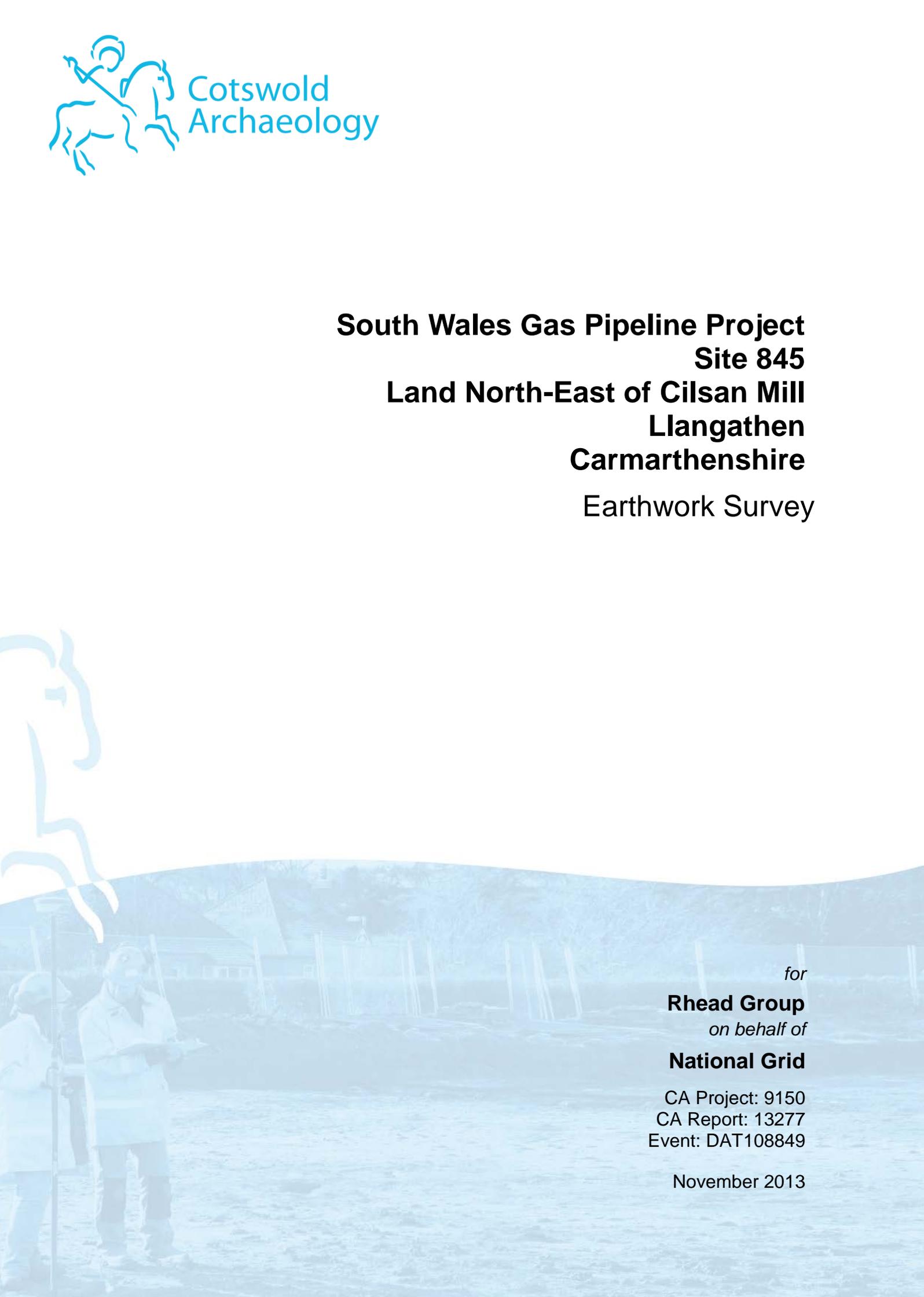


**South Wales Gas Pipeline Project
Site 845
Land North-East of Cilsan Mill
Llangathen
Carmarthenshire
Earthwork Survey**



for
Rhead Group
on behalf of
National Grid

CA Project: 9150
CA Report: 13277
Event: DAT108849

November 2013

South Wales Gas Pipeline Project Site 845

Earthwork Survey

CA Project: 9150
CA Report: 13277
Event: DAT102846

prepared by	Christopher Leonard, Project Supervisor
date	20 November 2013
checked by	Karen E Walker, Post-Excavation Manager
date	21 May 2015
approved by	Martin Watts, Project Director, Head of Publications
signed	
date	
issue	01

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Cirencester Building 11 Kemble Enterprise Park Kemble, Cirencester Gloucestershire, GL7 6BQ t. 01285 771022 f. 01285 771033	Milton Keynes Unit 4 Cromwell Business Centre Howard Way, Newport Pagnell MK16 9QS t. 01908 218320	Andover Office 49 Basepoint Business Centre Caxton Close, Andover Hampshire, SP10 3FG t. 01264 326549
e. enquiries@cotswoldarchaeology.co.uk		

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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: Site 845, Land North-East of Cilsan Mill, Llangathen,
Carmarthenshire
NGR: SN 5987 2244
Type: Earthwork Survey
Date: January–April 2006
Site Code: MHA06

An earthwork survey was undertaken by Cotswold Archaeology in advance of 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.

Earthworks associated with ridge and furrow cultivation were recorded during the survey. Examination of satellite imagery indicates that these are located within a wider landscape of ridge and furrow cultivation. The earthworks were undated.

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 2006 CA carried out an earthwork survey at Site 845, Land North-East of Cilsan Mill, Llangathen, Carmarthenshire (centred on NGR: SN 5987 2244; Fig. 1). The objective of the earthwork survey was to provide further data on the date, character, quality, survival and extent of the archaeological deposits within the pipeline construction working width.
- 1.3 The earthwork survey was carried out in accordance with professional codes, standards and guidance documents (EH 1991; IfA 1999a, 1999b, 2001 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 survey investigated four adjoining fields on the northern side of the River Towy (Fig. 1). The fields occupy a slight topographical rise within the otherwise flat flood plain of the river and lie at approximately 40m AOD. Higher ground is present to the immediate north. The underlying solid geology of the area is mapped as the

Abergwilli Mudstone Formation of the Ordovician Period with no overlying superficial deposits (BGS 2013).

Archaeological background

- 1.5 Remains of ridge and furrow visible on LiDAR imagery were identified within the site during the preliminary *Archaeology and Heritage Survey* (CA 2006a, ref. IDs 839 and 845). Archaeological recording during the pipeline construction works identified remains in the vicinity of Site 845 (Fig. 2), including Early to Middle and Late Neolithic pits and a Middle Bronze Age burnt mound at Site 21.02 (CA 2103a), a Late Neolithic pit at Site 20.18 (CA 2013b) and an undated but possibly prehistoric pit, perhaps a trough for a burnt mound, at Site OEA 11 (CA 2103a).

Archaeological objectives

- 1.6 The objectives of the archaeological works were:-
- to identify, investigate and record all significant archaeological earthworks revealed on the site; 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 field survey was carried out using a Leica TCR 705 Total Station with onboard data logging and coding. This was supported by manual site sketching and notation where necessary. A series of survey locations were identified at each site that provided sufficient coverage of the area to be surveyed, and were either inter-visible, or offered views to suitable mapped controls. The co-ordinates of control features such as buildings, pylons or other hard topological features were obtained from the digital base maps provided by RSK ENSR Environment Ltd, and the Ordnance Survey (OS) National Grid locations of the survey stations established using electronic re-section facilities available on the Total Station to log coded points.
- 1.8 Once the survey fieldwork was complete, the data was downloaded from the Total Station into a CAD system, and a drawing plan produced. This is a composite of surveyed data, superimposed on detail obtained from the OS base-map, and supported by manually recorded information. The site was initially reported on in advance of the pipeline construction (CA 2006b) and this report provides a summary

of that report, along with any additional information that has since become available using the resources detailed below.

1.9 The post-survey work was undertaken following the production of the UPD (GA 2012) 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 2006a);
- 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.

2. RESULTS (FIG. 2)

2.1 The survey recorded ridge and furrow earthworks. These survived to a maximum height of 0.1m, although it is worth noting that ridge and furrow cultivation remains are generally slight within South-West Wales (Ken Murphy pers. comm. to Jonathan Hart). One headland and three ridges were discernable. The headland is orientated north/south and has one parallel ridge immediately to the west. The other two ridges are perpendicular to the headland on its eastern side. All of the ridges are straight and the distance between their peaks is 8m.

Discussion

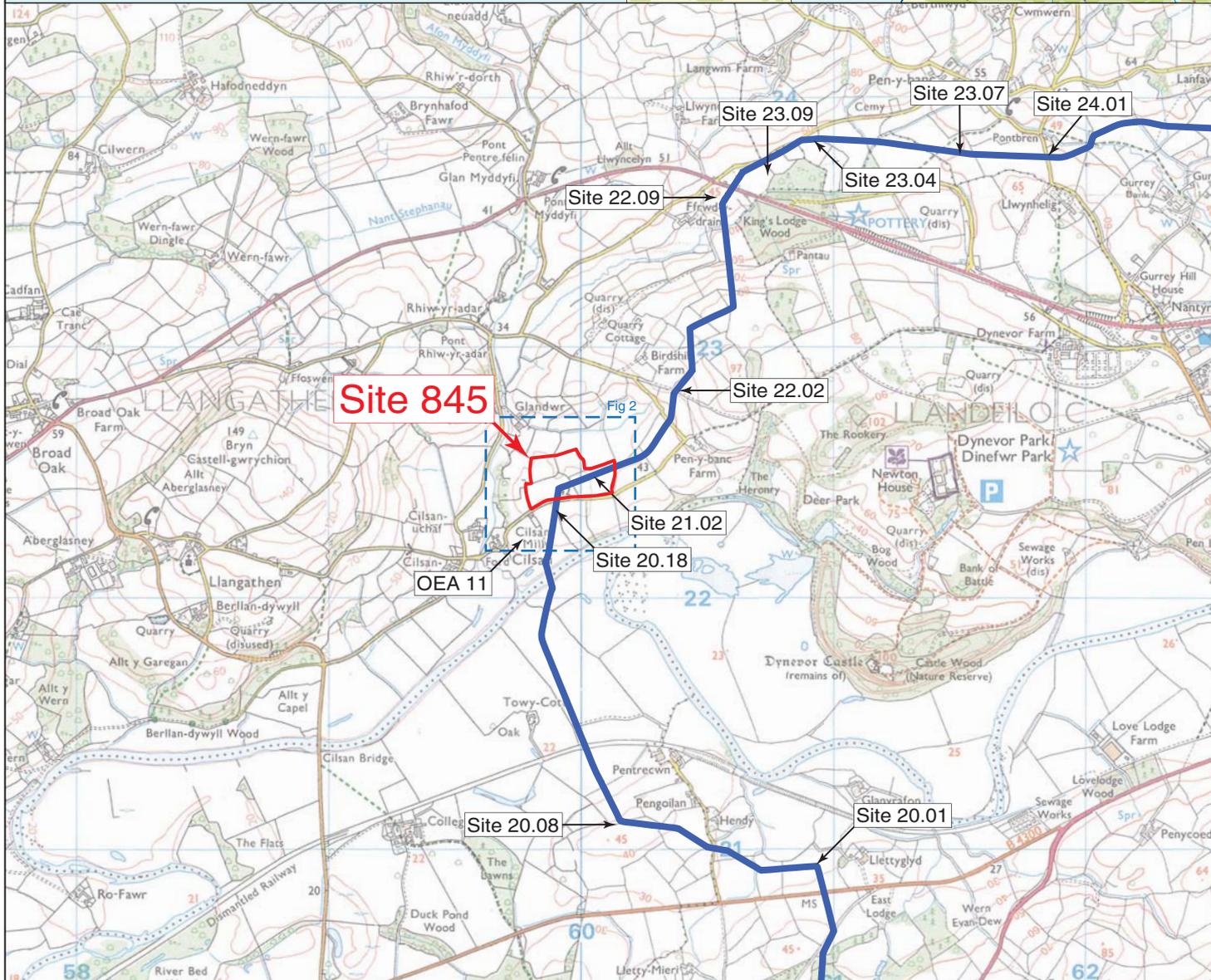
2.2 The earthworks were confined to one field, but examination of Google Earth satellite images available for the period 2005–2013 shows that the earthworks lie within a wider landscape of ridge and furrow cultivation (Fig. 2). The headland recorded in the south-west field in the earthwork survey corresponds to a now removed field boundary bisecting that field. The boundary was present at the time of the 1887 Ordnance Survey County Series map of Carmarthenshire and was still extant on the 1964 OS map, but was not depicted on the 1972–6 version (old-maps.co.uk). These cultivation remains are currently undated and although they apparently lack the characteristically medieval sinuous alignments, this may simply reflect the limited extent of their survival which makes clear reconstruction of their alignments difficult.

3. PROJECT TEAM

Fieldwork was undertaken by Richard Young, Kate Cullen, David Kenyon and Emily Knight. 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 CA by Mark Collard and Richard Young and the post-excavation was managed for CA by Karen Walker.

4. REFERENCES

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



Cirencester 01285 771022
 Milton Keynes 01908 218320
 Andover 01264 326549
 www.cotswoldarchaeology.co.uk
 enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

South Wales Pipeline. Site 845, Land North-East of Cilsan Mill, Llangathen, Carmarthenshire

FIGURE TITLE

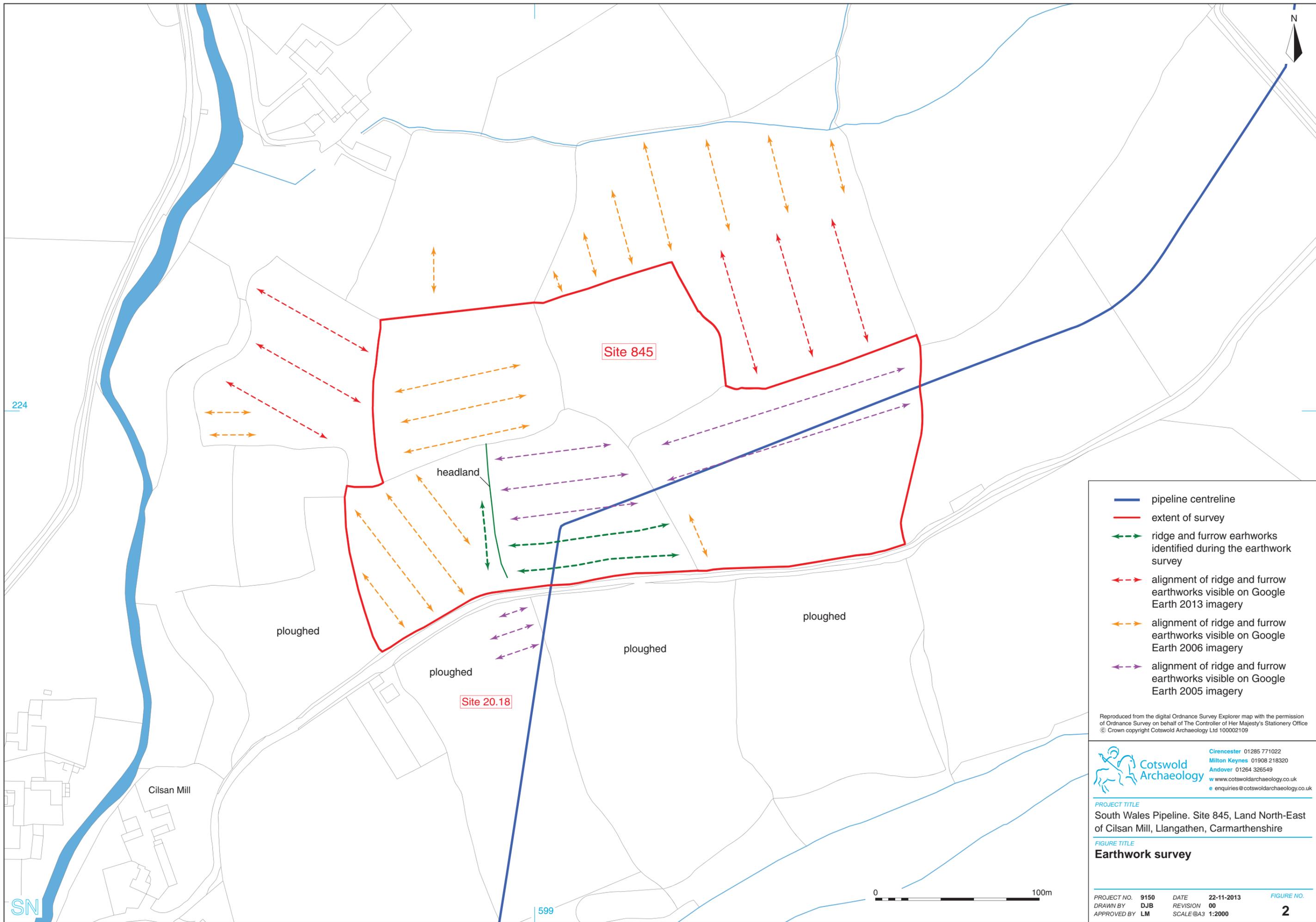
Site location plan

PROJECT NO. 9150 DATE 22-11-2013
 DRAWN BY DJB REVISION 00
 APPROVED BY LM SCALE@A4 1:25,000

FIGURE NO.

1

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- pipeline centreline
- extent of survey
- - - ridge and furrow earthworks identified during the earthwork survey
- - - alignment of ridge and furrow earthworks visible on Google Earth 2013 imagery
- - - alignment of ridge and furrow earthworks visible on Google Earth 2006 imagery
- - - alignment of ridge and furrow earthworks visible on Google Earth 2005 imagery

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Cotswold Archaeology
 Cirencester 01285 771022
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 www.cotswoldarchaeology.co.uk
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PROJECT TITLE
 South Wales Pipeline. Site 845, Land North-East of Cilsan Mill, Llangathen, Carmarthenshire

FIGURE TITLE
 Earthwork survey

PROJECT NO. 9150	DATE 22-11-2013	FIGURE NO. 2
DRAWN BY DJB	REVISION 00	
APPROVED BY LM	SCALE@A3 1:2000	



224

SN

599

Cilsan Mill

ploughed

ploughed

Site 20.18

ploughed

ploughed

headland

Site 845