP
Calibrated results at 68.2% probability:
540–400 BC
Calibrated results at 95.4% probability:
750–400 BC

SUERC-34225
Context 1130, upper fill of pit 1129, part of pit alignment
Material: charcoal, alder
Conventional radiocarbon age: 2420±30 BP
Calibrated results at 68.2% probability:
790–560 BC
Calibrated results at 95.4% probability:
800–530 BC

SUERC-34226
Context 1209, mid fill of pit 1129, part of pit alignment
Material: charcoal, alder
Conventional radiocarbon age: 2820±30 BP
Calibrated results at 68.2% probability:
1010–925 BC
Calibrated results at 95.4% probability:
1070–890 BC

SUERC-34227
Context 1425, uppermost fill of drying kiln 1360
Material: charcoal, oat grain
Conventional radiocarbon age: 355±30 BP
Calibrated results at 68.2% probability:
AD 1470–1630
Calibrated results at 95.4% probability:
AD 1450–1640

SUERC-34228
Context 1366, fill of post-hole 1330
Material: charcoal, oak
Conventional radiocarbon age: 340±30 BP
Calibrated results at 68.2% probability:
AD 1490–1640
Calibrated results at 95.4% probability:
AD 1460–1640

SUERC-34229
Context 1437, secondary fill of drying kiln 1360
Material: charcoal, rye grain
Conventional radiocarbon age: 355±30 BP
Calibrated results at 68.2% probability:
AD 1470–1630
Calibrated results at 95.4% probability:
AD 1450–1640

SUERC-34233
Context 1155, mid fill of pit 1153, part of pit alignment
Material: charcoal, hazel
Conventional radiocarbon age: 2815±30 BP
Calibrated results at 68.2% probability:
1005–925 BC
Calibrated results at 95.4% probability:
1060–890 BC

SUERC-34234
Context 1219, mid fill of pit 1153, part of pit alignment
Material: charcoal, hazel
Conventional radiocarbon age: 5020±35 BP
Calibrated results at 68.2% probability:
3940–3710 BC
Calibrated results at 95.4% probability:
3950–3700 BC

SUERC-34235
Context 1332, fill of post-hole 1331
Material: charcoal, oak
Conventional radiocarbon age: 385±30 BP
Calibrated results at 68.2% probability:
AD 1440–1620
Calibrated results at 95.4% probability:
AD 1440–1640

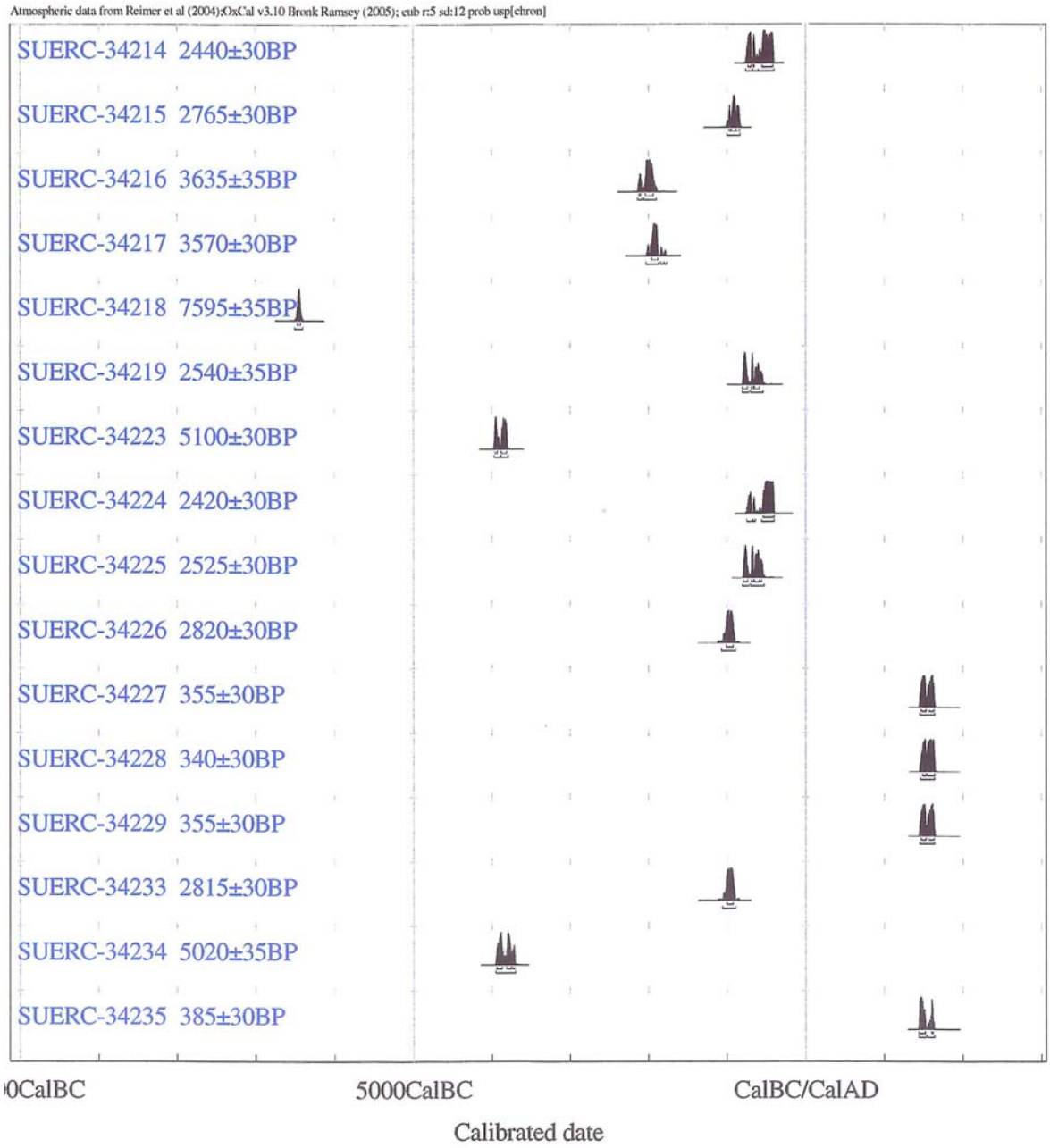

Fig. 22 Calibration of radiocarbon dates

5 CONCLUSIONS

5.1 The construction of the A483(T) Four Crosses Bypass in northern Powys afforded a rare opportunity to examine an extensive area in the vicinity of a nationally important group of prehistoric burial monuments. Earlier phases of archaeological assessment and evaluation had already demonstrated the presence of potentially significant archaeology along the 1km-long road corridor, and initial excavations were focused on two areas, one at either end of the route. However, the intensive archaeological monitoring of soil-stripping operations along the whole of the route revealed a wealth of buried archaeological features which were previously unrecorded. The excavations have thus uncovered evidence for multiperiod activity ranging in date from the Neolithic to the 19th century.

Prehistoric activity

5.2 The excavations produced limited evidence for Neolithic activity in the form of sherds from several Peterborough Ware vessels which were recovered from four pits, two immediately north and south of the ring-ditch, one at some distance to the south, and one adjacent to and north of the pit alignment. The function of the pits is unknown, although the dating, at around 3400 – 2500 BC, is broadly contemporary with the earliest phase of monument building at Four Crosses (Warrilow *et al*. 1986, 83).

5.3 The Four Crosses area is well known for its extensive round barrow cemetery, most of which have been almost entirely levelled by the plough and survive as characteristic ring-ditches, with little or no surviving mound material. Prior to the recent excavations the western limit of the cemetery appeared to lie roughly along the A483, with 25 ring-ditches identified through a combination of aerial reconnaissance and excavation, occupying an area largely between Domgay Lane and the floodplain of the River Vyrnwy. A previously unknown ring-ditch was identified during soil stripping, of which just over half lay within the road corridor. This had an external diameter of around 23m and was defined by a relatively small ditch. The central pit contained no skeletal remains, although a small quantity of cremated bone was concentrated in a limited area towards one end, possibly in association with two small flints. Radiocarbon dates from the bone and charcoal within the ditch indicate a period of use between 2140-1770 cal. BC.

5.4 The excavation of eight ring-ditches within the Four Crosses complex by CPAT in the 1980s identified four main phases of construction, starting in the Neolithic, around 3200 BC and continuing to around 1600 BC. The dates from the recently excavated ring-ditch are broadly comparable with the latest phase of monument building which consisted of more massive barrows associated with stake circles, dated to around 1900-1750 BC (Warrilow *et al*. 1986, 83-4).

5.5 The northern end of the road corridor crossed the line of a pit alignment which forms part of an extensive field system at Four Crosses, covering an area of about 650m by 1900m, and lying on the gravel terrace bordering the Vyrnwy-Severn floodplain, with further examples to the north of the Vyrnwy, near Llanymynech. Several sections of pit alignment have now been excavated, including three investigated by CPAT during the 1980s (Owen and Britnell 1989) and, more recently, a line of 23 pits by Birmingham Archaeology (Halsted 2010), and a single and a double row by Cotswold Archaeology, which are currently unpublished. The Four Crosses pit alignments are closely comparable with other systems with a widespread distribution in the Midlands, north-east England and eastern Scotland. Pit alignments are rare in other areas of Wales, although this may in part be due to less favourable conditions for the formation of cropmarks.

5.6 In common with the other excavated examples at Four Crosses for which information is currently available, the recently excavated pits appear to have been infilled naturally, perhaps over a protracted period. The uppermost fills, however, suggest more rapid infilling, whether as a deliberate act or through a period of intensive ploughing. Radiocarbon dates from the middle and upper fills of two pits suggest activity between 1070 and 400 cal. BC, although these do not provide evidence for the date at which the pits were excavated but rather indicate that a degree of infilling had already taken place by the late Bronze Age or early Iron Age. The excavations by Birmingham Archaeology in 2007, on the south side of Domgay Lane, recovered a small collection of Early Bronze Age pottery from several of the pits, as well as two flint knives which are thought to be Late Neolithic of Early Bronze Age in date. Elsewhere in Britain a range of dates have been proposed for pit alignments, ranging from the late Neolithic to the early medieval period, but the most recent assessment for the central Welsh Marches anchors them firmly in the early first millennium BC (Wigley 2007).

Medieval Post-medieval activity

5.7 Evidence for medieval activity is currently limited to a number of small pits in the area to the south of St Tysilio's church, although no direct evidence was produced for medieval dwellings. A small corn drying kiln was uncovered close to a rectangular, post-built structure, both of which have been dated to around AD 1450-1640 and appear to be associated with several linear boundaries demarcating enclosed fields

5.8 Later activity was represented by a group of three brick kilns at the southern end of the scheme, each of which was of a type known as a clamp kiln, as well as a number of adjacent clay pits. This type of kiln was common before the advent of large-scale, industrial brick making. Excavations in this area also identified roadside ditches flanking a predecessor of Canal Road which is likely to have been in use until this area was enclosed in 1799. The kilns appear to have been arranged alongside the road, on what would have been common land. Although the kilns have not been dated they are likely to belong to the late 18th century, possibly being associated with the construction of the Montgomeryshire Canal in the late 1790s.

5.9 Post-excavation analysis and specialist reporting is still on-going and further radiocarbon dates are anticipated for the main features. A report synthesising the results of the excavations will be prepared in due course for submission to *Archaeologia Cambrensis*. The site archive will be deposited with the regional Historic Environment Records, held by CPAT in Welshpool, while the finds will be deposited with the Powysland Museum, also in Welshpool.

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APPENDIX 1
Site Archive summary

context record forms:
Site A nos 1-204
Site B1 nos 600-643
Site B3 nos 700-767
Site B4 nos 600-643
Site B5 nos 800-1085
Site C nos 1100-1768

38 watching brief daily visit forms
context register
levels register
photographic register
drawings register
finds register

34 A1 site drawings
6 A2 site drawings
27 A3 site drawings
373 A4 site drawings

Digital photographs:
Films 3165 to 3171

Finds register

Appendix 2
Finds from the Metal Detector Survey

Copper Alloy Objects

Object	Find Spot
Brooch Fragment, post medieval	SJ2677518522
Buckle fragment, post medieval	SJ2688919801
Buckle fragment, post medieval	SJ2678018589
Button fragment, post medieval	SJ2669819304
Button, post medieval	B4
Button, post medieval	B4 - spoil heap
Button, post medieval	SJ2681118740
Button, post medieval	SJ2681118741
Button, post medieval	SJ2681118742
Button, post medieval	SJ2681118743
Cartwheel Penny (1797)	SJ2678218552
Combustion engine component, modern	B3
Combustion engine component, modern	SJ2678918566
Compression fitting, modern	B4
Cylindrical container, modern	SJ2678918566
Decorative Mount, post medieval	SJ2678818541
Draw Handle Fragment, post medieval	SJ2688719266
Furniture fitting, post medieval	B3
Furniture fitting, post medieval	none recorded
George III counterfeit shilling	SJ2669819304
George III halfpenny	SJ2688719266
George III Penny	SJ2671718562
George IV halfpenny	SJ2670019311
George V Penny (1920)	B4
Halfpenny - C19th - early C20th	SJ2672419272
Love token - bent Victoria half penny	SJ2681018575
Marshall Type V no. viii or xii Buckle Chape and Tongue. 1720 onwards	SJ2685219276
Military Button, post medieval	SJ2677818557
Pipe fitting, modern	SJ2682818728
Plain Shoe Buckle Type V (1750-90)	B3
Thimble, post medieval	SJ2688719266
Thimble, post medieval	SJ2682418880
Victoria 1876 penny	SJ2677418634
Victoria farthing	SJ2678518527
Victoria halfpenny	B4
Victoria halfpenny and button	SJ2669819304
Victoria halfpenny?	SJ2669819304
Whistle, modern	SJ2678418542

Iron Objects

Object	Find Spot
Harness Buckle, post medieval	SJ2679218594
Harness Buckle, post medieval	SJ2673318534

Harness Buckle, post medieval	SJ2678318530
Harness fitting, post medieval	no location recorded
Harness Ring, post medieval	SJ2678318508
Harness Ring, post medieval	SJ2678018523
Nails, post medieval	SJ2672419272
Oval Patten, 17th –18th century	SJ2688719266
Washer, modern	SJ2678818551

Lead objects

Object	**Find Spot**
Bag seal, modern	SJ2678218562
Bag seal, modern	SJ2688919801
Lead casting, post medieval	SJ2670019311
lead gas pipe, modern	B3
Lead waste, unknown date	B4
Lead weight?, post medieval	SJ2678318596
Pot mend, modern	SJ2688719266

O*bjects of uncertain metal*

Object	**Find Spot**
casting waste, date unknown	SJ2678018586
Nut, modern	SJ25673919249
Spoon Handle, modern	SJ2678818540
Teaspoon, modern	SJ2678018612
Watch back fragment, modern	SJ2677418633
Salt Shaker Lid, Modern	SJ2679118562