CPAT Report No. 1676

Offa's Dyke Rd017 Reinstatement

Archaeological Mitigation





Client name: Richard Pugh

CPAT Project No: 2381

Project Name: Offa's Dyke Rd017 Reinstatement

Grid Reference: SO 2803 7081

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Prepared by:	Checked by:	Approved by:
Ville per	1-1 ()	12 ()
Will Logan	Paul Belford	Paul Belford
Project Archaeologist	Director	Director
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Cover photograph: Offa's Dyke Rd017 viewed from the south Photo CPAT 4663-002.



YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS CLWYD-POWYS ARCHAEOLOGICAL TRUST

41 Broad Street, Welshpool, Powys, SY21 7RR, United Kingdom +44 (0) 1938 553 670

trust@cpat.org.uk www.cpat.org.uk

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CONTENTS

SUMN	/ARY	II
CRYNO	DDEB	II
1	INTRODUCTION	1
	BACKGROUND	1
2	ARCHAEOLOGICAL MITIGATION	3
3	CONCLUSIONS	8
4	ARCHIVE DEPOSITION STATEMENT	8
APPEN	NDIX 1: CPAT WSI 2056	9
APPFN	NDIX 1: SITE PLANS	.13

Summary

In June 2019 the Clwyd Powys Archaeological Trust carried out a programme of archaeological mitigation in connection with the reinstatement of a damaged section of Offa's Dyke near Knighton in Powys.

This part of the dyke measured approximately 7.5m in width and was 0.5m in height with a steep sloping western bank and a broad flattened top. A 5m section had been removed to form a field entrance. A sheep scrape was visible immediately to the south of this damaged section. The defensive ditch running along the western side of the dyke was buried below ground level and had not being impacted upon.

A Total Station survey and a photographic survey was carried out in order to determine the extent of the damage and to help inform the reinstatement process. A watching brief was subsequently maintained during the reinstatement of the dyke.

Crynodeb

Ym mis Mehefin 2019, bu Ymddiriedolaeth Archaeolegol Clwyd Powys yn cynnal rhaglen o liniaru archaeolegol mewn cysylltiad ag adfer adran wedi'i difrodi o Glawdd Offa ger Trefyclo ym Mhowys.

Roedd y rhan hon o'r clawdd yn mesur tua 7.5m o led ac roedd yn 0.5m o uchder gyda chlawdd gorllewinol serth a thop gwastad llydan. Roedd adran 5m wedi'i thynnu i greu mynedfa i'r cae. Roedd crafiadau defaid i'w gweld yn syth i'r de o'r adran hon a oedd wedi'i difrodi. Roedd y ffos amddiffynnol a oedd yn rhedeg ar hyd ochr orllewinol y clawdd wedi'i chladdu o dan lefel y ddaear ac nid oedd hon wedi'i difrodi.

Cynhaliwyd arolwg Gorsaf Gyfan ac arolwg ffotograffig er mwyn cadarnhau graddau'r difrod a helpu i ddarparu sail ar gyfer y broses adfer. Wedi hyn, cynhaliwyd briff gwylio yn ystod gwaith adfer y clawdd.

1 Introduction

1.1. The Field Services Section of the Clwyd-Powys Archaeological Trust was invited by Mr Richard Pugh to undertake a programme of archaeological mitigation in connection with the reinstatement of a damaged section of Offa's Dyke near Knighton in Powys (Fig. 1; SO 2803 7081). The section of dyke has been designated as a Scheduled Monument under the 1979 Ancient Monuments and Archaeological Areas Act and is known as 'Offa's Dyke: Section extending through Great Frydd Wood 1693m S to footpath leading to Woodhouse Lane (Rd017).' Part of this section was subject to damage in late 2017 or early 2018, comprising mechanical levelling of the earthwork to create an entrance between two adjacent fields.



Contains Ordnance Survey data © Crown copyright and database right 2018 Fig. 1 Map of Scheduled area showing location of damage marked by red spot

Background

1.2. Offa's Dyke consists of a linear earthwork, a substantial bank and ditch forming a major boundary to delineate the border between Mercia and the Welsh kingdoms. It is traditionally thought to have been built by the Mercian King Offa in the later 8th century. The remains included in the stretch between Great Ffrydd Wood and Woodhouse Lane (Rd017) vary in scale, with those in the southern third distinctly larger than those in the northern two thirds. To the north of SO 2803 7081, the Dyke takes the form of a low bank c.0.5-1.0m high, with

- little trace of a ditch, though the fall of the ground to the west gives the bank the appearance of greater height from this side.
- 1.3. The following section is taken from a Damage Assessment Report produced in February 2018 by Cadw's Field Monument Warden.
- 1.4. This scheduled section of the Dyke is approximately 1.69 km long and runs uphill from the southern flank of the Teme Valley, heading south along the upper slopes of Ffrydd Hill at around 330m OD. The remains included within the scheduled area vary in scale. To the south of SO 2803 7081 the massive bank rises approximately 4.5m above the base of the pronounced western ditch, contrasting with the slighter earthworks to the north where the Dyke comprises a low bank between 0.5 and 1.0m high and up to 8m wide, with little trace of a ditch, though the fall of the ground to the west gives the bank the appearance of greater height from this side. Much of this northern stretch is overlain by later boundaries including hedges, fences and low banks.
- 1.5. The damaged area is located on almost level ground at the junction of three fields, immediately to the north of an east-west boundary that meets a north-south hedge and fence boundary running along the line of the Dyke. Most of the upstanding monument at this point is located in the single large field to the west, and comprises a substantial bank up to 8m wide and 0.5m high, the north-south boundary running along the rear (eastern side) of the bank. The scheduled area extends beyond the upstanding earthworks to the west to account for the former western ditch, which is not visible at this point, and to the east over the reduced rear of the bank. Cadw's records indicate that the western field is rotated between arable and grazing resulting in the incremental erosion of the earthwork. The fields to the east are under pasture. Immediately alongside and to the south of the damaged area, a waymarked gate in the east-west hedge line clearly indicates the line of the Offa's Dyke Path National Trail.
- 1.6. The extent of the damaged area measures 5m N-S along the length of the dyke and over 8m E-W across the Dyke and includes both the line of the bank and the site of the ditch on its western side. Both the bank and the field boundary to its rear have been removed and the area levelled by a machine leaving a muddy gap 3.5m wide between the two adjacent fields. The exposed sections through the bank to either side of this breach are approximately 0.20 to 0.30m m high. To the north, part of the clay core of the bank is exposed and a spread of angular stones on the southern side are likely to have formed part of the bank.
- 1.7. The summit and western face of the surviving bank to the south of the levelled area have also been disturbed by the machine for a length of approx. 2.5m. The surface of the bank to either side of the breach is almost devoid of grass having been denuded by stock trampling between the two fields. This also affects the line of the Offa's Dyke Path National Trail.
- 1.8. Evidence from the height of the surviving bank to the north and south and a photograph taken in July 2017 suggests that the destroyed section was approximately 0.5m high and 7.5m wide before the damage took place. It is not currently clear whether the levelling has damaged the backfilled western ditch or any historic ground surface and evidence of the pre-Dyke environment beneath the bank.

2 Archaeological Mitigation

2.1. The archaeological mitigation was conducted between July 2nd and July 11th 2019 in accordance with the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for an Archaeological Watching Brief* (2017).

Survey

2.2. Prior to the commencement of reinstatement works a photographic record was made of the damaged section, which was also recorded through total station survey, recording the surviving extent and profile of the monument in relation to the existing boundaries. A Total Station survey of the undisturbed parts of the dyke to either side of the damaged section was also carried out during this phase of the works (see Fig. 10).



Fig. 2 Extent of damage to the Dyke viewed from the west. Photo CPAT 4663-001

2.3. An analysis of survey data determined that this section of Offa's Dyke Rd017 was 7m to 8m in width, and between 0.5 and 1.2m in height. The profile comprised a sharply defined steeply sloping western bank, a flattish bank top up to 5m in width and a moderately sloping eastern bank (see Fig. 12). A ditch was intermittently visible along the eastern side of the Dyke. There was no discernible trace of the defensive ditch which was located to the west of the Dyke.



Fig. 3 Extent of damage to the Dyke viewed from the north. Photo CPAT 4663-004

2.4. The main area of damage consisted of a breach through the dyke bank from east to west located at NGR SO 2803 7081 (Fig. 1). The breach measured approximately 5m north-south, 7.5m east-west and 0.5m in depth. Immediately to the south of the breach the top of the bank was broken up and disturbed, although it was unclear what had caused this. A sheep scrape (Fig. 2) had been dug into the western side of the dyke within this area.



Fig. 4 Exposed section through the core of the Dyke bank viewed from the south. Photo CPAT 4663-007

2.5. The damaged area was largely grassed over at the time of the survey, although a surviving section through the core of the Dyke bank was visible to a thickness of 0.3m and comprising

a compact light brown silt containing moderate rounded stones. Shortly after the damage was done a gravelly core was noted by Cadw at the base of the north-facing section, although this was no longer apparent when the survey was undertaken.



Fig. 5 View from the north-east showing the ditch running along the eastern side of the Dyke. Photo CPAT 4663-005

Reinstatement

2.6. The reinstatement was carried out using locally sourced subsoil of a similar composition to the existing fabric of the Dyke. It was conveyed to the site and placed into position by machine. Care was taken to avoid any damage to the existing bank by the use of hand tools to form the profile of the reinstated material where it met with the existing fabric. Once the form of the reinstated bank had been established it was covered with topsoil to a thickness of approximately 0.1m. The topsoil was sown with grass seed and covered with Geocoir biodegradable matting in order to stabilise the reinstated form of the bank.



Fig. 6 The reinstated section of the Dyke viewed from the north. Photo CPAT 4663-012



Fig. 7 The reinstated section of the Dyke viewed from the west. Photo CPAT 4663-018

2.7. The area of reinstatement was approximately 10m north-south, up to 7.5m east-west and 0.5m in height (Fig. 11). This allowed for the infilling of the broken up upper surface of the dyke bank and the sheep scrape located to the south of the main area of damage.



Fig. 8 The reinstated section of the Dyke viewed from the north. Photo CPAT 4663-019



Fig. 9 The reinstated section of the Dyke following laying of the stabilising matting, viewed from the north. Photo CPAT 4663-039

3 Conclusions

3.1. The survey of Offa's Dyke Rd017 at NGR: SO 2803 7081 revealed that the bank of the dyke survived as a visible earthwork 7.5m-8.0m in width and 0.5m-1.2m in height. The steep, well defined western bank was similar in profile to that recorded for the Dyke elsewhere, as at Ffrydd Road in Knighton 1km to the north (Allen, 1976). However the upper part of the dyke bank appears to have been truncated leaving a broad flat upper profile. It was unclear whether a ditch running along the eastern side of the Dyke was contemporary with it or a later feature. The large defensive ditch running along the western side of the Dyke bank was not visible as an earthwork, and there was no evidence that it had been damaged by the excavation of the breach through the bank.

4 Sources

Published Sources

Allen, D., 1988. Excavations on Offa's Dyke, Ffrydd Road, Knighton, Powys, 1976. *Radnorshire Society Transactions* 58, 7-10

5 Archive deposition Statement

5.1. The project archive has been prepared according to the CPAT Archive Policy and in line with the CIfA *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives guidance* (2014). The archive is entirely digital and will be deposited jointly with the Historic Environment Record, Clwyd-Powys Archaeological Trust and the National Monuments Record (RCAHMW).

Archive summary

CPAT Event PRN: 140304

40 digital photographs, CPAT film no 4663

Appendix 1: CPAT WSI 2056

1 Introduction

1.1. The Field Services Section of the Clwyd-Powys Archaeological Trust has been invited by Mr Richard Pugh to undertake a programme of archaeological mitigation in connection with the reinstatement of a damaged section of Offa's Dyke near Knighton in Powys (Fig. 1; SO 2803 7081). The section of dyke has been designated as a Scheduled Monument under the 1979 Ancient Monuments and Archaeological Areas Act and is known as Offa's Dyke: Section extending through Great Frydd Wood 1693m S to footpath leading to Woodhouse Lane (Rd017). Part of this section was subject to damage in late 2017 or early 2018, comprising mechanical levelling of the earthwork to create an entrance between two adjacent fields.



Fig. 1 Map of Scheduled area showing location of damage marked by red spot

2 Background

- 2.1. The following section is taken from a Damage Assessment Report produced in February 2018 by Cadw's Field Monument Warden.
- 2.2. This scheduled section of the Dyke is approximately 1.69 km long and runs uphill from the southern flank of the Teme Valley, heading south along the upper slopes of Frydd Hill at around 330m OD. The remains included within the scheduled area vary in scale. To the south

of SO 2803 7081 the massive bank rises approximately 4.5m above the base of the pronounced western ditch, contrasting with the slighter earthworks to the north where the Dyke comprises a low bank between 0.5 and 1.0m high and up to 8m wide, with little trace of a ditch, though the fall of the ground to the west gives the bank the appearance of greater height from this side. Much of this northern stretch is overlain by later boundaries including hedges, fences and low banks.

- 2.3. The damaged area is located on almost level ground at the junction of three fields, immediately to the north of an east-west boundary that meets a north-south hedge and fence boundary running along the line of the Dyke. Most of the upstanding monument at this point is located in the single large field to the west, and comprises a substantial bank up to 8m wide and 0.5m high, the north-south boundary running along the rear (eastern side) of the bank. The scheduled area extends beyond the upstanding earthworks to the west to account for the former western ditch, which is not visible at this point, and to the east over the reduced rear of the bank. Cadw's records indicate that the western field is rotated between arable and grazing resulting in the incremental erosion of the earthwork. The fields to the east are under pasture. Immediately alongside and to the south of the damaged area, a waymarked gate in the east-west hedge line clearly indicates the line of the Offa's Dyke Path National Trail.
- 2.4. The extent of the damaged area measures 5m N-S along the length of the dyke and over 8m E-W across the Dyke and includes both the line of the bank and the site of the ditch on its western side. Both the bank and the field boundary to its rear have been removed and the area levelled by a machine leaving a muddy gap 3.5m wide between the two adjacent fields. The exposed sections through the bank to either side of this breach are approximately 0.20 to 0.30m m high. To the north, part of the clay core of the bank is exposed and a spread of angular stones on the southern side are likely to have formed part of the bank.
- 2.5. The summit and western face of the surviving bank to the south of the levelled area have also been disturbed by the machine for a length of approx. 2.5m. The surface of the bank to either side of the breach is almost devoid of grass having been denuded by stock trampling between the two fields. This also affects the line of the Offa's Dyke Path National Trail.
- 2.6. Evidence from the height of the surviving bank to the north and south and a photograph taken in July 2017 suggests that the destroyed section was approximately 0.5m high and 7.5m wide before the damage took place. It is not currently clear whether the levelling has damaged the backfilled western ditch or any historic ground surface and evidence of the pre-Dyke environment beneath the bank.

3 Methodology

Fieldwork

Total station survey

3.1. Prior to the commencement of reinstatement works a photographic record will be made of the damaged section, which will also be recorded through total station survey, recording the surviving extent and profile of the monument in relation to existing boundaries.

Watching brief

3.2. The watching brief will be conducted according to the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance for an Archaeological Watching Brief* (2014). The watching brief will be undertaken to monitor the reinstatement of the dyke and ensure that no further in situ deposits are disturbed. Should any previously unrecorded archaeology be revealed they will

be investigated and recorded by hand using the conventional techniques for archaeological excavation:

- Where features of archaeological interest are identified during the ground works they
 will be systematically investigated by hand with sufficient work being undertaken to
 determine their date, character and function, using the conventional techniques for
 archaeological excavation and in accordance with CIfA Standard and Guidance.
- All features will be located as accurately as possible on an overall plan of the development at an appropriate scale, showing boundaries depicted on Ordnance Survey mapping.
- Contexts will be recorded on individual record forms, using a continuous numbering system, and be drawn and photographed as appropriate.
- Plans will be drawn on permatrace to a scale of 1:10, 1:20 or 1:50, as appropriate.
- All photography will be taken using a digital SLR camera with a minimum resolution of 12 mega pixels, including a metric scale in each view, with views logged in a photographic register.
- In the event of human burials being discovered the Ministry of Justice (MoJ) will be informed. The remains will initially be left in situ, and if removal is required, a MoJ licences will be applied for under the Burial Act 1857.
- In the event of finding any artefacts covered by the provisions of the Treasures Act 1996, the appropriate procedures under this legislation will be followed.
- 3.3. The watch brief will also involve a full photographic record during and after the completion of the reinstatement to aid future monitoring.

Post-excavation and reporting

- 3.4. All artefacts and environmental samples will be treated in a manner appropriate to their composition and a sampling strategy will be developed as appropriate:
 - All stratified finds will be collected by context, or where appropriate, individually recorded in three dimensions. Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest.
 - All finds and samples will be collected, processed, sorted, quantified, recorded, labelled, packed, stored, marked, assessed, analysed and conserved in a manner appropriate to their composition and in line with appropriate guidance.
 - arrangements to assess and study any artefacts, assemblages and environment samples.
 - Any artefacts recovered during the watching brief will be deposited with an appropriate museum, subject to the permission of the owner.
- 3.5. Following the on-site work an illustrated report will be prepared containing conventional sections to include:
 - Non-technical summary
 - Introduction
 - Site location
 - Archaeological Background
 - Watching brief
 - Conclusions
 - References
 - Appropriate appendices on archives and finds
- 3.6. The report summary will be provided in English and Welsh, in accordance with the *Guidance* for the Submission of Data to the Welsh Historic Environment Records (HERs) V1 (July 2018).

Site archive

- 3.7. The overall archive will conform to guidelines described in *Management of Research Projects* in the Historic Environment (MoRPHE), Historic England 2015, the CIfA (2014) Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives and The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (NPAAW, 2017).
- 3.8. The paper and digital archive will be deposited with the National Monuments Record (NMR), RCAHMW, including a copy of the final report. This archive will include all written, drawn, survey and photographic records relating directly to the investigations undertaken. A copy of the digital archive only will also be lodged with the Historic Environment Record, Clwyd-Powys Archaeological Trust.

4 Resources and programming

- 4.1. The watching brief will be undertaken by a skilled archaeologist under the overall supervision of Nigel Jones, a senior member of CPAT's staff who is also a member of the Chartered Institute for Archaeologists (CIfA). CPAT is also a CIfA Registered Organisation and as such agrees to abide by their *Code of Conduct* (2014) and the *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (2014).
- 4.2. All report preparation will be completed by or with the assistance of the same field archaeologist(s) who conducted the site work. Copies of the report will be deposited with the client and the regional Historic Environment Record within one month of the completion of on-site works. If appropriate, a short report will be published in *Archaeology in Wales*.
- 4.3. Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.4. CPAT is covered by appropriate Public and Employer's Liability insurance, as well as Professional Indemnity insurance.

N W Jones

16 May 2019

Appendix 1: Site plans

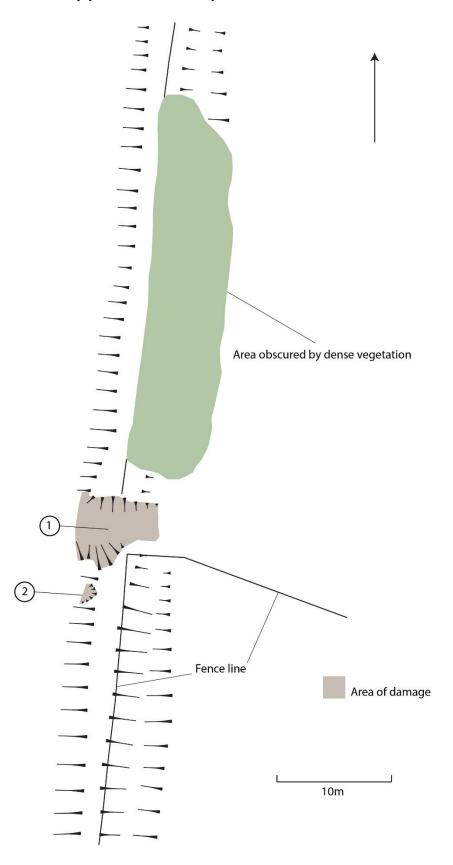


Fig. 10 Plan of the dyke prior to reinstatement

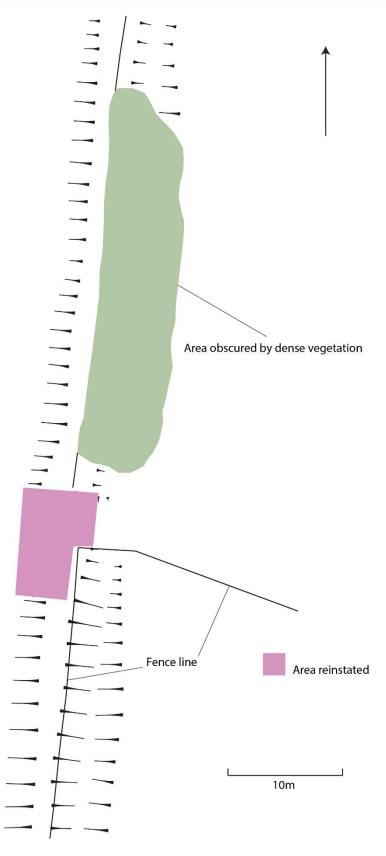


Fig. 11 Plan of the dyke following reinstatement

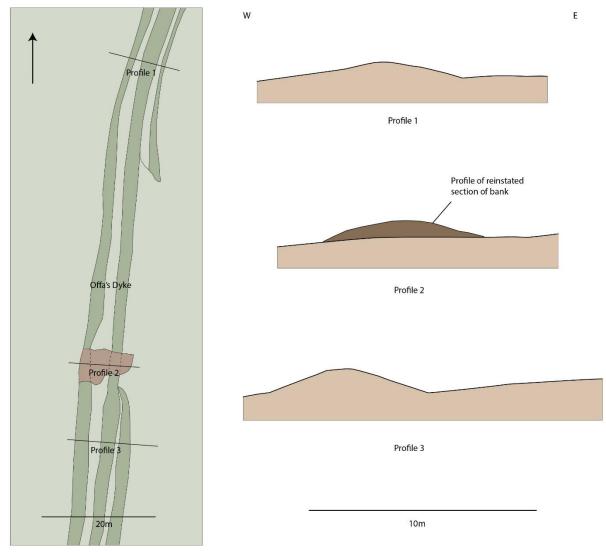


Fig. 12 Profiles across the bank of the dyke