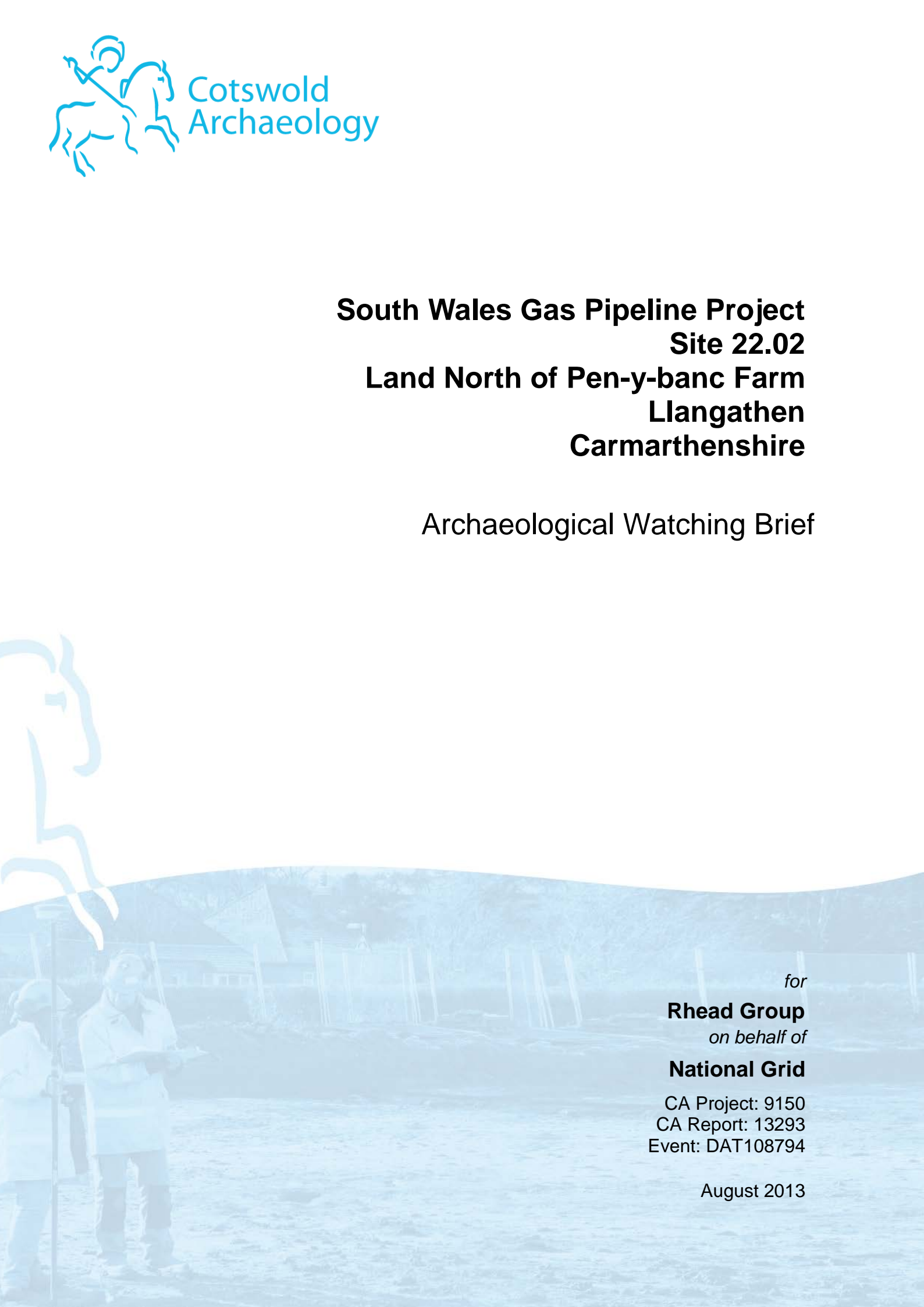


**South Wales Gas Pipeline Project
Site 22.02
Land North of Pen-y-banc Farm
Llangathen
Carmarthenshire**

Archaeological Watching Brief



for
Rhead Group
on behalf of
National Grid

CA Project: 9150
CA Report: 13293
Event: DAT108794


August 2013

South Wales Gas Pipeline Project

Site 22.02

Archaeological Watching Brief

CA Project: 9150
CA Report: 13293
Event: DAT102846

| | |
|-------------|--|
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| date | 23 August 2013 |
| checked by | Karen E Walker, Post-Excavation Manager |
| date | 30 April 2015 |
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| date | 30 August 2013 |
| issue | 01 |

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Fig. 1 Site location plan (1:25,000)

Fig. 2 Plan and sections of road (1:100 and 1:20)

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: | Site 22.02, Land North of Pen-y-banc Farm, Llangathen, Carmarthenshire |
| NGR: | SN 6039 2282 |
| Type: | Watching Brief |
| Date: | 2–26 June 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: | FTB07 |

An archaeological watching brief was undertaken by Cambrian Archaeological Projects 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 road was identified, comprising a cambered surface of silt, gravel and stones flanked by ditches. The road included evidence for rutting and repair but was undated. Whilst it is possible that it formed part of a former Roman road, it is also possible that the road represents later (for example post-medieval) surfacing, although this could itself follow the line of a former Roman road.



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 Between 2 and 26 June 2007 CAP carried out an archaeological watching brief at Site 22.02, Land North of Pen-y-banc Farm, Llangathen, Carmarthenshire (centred on NGR: SN 6039 2282; Fig. 1). The objective of the watching brief was to record all archaeological remains exposed during the pipeline construction.
- 1.3 The watching brief 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 is located within a field 1km west of Dynevor Park (Fig. 1). It overlooks the River Towy to the south and is located towards the top of the valley side at approximately 70m AOD. The underlying solid geology of the area is mapped as the Llandeilo Flags Formation (Sandstone, Limestone and Argillaceous Rocks) of the Ordovician Period; no superficial deposits are recorded (BGS 2013).

Archaeological background

- 1.5 The preliminary *Archaeology and Heritage Survey* (CA 2006) identified the possibility that a former Roman road extending westwards from Llandeilo might run through the site (CA 2006, ref. ID 6078). A geophysical survey carried out in 2005–6 in advance of the pipeline construction did not identify any archaeological anomalies in the immediate vicinity of the site (Bartlett 2006, fig. 33R) but Roman remains are known from elsewhere in the vicinity (for example an early Roman fort 1.5km east of the site; Scheduled Monument CM 367; Hughes 2007).
- 1.6 Because of the site's archaeological potential, an evaluation was undertaken in advance of the pipeline construction (CA 2009, Evaluation Site 22). This was targeted to locate any possible roadside remains and did not investigate the road itself. In the event, no archaeological deposits were found during the evaluation, although the results are summarised within this report.

Archaeological objectives

- 1.7 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

- 1.8 The fieldwork followed the methodology set out within the *WSI* (RSK 2007, Appendix B). An archaeologist was present during intrusive groundworks comprising stripping of the pipeline easement to the natural substrate (Fig. 1).
- 1.9 The post-excavation analysis and reporting was undertaken following the production of the UPD (GA 2012) and included re-examination of the original site records. 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.

- 1.10 During analysis of the primary archive it became clear that there was a conflict with the numbering of the road surfaces between the drawn and written records. As a result context numbers for the upper road surfaces and northern ditch fills have been omitted from the text and drawings within this report.
- 1.11 The archives from the evaluation and watching brief are currently held by CA at their offices in Kemble. The original paper archives will be deposited with the RCAHMW and a digital copy of the paper archives will be deposited with Carmarthenshire Museum under accession number CAASG 2008.0282.

2. RESULTS (FIG. 2)

- 2.1 This section provides an overview of the evaluation and watching brief results; detailed summaries of the recorded contexts and palaeoenvironmental remains are to be found in Appendices A and B. Full, original versions of the specialist reports are contained within the archive.

Evaluation Site 22

- 2.2 Two trenches were excavated and no archaeological features were identified.

Site 22.02

- 2.3 The natural geological substrate (22.2.003), comprising sandy clay with pebbles, was sealed below a road surface. A 14m-long section of the road was exposed within the site and comprised surfacing and make-up deposits flanked by ditches. The earliest road deposit was make-up layer 22.2.031 which had been laid directly onto the natural substrate and consisted of clay silt with angular stones. It was overlain by a 0.15m-thick gravel layer (22.2.022) which formed a 6m-wide road surface with a slight camber between two flanking ditches. These flanking ditches (22.2.012 and 22.2.020) were typically 3m wide and 0.8m deep with U-shaped profiles and contained silty fills. Samples from these ditch fills were devoid of artefactual or ecofactual remains. Ditch 22.2.020 was partially overlain by some of

the road deposits, although the precise relationship between the ditch and these deposits was not established.

- 2.4 The road had been resurfaced at least three times, with evidence for wheel rutting and repair patches evident. These resurfacing deposits utilised coarse sand with stones. The roadside ditches also showed evidence for maintenance, with at least two re-cuts present (22.2.004/22.2.023 and 22.2.016; Fig. 2). Environmental samples from ditch fills flanking the road produced no finds or charred plant or charcoal remains of any sort. The absence of any charcoal or charred plant remains means that there is no material that could be radiocarbon dated. This complete lack of archaeological evidence limits any interpretation of the deposits other than to suggest that no settlement is likely to be located in the immediate vicinity, since at least some charcoal might have been expected if there was occupation nearby. The ditches appear to have silted up naturally with some erosion of the road surface into the fills

Discussion

- 2.5 The road was undated and whilst it is possible that it formed part of the Roman road running westwards from Llandeilo, it is also possible that it represents later (for example post-medieval) surfacing, although this could itself be along the line of a former Roman road. The road features an elevated, cambered surface flanked by a ditch on either side, which is typical for roads of both the Roman and post-Roman periods; however it lacks a flat space between the raised road surface and the ditches, which is a characteristic of Roman roads. At 6m in width, the road surface would be on the small side for the Roman period (roads were most commonly 8m–13m in width), although smaller examples are known; a road of this period at Moor House, Weardale was only 3.5m wide. The small size may merely have reflected that the road was not part of a major military routeway.

3. PROJECT TEAM

Fieldwork was undertaken by Cambrian Archaeological Projects. This report was written by Peter Busby with comments by Jonathan Hart and illustrations prepared by Daniel Bashford and Anne Leaver. 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 work was managed for CA by Karen Walker.

4. REFERENCES

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APPENDIX A: CONTEXT DESCRIPTIONS

Site 22.02

| Context No. | Fill of | Context interpretation | Description | W (m) | Depth (m) |
|-------------|----------|------------------------|--|-------|-----------|
| 22.2.001 | | Topsoil | Red-brown sandy silt | | 0.2 |
| 22.2.002 | | Subsoil | Light yellow-brown sandy silt | | 0.5 |
| 22.2.003 | | Natural | Orange-brown sandy clay with occasional angular pebbles | | |
| 22.2.004 | | Ditch | NW/SE aligned with a steep northern side, a shallow southern side and a concave base | 1.55 | 0.35 |
| 22.2.005 | 22.2.004 | Ditch fill | Upper fill; light brown-grey clay silt with occasional pebbles | | |
| 22.2.006 | | Road surface | Grey-brown sand and abundant stones | 5.1 | 0.20 |
| 22.2.007 | | Road surface | Red-brown sand and abundant small to large flat stones | 5.7 | 0.25 |
| 22.2.008 | | Surface | NW/SE band of small to large stones | 0.5 | 0.25 |
| 22.2.009 | 22.2.012 | Ditch fill | Orange-grey silty sand with occasional angular stones | 12.0 | 0.45 |
| 22.2.010 | 22.2.004 | Ditch fill | Lower fill; light brown-grey silty clay with occasional small stones | 1.15 | 0.15 |
| 22.2.011 | | Road surface | stone surface with NW/SE wheel ruts | 3.40 | 0.1 |
| 22.2.012 | | Ditch | NW/SE aligned with shallow sides and rounded base | 2.05 | 0.45 |
| 22.2.013 | 22.2.012 | Ditch fill | Primary fill; dark red-grey silty clay | 0.5 | 0.05 |
| 22.2.014 | 22.2.012 | Ditch fill | Secondary fill; dark grey-brown silt | 1.1 | 0.1 |
| 22.2.015 | 22.2.012 | Ditch fill | Brown-grey silt | 1.15 | 0.15 |
| 22.2.016 | | Ditch | NW/SE aligned with steep sides and flat/concave base | 1.15 | 0.4 |
| 22.2.017 | 22.2.016 | Ditch fill | Brown sand clay silt with occasional stones | 1.15 | 0.4 |
| 22.2.018 | | Natural feature | | | |
| 22.2.019 | 22.2.012 | Ditch fill | Brown-grey sand | 1.15 | 0.2 |
| 22.2.020 | | Ditch | NW/SE aligned with a steep southern side, shallow northern side and concave base | 2.0 | 0.6 |
| 22.2.021 | | | Context not used | | |
| 22.2.022 | | Road surface | Primary road surface; sand gravel with occasional large stones | 4.4 | 0.15 |
| 22.2.023 | | Ditch | Part of 22.2.004 | 0.75 | 0.40 |
| 22.2.024 | 22.2.023 | Ditch fill | Dark red-brown clay silt with occasional stones | 0.75 | 0.40 |
| 22.2.025 | | Road surface | Dark grey-brown sand silt with stones | 0.45 | 0.05 |
| 22.2.026 | 22.2.012 | Ditch fill | Upper fill; dark brown-grey silty sand | 0.3 | 0.1 |
| 22.2.027 | 22.2.012 | Ditch fill | Brown clay silt | 0.2 | 0.15 |
| 22.2.028 | 22.2.032 | Ditch fill | Red-brown clay silt | 0.3 | 0.2 |
| 22.2.029 | 22.2.012 | Ditch fill | Light red-orange sandy clay | 0.5 | 0.01 |
| 22.2.030 | 22.2.012 | Ditch fill | Primary fill; dark red-grey silty clay | 2.05 | 0.2 |
| 22.2.031 | | Road makeup | Red-orange clay silt with angular stones | 6.0 | 0.15 |
| 22.2.032 | | Ditch | Steep sides and concave base (seen only in section) | 0.3 | 0.2 |
| 22.2.033 | 22.2.012 | Ditch fill | Grey-brown silt | 0.7 | 0.2 |
| 22.2.034 | 22.2.020 | Ditch fill | Upper fill; Grey-brown silty clay with sand | 1.15 | 0.1 |
| 22.2.035 | 22.2.020 | Ditch fill | Lower fill; light brown silty clay with small stones | 0.7 | 0.2 |

Evaluation Trench 22.01.T1

| Context No. | Type | Fill of | Context interpretation | Description | L (m) | W (m) | Depth/ thickness (m) | Spot date |
|-------------|-------|---------|------------------------|-----------------------------------|-------|-------|----------------------|-----------|
| 22.02.T1.1 | Layer | | Topsoil | Light grey-brown silt | | | 0.25 | |
| 22.02.T1.2 | Layer | | Subsoil | Orange-brown silt | | | 0.20 | |
| 22.02.T1.3 | Layer | | Natural | Yellow-brown sand silt and gravel | | | | |

Evaluation Trench 22.02.T2

| Context No. | Type | Fill of | Context interpretation | Description | L (m) | W (m) | Depth/ thickness (m) | Spot date |
|-------------|-------|---------|------------------------|---|-------|-------|----------------------|-----------|
| 22.02.T2.1 | Layer | | Topsoil | Light yellow-brown silt | | | 0.25 | |
| 22.02.T2.2 | Layer | | Subsoil | Orange-brown silt with occasional irregular pebbles | | | 0.4 | |
| 22.02.T2.3 | Layer | | Natural | Yellow-brown gravel and sandy silt | | | | |

APPENDIX B: PALAEOENVIRONMENTAL REMAINS BY JAMES RACKHAM

Samples derived from ditch fills flanking the road were processed (Table 1). The samples were processed in the manner described in the assessment report (Carruthers 2008). The residues were located for all three samples and were refloated, checked with a magnet and for archaeological finds. None of the samples produced a first or second flot.

Table 1. Bulk environmental sample from Site 22.02

| sample no | context no | feature | description | Wt kg. | Vol. l.* |
|-----------|---------------|---------|----------------------|--------|----------|
| 2223001 | 222035 | 222020 | Lower ditch fill | 20.5 | 20 |
| 2223002 | 222015 | 222012 | Secondary ditch fill | 8 | 15 |
| 2223003 | 222013 | 222012 | Primary ditch fill | 8 | 15 |

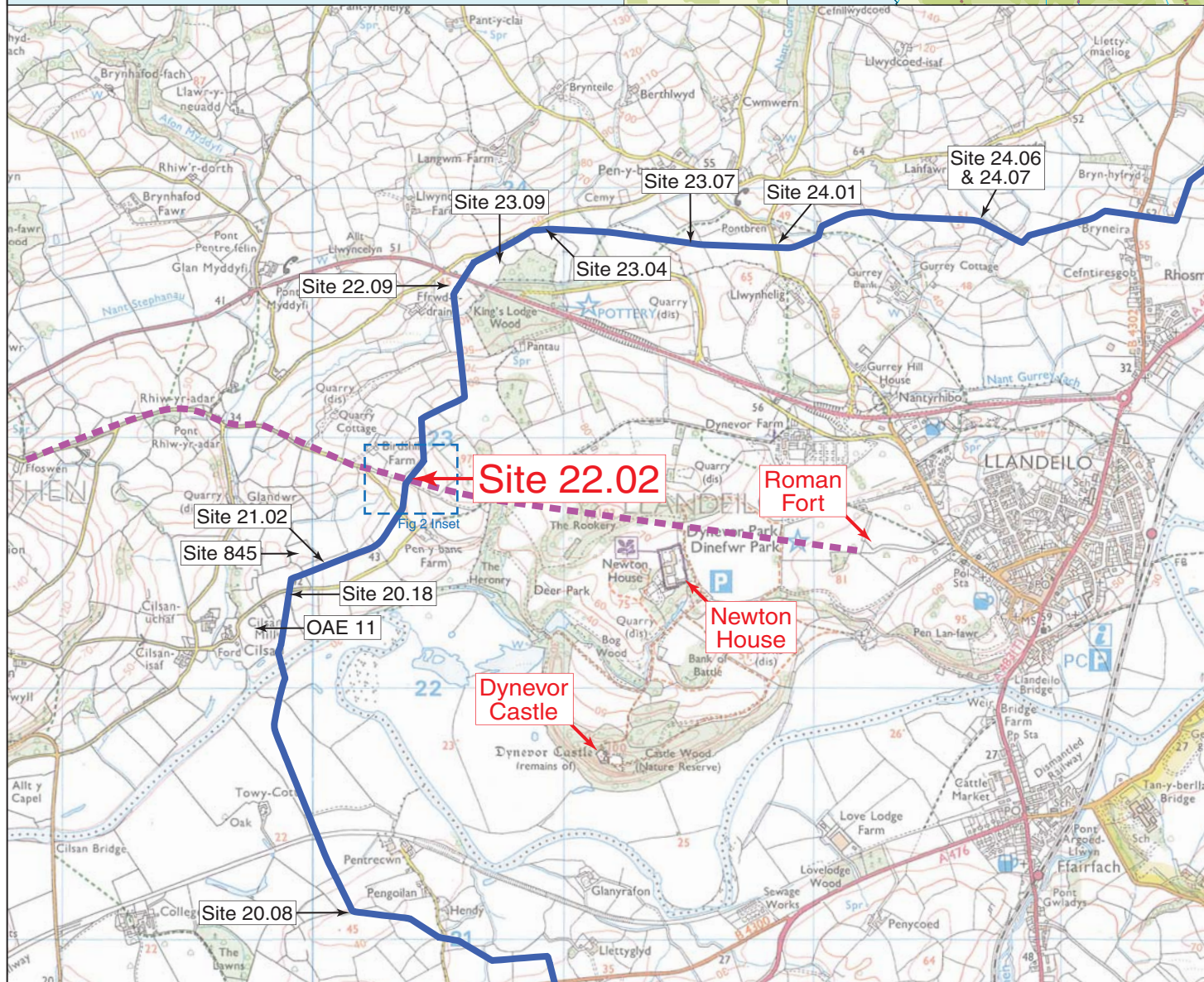
* approx sample volume estimated on site – not accurate

Table 2. Data for the environmental sample from Site 22.02

| no | no | wt g. | vol ml | vol ml | ay* | c* | one* | |
|---------|--------|-------|--------|--------|-----|----|------|-----------|
| 2223001 | 222035 | 20.5 | 3193 | nd | | | | occ. coal |
| 2223002 | 222015 | 8 | 257 | nd | | | | occ. coal |
| 2223003 | 222013 | 8 | 640 | nd | | | | occ. coal |

*quantities – E=1-10; D=11-50; C=51-100; B=101-200; A=200+ items; nd = no data; # flot from 1/3 of residue

Apart for a little coal, which probably occurs naturally in the local soils the samples produced no finds or charred plant or charcoal remains of any sort. The absence of any charcoal or charred plant remains means that there is no material that could be radiocarbon dated. This complete lack of archaeological evidence limits any interpretation of the deposits other than to suggest that no settlement is likely to be located in the immediate vicinity, since at least some charcoal might have been expected if there was occupation nearby. The ditches appear to have silted up naturally with some erosion of the road surface into the fills.



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

--- Roman Road

0 1km

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PROJECT TITLE

South Wales Pipeline. Site 22.02, Land North of Pen-y-banc Farm, Llangathen, Carmarthenshire

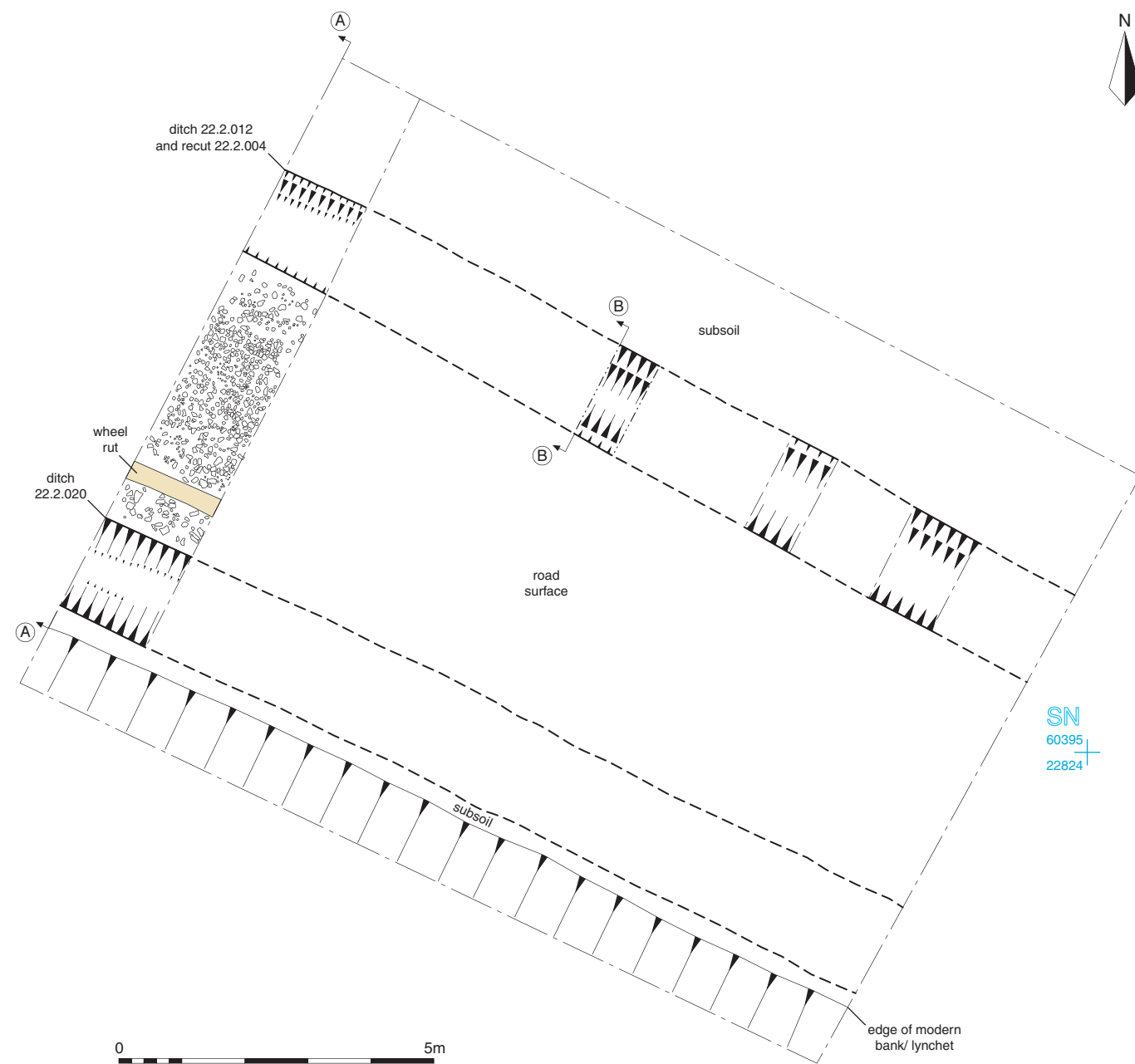
FIGURE TITLE

Site location plan

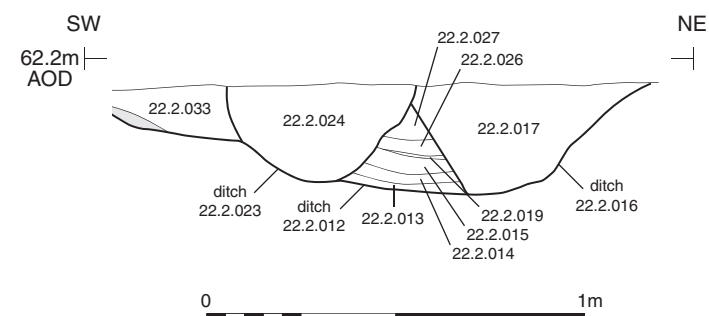
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APPROVED BY PJM SCALE@A4 1:25,000

FIGURE NO.

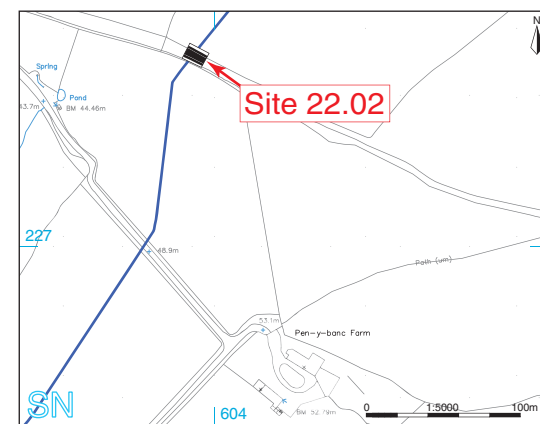
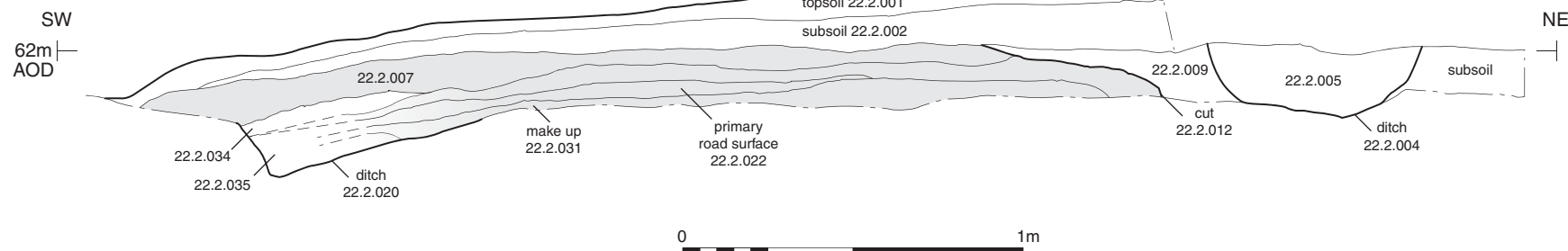
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Section BB



Section AA



— pipeline centreline
— road

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PROJECT TITLE
South Wales Pipeline. Site 22.02, Land North of Pen-y-banc Farm, Llangathen, Carmarthenshire

FIGURE TITLE
Plan and sections of road

| | | | | |
|-------------|------|----------|---------------|------------|
| PROJECT NO. | 9150 | DATE | 09-08-2013 | FIGURE NO. |
| DRAWN BY | DJB | REVISION | 00 | 2 |
| APPROVED BY | PJM | SCALE | A3 1:100 1:20 | |