Cotswold Archaeology

South Wales Gas Pipeline Project
Site 20.08
Land West of Pengoilan
Llanfihangel Aberbythych
Carmarthenshire

Archaeological Excavation

for

Rhead Group

on behalf of

National Grid

CA Project: 9150
CA Report: 13287
Event: DAT102846

December 2013

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GLOSSARY

CA – Cotswold Archaeology

CAP – Cambrian Archaeological Projects

CPAT – Clwyd Powys Archaeological Trust

DAT – Dyfed Archaeological Trust

GGAT - Glamorgan Gwent Archaeological Trust

FTP – Felindre to Brecon gas pipeline

HER – Historic Environment Record

MHA – Milford Haven to Aberdulais gas pipeline

NAL – Network Archaeology Ltd

NLMJV – Nacap Land & Marine Joint Venture

UPD – Updated Project Design

SUMMARY

Project Name:	South Wales Gas Pipeline Project
Location:	Land West of Pengoilan, Llanfihangel Aberbythych, Carmarthenshire
NGR:	SN 6019 2108
Type:	Excavation
Date:	26 June–16 July 2007
Location of Archive:	To be deposited with RCAHMW (original paper archive) and Carmarthenshire Museum (material archive and digital copy of paper archive; accession number CAASG 2008.0282)
Site Code:	MHA06

An archaeological excavation was undertaken by Cambrian Archaeological Projects (CAP) during groundworks associated with construction of gas pipelines (part of the South Wales high pressure gas pipeline scheme) between Milford Haven and Aberdulais, and Felindre and Brecon, which were conducted between 2005 and 2007.

A rectangular pit containing burnt stones and a sherd of Neolithic or Bronze Age pottery was identified. The function of this pit is not certain, although it is possible that it was a trough associated with hot stone technology. Further early prehistoric activity on site was attested by Mesolithic and Neolithic flints, however these were all residual in later contexts, or unstratified.

A penannular ditch, probably the remains of a roundhouse, was found and this together with several small pits indicates the presence of a Late Iron Age/Early Roman settlement, the full extent of which was probably not exposed. A Roman glass counter was recovered, although it is not known whether or not this was a residual find.

Several possibly medieval features were also present. The dates and functions of these were unclear however, although one contained a stone comparable to medieval linen rubbing stones found elsewhere. An undated possible enclosure was found. It was not clear whether this enclosure related to the roundhouse settlement, the possibly medieval features, or to another phase of activity entirely. A small number of undated features were also found.

1. INTRODUCTION

1.1 NACAP Land and Marine Joint Venture (NLMJV), on behalf of National Grid, commissioned RSK Environment (part of the RSK Group) to manage the archaeological works (non-invasive surveys, desk based assessment, evaluation, watching brief, and open area excavation) on a 216km-long section of pipeline from Milford Haven (Pembrokeshire) to Brecon (in Powys). The high pressure gas pipeline (part of the 316km-long pipeline route from Milford Haven to Tirley in Gloucestershire) was required to reinforce the gas transmission network. The archaeological work performed in advance of this pipeline was undertaken in a number of sections by a number of archaeological companies. The westernmost section of 122km, from Milford Haven to Aberdulais, was investigated by CA (then Cotswold Archaeological Trust) during 2005–2007 with some additional excavation work carried out by CAP. The section of 89km, from Felindre to Brecon was investigated by CA during 2006–2007 and CAP during 2007. Assessment reports on the works were completed in January 2012 (NLM 2012a, 2012b) and the current reporting stage was commissioned in February 2013.

1.2 In June and July 2007 CAP carried out an archaeological excavation at Site 20.08, Land West of Pengoilan, Llanfihangel Aberbythych, Carmarthenshire (centred on NGR: SN 6019 2108; Fig. 1). The objective of the excavation was to record all archaeological remains exposed during the pipeline construction.

1.3 The excavation was carried out in accordance with professional codes, standards and guidance documents (EH 1991; IfA 1999a, 1999b, 2001a, 2001b and IfA Wales 2008). The methodologies were laid out in an *Archaeological Framework Document* (RSK 2007) and associated *Written Statements of Investigation* (WSIs) and *Method Statements*.

The site

1.4 The site was located just below the summit of a low prominence bordering the River Towy floodplain (Fig. 1). The Towy valley at this point is broad and flat and the site is situated at approximately 40m AOD. The underlying solid geology of the area is mapped as the Abergwilli Mudstone Formation of the Ordovician Period overlain by superficial Quaternary Till (BGS 2013).

Archaeological background

1.5 No archaeological remains were identified within the site during the preliminary *Archaeology and Heritage Survey* (CA 2006). The Roman road traversing the Towy Valley (CA 2006, map 5) ran 1.8km south-east of the site. Another road on the opposite side of the valley, 1.75km north of the site, is thought to be Roman in date, although an excavation at pipeline Site 22.02 could not confirm this (CA 2013). Later remains include the ruins of the medieval Dynefor Castle (PRN880) which lie 1.2km north-east of the site.

Archaeological objectives

1.6 The objectives of the archaeological works were:-

- to monitor groundworks, and to identify, investigate and record all significant buried archaeological deposits revealed on the site during the course of the development groundworks; and
- at the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the project and the archaeological conclusions that can be drawn from the recorded data.

Methodology

1.7 The fieldwork followed the methodology set out within the *WSI* (NLM 2006). An archaeologist was present during intrusive groundworks comprising stripping of the pipeline easement to the natural substrate (Fig. 1).

1.8 The post-excavation work was undertaken following the production of the UPD (GA 2012) and included re-examination of the original site records. Finds and environmental evidence was taken from the assessment reports (NLM 2012b) except where the UPD recommended further work, in which case the updated reports were used. The archaeological background to the site was assessed using the following resources:-

- the *Archaeology and Heritage Survey* which was undertaken in advance of the pipeline construction and which examined a 1km-wide corridor centred on the pipeline centre line, including the then existing HER record (CA 2006);
- Dyfed Archaeological Trust HER data (received July 2014); and
- other online resources, such as Google Earth and Ordnance Survey maps available at http://www.old-maps.co.uk/index.html.

All monuments thus identified that were relevant to the site were taken into account when considering the results of the fieldwork.

1.9 The archive and artefacts from the watching brief are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the artefacts will be deposited with Carmarthenshire Museum under accession number CAASG 2008.0282, along with a digital copy of the paper archive. The original paper archive will be deposited with the RCAHMW.

2. RESULTS (FIGS 2–4)

2.1 This section provides an overview of the excavation results; detailed summaries of the recorded contexts, finds and environmental samples (palaeoenvironmental evidence) are to be found in Appendices A, B and C. Full, original versions of the specialist reports are contained within the archive. The natural geological substrate (208105), comprising orange-red clay silt, was cut by ditches, pits and postholes. These features were found to the north and south of an existing field boundary.

Neolithic/Bronze Age

2.2 Elongated pit 208167 was located in the southern part of the site within the area bounded by an undated enclosure ditch (Fig. 4). The pit was 2.4m long, 0.45m wide and 0.25m deep and contained charcoal-rich lower fill 208175 overlain by dark grey sandy clay 208156 which included large quantities of burnt stone, charcoal, and hazelnut shell fragments along with a single small sherd of Neolithic or Bronze Age pottery.

Late Iron Age/Early Roman

2.3 A small group of Late Iron Age/Early Roman features was found to the north of the existing field boundary (Fig. 3). These included a penannular ditch and three pits. Penannular ditch 208111 consisted of a V-profiled cut 0.15m wide and 0.2m deep and enclosed an area 14.5m in diameter. It included a 14m-wide north-facing entrance apparently defined by postholes 208133 and 208160, but it is possible that at least part of this gap was due to truncation given the shallow depth of the surviving ditch. A possible re-cut (208119) was present along the southern part of

the ditch circuit and the ditch was filled by grey silty clay 208118. This ditch was most probably part of a roundhouse.

2.4 The three pits were all found within the area enclosed by the penannular ditch. Pit 208114 was sub-rectangular in plan, 1.6m long, 0.4m wide and 0.18m deep with steep sides and a flat base. It contained a single dark brown sandy fill (208115) which included frequent burnt stones and five sherds of Late Iron Age/Early Roman pottery. Samples from this fill contained large quantities of charcoal and charred hazelnut shells. Pit 208120 was sub-rectangular in plan, 0.65m long and 0.15m deep with steep sides and a flat base. It was filled with silty clay deposits which contained small amounts of charcoal and had been truncated on its east side by pit 208124, which was oval in plan, 0.9m long, 0.6m wide and 0.2m deep. This pit contained unidentifiable burnt animal bone. Although pits 208120 and 208124 were undated by finds, their location in plan may indicate that they were associated with the penannular ditch.

Medieval

2.5 A small group of features which may have been medieval in date was present to the south of the existing field boundary (Fig. 4). Pit 208174 was cut into the upper fill of undated enclosure ditch 208107 (see below). It was circular in plan, 0.6m wide and 0.2m deep with vertical sides and a flat base. Its lower fill, 208173, was a thin, charcoal-rich deposit containing hazelnut shell fragments and a bread wheat-type cereal grain. Bread wheat was widely used from the early medieval period onwards and later prehistoric use is also known. However, whilst the presence of a single grain does not provide storing dating evidence, when taken with the pit's proximity to more probably medieval features (see below), medieval dating is perhaps more likely than late prehistoric.

2.6 To the east, a small curvilinear ditch (208182) terminating at two pits was found. Ditch 208182 was 6.75m long, 0.2m wide and 0.15m deep with steep sides and a flat base. Its fill (208110) was charcoal-rich and contained a pebble with a polished surface, comparable in form to early medieval or later linen smoothers, but which could not be securely dated. The ditch also contained flints, including microdebitage and shatter. The northern end of the ditch terminated at pit 208157. This small pit was circular in plan with a bowl-shaped profile. It was filled with charcoal-rich red clay 208109, and samples from this yielded hazelnut shell fragments and cereal grains, including one that was poorly preserved and was possibly either a hulled

wheat or rye. The latter would confer a medieval date, however as the grain was not conclusively identifiable to species, this could not be ascertained with any confidence (Appendix C). The fill also contained a single, possibly residual flint chip. A second pit/posthole (un-numbered) was present at the southern end of the ditch.

Post-medieval/Modern

2.7 Parallel ditches 208100 and 208102 were located to the south of the modern hedge and were north-west/south-east aligned, 0.7m apart (Fig. 4). They comprised cuts with moderately steep sides and concave bases and were up to 1m wide and 0.2m deep. Both had filled naturally and contained no finds. These were hedge-bank ditches forming a field boundary that was depicted on the 1st Edition OS map of Carmarthenshire (1884–1886) and was present up to the 1987 Edition.

Undated

2.8 Curvilinear ditches 208107 and 208108 were found within the southern part of the site. The easternmost ditch (208108) continued beyond the excavation but the westernmost ditch (208107) seemed to terminate beneath post-medieval/modern ditch 208100, although this stratigraphic relationship was not tested by excavation and there was no depiction of a ditch adjoining the hedge-bank on historic mapping. Although only partially exposed within the site, these features perhaps defined an enclosure with a 2.5m-wide north-east facing entrance. The ditches were up to 1.2m wide and 1m deep with steep, V-shaped profiles (Fig. 4, section AA). They had filled naturally and monolith samples through their fills indicated that the lowest fills had been subject to seasonal waterlogging and may have formed quite rapidly, but that the upper fills had accumulated slowly enough for a layer of turf to form (Appendix C). Samples from the upper fills yielded poorly preserved cereal grains, including hulled barley. The upper fills also contained four struck flints, including an Early Neolithic scraper, two Mesolithic or Early Neolithic flakes and one piece that was not closely dateable, but it is not known whether this material was contemporary with the ditch or was residual.

2.9 Just inside the enclosure entrance was pit 208183. This was oval in plan with gently sloping sides and a concave base and was almost entirely filled by a large oval-shaped stone (208176). This stone was scorched and was not recovered for examination, although it was noted in the field that it may have been a quern or grinding stone. A few postholes were located near the edges of the enclosure ditch; all were undated and there was no recognisable pattern to their distribution.

2.10 A further undated feature, ditch 208153, was found to the north of the existing field boundary and immediately north-west of penannular ditch 208111 (Fig. 3). It was aligned north-east/south-west and was 6m wide and 0.4m deep with gently sloping sides and a concave base, although it was somewhat irregular in plan. Its primary silt 208154 was overlain by a deposit of burnt stones within a dark grey silty clay matrix, 208136. This fill included a Neolithic flake and a Roman glass counter. The flake was probably residual but it is unclear whether the counter dates the ditch or was also residual. This fill was in turn covered by 208155, a thin layer of silty clay. Given the uncertainty over the provenance of the Roman glass counter, this ditch is best regarded as undated and its relationship to the penannular ditch was not established. Rackham in Appendix C suggests that this 'ditch' could in fact have been an erosion channel resulting from seasonal run-off and also suggests that this could have formed during the medieval period.

Discussion

Early prehistoric

2.11 The dating of features on site is problematic due to the small finds assemblage recovered. Much of the flint assemblage may have been residual, but does indicate a background of early prehistoric activity, as does the Neolithic or Bronze Age pottery sherd recovered from pit 208167. The size, shape and fill of pit 208167 are characteristic of troughs associated with burnt mounds elsewhere along the pipeline. There was no evidence of a mound within the site but it is possible that any former mound had been entirely denuded, or that heating activities in this instance were not of sufficient intensity to have produced a mound of debris.

Late Iron Age/Early Roman

2.12 The penannular ditch and the pits enclosed by it reveal that the site was occupied during the Late Iron Age/Early Roman period. The presence of postholes within the roundhouse ditch suggests that it had formed the foundation trench for the roundhouse wall, rather than having been an external drip gully. It is possible that the undated D-shaped enclosure was part of this occupation since it contained debris characteristic of occupation sites (See Appendix C), although this must remain as speculation on the basis of the current evidence. Given the narrow confines of the pipeline corridor, further parts of this settlement may await discovery.

Medieval

2.13 The small group of features tentatively assigned to the medieval period are in fact poorly dated and are difficult to interpret. It is possible that they related to some sort of production process, but, aside from the possible linen smoother, the nature of any such process is unclear. Although assigned a medieval date, largely on the typology of the polisher, these features might instead have been associated with the Late Iron Age/Early Roman settlement.

3. PROJECT TEAM

Fieldwork was undertaken by CAP. This report was written by Christopher Leonard with comments by Jonathan Hart and illustrations prepared by Daniel Bashford. The archive has been compiled by Jonathan Hart and prepared for deposition by Hazel O'Neill. The fieldwork was managed for CAP by Kevin Blockley and the post-excavation was managed for CA by Karen Walker.

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APPENDIX A: CONTEXT DESCRIPTIONS

Context	Fill of	Interpretation	Description	L (m)	W (m)	Depth (m)	Spot date
208100		Ditch	NE/SW aligned. Linear in plan with moderately steep sides and concave base	1.0	1.0	0.15	
208101		Ditch	Part of 208100	1.0	0.85	0.1	
208102		Ditch	NE/SW aligned. Linear in plan with gently sloping sides and concave base	1.0	1.0	0.2	
208103	208102	Ditch fill	Mid red-brown sand	1.0	1.0	0.2	
208104		Subsoil	Light grey-brown sandy silt. common sub-angular stones			0.2	
208105		Natural	Light orange-red clay silt				
208106	208100	Ditch fill	Mid red-brown sand	1.0	1.0	0.15	
208107		Ditch	Curvilinear in plan with steep sides and concave base				
208108		Ditch	Ditch terminus. Curvilinear in plan with steep sides and concave base	1.0	1.2	0.75	
208109	208157	Pit fill	Red clay. Occasional charcoal flecks	0.45	0.4	0.15	
208110	208182	Ditch fill	Mid grey-brown clay. Occasional charcoal and small stones	1.0	0.2	0.15	
208111		Gully	Curvilinear in plan; V-shaped with steep sides		0.15	0.15	
208112		Posthole cut/fill	Circular in plan with flat base. filled by mid grey-brown silty sand	0.35	0.35	0.05	
208113	208114	Pit fill	=208115	0.6	0.4	0.3	
208114		Pit	Rectangular in plan with steep sides and flat base	1.6	0.4	0.3	IA/ Roman
208115	208114	Pit fill	Dark brown-grey sandy silt. Common medium and large angular stones	0.7	0.4	0.3	
208116		Subsoil	=208104			0.3	
208117		Natural	=208105				
208118	208111	Gully fill	Light orange-grey silty clay. Occasional smack, angular stones		0.15	0.15	
208119		Gully	Part of 208111		0.4	0.1	
208120		Pit	Oval in plan with steep sides and flat base	0.65	>0.2	0.15	
208121	208120	Pit fill	Upper fill: light orange-grey silty clay. Occasional small stones	0.65	>0.2	0.10	
208122	208120	Pit fill	Lower fill: mid orange-grey sandy silt. Frequent charcoal flecks.	0.65	>0.2	0.05	
208123	208111	Gully fill	=208118				
208124		Pit	Oval in plan with steep sides and flat base	0.9	0.6	0.2	
208125	208124	Pit fill	Upper fill: mid red-grey clay silt. Occasional small stones and charcoal flecks	0.9	0.1	0.2	
208126			Context not used				
208127			Context not used				
208128	208108	Ditch fill	Upper fill: light orange-brown clay. Occasional stones		1.2	0.45	Meso/ EN
208129		Field drain			0.3	0.15	
208130		Ditch	Part of 208100		1.05	0.3	
208131		Ditch fill	=208106		1.05	0.3	
208132	208129	Field drain			0.3	0.15	

208133		Posthole	Circular in plan with steep sides and a tapered base	0.15	0.15	0.1	
208134	208133	Posthole fill	Light orange-grey silty clay. Occasional small stones	0.15	0.15	0.1	
208135	208124	Pit fill	Lower fill: mid orange-grey silty clay. Occasional small stones and charcoal flecks	0.9	0.6	0.2	
208136	208153	Ditch fill	Frequent small angular burnt stones within a dark grey silty clay matrix		1.0	0.2	
208137	208119	Gully fill	=208118		0.4	0.1	
208138			Context not used				
208139	208107	Ditch fill	=208149		1.6	0.25	
208140	208108	Ditch fill	Lower fill: grey clay. Occasional charcoal		0.7	0.3	
208141	208107	Ditch fill	=208150		1.4	0.2	
208142	208107	Ditch fill	=208151		0.6	0.35	
208143	208107	Ditch fill	=208152		0.55	0.5	
208144		Posthole cut/fill	Circular in plan with steep sides and flat base. Filled by dark grey-black silty sand	0.1	0.1	0.35	
208145	208107	Ditch fill	=208150		1.15	0.4	
208146	208107	Ditch fill	=208151		0.9	0.45	
208147	208107	Ditch fill	=208152		0.7	0.55	
208148		Posthole cut/fill	Circular in plan with vertical sides and flat base. Filled by mid grey-brown silty clay	0.1	0.1	0.1	
208149	208107	Ditch fill	Mid brown-grey silty sand		1.2	0.1	
208150	208107	Ditch fill	Grey silty clay mottled with orange flecks		1.25	0.2	
208151	208107	Ditch fill	Light grey clay		0.85	0.25	
208152	208107	Ditch fill	Mid white-grey clay		0.65	0.45	
208153		Ditch	NE/SW orientated. Linear in plan with gently sloping sides and flat base	1.0	6.0	0.4	
208154	208153	Ditch fill	Lower fill: mid orange silty clay. Common charcoal flecks and occasional small stones.	1.0	4.7	2.1	
208155	208153	Ditch fill	Upper fill: light brown-grey silty clay. Occasional small stones and charcoal flecks	1.0	1.4	0.1	
208156	208167	Pit fill	Upper fill: dark grey sandy clay. Common charcoal flecks and occasional burnt stones	2.4	0.4	0.25	NEO/ BA
208157		Pit	Circular in plan with bowl-shaped profile				
208158		Posthole cut/fill	Circular in plan with steep sides and tapered base. Filled by mid grey-brown sandy clay	0.1	0.1	0.1	
208159		Posthole cut/fill	Circular in plan with steep sides and tapered base. Filled by mid grey-brown silty clay	0.05	0.05	0.05	
208160		Posthole	Circular in plan with steep sides and tapered base	0.15	0.15	0.15	
208161	208107	Ditch fill	=208150		1.0	0.55	
208162	208107	Ditch fill	=208151		0.45	0.3	
208163	208107	Ditch fill	=208152		0.45	0.3	
208164		Posthole cut/fill	Circular in plan with vertical sides and concave base. Filled by mid brown-grey silty sand	0.65	0.65	0.1	

208165		Posthole cut/fill	Circular in plan with vertical sides and concave base. Filled by light grey-brown silty sand	0.6	0.6	0.1	
208166	208160	Posthole fill	Mid yellow-grey clay silt. Occasional small stones	0.15	0.15	0.15	
208167		Pit	Oval in plan with steep sides and flat base	2.4	0.45	0.25	
208168		Posthole cut/fill	Circular in plan with vertical sides and concave base. Filled by mid brown-grey silty sand	0.05	0.05	0.1	
208169		Posthole cut/fill	Circular in plan with steep sides and concave base. Filled by mid brown-grey silty sand	0.05	0.05	0.1	
208170	208107	Ditch fill	=208149		0.6	0.25	
208171		Posthole cut/fill	Circular in plan with steep sides and tapered base. Filled by mid brown-grey silty sand	0.1	0.1	0.1	
208172	208174	Pit fill	Upper fill: mid orange-grey silty clay. Common charcoal and occasional small stones	0.6	0.6	0.15	
208173	208174	Pit fill	Lower fill: dark grey-black silty clay. Frequent charcoal	0.55	0.55	0.05	
208174		Pit	Circular in plan with vertical sides and flat base	0.6	0.6	0.2	
208175	208167	Pit fill	Lower fill: charcoal within a dark grey-black matrix. Occasional small stones	2.3	0.3	0.1	
208176	208183	Stone	Large oval-shaped stone	0.55	0.3	0.1	
208177			Context not used				
208178			Tree-throw pit	0.2	0.2	0.15	
208179			Tree-throw pit	0.15	0.15	0.15	
208180	208181	Tree-throw pit fill	Light grey clay sand. Occasional charcoal flecks	0.8	0.75	0.2	
208181		Tree-throw pit	Irregular in plan with steep sides and irregular base	0.8	0.75	0.2	
208182		Ditch	Curvilinear, steep sides, flat base	6.75	0.2	0.15	
208183		Pit	Oval in plan with gently sloping sides and concave base	0.9	0.65	0.2	
208184	208183	Pit fill	Light yellow-brown sandy silt. Occasional small angular stones	0.9	0.65	0.2	

APPENDIX B: THE FINDS

Prehistoric Pottery (Gibson 2013)

A single sherd was recovered from fill 208156 of pit 208157. The sherd was a soft pitted fabric with light brown outer surface and black inner surface and core. The fabric averages 5mm thick. In the absence of formal features and decoration this sherd can only be ascribed a Neolithic/Bronze Age date. The thinness of the fabric and its pitted nature may suggest that the sherd belongs to a vessel from the earlier Neolithic Developed Carinated Bowl tradition (c.3800–3500 BC) but this remains uncertain.

Roman Pottery (Timby 2013)

Pit 208114 produced five sherds from a handmade, tubby Malvernian ware jar with a vertical line burnished finish and an igneous rock temper. The jar is slightly sooted on the lower exterior from use. Such wares date from the later Iron Age but continue to be used well into the Roman period. Fabric: MAL RE A.

Lithics (Pannett 2014)

The assemblage comprises 15 struck lithics recovered from the ditch fills, the subsoil and the natural.

Context	Description	Count
208102	Ditch	1
208104	Subsoil	2
208110	Fill of ditch 208182	5
u/s	unstratified	2
208128	Fill of ditch 208108	
208136	Fill of ditch 208153	1
208139	Fill of ditch 208107	1
208180	Natural	1
	Total	14

Primary Technology

The assemblage comprises predominantly fresh flint of varying colours and quality. Cortex survives on four of the pieces and is characteristic of water rolled pebbles, either derived from a riverine or marine context. A single piece of chert was identified within the assemblage. One flint flake recovered from the subsoil was abraded, rolled, indicating that it had formed part of a ploughsoil deposit for a period of time.

The assemblage is flake dominated, with nine complete flakes, one complete blade, one proximal blade fragment and three pieces of angular shatter. Three of the complete flakes and the complete blade were struck from a single platform flake core, while the chert blade fragment was struck from a single platform blade core. On average the complete pieces were 25.1mm in length, 18.4mm in breadth and 6.8mm thick. One piece of angular shatter appeared to be a fragment of a core, although the type of core it derived from was not possible to identify. A platform survived on six of the pieces. Four were planar, two on flakes and two on blades, and one, on a flake, was planar with platform trimming or preparation. A single cortical platform was identified on a flake, struck from the outer surface of the pebble or nodule. Four complete flakes and one distal flake fragment had feathered terminations, while three complete flakes had a hinge termination and one had a stepped termination. The hinge and stepped terminations could have been caused by flaws in the pebble flint, or through the use of a soft hammer which is also evidenced by the presence of diffuse bulbs of percussion on a number of the struck lithics.

Secondary Technology

Four of the struck pieces had been retouched. The single, chunky, blade from the subsoil had invasive retouch along the left hand side dorsal edge, extending around a third of the way across the dorsal face. This retouch extended along the full length of the blade, from the platform to the hinge termination. On the right hand side dorsal edge rough abrupt retouch had been used to form a crude denticulated edge. The piece represents a rough plano-convex knife of probable Late Neolithic or Early Bronze Age date. Two retouched pieces were recovered as unstratified items. These comprised an end scraper formed on the distal end of a flake. Abrupt and invasive retouch had been used to form the scraper edge, and abrupt retouch had been continued along the right hand side dorsal edge to form a possible cutting edge. The piece is likely to be Early Neolithic in date. The second retouched piece comprised a distal flake fragment with a small notch formed by abrupt retouch along the right hand side ventral edge. This appears to have been used to truncate the flake, which is probably Neolithic in date. A single retouched piece was recovered from fill 208136 of ditch 208153. This comprised a regular flake with abrupt retouch along the left hand side dorsal edge. The flake was also edge damaged along the right hand side of the piece. It is likely to be a crude cutting implement of Neolithic date.

Discussion and Interpretation

The flake dominated assemblage contains a variety of flint types, differing in quality, with some retaining a water-rolled cortex. These characteristics are typical of a pebble resource, probably deriving from local rivers or beaches on the coast, 30km to the south. The assemblage is flake dominated, and a number of the pieces show the characteristics of having been struck with a soft hammer. The assemblage is largely undiagnostic, but contains four pieces of probable Early Neolithic date and a single piece of Late Neolithic/Early Bronze Age date. The four Early Neolithic pieces comprise three retouched pieces, the end scraper, truncated flake and crude cutting tool, and the chert blade, while the plano-convex knife is of Late Neolithic/Early Bronze Age date. The struck lithics were recovered from a number of contexts, including the subsoil, and ditch fills. It is possible that the lithics are contemporary with the ditches, however the relatively small size of the assemblage and the recovery of Iron Age pottery from features within the ditches suggests that the lithics are residual. The recovery of lithics of Neolithic date is, however, significant as it demonstrates the use of this part of the landscape throughout prehistory.

Worked Stone (Vince and Steane 2008)

A rounded pebble from fill 208110 of ditch 208182 has a single polished surface. It is similar in size to early medieval and later linen smoothers and may have had a similar function.

Glass counter (by Ed McSloy, Cotswold Archaeology)

A single glass counter was recovered from fill 208136 of ditch 208153. Glass counters of Roman date, the majority opaque white or dark brown/black, are well-known and large numbers have been identified from military sites in Wales. Most date to the 1st or 2nd centuries AD. They are presumed to have been used both for recreational purposes and for accounting/reckoning (Price 1995, 129–30). Among a group of 87 such counters from Usk, Monmouthshire, 38 were of opaque white glass and were similar in size/form to the example from Site 20.08.

Description

Plano-convex counter of opaque white glass. Wear from use to underside. Diam. 17.1mm; thickness 6.2mm. From fill 208136 of ditch 208153.

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE BY JAMES RACKHAM

Bone

Two small fragments of burnt bone (<1g) were recovered from context 208115 by hand excavation. Neither fragment can be identified. A small collection of burnt bone (<1g) was recovered from three of the environmental soil samples taken on site – sample 2083001 (context 208115), sample 2083019 (context 208110) and sample 2083032 (context 208180). The assemblage from sample 2083001 comprises 38 very small fragments of burnt (calcined) bone, weighing 1 gram. None of the material is of sufficient size to permit identification. Sample 2083019 produced a single fragment of unidentifiable burnt bone (<0.1g). Sample 2083032 produced two tiny unidentifiable fragments of burnt bone (<0.1g). The presence of only burnt bone on the site suggests that unburnt bone has not survived owing to the burial environment.

Environmental Soil Samples

A total of 35 samples were collected from a range of features (Table 1). The samples were processed in the manner described in the assessment report (Carruthers 2008). The residues were located for all except three samples. These residues were dried, sorted and refloated and checked with a magnet. The 2nd flots have been checked for identifiable charred plant remains and their volume is noted in Table 2. The samples from the Iron Age to early Roman features in the northern half of the site were largely devoid of finds, although sample 2083001 produced a little fired earth, a substantial quantity of burnt stone, and a little burnt bone and a small magnetic fraction, while the second sample from this context, 208115 also produced some burnt stone. Three other samples produced a little burnt stone but no other finds. Three cereal grains and two grain fragments were also present in 2083001.

Five of these samples produced hazel nutshell fragments (Tables 2 and 3) with one of the two samples from the sub-rectangular pit, 208114, within the ring ditch producing over 26g of nutshell. The ring ditch is tentatively interpreted as a roundhouse and the assemblage from pit 208114 is consistent with this pit as a feature within the house. The remaining samples are perhaps poorer than might be expected from a roundhouse gully and internal pits of late Iron Age or early Roman date but the samples are fairly small, the ring gully was heavily truncated, and its first fills are more likely to contain natural silting and gully side slip/erosion than rubbish, and samples from the gully at the back of a house are less likely to produce material than those by an entrance. These factors could easily account for the generally low density of charcoal and charred plant macrofossils in most of the samples.

The curvilinear enclosure ditch is similarly lacking in finds. Burnt stone occurs in four of the samples from the ditch fills, a very little burnt clay in one and a little flint in one. The sample flots are generally very small but three produced one or two charred cereal grains with only barley identified (Table 2). These finds give no indication of the date of the feature, but do suggest contemporary occupation nearby from which the burnt stone, charred cereals and charcoal could have derived. The samples from the small stake and posthole features just inside and outside this enclosure were so small that their lack of finds is to be expected. Just a few small fragments of charcoal are all that they produced.

The sample from the large ditch feature in the northern part of the field produced a small charcoal assemblage and a single fragment of hazel nutshell, but neither can add to the study, and the nutshell could easily be residual in the ditch fill. The samples from the tree-throw pit group to the south west of the enclosure entrance are the richest of the undated features (Table 2). They produced a relative abundance of burnt stone, one a little flint and burnt bone. Two of the samples produced hazel nutshell fragments and one a probable barley grain.

Four of the samples were taken from deposits tentatively allocated to the medieval period (Table 1). Unfortunately this allocation appears to be on the basis of the preliminary identification of a single bread type wheat and possible rye grain in two of the samples (Carruthers 2008). The latter is identified below as *Triticum*

dicoccum/*spelta*/*Secale cereale* and cannot be used as an indication of date. The post-excavation study of the samples has not contributed to this discussion. The samples are the richest from the site (Table 2) with burnt clay, a little burnt stone, a small magnetic fraction, flint and burnt bone in one sample, and all produced a few hazel nutshell fragments while two produced single charred cereal grains. They do appear to reflect occupation activity but of what date cannot be hazarded.

Table 1. Samples taken for environmental study at Site 20.08

sample no	context no	feature	description	Wt kg.	Vol. l.	Date
2083001	208115	208114	Small pit fill	26	nd	IA/ERom
2083002	208115	208114	Small pit fill	4	nd	IA/ERom
2083003	208118	208111	Ring gully fill	1	nd	IA/ERom?
2083004	208118	208111	Ring gully fill	11	nd	IA/ERom?
2083005	208119	208111	Recut of ring gully	10	nd	IA/ERom?
2083006	208123	208111	Ring gully fill	0.48	nd	IA/ERom?
2083007	208123	208111	Ring gully fill	12	nd	IA/ERom?
2083008	208121	208120	Small pit fill	11	nd	IA/ERom?
2083009	208122	208120	Basal pit fill	2.5	nd	IA/ERom?
2083010	208125	208124	Small pit upper fill	10	nd	IA/ERom?
2083011	208135	208124	Primary pit fill	10	nd	IA/ERom?
2083012	208139	208107	Upper fill ditch	18	nd	undated
2083013	208140	208108	1st fill curvilinear ditch	24	nd	undated
2083014	208128	208108	Upper fill ditch	20	nd	undated
2083015	208140	208108	1st fill curvilinear ditch	0.16	nd	undated
2083016	208148		Posthole cut/fill	0.39	nd	undated
2083017	208144		Posthole cut/fill	1.36	nd	undated
2083018	208109	208157	Pit fill	21	nd	Med?/undated
2083019	208110	208182	Ditch fill	20	nd	Med?/undated
2083020	208154	208153	Lower fill	0.96	nd	undated
2083021	208158		Posthole cut/fill	0.21	nd	undated
2083022	208159		Posthole cut/fill	0.12	nd	undated
2083023	208163	208107	Fill stakehole in 208107	0.29	nd	undated
2083024	208164		Posthole cut/fill	0.26	nd	undated
2083025	208156	208167	Pit fill	21	nd	undated
2083026	208168		Posthole cut/fill	0.23	nd	undated
2083027	208169		Posthole cut/fill	0.31	nd	undated
2083028	208171		Posthole cut/fill	0.23	nd	undated
2083029	208163	208107	1st fill ditch	27	nd	undated
2083030	208172	208174	Upper fill of pit	35	nd	Med?/undated
2083031	208173	208174	Basal fill of pit	6	nd	Med?/undated
2083032	208180	208181	Tree throw fill	35	nd	undated
2083033	208178		Tree throw pit	2	nd	undated
2083034	208179		Tree throw pit	2	nd	undated
2083035	208146	208107	Ditch fill	0.5	nd	undated

Table 2. Environmental data from the samples from Site 20.08

Sample	Context	Pro-cessed wt kg	1st flot vol ml	2nd flot vol	residue wt g	pottery	burnt clay g.	burnt stone g.	coal	flint	magnetic g.	burnt bone	comments
Iron Age/Early Roman? features													
2083001	208115	26	972	3	4119		3.2	1620+			2	2g	cinder; see Table 3
2083002	208115	4	5	1	3979			C			-		HNSx2
2083003	208118	1	1	0	976			317			-		
2083004	208118	11	100	1	637						-		
2083005	208119	10	20	1	432						-		See Table 3
2083006	208123	0.48	<1	nr	0						-		
2083007	208123	12	1	<1	187						-		
2083008	208121	11	4	2	194						-		
2083009	208122	2.5	5	1	156			+			-		
2083010	208125	10	15	1	1043						-		See Table 3
2083011	208135	10	5	1	942			+			-		HNSx1
Curvilinear enclosure ditch, 208107 and 208108 (undated)													
2083012	208139	18	20	1	1957			+		5g	-		cf barleyx1; indet grain x2
2083013	208140	24	8	<1	1138			+			-		Indet grainx1
2083014	208128	20	5	1	2127			434+			-		hulled barley x1; indet grain x1
2083015	208140	0.16	1	nr	0								
2083029	208163	27	1	<1	2170		+	786			-		
2083035	208146	0.5	3		0								
Undated post/stakehole fills													
2083016	208148	0.39	<1	<1	6						-		
2083017	208144	1.36	<1	<1	9.4		D				-		
2083021	208158	0.21	<1	<1	102						-		
2083022	208159	0.12	<1	<1	1.6						-		
2083023	208163	0.29	<1	<1	53						-		
2083024	208164	0.26	<1	<1	0.6						-		
2083026	208168	0.23	<1	nr	0								
2083027	208169	0.31	<1	<1	1.2						-		
2083028	208171	0.23	<1	<1	3.4						-		
Undated large ditch													
2083020	208154	0.96	50	<1	0.4						-		HNSx1
Undated pit 208167													
2083025	208156	21	60	1	1179	1g	254+				-		See Table 3
Undated tree throw pit fills													
2083032	208180	35	35	2	3720			1970		<1g	-	<1g	See Table 3
2083033	208178	2	5	<1	351			319			-		HNSx1
2083034	208179	2	10	<1	226			125			-		HNSx1, cf barleyx1;
Medieval?/undated Pit and ditch samples													
2083018	208109	21	30	2	1667		116+	+			2		Flintx1;see Table 3
2083019	208110	20	150	3	1641		369+	434		<1g	1	<1g	See Table 3
2083030	208172	35	605	nr	2313		19+	+			3		HNSx1
2083031	208173	6	500		150		2	+			1.2		HNSx1;wheat cf bread typex1

*quantities – E=1-10; D=11-50; C=51-100; B=101-200; A=200+ items; nd = no data; + - recorded in the <2mm residue but not sorted or weighed; nr- no residue found for refloating; HNS – Hazel nutshell fragment

Charred plant remains *(Wendy J. Carruthers)*

Seven samples from Site 20.08 were looked at in detail (Table 3), including four pit fills, a tree-throw pit fill, the fill of a gully and the fill of a re-cut of the penannular ditch 208111. Sorting was carried out using an Olympus SZX7 stereoscopic microscope. Flots were first separated into 3 fractions (minimum mesh 250 microns) to facilitate sorting. All modern material was removed prior to measuring the flot volume (for this site this amounted to small quantities of modern rootlets). Stace (2010) and Zohary and Hopf (2000) were used for nomenclature.

The principal component of these samples was hazel nutshell (HNS), with one sample producing abundant small fragments. In order to estimate roughly how many nuts the fragments in the most productive sample represent, and at the same time to provide a rough measure of fragmentation that can be compared across sites and types of features, two methods of quantification were used. Firstly fragments were counted and secondly the assemblage as a whole was weighed to the nearest 0.1 g. Using a conversion factor calculated by undertaking experimental charring for the Staosnaig Mesolithic hazelnut processing site (Carruthers 2000) it is possible to obtain a very rough idea of how many nuts might have been present. This calculation is carried out below.

Table 3. Charred plant remains from productive deposits at Site 20.08

	Date	LIA/ERom	LIA/ERom?	LIA/ERom?	Medieval?/undated	Medieval?/undated	Undated	Undated
	context type	fill of sub-rectangular pit	fill of possible re-cut of ring ditch	fill of undated pit	fill of pit at end of ditch 208182	fill of gully	fill of elongated pit	fill of tree-throw pit
	Feature no.	208114	208111	208124	208157	208111	208167	208181
	Context no.	208115	208119	208125	208109	208118	208156	208180
	Sample no.	2083001	2083005	2083010	2083018	2083019	2083025	2083032
	Proc. Vol. (l)	26	10	10	21	20	21	31
	Flot	1st & 2nd	1st & 2nd	1st & 2nd	1st & 2nd	1st & 2nd	1st & 2nd	1st & 2nd
	Flot Vol (ml) minus lge char	245	5	7		40	20	22
Cereal grains	Extracted large charcoal (ml)	sent to JC?	10	10		105	40	20
Hordeum vulgare L.	indeterminate barley grain	2						
Triticum dicoccum/*spelta*/*Secale cereale*	hulled wheat / rye grain				1			
Avena/*Bromus* sp.	oat/brome caryopsis	1						
Cerealia indet	indeterminate cereal grains	2f						cf.1f
Other plant remains								
Corylus avellana L.	hazel nut shell fragments HSW	1356 / 26.5g	4 / <0.1g	7 / <0.1g	7 / <0.1g	23/ 0.4g	62 / 0.8g	17 / 0.2g
Corylus avellana L.	whole immature hazel nut	1						
indeterminate (?cramp ball)					4f			
	TOTAL ITEMS	1362	4	7	13	23	62	18
	CHARRED FRAGS PER LITRE (flots 1+2)	52	0.4	0.7	0.6	1.2	3	0.6

Results

The flots contained frequent medium to large chunky charcoal fragments which were extracted for charcoal analysis (see below). Hazel nutshell fragments were primarily small but not excessively eroded. The few cereal grains recovered were very eroded or distorted and so difficult to identify with certainty. No weed seeds were recovered. The results of the analysis are presented in Table 3.

Discussion

The very limited range of species recovered from the seven samples makes it extremely difficult to determine the likely date of the charred plant remains.

Sample 2083001 (context 208115) was the most productive of the seven samples, originating from the fill of pit within the penannular ditch. Because sherds of LIA/ER pot were recovered from this pit the ring ditch has been interpreted as a probable roundhouse. Large quantities of hazelnut shell (HNS) were recovered from the sample (1356 fragments) representing around 63 nuts using figures obtained by the author by experimental work (1 nutshell = c. 0.42g; Carruthers 2000). This quantity amounts to about three large handfuls of nuts while still in their shells, perhaps a suitable amount for an offering, or maybe the debris from shelling a good meals worth of nuts, or used for lighting a fire. The presence of a whole immature nut does suggest the nuts could have been burnt whole, since the oily kernels are unlikely to survive charring and burial. However, when preparing collected nuts for roasting, prior to storage or grinding into flour, the unusable immature nut is likely to have been discarded into the fire alongside the nutshells. This sample also produced the most cereal grains, but they were very poorly preserved. The very small, distorted barley grains (*Hordeum vulgare)* could not be identified further as either hulled or naked barley. A large elongated, eroded grain must have come from either oat (*Avena* sp.) or a large brome grass (*Bromus* sp.). The other two fragments were too small to even be certain that they came from cereals. Perhaps these cereals had also been discarded/dropped into a fire during food preparation, or maybe they represent general background waste swept up and burnt with the HNS.

Sample 2083018 (context 208109) came from a pit, 208157, that was located at the end of small curvilinear ditch 208182 at the entrance to the enclosure. A small number of HNS fragments were present plus an elongated, flat fronted but very eroded cereal grain that might have been a hulled wheat (*Triticum dicoccum*/*T. spelta*) or rye grain (*Secale cereale*). A large (2cm), rounded 'corky' textured item with a few fragments was initially thought to have been a crab apple but on closer examination, having cleaned away silt, it appears to be a possible fungus such as puff ball, cramp ball (*Daldinia concentrica*), or large tuber.

The remaining five samples (2083005, 2083010, 2083019, 2083025, 2083032) produced only small quantities of HNS fragments, although sample 2083032 (context 208180) from tree-throw pit 208181 produced a small indeterminate cereal fragment. Five other samples that were only taken to the assessment stage produced occasional poorly-preserved cereal grains (samples 2083012, 2083014, 2083013, 2083031, 2083034; Table 2). Most of the identifiable cereals were barley or hulled barley. Two of these five samples also contained HNS. Five additional assessment samples contained only traces of HNS.

It is clear from initial radiocarbon dating of HNS fragments from sites along the pipeline that hazelnuts remained an important part of the rural economy for much longer in South Wales than in areas with better arable soil such as southern England. Of the seven radiocarbon dates carried out on HNS fragments five produced a Neolithic date, one a MBA date and only one an early medieval date. The poor state of preservation of cereal grains at this site and absence of weed seeds means that it is impossible to make any suggestions as to the possible dates of the assemblages.

Charcoal *(Dana Challinor)*

Only one sample from this site, from Iron Age/early Roman pit 2080114, was selected for study, as the other samples were too insecurely dated. Although charcoal was abundant in the sample, the condition was very poor, with heavy sediment encrustation and mineral deposits (probably vivianite). Two taxa were positively identified; *Quercus* sp. (oak) and *Alnus glutinosa* (alder). The degradation of the material inhibited examination of maturity, although it was noted that many of the larger alder fragments exhibited strong ring curvature.

The poor condition of the charcoal and the limited dataset from Site 20.08 restricts discussion, but the results will provide a useful contribution to the broader consideration of the charcoals found along the whole pipeline route. Alder prefers a wet ground habitat, especially near to streams and riversides. It is not considered a good fuelwood (Edlin 1949) and benefits from seasoning.

Table 4. Charcoal from Site 20.08

	Feature type	pit
	Feature number	208114
	Context number	208115
	Sample number	2083001
Quercus sp.	oak	7 (r)
Alnus glutinosa Gaertn.	alder	10 (r)
Alnus/*Corylus*	alder/hazel	6
Indeterminate		7
Total		**30**

r=roundwood; (brackets denotes presence in some fragments only)

Monolith 208107

The excavations at Site 20.08 uncovered a curvilinear enclosure ditch that was sectioned in several places. Slot three recorded a V shaped profile nearly 1 metre deep. A monolith was taken through the whole profile of the ditch.

The lower half of the ditch fills (46-95cm) shows no evidence of structural development suggesting that it has probably remained seasonally waterlogged throughout its history. The absence of any surviving organic remains in this section however indicates that none of the sequence has been permanently waterlogged and the survival of pollen in a condition suitable for study is very unlikely, except in the very lowest samples.

The upper part of the deposits initially shows a weak structure becoming stronger up profile as a result of a greater level of soil development. Most of the visible 'stratigraphy' is a product of these soil processes, largely resulting in different degrees of mottling and deposition of iron in the deposits. These upper fills probably filled up fairly slowly with a turf or vegetation layer always growing on its surface, but becoming less subject to seasonal saturation as it filled.

The uppermost few centimetres of deposit in the monolith looks like it may be the base of the modern soil.

In the absence of any episodes in the sequence that might suggest a period of stability (cessation of the infilling process), the failure of organic material and snails to survive, and the lack of a date for the ditch no further work was undertaken.

Discussion

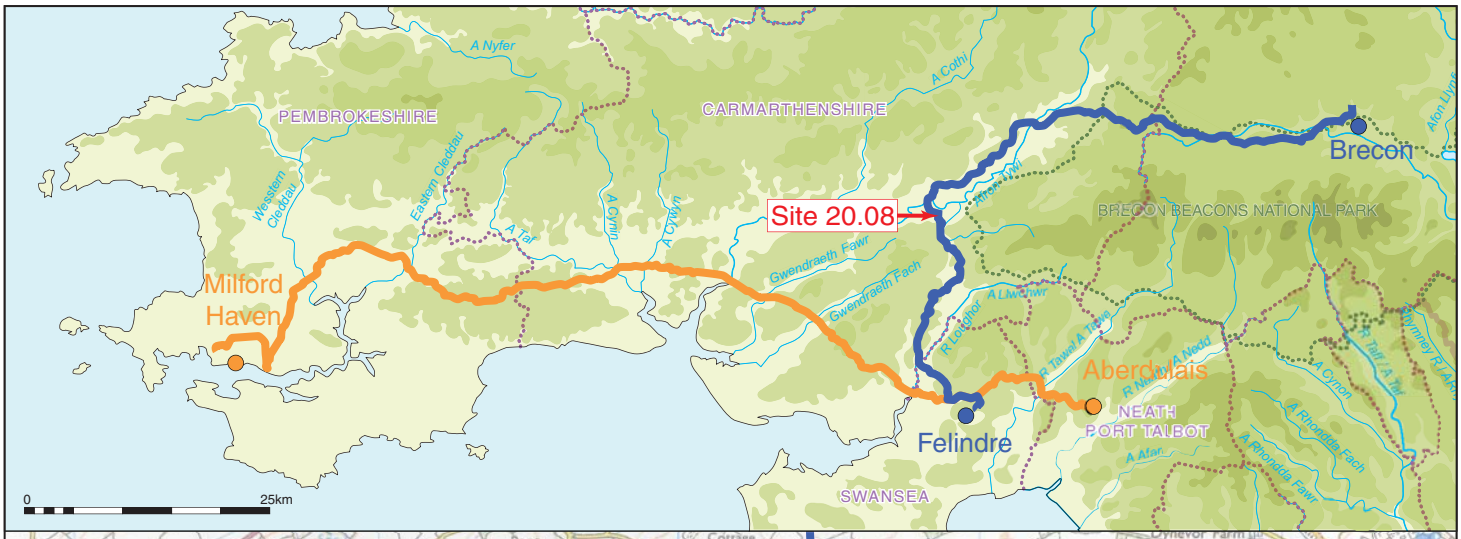
The environmental assemblages are poor but clearly indicate the use of barley and hazelnuts during the Late Iron Age/Early Roman period, the latter in sufficient numbers to indicate processing or consumption at the site. Confident association of the ring ditch and other pits with pit 208114 can only be established through radiocarbon dating, but charcoal and charred nutshell occurs at such low density in most of the samples that any resultant

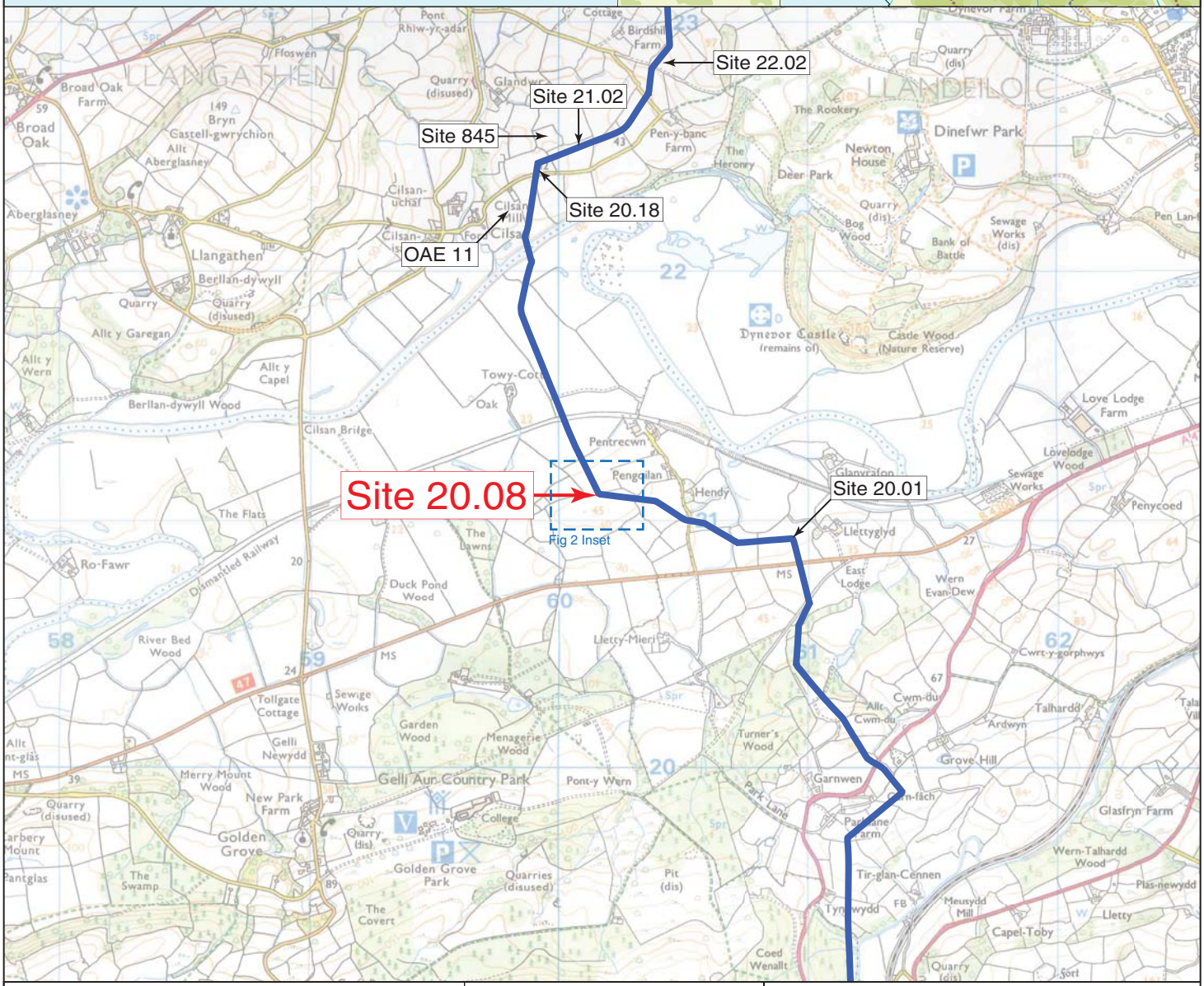
dates could not confidently be associated with the feature they derive from. Hazel nutshell fragments are particularly robust and radiocarbon dates have often proved they are residual when they occur at very low densities. An example of the problem of residual material or contamination occurs at Site 25.07 on the pipeline. Dates on oat grains and hazelnut fragments from the same pit have produced early medieval and early Neolithic dates respectively. With three or four oat grains and twenty six hazelnut fragments in the pit sample it is a toss-up as to whether the pit was Neolithic with contamination from the oat rich medieval features adjacent or medieval with residual Neolithic nutshell. The only samples with any potential for dating from this group of possible late Iron Age/early Roman features at Site 20.08 is sample 2083004 from ring ditch gully 208111 which has a 100ml charcoal flot from 11 litres of sample which suggests an assemblage probably contemporary with the fills, and suitable charcoal could be dated; and ten litre sample 2083010 from the upper fill of pit 208124 from which seven fragments of hazel nutshell were recovered which could be dated. Nevertheless these are not great samples for dating. Confirmatory dating of the rich hazelnut assemblage from pit 208114 could also be argued.

The initial dating of some of the features in the southern part of the site to the medieval period is unreliable, the cereals (part of the justification) cannot be used to date these features. For those samples associated with the enclosure and these putative medieval features most of the samples have nothing suitable for radiocarbon dating or just one or two fragments of nutshell or cereal grain, any or all of which could easily be residual in the contexts they occur in. Only samples 2083019 (from short linear 208182), and 2083030 and 2083031 (from pit 208174 cut into the top of the enclosure ditch) have produced a rich (Table 2) enough flot to suggest that the environmental assemblages are contemporary with the deposits. The low density of nutshell and cereals in these suggest that any radiocarbon dating should be on suitable charcoal rather than the identified macrofossils if the intention is to date the feature.

With this lack of confident dating, not merely for the features, but also whether they contained identified macrofossils are confidently contemporary or potentially residual the site affords little opportunity to consider the use of hazelnuts and cereals across the site. Some of the hazelnut fragments could be associated with the Neolithic and early Bronze Age activity indicated by the flints, some are clearly related to the late Iron Age/early Roman period and some may be associated with the features at the enclosure entrance. We also appear to have barley associated with the late Iron Age/early Roman pit and the curvilinear ditch and the ‘tree throw group’ at its entrance. A possible bread type wheat grain was recovered from pit 208174 cut into the top of the enclosure ditch fill. This is the best candidate for a late feature on the site, for stratigraphic reasons, but cannot be firmly placed in the medieval period without confirmation from a radiocarbon date.

The site contemporary with all the archaeological features, barring perhaps the tree throw group, is likely to have been in a cleared landscape. The abundance of alder charcoal in late Iron Age/early Roman pit 208114, which must surely have come from some distance away (the nearest suitable habitat, the banks of a palaeochannel of the River Towy, is 350m down the hill to the north-west) suggests that the natural oak and hazel woodlands of the area were no longer easily accessible. Alder is not the best fuel (Edlin 1949) and its dominance suggests a lack of availability of other woods. It is perhaps rash to make such proposals on the basis of a single sample, but we can be fairly confident that the alder must have been collected from the valley floor which implies that suitable wood for the fires that generated this assemblage may not have been available closer.





- Milford Haven to Aberdulais pipeline
- Felindre to Brecon pipeline
- 0-75m contour
- 75m contour
- 200m contour
- 400m contour
- 600m contour

N

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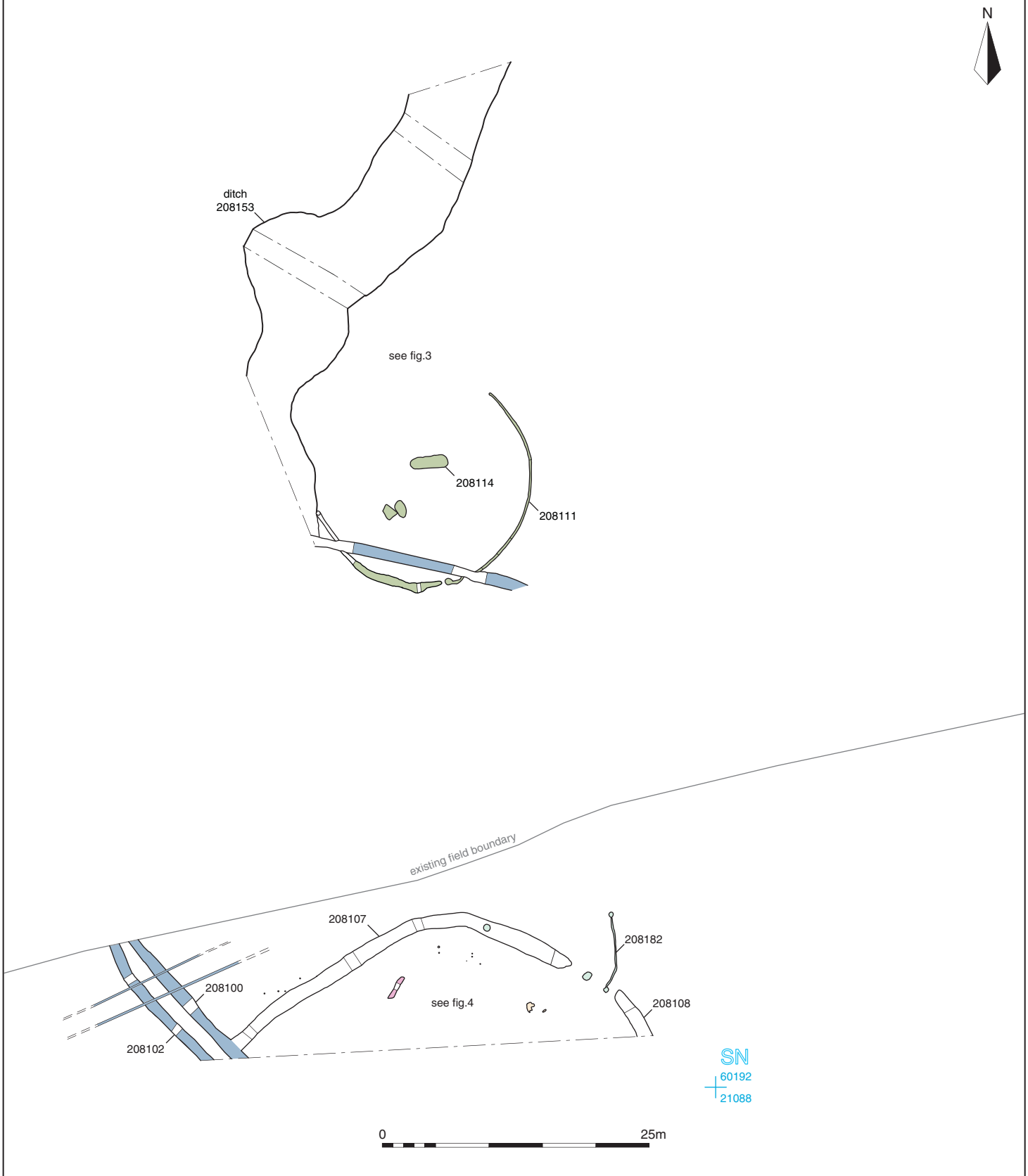
PROJECT TITLE

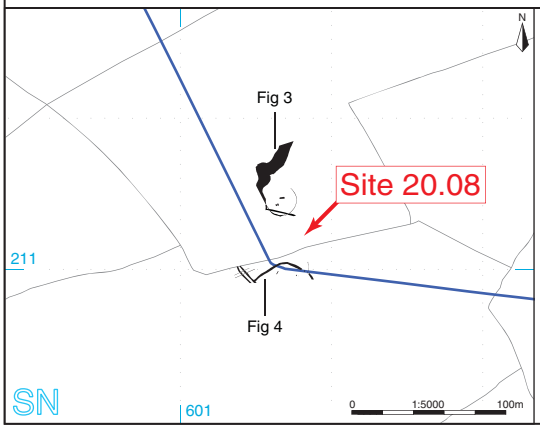
South Wales Pipeline. Site 20.08, Land West of Pengoilan, Llanfihangel Aberbythych, Carmarthenshire

FIGURE TITLE

Site location plan

PROJECT NO.	9150	DATE	27-11-2013	FIGURE NO.
DRAWN BY	DJB	REVISION	00	1
APPROVED BY	LM	SCALE@A4	1:25,000	





- pipeline centreline
- Neolithic/Early Bronze Age
- Late Iron Age/Early Roman
- medieval
- modern
- undated
- tree-throw pit

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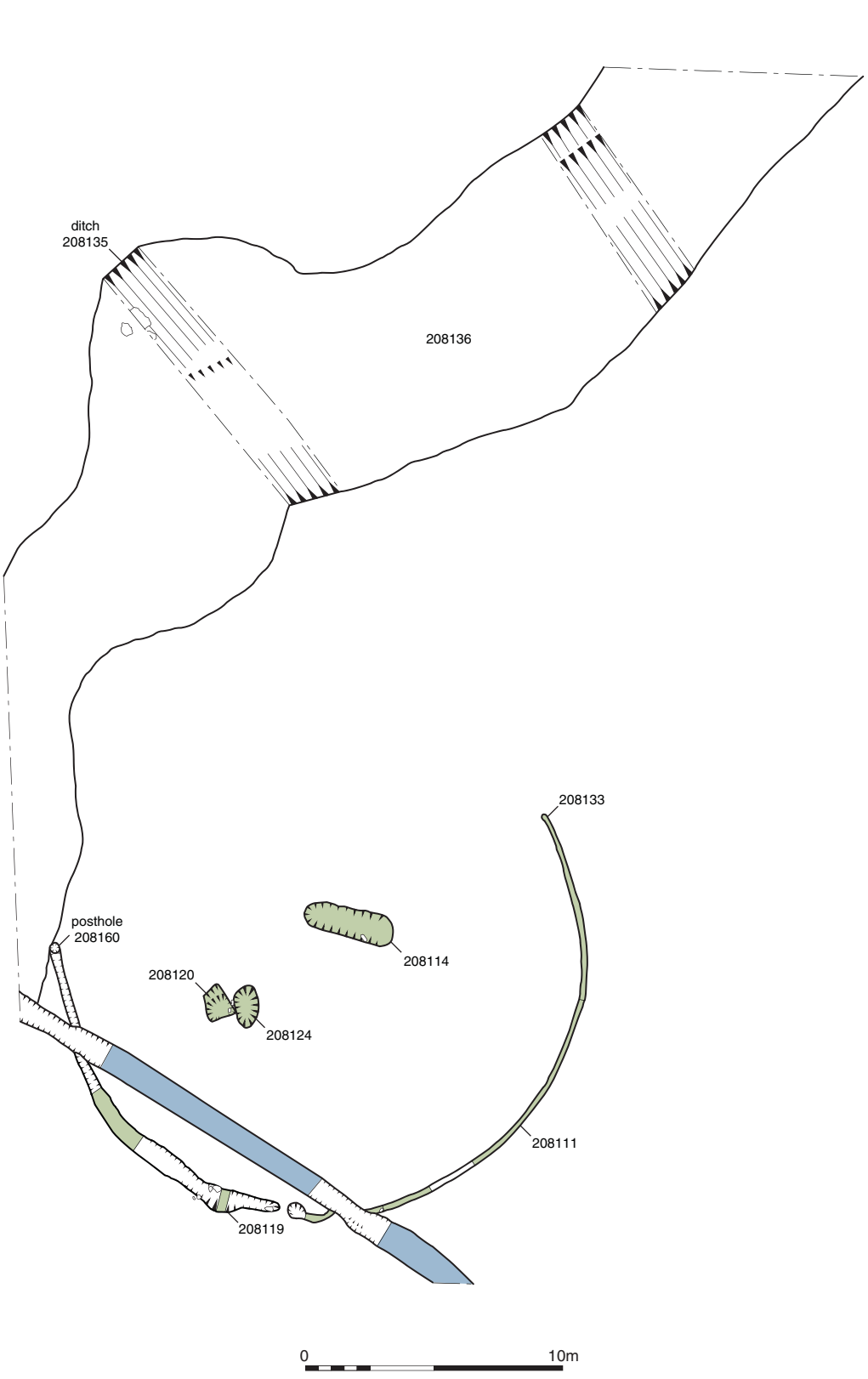
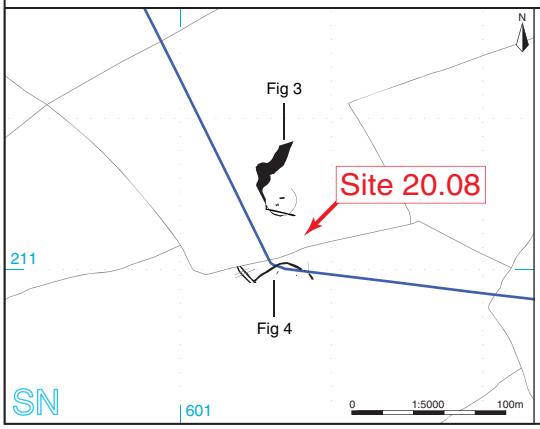
FIGURE TITLE

Plan of archaeological features

PROJECT NO.	9150	DATE	27-11-2013	FIGURE NO.
DRAWN BY	DJB	REVISION	00	2
APPROVED BY	LM	SCALE@A4	1:500	





pipeline centreline
Late Iron Age/Early Roman
modern
undated

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PROJECT TITLE
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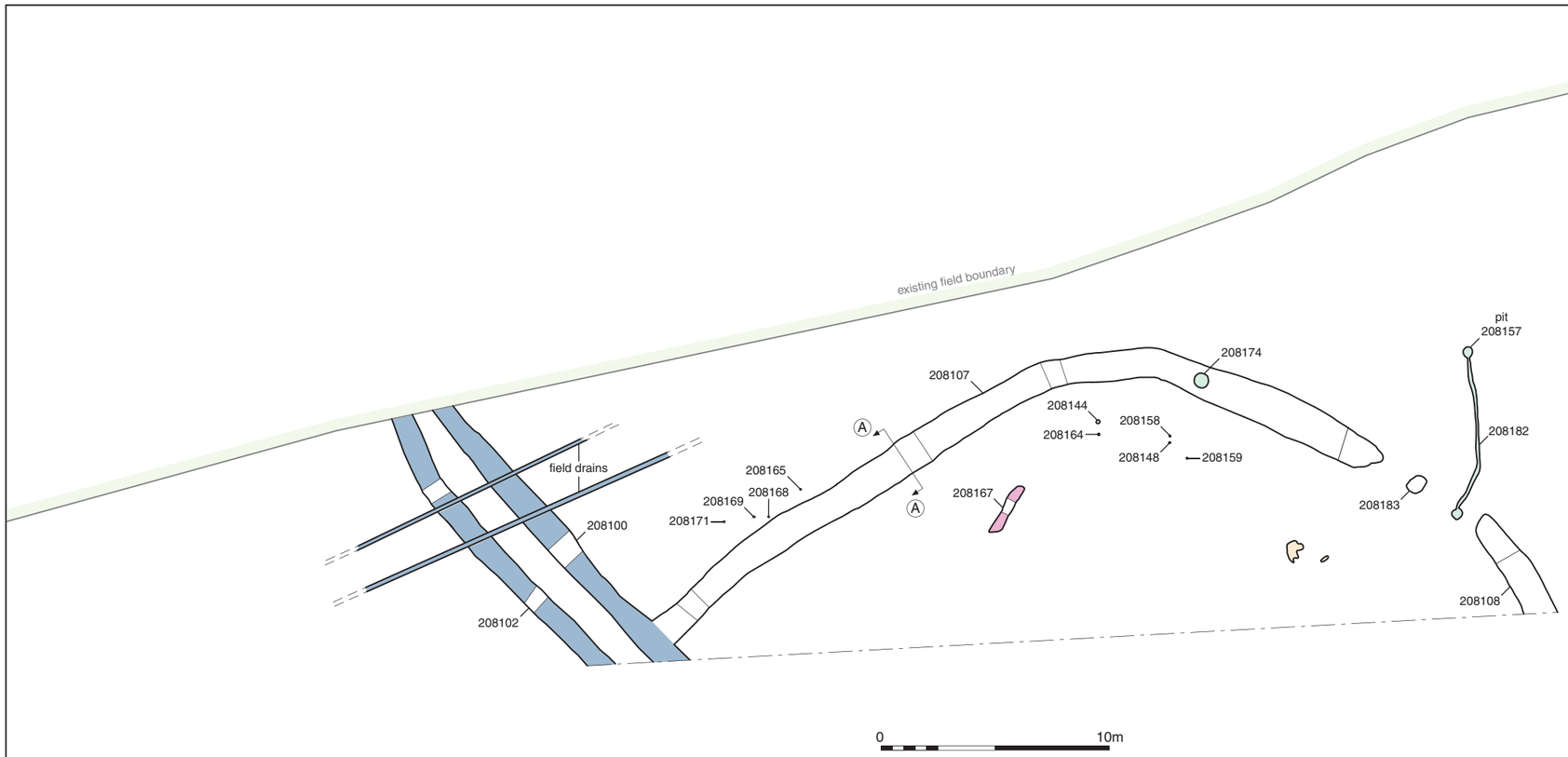
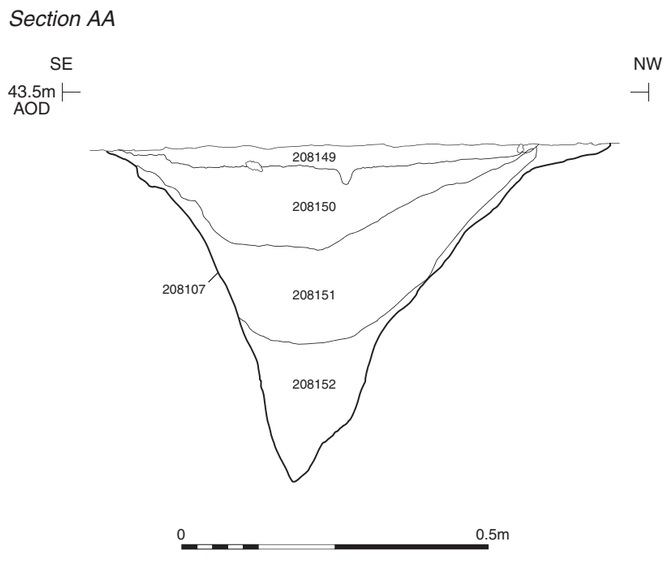
FIGURE TITLE
Plan of the northern area of site

PROJECT NO.	9150	DATE	27-11-2013	FIGURE NO.
DRAWN BY	DJB	REVISION	00	3
APPROVED BY	LM	SCALE@A4	1:250	





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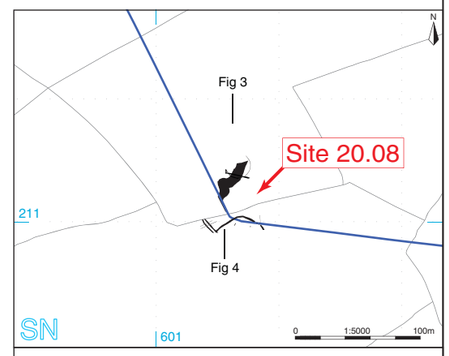

- pipeline centreline
- Neolithic/Early Bronze Age
- medieval
- modern
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PROJECT TITLE

South Wales Pipeline. Site 20.08, Land West of Pengoilan, Llanfihangel Aberbythych, Carmarthenshire

FIGURE TITLE

Plan of the southern area of site and north-facing section of ditch 208107

PROJECT NO.	**9150**	*DATE*	**27-11-2013**	*FIGURE NO.*
DRAWN BY	**DJB**	*REVISION*	**00**	**4**
APPROVED BY	**LM**	*SCALE@A3*	**1:200 1:20**	